



AIA President Marilyn Palmer is pictured here handing over the President's Conference Award to Alec Tilley at Claverton Pumphouse on Sunday, October 18th. As reported in the Bulletin [6/1], Claverton was opened to the public in the summer of 1978, and has now spent the best part of ten years bringing in additional funds to go towards the restoration of the Kennet & Avon Canal. The volunteers working on the project have discovered—like many others—that completing the restoration is not the end of things, but merely the beginning. Since 1978, all the wooden (elm) paddle boards on the waterwheel have had to be replaced by a harder foreign timber, and now much of the paintwork is peeling and is having to be re-done. Nevertheless, the volunteers have still found time to restore the Lister diesel pump which replaced the water-powered plant when it broke down early in the 1950s!

The project is keen to recruit new members, whether to help with maintenance, help with publicity or shepherd visitors around on open days: if you live in the Bath/Bristol/West Wiltshire areas, and are interested in participating, please contact Neil Hicks: ☏ Bristol (0272) 712939

INDUSTRIAL ARCHAEOLOGY AS HISTORICAL ARCHAEOLOGY

Industrial archaeology has been variously defined as being concerned with the development of industrial activity since its beginnings (*Rais-trick*, 1972) or as generally confined to the study of industrial monuments surviving from the last two hundred years or so (*Buchanan*, 1972). It emerges from the first definition as a thematic discipline concerned with development over a long period of time and from the second as a period archaeology, although with boundaries of study still closely defined. Yet archaeologists of earlier periods, including post-medieval archaeology, have never sought to limit themselves to one aspect only of their period and now, for example, examine the typological development of settlement patterns in the prehistoric period in relation to the evidence for burial rites: the more complex the former, it would seem, the less complex the

latter, as if temporal concerns began to take precedence over spiritual, possibly for military reasons (*Bradley*, 1984).

Should the archaeologist of recent times, then, abandon the title 'industrial' and become an historical archaeologist, seeking to examine the vital evidence of all aspects of society in a given period and relate this to the wealth of documentary evidence available? It is the stance generally adopted in North America and Australasia, as is illustrated in a recent book edited by Suzanne Spencer-Wood and called *Consumer Choice in Historical Archaeology*: this attempts to assess the conditions under which patterns of archaeologically deposited data like fish remains, glass, ceramics and gravestones in the 19th and early 20th centuries were affected by consumer behaviour. In Great Britain, however, the term 'industrial archaeology' is widely recognised and should not be abandoned lightly. There is, in fact, no need to abandon it, since in this country industry in its broadest sense has been the dynamic

TOWARDS THEORY IN INDUSTRIAL ARCHAEOLOGY

The ninth Annual Conference of the Theoretical Archaeology Group was held at the University of Bradford from December 15–17th, 1987. It included for the first time a session on industrial archaeology organised by Phil Copleston, a recent graduate of the Ironbridge Institute who is now working at Aberdulais Falls. He believes that industrial archaeology in this country lacks an adequate theoretical basis compared with, for example, historical archaeology in the United States, and invited four industrial archaeologists to present short papers on the research strategies and models they use. Colum Giles of RCHME discussed the survey of Yorkshire textile mills and Stephen Hughes of RCAHMM the role of fieldwork in developing historical understanding: their work has previously been published in either *AIA Bulletin* or *Industrial Archaeology Review*. Kate Clark of the Nuffield Survey based in the Ironbridge Institute showed how archaeological methods can be applied to the study of an industrial landscape, and an extended version of this will appear in *Industrial Archaeology Review*. Marilyn Palmer looked at industrial archaeology as historical archaeology, and her paper is printed here. There was a lively discussion following the papers at Bradford, and the *Bulletin* Editors would welcome correspondence on the question of whether industrial archaeology lacks — or, indeed, whether it needs — a theoretical basis.

force which has shaped human development over the past two centuries and change in the landscape has, to a large extent, been conditioned by the response to industrial activity. Recognising this, the industrial archaeologist must seek to place the monuments of industry in their topographical and human environment and consider himself as the archaeologist of industrial society. He cannot examine sequences of change over a long period of time as is generally undertaken in earlier period archaeologies, but this is offset by the incredibly rapid pace of development in the past two centuries compared with that in any other period of the past.

