

# BIAS viewsviewsviewsviewsviewsviewsviewsviewsv viewsviewsviewsviewsviewsviewsviewsviewsv viewsviewsviewsviewsviewsviewsviewsviewsv

## A Preservation Trust for Avon

A group of BIAS members with special interests in conservation have been working at behest of the committee in recent months in co-operation with officers of the planning department of Avon County. The aim has been the formation of a charitable Trust to facilitate the preservation of selected industrial buildings together with the plant or equipment appropriate to them. As *BIAS Journal 12* goes to press we have been informed that the Articles of Association proposed for this new body have now been approved by the Charity Commissioners. Within a short time the Avon Industrial Buildings Trust Limited will achieve legal entity as a company limited by guarantee and not having a share capital

The establishment of this County Trust presents a means of raising funds by grants or loans from official and charitable sources, and donations from the public, for the restoration or conservation of historic industrial buildings which have no current use. Such a Trust often operates a revolving fund by purchasing and restoring a building, and subsequently selling it for profit which is ploughed back into the Trust for further projects. Alternatively, a long lease can be acquired on the building for which the scheme is planned. It is this latter method which is being adopted for the initial proposals being planned by the new Trust at Saltford Old Brass Mills. Professor R F Tylecote, of Imperial College and editor of *Historical Metallurgy*, has visited the mill and reported to the Inspectorate of Ancient Monuments on the need to prevent further deterioration in the unique remains of the annealing furnace contained in this site. It has been possible to attract this kind of attention because of research and survey work undertaken by BIAS members which has been published, partly in this Journal and elsewhere, and used to publicise the importance of protecting the future of Saltford Mill. We await reaction from the Inspectorate to a Trust application for a grant, on which the future of the Saltford scheme largely depends. In the meantime the Trust, working in close collaboration with BIAS, must ensure that its organisation is capable of taking full advantage of the opportunities presented by this new venture.

## New plans for old Temple Meads station

BIAS is not the only local organisation currently in the business of creating a conservation trust for preserving local industrial monuments. During 1979 the Brunel Engineering Centre Trust was formed to restore and adapt to new purpose the old Temple Meads train shed and station built by I K Brunel. An inaugural meeting was held last Spring under the chairmanship of Marcus Binney, at which BIAS and a number of voluntary organisations were represented. Only in the last few weeks however, has success been achieved in negotiations with British Rail Property Board which has now agreed to lease the whole building to the Trust for a year at a peppercorn rent, and

also to assist with the necessary raising of funds. It is planned to use the entire site including the offices, the vaults and train shed, the latter now being occupied temporarily as a car park. Appropriate uses are still being sought for some parts of the building, but as an integral part of the project it is planned to install a permanent exhibition of works by Brunel and other eminent Victorian engineers and architects.

## City Docks

The move to bring life back to Bristol docks and to make the most of what is there is gaining in impetus. So much so, that it is difficult to keep track of new schemes as they proliferate, but the general trend towards tidying up, planting trees and making the waterfront more accessible to the public is one that can only be applauded, and be seen to enhance Bristol's industrial archaeology.

Since the demolition of the sand-hopper and removal of the crane early in 1978, the former sand wharf at Bathurst Basin has undergone a complete transformation. The whole site has been cleared and resurfaced, trees have been planted, seats and lights provided, and the area now forms a pleasant traffic-free space very popular with anglers. The ugly corrugated iron fence which formerly hid the wharf from the road has been replaced by a lower brick wall, thereby enabling passing pedestrians to enjoy a new view of the Basin. The hydraulic rams which formerly operated the swing bridge can also be studied at close quarters now, as they have been retained as part of the scheme (though not, unfortunately, cleaned or repainted). It is a pity that during this period of renovation at Bathurst Basin, the aptly-named 'Bathurst Tavern' has lost its attractive inn-sign and had its name changed for some reason to the 'Garricks'.

Elsewhere in the Docks, 'E' Shed at the head of St Augustine's Reach has been cleaned and refurbished, and a covered, illuminated walkway now allows access to the waterfront at this point. The interesting sailing-ship weather vane has also been returned to the building from its temporary exile at the Underfall Yard. The Bristol Arts Centre have plans to make use of this building together with the adjoining 'W' Shed for a variety of activities which will include dance, gymnastics, films and a theatre workshop and exhibition area. Funds are now being sought for the project under the appropriate name of *Watershed*.

