J. S. Kerr, *Design for convicts*, Library of Australian History, in association with the National Trust of Australia (N.S.W.) and the Australian Society for Historical Archaeology, 1984; pp.194, $27.50.

Serious readers of this meticulous study had better bone up first on the general history of convictism (A. G. L. Shaw's *Convicts and colonies* is recommended as a good start). The rich, detailed and scholarly account that James Semple Kerr offers will be difficult for an unprepared reader to absorb. For this is no ordinary book. It is as intensive as Nikolaus Pevsner's *History of building types*, which contains a potted history of prisons in the western world. Like Pevsner's book, it requires plenty of mental application, but offers ample reward by providing new knowledge and insights.

Not many Australian building types have been studied in this depth. Max Freeland's work on the pub, Peter Freeman's on the woolshed, Ross Thorne's on the cinema and, more recently, Miles Lewis's on prefabricated buildings and Emery Balint's on warehouses, are all comparable. In contrast, penal establishments, which were in fact among the most important public works up to the middle of the nineteenth century, have not been treated well in historical writing. Dr. Jim Kerr's book thus fills a real gap.

Convict design must be seen against the background of the cruelty of legislation in every country, and particularly in England. In 1810 the reformer Samuel Romilly wrote: 'There is probably no other country in the world in which so many and so great a variety of human actions are punishable with loss of life'. New South Wales and Tasmania were penal colonies for half a century, and Western Australia for some eighteen years, reflecting the fact that most of those condemned to death were not executed but banished. The objectives of transportation were never simple. Originally imprisonment was prior to trial, or prior to execution, or for debt, or as a cruel form of revenge. Then came imprisonment as a form of punishment. By the time transportation became common there was a new, though not universal, purpose: that of correction or reform. All of these concepts are applied in this book to the Australian colonies, though it must be said again that the author assumes his reader already understands the general situation.

The convict accommodation provided in the Australian settlements included barracks, stockades, hospitals, asylums, factories and portable buildings. As the need arose for the punishment of secondary offenders, gaols and watch houses were built. Kerr's text analysing these, moves up and down the centuries from 1788 to the 1850s, and across the different types of penal design, gradually unravelling what the author calls 'a complex and chaotic subject'. There is a helpful introductory chart, which arranges the account chronologically into four periods and thematically into three main streams.

Kerr presents much new documentary material, and offers fresh interpretations of familiar sources. Many of the settlements, such as the dreadful Sarah Island, in Van Diemen's Land, lapsed. Others, like Sydney, grew into towns. Port Macquarie was the first and last penal settlement whose initial layout was done (under the influence of Mrs Macquarie) according to picturesque principles. There were settlements for the 'gentlemen convicts' (educated and political prisoners) and other peculiar establishments like Rottnest—the island gaol for the 'safe keeping of prisoners of the aboriginal race'. Plenty of new facts emerge, such as those about the 'back-to-back' housing on Norfolk Island in 1793, and the odd split-level barracks at Macquarie Harbour.

The gaol emerges as a distinct building type, at first influenced by function and available materials, and subsequently, in Macquarie's time, by what Kerr describes as 'the intrusion of taste'. The effects upon gaol design of Greenway and other architects, the army, British officialdom, the Society for the Improvement of Prison Discipline, and the American experience, are all methodically revealed. Such concepts as the classifying and separation of prisoners, though not discussed in depth, are illustrated in examples both executed and projected.

Captain Alexander Maconochie gets a well-deserved chapter to himself. He was the humane radical of Van Diemen's Land, who introduced the idea of auditory cells underneath a chapel floor so that each prisoner below could be subjected to moral improvement through a trapdoor. The probation stations of Tasmania were an outcome of Maconochie's reforms.

The format of the book is excellent. A feature is its wide left margin, in which sources are cited directly opposite the places in the text where they are relevant, so that 'footnotes' are eliminated. Citations are extended in the Bibliography, which is an impressive appendix. There are three other appendices: the locations of all source material; a select and descriptive index of people, including sixty-three persons known to have been associated with convict design (only one of whom originally called himself an architect); and a select index of places and themes. The explanation of references and abbreviations interrupts the flow of the book between the Introduction and Chapter 1.

