

Edited by Joan Day

Industrial archaeology has finally caught up with the production of BIAS Journal, hence the new look of our present volume. It has been produced by typewritten script reduced by photocopier rather than setting from an IBM Selectric Composer, the machine used from the outset of BIAS publications. The composer was capable of providing a variety of typefaces, in different point sizes, with the appropriate variation of distance between lines. Electrically controlled, it comprised a complicated assembly of mechanisms with the overall appearance of a sophisticated typewriter. The wear of mechanical parts, which have become progressively more difficult to replace, to a point where repair is no longer viable, has been its downfall. Selectric Composers are being increasingly abandoned to the dusty shelves of office relics belonging to the days before microcomputers. The alternative computer word-processor still cannot provide copy of the quality required at a reasonable cost. Computer-controlled photo-typesetting is of superior quality, but remains too expensive; however, the scene is changing rapidly and new techniques are on the way. In the meantime, until a suitable process for BIAS becomes available, we shall be using the humble typewriter, albeit of a different breed from those of a half-century ago. For this facility we acknowledge the cooperation of BIAS member Gill Seward, who has been backed up with 'special effects' by Gwen Nicholson.

The conservation effort

Roger Wilkes, 15 Dragons Hill Gardens, Keynsham, (Tel, K5018), would appreciate information on any endangered sites in members' own localities. During the year the sub-committee has been active on the following issues:

Albert Mill, Keynsham When planning permission was granted last year by Wansdyke District Council for the ambitious development scheme, in which the surviving dyewood processing plant was to be properly preserved, it was disappointing to see no following action being taken by Ausnere Properties at the Albert Mill site. It is rumoured that additional structural work found to be necessary is proving a financial stumbling block, a reminder that several schemes proposed for the site in the past have ultimately proved not to be financially viable. In the meantime the building deteriorates and it is hoped for the sake of its survival that a way will be found round the current difficulties. With the full co-operation of the Ausnere organisation a group of BIAS members measured a bay of the building during the Easter break which had been omitted by the previous survey published in *BIAS Journal 7*. It is believed that this section may possibly have predated the main part of the existing building complex, but no time had been available when the original survey was

carried out as our work was curtailed by Messrs Ellis and Everard, the firm in occupation. We hope that this new work will be published in a future issue of our *Journal*.

16 Narrow Quay, Bristol New planning applications with respect to this last surviving sail-making loft in the environs of Bristol's dock-land were anticipated in these notes in last year's *Journal*. When, as expected, they were duly made public, BIAS again made representation to Bristol's Planning Committee that consent to demolish this interesting building should not be granted. We await the decision of the planners.

Thimble Hill, Bath At one stage during the year it was feared that remains of this small but prominent building, lying at the entrance from the Avon to the Kennet and Avon Canal, were about to be demolished. The developers were anticipating the receipt of full planning permission and parts of the building were being dismantled. There were also serious reservations about the efforts of Bath's Planning Committee to ensure adequate prior recording at underground levels on a site, the true purpose of which has remained obscure. As events progressed, and as the subsequent stages of work have been monitored on behalf of BIAS by Angus Buchanan, it appears that we should be somewhat re-assured. The most important aspect to the canal-side of the building is being preserved satisfactorily. Close inspection of the stonework has revealed details that confirm former suspicions that a small beam engine was once situated here, for the purpose of pumping water to the locks at higher levels. Excavation at the base of the building may well have settled the question but the opportunity has now been lost, and we shall have to await documentary evidence to finally prove the point.

Fussell's Ironworks, Mells A request to BIAS was made by the Planning Department of Mendip District Council for information on the history of the site at Mells and the excavations in which BIAS members were involved over so many years. This was required to support the effort to establish a Conservation Area in that part of the Mell River Valley in which the works were situated. Robin Stiles, author of the short report on the excavations published in *BIAS Journal 8*, provided the assistance required.

Saltford Brass Mill BIAS has recently re-affirmed its opposition to the proposed development at the site, which includes the insertion of four holiday flats inside the brass-mill building, and wishes to be represented at the forthcoming Public Inquiry to decide the matter. This is to be held to hear an appeal against the rejection of Scheduled Building Consent, necessary for development of a Scheduled Ancient Monument which the mill was designated early in

1986. Given a suitable date, which has not been finally decided upon at the time of going to press but provisionally said to be 17 February, it is hoped that Angus Buchanan will represent BIAS interests at the Inquiry. Other local and national organisations have also expressed a desire to be similarly represented.

Frenchay Mill A watching brief was kept on a planning application for developments at the site, which were, however, rejected by the planning authority. At the time of going to press information is still being sought on possible proposals for the conversion of the Gunpowder House at Shirehampton.