During the autumn of 1979 work began on a new housing scheme, now well under way in the Hotwells Triangle. (ie the site of the former Merchants Dock adjacent to Cumberland Basin) and interest amongst potential purchasers was reported as exceeding all expectations. Nearby, facing Junction Lock, the old hydraulic engine house is at last about to be rescued from the disgraceful state of near-dereliction which has overtaken this listed building within the last five years. Plans for conversion to a restaurant have

been prepared, with great concern for historic detail, by the two young Bristol architects, David Richards and Andy Sheppard, whose drawings appear on our covers. It is hoped that work on their scheme will have started by the time *BIAS Journal 12* is distributed, and be open to the public by the autumn.

On the opposite side of the Floating Harbour at Baltic Wharf a tenacre site has been allocated for a housing scheme of 200 council dwellings, the design of which has been the subject of a competition won by Professor Ivor Smith of the University of Bristol School of Architecture. There has been general acclaim for the policy of using derelict dockland for housing to bring people back to the area to live.

Back upstream, at Prince's Wharf the proposals, supported by BIAS with a donation, for a Lifeboard Museum at 'L' Shed, adjacent to Prince Street Bridge, have gained further backing, including planning permission. This move has proved a disappointment to Paul Elkin, installed in the Industrial Museum next door in 'M' Shed, for apparently there had been hopes of eventual expansion of the museum into the adjoining premises. It will, however, still be possible for him to make use of the upper floor of 'L' Shed for storage and so eliminate the need for the existing far-distant stores at York Street and Beaconsfield Road. With all thoughts of further enlargement of the Industrial Museum display area now frustrated, there is to be an extensive reorganisation of existing exhibits to take full advantage of the area already occupied.

### Green Park Station

Green Park Station, Bath, has managed to remain in the local news. There were two official Enquiries held in the course of 1979, in January and September, with an Inspector from the Department of the Environment receiving evidence from interested parties and amenity societies, including BIAS. The report on the second Enquiry is still awaited, but that on the first came down firmly in favour of retaining the structure of the Station, so this was very encouraging. The remaining issue involves the relationship between the conflicting interests of the City council, the various developers with their plans for hotels and supermarkets, and British Rail which still owns the Midland Road site across the river from the station. The best hope at present seems to be for a multiple development on both sides of the river, with provision for both a supermarket and a hotel, and with the station preserved as an integral part of the scheme. Whatever emerges from the Enquiries, the fabric of the station continues to deteriorate, posing an ever-growing problem for the eventual renovator. ***At the second Enquiry the Minister approved the scheme for a store proposed by Sainsburys, but Bath planners still have to choose between this plan and a new one submitted by Messrs Tesco.***

### Prior Park Cottages

Workers' housing in Prior Park Road Bath built by Ralph Allen for his quarrymen, reputedly in the 1730s, has been threatened in a road-widening scheme and the cause of bitter controversy in the past few years. Meanwhile, its condition has gradually worsened, a situation not unknown elsewhere in Bath. More recently, however, there have been renewed efforts and interest in trying to convert the

dwellings to modern housing standards. A public enquiry resulted in a decision to save the block against the proposals of Avon County Council. Three separate rehabilitation schemes have already been put to Bath City Council and others are invited from organisations or firms with experience in the restoration of old buildings. Superficially at least, these dwellings have similarities in style with the rows of workers' houses built by brass-manufacturer William Champion at Warmley, Bitton and Kelston in the 1760s and described by Christopher Powell and Roger Wilkes in *BIAS Journal 7*.