The 236 figures beautifully illuminate the text. Nearly all of them have been redrawn by the author from original documents, and are deliberately clear and simple. Their handwritten captions, though visually weak, have a nice sense of immediacy. There are nineteen plates and other illustrations. Every illustration is scrupulously sourced—a model of scholarly writing. It is a pity that so few of the plans have a north point, especially as bearings are so often referred to in the text.

*Design for convicts* certainly achieves its stated purpose, explaining the reasons our prison buildings and settlements took the form they did, and giving an account of the development of penal design in Australia such as will provide a context for understanding the surviving buildings. Many of the multitude of places described still survive, either above or below ground. Most of them are being mutilated, quarried or neglected. Kerr believes—and historical archaeologists will agree—that a necessary project, for which this book is intended as a background study, is the recording of all remains associated with penal and institutional establishments in nineteenth-century Australia. This should incorporate a comparative assessment of the value of extant remains to Australia's heritage, and help establish priorities for long-term conservation action.

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This book is soft-bound in blue card with a clear plastic front cover and blue card internal dividers. The 452 pages weigh 1.6kg so it could not be called light reading. If you acquire a
A feature of maritime archaeology is the willingness to experiment and to improvise. A number of papers outline different systems of site recording and methods of excavation. Wreck relocation is becoming more than applying documents and happenstance. Tarlton, among others, describes at some length the use of electronic navigation and search aids. In this vein, two papers (Baker, Coleman) describe the rediscovery and archaeological potential of the Pandora: currently a small computer is afloat above the wreck recording and manipulating site data as it is discovered by divers (Today’s Computers, June 1985: 34–42).

This book can be both substantive and diverting (vide Bolton’s paper ‘Maritime archaeology and Australian history’) and if the conference title seems grandiose and the international links tenuous, an historical connection with Holland is real and has produced Van der Heide’s paper ‘Consequences of finding historical shipwrecks in the Netherlands’. This must rate as a substantive contribution. However, the reader needs to be patient: the papers noted above, although by no means exclusive, comprise barely forty per cent of the bulk. The editors have attempted to squeeze everything from the conference between two covers, so that a speech by the then-Minister for Home Affairs and Environment appears, with all its similarity to parts of a following paper by a co-editor who happens to work in that Department. Determination is also needed, as production quality in the review copy is low: print density varies and the upper part of letter strike is consistently absent, so that ‘h’ is ‘n’ and ‘b’ is an ‘o’ etc.

The editing as a whole is unfortunate: there is no uniform referencing system and references are frequently erroneous or missing. An inability to spell, e.g. ‘programe’ (p.196) for bulwark, (query: is ‘Phanecian Meditriremeanean’—p.354—jargon for Phoenician mediterranean trireme?). Van der Heide’s paper is given a different title in the list of contents and that list is separated inconveniently by eight pages from the unreliable lists of figures and plates. There is no list of tables and there are too many references in papers to figures and tables that are not reproduced. There appear to be oddities of fact, e.g. mast stumps ‘5 feet X 18 feet diameter’ on a vessel with a twenty-two-foot beam (p.210), and also of interpretation, e.g. ‘anarchy . . . is a law of death’ (p.47).

A list of typographic errors would be lengthy indeed.

The publication claims to represent an international conference (‘. . . the second southern hemisphere. . .’) and has been produced by Government bodies. The international community and maritime archaeologists may feel disappointed by some of the content and presentation. Yet the vigour, enterprise and dedication of maritime archaeologists are inspiring; a subscription to the Australian Institute for Maritime Archaeology Inc. (Department of Maritime Archaeology, Western Australian Maritime Museum, Cliff Street, Fremantle, Western Australia 6160) could be good value and produce information more up to date than is to be found in the proceedings of a 1982 conference.

Jon Winston-Gregson, Canberra.


The book under review here has, to my mind, much in common with some of the old movies shown on The Golden Years of Hollywood. There are numerous facts and snippets of information that are of some interest, but by and large I personally would look around for something else. I think this problem stems from a number of factors.
Firstly, the book (really a technical report graced with an ISBN and a picture on the cover) was produced from a study undertaken because there was a need for some archaeological salvage work of the said cottage. In common with much work of this kind, the objective of the exercise appears not to have been clearly defined, and as a consequence a lot of data has been generated without there being a clear statement of how it has been collected. It would be unfair to blame the author of this book or any other individual for this, and as one who has found himself in a similar situation on occasions I do not intend to do so. But there is a need to question the value of an approach involving:

1. dig material up.
2. think of an idea about what to do with data.
3. write up idea.