Industrial archaeology is, then, a valid definition for the study of the physical evidence of the recent past. The wider question, perhaps, is how far the study of archaeology is relevant at all in a period from which such vast quantities of documentary evidence survive? In the investigation of a non-literate society, the 'hierarchy of inference' is an important concept (*Hawkes*,

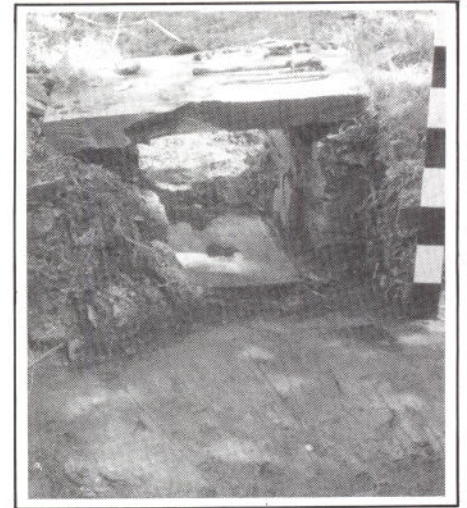
1954): it may be legitimate to infer from archaeological phenomena to the subsistence-economics of human groups, but one can also infer to the socio/political institutions or religious institutions, as in the example referred to earlier concerning the relationship of burial rites and settlement patterns? Conversely, in the investigation of literate society, the nature of institutions is, in fact, more easily determined than, for example, everyday diet, because written material produced by the ruling elites concentrated on such matters and has been carefully conserved. Archaeological evidence is vital in the understanding of economic activity because ordinary working life did not often find its way into literature, nor was the transformation of the landscape by industrial activity described except in spectacular instances like the Ironbridge Gorge, the first water-powered cotton mills in Cromford or the exploitation of Parys Mountain. Perhaps industrial archaeology should be defined as 'the study of people at work'? Documentary evidence must be treated critically and regarded as only one element in the investigation of the past. It does not tell the whole story: only in conjunction with archaeological methods can totality of the recent past be revealed and the ordinary be explored as opposed to the unique.

Industrial archaeologists have been accused, with justice, of concentrating on the study of monuments in isolation rather than seeking to place them in context. There is, however, a place for detailed recording: archaeologists are the archivists of an era and could legitimately claim that their task is to place structures objectively on record rather than interpret them. But what is not understood may fail to be adequately recorded, and it is better to regard the recording process as part of a general research strategy rather than an end in itself. The strategy may take two forms. The first is the examination of one type of monument or structure on a regional or national basis: the second the in-depth study of a particular site with regard to its regional or even national significance in technological, economic or human terms. Both strategies involve the search for

other types of evidence which complement the purely archaeological, but the end result is concerned with the assessment of physical evidence.

The study of particular structures on a systematic basis is a strategy familiar to mainstream archaeologists but less utilised by industrial archaeologists who tend, by force of circumstance, to work in comparative isolation. It has been done by the Scottish Royal Commission on Ancient and Historic Monuments; Graham Douglas and Miles Oglethorpe have recorded windmills, windpumps, Norse mills and other structures on a national basis and thereby been able to suggest typology of development. The English Royal Commission are undertaking a similar survey on a regional basis, that of textile mills in Yorkshire and Lancashire. The particular interest of the Editors of *Industrial Archaeology Review* lies in the archaeology of nineteenth century mineral dressing and we are attempting to compare the evidence for the treatment of lead and tin. Buddles, used for gravity separation of the metal from the crushed gangue mineral, vary regionally, chronologically and according to the type of mineral being processed. Documentary evidence would seem to suggest a steady technological progression throughout the century: archaeological evidence indicates the inertia of the industry in many areas, and prompts an examination of the capitalisation and general technical awareness of the mining companies in different areas. Only through such research can the differences in the archaeological structures be explained.

