BIAS NEWS AND NOTES

edited by Joan Day

Welcome to our many new members. In spite of the general economic gloom, particularly in the industrial scene, it is gratifying to know that six companies have considered new BIAS membership worthwhile during 1975. Individual membership of the society has not been standing still either, as the latest figures indicate. Our overall totals are approaching 300 at a time when some long-established societies are experiencing a recession. We hope that the BIAS policy of trying to cater for all kinds of interest in industrial archaeology will encourage our upward trend to continue during the coming year.

Conservation in Avon

Now that Avon County is beginning to take things in its stride, planning officials are looking at several industrial sites particularly those in proposed Conservation Areas. The approach recently made to BIAS by the County's Conservation Officer, Miss Marion Meek, is a very welcome development which will sure to be of mutual benefit, to her department and our society. We now have an opportunity to make a significant contribution to the information being collated on industrial sites in the county. Wansdyke's planning office is currently investigating proposals for twenty-three conservation areas within its territory. Recently, part of Keynsham was closely scrutinised by the District Council's Conservation Officer, John Green, who was glad to make use of the drawings of Albert Mill, prepared last year by BIAS Survey Unit. Further co-operation will be possible quite shortly when part of the village of Saltford will be studied for similar purposes. Timsbury, Claverton, Combe Hay and Pensford are other Wansdyke villages with important industrial features which will be considered within these proposals.

A substantial success of the past year in local industrial preservation has been the decision of the Secretary of the State for the Environment to refuse planning permission for the redevelopment of the Seed Warehouse at No.1 The Grove. The Society was represented at the local enquiry in January 1975, when the preservation of this fortress-like pennant sandstone building was urged. Together with the handsomely restored Bush's Warehouse, now occupied by the Arnolfini Gallery, and the adjoining Georgian terrace containing the Shakespeare Inn, this building preserves a fragment of the historic Bristol waterfront at a time when much of it is in danger of careless redevelopment. The demolition of the brick sheds on Bathurst Wharf, across the Floating Harbour from The Grove, will be watched with acute anxiety,and the local planning office is being currently pressed for reassurances that the site will be redeveloped in a sympathetic manner. The waterfront in the city centre is possibly the most valuable of Bristol's industrial monuments. And it is certainly one of the most vulnerable.

Association for Industrial Archaeology

The Association for Industrial Archaeology held its annual conference in September 1975 in Durham. The gathering was the largest yet, with about 150 members attending, and the usual mixed fare of lectures, slide shows, and excursions was enjoyed by all. The conference was distinguished by the first 'L T C Rolt Memorial Lecture', delivered by Professor A W Skempton of imperial College on 'Engineers of Sunderland Harbour'. Members savoured the rich industrial heritage of North East England in a variety of ways, but especially through the excursions, one of which went to Beamish Open Air Museum and the other to the Bowes Railway and the Ryhope engines. The AGM was held with unusual efficiency and good humour. BIAS members will be interested to know that the attempt by the Society to enlarge the opportunities for institutional membership of the AIA was not accepted by the Council of the Association. It might be necessary to press for a reconsideration of this decision on a future occasion.

The Second International Congress

Internationally, the area of industrial archaeological interest and activity is spreading rapidly. This fact became apparent at SICCIM, the Second International Congress on the Conservation of Industrial Monuments, held at the Mining Museum in Bochum, West Germany, in September 1975. The active membership of the Congress was about fifty, comprising ten from Britain, three from the USA, seven from Scandanavia, two from Austria, Holland and Japan, and one each from France and Belguim. Six came from the Eastern European countries and the remainder were the West German contingent. The papers presented to the Congress showed considerable progress in industrial conservation in all the participant countries since the First Congress (FICCIM) held at Ironbridge two years previously. Based in the heart of the traditional Ruhr industrial district, delegates had a good opportunity to observe German developments, including some excellent preservation enterprises. It is planned to hold the Third Congress (TICCIM) two or three years hence in Sweden.

Eighteenth-century steam engines

News and Notes of **Journal 6, 1973** contained an item about eighteenth-century steam engines known to have been installed in the Bristol area. It was inspired by the national statistics of eighteenth-century engines being compiled by John Robey of Stafford and hoped to provide an impetus to local research on the subject. Unknown to us at the time Ken Rogers, Assistant County Archivist of Wiltshire, was studying Thomas Goldney's Account Book which had been deposited at the Wiltshire Record Office in Trowbridge. He found references to boiler castings and engine parts of some 60 'fire' engines supplied between 1741-69 by Goldney, in his capacity as West-Country agent to the Coalbrookdale Company. Several of these engine parts were destined for the Bristol area and, as the entries include the names of

buyers, places of erection, engine dimensions and weights, they corroborate and greatly expand the available information on the known local sites such as those shown on Donn's map of 1769. Mr Rogers has written a book about the engines detailed in this new source which will be published shortly.

