Notices of Books.

THE GLASTONBURY LAKE VILLAGE: A Full Description of the Excavations and the Relics Discovered, 1892–1907, Vol. II, by Arthur Bulleid, F.S.A., and Harold St. George Gray. (Published by the Glastonbury Antiquarian Society, 1917; royal 4to., pp. xxix–xl, 353–724; 43 plates, 43 illustrations in the text; price, 2 vols., £3 3*s*. net).

To complete the story we may add that there are also chapters on the Remains of Wild and Domestic Animals by Professor W. Boyd Dawkins and Mr. J. Wilfred Jackson; on the Bird Bones by Dr. C. W. Andrews; on the Plants by the late Clement Reid; and on the Inhabitants of the Lake Village, the Range of the Iberic Race in Britain and its Place in British Ethnology by Professor Boyd Dawkins, while Dr. Robert Munro contributed an important Introductory Chapter to Volume I on Lake Dwellings in general and on the broader aspects of the Glastonbury Lake Village and its inhabitants in their relationship to similar structures elsewhere. It is not surprising that the monograph resulting from the combination of this brilliant galaxy of talent is one of the most important contributions to British Archæology that has appeared since General Pitt-Rivers set up a standard for such works not easily reached.

The review of the first volume fell into the capable hands of the late Rev. C. W. Whistler and it is a matter of the deepest regret that he has not been spared to see the completion of the work and to finish the task he began,—a regret none can feel so deeply as the present writer called upon to take up the pen he dropped and to collaborate yet once more with the friend who has been called away.

Mr. Whistler's review of Vol. I which appeared in vol. LVII of the *Proceedings* (1911), dealt so fully with the general format and scope of the work, and the character and excellence of the illustrations, that there is little left to say on these points. The difficulties which have attended all printing and publication work during the last few years have delayed the appearance of Vol. II and enhanced the cost of production, but they have not impaired its excellence. It is fully up to the standard of Vol. I and nothing more need be said. There is, however, one new feature deserving of special mention, a frontispiece showing the amber, jet and glass

beads, found in the course of the excavations, beautifully printed in colours from watercolour drawings by Mr. G. Lawrence Bulleid, A.R.W.S. The delicate tones and texture of these objects, which the skill of the artist has admirably rendered, have been reproduced to perfection by the Watford Engraving Company. Others who have assisted with the illustrations to the volume are Mr. Thomas May, F.S.A., who contributes drawings giving the elevation and section of the various shapes of pottery, and Mr. Rupert C. Austin, A.R.I.B.A., who has drawn most of the Iron Objects and some of the pottery fragments.

The volume continues the detailed description of the various finds commenced in Vol. I. The chapters on Objects of Amber and Glass, chiefly Beads; Objects of Iron; Currency; Objects of Bone; Objects of Antler; Tusks and Teeth, perforated or otherwise worked; Objects of Baked Clay; Spindle-Whorls; and Objects of Flint are by Mr. St. George Gray, while Dr. Bulleid contributes the chapters on Pottery; Objects of Unbaked Clay; Millstones and Querns; and Other Stone Objects. The chapters by the several authors already mentioned conclude the volume.

A distinguishing feature of the monograph,—referred to by Mr. Whistler in his review of the first volume,—is even more apparent in the one before us. The description of the relics found is accompanied by a careful comparison of each article with similar finds elsewhere and, especially in Mr. Gray's chapters and the one on pottery, by copious and valuable references to a vast amount of antiquarian literature.

In the chapter on objects of amber and glass five of the former and twenty-seven of the latter are comprised, all the glass objects being beads save three, a pin head, some fused glass with bronze adhering and a lump of greenish-blue glass slag. A vitreous paste, which may be glass, has also been noticed outside the lip of a clay crucible. The distribution of the beads points to the use of such ornaments during the whole period of the occupation of the Village, while the discovery of glass slag and of vitreous paste on a crucible point to manufacture on the spot, though there is no direct proof of this.

