

BULLETIN 2.4.

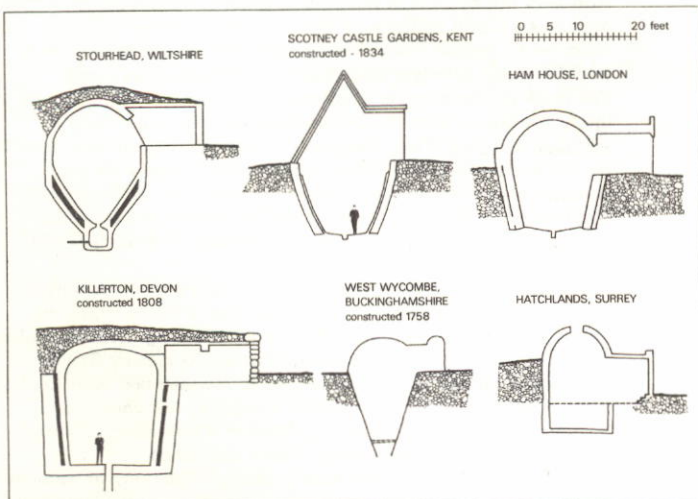
1976

The article which follows first appeared in the Autumn 1975 issue of 'National Trust', the quarterly journal of the National Trust. We are very grateful to the author, Geoffrey Locke, and to the editor of 'National Trust', Arthur Foss, for permission to reproduce it here.

ICE HOUSES

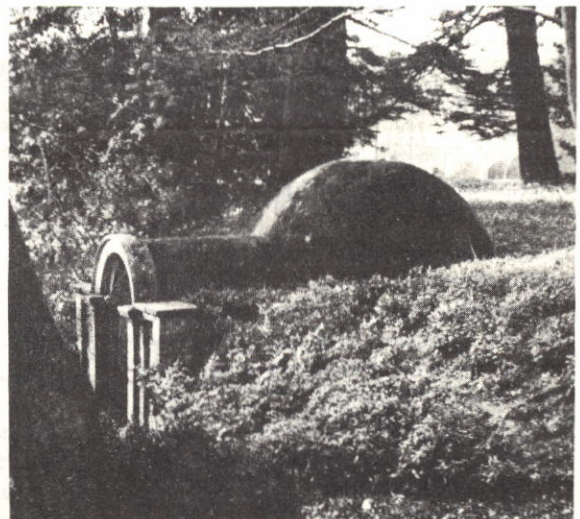
by GEOFFREY LOCKE

Before refrigerators were available ice was harvested in the winter and stored in special buildings called ice houses. From 1750 to 1900 it was usual at a large residence to have such a store in which ice could be kept until the summer. The practice of storing ice and snow was introduced to Britain from warmer countries in about 1650. In the seventeenth and early eighteenth centuries to have ice in summer was considered a luxury but by the early nineteenth century the use of ice, particularly for food preservation and the preparation of ice cream and water ices, was common among the wealthier members of society. The remains of ice houses are to be found at many Trust properties, and some of them are well preserved. Particularly interesting ones can be seen at Killerton Garden, Devon, and at Scotney Castle, Kent.



Most ice houses comprised a brick lined circular pit or well with a domed brick roof which was usually covered with soil. The illustration above shows the wide variation in the shape and size of some of the better preserved ones at National Trust properties. The common feature of these and most ice houses is that the bottom part is built below

ground level to take advantage of the fairly low and steady temperature which exists underground. From the bottom of the well a drain with an air trap was constructed because, unless the water from the ice which melted drained away freely, the walls and straw, which was usually packed around the ice, became saturated and their insulation properties were impaired. There were two schools of thought regarding the direction in which the entrance should face, whether to a cool northerly direction or, as J. B. Papworth, architect, wrote in 1818 to an airy south-easterly direction to 'allow the morning sun to expel the damp'. Since the ice house had to be built in a position where drainage could be arranged this often resulted in it being some distance from the residence which it served. At Scotney Castle the ice house, which is thatched, is very close to the old moat from which the ice was collected, but is several hundred metres from the house.