This is not to say that Coutts did not have some definite goals in mind when approaching this project. For instance, the chronology of the building of various rooms would have been an obvious question to follow up. In this report it is well-handled and a generally convincing argument is offered for the order in which different rooms were added to the structure. The meshing of this with the historical literature review is quite interesting with Coutts demonstrating that Mills' stocks rose, so too did the standard and size of his accommodation. However, when one turns to the results of the excavations, very little of the large quantity of data produced from them is incorporated into this or any other model. Coutts, I think, recognised this himself, which is perhaps why the artefact analyses (including faunal material, ceramics, bottleware and nails) really constitute separate and unrelated sections in the report. The exercise is not without its rewarding observations, such as the apparent butchering of animals for human consumption at the site. One might ask whether this was a necessity or preference, that is, were there any butcher shops in the town at that time from which meat might have been bought? A comparison of the historical and archaeological sources might help here, though I suspect that the dating of the excavated material is not secure enough for this question to be answered with any surety.

Two areas that call for comment in this book are those of editing and production. With regard to the first of these, there are irrelevancies and generalisations that could have been omitted. One such case is the nature of Captain Mills' father seems to me to be largely irrelevant to the historical background, as is the marital status of Eliza Sophia Mills. There is also a curious chronological to-ing and fro-ing. We get a potted chronology of Mills' career through to his death in 1877 and then jump back to his marriage in 1837. Surely this could all have been integrated to provide a coherent picture of his life? The socioeconomic model for the nineteenth century lacks sophistication and could have been dispensed with. I think we are all aware that rich people tend to live in bigger, more ornate houses. I can only agree with Coutts when he says this is an oversimplification (p.131).

Presentation is a major problem area. In my opinion the Harvard system simply does not work in historical archaeological publications. Far better to have employed the superscript-number and endnote system (as in this journal). Division into chapters with a clear hierarchy of headings would also have helped, as would page numbers for the figures and plates in the table of contents. As it is, I found this list virtually useless. Some of the figures and plates could have been reduced in size without loss of clarity and some dispensed with altogether. Plate 19, for instance, shows old nails in a wall stud but two thirds of the photograph is the blackboard announcing the subject. Judicious cropping is required. If I was buying this book, I would be most annoyed at having immediately to rebind it. Nearly every page in my copy has fallen out. The gum binding is simply not adequate for a book of this size. Stitching is an essential.

With the exception of this last fault responsibility for which must lie with the government printer, a former editorial hand might have cleared up many of these problems, if one was determined to publish this monograph. I think, however, it would have been more useful to have given us the interesting bits as a short paper, rather than a 415 page book. Much of the technical detail could have been left in an unpublished report, that would have been available for consultation by those who might wish to know exactly how many pieces of ceramic were found during excavations at Captain Mills' Cottage, Port Fairy, Victoria.

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Dr Eslick has compiled a very precise and intelligent report working to a brief that was much less precise. The town of Portland and its hinterland, on the most westerly peninsula in Victoria, have a long history of development beginning with sealing, more permanent occupation by whalers after 1833, followed by agriculture and grazing. The town of Portland dates from 1840 and it has been a focus for this farming ever since, becoming a centre for bark-crushing in the 186os. The rail-link established in 1878 encouraged some industrial expansion, with larger bark-mills and a freezing works in the 1890s, while the building industry encouraged the development of stone-quarrying and lime-burning.

The area remained rural and dairying, with small-scale industry, until Alcoa proposed to construct an aluminium smelter on the promontory between Nelson Bay and Portland Bay. The obvious changes in the southern part of the urban area of Portland, implicit in the Alcoa proposals, prompted a survey of the smelter site in 1980 by J. P. Wesson and D. J. Clark, who identified six historically interesting sites. In 1981 a wider urban conservation study of Portland town was completed by Wilson Sayer Pty Ltd. Dr Eslick's brief was to locate archaeological sites of European occupation up to 1900 in the (undefined) 'area of Portland'.

Dr Eslick defined her area as embracing the town, the whole of three adjacent parishes and the southern section of Bolwarra parish, making a sensible area for survey embracing the seaward part of the peninsula. More than 250 sites, including town buildings, were identified and assessed in the very inadequate time of twenty weeks allowed for the survey.

