THE LOCAL SCRIPTS OF ARCHAIC GREECE. By Miss L. H. Jeffery. Pp. xx+416, Pls. 72, figs. 47. Clarendon Press: Oxford University Press, 1961. Price £7 75.

In an age when the currency of many an adjective has become cheapened, it may mean less than it did to describe a work as 'monumental'. But if, at its full value, this is a description reviewers would seldom dare to use, it is seldom that a volume comes to hand which demands it. Miss Jeffery's Local Scripts is such a volume. Its author amply deserves (and has already received¹) the highest praise from her fellow-epigraphists, and her work will be welcomed by all serious students of classical antiquity, into whose hands she has set a valuable instrument

of study and reference.

The Local Scripts is a thorough and comprehensive survey of the inscriptions of the Greek cities written in the distinctively individual alphabets, sometimes known as 'epichoric', of the archaic and classical periods, i.e., to the end of the 5th century B.C., by which time the Greeks had come to adopt one such alphabet, that of Ionia, for general use. Many scholars will deal piecemeal with sundry of the inscriptions which Miss Jeffery has assembled, and in this or that detail may criticise or controvert what she has to say about them: but the ensemble will surely be for many decades without rival or challenge, and will be the standard citation in the field it covers.

It has been a book long in the making (nearly twenty years), and sums up its author's patient and detailed researches into the earliest periods of Greek writing. The vast bulk of Greek inscriptional remains post-dates 400 B.C., and despite the size of this volume Miss Jeffery is concerned with one particular and fairly self-contained branch of Greek epigraphy. She has to deal with a quantity of scattered material, mostly short and fragmentary, on stone, bronze, pottery and implements of various kinds, which in many cases is sufficient only to sketch in outline the possible early history of local epigraphic development. In other areas the quantity of available inscriptions has imposed on her the task of selecting what is most useful to her theme. Even so, it is only in Attica (where her terminal date has to be fixed at 500 B.C. for this very reason) that the evidence is comfortably comprehensive: and Athens was always exceptional in the quantity of its inscribed records. Elsewhere the evidence, even when quantitatively good, often proves uneven. Arcadia, for instance, shows nothing before the middle of the 6th century; Laconia offers much 6th-century material but is relatively poor in the fifth; Boeotian evidence is very strong at the end of the period.

Nevertheless the total amount of material to be surveyed is remarkably great, and the author's task has been one of arduous collection and comparison. Her command of archaic epigraphy is prodigious, her bibliography is thorough, and her careful delineation of alphabetic forms, letter by letter and text by text, though to some extent suffering from the neatness of the printed page, is an advance on any previous study of the subject. A generous proportion of the inscriptions is illustrated with either a photograph or a drawing, and a table of letter forms, 'consolidated' from all the areas surveyed, rounds off the book. The abundance of illustration is desirable and welcome, although a number of the drawings only reproduce those already well known in, for example, H. Roehl's *Imagines*, now nearly sixty years old in its most recent edition. This is so even where the stones are readily accessible, and for these at least a photograph or a fresh drawing based on personal revision of the monument could

surely have been provided.

In a book of such length and detail it would be beyond the scope of this review to debate the issues of individual inscriptions. An overall impression is that Miss Jeffery tends to lower the dates of her material too generously, and that the system of comparative chronology so created is uncomfortably depressed. Some of the earliest inscriptions, those of the latter part of the 8th century, have a calligraphic quality which suggests that the 7th century might be

¹ When this review was in proof, *The Local Scripts* had already been carefully and favourably reviewed by B. D. Meritt, A.J.A., LXVII (1963), 91-2, A. E. Raubitschek, *Gnomon*, XXXIV (1962), 225-31, A. M. Woodward, Cl. Rev., NS XII (1962), 257-61, Rhys Carpenter, A.J.P., LXXXIV (1963), 76-85.

credited with some material allocated by Miss Jeffery to the sixth - with, perhaps, a little more elbow-room at the end of the 6th century and the beginning of the fifth. Secondly, the principal criterion of development sometimes seems to be no more than that an inscription with rougher or more ill-formed letters, the shapes of which may be described as more 'primitive' in character, must be dated earlier than one with more regular and sophisticated characteristics. To some extent the object to be inscribed dictates the calligraphy, and Miss Jeffery acknowledges (pp. 63-4) that different media produced different 'rates of development'. But the matter must surely be more complicated, dependent on the writer's age, intelligence, training, environment and idiosyncrasies, as well as on the model, if any, before him. From a later age, a sample of poor gravestones of Roman date from the backwoods of Anatolia can hardly keep company with the elegance of a good municipal inscription of the Haut-Empire. Within the period of The Local Scripts the gravestone of the Corinthians killed at Salamis (Corinth no. 29) offers an example and a warning. It is poverty-stricken work; yet Corinth was rich and artistic and in the van of civilized progress. Conversely, the dedication of Peisistratus, son of the Athenian tyrant Hippias (Athens no. 37), was long felt by many to be 'too good' for the date to which it must be assigned and Miss Jeffery's brief comment on it refers to it as an anomaly. The progress of time and art cannot be so precisely correlated even within one city, even less between one city and another.

Indeed, the structure of 'twenty-five year periods', such as Miss Jeffery seeks to establish (p. vii) is too narrow for the epigraphic as for any other branch of art; the personal factors are too great. For dating on the basis of the letter-forms of an inscription, no date within less than half a century should be considered safe. Historical criteria may give the necessary security. Where a date can be assigned with the help of the chronology of ceramic or sculptural style the situation may be more promising. Inscriptions painted on pots before firing tend to an early neatness and sophistication (pp. 63–4); sculptural chronology at times looks to the epigraphic criteria for assistance instead of affording the epigraphist the support he may need. Nevertheless, where a balance of all the criteria can be struck, the result may shed light on comparable material; but the fragility of the letter-form criterion per se needs more emphasis than it has received. It is however to Miss Jeffery's credit that she has reduced this amorphous mass of material to order and clarity, and after she has done so much to disentangle the threads it may be a trifle ungrateful to comment that the result is too orderly and too clear.

The regional consideration of the Greek city-state world, with representative material discussed city by city, occupies the major part (Pt. III) of the book (pp. 66-379, with comprehensive indices at the end). Pp. 1-65 present the general discussion of the early Greek alphabet for which the detailed study provides the background of evidence. On the substance of Part I, the origin of the alphabet in Phoenicia and its transmission to Greece, Miss Jeffery's view largely coincides with that of the reviewer, with, as she remarks, a difference of emphasis. The alphabet was picked up by Greek traders on the Levantine coast at Al-Mina or thereabouts. That this adoption was a very casual and individual affair is not precluded by the community of certain essential characteristics in all Greek local alphabets. The emphasis should rather be on the initial untidiness which for so long kept the Greek cities as independent of each other alphabetically as they were politically.

Part II considers the direction of writing, the methods and materials used, what the inscriptions are about, and the use of the letter-forms in dating. It combines erudition with thoroughness and readability, and leaves little room for comment. On the direction of writing, E. Zinn's article 'Schlangenschrift' (Arch. Anz. 1950, 1-36) perhaps deserved more than a brief reference in the addenda: and whether the left-to-right script is dependent on its users being collectively right-handed (p. 47) was shrewdly doubted by a reviewer in the Times Literary

Supplement in another connection.2

A small and final point. Miss Jeffery has preferred to print her Greek without breathings or accentuation; she gives no reasons, though they are to be presumed good. Certainly the Greeks of the time used no accents and had a separate letter for the aspirate. But in a modern

¹ A.J.A., LXIII (1959), 175-8. ² T.L.S., 12 June, 1959, 358.

work the idiosyncrasy obtrudes itself unpleasantly. It is more desirable to write an epigraphic text in majuscule, which would be even closer to ancient practice and, though formerly used in the great epigraphic collections, has regrettably gone out of fashion. Autres epigraphistes, autres moeurs: some insist on being primitive, others sophisticated. The point may not be without its application to the legion of anonymous writers whose handiwork Miss Jeffery has devotedly laid before us.

A. G. WOODHEAD

CRETE AND EARLY GREECE. By Friedrich Matz. Pp. 259, Pls. 78, figs. 50. Methuen, London, 1962. Price £2 85.

This book is a volume in the superbly illustrated (and moderately priced) 'Art of the World' series. Its 56 excellent colour pictures stuck into the pages of the text, some 50 text-figures, and 22 black and white illustrations forming an illustrated appendix, combine to give a fine pictorial survey of the art and architecture of the prehistoric Aegean world. The admirable landscapes with buildings remain most vividly in the mind and many of the objects illustrated can never have been seen in colour reproduction before. The text-figures are the

weakest feature; very few are really good and fig. 30 is terrible.

The text is by Professor Matz, one of the most eminent authorities on the archaeology of the Bronze Age Aegean, and it is in many ways a very personal account. He has chosen as a guiding theme the links between Greek classicism and the primitive Greek world, a theme that is admirably illustrated by the frontispiece showing the Parthenon rising above a stretch of Cyclopean wall on the Acropolis. Professor Matz puts the question: 'Is it possible to treat pre-Greek and Greek styles together. Or are the former simply an element in the historical development of the latter?' The book would have lost and gained much had the author not chosen this theme. The layman, for whom the book is presumably intended, will find it difficult to follow the relations between decorative syntax in pottery and ethnic groups, and the beginnings of the dichotomy between east and west in neolithic times; on the other hand there are moments when Matz's particular approach is extremely illuminating, especially in the final sections on the end of the Mycenean world. The book is never easy reading; the brave translation from the German often fails to find the equivalent English usage, sometimes it mistranslates and, inevitably it fails to make complicated ideas clearer for English readers. Indeed one questions whether such a book ought ever to be translated; Professor Matz's views are of great interest but only those who can read him in his mother tongue can truly appreciate them. To illustrate this point one may cite the summing up on pp. 226-7 of the questions posed at the beginning of the book; this crucial passage in the English version has to be read over and over again to extract its meaning.

Yet there are parts of this book which are immensely readable and clear and provide an excellent introduction to the subject. The geographical background and the history of the discovery of Bronze Age Greece are briefly discussed and the narrative provides a systematic account of art in Greece from neolithic to late Bronze Age times. Throughout, it maintains a good balance between art and history, and the descriptions of the Palace of Knossos, of late Minoan painting, of the Shaft Graves and the development of Mycenean culture on the mainland are most clear and stimulating. Indeed, the approach, as it probably should be in a book of this kind, is often remarkably orthodox; the author avoids the recent controversy about what happened at Knossos in 1400 B.C. and pursues a cautious and moderate policy in the use of the epic tradition to reconstruct the history of the Mycenean world. The final section on the collapse of the Bronze Age world deserves to be read many times for its illuminating discussion of the growth of Greek elements in Mycenean art. At this point the reader begins to see what Professor Matz is trying throughout to bring home to him — that it is possible to study pre-Greek and Greek styles together and that it is the duty of the historian and the archaeologist to search out these links between the two which will probably become more and more apparent in the future. The lasting impressions of the book are of its superb illustrations and of the author's mastery of his subject and his firm belief in the unity of art and history in Greek lands which in the end he succeeds in communicating to the reader. D. E. STRONG

ROMAN IMPERIAL SCULPTURE. By D. E. STRONG. Pp. vii+104, Pls. 144. Alec Tiranti, London, 1961. Price £1 105.

This admirable work presents a rich sample or cross-section of Roman Imperial sculpture, together with two dozen of the precursors (Pls. 1-24), stating the general picture in a series of short introductory appreciations followed by notes on each individual figure. The result

is a succinct and well-balanced description of Roman Imperial art.