Reinforced concrete buildings

in last year's Journal David Cocks described, in some detail, the design, construction and present condition of the WCA building in Redcliff Back, Bristol, and this was followed by an extremely popular visit in June to the warehouse site. These events aroused an interest in the chronology of reinforced concrete construction, which presented a few difficulties. However, it is fairly universally accepted by building historians that France played a significant part in the early history of ferro-concrete (concrete with iron or steel used as reinforcement) and, that one man in particular, Francois Hennebique of Paris (1843-1924) was outstanding. Amongst Hennebique's contemporaries and friends was Louis Gustave Mouchel, one-time structural designer at the Ponts ét Chaussées, who settled in South Wales in 1875 and twenty years later introduced Hennebique techniques into industrial buildings at Briton Ferry. Shortly afterwards Mouchel started a structural design practice and moved to Victoria Street, Westminster. His first designs incorporating the then quite revolutionary ferro-concrete piling techniques were carried out at Southampton and Swansea in 1897 but by 1903, he was working as consulting engineer to the Great Western Railway on Jeffries Wharf in Bristol and a year later for the Bristol City Council on Brandon Wharf.

Civil engineers were suspicious of these new construction techniques and although Mouchel was a tremendous enthusiast he needed to convert the established engineers to develop his pioneering methods. One such convert was W. W. Squire, Bristol City Docks Engineer and the man who was in overall charge of the Royal Edward Dock project at Avonmouth. By 1904, Mouchel was working on transit sheds at Cannons Marsh, and followed this three years later by designing the 500ft long sheds on the Royal Edward Dock site. He had established himself in the Bristol area. In 1906 he was the designer for the River Frome culvert scheme, by 1908 had prepared designs for the Cannons Marsh Goods Station and after that his clients' list reads like a table of Bristol industrial growth. W D and H O Wills, Imperial Tobacco Company, St Annes Board Mills, Georges Bristol Brewery, J Robertsons, J S Fry and Sons, Bristol Waterworks and Bristol Gas Company all used Mouchel at some time or other, whilst his association with architects Oatley and Lawrence led to participation in the University of Bristol expansion of 1915-25 including the 215ft high Great George tower. It would seem that the Hennebique-Mouchel ferro-concrete collaboration had a considerable impact on the structural development of Bristol buildings.

Among the projects listed by the company in its 1908 designs are, 'Warehouse floors for the Western Counties Agricultural Association Limited and Mr W H Brown', (the WCA's engineer), revealing that Mouchel was involved at one time with the structural design of the warehouse. For this detail and for the extensive sources of information which have been made available, we are indebted to Mr Bob Milner of Keynsham, now retired but formerly an engineer with the firm now known as L G Mouchel and Partners, who have local offices at Bath.

Stothert & Pitt research

Stothert & Pitt, the Bath engineering firm which made the 'Fairbairn' crane featured elsewhere in this Journal, has had a long history. But nobody seems to know precisely **how** long. Some years ago, the firm was preparing to celebrate its centenary about 1970, as it was then believed. The firm was persuaded, however, by the evidence of cast iron bridges bearing the name 'Stothert' which were clearly older than 1870, that the beginning of the enterprise was much earlier, probably about 1800. Recent research by Dr Hugh Torrens of Keele University, whose interest in local industrial archaeology is shown by his article on the Combe Hay Caisson lock, has now demonstrated that the foundation of the firm goes back into the eighteenth century. His earliest date at present is 1779, when Mr George Stothert is recorded as a superintendent of the works of Mr Harris, an Ironmonger of Bath. Dr Torrens is collecting information about the history of the firm and about the genealogies of the families involved in it, and he will be grateful for any details which our readers can give him. We hope that it will be possible to publish an article on this subject in due course.

Photographic history

For many years BIAS member George Parker, of Wells, has been collecting good examples of the main processes used in photography since its invention about 135 years ago. This collection and the intense interest which inspired it, enabled Dr Parker to contribute a fascinating lecture on photographic history to the BIAS Extra-Mural series three years ago which many members will remember. Meanwhile, he has also been acquiring pieces of equipment to represent a chronological sequence of the main types of camera used, from the start of the dry-plate era in about 1880, to very recent times. This collection was placed on temporary display at Wells during 1974 but has now been presented to the recently extended Newbury District Museum, where Dr Parker has a long-standing association. Members may like to note that he intends to continue his collection of prints, slides, books and catalogues reflecting the history of photography.