The classification system called for four categories: extremely significant, highly significant, moderately significant and of low significance; the state of preservation played perhaps too important a role in this classification procedure.

Dr Eslick undertook this project single-handed, did the documentary research herself and prepared the maps and the extremely valuable collection of photographic evidence. All these tasks were fulfilled with flair and authority. Within the constraints of resources and the strait-jacket of publishing policy, Dr Eslick has produced a volume which deserves to be widely known and considered by those interested in Victoria and by all those engaging on similar consultations anywhere.

There is one very unfortunate error in the book and it is none of the author's doing. She was not shown the proofs of the forty-six pages of figures; otherwise the inversion of the captions to Figures 3 and 4 and to 5 and 6 would have been avoided. Unlike some such inversions, these are insidious and, to those unfamiliar with the topography of Portland, very puzzling; for the pairs of maps concerned show sites within and outside the urban area and in the west and east parts of the rural area respectively, and substantial confusion is created. I understand that the Victorian Archaeological Survey has not included errata slips; if this is the case, it should consider doing so for copies to be sold in future. The remaining figures consist of photographs old and new relevant.

'This publication of an original and spirited experiment in excavation by archaeology students at the University of Sydney is, unhappily, a double memorial'. So commences Ian Jack's forward to this monograph, which is a memorial to Maureen Byrne, the leader of the Rozelle well excavation in 1977, and to Dani Petocz, who took over the compilation and editing of the report after Maureen's death, and who in turn met an untimely death before completion of the publication.

The final editing and printing of the manuscript was taken up by Professor Jack and Linda Villiers, Dani Petocz's wife.

The end result, so sadly arrived at, is an interesting study of what can, and can't, be done in the context of a short-term rescue excavation.

The report is divided into brief (at times perhaps too brief) chapters on the excavation, the finds, and the archival research. The brick-domed well is located behind a house in Rozelle, an inner Sydney suburb and was constructed, the report concludes, between 1874 and 1880, and used until mid 1901. The date at which the well was filled is unknown, as only 1.7m of the deposit within it was excavated, and the fill had reached to within 60cm of the capstone before it was sealed. The most recent dated artifact in the well was a 1960 halfpenny. The excavation took place over a five day period in 1977, with the assistance of volunteer student diggers. On completion of the short excavation period, the well was further cleared by the owner and incorporated into the extensions of the house.

An interesting aspect of the report is that it allows readers to judge for themselves the effectiveness of the rescue excavation techniques employed. Finds were dry sieved and sorted and then measured, drawn, photographed or otherwise recorded as thought necessary. All artefacts were then either returned to the owner or discarded. The limitations of this field recording technique were recognised by the author. It permitted only general observations to be made of the bulk of the material excavated, as no artefacts were kept for later study or comparison. Even the identification of marked pieces of glass and ceramic was dependent upon the accuracy of the description or sketch drawing made at the time of the excavation, and in some cases this was clearly inadequate.

The coarse dry-sieving used meant the loss of small bones from an otherwise rich bone collection, the sampling of which was further biased by the limitations placed on work and storage space and time. As the author notes, these restrictions meant that any bone that could not be immediately identified was discarded. As a result, for example, the unlocated post-cranial remains of a kitten, whose skull was located in fragments in three spits, may have been incorrectly identified as rabbit, lost through sieving, or have remained scattered through the unexcavated lower deposit. Despite these limitations an interesting analysis of the bone remains was carried out which adds much to the value of the report.

The drawbacks in the procedure pursued during the excavation and analysis of the finds were recognised by the author, and the implications of this procedure for the final site synthesis can be assessed by the reader and the pros and cons weighed up for future rescue excavations. On the whole, given the serious logistical constraints on the project, the procedure followed allowed the retrieval of a considerable amount of information, especially about diet, and this information was reinforced and given clarity by the documentary research which was undertaken.

The report itself is brief and to the point. The historical research is thorough, although some aspects, such as the terminlial date for the filling of the well, leave room for more discussion. The archaeological analysis of the finds is straightforward and factual, but would have benefited from more discussion for some of the classes of artefacts. One small point, which always irritates this reviewer, is the use of ratio scales instead of bar scales in the drawings. When reduced for publication, as in the case of Figures 2 and 3, these scales become meaningless.