The introductory chapter, discussing the traditions that lay behind Imperial art, emphasises rightly its dependence upon Greek art, through the intermediary channels of Etruria and Magna Graecia. It might perhaps have been thought appropriate to mention, more specifically, Campanian art, particularly in view of the close connexion between potential patrons in both Latium and Campania. The individuality of what remains certainly calls for it, and might have toned down the meiosis of the statement that Etruscan and Roman art were 'not entirely without' their own themes. Compensation may, however, be found in the charming examples of late-Republican conventional decoration, in so many fields; not merely in furnishings but in architectural scroll-patterned friezes, which, with the even earlier Cerveteri terracotta, look forward to the Ara Pacis, just as the Civita Castellana base looks backward to the exaggeratedly tall and slender figures of the Praenestine cistae, in an old line of cultural connexion. It is interesting to see how accomplished is the Volterra funeral procession compared with the posturings of the Delphi and Lecce battles. The Ara Pacis itself fares somewhat ill in the quality and choice of plates, but there is delight in the Mantua relief and the Vienna lioness. Both illustrate how diverse were the sources of inspiration and currents of style and constitute a complete rebuttal of Wickhoff's insistence upon a single trend, as if style were governed by a sort of show of patterns for the coming decade. The variety of previous work should indeed remove all surprise at the diversity evinced by the Cancelleria reliefs and those of the Arch of Titus. Yet, this being said, when such items as the reliefs from Orange or St. Remy are placed violently out of chronological order in the series as presented, it is noteworthy how brutally disharmonious is their impact. So much, in fact, depends upon the choice of examples. If, for example, almost any one of the frontal panels from the Beneventum arch had been selected instead of the passage-way reliefs, a much closer link with Hadrianic art would have been apparent. One can see the Benevento passage panels harking back to the Arch of Titus, as do the proportions of the whole architectural framework, just as the Hadrianic reliefs from the Arco di Portogallo are rightly seen to look forward to Aurelian official works.

In this limited selection it is difficult to do justice to the long narrative sculptures of the Columns of Trajan and Marcus and the second, by a choice of detailed studies, comes off the better, somewhat unjustly and at the expense of illustrating effectively the very different ethos of the two monuments. The fact cannot emerge in the pictures, though it might have done so in the text, that the reliefs on both Columns are obviously selected from a substantially larger and less disjointed collection, and this supports very strongly the view that they are based upon illustrated scrolls. In Dr. Strong's series of figures more detailed reproduction, of the type used for the Column of Marcus, would have been of telling effect in illustrating the sarcophagi, in which the variety and violence already apparent in the Hadrianic pieces act as a counterblast to the cool and sparse composition of official art: only the tondi, embodied in the Arch of Constantine, link the two modes of expression. The models available to the carvers or designers of sarcophagi are of the highest interest. Some have the richness of embroidered funeral hangings or palls (99, 115), others the detachment of an official composition (121, 124, 127), others again betray provincial types, as in the retainers of the Rheims huntingscene (120) or the wild Germans of the Ludovisi battle (123). The Ludovisi piece indeed seems to merit more sensitive treatment than it has received, and a reference to the comments upon it by R. Hinks in his Carolingian Art would have underlined its superb quality, as compared for example with the tortured confusion of the Ammendola sarcophagus. Eventually one might see this field of art as influencing official compositions and giving a sort of rationality to the base of Diocletian's Column (132), which, unlike the soldiers of Severus (109), is no longer an echo of the official style of the Column of Marcus. When comparable works are thus viewed over the centuries differences emerge and evoke not only agreement but sometimes doubt, such as Dr. Strong surely rightly expresses about the dating of the Boboli Victory

(133), a scepticism reinforced by a consideration of his series (141) of spandrel Victories from triumphal arches. Such reflections as these serve to underline the interest and value of Dr. Strong's work, not merely as a text-book but as a stimulus.

I. A. RICHMOND

THE ART AND ARCHITECTURE OF ANCIENT AMERICA. By George Kubler. Pp. xxxv+396, Pls. 168, Figs. 119. The Pelican History of Art, Penguin Books Ltd., Harmondsworth, 1962. Price £4 45.

This is a notable book and it attempts something which has not been done before. It deals with the higher civilizations of Mexico and Peru, and with the lesser ones between and around them. The United States are excluded and so are the lowlands of South America, but even so it covers a vast area and a span of at least 3000 years. It is proper that it should be primarily concerned with works of art, and with the "cultures" only when such topics were required to illuminate the objects, which are after all the principal proof of the "culture's" existence, but it must be added that the validity of many of the observations made must

depend on a correct chronology.

In his introduction, Kubler whets our appetites with remarks, some penetrating and some provocative, about many matters. For instance he questions whether 'culture' includes aesthetic activity. What he appears to mean is that artistic development depends more on the spirit of some artists than on the material surroundings they live in, made up as they are of both human and natural factors, or, more briefly, that the artist inspires the culture rather than drawing his inspiration from it. I hope it is fair to comment that an art historian is entitled to take a somewhat extreme view of the matter. He will cause flutterings in some archaeological dovecotes by his view that archaeology is a scientific technique rather than a fully autonomous discipline, because many archaeologists would say that it is a humane discipline which makes use of scientific techniques. He warns against too great a reliance on pottery sequences in reconstructing history and postulating new 'cultures' entirely on the basis of ceramic changes. This needed saying, although in many cases he is preaching to the converted. One of the most interesting things in the book is his criticism of the neo-diffusionism which bases Asiatic influences in the American high cultures on artistic resemblances, in which he firmly states that this view arises from ignorance on the part of its protagonists of the diverse origins from which these resemblances converged. It is to be hoped that he will take occasion elsewhere to develop this subject in detail. He goes on to discuss the development of art history as applied to the New World, with some consideration of the principles he has followed in the book, and he ends his introduction with a review of the place of the artist in American culture through time.

The main body of the book falls into three parts. In the first various Mexican areas are surveyed, in the second the Maya and their southern neighbours, and in the third the Andean civilizations, starting with Colombia and Ecuador and ending with the various areas of Peru. An art historian, trained in the art of the Old World, who is also learned in American archaeology is a rare bird, and it is interesting and stimulating, and sometimes infuriating, to see what he makes of the ancient arts of the New World. To those accustomed to looking at them mainly with an archaeologist's eye, it is, for instance, very valuable to be reminded that many great pilgrimage centres (in this case Pachacamac in Peru) lack an independent artistic tradition of their own, and again it is refreshing to be recalled, as in the pentrating analysis of Mochica art, from excessive speculation to 'intrinsic meaning'. Another interesting suggestion is that the Coastal Chavin and Mochica styles were local ones with a long overlap in time; some overlap would solve difficulties, and it is good to have the problem posed because it should be capable of solution fairly easily by field work in the right places, but I should be loath at present to admit an overlap of the length postulated by Kubler. In the Mexican area an important idea, which also merits fresh detailed study, is the possibility of two-way traffic of influences between Tula and Chichen Itza; Kubler allows that Chichen was under Toltec domination, but the extent to which he thinks it influenced Tula artistically is surprising.

The book contains much that is excellent and salutary, but a mere archaeologist cannot refrain from disagreeing with cases were art-historical intuitions lead to conclusions which

are strikingly at variance with what appear to be soundly-based archaeological conclusions. or even conflict violently with most recent and careful radiocarbon measurements. An outstanding question here is that of the correlation between Maya and Christian calendars. Kubler prefers the Spinden correlation, which makes everything 260 years older than the more generally acceptable Goodman-Martinez-Thompson one (Thompson for short), which he also calls the orthodox correlation. The new radiocarbon dates from Tikal, which give the strongest possible support to the Thompson correlation, cannot have been available until most of the book had been written, and they appear to have been brought in as an afterthought, with the remark 'I have nevertheless retained . . . the Spinden correlation because of its superior convenience for the description of stylistic events' (Italics mine). On the other hand he uses the Thompson chronology for the Late Classic Puuc and Chenes architectural styles of Yucatan. and reconciles the contradiction by 'the simple device' of extending the length of the Classic Period from 600 to 900 years, calling Late Classic developments elsewhere Mid Classic and putting them before Puuc and Chenes instead of coeval with them. 'Readers who prefer the later correlation need only add 260 years to our equivalents' (p. 122), but since this does not always apply the unwary will be led into confusion. Elsewhere he cites radiocarbon as supporting (p. 189) or 'also allowing' (p. 143) the Spinden correlation, but these dates were isolated early measurements which the numerous series from Tikal, measured with extraordinary precautions, have shown to be in error. In justification of his position, he says (p. 183) that Thompson and others regard the Toltee-Maya and Puuc-Chenes styles as roughly contemporary, but I can find no justification for this in Thompson's writings, and he has confirmed it verbally.

The dating ascribed to Olmec sites and monuments I find difficult to follow. It is stated (p. 65) that La Venta flourished in pre-Classic times, which sounds like an acceptance of the date of 800 to 400 B.C. suggested by Heizer and others on the strength of radiocarbon readings. Later (p. 67) the colossal heads, four of which came from La Venta, are provisionally dated A.D. 200 to 300. A corollary of this is the idea that a type ('the ideographic mode') of the Olmec style came to La Venta from the highlands, and preceded the naturalistic style of the colossal heads. It is an interesting idea, but it depends for its validity on dating and the dates at present available do not support it.

Examples from South America of the somewhat cavalier treatment of chronology are the unsupported suggestion that the spread of the Tiahuanaco style began in pre-Classic times (p. 10), and the statement (p. 234) that the Chimu dynasty was coeval with Toltec rule in Mesoamerica. To say that the Chimu began about the time the Toltecs ended would be nearer the mark!

In a field in which new discoveries are constantly being made it is impossible to be right up to date, and Kubler himself must be the first to regret that all he had to offer on the Preceramic art of the Peruvian coast was the two carved gourds found by Junius Bird at the Huaca Prieta, although these are exciting objects in themselves. (Mention of them would come more appropriately on p. 233 than in their present position on p. 248.) The origin of the textile art of this horizon, revealed by the recent work of Bird and Engel, is one of the outstanding problems in American art. On the subject of the coast of Ecuador, the very brief summary depends largely on work by Jijon y Caamano and myself which had been largely superseded by work of Emilio Estrada published in and before 1959.

I have noted some minor matters which should be tidied up in any new edition. On p. 21, the remark about the intrusion of nomads applies to Mexico but not Peru. On p. 39 the proportion of talus to panel at Xochicalco should surely be 9:4 not 4:9. On p. 65 the term 'plumbate' refers to the appearance of the pottery and not to any lead glaze. I believe from the context of p. 112 that Toluquilla is wrongly placed on the map p. xxvii, and some attention might be given to the titles of the maps on pp. xxviii and xxix. The section of Tikal, fig. 32, differs in scale so much from the 'plan' it illustrates that they cannot be matched in detail. In fig. 75, the earlier plate is at the bottom and not the top as might have been expected, and the description on the opposite page adds to the confusion. The plan and perspective section of Sechín, fig. 80, do not illustrate the same stage of development and cannot be matched. If the unaccustomed appelation of Taypicala must be applied to the site of Tiahuanaco, it

should be done consistently, but on p. 303 it is not. On plate 142, the Inca part of Pachacamac is on the right, not as stated on the left.

Notwithstanding any criticisms I have made, I am extremely grateful to Kubler for tackling this immense task, for his penetrating artistic appraisals, for the comparisons he has pointed out, and even for the controversial statements which have made me examine the grounds of my beliefs. The book will go far towards filling a serious gap in the literature of art history, those unfamiliar with the field will be introduced, in print and picture, to a fine series of objects, and those who know it will find some excellent portraits of old friends.

G. H. S. Bushnell

THE CAVES OF FRANCE AND NORTHERN SPAIN. By Ann and Gale Sieveking. Pp. 272, Pls. XVI, figs. 102. Vista Books, London, 1962. Price £1 103.

In 1952 the late Abbe Henri Breuil published his Four Hundred Centuries of Cave Art, and provided us with the first descriptive list of the Upper Palaeolithic decorated caves of western and Mediterranean Europe. His large work was mainly concerned with the art in the caves and with the circumstances of the discovery and interpretation and recording of that art. He did not, and did not intend to give, a guide to the caves themselves. Yet such a guide-book had been needed for a very long time. My own Lascaux and Carnac (1955) was a gossiping guide to a few of the main sites at Les Eyzies. Now, with this present work by Mr. and Mrs. Sieveking, the need for a complete and comprehensive guide-book has been well filled. This is a modest, attractive and very valuable book which will be widely used by travellers and archaeologists.

The main part of it is a catalogue of the caves in France and northern Spain with details of how to get to them and useful practical information (e.g., the entry for Marsoulas: 'Key with shopkeeper at Marsoulas. Tip. No electric light'). There are plans of most of the important sites, and accounts of what to see at all sites. A system of stars has been devised to distinguish the best caves, those which, in the terminology of the Guide Michelin 'mérite un detour', and those good in their category. Altamira, Font de Gaume, Les Combarelles, Niaux are of course among the top two-starred sites.