Papermaking

Brian Attwood, former chairman of BIAS, has continued to be busy on our behalf since pressure of work at St Annes Board Mills forced him to resign from our committee. Now, in his capacity as chairman of the National Paper Museum committee, he is able to give some information on the new National Paper Museum which has been established at Manchester in the North West Regional Museum of Science and Technology. Over the years the paper industry has been well aware of its heritage and has gradually accumulated artifacts and machinery associated with its development. In the early 1960s the first base for this collection was set up at a Kent papermill but with its subsequent closure new arrangements had to be made. The material has now been housed successfully at the Manchester museum, in company with a wide range of exhibits of technological interest which are well worth visiting. However, there are plans to construct

a new base for papermaking eventually, in the same region. The collection ranges from hand-made paper-making equipment (some of great rarity) up to present~day machinery. There is a working model of a complete paper-making machine which can be demonstrated during the normal opening hours of the Museum. Also in the collection are a number of rare books about papermaking, and water-marked papers. Recently a film has been made of the complete hand-made paper-making process which, Brian hopes, will be available for showing in the BIAS programme in the coming year.

Those who are particularly interested in the paper industry will want to study the recently-published **1975 Journal of the Gloucestershire SIA** which features a group of paper-mills and the families of their owners to the north of Gloucester. Hardly relevant to Bristol you may well consider, but a quick glance at the first few pages of the centenary publication, **Robinsons of Bristol 1844-1944**, would persuade you otherwise. The eighteenth-century Robinsons of the Forest of Dean were traders in general goods but related to the Lloyds of Postlip papermills near Winchcombe. In 1803 Edward Robinson became apprenticed to his cousins at Postlip and later, moved with them when they took Overbury Mills near Tewkesbury where Elisha Smith Robinson was born. Gaining other business experience as quite a young man, including that of the grocery trade, Elisha eventually returned to work with his father at Overbury papermills for a short period. A clash of personalities induced the son to leave for Bristol and, by 1844, he had established his own business supplying wrapping paper to the grocery trade. Robinsons of Bristol had been founded. A few years later, when Elisha Smith Robinson was joined by his youngest brother Alfred, the business became the more familiar E S and A Robinson.

Toll board from Marksbury

The BIAS Sunvey of *Turnpike Roads in the Bristol Area*, published in two parts in **Journals 1** and **5** brought in informa tion of newly discovered toll boards in the area. News and Notes of **Journal 4** drew attention to the board found at Keynsham, complete with all its toll charges, which came from the now-demolished turnpike house, once situated at the Twerton fork approaching Bath on the A4. Frances Neale referred to a similar discovery in **Journal 5**, of a board from the demolished West Harptree Trust turnpike house on the West side of Blagdon village. In the last few weeks details have emerged of another board, now used as a barn door at Compton Dando. Although a rectangle of timber has been removed and the surface has been partly worn away by animals which have used the barn in the past, much of the raised lettering is still perfectly legible, enabling the board to be dated to 1830 and its original site named as Marks-bury. The turnpike house in the village of Marksbury was pulled down in 1969 but a drawing of the building portrayed by Peter Stuckey can be seen in Journal in the **Journal 5** survey article. BIAS member, Terry Cleave, has been inspecting the board at Compton Dando with the idea of discovering how the white lettering was raised from the surface; a feature also of the board found at Keynsham and the Bagstone Gate board stored in Bristol Museum. He has come to the conclusion that this was not part of the original appearance but rather the result of gradual weathering and disintegration of the unpainted surface which eventually left the better-protected painted surface of the letters standing proud of the board itself.

The readable part of the Marksbury board is as follows:-

. . .RNPIKES
. . .RY GATE
. . .taken at this gate pursuant to the
BATH TURNPIKE ACT 10th Geo. 4

FOR every Horse, or other Beast [dra] wing any Coach, Barouche, Sociable Berlin, Chariot, Landau, [C] haise, Phaeton, Curricle, Gig, Carravan, Cart upon Springs, Hearse, Litter, or other such light carriage (except Stage Coaches) the sum of 5
FOR (every) Horse or other Beast drawing any Stage. Coach licensed to carry - the whole inside and outside not more than sixteen passengers, the sum of 5
Licensed to carry more than sixteen passengers, the sum of 6