A well in Rozelle can be summarised as a straightforward, concise and unpretentious description and analysis of an excavation undertaken under difficult circumstances, and with very limited resources. It is aware of the shortcomings inherent in this kind of rescue work, but makes no apologies, as none are needed.

Those who read the report carefully will learn and benefit from it, especially if they, too, are likely to find themselves in the position of having to undertake a small-scale rescue excavation.

Michael Pearson


If you thought that events such as the destruction of the Rural Bank building in Martin Place, the bulldozing of the complex at Darling Harbour Goodyard and the wrecking under floodlight, amidst enormous public controversy, of the Bellevue Hotel in Brisbane, were peculiarly Australian, well, you were wrong. The same thing is happening to the heritage of New Zealand. In the past five years a hundred year old railway platform intimately associated with the famous Brunner coal mining site was removed by the Railways Department, the Buckhams Malthouse and Brewery was demolished in a dawn raid with the blessings of the Queenstown Borough Council and the government stamper battery building at Glenorchy was destroyed, to mention but a few.

It became obvious, when reading *New Zealand's industrial past*, the collected papers presented at the Industrial Archaeology Seminar in Christchurch in 1983, that New Zealand's industrial development was similar in many respects to Australia's and therefore it shouldn't be surprising that the problems that they are now facing in the conservation of their industrial heritage are also similar.

Both countries were a long way from the centres of Europe and America, both were colonised principally by the British, both had poor land communication for many years and, relatively speaking, both were initially poor in resources and skilled labour. These conditions forced the early colonists to be entrepreneurial, aggressive and innovative to survive. Many of New Zealand's early industries bear these characteristics and many were on a similar scale as in Australia. For example, the gold rushes had almost the same impact on the population and economy of the colony.

Despite the similar patterns of development to Australia and the obvious parallels in some industries that used equivalent imported technology, the papers presented at the seminar highlighted New Zealand's place in world industrial archaeology. The kauri gum industry, where gum was dug from alluvial deposits where it had been marked after falling from the trees, concentrated and then refined for ultimate use in high class varnish, is probably unique. And where else, besides isolated areas of Northern America, have driving dams been
used to transport logs to saw mills? The driving dams were massive, usually wooden, dam walls built across a watercourse. The wall had a quick release door built in it so that when sufficient water and logs were stored in the dam, the door could be suddenly opened and the logs driven by the rush of water to the mill.

As in all seminars in emerging disciplines, there was great diversity of both approach and content of the papers. The papers were presented in two parts although there was some inevitable overlap. In the first part, there were a number of case studies of individual sites or a group of sites in a specific industry. The emphasis in these studies was on the historical record rather than the existing fabric of the places. The second part encompassed problems associated with the assessment, protection, conservation and management of structures, relics and sites.

The papers are very well presented in an A4-sized booklet, copiously illustrated with both historical and contemporary photographs. They provide a glimpse of the industrial archaeology of a near neighbour, which, it would seem, has not received the recognition of the industrial archaeologists of other countries, including Australia. Perhaps this lack of exchange is illustrated by the fact that none of the papers mentioned ICOMOS or a New Zealand equivalent of the Barra Charter, when discussing conservation issues.

The papers deal with a diversity of subjects but as in the case with the proceedings of any seminar there is not enough detail to satisfy the serious student. However, the references given by several of the authors, provide an excellent starting point for those who wish to delve further into individual sites or industries.

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This enticingly silver-covered, paperback, small-format work offers much of interest to anyone interested in the metallurgy of iron, of whatever period, and makes a valuable supplement to Tylecote's analysis of metal fabrication in Aspects of early metallurgy (ed. W. A. Oddy, London, 1982). The presentation, however, is cumbersome. This is not an overview of smithing in the region, as you might expect from the cover picture of the honest blacksmith plying his trade, and from John D. Light's extended title ('Tinker, trader, soldier, smith: a frontier fur trade blacksmith shop, Fort St Joseph, Ontario, 1796–1812, with particular reference to the arts and mechanics of farriering, cooperating, trap-making, gunsmithing, tinkering, locksmithing, tool-making and general blacksmithing [etc. . . .]').

It is instead a collection of Parks Canada reports, three major ones and four minor ones, ingeniously cobbled together to make an attractive enough book. And at that price, who are we to complain?