This useful and carefully compiled catalogue is preceded by a short introductory section on the archaeology of the caves and with practical general information ('for women either a tight or very full skirt will be a nuisance... Shorts on either sex are not favourably regarded in Spain and, in any case, are rather cold inside a cave... Do not wear clothes that you respect'). The authors criticise the arrangements at Les Combarelles and Font de Gaume which they say are 'disgracefully looked after'; and they are right. The strange and sad affair of the fading colours, crumbling and mushroom-growth at Lascaux has only become public after their book went to press. It is widely hoped that those using this guide-book in 1964 and succeeding years will again be able to visit Lascaux. They are wisely cautious of Rouffignac, describing it as 'if authentic' (p. 46), and 'if one accepts their authenticity' (p. 125). The list of books for further reading is short: it might have included a few of the articles and books on Rouffignac so that the reader might judge for himself the nature of this fascinating, sad, odd controversy.

GLYN DANIEL

BAGENDON: A BELGIC OPPIDUM. EXCAVATIONS, 1954-56. By Elsie M. CLIFFORD and others. Pp. 287, Pls. LVIII, figs. 71. W. Heffer & Sons Ltd., Cambridge, 1961. Price £3 35.

Ten years ago the Bagendon earthworks were scarely known outside Gloucestershire, and in no way notable save in the area of 200 acres they enclosed and their proximity to the only slightly larger Roman city of Corinium, capital of the Dobunni. That we can now accept the claim that the 'Bagendon oppidum, and the story of the Belgic Dobunni, form an important addition to the protohistory of what now is western England' is due almost wholly to the initiative of the author, who suspected a connection between the two and put it to the test

in three seasons of excavation from 1954-6. The results show how much can still be achieved by an individual with Miss Clifford's pertinacity and luck, two essential and not wholly unconnected attributes of the successful excavator. Luck she undoubtably had, in hitting upon the site of a Belgic mint in so large an area without obvious focus. This would have been enough to single out Bagendon as the probable native precursor of Roman Cirencester, but in addition Miss Clifford and her assistants produced evidence, largely unsuspected in the region, of a full-blown Belgic culture with connections with the continental Belgae from the time of Tiberius onwards, with the southern British Belgae of the kingdom of the successors of Commius, and still more closely with the south-eastern Belgae of Cunobelin.

Hitherto the characteristic coinage of the Dobunnic area, with triple-tailed horse, derived from the coinage of the Southern Belgic region, had stood more or less alone, and when the author commenced her excavations it was still possible to see this as a Belgic trait adopted by a non-Belgic people as a result of political contacts; and indeed, with Ralegh Radford, to associate it with the makers of 'stamped-ware', since seen as a foreign intrusion via the Bristol Channel into a region no longer found to be co-extensive with the coins.

Such wheel-made pottery of Belgic affinities as was known, as at Salmonsbury camp in E. Gloucestershire or Sutton Walls in Herefordshire, could be regarded directly or indirectly as testimony to a late Belgic penetration of the west and south-west, no more than a generation or so before the Roman conquest, which seemed to have overrun Dorset, perhaps put a violent end to the Iron Age B culture of Glastonbury, and been responsible for massacres at Worlebury (Som.) and Bredon Hill (Worcs.). The discoveries at Bagendon at once made it necessary to view the Dobunnic coinage as the prime evidence for Belgic penetration, and led to a re-examination of its development by Derek Allen, with results that are set forth in these

pages.

Dr. Allen's contribution, and those of Professor Hawkes, reconsidering the historical and archaeological evidence for the Belgic Dobunni and their relations with the Roman invaders, supplement Miss Clifford's own account of the excavation and her discussion of the Belgae of Bagendon. Mrs. Cotton supplies an essential study of the regional pre-Belgic cultures, including the Western Second B makers of linear-ornamented pottery, fine metal-work, and probably currency-bars and closely-set bivallate or multivallate hillforts, and the Western Third B makers of 'stamped-ware', whose intervention in the area we are here mostly concerned with, E. of the Severn, seems to have been momentary. Alongside these contributions come the specialists' reports, archaeological and scientific, amongst which we can here only single out Miss Fell's important analysis of the coarse pottery, and Mr. Hull's of the brooches and 'red-glazed' wares, in which he distinguishes three groups, the first and third true Arretine and S. Gaulish respectively, the second a new group, of Arretine forms but in a ware similar to the S. Gaulish, of problematical origin.

The result, made possible by public and private benefactions, is a volume of unusual importance and authority, on a scale that could not normally be expected as the result of a relatively small series of excavations. Inevitably challenging comparison with the research reports of the Society of Antiquaries, it suffers only in lacking the unity imposed by the single authorship normal to those volumes. Hence the story of the Belgic Dobunni is not wholly drawn together by Hawkes in his chapter on the Western Third C culture. It needs also to be looked for in Mrs. Cotton's chapter, particularly in what she has to say about Belgic impact on the hillforts, as well as in her quotations from Hawkes, while the fullest information about the nature of the Belgic settlement at Salmonsbury, so near to Bagendon, is given by Allen. But a respectable index makes light of these difficulties, and despite some editorial blemish such as form and figure numbers for pottery misquoted in the excavation report and in the pottery analysis, there is no doubt that the beautiful format of the volume and the lively style

of Mrs. Clifford's team make attractive reading.

The picture so skilfully reconstructed hangs, as has already been said, on Allen's new study of the coins seen in the light of Miss Clifford's revelation of a Belgic, and not merely Belgicized, community at Bagendon. This, as the pottery and other objects showed, had not arrived here, in S.E. Gloucestershire, until about A.D. 10, when a large enclosure of characteristic Belgic type was constructed at Bagendon on a site, so far as is known, previously

unoccupied, to last until the early years of the Roman conquest. The earliest gold staters, however, with reverse type of triple-tailed horse, and the succeeding silver issues, suggested an initial penetration of south Gloucestershire, c. 25 B.C., by Atrebatic Belgae or affiliated people of Southern Second C culture from the adjacent region of north Wiltshire, and is now seen to have been followed by further spread into north Somerset where, at Camerton and one or two other places, we now have a significant amount of pottery of Bagendon type dating perhaps from the end of the 1st century B.C. Then at last we can discern a movement eastwards in the first decade or so A.D. into our Bagendon region in S.E. Gloucestershire.

The culture of these newcomers, now properly seen for the first time at Miss Clifford's site, deriving from Southern Second C but developing independently and distinctively as a result of its absorption of the native western B cultures, is our Western Third C, although even at Bagendon its Southern Belgic origin is still manifest in the pottery of phase I. In phase II, to which the mint belonged, from c. A.D. 20 onwards, the contacts of the Bagendon Dobunni were overwhelmingly with the south-eastern Belgic kingdom of Cunobelin, as traders and as allies. The political implications of this situation, and the changes consequent on the succession of Cunobelin's sons, Caratacus and Togodumnus, in c. A.D. 41, are absorbingly discussed by Hawkes. If some of the suggestions put forward should prove too neat to stand the test of time, it seems unlikely that the identification of the Bodunni of Dio's account of the Roman invasion with our Dobunni, despite the old assumption that the former were a tribe of Kent, will be one of the casualties.

It also seems clear that *Boduoc*, whose Romanizing coins, centred on the Bagendon area, seem to fall within the first few years of the Roman conquest up to the establishment, c. A.D. 47, of the Fosse Way frontier through the centre of Dobunni territory, had made his terms with Rome. If *Corio*, as coins may suggest, was a contemporary ruling the southern part of a divided tribe, he would, as Hawkes proposes, clearly have been an enemy of Rome and, as Miss Clifford herself contends, a likely protector of Caratacus before the latter's adoption by the Silures of S. Wales. She already has the 600-acre Minchinghampton earthworks complex, 10 miles W. of Bagendon and apparently outside the territory of Boduoc, marked down as the headquarters of that redoubtable leader, and, after Bagendon, he would be a bold man who would say her nay.

To the question 'Who were the Dobunni?' Hawkes' answer is that they were the makers of the linear-tooled pottery of Western Second B, who were still dominant, despite the intrusion of the 'stamped-ware' people of Western Third B, in the region afterwards overspread by the Dobunnic coins, when our Belgae arrived in and after the final quarter of the 1st century B.C. This seems at least as probable as that the latter brought the name with them, but it is not the kind of question that archaeology is ever likely to answer. The question can be posed in precisely the same terms for the Durotriges of Dorset, amongst other coin-using tribes whose Belgicization is otherwise in doubt, but where there are fewer signs of a Bagendon in the making.

R. A. H. Farrar

HOD HILL, Volume I: Antiquities from Hod Hill in the Durden Collection. By J. W. Brailsford. Pp. viii+23, Pls. XIV, figs. 15. Trustees of the British Museum, London, 1962. Price 185.

The Durden Collection, which forms the subject of this volume, was made on Hod Hill, Dorset, by Mr. Henry Durden of Blandford in the middle of the last century and subsequently purchased by the British Museum from his son in 1892 and 1893. Hod Hill is a large, multivallate Iron Age hillfort with the unusual distinction of having a Roman fort occupying its N.W. corner and making use of the existing northern and western defences of the native construction. In the middle of the last century the western half of the hillfort, including the interior of the Roman fort, was ploughed and a large number of objects, mostly of bronze and iron, came to light. Not surprisingly these included a considerable amount of Roman military equipment. The importance of this collection and the need to place it in its proper context was one of the reasons which led to the excavations on Hod Hill in the years 1951 to 1958. These excavations, the first to be undertaken by the British Museum in this country, were

directed by Professor Richmond with the assistance of Mr. Brailsford, the author of this volume. The publication of this material, eminently desirable in itself, became, once the excavation had been undertaken, a sine qua non of any discussion in the forthcoming excavation report, and the Trustees and Mr. Brailsford are to be congratulated on thus diligently preparing

the ground for Volume II.

The text consists of a catalogue of the finds grouped under various headings (Iron Weapons, Bronze Bow-brooches, Currency Bars, etc.), with references to known parallels. There is no detailed discussion of the material since this will be included in the volume containing the excavation report. The catalogue is followed by fifteen pages of line drawings, the work of C. O. Waterhouse and of excellent quality. It is gratifying to see such a high proportion of the finds illustrated in this way. Bronze Bow-brooches are particularly well represented here, the whole of the group (C1 to C101) being shown with the exception of C17. Unfortunately, the quality of the line drawings is not maintained in the plates, of which there are fourteen. Most of them are adequate, but no more than that, while one or two present little more than dark silhouettes of objects and would have been better omitted. The only other illustration is the plan of the site (Frontispiece), which would have been improved by the addition of the main contour lines and the inclusion of the whole of the very prominent inner quarry ditch, one of the notable features of this site, which exists behind the main rampart on all four sides of the hillfort. No doubt a more detailed plan will be included in Volume II. In spite of these minor criticisms this is nonetheless a very welcome and well-executed piece of work. The wealth of material represented in it makes the publication of the excavation report an event to be awaited with keen interest. J. FORDE-JOHNSTON

CORNISH FOGOUS. By EVELYN CLARK. Pp. xx-j-152, Pls. xv1, Maps and figs. 10. Methuen and Co., London, 1961. Price £1 101.

Fogous are artificial caves, wholly or partly subterranean, comprising stone-lined passages and chambers and usually found associated with, or in close proximity to, settlements of the later Iron Age and early Romano-British periods. Their distribution is confined almost exclusively to West Cornwall and though their purpose remains enigmatic it is possible that they served either as hiding places or for storage. In this book Mrs. Clark describes the nine surviving fogous with the aid of plans and plates and has included accounts, based on previous writings, of a further twelve now destroyed. This collection of material will prove of use to those with an interest not only in Cornish archaeology, and in particular its settlement types, but in the analogous, though not necessarily related, souterrains of Scotland and Ireland.

The book, which includes a Foreword by Dr. Ralegh Radford, is attractively presented and pleasingly arranged, the typography being specially worthy of mention. Following a brief Preface the characteristics of a fogou are defined in the introductory chapter and a detailed description of the surviving fogous, each accorded a short chapter, forms the bulk of the book. A discussion of some Irish and Scottish souterrains is followed by a consideration of certain Cornish structures possibly related to fogous, the destroyed fogous are briefly described and two short chapters, by way of summary, conclude the work. There are three

appendices of doubtful value.