### Clevedon Pier

The creation of a National Piers Society in July 1979, with Sir John Betjeman as its President, raised new hope for the preservation of our own most distinguished pier, that at Clevedon. The estimated costs of repairing Clevedon Pier have escalated alarmingly since the accident ten years ago which resulted in the loss of two spans in this elegant structure. The figure of £70,000 which was then estimated as being the cost of restoration has now risen by a factor of ten, and Woodspring District Council has, not surprisingly, despaired of saving it and has applied for permission to demolish it. The preservationists, however, are now making one more energetic appeal for money and support, and the idea is being canvassed of purchasing the pier by a consortium. Any offers of help should be directed to Mr A Topham, at 6 Cambridge Road, Clevedon, Avon. With luck, it is still not too late to save this outstanding industrial monument.

### Afloat in Bristol

*Writing recently in the AIA Bulletin, John Robinson commented that the Samuel Plimsoll, the port's steam dumb bucket dredger would be seen no more: -*

Built by Charles Hill's at their Albion Dockyard in 1955, the vessel was the largest dredger ever built in Bristol, being 42 m long x 11 m beam. A triple expansion steam engine of 500 ihp was fitted, fed from a 3-furnace Scotch boiler, coalfired to take advantage of Bristol's convenient proximity to the Welsh coalfield. Oil firing was substituted in 1968, and the easy steaming provides ample power to operate the chain of 36 buckets each of 25 cu ft capacity, the dredger not being fitted for self-propulsion.

Drive from the main engine is through a flat belt running on plain pulleys, an arrangement which has saved the engine from sudden shocks when one of the buckets meets an immovable obstruction on the dock bottom. When the Port of Bristol Authority offered her for sale last year, scrapping was thought to be the *Samuel Plimsoll's* most likely fate, but her new owners in Sicily are known for their policy of buying elderly vessels and running them with the minimum of maintenance 'until they drop', and bought 4 vessels from UK ports on their latest shopping expedition. Her generous beam affords great stability as well as spacious working conditions below deck and her new owners, who bid £35,000 for the dredger compared with her cost when built of £150,000 can pride themselves on having acquired an excellent specimen of Bristol ship building, good for several more years of work however archaic her means of power may seem to us twenty five years on.

In September the Norwegian vessel 'Frierfjord' was brought into the City Docks, and will eventually be renamed 'Sand Diamond' and join the fleet of dredgers still operating from Hotwells. On October 30th the Panamanian-owned 'Neuwulmstorf' came to Princes Wharf to pick up a special load consisting of three large silos, made by the Braby Group of Ashton, which were destined for Fleetwood in Lancashire.

*NOVA*, the new Bristol educational trust formed to provide Nautical Opportunities for Volunteers in Avon, was responsible for the Autumn appearance of the *SV Pascual Flores*, now being refitted in Hill's old Yard under a grant from the Manpower Services Commission. *NOVA* aims to raise £20,000 to convert this 128 ft schooner for sail training. Built in Spain 60 years ago for the American fruit trade, the vessel never actually crossed the Atlantic but instead, secured a reputation as the fastest trading schooner in the Western Mediterranean. The initiative for this enterprise is centred around the Department of Navigation at Brunel Technical College in conjunction with staff at Bristol Polytechnic.

### Excavations at Narrow Quay

*Referring to BIAS Journal 11 Views item on the CWS Warehouse site excavation at Narrow Quay, Grahame Farr gives details of evidence for the existence there of an early dock, as follows:-*

For documentary evidence see Patrick McGrath's *Records Relating to the Society of Merchant Venturers* (Bristol Record Society, 1951) pp 139 et seq, or, perhaps more readily obtainable, Wells' *Short History of the Port of Bristol*, pp 14-15 and 17.

Physical evidence of the presence of the remains of ships was abundant when the extension was built to the CWS in, I believe, November 1956. I remember passing one day and seeing three or four fishtail crotches by the side of the road. I had my camera with me and took photographs, but unfortunately did not have a rule to place beside them or to take measurements. On my next visit they had gone - a general process of quickly wafting away any archaeological remains which might delay the building process. The crotches were shaped as in the sketch. They stand on the keel of a vessel at the ends, where the deadwood is, and the planking is laid in roughly cut grooves. (Similar remains were found a few years ago at Rye and dated to the 16th century). Additional evidence was provided by many odd lengths of timber and by large pebbles, similar to those found in many westcountry beaches, eg Minehead, probably brought to Bristol as ballast. I gave a brief report, together with samples of wood and ballast stones, to the Museum, but heard no more about the subject. In fact nobody seemed to be in the slightest degree interested at the time. Maritime Bristol is indeed the Cinderella of industrial study locally.