We get very good value indeed from Unglik, whose two reports, on the metallographic study of the axes from the 1978 excavation and on the slag and iron from an earlier excavation, make very interesting reading. They do not break new ground in archaeology in general—this sort of study is routine in European Iron Age and Medieval Studies, at least, but they do introduce a new dimension of rigour into the analysis of commonplace near-modern artefacts. Unglik goes beyond microscopic examination and chemical analysis to speculate about the personality of the smith—characterised by John D. Light, who has a nice touch in these matters, as 'slippery'.

Unglik's second report is on slag from a 1964 excavation and in itself illustrates the increasing sophistication of historical archaeology: the 50kg of slag examined here were classified as 'cinder' or 'cooked earth' in 1964—fortunately the material was retained and has now been examined in a most comprehensive way. This particular report certainly breaks new ground and should serve as a model for future work. I regret to say that it also shows a lot of very poor and sloppy iron working (from the evidence of the slag)—but, sloppy or not, he had courage and appears to have made a valiant, unsuccessful, attempt to refine from pig iron to wrought iron—I marvel at the technology which enables us to know that the blacksmith failed to clean out his forge properly and congratulate the authors on presenting this material in very accessible language.

The first part of the book, which is Light's analysis of the 1978 excavation, with four appendices, has many points of interest but is presented in a curiously sidelong way. It took four readings of the entire book to discover who had excavated the site (the information, oddly, is contained in the acknowledgements, p.4). One has to progress to page 95 (foreword to Unglik's second report) to discover that this excavation is part of a much larger programme of excavation—or so I interpret it. Again puzzling, a feature described as 'a semi-subterranean building' is referred to at some length—indeed it has its own appendix, D,—and we are told that it has been 'partially excavated', yet no plan is provided of this feature, which is shown on Figure 41 as a grass-covered depression. One is given to understand that it is to be properly excavated—in which case, why not leave discussion of this 'building' (no explanation is given of the reason why this term should be applied) until something a little more positive can be said about it, than that it abuts the smithy and that garbage from it may have collapsed into the smithy's dump.

The coyness about the excavation extends to the location of the site. Diligent reading tells me that the site is on Lake Huron (Fig. 39) but there is no other means of locating it. This may of course be a very well-known place to Canadians, but, at the risk of being myself parochial, I could not help thinking that Parks Canada had something to learn from this journal in terms of locating study areas. These cavils aside, the report is most stimulating. The site plans appear to be computer-aided-drawings and, once again, reveal an increasing sophistication in historical archaeology techniques. Artefact lists are also computer printouts and really demonstrate what a useful tool for the excavator the computer can be. Light's interpretation of minimal evidence is enthraling. He presents a totally convincing reconstruction of the smithy, taking us step by step through his reasoning and using, most skilfully, the results from Unglik's work and also those from a brilliant study of soil magnetism (Appendix A1). The overall result is impressive and again provides an invaluable model for future work.

In contrast, the historical discussion seems thin; it is simply not good enough to supply references such as 'personal communication for a statement of major significance—that the blacksmith had upper-middle-class status (p.16) —or to refer, again for key evidence, to an unpublished, undated report in Parks Canada files. The reader is entitled to be given a substantial quotation from this sort of work, which is virtually inaccessible.

This publication can be obtained from the Canadian Government Publishing Centre, Supply and Services Canada, Hull, Quebec, Canada K1A O99. Give catalogue reference R61-2-91875E. It's a good buy and very relevant to excavation interpretation as well as iron working research (remember that if sufficient foreign interest is shown, Parks might be more inclined to pander to our desire for maps and proper excavation reports).

The authors have standardised the terminology relating to glass artefacts, attributes and measurements, for both Canadian archaeological and museum purposes, so that such collected data are suitable for cataloguing in a national computerised storage and retrieval system.

The result is much more than a glossary of terms. It is a profusely illustrated textbook, with clear line-drawings and photographs, which will prove of great value to archaeologists and curators alike. It not only provides broad details of glass colour, condition and forming techniques (pp.7-57), and guidance on how such evidence may prove of value in dating, but also names and illustrates different forms of containers (pp.69-123), tableware (pp.125-145), closures (pp.147-167) and flat glass (pp.169-172). The excellent layout may be improved, and turning back to figures avoided, if the section on decoration (pp.50-67) was transferred, in future editions, to the tableware section between pages 130 and 131.