The plans are, in the main, satisfactory, though some have been over reduced and they are nowhere listed. One would like to have had more showing the relationship of fogous to settlement sites. Most of the plates are adequate but again many have been over reduced and the lack of a scale in all of them is a serious disadvantage. In particular the so-called basrelief at the entrance to Boleigh is entirely unconvincing, more so even than the original. But it is the text which gives rise to the greatest disquiet, for although the description of the extant and destroyed sites is generally satisfactory the discussion of the comparative material, sites and finds, is far less happy. The author's contention that fogous are La Tene structures but not of the Iron Age, because 'the Iron Age per se did not exist [in Coruwall]' (p. 9) is indeed disturbing, particularly in view of her claim that 'the book is written for archaeologists' (p. xvi). Moreover the work is given an inflated air by being extremely repetitive and at times tautologous e.g. 'habitation settlement' (p. 2). It is carelessly edited — scarcely what we expect

from the publishers of so many admirable books on archaeology—and incorrect facts, references, dates and spelling abound. Indeed, one is left with the feeling that the most valuable material in this book, that describing the individual sites, could have been published more successfully within the pages of a suitable archaeological journal.

D. J. Bonney

THE IDEA OF PREHISTORY. By GLYN DANIEL. Pp. viii+171, Pls. VIII. C. A. Watts, London, 1962. Price 155.

Short definitions of the nature and aims of prehistory by archaeologists of the present time are now generally to be found in introductory and popular books, but it has not been easy to follow the course of events leading up to the present position, nor to learn of the dangers and oppositions that confronted, and often still confront, the pursuers of knowledge in this field.

Dr. Daniel meets a real need in this compact book comprising his eight Josiah Mason Lectures for 1956-57 at Birmingham University. He presents a clear and integrated account of the opening up of ideas about the preliterate past from the first random speculations to the laborious search for valid evidence, and so on to the troubles arising from controversies on the date of the Creation, Evolution, and all the aberrations of romantic, nationalist, and doctrinaire, interpretations of the past. On the positive side he is able to marshal the leading thinkers and explorers, and turning points in the progress of prehistory; he shows us the debt owed to the pioneers of geology and anthropology, and examines the now growing awareness of the relevance of prehistory to History as it is normally understood.

In his final chapter, Dr. Daniel brings together some very useful comments on the reasons for present-day wide public interest in archaeology, and rightly sees an underlying factor in the desire for an integrated concept of the past and its bearing on inherited and modern situations and problems. The formulation of ideas about the human community at large, and the apprehension of socio-economic world problems, have undoubtedly contributed to a call for world history. In this, the role of prehistory, often illustrating basic situations and continuities in patterns of life, is found to be not only cogent but indispensable. Not to have a discipline of prehistory, nor the means to equip and foster the work of prehistorians, must mean a field left open to every kind of propagandist and fanatical pretence. This is a danger already recognised by historians, and apt words are quoted on this matter, but apart from the dangers and opportunities attendant on the wider recognition of prehistory, Dr. Daniel is surely right in claiming that it is the length of perspective offered by this study which is its main contribution to modern thought. We are as yet too early in the development of our field to pretend to a philosophy of prehistory, but, if it should emerge, it will have been prompted by such questions and lessons as have been brought together in these pages.

T. G. E. POWELL

A GUIDE TO PREHISTORIC SCOTLAND. By RICHARD FEACHEM. Pp. 224, figs. 50, maps 2. B. T. Batsford, London, 1963. Price £1 155.

This book is the second in a series, of which the first was Nicholas Thomas' Guide to Prehistoric England (1960). Its modest appearance must not be allowed to disguise the fact that it is a pioneer work, and that Mr. Feachem, a member of the staff of the R.C.A.M. (Scotland) and a highly-skilled field worker, is perhaps the only person really qualified to write such a survey. The declared aim, as with Prehistoric England, is to assist the interested amateur to locate and visit a wide representative series of structural remains and to appreciate them against the background of the most recent conclusions as to date and function. Secondary, but no less valuable, aims emerge from a close perusal; for example, the sections starting on pp. 94 and 175 embody conclusions based on the author's own research, and prepare us for the professional reports, couched in elegant and concise terms, which will appear in the near future.

Mr. Feachem has, sensibly, abandoned the county classification which Mr. Thomas was able to employ for the land south of the Border. This is wholly justifiable. Few people could delineate, even approximately. Clackmannan or Kincardineshire, and it is pointless to suppose that the comparatively late Scottish counties correspond to genuine cultural or geographical regions. Instead, we approach the field monuments as types; Early Settlements, Chambered Tombs, Henges, Stones and Cairns, Cup-and-Ring markings, Homesteads, Hill-forts and Settlements, Brochs, Duns, Crannogs, and Pictish symbol stones. This is, of course, broadly a chronological sequence. Each category bears a short introduction, enlivened with a few plans and careful reconstructions, and the individual entries then follow in the alphabetical order of counties. The sites are given six-figure N.G. references, and the nearest Ministry of Transport road numbers, and (where necessary) more precise directions on how to find

The Bibliography (p. 202) is extremely selective. It is followed (pp. 203-213) by a most useful concordance whereby, arranged under counties, several hundreds of the sites mentioned in the book itself are cross-referenced to the reports (mostly in Proc. S.A. Scot.). The Index is to the monuments only, but as it includes the category of monument (e.g., Beacharra,

Chambered Cairn, 49) it will be a working, and not a decorative, index.

There is, unfortunately, one aspect which invites adverse comment, and that is the whole matter of illustration. This is not Mr. Feachem's fault, though exception might be taken to his figs. 1 and 2, where the curiously pointilliste convention employed to display neolithic pottery may give the unversed a quite inaccurate idea of a granular surface. It would seem that the house of Batsford, much of whose well-deserved reputation for fine book production a decade or so ago rested on the excellence and lavish use of their half-tones, have ceased to bother very much about this. Figs. 19 and 20, for example, are awful. Fig. 31 (Dumbarton Rock) isn't much better: why not use the very good Aerofilm oblique, which conveys the nature of this site properly? The half tones in Prebistoric England were only adequate, and 'adequate' is perhaps the highest standard of many of those in Mr. Feachem's volume. Both books are, of course, better than the appallingly-illustrated Prebistoric Ireland (Raftery, 1951), which was printed in Dublin, and not by William Clowes & Son; but we know very well that Batsford can do much better than this, and Mr. Feachem's text certainly deserves plates as good as those in the Thames & Hudson 'Peoples and Places' series.

Illustrations apart, this is a very fine guide indeed. The section on Pictish art (p. 191) is a brave one; and Mr. Feachem's very real gift of sympathetic identification with the past which he studies professionally is yet again shown by such thumb-nail sketches as this, of an Iron Age Celt; 'The traditional moustachioed, trousered gaucho with his disconcerting multi-

CHARLES THOMAS

STRATIFICATION FOR THE ARCHAEOLOGIST. By EDWARD PYDDOKE. Pp. 124, Pls. VIII, figs. 18. Phoenix House Ltd., London, 1961. Price £1 10s.

The title of this book is important. If the reader is not to be deceived in his expectations, he must understand that it means exactly what it says. Stratification is used here in the precise sense of the making of strata. It is Mr. Pyddoke's expressed hope that his book will 'introduce the archaeologist to the great variety of deposits in which antiquities are discovered . . . and will stimulate a fuller study of the many factors and processes which combine in the formation of strata'. It is no part of his purpose to discuss in detail the interpretation of strata

exposed in archaeological or other excavations.

He is entirely right, of course, to stress the need for a wider understanding of the processes of accumulation and erosion, and of chemical and physical change, which determine the nature and history of archaeological deposits. Far too often the use of terms such as 'primary silt' or 'weathered natural' or 'occupation-earth' serves merely to conceal the excavator's indifference to the mode of formation of such deposits, even though this may be of even greater significance for the history of the site than its strictly archaeological, or artefactual, content.

The greater part of the book is concerned with the effects of purely natural agencies: alternations of temperature, erosion and transport by wind and water, and changes in structure and composition due to plants and animals. These chapters are well written, and contain much that can be studied and remembered profitably by even the most experienced excavator. But they would be even more valuable if there were a subject-index, instead of a mere index of sites, and if a great deal more reference had been made to published examples of the processes discussed, which the reader could follow up. Of the instances actually quoted, over one-third lack any bibliographical reference in a footnote. These are faults which must be corrected in the next edition.

Every excavator who takes seriously his responsibilities as an observer and interpreter of evanescent data will be grateful to Mr. Pyddoke for his exposition of the 'natural' element in the formation of archaeological strata. But he will also agree, surely, that on the great majority of excavations 'artificial' man-made layers are at least of equal importance; and here he has been far less adequately served by the author. True enough, 'the detailed interpretation of strata . . . requires skill and an ability to observe which can be learned only by long experience of actually excavating' (p. 117); but this hardly excuses so very summary a treatment of the effect and the interpretation of human activity. Even though he explicity limits his terms of reference to the making of strata, the author virtually ignores the fact that man-made objects, or artefacts, are themselves components of strata, and components of special significance and importance. Certainly 'the principle of dating strata from included artefacts cannot safely be applied unless firmly established types are concerned' (p. 119); but a fortiori it cannot be applied either, unless the processes by which an artefact has reached the context in which it is found have been unambiguously evaluated. This is the aspect of stratification for the archaeologist which above all requires the most critical and extended examination. Though the natural processes discussed here have an obvious bearing upon the interpretation of strata in historical terms, their implications have not, unfortunately, been drawn with the necessary emphasis. There is all too little here to contradict the assumption, still much too commonly accepted, that coins and sherds necessarily 'belong', chronologically, to the layers in which they are ultimately found.

In fact, of course, the ostensible distinction between stratification — the making of strata — and stratigraphy — their record and interpretation in human terms — is both artificial and false. In every case the archaeologist's starting-point is the raw data revealed in his sections; and these must be *interpreted* in terms of the processes which give rise to them, whether natural or human or both. Mr. Pyddoke has given us a very useful and readable account of the natural history of stratification; but the other half of the book implied by his title remains to be written.

R. I. C. ATKINSON

METALLURGY IN ARCHAEOLOGY. By R. F. Tylecote. Pp. xvi+368, Pls. xxvIII, figs. 74. Edward Arnold, London. 1962. Price £4 4s.

The last few years have seen the publication of a number of books dealing with the history of metallurgy — Aitcheson's History of Metals and Schubert's History of the British Iron and Steel Industry, to mention only two — and one may be inclined to ask whether there is need for yet a further treatise on this subject. To begin with, this is not a history of metallurgy: Dr. Tylecote has been faithful to his title and, to quote his own words, has compiled 'the wealth of information on metallurgical aspects of archaeology mainly in the appendices to excavation reports', so providing us with a cohesive account of early metallurgy in these Islands. Historical sources have not been so much ignored by the author as reduced to their proper proportions — 'written by observers who were not specialists in the techniques they witnessed'. Instead of historical sources Dr. Tylecote has preferred 'to rely upon the factual evidence of the artifacts themselves'. This is archaeology.

No one who reads this book can fail first to be impressed by the really immense amount of work that must have gone into collecting, sifting and arranging the material upon which it is based. As a bibliography alone it is of enormous value. It would have been excusable,

one feels, had Dr. Tylecote considered it his duty only to edit the material collected; but he has gone much further than this, and throughout the book one is always aware of his

painstaking assessment of the significance of the data with which he is dealing.

Dr. Tylecote devotes a chapter each to copper and its alloys; tin and tin-alloys; lead and silver; while two further chapters deal with the native metals — gold, copper and iron — and methods of fabrication. The last five chapters cover the working of iron from its arrival in Britain to the introduction of the blast-furnace and finery. To these chapters are appended — in addition to the ninety-eight tables in the text — seven tables, chiefly of chemical analyses of copper and bronze objects, and a short glossary of technical terms with which the archaeologist may not be familiar. There can be little doubt that most archaeologists will welcome the glossary, although it seems to be barely adequate. There are probably fewarchaeologists, for example, who could define an alpha-bronze (p. 45), one of a number of such terms absent from the glossary.

The very presence of the glossary, however, is symptomatic of the difficulty of writing a book of this kind, for it is Dr. Tylecote's intention that it should be read both by archaeologists and metallurgists. No one can deny that this is a laudable approach, and the author must be given every credit for attempting to bring together two so widely different disciplines. At times, however, one is aware that Dr. Tylecote is stepping aside from the main theme to explain an archaeological point to the metallurgist reader, and vice versa, and this can be distracting. Writing for two schools is also, presumably, the cause of a number of statements that could be confusing. The claim that a temperature of 1063° C. 'is the lowest that would fire a suitable pot' makes good sense to the metallurgist reader whose concern with ceramic materials lies chiefly in furnace linings and crucibles; to the prehistorian, to whom pottery is

more often than not lightly fired mud, the statement may seem almost outrageous.