The ice house in the grounds of Hatchlands, near East Clandon, Surrey

The task of filling the ice house was usually the responsibility of the head gardener. He would lead the team of men who, at the first hard frosts, would collect the ice from frozen rivers or ponds and take it to be broken up and rammed down in the store. It is recorded that when the large ice house at Killerton was filled in 1809 the task took thirty men more than five days to stow forty tons of ice. It was hoped this quantity would last the household two or three years. The practice of having a large enough store to hold ice for two successive years was widely recommended although this policy does not seem to have been often adopted. Once filled, the store was shut up and the entrance tunnel filled with more ice or sometimes straw. It would not be opened up until the summer months when the ice was taken to the house. It was used in the kitchens and cellars for keeping fish, meat and dairy products cool and for

the preparation of desserts. It was also used for cooling wine, the treatment of fevers and sometimes the cooling of rooms.

Food was occasionally stored in the ice house on top of the ice or in cool chambers adjacent but this practice necessitated frequent visit to the store and more rapid melting of the ice resulted.

Ice houses fell into disuse from the late nineteenth century when block ice, cut from frozen lakes and imported from USA and Norway, became readily available. This ice was superior to that which was home produced as the blocks were transparent and pure. It was known as Arctic crystal. Domestic refrigeration machines became available at the beginning of the twentieth century. In 1890 the old ice house (now demolished) at Tatton Park, Cheshire, was converted to a silage store and more recently several were used as air raid shelters.

The ice house was sometimes given a decorative facade or was incorporated into another building as is the case at West Wycombe Park, Buckinghamshire, where the Temple of the Winds surmounts an ice well; there is also another ice house at West Wycombe Park. At Penrhyn Castle, Wales, one of the towers has an ice well in its basement. Another interesting example which can be seen is at Wallington Hall, Northumberland. It was recently cleared by the Acorn Campers who have also cleared the ice house at Stourhead, Wiltshire.

There are thousands of these frequently overlooked buildings distributed throughout Britain which are often structurally sound. During the reign of Victoria the subject of ice houses underwent much consideration and a few of this period are extremely elaborate and illustrate the perfection of ice house construction.

THE ANDERTON BOAT LIFT 1875-1975

To mark the centenary of this unique industrial monument, the North Western Museum of Inland Navigation Limited has commissioned Josiah Wedgwood and Sons Ltd to make a limited edition of 2,000 plates each certified by the chairman of Wedgwood. These are available for £7.00 including postage, packing and V.A.T.,

The lift is situated at Anderton, near Northwich in Cheshire. Built in 1875 as a hydraulic lift to link the Weaver to the Trent and Mersey Canal, fifty feet above, it was converted to electric drive between 1906 and 1908. Recommended by Edward Leader Williams, it was designed by Edwin Clark and built by Emmerson Murgatroyd of Stockport. The conversion to electric drive was carried out by the Weaver engineer J. A. Saner and his staff.

The North Western Museum of Inland Navigation Limited is a Charitable Trust, established to collect and preserve historical boats of the canals and navigable rivers and other material linked with the history of inland navigations. In close association with Cheshire County Council, a site is to be made available in the upper basin at Ellesmere Port.

Further details from :-

Dr. David E. Owen, CBE, Manchester Museum, The University, Oxford Road, Manchester M13 9PL.

THE NATIONAL MUSICAL MUSEUM

The museum was founded in 1963 by Frank W. Holland with the desire to enable the public to hear and enjoy the exceptional performance of a properly regulated Reproducing piano.

Since then the scope of the Museum has extended to include both the history of the piano and the development of the automatic playing of musical instruments.

When it was founded it was the first museum of its kind in the country. Since then others have followed, usually with a bias to the lighter (Fair organ) aspect and the tourist trade.

The collection is, fortunately, still housed in the 'temporary original building, a disused but much appreciated church which imposes considerable restrictions on the display. Amongst the collection are pianofortes, automatic pianos, pipe and reed organs, orchestrions and music boxes. For further information contact Frank W. Holland, The National Musical Museum, 368 High Street, Brentford, Middlesex.