*But, Les Good, Director of the Excavations at Narrow Quay Bristol 1978-9, reports below:-*

Between November 1978 and February 1979 excavations were carried out by Bristol City Museum on the site of the Co-operative Wholesale Society building on Narrow Quay

near the centre of Bristol. The site was near the east bank of the recut channel for the River Frome dug in the 1240's, and immediately outside the City's Marsh Wall built about the same time. The main quay for the City's sea trade was built along this bank to the north of the Marsh Wall, and was gradually extended southwards in the 17th century. Outside the city wall the area was mainly marshland, but documentary evidence suggests that it was used extensively for shipbuilding in the late medieval and early post-medieval periods. Originally the 'docks' in which the ships were built were simply long pits dug into the marsh, the ships being launched by breaking open the embankment at the river's edge and floating them out. A large pit some 4 m wide and over 19 m long along the north edge of the excavations appears to have been such a dock. The material used to backfill the pit contained a great deal of pottery of late 16th/early 17th century date as well as domestic refuse and a number of leather shoes. The date of the pottery and the shoes and its position-near the site of St Clement's Chapel indicate that this may have been St Clements Dock, so called because of its proximity to the chapel of the Merchant Venturers and which was filled in at about this time.

In 1956, during the construction of an adjacent building to the south, a number of ships' timbers and a large wall, thought to have been part of a stone dock built by the Bristol merchant Robert Aldworth in 1625, were observed. Two large walls located in the south-west corner of the 1978 excavation are also considered to have been part of this dock. Within the area enclosed by these walls was a group of curved timbers pierced by wooden pegs. These originally formed the ribs of a carvel-built boat used in river and coastal trade and had been re-used as a rough platform inside the dock about a metre above the bottom. Beneath these were a number of vertical wooden stakes which had presumably been inserted to help dry out the underlying soil. Clay pipe bowls from this soil give a date for the platform of about 1650-1660. In the last quarter of the 17th century the dock went into disuse and it had been filled in by 1690.

In the north-east corner of the site was a complex of walls whose foundations were built in a trench with a clay lining which appeared to have been partially baked in situ. This seems to have been done by the inclusion of a small amount of hot ash and slag, and served to protect the walls from water seepage. The walls were probably part of a quayside structure built at the time of the extension of the 'Quay' southwards to Aldworth's Dock in 1660.

By the beginning of the 18th century quays extended almost the full length of the river bank around the marsh and most of the area had been built over. Most of the City's shipbuilding industry had by then been transferred to the opposite banks of the river. Unfortunately the depth of the basement of the CWS building meant that no trace survived of buildings erected on the site after the infilling of the dock.

### The Charterhouse Flues

The Mendip Society, having successfully organised a scheme to restore the Smitham smelting chimney a few years ago, is currently concerned with the deteriorating condition of the lead-smelting flues at Charterhouse which have been slowly

falling in for some time. It has not been possible to obtain any assistance from the Somerset County authorities but the local authority, Mendip, has now given permission for the Society itself to undertake restoration work. Some urgent tasks have already been carried out by volunteers, but there is now need for some expert advice in the techniques to be adopted for more permanent measures. If any BIAS member could assist would they please contact Mrs Jill Davies at The Old Baker, Kent Street, Cheddar (Cheddar 742508), who will also welcome volunteers for working parties.

Towards the end of 1979 Mrs Davies felt there was need for concern about the future of the animal 'roundhouse', in the farm complex at Lye Cross, near Redhill on the A38. The building was referred to by Martin Watts in his article on 'Animal-Powered Machinery in the Bristol Region', *BIAS Journal 9*, and in consequence photographed later by at least one BIAS member. Attempts by Mrs Davies to rouse interest in getting this building listed met with no response from the County authorities and, just before Christmas, signs of impending demolition intensified when tiles were removed from the interesting conical roof. BIAS joined in last-minute measures to try to prevent destruction but, sadly, the building has now vanished from the landscape.