The subject matter, covering as it does such a wide field — mines, ores, furnaces, detailed studies of manufacture, metallographic and radiographic examinations, chemical analyses and so on — demands a great deal of space. The book has to be a big one. Even so, economies could have been made by the publishers at no cost to the text, and some could actually have improved the book. Apart from an X-ray and eight metallographic sections, the half-tone plates tell one very little and most of the subjects would have been better illustrated as line drawings. The figures are, on the whole, clear and informative, but the lay-out of that illustrating coin-stamping (p. 168) is an extraordinary lapse, and quite out of keeping with the rest of the book. The book was printed in Holland, which probably accounts for a number of minor and very obvious typographical errors. However, in books produced at a tenth of this price we are accustomed to illustrations being printed the right way up (p. 47).

The author concludes with a short survey of the gaps in our knowledge of early metallurgy in Britain, listing twenty-five fields of research into which a great deal of work must go before we can be satisfied that we have even a framework on which to construct a prehistory. This is salutory: it gives the lie to anyone rash enough to suggest that research into

the archaeology of Britain is 'worked out'.

H. W. M. Hodges

THE GREATER ANGLO-SAXON CHURCHES: AN ARCHITECTURAL-HISTORICAL STUDY. By E. A. FISHER. Pp. 452, Pls. 230, figs. 46, maps 5. Faber and Faber, London, 1962. Price £8 81.

If the useful phrase 'Great Church' is to remain useful it must imply, at all periods, a building designed to accommodate a full liturgy, with quire and processions, and a multiplicity of altars. It cannot possibly be extended to a two-celled parish church, with or without a bell-tower, nor to an oratory, even if part of a monastic complex. Indubitably such great churches existed in England before the Conquest: even though the unenlarged porticus-church of the missionary period might not qualify, the aisled basilica was known from an early date. Indubitably also, they had almost entirely disappeared, when the Norman, or more precisely, the Hildebrandine prelates had covered the land with a 'white robe of churches'. As Mr. Fisher says, no 'head-minsters or cathedrals remain above ground' (though Elmham has a good deal more to show than foundations and something is upstanding of Sherborne).

What are left are waifs, like Brixworth, that have lost their continuity of endowment, and portions of minsters or larger secular churches, like Stowe (Lincs.), Staindrop (Co. Durham), or Leeds (Kent) embedded in buildings which have not since risen above parochial status. Their recovery is a controversial matter, calling for a co-ordination of literary and liturgiological evidence, a knowledge of parallels throughout Christendom and for disentanglement of remains from accretions of masonry as well as of soil. The last years have seen such advances as the general disquisitions of Dr. Ralegh Radford and the simultaneous attack by Messrs. Quirk and Biddle on the minsters of Winchester. But, notwithstanding its title, we must not look in Mr. Fisher's book for another essay in this field. His 'Greater Churches' are not great churches in this sense. There are only the most trivial references to Winchester and Christ Church, Canterbury; Hexham and Peterborough, where the evidence is equally from document and excavation, are only admitted as exceptions to his odd definition of a 'Greater Church', which is presented with disarming directness in the preface (where one might not look for it): 'for no other reason than convenience' it is simply 'a church with a tower'.

Two facts at least are certain: small churches commonly had towers at an early date in Lindsey and the northern Wolds, around Bedford, and, above all, in East Anglia — elsewhere they had none; and even such towers as these, in England as elsewhere, are relatively late. Hence, most of Mr. Fisher's examples, while admitted on all sides as 11th-century, are far less certainly pre-Conquest, and his selection is as one-sided in place as in time. Let us, then, ignore the title and judge the book as a candidate for a subject that surely needs treatment, 'Tower-typology as a key to early Romanesque architecture'. But even here the broader issues are avoided, though the book has its usefulness as a source for future study: the growing number of students will find, at a high price, a supplement, though not a substitute, for Clapham and Baldwin Brown, which are now hard to obtain. The photographs, many by Mr. C. E. Coulthard, are plentiful and usually good. The painstaking descriptions, unenlightened by drawings and unreadable to the layman, are nevertheless a fund of detail unobtainable elsewhere. There are one or two unfamiliar examples that would be discoveries if we could accept them: those on the episcopal manors of Teignmouth and Bishopsteignton were massive Romanesque structures, but there is no cause to make their stair-turrets into early round towers. The nearest parallel, Aveton Giffard, is 13th-century. Yet Mr. Fisher tries the same sort of reasoning once again at Minster-in-Thanet; years ago it was also tried at Hythe, Kent. The maps have a marginal utility to remind us of problematical 11th-century examples, often without towers, but for distribution their value is slight. The density in Sussex is due to the intense study of the small churches there, not least by W. H. Godfrey: the knot of early towers around Bedford is adumbrated, but several, e.g. Marston Moretayne, have been missed. The bibliography is wide and helpful, for it is necessary to the author's way of working. This is medieval: it would be unjust to Higden to call it the method of the Polychronicon. 'Authorities' are quoted side-by-side, without assessment of their value or background. If one gives a date for an event and another tries to correct it, both dates and two events emerge an ancient pitfall in using tertiary 'authorities'. At North Elmham I showed that the earlier excavation was in the '70s, not 1891, and Mr. Fisher follows me, yet the ruins are still 'buried' in 1891. Inconsistencies, particularly in dimensions, are fastened on: Clapham and Godfrey made the then overgrown nave of Elmham 72 feet; I, in a popular guide, said 65. I apologize; the figure is 66.75. But why, if the published 'authorities' have been checked, waste space over past errors? It is just because we are treated as 'authorities', creatures which should not exist, except, faut de mieux, as recorders of destroyed work. Authorities, like scriptures, have to be both right and wrong at the same time. At Elmham again, where we understand that 'Hugh' Despenser made the earthwork, said in another paragraph to exist, four centuries earlier (!), the now quite superseded plan by Clapham and Godfrey is reproduced, together with a patchwork description, partly theirs and partly mine. Indeed, for all the 'personal observation and correction' there is not one original plan or text-figure. At Deerhurst, for good measure, there are two plans, both recent, though not the most recent, but widely divergent, by 'authorities' of different stature, but neither of them fools. From this alone we understand that Deerhurst is still controversial. A judicious summary of the issues would be valuable, but the twenty pages of derived argument are wasted.

In kindness let us rather ascribe this tangle to the pre-scientific method of compilation than to the essentially careful author. On points of more general detail there are questions where his reply would be valued. Were the leaves of unrebated doors really mere shutters, clapped on inside, or were they harr-hung in independent frames? And was the hanging of

bells in windows so curious? It is usual still in Spain.

The expressed object is worthy enough — the collation of much scattered writing with the actual remains. But this calls for a historian in two depths — not only of ancient art but of modern criticism. And is not the subject too large for one such survey? It was four centuries and three-quarters from Augustine to Lanfranc, and since neither the Norman conquerors nor the cosmopolitan prelates who followed them were masons, the story need not end there. Even for those conservative centuries it is time we dropped the romantic myth of one 'national style' and thought in terms of 'Early Christian' (or some alternative name) and 'Early Romanesque'.

S. E. RIGOLD

THE CHURCH IN ANGLO-SAXON ENGLAND. By C. J. GODFREY. Pp. xii+530, Pls. XVI, 6 maps. Cambridge University Press, 1962. Price £2 155.

This account of the church in Anglo-Saxon England opens with a slight survey of Christianity in Roman Britain and among the Celts. The main theme is the conversion of England and the development of the church; the concluding chapter records the primacy of Lanfranc. The ground is well covered and the survey includes accounts of the Anglo-Saxon missions to Prisia and Germany and to Scandinavia. The latter is a subject that has too often been neglected and its inclusion here is both proper and welcome. The book is not confined to a purely historical narrative, but also has chapters on architecture and art and an excellent survey of contemporary ideas and attitudes. The last draws on the early poetry and, for the later period, on the vernacular homilies and related sources. The style is loose, too often without sufficient care for the exact meaning of the phrases used. 'The greatest scholar of the 7th century in England and indeed perhaps in Western Europe, was Aldhelm' (p. 201). 'The relics of Bede remained at Jarrow until the 11th century when they were transferred to Durham Cathedral along with those of St. Cuthbert' (p. 213). These sentences are chosen at random from one chapter, but they are typical of many. The first is a hasty judgment, which it would be difficult to justify if one considered the School of Canterbury in England and the Irish scholars outside; the second is misleading in that the reader would deduce that the relics of St. Cuthbert were at Jarrow till the 11th century. Sentences like these raise doubts whether the author has really considered the implications of what he has written.

The chapters on Art and Archaeology require a closer examination in our Journal. The survey is adequate in general, but misses a number of contributions, especially those in periodical literature. The account of the later post-Danish period is noticeably better than that of the earlier age. A number of errors and omissions may be noted. P. 171: there is no evidence that the use of the disconicon and prothesis reached England; the discussion of the Syrian parallels is therefore irrelevant as most features in early Anglo-Saxon architecture may be explained by Gaulish and Italian practice. P. 172; it is far from certain that the double apsed church at Abingdon dates from the 7th century; even if this be admitted, it is not the earliest in the west, as an example at Orleansville dates from the 1th century, P. 172: mention should have been made of the larger church at Jarrow, destroyed in the late 18th century; drawings have been published. P. 176: there are good western precedents for the erection of crosses, e.g., to mark the places where St. Germanus of Auxerre preached. P. 180: The diocese of Abercorn, not Whithorn, 'existed from 681 to 686'; a dating of the crosses of Abercorn and Aberlady to this short period would not now be accepted on either historical or artistic grounds. P. 203: the recent article by Jackson and Fletcher should have been consulted for Bradford on Avon. P. 203: the church dedicated by St. Aldhelm, while waiting for a ship, was at Corfe, not Wareham. P. 284: there is no evidence that Alfred's church at Athelney was built round a circular space' or that it resembled Aachen; a timber church like the later Norwegian stave-churches, but with absidioles, is rather suggested by the text. P. 367: the tower at Barton on Humber is not round. P. 370: Talbot Rice is cited for a date c. 1080 for

the Chichester reliefs, but the suggestion is made that they look Saxon and that they came from Selsey; Zarnecki's dating of 6.1140 is relegated to a footnote and quoted second-hand.

C. A. RALEGH RADFORD

THE SWORD IN ANGLO-SAXON ENGLAND, ITS ARCHAEOLOGY AND LITERATURE. By H. R. ELLIS DAVIDSON. Pp. xxvii+237, Pls. IV, figs. 118. Clarendon Press: Oxford University Press, 1962. Price £2 155.

Mrs. Davidson was a pupil of the late Professor Chadwick at Cambridge and exemplifies in her work his twin approach to the Anglo-Saxon period through archaeology and literature. This is an excellent book in which Mrs. Davidson, besides dealing as a qualified linguist in Part II, in 110 pages, with the sword and its status and significance in Anglo-Saxon times as revealed in literature, has (at equal length in Part I) covered the archaeological material very throughly and systematically and taken fully into account the latest literature and discovery. Indeed, apart from her valuable collection and ordering of known material - known, that is, to a handful of specialists — she makes original contributions on the archaeological side. Furthermore, she has taken unusual trouble to master the scientific and technical aspects of the manufacture of the sword-blades used (but probably not made) by the Anglo-Saxons. The original appearance and method of manufacture of these blades has long been an intriguing puzzle, with fascinating literary connections, but in the last fifteen years the enigma has been essentially solved in a series of important papers. Sword-blades of the pagan and later periods, being all from graves or river beds, are extremely difficult to study, since they are almost invariably heavily corroded or coated, or else indissolubly embedded in rusted layers representing the scabbard. Radiography and scientific analysis of blades sacrificed for the purpose, and practical experiments in forging, have revealed all the technical secrets of their manufacture, and placed the study of these weapons on a new basis. Mrs. Davidson has also read very thoroughly all the early accounts of the discovery of the swords she treats of, and is thus aware of the condition and circumstances in which they were placed in graves.