PUBLICATIONS

'Cast-Iron Architecture in New York' by Margot Gayle and Edmund V. Gillon (Friends of Cast-Iron Architecture, 44 West 9th Street, Room 20, New York, New York 10011, \$ post paid).

'Developments in Structural Form' by Rowland J. Mainstone (Allen Lane with RIBA publications, 352 pp, 300 half-tones, 38 line drawings, £12). Mainstone's real triumph, perhaps, is his simultaneous consideration of the physical principles of structures, the materials of which they are made, the ways in which they may be built, and the history of man's involvement with them.

'The Industrial Archaeology of Preston' by A. D. George (Manchester Region Industrial Archaeology Society, 8pp, 20p plus p & p from the author, 'Sulwath', 30 Kingsway, Worsley, Manchester, M28 4FD). Brief, but referred historical account intended to extend and update Owen Ashmore gazetteer in 'Industrial Archaeology of Lancashire'.

'Wiltshire Industrial Archaeology, No.5' (The Journal and Transactions of the South Wiltshire Industrial Archaeological Society, 48pp, 1974 from (price unknown) the Editor, 28 Saxon Road, Salisbury, Wiltshire). Articles on illustrative letterheads, the missing people, Salisbury cinemas, Salisbury & Winchester Sewage Works, Marconi on Salisbury Plain, the Wessex Drove Road and the Oxford to Poole Road and military railways. Other details of the society from the Secretary, P.S. Goodhugh, 34 Countess Road, Amesbury, Salisbury, Wiltshire.

BOOK REVIEWS

Suburbia, by David Thorns, PALADIN, St. Albans, 1973, pp 175, ill, 60p.

Although this book is of marginal interest to the industrial archaeologist it is a useful addition to the literature of urban sociology. The historian or general reader with no sociological background may find difficulty with the specialised sociological phraseology.

The book comprises nine chapters, the first two of which are particularly concerned with the problems of defining the suburb in sociological terms. They examine the way sociologists have tried to do this and explain how the author intends to deal with this conceptual problem. This analysis is in two parts, a) the growth, development and present position of the suburb as a particular ecological phenomena and b) the growth and development of a suburban way of life.

For readers of the Bulletin the most interesting material is that dealing with the formation of suburbs. This is found largely in Chapters 3 and 4. The first of these discusses the growth and subsequent development of the suburbs attached to specific British cities and although much of this chapter is concerned with London there is some comparative material relating to Manchester and Birmingham. By way of contrast, Chapter 4 is devoted to a study of suburbs in the United States, France and Japan.

In Chapter 5 the author attempts to set up a typology of suburbs based on certain premises, namely whether they were planned or unplanned, for residential or industrial use and if they were occupied by mainly middle or working class families. The next three chapters deal with aspects of suburban life, particularly the work 'ethic', the family and leisure time activities. In the final chapter there is a discussion about whether it is possible to draw any conclusions about the way of life of suburban dwellers and looks at the future role of the suburb in modern social life.

There are four pages of photographs illustrating the physical layout of different types of suburbs. These have good informative captions but unfortunately two of the cities shown are identified by name. This book is intended for sociologists and as such fulfils two important functions. It correlates existing information about suburban life which had previously only been available in specialist journals, and suggests a possible method of classifying suburbs. To some extent this book clears up much of the confusion associated with this area of urban sociology. This book is too sociologically orientated to be of great interest to the industrial archaeologist although some sections, particularly Chapters 3 and 4, are worth careful consideration.

University of Reading

Diane Freeman

Industrial Archaeology of North East England, by F. Atkinson, DAVID & CHARLES, Newton Abbot, 1974, 2 vols, pp 367, vol 1 £4.25, vol 2 £3.75.