Painters Pit Ventilation Furnace

Although the main work of restoration at the furnace was carried out during 1984-5, as reported in *BIAS Journal* 18, repairs were still needed on the higher levels of the chimney. This work was finally completed by the Autumn of this year and the small group of BIAS enthusiasts responsible received formal recognition of the value of their project when Kingswood District Council staged an 'official' firing ceremony by the District Council Chairman Ian Smith, at the end of September.

The furnace and its chimney is situated at a coalpit opened about 1730 and abandoned some forty years later. The shaft was later to become known as Painters Pit. By the end of the century the Brain family had started Old Pit nearby and by 1830 had dug New Pit on the opposite flanks of the Golden Valley. During the mid-nineteenth century they had repaired and adapted the old shaft of Painters Pit to aerate the whole underground system by erecting the ventilating furnace beside the original shaft. Thus Old Pit and New Pit formed the downcast shafts with Painters Pit becoming the upcast shaft and emergency exit.

At the site of the ventilation furnace, the 17ft diameter circular horse-walk of the whim gin is now revealed, complete with central pivot stone. The chimney has a drift shaft linked to the main shaft nearby, which has now been safely capped. The firebox at the base of the chimney created the updraught which kept a current of air flowing through the whole system and is believed to be the last example of its type existing at coalworkings throughout the country. The site was listed Grade II in November 1984, but intending visitors should note that it is situated in a private field through which the owner has kindly allowed access and great care should be taken with crops in the approaches.

The canal scene

John Powell reports on an important development during 1986 at the Somerset Coal Canal entrance from the Kennet & Avon Canal

'If ever there was a derelict canal this was. It could be proved to demonstration it had ceased to be of any value as a means of communication'. This was the verdict of counsel for local landowners at the Inquiry into the application for the abandonment of the Somerset

Coal Canal in 1903, and many would have said that little had changed, until 1986, with only the occasional determined industrial archaeologist seeking out the remains en route to the Combe Hay Locks or Paulton Basin. In recent months, however, new life has been breathed into a short stretch of this 'lost' canal immediately south of the point at which it joined the Kennet & Avon Canal on the west side of Dundas Aqueduct. Tim Wheeldon, proprietor of the Bath & Dundas Canal Company has, through his own efforts, excavated the old lock chamber and a length of canal beyond, and it is now used for the mooring of boats. The towpath of the Kennet & Avon is carried across by an alloy lift bridge which was formerly located on the Oxford Canal at Banbury. Mr Wheeldon hopes eventually to be able to extend this improvement as far as the Viaduct Hotel, adjacent to the main Bath-Warminster road.

This development is yet another step forward in the slow but steady progress in the restoration of the Kennet & Avon, most of which has been due to the tireless work of the Kennet & Avon Canal Trust, whose members were deeply saddened by the death on 27 November of General Sir Hugh Stockwell. Although his military career was under the spotlight during 1986, this being the 30th anniversary of the Suez Campaign which he commanded, he will be remembered throughout the West Country as the man who led the battle for the Kennet & Avon for many years, and was President of the Trust at the time of his death.

Fairground Gallopers

John Robinson of the Science Museum describes a recent temporary acquisition, with Bristol connections, at the Museum's outstation at Wroughton, near Swindon, and proposals for its display at a new National Fairground Museum.

There have been various invitations to establish a museum of the travelling fair some of which foundered on the prejudice that the subject was somehow frivolous or beneath serious study. One such scheme was developed in some detail about ten years ago by London architect David Braithwaite, author on the subject and historian of the Burton on Trent firm of Orton and Spooner whose artists supplied some of the finest decorated panels and figures. Sadly the passage of time has seen many more rides broken up or sold overseas. Earlier this year the Fairground Heritage Trust was formed to create a permanent national collection of historic roundabouts, amusements and transport. The Trust's first major acquisition is a remarkable Victorian galloping horse roundabout with its original Tidman centre engine, Verbeck organ and road train. The ride was built by Savage of Kings Lynn, with a set of finely carved horses by Arthur Anderson of Bristol, who was Britain's most distinctive and most famous fairground carver. The packing truck was built on a sub-structure taken from a farm cart, and the 1917 FWD lorry imported into this country from the USA during World War I survives on its solid rubber tyres.