The study of particular sites in considerable detail is a more familiar strategy to industrial archaeologists, but even so the detail should not obscure the vision of the whole. Preliminary work on maps and documents can enable adequate site evaluation, as has been shown by the Nuffield Survey in the Ironbridge Gorge, leading to strategies for preservation or excavation. Our present work in the East Midlands for the National Trust on the Calke Abbey Estate in Derbyshire is to assess the archaeological potential of the limeyards which provided a considerable income for the Harpur-Crewe es-



1. Wood-floored buddle for lead dressing, Bryn Dyfi, Cardiganshire, 1881.

tate. The two archaeologists actually employed by the Trust are concerned with field survey and documentary research along similar lines to the Nuffield Project. Our task is excavation, but with limited manpower and time, since industrial archaeology is not our profession, site evaluation utilising other evidence is essential. Maps in Derbyshire Record Office indicating the projected routes of tramways from the Ashby Canal to Ticknall suggest that 'new work' had begun in Margaret's Close about 1800. Documents showed that this had been worked by a separate company selling lime to, among others, the Melbourne Hall estate but that by 1802 they were in financial difficulties. A financial statement refers to 180 double yards of Iron Railway and four lime kilns, but subsequently the area is not referred to again in the documentary record. A careful survey of the area revealed the likely site of the kilns, a bank with some evidence of surface stone. Excavation has so far revealed one of the kilns which appears to have been rebuilt utilising some vitrified bricks but not subsequently fired, archaeological evidence which is supported by the documentary evidence indicating the liquidation of the company.



2. Concrete centre-head buddle, West Basset, Cornwall, 1875



3. Stepped buddle, Brea Adit tin-streaming site, Cornwall, early 20th century.

AWARDS

CIVIC TRUST AWARDS 1987

Among the 17 awards sponsored this year by McDonalds, was a special one for inner city revival made to the Wigan Pier, project which has created canal walks and converted Listed warehouses to functions including a concert hall, college accommodation and an industrial museum.

Another award of IA interest went to the conversion of Manchester Central Station to the Greater Manchester Exhibition and Event Centre. A joint award was made to the Granada TV News Centre and the Merseyside Maritime Museum in Albert Dock, Liverpool.

KIRKALDY TESTING MUSEUM

This museum in Southwark Street, London, is intended to portray the standardisation of materials testing as developed by David Kirkaldy (1820–97). It has been awarded the Engineering Heritage Hallmark Award by the Institute of Mechanical Engineers and also been granted charitable status. The Friends of Kirkaldy are seeking volunteer guides and

will provide training. Contact Janet Austin, 121 Brownspring Drive, New Eltham, London SE9 3JZ.

The Times and Royal Institution of Chartered Surveyors Conservation Awards 1987.

The theme of this year's awards was 'A New Year Lease of Life'. There were 93 entries in two categories, non-residential to residential and residential to non-residential conversion projects. The winner of the first category was the Jacobs Island Company for their conversion of the warehouse at New Concordia Wharf in Southwark. The old grain warehouses, part of St Saviour's flour mill of 1882, were rebuilt 1894–8 after a fire, had been disused since the 1960s and they have now been converted to flats, workshops, studios and offices.

The two themes for the 1988 Awards will be 'Coast and Countryside' with awards for environmental projects involving public access to countryside and education projects, involving rural craft museums, interpretative centres or farm museums.



THE DOROTHEA AWARD FOR CONSERVATION

This annual Award is made by and through the generosity of Dorothea Engineers Ltd, and judged by a panel of three judges, one nominated by them and two by the Council of AIA. Its purpose is to support and encourage voluntary conservation work on sites and artefacts of industrial, agricultural and domestic importance. Entry forms may be obtained from John Crompton, 112 Milton Road, Fallings Park, Wolverhampton WV10 0ND, to whom enquiries concerning the Award should also be addressed.

The two types of strategy are not mutually exclusive: the study of limekiln structures elsewhere in the British Isles has enabled us to make a selection of which of the 40 or so kilns on the Calke Abbey estate to excavate in order to construct a typology: documentary evidence for this very common type of structure is scanty, and only archaeology will enable the development of the limekiln to be understood.