Although many of the discrepancies of terminology between archaeologists, collectors, commercial users and manufacturers, have been removed, a few perennial problems remain unresolved, for example:

1. The precise term 'rim-diameter' for tableware is changed to 'bore' in describing bottles. Users define the 'bore' in the dictionary sense, as the internal (not the rim) diameter, which limits the maximum practicable cork and filling-tube size.

2. The extension (for bottles) of the long-used but unfortunate term 'string-rim', where no rim exists, to the lower reinforcing part of the finish, which since c.1870 is often shaped primarily to protect the cap skirt. The terms 'collar' and 'band' (both used for tableware), 'bead', or (for wired-on corks) 'anchoring collar', may all prove worthy of consideration.

3. Whilst all will applaud the author's efforts to drop the ambiguous term 'applied-lip', the adoption of 'added glass', rather than 'applied finish' (corresponding with 'applied-foot' etc. in tableware), is a poor description of the delicate centring and rotation processes involved in the application of the hot glass.

4. A major confusion appears to be the retention of the term 'lip', other than for modifications of the rim, such as flanged, flared, fire-polished lip etc. The more extended use of the term 'lip' results, for example, in the common 'champagne finish' also appearing in the guise of a 'flat-lip' and a 'flattened string-rim', whilst the common rounded one-part finish, often referred to by collectors by the slang term 'blob-top', only appears listed as a 'lip'!

5. A definition of the method of describing tapered outlines (e.g. always 'in' or 'out' from the centre of the glassware on moving down the glassware?) would have been useful. At first sight the drawings for 'tapered-up', 'tooled-up', 'tooled-down', 'sloped-down shoulder', and a few others, were confusing, and that for the 'tapered-out' neck precisely the opposite of anticipated usage.

Although the text is refreshingly free from technical imperfections, early machine-made glass (p.11) was usually more slow-setting and less durable than that it replaced; the common green of modern wine bottles (p.14) results from chromium additions not copper; and the error of using the term 'neck-finish' instead of 'neck', in the bottle anatomy (Fig.52), should also be noted. Although it is true that a greater proportion of bottles with applied seals are found on early sites, before 1840 (p.17), reference to the extensive index of such seals by E. Fletcher (E. Fletcher, 1976, *A bottle collector's guide*, Latimer) shows that these continued to be widely used for wines, gins and bitters, well into the twentieth century.

Many parts of this glossary provide sound guidance on dating, but some modifications are clearly required in an Australian context:

1. Pressed tableware was imported from the U.S.A. during and after 1835 (cf. c.1830-1834 and other details on p.34).

2. Foil-top bottles were imported into Australia, by Dunbars of London, during and after 1843. There seems little doubt finish-moulding tools were then in use, as is clear by inspection also of bottles from Western Australian wrecks (cf. 1820-1920, p.43).

3. The chronology of the introduction of glass machinery (p.39) is understandably different: semi-automatic c.1910-1930; Owens suction machines not used here; automatic flow-fed machines 1920 onwards; and independent section machines c.1940 onwards.

This book breaks new ground and is highly recommended.

**James Boow**


Restricting the content of this volume to excavated examples of lighting does have its drawbacks for a general readership, but archaeologists will find this an illuminating reference volume for identifying and dating lamps or lamp parts recovered in excavations. As a study of a class of artefacts, it is exceptionally well illustrated.

Each of the short chapters deals with a particular form of lighting device, including candlesticks, oil, kerosene or electric lamps but not gas. The function of each type of device is explored in a short essay, then there is a brief general discussion of the type as represented in archaeological contexts, and a series of well-captioned illustrations of provenanced examples.

That the Canadians have resources to catalogue and study archaeological artefacts in this fashion will be the envy of Australian archaeologists. That they make the material available to the international archaeological community is exemplary. The great value of this book for all archaeologists will be in assisting in the recognition of lighting devices from artefact assemblages, where before they might have been unidentified bits of glass or metal.

**John Wade,**

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The authors have standardised the terminology relating to glass artefacts, attributes and measurements, for both Canadian archaeological and museum purposes, so that such collected data are suitable for cataloguing in a national computerised storage and retrieval system.