The present state of industrial archaeology in the North East owes much to Mr. Atkinson who has combined his industrial archaeology along with a massive personal commitment to the creation of the Northern Regional Open Air Museum. It is a matter of regret that these volumes, aimed at filling an outstanding gap in the David & Charles series, should have suffered so much as a result. At a superficial level this manifests itself in that the author's museum merits more than fifty references plus the lion's share of an appendix, whilst being coyly absent from the otherwise comprehensive index. At a deeper level the abundance of errors scattered through the volumes are equally a consequence of this heavy commitment. The strongest section is volume 1 which follows the customary pattern of the series with chapters on Coal, Lead, Transport, Power, Iron and Steel etc. It consequently struggles with the inevitable problems that arise within this format in dealing with interrelated industries, with power sources and with industry-generated transport systems. For example, Lead Products is not included in the chapter on Lead, and the settlements associated with the lead industry are not discussed. The chapter on Power is inevitably weak in this respect. Nevertheless, within the limitations of the format, the many and varied industries of the North East are here described together for the first time in published form and a number of useful and generally drafted sketches and plans are included. Almost all of these industries have left their physical marks, and the text is liberally scattered with references to field evidence albeit on one or two occasions the text is at variance with the gazetteer. Whilst it is unrealistic to expect a coherent account of industrialisation based on field evidence alone, a book on industrial archaeology requires some analysis of the physical remains in addition to their description. At the risk of nit-picking it must be said that the reliability of the text suffers from an excessive number of errors. There never was a steam-powered haulage engine at North Walbottle; the rail locomotive was not first tried in the North East; the John Bowes was not the first screw steamer; Lintford was not the last paper mill to work in Durham since at least two are still at work; and so on. Moreover, a number of statements require substantiation. Did the Billingham Chemical industry follow the discovery of Anhydrite? Did Samuel Brown design the Scotswood Suspension Bridge? Were County Durham's pit villages 'mean'? Further, readers will search in vain for the Friar's Goose Engine House on Gateshead Fell but they will find it where the grid reference in fact places it, two or three miles from the Fell. And where precisely is 'Urpeth on Tyne'? On the other hand the reader will be pleasantly surprised to find that the Beamish Flint Mill building still survives together with its wheel pit and water races, in spite of the author's suggestion that no trace of the buildings can be seen.

Volume 2 comprises the gazetteer and some appendices. Unfortunately again, neither of these are entirely satisfactory. Firstly, there is no introduction to the gazetteer and consequently the opportunity has been lost to explain the basis of selection. Secondly, local government reorganisation has meant that the author's use of the name 'Cleveland' bears little resemblance to the present county of that name. Thirdly, dozens of sites included in the gazetteer either no longer exist or have been drastically modified since the gazetteer was initially drawn up. The author has quite explicitly included a number of vanished sites, and this can sometimes be quite helpful, but there can be little justification for including for example, the sites, of a traffic sign and a gents' toilet, both of which are described as having been removed to the author's museum. There is internal evidence that modifications were being made to the gazetteer only a few months prior to publication and yet sites which were completely obliterated two or three years ago have been retained. However, the number of sites which have vanished since the gazetteer was first drawn up, must serve as a salutary reminder, if any was needed, of the rapidity with which industrial sites are eradicated. Fourthly, there is no implication or stated internal logic to the selection of sites.

The very important railway stations on the Newcastle to Carlisle Railway are all omitted, sharing this indistinction with Newcastle Central and Darlington North Road stations. Yet a number of insignificant stations are included. The author's use of several sources, both acknowledged and unacknowledged, has led him into a number of traps. As examples, a pure folly is described as a former corn mill; the Royal Border Bridge has lost half of its arches; Thornley Colliery is described as having two working steam winders whilst elsewhere Woodhorn Colliery is said to have the last working steam winder in the North East. Finally, the otherwise useful appendices are marred by an absence of grid references, although that on Durham's Railway inclines is woefully incomplete.

In general the two volumes (why two volumes incidentally?) are useful in giving coverage to an area as yet badly served by literature in this field, but their errors will inevitably raise doubts about their general credibility. It gives no pleasure to have to advise caution to anyone considering using them.

University of Newcastle upon Tyne

S.M. Linsley.