The iron objects number one hundred and nine, seven only belonging to weapons. There are thirteen knives, eight bill-hooks, six reaping-hooks, four saws, four gouges, seven adzes, seven files and rasps and two awls, besides bolts, nails and rivets, bridle-bits and rings of various sorts, five of them being finger-rings. Thanks to the preservative qualities of the peat some of the iron objects found outside the palisading are unusually well preserved, many of them still retaining their wooden handles; but the wetness of the site and the clay of the mounds account perhaps for the comparative fewness of iron objects. The bronze objects, described in Vol. I, number no less than two hundred and seventy-four. In

general the finds show that the Village had reached a stage of culture when bronze was employed mainly for personal use and for adornment, while implements of carpentry and agriculture were of iron. They also bear out the conclusions in Vol. I as to the skill of the villagers as carpenters. The evidence shows that iron-smelting and forging were carried on in the Village.

Only one coin was found in the Village, rather more than half of a piece of tin-money of native manufacture of Late Celtic type, probably dating from early in the first century A.D. But besides this coin there were found two of the flat iron bars which Mr. Reginald A. Smith, F.S.A., has identified with the currency-bars or iron money whose use in Britain as a medium of exchange is mentioned by Caesar. This discovery gives the opportunity for an illuminating chapter on "Currency" by Mr. Gray, in which he reviews all previous similar finds and from the weights of some of the bars found works out their place in the assumed table of values.

Objects of bone and antler are very numerous and show how valuable these materials were to the craftsman of those days. Weaving-combs of both materials were dealt with in Vol. I. Among the more interesting bone objects figured in this volume are a perforated disc of bone from a human skull, perhaps used as an amulet, bone beads which may have been used for a necklace, a dice-box and dice (not found together), and bone needles. Worked bones, evidently prepared for use as some kind of implement are numerous, though the purpose for which they were meant is not always clear in our present state of knowledge. There were found nearly forty long-bones of oxen and horses which had been shortened and provided with notches and holes, varying in number. Records of similar finds elsewhere are very few, and what these bones were used for and why they should be so plentiful in the Lake Village are questions that at present remain unanswered. Perforated metacarpi and metatarsi of sheep form a still larger group. These were probably used in weaving, either as spools in a shuttle, or, as suggested by the Rev. C. W. Whistler, as bobbins with which the weft could be worked in.

Antler was used for hammers. Most of those found had artificial handles, but in two cases a tine had served this purpose. Other objects of antler are cheek-pieces of bridles made of perforated tines, handles of knives and other tools, ferrules and implements for ornamenting pottery.

Dr. Bulleid's important chapter on the Pottery of the Lake Village extends to nearly seventy pages and is divided into the following sections :—

I, Introductory Remarks. II, Geographical Distribution of Late-Celtic Pottery in England. III, Constituents of Paste. IV, Technique. V, Types of Pottery Shapes. VI, Ornamented Pottery. VII, Ornamented Bases. VIII, Cordoned and Zoned Vessels.

IX, Vessels with Perforated Sides and Bases. X, Vessels with Ears or Lugs. XI, Pigmy Vessels. XII, Shallow Grain Vessels.

The finds of pottery reached an enormous total, representing fragments of thousands of vessels. Only some half-dozen were found intact, but a great many have been restored by patient skill and care. An analysis of the contents of fifty-two out of the ninety mounds which made up the Village show that they had contained over 5000 vessels, 780 of which were ornamented, while some ninety had ornamented bases or other distinguishing features. The materials were probably obtained locally and the manufacture carried out on the spot; though neither a potter's kiln nor the probable site of one has been discovered. Taken as a whole the Lake Village pottery is rather below the standard of the best Late-Celtic work. It is for the most part hand-made and of rather coarse paste, only some twenty vessels showing evidence of the use of the potter's wheel. As to its date and classification with regard to Late-Celtic pottery from other sites our ignorance of the place and mode of burial of the Glastonbury Lake-villagers deprives us of an important source of information, and Dr. Bulleid after reviewing the evidence shrinks from drawing definite conclusions. Similarly as regards the ornamentation, while he gives a valuable analysis of the designs on the Lake Village pottery, he refrains from dealing with the question of the relation of its art to Late-Celtic art in general. It is to be hoped that he will deal with this in some future number of our *Proceedings*.

