



Edited by Joan Day

As 1984 came to a close Europa Nostra, the international federation concerned with the conservation of Europe's cultural and natural heritage, announced its awards for the year. The announcement gave news of recognition to the Bristol City Council in the form of a Diploma of Merit for the transformation of the central harbour areas: in particular for 'the superb development of tourism and leisure activities and the provision of housing and employment in the central city site of previously decaying wharves and warehouses'. The competition was intense and of twenty-five awards made throughout Europe only five came to Britain, making Bristol's success all the more prestigious. BIAS members might sit back momentarily to enjoy a small part of the reflected glory, for without past opposition to some badly judged plans of earlier years there would have been little left to appreciate or to be worth transforming in the Floating Harbour. However, it would be dangerous to relax for too long the vigilance which is still needed over future proposals for the docks area. During the past year, BIAS committee members have been active in trying to forestall the possible splitting up and removal of the important collection of machine tools of the 1880s and other contemporary equipment in the Underfall Yard Workshops, which was featured in detail in BIAS Journal 10. 1977. The threat subsided when eventually, only one of the forges was moved, despite the large-scale removal plans which, apparently, had been considered for this important collection, which many BIAS members feel should be carefully conserved. There are some who would like to see this steam-powered workshop restored to a limited but practical use whilst others doubt the feasibility of this kind of solution in preserving the entire workshop for the future. Clearly, the Society must keep a watching brief on future proposals for the Underfall Yard Workshops.

Dundas Repaired

John Powell reports an important landmark in the restoration of the Kennet and Avon Canal

BIAS Journal 10 for 1977 reported that, according to predictions made at that year's AGM of the Kennet & Avon Canal Trust, the canal would probably be open to navigation between Bath and Bradford-on-Avon and beyond by 1980. In retrospect, this seems to have been a wildly optimistic statement but at that time Bath locks were ready for use, work was progressing rapidly on the notorious Limpley Stoke 'dry section', Claverton Pumphouse was rapidly nearing completion, and Avoncliff Aqueduct appeared to be the only big hurdle still to be tackled. Dundas Aqueduct possibly the best known architectural feature on the whole canal, was not thought at that time to need a substantial amount of repair. Unfortunately, as time went on and other projects on the section slowed, the condition of Dundas Aqueduct deteriorated considerably. Leaks worsened, levels were lowered, and eventually plastic sheeting had to be

used as a temporary measure to keep the structure as watertight as possible. It became clear that major work was necessary before navigation could be allowed, which came as a particularly bitter blow when all the other setbacks had been overcome. Following a visit to the Kennet & Avon in April 1983, Sir Frank Price, then Chairman of British Waterways Board, gave an assurance that he would do all in his power to get Dundas repaired at the earliest opportunity. He was true to his word, and permanent repair work began in October 1983 following the draining of the aqueduct and adjoining basins. By June of 1984 the original puddled clay lining of the aqueduct had been replaced by a concrete one, and the canal on either side was also lined with concrete similar in profile to that used in the 'dry section' some years ago. Sir Frank Price officially retired as BWB Chairman on 30th June 1984 but the first day of his retirement was spent returning to Dundas to perform the official opening ceremony and travel in the first boat across. Navigation is at last possible from Bath to Bradford throughout, and some are claiming that 1 July 1984 is the most significant date in the Trust's history.

An integral part of the scheme has been the plan to reconstruct the entrance into the old Somerset Coal Canal from the basin on the west side of the aqueduct. It is proposed that a quarter mile or so of the bed will be dredged out to form moorings and a marina, and preliminary work on the excavations began early in November.

Kennet and Avon Canal Trust 1788 – 1988

Mike Corfield of Devizes gives the latest information on plans to re-open the through route in time to celebrate an important occasion

The Trust is now launching an appeal to complete the restoration by 1988, just 200 years after the first meeting was held in Hungerford to plan the linking of the Kennet with the Avon.

Early in 1985 the progress eastward will continue with the opening of the canal on from Bradford to Foxhangers, the foot of the Devizes flight of locks. At the east end, with the completion of the rebuilding of Padworth and Aldermaston locks, work will continue on Woolhampton Lock; these turf sided locks, a legacy of the original construction of the Kennet Navigation in the 1720s are formidably expensive to reconstruct, and it is hoped that the present work which is being undertaken by a consortium comprising the Trust, British Waterways Board, Berkshire County Council and the Manpower Services Commission will continue until all the River Kennet locks are restored. This will leave only the problem of road bridges at Thatcham, Woolhampton, Froudes and Padworth to be resolved before the navigation can be re-opened from Reading through to Crofton. At Crofton a further MSC scheme is planned to restore the six

locks now barring the passage to and from the Vale of Pewsey. The famous flight of locks at Devizes has been substantially restored, top gates have been bought, funds must be raised to buy and fit the bottom ones. The final major expenditure is to improve the water supply by back-pumping from Claverton; this has now reached Bradford, pumps are planned for Semington and Seend in 1985. The major pumps will be to raise the water up the Devizes Flight.