An admirable aspect of Mrs. Davidson's book and one which will make it all the more valuable to students of both archaeology and literature, is its readability, its lucid simple style and the ease with which it can be consulted. The table of contents is excellently set out under clear chapter headings, and there is a good index. Although Mrs. Davidson is concerned with the study of swords in Anglo-Saxon England, continental parallels, which help to elucidate English finds and fill the gaps in the story left by British material, are fully dealt with. The English material is not well known on the Continent, so that Mrs. Davidson's full treatment of it makes her book important to the study of the subject in the Germanic world at large. There is a useful list of all the more important swords giving their present whereabouts. This would have been more valuable archaeologically if it could have been a complete corpus of known swords. It is also a pity that, through no fault of Mrs. Davidson's, it does not include the number of important swords from recent as yet unpublished excavations; the Dover cemetery, for example, excavated some years ago, contained a number of important swords, which are not listed in this book. A supplementary list might well be added if the book is reprinted.

It seems odd that a book which is such a fine example of the Chadwick approach to Anglo-Saxon studies at its best should not have been published by Cambridge. As it is, the Oxford University Press are much to be congratulated on their enterprise in undertaking the publication.

R. L. S. BRUCE-MITFORD

CASTLES AND CANNON: A STUDY IN EARLY FORTIFICATION IN ENGLAND. By B. H. St. J. O'NEIL. Pp. xix+121, frontispiece and 24 figs. Oxford University Press, 1960. Price 10s.

Whether guns were invented first in the East or in Europe remains to be proved, but now that the authenticity of the MS. of the Florentine ordinance of 1326 referring to making cannon is accepted, it and the representations of cannon in Walter de Milemete's two MSS.

De nobilitatibus . . . regum, of 1326-7 at the latest, give a terminus for the first appearance of the weapon in Western Europe. Both representations show guns of flask form, of which one (MS. at Christ Church, Oxford) is some 4 ft. long and mounted on a timber trestle, the other (Holkham MS. 458, now B.M.) some 8 ft. long on a stone (?) bed. Improbable though the form of these de Milemete cannon may appear, it is confirmed by the Loshult gun in Sweden (Nat. Hist. Museum, Stockholm, ex Army Museum, nr. 2891), the earliest gun to survive, which is similar though smaller (12 in.) and probably therefore a hand gun. It is a bronze casting; so doubtless were the de Milemete cannon. This poses the question whether such weapons were made in any great numbers in the 14th century, though two out of possibly only four other guns dating from before 1400 which survive, the Tannenberg (Germanisches Museum, Nürnberg) and the Morko (Nat. Hist. Museum, Stockholm, nr. 1194) hand guns, are also of bronze; they are of the last years of the century and show a tubular not the flask form. We know from 14th-century texts that iron guns were then being made; but probably the perishable nature of wrought-iron has affected the incidence of survival. The technique of working this material carries the supposition that such guns were tubular.

Any close accuracy of aim with the flask-shaped guns was clearly impossible, nor was there spread of shot, for the de Milemete MSS. show that the projectile was an arrow. Nor indeed could the later 14th-century tubular guns have been more than approximately directional. At the siege of Algerias guns did no more than spread fear because of their extra range; again, the sixteen cannon at Aljibarrota (1385) did not bring victory to the side alone

possessing them.

By the middle of the 14th century references to cannon are less rare, but it is after c. 1370 that they become really frequent and about then that large guns appear to have been developed, principally it seems for use against strongholds. At the Tannenberg siege of 1399, which gives the terminus ad quem for the hand gun already mentioned, twenty horses were needed to

draw up a bombard.

In default of some consideration of the early development of cannon and hand-guns themselves, both in form and use, examination of early artillery fortifications in England stands in vacuo. This is the fundamental criticism of Bryan O'Neil's book. He was a pioneer in the study of the effect upon fortifications of the introduction of the cannon as an engine of war in Europe and was preparing a chapter on the history of gunpowder and early cannon when his labours were cut short. The lack is supplied in some measure in Professor P. E. Russell's introduction but still without the vital correlation of firearms and architecture and consideration of the functional influence of one upon the other. Incidentally, it would be interesting to know his evidence for his statements regarding the size of the first cannon and their material, and their projectiles: the de Milemete guns must surely have been more than 20 to 40 lb., and if the earliest guns were not cast it is surprising that some of the earliest to survive, the Loshult, Tannenberg and Morko guns, are all of cast bronze; and indeed the letter books of the City of London record c. 1352 that there were in the Guildhall six instruments of latten called 'gounis'. The early guns he illustrates would not generally be accepted as early. The Carisbrooke gun, for example, is of the late 16th century.

Unnoticed by O'Neil and Professor Russell are two small guns excavated many years ago at Castle Rising in Norfolk, and to which Mr. C. Blair first drew my attention (a third gun is now lost). The castle, which is now a national monument, became largely derelict after 1397; for this reason and in our present state of knowledge, it is reasonable to date the guns to the late 14th century. If this be accepted, they are the only ones of their kind of as early a date to have been excavated in an English castle; but their importance has remained unrecognized. They are tubular and their construction is of much interest, for they are of wrought-iron and, possibly, oak or leather (analysis is awaited). One is a breech-loader $2\frac{1}{3}$ ft. long including the chamber and of $2\frac{3}{4}$ in calibre, and was probably attached to a short timber stock; the other is a muzzle-loader, some 1 ft. 10 in. long with $1\frac{3}{4}$ in calibre, and retains part of its iron shaft or 'stock'. The latter is a hand gun. Two breech-loaders of c. 1400 of similar

I It is a misapprehension to suppose that these guns were also flask-shaped within. The external profile is due to the thickening of the metal at the breech end to withstand the explosion of the charge.

construction to the foregoing, but larger and mounted still on original timber baulks, survive in the Royal Danish Arsenal Museum in Copenhagen; these were recovered in 1937 from a wreck near the island of Anholt in the Kattegat. Their length is some 6 ft. and calibre some 7 in. The surviving baulk-like stocks of other near contemporary guns of this larger size show an axle and solid wheels forming a rudimentary carriage. Other early guns of like construction are in the Royal Army Museum in Stockholm, the Bern Historical Museum, and the Museum of Antiquities at Rouen. A small 15th-century breech-loader in the Stockholm City Museum dredged from the Riddarsholmkanal shows possibly how the larger Castle Rising gun was originally stocked (Torsten Lenk, 'Medeltidens Skjutrapen' in Nordisk Kultur: Vaaben (Stockholm, 1943), 157, fig. 41). Thus we possess representative examples of three sizes of guns of the 14th century and 6.1400: under 2 ft. and easily portable, between 2 ft. and 6 ft. and more or less handy, and 6 ft. and over and moved with difficulty.

The chronology of early gun-ports as revealed by existing documents and their architectural development are examined for the first time by Bryan O'Neil in his chapter on 'The reign of Richard II and the early gun-ports', the objective examination being well, if briefly, set against a review of the contemporary wars with France. But this is only the half, not the whole. If one examines the plan, sectional and elevational diagrams of gun-ports in O'Neil's book (fig. 1, unfortunately without either scale or dimensions), it becomes increasingly clear which could and which could not be used with each of the sizes and forms of gun described above, from Castle Rising and Anholt. The earliest gun-ports may well be those of c. 1360 in the town walls of Southampton, but those in the West Gate at Canterbury are integral with the building, which is firmly dated to 1380 and the earliest known fortress in this country designed specifically for defence with guns. In both, the ports are small, with high beds (cills) to the embrasures. Thus may be deduced the kind of firearm first used in the defence of these fortresses, for such ports with short, wide splays are suitable for the use of hand guns and the range of cover possible with the nimbleness of turn that hand guns permit; whereas the ports with long, gradual splays are more suited to the heavier and less manœuvreable guns, giving little more than frontal cover. In the latter, the whole gun on its stock was probably set on the embrasure bed where this is of great depth $(5\frac{1}{2})$ ft. at God's House Tower, Southampton, 5 ft. 10 in. at Bodiam, 10 ft. at Raglan); elsewhere the barrel and stock forward from the carriage axle was presumably of a length sufficient to reach over the cill to the port, leaving the vent well back within reach of the man with the slow-match; or again the cill was cut back short of the full thickness of the wall, or even, as at Caister, down to floor level. Such considerations render necessary a revision of O'Neil's comments on pp. 18-9, for he seems to have thought that no early guns survived. The huge bombards are a problem apart; it may well be they were essentially for offence, not defence. In 1405 the Captain of Warkworth castle, having expressed his intention of holding it for the Duke of Northumberland against Henry IV, was glad to capitulate after seven discharges only from the king's siege cannon!

In the chapter on 'The Fifteenth Century', O'Neil has produced a historical summary of our relations with France and our internal troubles; artillery fortification finds little place in it. There was indeed little development in the science during the century: the late 14th-century gun-ports at Canterbury differ hardly at all from those of the mid 15th century at Southampton or those of about 1480 also at Canterbury. But his explanation of this phenomenon as an example of the stagnation of ideas during the 15th century is an over-simplification. Structural innovations may have been absent, but guns received notable refinement. Pivotted vent covers were fitted to protect the priming powder from wind and rain, and a primitive matchlock was introduced in the third quarter of the century, even if no more fundamental changes occurred. Then the structural development recommences, for in 1481 at Dartmouth Castle a new and advanced type of gun-port appears. Thenceforward, correlation of documents and accounts, surviving forts and guns enables the development of artillery fortifications in England to be traced in greater detail. This O'Neil does, in the historical setting, in chapters headed 'Henry VIII, Elizabeth and the Spanish Armada' and 'The Seventeenth Century': those periods in fact to which he had chiefly devoted his attention over many years.

This book based mainly upon O'Neil's Rhind Lectures is a pioneer work, and much gratitude is due to Mrs. O'Neil for having assembled the papers and seen them through the

press. It is not a criticism but an expression of confidence in O'Neil's scholarship and perception to say that it is sad that he was not able to complete a definitive work upon the subject, which no doubt he would have done in the fullness of years.

A. R. Dufty

DECORATIVE PAINTING IN ENGLAND, 1537-1837: Vol. I Early Tudor to Sir James Thornhill. By Edward Croft-Murray. Pp. 326, Pls. 139. Country Life, London, 1962. Price £12 125.

It has been left to Mr. Croft-Murray to perceive that decorative painting has a legitimate position in the art history of this country, and to remedy the neglect with which it has hitherto been treated. Thanks to Pope we all know the names of Verrio and Laguerre, but few of us, without considerable thought, could add any others beyond those of Holbein and Thornhill. The extent of our ignorance is now revealed in all its fullness in this admirable study. The volume is the first of two, concluding with the end of the career of Sir James Thornhill, who died in 1734. It includes the names of some hundreds of painters, and records an immense quantity of work, ranging from humble ornamentation to decorative schemes on the great scale.

The decorative work of the period is discussed in seven chapters: Early Tudor, Elizabethan, The age of Inigo Jones, The Restoration, Antonio Verrio, Louis Laguerre, and Sir James Thornhill. This detailed dissertation is followed by a catalogue sub-divided under the same seven heads. The catalogue is arranged under painters each with his biography, followed by a description of any and every kind of work he is known to have carried out, whether still surviving or not. The first four catalogues are each extended by two further sections, the first listing and describing the remaining known, but anonymous, work of the period, and the second containing the names of those who, while not known to have been engaged upon decorations of a permanent character, from the nature of their recorded activities might on occasion have done such work. Bibliographical references give the sources of information. The volume concludes with a single index which is a model of its kind, compendious in its

range (thirty-five pages in triple columns), consistent in its sytem, and precise.

This is a devoted piece of research, carried through with triumphant success. The subject has been sporadically explored before, but the results have been too fragmentary and scattered to be of very much practical use as an aid to knowledge, and their usefulness has been still further impaired by the lack of a general context in which they could be studied. It is Mr. Croft-Murray's achievement to have remedied both these deficiences to the full. He has tracked down every surviving piece of work he could hear of, the information already available has been carefully collated, and he has then plunged into the ocean of contemporary records in a pertinacious search for evidence relevant in any way to his subject. The scope of his investigations may be judged from the Bibliography, fifteen pages of this quarto volume in double columns, enumerating sources printed and manuscript, public and private. The vast amount of information which has been gleaned from this process has been sorted and classified to form the Catalogue, an exact, factual statement which adds a new work of reference to the resources of art historians. Mr. Croft-Murray's modest appeal for any additions or corrections readers may be able to supply exemplifies the exacting standard he has set himself.