Industrial sites underwent complex changes in very short periods of time: we have found this in our study of the history and archaeology of the Basset Mines sett in Cornwall. A stratigraphical approach is necessary to reveal the layers of the palimpsest even when excavation is not undertaken and field survey and documentary research are the only methods used. The establishment of industrial activity has been determined by the location of raw materials and source of power and, in turn, generated systems of transport, accommoda-

tion and facilities for the workforce and secondary industry which may have outlived the primary. A theoretical model of this kind recognises the primacy of industry but takes account both of change through time and of the topographical and human impact of industry. The task of the archaeologist, as Martin Carver has said, is to create images as well as to take photographs (Carver, 1987). The French are, perhaps, less prosaic than we are in their approach and adopt this attitude in their interpretation of the industrial past. The Musée des Forges d'Hennebont in southern Brittany has little archaeological evidence to utilise in its attempt to portray this great iron forge between the years 1860 and 1966, but makes up for it in words.

Tout ouvrage, fût-il industriel, ne peut jamais se présenter comme une réponse univoque aux seuls constraints de la fonction qu'il abrite. L'usine aura toujours, bon gré mal gré, un habit qui l'acculture.

The form of every industrial enterprise is not conditioned only by its function or by the site chosen for its location: it becomes a living entity in itself. The industrial archaeologist, utilising all the available evidence including the study of comparative sites, has both to determine and to account for this response.

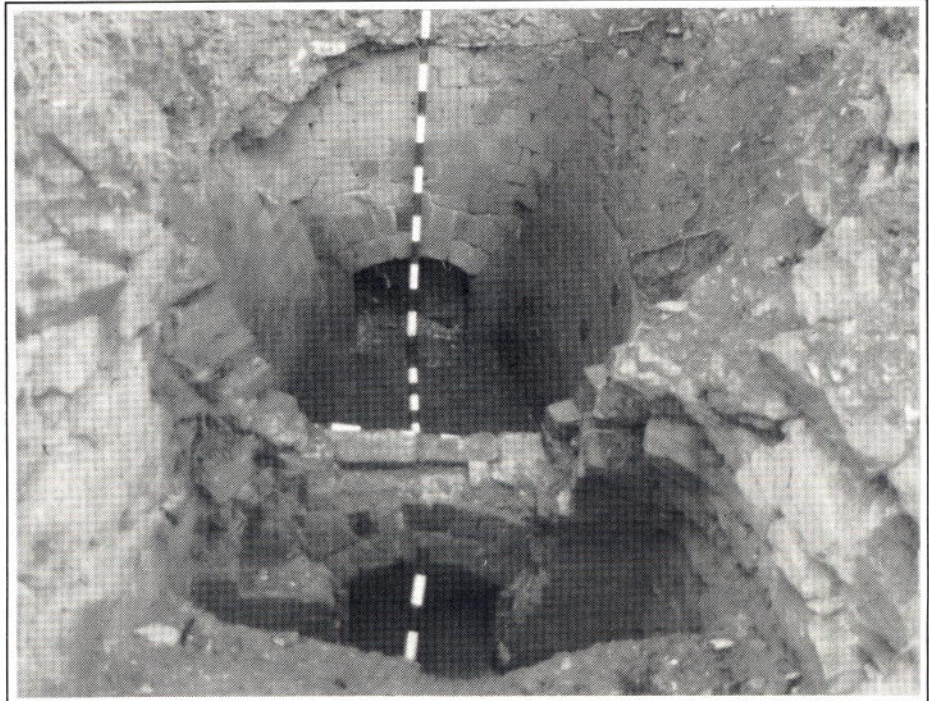
Marilyn Palmer

REFERENCES

- Bradley, R (1984): *The Social Foundations of Prehistoric Britain* [Longman] p159
- Buchanan, R A (1972): *Industrial Archaeology in Britain* [Penguin] p20
- Carver, M (1987): *Underneath English Towns* [Batsford] p112
- Hawkes, C (1954): Archaeological theory and method: some suggestions from the Old World, *American Anthropologist* 56, p155-68
- Raistrick, A (1972): *Industrial Archaeology, an Historical Survey* [Eyre Methuen] p9
- Spencer-Wood, S (1987): *Consumer Choice in Historical Archaeology* [Plenum, New York]



4. The site of Margaret's Close limekiln, before excavation.



5. Excavated kiln, Margaret's Close.