Conservation on the Little Avon

In November 1975, the Stroud District Council approved the designation of a new conservation area on the borders of Gloucestershire and Avon County at Kingswood, near Wotton-under-Edge. Within the area are the principal buildings of the Abbey Mills complex, which includes, the remnants of the original mill building gutted by fire in 1898, the decorated cast-iron water tank seen from the main road, a row of mill cottages, a warehouse and adjacent cottage. The next mill downstream the Little Avon River is Langford Mill which, unfortunately, was not included in the conservation scheme. This site was visited and surveyed in outline in May 1975, when the cast-iron breast-shot waterwheel was still in place with all its equipment. Shortly afterwards the wheel was broken up, apparently in a misguided attempt at finding work for men by 'tidying up' the building although holes in the roof were left unrepaired. However, the building as it stands is still worth saving and an application for its listing as a building of historical interest has now been forwarded to the Department of the Environment.

Display of the Bridgwater brick industry

In July a room was re-opened in the Blake Museum, Bridg-water, which deals exclusively with one aspect of industrial archaeology: the growth and development of the brick and tile industry in the Town.

Following the success of an earlier temporary display, the staff of the Somerset County Museum have now exhibited the material in a permanent manner. Photographs, diagrams and text illustrate the importance of the industry to Bridgwater during the 19th and 20th centuries. These post-medieval developments are also set in an historical context, the brick being traced from its humble origins in the Middle East and the tile from its introduction into Somerset by the Romans.

A number of tools and moulds used in the industry are

displayed as are examples of the more decorative clay products such as finials for the gable ends of buildings. Also included are a number of Bath scouring bricks, once manufactured in Bridgwater in thousands from a slime deposited by the River Parrett that flows through the Town.

Additional research for the Exhibition was undertaken by Brian Murless of the Somerset Industrial Archaeological Society, and who addressed BIAS members last November. For historical and economic reasons Brian is taking the Old County of Somerset for his long-term study of the brick and tile industry. He has already received valued help from persons living in those parts of Avon which were formerly Somerset but new contacts and information would be greatly appreciated.

Private enterprise transport

At the close of the year there is speculation that the West Somerset rail link between Taunton and Minehead may be functioning earlier than thought possible because of the employment situation. It is thought that the West Somerset Railway Company will qualify for a £50,000 grant under the present Government scheme to create employment. At present there are plans to have eight commuter trains running every day by late 1976 but preliminary steam services will run between Minehead and Blue Anchor by March.

Nearer home, the proposals for a water-bus transport system are being discussed in Bristol, the idea having been launched by the Junior Chamber of Commerce. A scheme has been put forward for a commuter service with regular schedules making use of three 96-seater waterbuses in the City Docks between Cumberland Basin and Temple Meads. The stops suggested are at Cumberland Basin, the ss **Great Britain**, St Augustine's Reach, Bristol Bridge and Temple Meads.

The end of coalmining

In order to comply with the legal requirements of the lease the National Coal Board has now demolished the old colliery buildings at Kilmersdon, having first retrieved as much underground equipment as possible for use in South Wales colliery sites. The beam-engine house, measured in 1974 by the BIAS Survey Unit, was a pile of rubble by the time of the society visit in October 1975, when members were shown round by Mr D L Dowding, NCB Surveyor. Many of the Writhlington buildings were still surviving on that day but demolition contractors had already moved in when plans for the site's industrial museum linked with the Radstock Railway Museum had been abandoned for financial reasons. By the close of the year the headstock and most of the buildings at Writhlington had vanished from the landscape. Several contractors have been working on the removal of shale from the larger local spoil heaps and, before long, it will take an experienced industrial archaeologist to discern the remains of the coal-mining industry of North Somerset.

These changes are welcomed by many of the local residents, particularly the more vocal elected members of the council, a reaction which is quite understandable when one considers the dirt, industrial illness and injuries which many mining familes have had to endure. However, not all local people wish to have the evidence of several hundred years of industrial history swept from the area entirely. In this cause, the Society felt justified in supporting protests of residents in their opposition to the removal of the Withy Mills spoil heap, near Timsbury. This site, now overgrown and scenically attractive, overlooks the Paulton Basin of the Somersetshire Coal Canal, its system of tramroad routes from the local collieries. Just a few hundred yards away lie the remains of Paulton Foundry and the site of Somerset's earliest Newcomen engine at Paulton Engine coalworks.

The Society has now heard from the County Planning Office that permission to remove shale from Withy Mills spoil heap has been refused. The tip will remain, covered with its oak trees and blackberry bushes and providing an excellent vantage point to view the surrounding industrial archaeology of coal mining.

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