Both the Trust and the Waterways Board officers are confident that the work can be completed provided that the Trust's income over the next four years can be doubled. This means raising an extra £½ million. For more information please contact the Kennet and Avon Canal Trust, Canal Centre, Couch Lane, Devizes, Wilts. Tel: Devizes (0380) 71279.

GWR 150

1985 sees the celebration of 150 years of the Great Western Railway. To be accurate, 1985 is 150 years after the passing of the Act authorising the railway's construction, the line not opening throughout until June 1841, though presumably current celebrations are based on the fact that the GWR themselves chose 1935 as the year in which they celebrated their centenary. Though the Great Western's influence was eventually to be felt in an area bounded by London, Penzance, Birkenhead and Weymouth, Bristol was the original destination of the line from the Capital, so many of the celebrations will be focussed on the city whose coat of arms was incorporated into that of the GWR. A mobile exhibition train will visit all parts of the former GWR system during the summer of 1985, and will be at Weston-super-Mare on August 12-13, and at Bristol from August 24-27. A lecture will also be given in Bristol by Philip Rees, retired Western Region Chief Civil Engineer, the provisional date being given as 17 April, the venue to be announced. From August 1 until September 1 there will be a major exhibition in part of Swindon British Rail Engineering Works, including a full-size working replica of broad gauge locomotive *Iron Duke* hauling coaches and offering rides to the public. Details of other celebrations can be obtained by writing to the Regional Public Affairs Manager at 1 Gloucester Street, Swindon SN1 1DL. Without doubt, however, the highlight of the celebrations for many people will be the large number of steam specials being operated throughout the summer. Steam specials will operate from Bristol-Plymouth (having come from Paddington under diesel power) on April 7, July 7 and September 1, and from Plymouth to Bristol on April 8, July 14 and September 8. Steam trains will also run between Swindon and Gloucester on Tuesdays, Wednesdays and Sundays in August. Steam trains are likely to run also between Wapping Wharf and Temple Meads, and on the Portishead line, though dates for these are not yet available. Temple Meads Old Station will be open to the public from Spring 1985, and Harvey's are to produce a special sherry. A special IKB beer is also due to appear. Numerous other events are being arranged at local level, and details of these will be appearing in the local press nearer the time.

News from the Industrial Museum

Andy King brings BIAS readers up-to-date with new developments at the museum

New Maritime Gallery. Although Bristol Museum has had a small display of ship models since time immemorial at Queen's Road or at the Industrial Museum, until this year there has never been a major display to tell the long history of the port. Since most of Bristol's traditional industries stemmed from it, this has been a serious omission. It was therefore with a great deal of pleasure that the new Maritime Gallery at the Industrial Museum opened in June. Occupying about a quarter of the available display space at the Museum, the gallery covers a wide variety of aspects of the Port. Beginning with an audio-visual programme telling the story of the many attempts to improve the facilities of the harbour, the display continues with a look at Cabot's journeys, privateering and the slave trade before beginning on the long saga of the Floating Harbour. The Port's early trades are covered in a mock-up warehouse setting, and many of the fine ship models from the museum collection are featured alongside. The change from wood to iron shipbuilding and the move to Avonmouth and finally Portbury bring the story up-to-date. A reconstructed engineering workshop featuring the Bush & Beddoe punch and shear, alongside the triple expansion engine from the tug *Medway* are followed by an Edwardian docks' office, a model of Avonmouth docks and finally a section covering the changes in cargo-handling methods during the last thirty years.

'*Mayflower*'. Restoration of *Mayflower*, the world's oldest tug, continues. She has temporarily lost the title 'oldest Bristol-built ship afloat' while on the hard at the Bristol Marina for shot-blasting and hull repairs. Anyone who wants to get a good idea of her lines is encouraged to have a look. The most interesting new fact, and the most embarrassing from Andy King's point of view, is that a recently-discovered photograph proves that the tug originally had a single-cylinder engine (probably like that from *ss Tredegar* shown in George Watkins's *The Steam Engine in Industry* Vol 1) rather than the V-twin illustrated in the article about *Mayflower* in the last BIAS Journal. The current engine from *Mayflower* will be on display in its nearly-restored condition at the Industrial Museum in the near future, together with other bits and pieces and a selection of historic photographs of her.

A Rescue Dig in Nailsea

Ron Fullagar reports on the rescue project in which he was involved at the close of the year

The Rev J Collinson wrote in 1791 of four pits within the parish of Nailsea, and it could be one of these on which a rescue dig was carried out in December 1984. It was known that a colliery had existed at 'The Elms', a large house built in 1900 with an extensive garden featuring a rockery in front of an ivy-covered engine house. Toward the end of 1984 the site was sold and developers began to dig exposing an old rectangular mine shaft. They informed the Nailsea and District Local History Society who, in turn contacted members of BIAS for assistance.