The BP Book of Industrial Archaeology, by Neil Cossons, DAVID & CHARLES (1975), 496 pp, 103 plates, 31 line illustrations, £4.95. This excellent book covers the spectrum of a wide ranging subject in a most pleasantly written style. Mr. Cossons introduces his interpretation of the subject persuasively and, having set boundaries within the British industrial experience he further delimits the special sub-fields in like manner. Within fourteen well-illustrated chapters and using some first class diagrams, he completes the survey from energy types through production to communications and services. Perhaps a hyper-specialist burrowing away in a particular line of enquiry, might with difficulty, find fault with an explanation. If so, this is an ever present problem for anybody covering the broad areas of technical history but, on examination the problem usually resolves itself into a question of nomenclature. On the contrary, the author has given workers in the field a real helping hand, not so much by his formal exposition which takes the now classical layout form of the written subject but by the addition of a conclusions chapter, three appendices, a bibliography and an index all of which act as anchors for the enthusiast and the general reader alike on the mechanics of industrial archaeology itself; its sites, museums, societies and some of its purposes as a study. It takes courage to write another book on industrial archaeology when some good texts of various sizes are already available but Neil Cossons has shown a clear minded mastery of the subject with which his colleagues and students are familiar. This book is a very welcome and worthy addition to the literature. Sheffield City Museums

J.W.H. Silvester

Staffordshire and Worcestershire Canal, by J. Ian Langford, GOOSE & SON, Folkestone, 1974, £3.50.

This is No.1 in a series entitled Towpath Guides, and it is just that. It tells the reader what is found along the 46½ miles of towpath from Great Haywood to Stourport. The book is very detailed, and is to be welcomed by students of industrial archaeology in that it is possible to identify virtually every surviving artifact. Thus at Oxley is Wolverhampton, where two massive blue brick railway viaducts span the canal, our attention is directed to a small viaduct which carried the town's sewage system. The inscription on the foundation stone states that it was laid on 3 July 1868 by Alderman J. Langman, Mayor of Wolverhampton, that A. Morgan was the engineer, and G. Ford the contractor. The reviewer is particularly grateful for this information, since he failed to decipher this stone recently. Detail of this sort abounds in the book. It relates to bridges (distinguishing the authentic Brindley ones from copies), locks, weirs, warehouses, tar distilleries, inns, factories, indeed everything that is likely to be of interest. People as well as things are given prominence, but the book is not 'folksy' and is all the more welcome for this. The author is an engineer who works at Birmingham University and is active in the Friends of the Black Country Museum. The illustrations are by Robert May, a staff photographer on the Birmingham Evening Mail. No doubt to keep down costs the photographs have been kept together, at the front of the book, whilst the route maps are at the back. The appendices are concerned with geology, distances, engineering works and, since the sale of the volume is directed towards canal users in pleasure boats, cruising facilities. The bibliography is scanty; this is not surprising since the vast bulk of subject matter was obtained from on-site investigations. As one who lives close by this canal, the reviewer is delighted to see this volume which the author has dedicated to the memory of James Brindley.

Stafford

Fred Brook

BP GRANTS AID INDUSTRIAL ARCHAEOLOGY

Nine industrial archaeology groups received cash awards under the BP Industrial Heritage scheme announced last July by BP Industrial Division. The scheme was devised in conjunction with the Association for Industrial Archaeology and it gives support to industrial archaeological work, particularly in those fields not eligible for grant aid from official sources.

The award winning projects were selected from 130 applications by a joint committee from the Association for Industrial Archaeology and BP. The members were the AIA President, Dr. R. A. Buchanan, of Bath University; its secretary, Neil Cossons, who is Director of the Ironbridge Gorge Museum Trust; and Trevor Marsden, Manager, BP Marketing Industrial Division. The awards announced on the 24th November 1975 are :-

£500 to the Archwright Society in Cromford, Derbyshire, to assist in the development of local history trails at Cromford, Belper and Shardlow.

£500 to the Tyne and Wear Industrial Monuments Trust, Newcastle on Tyne to help make a cine-film record of the surviving glass industry in the North East.