The result is much more than a glossary of terms. It is a profusely illustrated textbook, with clear line-drawings and photographs, which will prove of great value to archaeologists and curators alike. It not only provides broad details of glass colour, condition and forming techniques (pp.7-67), and guidance on how such evidence may prove of value in dating, but also names and illustrates different forms of containers (pp.69-123), tableware (pp.125-145), closures (pp.147-167) and flat glass (pp.169-172). The excellent layout may be improved, and turning back to figures avoided, if the section on decoration (pp.50-67) was transferred, in future editions, to the tableware section between pages 130 and 131.

Although many of the discrepancies of terminology between archaeologists, collectors, commercial users and manufacturers, have been removed, a few perennial problems remain unresolved, for example:

1. The precise term 'rim-diameter' for tableware is changed to 'bore' in describing bottles. Users define the 'bore' in the dictionary sense, as the internal (not the rim) diameter, which limits the maximum practicable cork and filling-tube size.

2. The extension (for bottles) of the long-used but unfortunate term 'string-rim', where no rim exists, to the lower reinforcing part of the finish, which since c.1870 is often shaped primarily to protect the cap skirt. The terms 'collar' and 'band' (both used for tableware), 'bead' or (for wired-on corks) 'anchoring collar', may all prove worthy of consideration.

3. Whilst all will applaud the author's efforts to drop the ambiguous term 'applied-lip', the adoption of 'added glass', rather than 'applied finish' (corresponding with 'applied-foot' etc. in tableware), is a poor description of the delicate centring and rotation processes involved in the application of the hot glass.

4. A major confusion appears to be the retention of the term 'lip', other than for modifications of the rim, such as flanged, flared, fire-polished lip etc. The more extended use of the term 'lip' results, for example, in the common 'champagne finish' also appearing in the guise of a 'flat-lip' and a 'flattened string-rim', whilst the common rounded one-part finish, often referred to by collectors by the slang term 'blob-top', only appears listed as a 'lip'.

5. A definition of the method of describing tapered outlines (e.g. always 'in' or 'out' from the centre of the glassware on moving down the glassware?) would have been useful. At first sight the drawings for 'tapered-up', 'tooled-up', 'tooled-down', 'sloped-down shoulder', and a few others, were confusing, and that for the 'tapered-out' neck precisely the opposite of anticipated usage.

Although the text is refreshingly free from technical imperfections, early machine-made glass (p.11) was usually more slow-setting and less durable than that it replaced; the common green of modern wine bottles (p.14) results from chromium additions not copper; and the error of using the term 'neck-finish' instead of 'neck' in the bottle anatomy (Fig.52), should also be noted. Although it is true that a greater proportion of bottles with applied seals are found on early sites, before 1840 (p.17), reference to the extensive index of such seals by E. Fletcher (E. Fletcher, 1976, *A bottle collector's guide*, Latimer.) shows that these continued to be widely used for wines, gins and bitters, well into the twentieth century.

Many parts of this glossary provide sound guidance on dating, but some modifications are clearly required in an Australian context:

1. Pressed tableware was imported from the U.S.A. during and after 1835 (cf. c.1830-1834 and other details on p.34).

2. Foil-top bottles were imported into Australia, by Dunbars of London, during and after 1843. There seems little doubt finish-moulding tools were then in use, as is clear by inspection also of bottles from Western Australian wrecks (cf. 1820-1920, p.43).

3. The chronology of the introduction of glass machinery (p.39) is understandably different: semi-automatic c.1910-1930; Owens suction machines not used here; automatic flow-fed machines 1920 onwards; and independent section machines c.1940 onwards.

This book breaks new ground and is highly recommended.

*James Boow*


Restricting the content of this volume to excavated examples of lighting does have its drawbacks for a general readership, but archaeologists will find this an illuminating reference volume for identifying and dating lamps or lamp parts recovered in excavations. As a study of a class of artefacts, it is exceptionally well illustrated.

Each of the short chapters deals with a particular form of lighting device, including candlesticks, oil, kerosene or electric lamps but not gas. The function of each type of device is explored in a short essay, then there is a brief general discussion of the type as represented in archaeological contexts, and a series of well-captioned illustrations of provenanced examples.

That the Canadians have resources to catalogue and study archaeological artefacts in this fashion will be the envy of Australian archaeologists. That they make the material available to the international archaeological community is exemplary. The great value of this book for all archaeologists will be in assisting in the recognition of lighting devices from artefact assemblages, where before they might have been unidentified bits of glass or metal.

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