The existence of one shaft on the site had been known. When 'The Elms' was built there had been no water supply or drainage in the area and features of the old colliery had been utilised. A small building for a pump had been placed over a round shaft which became a well, and the standing

engine house had been extended upwards by several feet to house the header tanks for the domestic water supply. These buildings, a rockery backed by a curving wall and a small shed beside the drive were the main visible features. Closer investigation showed that the small shed had been a weigh house with fireplace, and that the curving wall had bounded a horse gin circle standing about eight feet above ground level. Excavations were begun, assisted on two days by a JCB. Very soon the foundations of another engine house were found, evidently that of a beam pumping engine having a cylinder of about sixty inches in diameter. The discovery of chain links of the kind used on arch heads indicated the use of a wooden beam without Watt's parallel motion. There was a rectangular hot-well which had been modified at some time, but at least latterly, the engine probably had an external condenser. Beside the engine house the foundations of a boiler were uncovered, probably of a wagon boiler, with a large rectangular pit below the probable position of the firebars. This was reached by tunnels at each end. The shorter tunnel possibly positioned under the fire door led under a channel which may have been used to return engine condensate to a reservoir. There are other features on the site which are not easy to interpret. The purpose of the standing engine house is not clear. There are indications that there may have been an external flywheel or winding drum, a large tree grows in the site; and a line of heavy stones across the gin circle probably related to the transmission to the shaft several yards away. A second horse gin circle was found adjacent to the shaft used for the domestic water supply, but no further work was done in that area. The developers were expected to start work early in January 1985 when the site will be lost. I should like to express appreciation of the opportunity offered by the developers to explore the site, and to the Nailsea and District Local History Society for making BIAS aware of it.

Severn Survey

Peter Wakelin, a member of BIAS and previous contributor to the Journal, has recently embarked upon a major research project at Wolverhampton Polytechnic to study the history of navigation and trade on the River Severn. The Severn was a vital link, from the Middle Ages until the coming of the railways, between the West Country and Mid Wales, the West Midlands, and the North West. It provided a line of cheap transport over 160 miles in length, along which was carried a vast range of commodities. It was by far the longest river navigation in Britain and must have been among the busiest in Europe, yet surprisingly little is known about the navigation or its trade.

One of the most important sources for the study will be the customs books for the river port of Gloucester, which record in detail the traffic passing through that point from the late sixteenth century to the 1760s. Over a thousand different commodities are listed, from coal, iron, wool and earthenware to clay tobacco pipes and 'elephants' teeth'. Almost all the trade passing downstream from Gloucester seems to have been focussed on the port of Bristol where the produce of the Severn Valley and its enormous hinterland was sold for export or distribution in the West Country. Return cargoes, like Bristol's imports of wine, tobacco and spices, or its own manufactures such as brass, glassware and soap, would then be carried northward. It is hoped that detailed study, with the aid of a computer, of the commodities

traded during the seventeenth and eighteenth centuries will provide a great deal of new information about numerous industries and their changing regional influences. Fascinating details have already begun to emerge from the port books about Abraham Darby and the early coke iron industry, about the salt trade, and about the seasonal navigability of the river.

Much more evidence will be needed, however, in order to understand the ways in which the Severn traffic was carried and how it was organized, and to gain an impression of the importance of the river to the area which it served. Given that so much of the Severn's trade was carried through Bristol, readers may know of source material in the locality which will shed further light on the subject. Biographical information about ship masters and merchants, accounts of costs for transporting goods or of dealing on wharves, and more general descriptions of many sorts will be vital if the river is to be fully understood. Peter Wakelin would be very pleased to hear from anyone who knows of such potentially useful documentary evidence for the coasting trade from Bristol and for the navigation of the Severn and its tributaries. He would also like to know about archaeological sites, such as early wharves and trow wrecks, which might provide information for the study, and is keen to interview surviving Severn trowmen about the physical problems of navigating the estuary. Readers can write to him at the School of Humanities, The Polytechnic, Wolverhampton, Castle View, Dudley, West Midlands DY1 3HR. All help will be gratefully acknowledged.

Obituary Angus Buchanan has contributed these notes about long-standing BIAS member, Iain Walker

Dr Iain C Walker died on 6th May 1984 at the age of 46. He was the first post-graduate student to register with me and probably the first in the School of Humanities and Social Sciences at the University of Bath. He was at that time working as a government archaeologist in Canada having graduated at the University of Edinburgh with a Master's Degree of Prehistoric Archaeology in 1961. After two years' educational leave at Bath as a full-time PhD student in 1968-70 he returned to Canada where he resumed work in the Canadian government service. He moved eventually into the Museums Service, his last post being in the History Division of the National Museum of Man in Ottawa. He completed his thesis in 1973 on the subject of *Clay tobacco-pipes with particular reference to the Bristol industry*. Dr Walker had become interested through his excavations at Fort Louisbourg on the St Lawrence estuary, where fragments of clay pipes occurred in profusion and provided a valuable dating technique. It was discovered, moreover, that many of the pipes came from Bristol, so that he sought documentary and archaeological evidence of Bristol pipe-makers. His thesis covered much more than this, with authoritative sections devoted to the technique of clay-pipe manufacture and to the worldwide trade in the finished commodity. Dr Walker became the outstanding international scholar in all aspects of clay tobacco-pipes, contributing many articles and research notes to a wide range of learned journals. He was drawn into the developing field of industrial archaeology, but his general archaeological interests were extensive and he will be greatly missed by scholars in many fields.