£400 to the Veteran Steamship Society Ltd, Dunmow, Essex to help restore the "Resolute", a steam-driven river steamer.

£325 to the New Lanark Conservation and Civic Trust to establish a Heritage Trail in the Village.

£300 to the Herefordshire Waterworks Museum Trust to provide equipment for the movement and preservation of exhibits in the museum at Broomy Hill, Hereford.

£250 to the Berkshire Industrial Archaeology Group, Reading to help complete the restoration and display of a nineteenth century horsewheel near Henley-on-Thames.

£150 to the Northamptonshire Industrial Archaeology Group to help produce a survey of buildings and methods associated with footwear manufacture.

£85 to the Hartridge Comprehensive School Industrial Archaeology Society, Newport, Gwent to make a colour film and slides of the industrial heritage of Gwent.

£50 to Tonypany Grammar School, Rhondda, Glamorgan, for an exhibition on the industrial heritage of the mid-Rhondda.

It is hoped that similar assistance from industry to the AIA will be forthcoming in the future.

AIA CONFERENCE 1976

The 1976 Conference will be held at the University of Southampton from Friday September 10th to Sunday September 12th. The theme of the Conference will be to examine the industrial archaeology of Hampshire, Dorset, Sussex and Wiltshire. The field excursion will be to Portsmouth and Gosport dockyards where, among other excellent features, we hope to see the famous block mills and machine tools erected by Marc Brunel. For further information and application forms, please write to Fred Brook, AIA Conference Secretary, 15 Widecombe Avenue, Weeping Cross, Stafford.

THOMAS TELFORD

The Ironbridge Gorge Museum Trust is in the process of forming a centralised collection of copy documents relating to Thomas Telford with the ultimate aim of establishing a museum devoted to the famous Civil Engineer.

They have already located the larger collections of Telford documents but have as yet had little contact with libraries, museums and private collectors who hold smaller, but equally important collections on Telford and the numerous civil engineering projects associated with him. This situation has arisen because of the diversity and quantity of Telford's work and they would be most grateful for information on the whereabouts and exact nature of any Telford material. Please reply to Alastair Penfold, Telford Research Student, Ironbridge Gorge Museum Trust, Church Hill, Ironbridge, Telford, Salop, TF8 7RE.

TWELFTH EAST MIDLANDS INDUSTRIAL ARCHAEOLOGY CONFERENCE

Preliminary Notice

The 12th EMIAC will be held on Saturday, 22nd May, 1976 at Beretun School, Barton-on-Humber, South Humberside.

The subject will be bricks and brick-making and the day's proceedings will include a visit to a working brick yard. This will be a joint meeting with the British Brick Society. Please note the date now.

Further details from :-

Mrs. C. M. Wilson, Secretary of the Industrial Archaeology Committee, Society for Lincolnshire History and Archaeology, Museum of Lincolnshire Life, Burton Road, Lincoln. Telephone: Lincoln 28448.

8TH ANNUAL CONFERENCE OF WESTERN I.A. SOCIETIES

The South East Wales I.A. Society are the host society for the annual conference of societies from the South West of England and South Wales to be held at the REARDON-SMITH LECTURE THEATRE, NATIONAL MUSEUM OF WALES on SATURDAY 3rd APRIL, 1976.

Basically this is an industrial archaeological programme but in South Wales particularly the local history societies by their very situation find themselves naturally drawn more and more to industrial history research.

This is a preliminary announcement, full and final details of the programme and catering arrangements etc. will be forwarded in the New Year, to those who contact the Conference Secretary. They would like societies or individuals to present aspects of I.A. in their particular area in the form of approximately a half-hour illustrated talk.

For further information contact the Conference Secretary, Raymond E. Bowen, 8 Castle Drive, Valley View, DINAS POWIS, S. Glam. Tel. Dinas Powis (0222) 513058

AIA Bulletin is published six times a year 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 and specialist survey and research groups and bodies involved in the preservation of industrial monuments, to represent the interests 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 Secretary, Association for Industrial Archaeology, Church Hill, Ironbridge, Telford, Salop TF8 7RE, England (095-245-3522).