Thus far the feat of exploration. Out of its discoveries the history of decorative painting is built up in the narrative text. It must be conceded that aesthetically little of the material is very rewarding, and a great deal of it is fragmentary or now only known of from records. But the point does not lie in the individual examples and their merits or otherwise, but in the conditions and progress in England of a form of art common to all countries. As elsewhere, before the emergence of the artist, a painter would fulfil a variety of roles, from the craftsman's to that of the designer of figure decoration. The period covered in this book spans the transition, and the author earns the reader's admiration for the equal and equable way in which his scrupulous care and attention are devoted to every phase of his subject. It is the barest truth to say that our knowledge of the course of decorative painting in England during the period covered is transformed by this book. The picture it reveals is a discovery in itself,

and countless individual finds have gone to its composition. Among others are the contributions from hitherto untapped sources towards a revised biography of Verrio, whose life is entertainingly re-written in extenso.

The author has been well served by his printers and publishers. The catalogue especially may be singled out for its happy adaptation of typography to the system of arrangement, facilitating reference by guidance given to the eye. The quality of the printing throughout the book makes it a pleasure to consult, and the collotype of the plates is also of a high standard.

Mr. Croft-Murray has appealed for additions and corrections. One of each may therefore be offered to him. At Madingley Hall near Cambridge are some wall-paintings of the period of James I, which seem to have escaped even his searching eye. On p. 179 the error reappears of crediting George Gower with a grant of the monopoly of painting portraits of Elizabeth I, a privilege which he sought but does not seem to have obtained.

I. W. GOODISON

STIRLINGSHIRE: AN INVENTORY OF THE ANCIENT MONUMENTS. By THE ROYAL COMMISSION ON THE ANCIENT AND HISTORICAL MONUMENTS OF SCOTLAND. Two vols. Pp. xxxix+487, Pls. 230, figs. 180. H.M. Stationery Office, Edinburgh, 1963. Price £12 125.

This two-volume Inventory deals with a county whose geographical importance, especially in the Middle Ages, has long been recognized. The prehistoric archaeology and early history of the district have inevitably been lesser subjects inadequately studied, because that importance has continued, and has encouraged land development without interruption from earliest times to the present day, to the great detriment of early remains. Not the least of the many excellent qualities of these volumes therefore is the manner in which these gaps in our knowledge have been narrowed. New monuments are brought to our notice, notably a series of Early Iron Age forts and 'duns', by whose discovery, and by the classification of others hitherto unidentified, the Royal Commission has enhanced the value and interest of its survey with original fieldwork.

The county is an uncomfortable one to study archaeologically. One half of it consists of inhospitable hills, the other and habitable half has been much disturbed by commercial and industrial undertakings; by railways, canals, ironworks and so on. No longer are these ignored. The modern evidence of man's technological progress has received distinguished official recognition. Thus the two volumes strikingly demonstrate the wide range of the current archaeological and historical outlook. Although architects were the first to draw attention to the aesthetic and dramatic qualities of factory and other so-called 'functional' architecture of the 19th century the archaeologist has more recently shown concern for the future of these monuments of the recent past, and to them he and modern historians are turning an anxious forward-looking glance, recognizing today the Ancient Monument of the future.

This archaeological double-think will lead to disreputable places. A reactionary will be doubtful about the extent to which contemporaries are aware of what posterity will regard as characteristic of their time. The inclusion of roads, railways, canals, viaducts and 'old farms' (i.e. farms which are not old) acknowledges however that everything is 'connected with or illustrative of the contemporary culture, civilisation and conditions of life of the people of Scotland from the earliest times'. And so it is. Distillery architecture, for instance, will repay close study and should be included in future volumes as further Monuments and Constructions worthy of mention therein. By that time we shall have Conventional Archaeologists and Industrial Archaeologists too. It is a far cry indeed from the day of not so long ago when a Conventional Archaeologist protested that there was no such thing as medieval archaeology. How wrong he was.

To tell the truth early remains are somewhat scarce in Stirlingshire, but the most is made of available material. Mesolithic whale-bones are well documented and the Neolithic period is distinguished by five ruined Clyde-Carlingford cairns. Recorded relics of the Stone and Bronze Ages are listed with useful references and relevant information, and the prehistoric period is comprehensively illustrated by a coloured distribution map inserted in the right place. With the Iron Age we have more monuments and they are capable of classification; but the evidence for occupation is still slight. The hill-forts are small, as are the 'duns' which

make a surprising appearance far away from their natural environment of Argyll. Neither from these defensive constructions nor from the two alien brochs can conclusions be drawn about origins and duration, and the critical question of relationship with the Romans remains unanswered.

The Romans recognized the strategic importance of this central area, and permanently (we hope) commemorated their appreciation in the construction of the Antonine Wall, thirtyseven miles of turf rampart upon a stone foundation, with a ditch in front and forts attached which were served by a Military Way. Ten miles of the Wall passed through the county, and what survives of it and its works, and an enigmatic structure known as 'Arthur's O'on', which was probably a victory monument and is now unfortunately away, constitute a substantial body of material which is fully treated in one of the major contributions of this Inventory. Attention is drawn to fresh evidence which contradicts Sir George MacDonald as well as evidence which confirms, but recent excavation results, however informative, show that much more is required before confident conclusions can be made about the history of the northern frontier. The terminal fort at the eastern end has been located, the mile-castles of Hadrian's Wall are paralleled by patrol forts between the larger garrison forts, and simple temporary forts in the vicinity of the Wall, recently discovered, are thought to have been for the accommodation of the working parties engaged in the construction of the Wall. It is timely, in view of the efforts now being made to halt the destructive encroachments of land development, of new roads, sand and gravel quarries, and housing schemes, to which this area is peculiarly vulnerable, to have authoritative publication of such information, accompanied as it is by numerous individual site plans, distribution maps and discursive comment embracing the evidence of recent and current excavations, much of which is unpublished. Not so up-to-date however is the statement on p. 36 that Agricola appears to have met with serious opposition from Scottish tribes only after he had crossed the Tay. If we understand our early native history correctly the one thing he could not encounter was a Scottish tribe anywhere.

There are only two ecclesiastical monuments of distinction; the Augustinian abbey of Cambuskenneth, which has a unique and complete campanile and little else, and the fine late medieval parish church of the Holy Rude in Stirling. The Roman contribution is the most valuable in the inventory, along with the account of Stirling Castle. This gets forty-two pages of description and history, and well it deserves them, for in every way it is the greatest castle in Scotland. It dates from the 12th century historically, and most probably from even earlier times, but little survives of early work. This loss is more than compensated for by the later work, however, notably the Great Hall and the Palace, two buildings of outstanding importance in the history of Scottish secular architecture. The Great Hall, of the later 15th century, is quite considerably larger than Edward IV's Great Hall at Eltham and Henry VIII's at Hampton Court, and it proclaims contemporary French rather than English taste. Even more French is the Palace built by James V between 1539 and 1542 with French masters on the pay-roll. This remarkable quadrangular building is enriched with an equally remarkable series of sculptured figures upon lofty baluster shafts in spacious wall niches. The treatment is carried round three of the four external façades and has no parallel in Britain nor on the Continent either as far as we have been able to discover. Congratulations then for finding a convincing foreign source, a book of German engravings, which, with Edzell Castle in mind, we ourselves have long suspected but been unable to prove.

The lay-out of the volumes follows the precedent set in the Selkirkshire Inventory (1957), being arranged in chronological order of types of monument regardless of situation. With the decline of the parochial outlook and the predominence of the archaeological this is sensible, and it agrees with the arrangement of the Introduction. Moreover the types of monument are grouped beneath running-heads, and thus one can short-circuit the Index and by thumbing the pages can see at a glance, as it were, what Stirlingshire has to offer of any particular kind of monument. It does not take a moment, for instance, to find 'mottes' and get the complete score. And so for other monuments, they can be found at a glance, except the engineering shop of the Carron Iron Works which is oddly among the 'Houses of the 16th to 19th centuries'. (We wonder if the text could not be rationalized still further. All these feet and inches: are

they really necessary? They are certainly distracting. Could they not be relegated to a final

paragraph or given in a table of vital statistics?)

There are other improvements besides. At last the photographs are worthy of an expensive official publication. With the exception of the frontispiece of vol. 1, a lively subject which does not need to be doctored to look like a plaster-cast against a studio canvas, they are very good, some exceptionally so, taken with imagination and well reproduced. The coloured distribution maps of the prehistoric sites and finds are models of their kind, clear and bright, and the large coloured plan of Stirling Castle is not only easy to read but impressive, and makes a cheerful change from the standard black-and-white hatching. And finally a word of praise for a generous bonus, the inclusion of the reconstruction drawings by Mr. Hay of the Royal Commission's staff. They are a joy to behold. The Commissioners and H.M.S.O. are to be congratulated for enhancing the books so generously with his splendid and sensitive draughtsmanship.

MONUMENTS THREATENED OR DESTROYED: A SELECT LIST 1956-1962. By THE ROYAL COMMISSION ON HISTORICAL MONUMENTS (ENGLAND). Pp. 89, Pls. 68, figs. 46. H.M. Stationery Office, London, 1963. Price 18s. 6d.

At first glance this is a sad, bad business: as data for a measurement of what England (and England alone) is losing in ancient and historic sites and buildings, the Commission presents brief descriptions of some 850, selected from a much larger number. The cover, overprinted in red, shows a 15th-century timber building as if on fire. Appendix A, the shorter of the two but at least as startling in its implications, lists some 190 sites of earthworks, with plans of half a dozen: five Iron Age hill forts destroyed, three of them without any excavation, and many settlement sites; three Roman villas and more settlements, untold acres of Celtic fields and miles of Roman road; medieval settlement sites and even a motte and bailey castle. Appendix B lists some 660 buildings out of more than 1,000 notified through official or unofficial sources and has many illustrations. It includes 70 or more small medieval houses and a few large ones, about 50 larger country houses or mansions and large numbers of town buildings. By using a glossy paper, it has been possible to place illustrations adjacent to the items to which they refer.

It must be admitted that the impact of the title and cover are somewhat diminished by a reading of the Report (which I understand was published as a White Paper) and of the prefaces to the appendices. Every reader will know of buildings here listed which have survived the threat of demolition or substantial alteration. On the other hand, other notable buildings have been recorded by the N.B.R. and so are not included in this list. It is probably true that not many lesser buildings have been missed, and some notable buildings long derelict have now been placed on permanent record.

In one sense a building properly recorded is a building preserved; a site excavated is a site saved. A few of the sites here listed have in fact been excavated and how many of those unexcavated have been totally destroyed it is impossible to tell. Lengths of Roman road have gone, but some were hitherto unknown, and so are a gain to knowledge. Ploughing a moated

site (for example Rolleston, Notts.) may not have disturbed its medieval levels.

This list serves primarily to tell us about the work of the Commission outside the counties in which inventories are now being compiled. Special surveys of earthworks have been carried out in West Dorset, in Wiltshire and in particular areas such as the rocket site on Spadeadam Waste. The list of earthworks contains mainly extensive sites which presumably were thought by the Ministry of Works to be too large for excavation or to lack clear archaeological importance. Not a single significant monument of the Industrial Revolution was surveyed. Independent publication by the Commission of this emergency recording, without any account of emergency excavations by the Ministry of Public Building and Works, tells only part of the story. Nevertheless, every welcome must be given to this evidence of the widening scope of the Commission's activity, and to the publications which have appeared or are proposed: A Matter of Time, Monuments Threatened or Destroyed and the forthcoming report on Civil War siege-works at Newark-on-Trent.

Appendix B will serve as an index to the more detailed records of the buildings in question which can be consulted in the Commission's archive. More significantly, the Commission has taken its first step towards a systematic treatment of English vernacular building by including more than 30 plans of small houses. It is to be hoped that extensive research in this field will be briskly pursued, for the Commission is in a position to achieve results beyond the

scope of individual field workers.

Finally, what of the problems concerning preservation to which the Report alludes? The Commission adds its official voice to the repeated condemnation by archaeological bodies of the processes which not only destroy individual buildings of historic interest but even threaten to obliterate the historic character of towns. As the Report recognises, this is a major problem of town planning. The comment on 'the frequent abandonment of the upper storeys of street premises over shops' does not apply to ancient structures alone; many 19th-century buildings reveal their obsolescence in just that fashion. Even planned renewal of our city centres, as against the piecemeal redevelopment of which we now complain, would certainly deprive us of some historic buildings. Only if we know what we possess shall we know what we can afford to discard. Nothing less than a much intensified and fully coordinated deployment by all the state agencies of all their resources for field archaeology will fulfil our present needs.