The ride was travelled by the Edwards family of showmen, and was looked after by Mrs Edwards while her sons and daughters managed other

rides. When Mrs Edwards died some fifty years ago the ride was put into store in Swindon, and only recently have her heirs decided to part with it for restoration and preservation. The survival of such a roundabout without any alterations or serious deterioration since the 1930s is remarkable. Recognising the determination of the Fairground Heritage Trust to preserve this ride permanently (it is not intended to operate it other than very occasionally, to minimise wear and damage) the National Heritage Memorial Fund has contributed generously towards its purchase and other major contributions have come from the Manifold Trust the Material World Charitable Foundation and the Science Museum Preservation Fund. The Edwards Gallopers are stored temporarily at the Science Museum outstation at Wroughton where restoration will begin shortly. Viewing will be possible on advertised Open Days during 1987. The ride and other items in the Trust's collection will be displayed in the proposed National Fairground Museum, for which a site is currently being sought.

Joseph Day (1885-1946)

Hugh Torrens is searching for information about a pioneer of the two-stroke engine.

In 1952 staff of the Science Museum appealed - without success - for any information about an English pioneer of the internal combustion engine called Joseph Day. He designed a valveless two-stroke gas engine of considerable significance, which was patented in 1891-2. Examples survive in the Science Museum and the Deutsches Museum in Munich. Day came from a Catholic family with long connections with Bath. He was born in September 1855 in Bayswater, London and after attending school at Beaumont, Windsor, became one of the first engineers to train at the Crystal Palace School of Practical Engineering. After a 3 year pupilage at Stothert and Pitt's engineering works in Bath, he established himself as an engineer in 1878. After various partnerships and the first of a series of patents granted over 1878-1908, he built the Victoria Ironworks in Spring Gardens, Bath in 1883. He was elected AMICE in 1887.

An attempt to raise capital in 1892 to develop his gas engine patents failed to attract shareholders and Day and his last partner went bankrupt in 1893. Day then moved to Weston-Super-Mare where he remained active, as an inventor if not as a manufacturer, until 1902. By 1904 he was in London and with the help of his father - a noted London lawyer - he recommenced the manufacture of Day 'valveless' two-stroke stationary and marine engines by 1906. These were later produced by the Day Motor Co Ltd of Putney from 1908. The engines had only three moving parts and would run equally well forwards or backwards. They achieved world wide sales, as petrol and paraffin models. Day was also an inspiration behind the two-stroke engine Trojan car of 1912. The First World War interrupted this work as the firm became busy on government contracts. In 1923 his firm was reformed as the Day Foundry and Engine Co Ltd in Richmond, Surrey and Day engines had ceased manufacture by 1927. He died on Christmas Day in 1946 aged 91, near

Twickenham, apparently quite forgotten. He showed that the two-stroke engine could compete, especially in the field of marine engines, with the Otto four-stroke cycle, and he deserves proper recognition. Information on any aspect of Day's life and work is sought for a planned biography, in particular data on the evolution of the marine boat engine. News of the survival of any Day engines or other artifacts would be particularly welcomed by Hugh Torrens, Lower Mill Cottage, Furnace Lane, Madeley, Crewe, CW3 9EU.

Association for Industrial Archaeology

15th Annual Conference, 11th to 13th September 1987 University of Bath with preliminaries from September 8th.

In 1964, Angus Buchanan organised a one-day conference on industrial archaeology for Bristol's College of Advanced Technology - then shortly to become the University of Bath. Support warranted a repeat the following year and in 1966 the conference was extended to a residential weekend at Bath attracting national support. By 1967 participation from overseas was in evidence during 'continuing and animated discussion about many aspects of industrial archaeology'. A constantly recurring theme was the need to improve its national standing and the proposal to form a national society. Three more conferences in Bath were to follow in successive years before the organisation 'went walkabout', first to Bradford and then to Glasgow. At Port Erin, Isle of Man, the following year, 1973, the Association for Industrial Archaeology was formally established. The AIA Conference can be said, therefore, to have stemmed directly from the first residential gathering at Bath in 1966.

In 1987, the AIA returns to Bath for their fifteenth annual Conference and also for what, in reality, is the 21st Anniversary of the first concept of such an assembly. The early Bath conferences were held in the centre of the city, at temporary premises of the new University of Bath. Next September members will be assembling at the university campus, some two miles distant and six hundred feet higher, where they will be accommodated.

The Annual General Meeting of the AIA will be held on Sunday morning followed by the Rolt Memorial Lecture which, very appropriately for this occasion, will be given by Dr R A Buchanan, entitled, *The Great Engineers*.

As in previous conferences, there will be an additional programme of events based at the University of Bath with lectures, coach excursions, prior to the main conference, starting on the evening of Tuesday, 8 September 1987.

BIAS is regarded as the host society for this mammoth event and those members who would like to take an active part in the organisation, by acting as guides, or ensuring that those from abroad or distant parts of the country receive a warm welcome should contact Owen Ward, Mike Bone, Joan Day or John Powell who are responsible for the organisation on behalf of the AIA.