### **The Albert Mill, Keynsham**

Proposals for the future of Keynsham's Logwood Mill as living accommodation combined with a small factory unit, supported by BIAS and reported in last year's BIAS Views, were re-submitted during the year in the required detail to Wansdyke planning authority and have now received planning permission to go ahead with the scheme. The Inspectorate of Ancient Monuments had criticised the number of new windows inserted in the building. BIAS and other interested bodies felt that these were appropriate, and necessary, for conversion to living accommodation, and thus provided the only means, proposed so far, of saving the mill from falling into dereliction. Apparently the planners agreed. The scheme will retain the waterwheels and will display the dyewood-processing equipment in the vestibule of the building.

### **The Iron Bridge**

No industrial archaeologist can have been unaware of the fact that 1979 was the year in which the second centenary of the Iron Bridge at Coalbrookdale was celebrated. The anniversary of this 'Stonehenge of the Industrial Revolution' was observed by a carefully orchestrated series of events in Ironbridge during the summer, culminating in the visit of HRH, Prince Charles to open the new Museum of Iron and to unveil a plaque on the Bridge itself. It was also marked by a number of well-illustrated publications and by an excellent exhibition at the Royal Academy on the theme of 'A View from the Iron Bridge'. Considerable international interest was shown in the celebration, and the Annual Conference of the AIA was held in the very congenial environment of Maw's Tileworks, almost in the shadow of the Bridge.

### **Corrections**

#### **The Underfall Yard**

*Tom Fisher wishes to record the following corrections to the article on the 'Underfall Yard' in BIAS Journal 10:-*

The planing machine drive belt is not crossed (p 8). The upper of the three shafts shown protruding from the crosshead is used to raise or lower the crosshead. It can be ratchet driven also. The long bed lathe (p 9) was used in a variety of arrangements, including the crossed belt drive shown, though the crossed arrangement was used only rarely. The shaping machine (p 11) does not have a crossed drive belt. This means that all other arrows indicating tool head movements are reversed.

#### **Charfield Station**

*C R Clinker, the well-known railway historian whom we are pleased to welcome as a BIAS member makes the following comments on historic details included in the article on 'Charfield Station', BIAS Journal 11:-*

The Act of 1 July 1839 did not authorise construction of the Bristol and Gloucester Railway; it changed the name of the Bristol and Gloucestershire (authorised by Act of 19 June 1828 to make the line from Cuckold's Pill to Coalpit Heath) to 'Bristol and Gloucester Railway' and empowered the Company to make an extension from Westerleigh to Standish and a junction there with the Cheltenham & Great Western Union, the present Gloucester-Swindon line. The second paragraph of the article suggests an amalgamation of the Bristol & Gloucester and Birmingham and Gloucester companies. Although terms were agreed this amalgamation did not take place. The two companies retained their separate existences until absorbed by the Midland Company in 1846. (It might be added that the Act under which this took place stipulated maintenance of passenger and goods stations at Charfield and Wickwar). Charfield station was opened on 8 July 1844 for passengers and 2 September 1844 for goods traffic and it closed to passengers from 4 January 1965 and goods 6 September 1965. (Workman's private siding at Huntingford Mill had closed on 17 June 1928).

It so happened that I was at Charfield at 6.15 am on Saturday 13 October 1928, having accompanied the GWR representative to the scene of the accident in which a GWR train was involved whilst running on the LMS line by virtue of running powers. The statement that the GWR had installed automatic train control from 1890 is not correct. The first experiments were made in January 1906. It was not until November 1908 that a start was made on equipping certain running lines on a permanent basis; the programme for equipping all main and secondary lines was started in 1929. The Norton Fitzwarren accident of 1940 was the most serious of its kind on the GWR, but there had been several lesser accidents similar to the one at Charfield.

### **Acknowledgement**

*BIAS Journal* encompasses an extensive range of technical history over which the editors cannot always be responsible for the accuracy of the material submitted. BIAS articles increasingly are being referred to those who have particular expertise in a subject. In this volume we are indebted to Professor D G Tucker, formerly Head of Department of Electronics and Electrical Engineering at the University of Birmingham, and to Mr W K V Gale, the authoritative writer on iron and steel industries.