M. W. Barley

THE HOUSE AND HOME. By M. W. BARLEY. Pp. 208, Pls. 239, figs. 16. Vista Books, London, 1963. Price f. 1 105.

The study of the traditional English home has for a long time been the handmaid of Romantic Architecture; only recently has it become a subject for serious historical research. R. Nevill published a study of Surrey buildings in 1898 which was frankly an analysis of their visual qualities for the benefit of modern designers. His approach remained common for more than a quarter of a century and much that is best in English domestic building of the present century has resulted from a sympathetic understanding of the picturesque beauties of old

timber, brick and tile.

An appreciation of the English house as evidence for cultural, social and economic history is a recent development and, apart from papers in the journals of historical societies, little has been published on the subject. The work of Sir Cyril Fox and Lord Raglan in Monmouthshire, published 1951-4, established the study of vernacular building as a respectable discipline for the social historian and Dr. W. G. Hoskins placed the subject in a wider historical background. Mr. Barley is a pioneer in this field; he has extended his view of home life in an architectural setting from the regional to the national level and in the present volume he includes Scotland and Wales as well as glimpses of Ireland. His earlier book The English Farmhouse and Cottage was more restricted in time and in space and was primarily the product of much patient documentary research. He now tries to present his scholarship in a more popular picture book of the whole domestic scene from 1066 to the present day, opening with scenes from the Bayeux Tapestry and finishing with modern flats by English and Scottish Local Authorities.

Mr. Barley's text is an uneven mixture of his own real scholarship and his own personal observation in certain rather restricted fields, with potted extracts from other writers. The photographs present a fascinating though patchy picture of domestic change, which suffers from being untidily arranged. There is no doubt where Mr. Barley's real interests lie. As a scholar he is absorbed in the evolution of the farmhouse and cottage from their emergence at the end of the Middle Ages to their submersion in the tide of Geogian taste and the Industrial Revolution. As a man he is interested in following the social habits of the underprivileged through the Industrial Revolution, through the world of 'top-shops' and 'back-to-backs'. We are shown an illuminating collection of small manor houses, farms and cottages from many different regions and also the development of industrial housing, omitting none of its more sordid details but also with charming views of working-class families at tea.

To complete the picture, mansions, Scotland and modern housing have to be brought in. For mansions we are given a few photographs of well-known giants; an aerial view of Blenheim

has to stand for the whole range of English country house exteriors of the 18th century. But then Mr. Barley is not concerned with Architecture. He reproduces a most delightful photograph of a maid's dormitory at Salvin's Mamhead (1828) which whets the reader's appetite for more behind-the-scenes details of the houses of the great. After being given the impression that all Scots live in towers, we are allowed to see that more ordinary forms of building were also practised north of the Border. Mr. Barley is misleading in calling 'bastels' towers, and neither 'bastels' nor 'stone-houses' were confined to Scotland. The illustration of a Scottish Georgian country house, Invererne House, is enlivened by period costume which emphasizes the fact that many of the photographs were not taken specially for this book. In the modern sphere Mr. Barley is disappointing; we are shown some modern flats and a modern bathroom with little comment, and nothing of modern house design of the last ten years.

Mr. Barley is not an easy writer to follow. Some points become clearer on being distilled from his longer book, but his text remains rather muddled. For example, the evolution of the hall-house in the S.E. alongside or out of a supposed longhouse type is confusing, while the contrasts drawn between highland and lowland regions need qualification. The plans that accompany the text would have been better if they could have been drawn to a uniform scale.

However, the charm of this book lies in the illustrations. Here, as never before, we see reviewed the buildings that have formed the home background for generations of Britons, for the ordinary people both of the country and the town. We hope that Mr. Barley will continue his researches and give us further studies of the British home.

ROBIN McDowall

THE FOALS OF EPONA: A HISTORY OF BRITISH PONIES FROM THE BRONZE AGE TO YESTERDAY. By ANTHONY DENT and DAPHNE MACHIN GOODALL. Pp. x+305, Pls. 79, figs. 53, maps 6. Galley Press, London, 1962. Price £2 55.

'Their own history for horse-breeders and horse sense for historians'. These words on the wrapper aptly describe the context and aims of this book which is the outcome of great practical experience, and wide reading. The book is written in any easy, often light-hearted, style very suitable for its purpose, but this does not obscure the weight of factual knowledge and informed observation that it contains. The authors first take their stand on the Field of Hastings to witness the effective introduction of the Great Horse to England, an event of as supreme importance in the history of horse breeding as was the battle in other respects. Before this fixed point in time, they can look back to the small horses of Harold's English, and all the small horses before that again backwards into the as yet poorly documented ranges of prehistory. Forwards from Hastings, the native horses continued to play essential roles in the transport of man and goods until the days of mechanisation in the middle of the 19th century when concern for the native breeds led to the creation of stud books and pony societies. There is a great deal of information on the use of small horses for travelling and pack purposes throughout the Middle Ages and down through Stuart and later times, and here is the opportunity to learn the difference between ambling and trotting, palfrey and rouncy, courser and capul, and to grasp the diversity of equine requirements of the knightat-arms. Prior to 1066, there is more information on horses than might be expected, and for the Roman period the variety of breeds in employment and the importance of fast horses for the courier service may be noted. Some of these strains may have been taken over by the English for they were not blind to the points of a good horse, nor to the usefulness of Welsh (British) masters of horse in the king's court. It is interesting that the authors consider the Vikings to have made positive contributions to better horse management with improved gear of various kinds, and also in strengthening native breeds by crossing with imported Scandinavian stocks.

For pre-Roman times, the authors base their classification on that of Ewart distinguishing three varieties for Late Quaternary times: steppe, forest, and plateau. Ewart's 'Celtic pony' they would prefer to name 'North Atlantic', as its range includes Norway and it was indigenous to north-western Europe long before the Celts appeared anywhere in that direction. Opportunities for interbreeding amongst wild and early domestic varieties need not have been

infrequent so that it would be wrong to expect exclusive strains in all excavated material. The authors rightly complain of the perfunctory nature of horse identifications in reports on fauna attached to too many archaeological publications, and much more intense collection and examination is certainly required. Not all specialists will now accept Ewart's classification in detail, and definitions based on tooth structure, and more elaborate craniometry, may be expected to lead to different results, but in terms of the domestic horse questions of exact descent from particular early varieties may not be so important as has been thought heretofore.

For horses driven, and ridden, in the context of the Hallstatt and La Tene cultures, it may be observed that selective breeding over a few horse generations would have been effective in producing suitable animals without their qualities being shown generally in local horse herds. In this way, horse bones from any Iron Age site are not necessarily representative of the best horses available at that time, nor of those most suitable for exacting performances in public life. The authors raise an interesting point in the relationship of the ridden horse to the social duty of hunting deer and wolves, not primarily as a warrior pastime, but to protect crops and livestock. There are three short appendices on the Roman posting service in Britain, on monastic horses, and on the limitations of bits as evidence for the size of horse. There is a select bibliography, but no exact references to the publications of some authors mentioned in the text and obviously worth following up. There is a good index, and the book is excellently illustrated from sources ancient and modern including the living pony.

T. G. E. POWELL

INDUSTRIAL ARCHAEOLOGY: AN INTRODUCTION. By Kenneth Hudson. Pd. 179, Pls. LX, figs. 2. John Baker Ltd., London, 1963. Price £1 16s.

Industrial Archaeology is no novelty to the Royal Archaeological Institute: the earliest article on the coal trade quoted by Mr. Hudson is dated 1878, but some twenty years earlier the Institute published a 74-page paper by T. J. Taylor¹ on 'The Archaeology of the Coal Trade'; this little-known work deserves a place in any bibliography of the coal industry and is essential reading for any member who thinks that the Institute is solely concerned with the 'Arts and Monuments of the Early and Middle Ages'. However, as the volumes of Proceedings are not easily available, and as all archaeologists, of whatever shade, ought to know something about this ostensibly new subject, if only in order to 'know ones adversary', Mr. Hudson's book will serve our purpose admirably.

The book is not intended to be more than an introduction and for this reason the author covers all the major fields of industrial development without becoming too involved in the details of the individual processes of manufacture. He considers at some length what is meant by Industrial Archaeology, which he defines as 'the organised, disciplined study of the physical remains of yesterday's industries'. We are given a reminder of the urgent need for collecting information before existing relics are swept away, and an incentive is offered in the casehistories of some well-known industrial archaeologists (one almost sees Samuel Smiles' hand at work here) to go and do likewise. With every industrial process that is described useful suggestions are made of objects to look for or fieldwork that ought to be done; also included is an excellent and extensive bibliography - perhaps one of the most useful sections in the book.

Mr. Hudson writes well and has produced a valuable resume of what Industrial Archaeology is about and what archaeologists ought to be doing to record it. The arrangement of the text is good and most of the facts seem to be reliable although a number of minor errors occur. The most serious deficiency, however, is the total absence of any reference to the plates which should surely have been selected to illustrate the text: in some places they do, but others such as a '19th-century petrol filling point' (which appears to be c. 1920) are not mentioned at all. Other incorrect dates appear in the captions; for example the housing at Swindon (Pl. XL) is not early 19th-century but c. 1850 and the Liverpool lamp-post in Pl. LIX similarly ascribed is probably 50 years later. On the subject of photographic records it is

¹ Proc. Arch. Inst., 1852, Newcastle (London 1858), Vol. I, 150-223.

interesting to know that 'the [Historical Monuments] Commissions are now free to make available their previously illicit photographs ... 'but fortunately the English Commission at least will be free from an excess of enquirers for the address quoted is now some three years out of date. Some of the scientific terms used could do with better explanation, and to be told that Booth's distillery has 'a flavour still dated 1828' will be found a trifle ambiguous. Errors and oddities apart, the world of shraff and shords and saggar-maker's-bottom-knockers is a fascinating one and those who have not discovered it already will be well advised to do so through the pages of this book. C. F. STELL

THE INDUSTRIAL ARCHAEOLOGY OF COUNTY DOWN. By E. R. R. Green. Pp. 99, Pls. XXXIII, figs. 3, maps 4. H.M. Stationery Office, Belfast, 1963. Price f 1 ss.

This volume is intended to be complementary to the Inventory of the Ancient Monuments Survey of County Down which is nearing completion. It is divided into three sections commencing with a detailed account of the history of the linen industry in the county, including an inventory of 90 sites of beetling mills, bleachworks and the like. In the second section grain milling, brewing, distilling and flax scutching are discussed, followed by an inventory of the sites of 45 watermills and 104 windmills. The final section is devoted to communications and includes particularly valuable accounts of the Newry and Lagan navigations and of Donaghadee harbour with which John Rennie was principally concerned. There are four distribution maps covering the sites listed.

It would be wrong to consider this as a complete inventory of industrial monuments since the author has deliberately omitted minor industries; nor are the lists of sites complete, the 45 corn and scutch mills for example are merely a selection of the best surviving examples - a procedure which considerably reduces the value of the relative distribution map. Dr. Green is an historian and has concentrated on this aspect of his subject, but there is more to industrial archaeology than historical narrative and if the definition quoted in the preceding review be accepted a great deal more ought to have been said about the physical remains. In his 14-page account of the linen industry Dr. Green gives a number of interesting facts concerning the processes involved and makes some reference to the machinery employed. but more might profitably have been said about the buildings themselves. This and the other sections are also sadly lacking in plans and other line illustrations, the drawing of the Ballycopeland windmill being a notable, but the only, exception.

In these still early days of industrial archaeology there can be no general agreement on the proper treatment needed for the publication of industrial sites, but it is surely apparent from the present volume that, however well the subject may be tackled by a single author, a comprehensive treatment can only be provided (and that is what one expects in the present context) by the work of a team comprising not only an historian but also an architect and an engineer. Measured plans, sections, and details of buildings are already accepted as essential to the study of structures; we may now add that for industrial archaeology detailed working drawings of old machinery where it still exists are a vital and urgent necessity — a photograph

however good is quite inadequate.

This has been a pioneer work and Dr. Green is to be congratulated on its publication. Let us hope that this is only the first of a series of volumes which will illustrate in detail, for the first time, the industrial and commercial remains that lie visible, but largely unseen, and certainly unrecorded, throughout the United Kingdom. C. F. STELL