Objects of unbaked clay are naturally not numerous, but they throw interesting side-lights on the conditions of life in the Village. They were found mostly outside the palisading that surrounded the Village in the peat, which was thickly strewn with pieces of clay irregularly distributed, as if the villagers in idle moments used to frequent the outskirts of the Village and while away the time by chucking lumps of clay into the surrounding water. At one spot lumps of grey clay weighing perhaps a ton in all were found heaped together, as if a canoe loaded with clay had capsized and deposited its cargo at the bottom.

Objects of baked clay were numerous, the most important being sling-bullets and loom-weights,—the former doubtless used in the chase, as well as in warfare. Spindle-whorls were also found in large numbers and of various materials, among them being lias, sandstone, shale, lead, tin, baked clay, pottery, bone, antler and fossil ammonites. Together with the weaving-combs, loom-weights and other weaving-appliances found, they show the importance of the textile industry in the life of the Village.

A fair number of flint implements with numerous flakes and chippings show how late the use of stone for certain purposes lingered. Three stones with natural perforations were found,—perhaps preserved as charms. The hand-mills found included

eighteen mill-stones of the saddle-stone type and thirty-eight rotary quern-stones. Other stone objects found were, pestles, whetstones, hammer-stones, pebbles apparently used as counters for some game, pot-boilers, etc.

The botanical remains, as Mr. Clement Reid points out, all belong to plants still to be found in the neighbourhood of the site, while they also give evidence to show that the land and sea levels were practically the same as at the present day. A curious find consisted of some small lightly baked cakes which seem to have been kneaded out of a mixture of unbroken wheat-grains and something sticky, probably honey. These can hardly have been meant for food and were, perhaps, used in sacrifice.

The Bird bones show that the Crested Pelican, which in Europe is now confined to regions in the S.E., was comparatively numerous when the Village was inhabited and bred in the neighbourhood, as did also cranes and swans. Naturally the birds found are mostly those fond of water and the marsh, but except for the cormorant and puffin sea-birds are absent from the list. The White-tailed Sea Eagle however appears there.

Animal remains were very plentiful, and throw much light on the life of the Village and the breeds of domestic animals kept in Britain at the period. Their remains very largely predominate over those of wild animals, and it is clear that the chase played an insignificant part in village life. The material for tools appears to have been for the most part collected from shed antlers.

We have little space left for Professor Boyd Dawkins' important section on the Inhabitants of the Lake Village, though it is no doubt to his chapters on this subject that many readers will first turn. Briefly it may be said that his review of the human remains, of their distribution and the marks of violence they bear, brings him to the conclusion that the occupation of the Village was terminated by a massacre of the inhabitants. The skull measurements show that they belonged to the Iberic race, the Mediterranean race of Sergi, and compare with similar remains from other prehistoric sites in Britain, *e.g.* the hill-fort of Worlebury near Weston-super-Mare, where the inhabitants were in the same stage of culture as the Lake-villagers and where their occupation of the fort was similarly terminated by a massacre at about the same period. The Iberic race in Professor Dawkins' view were widely spread over Britain from Neolithic times, living on through the invasion and occupation of the Goidels in the Bronze Age and of the Brythons at a later period. The Lake Village he considers may have been stormed and sacked when the Belgae took possession of Somerset sometime between Caesar's invasion and the Claudian conquest.

An exhaustive index forms a valuable conclusion to the two volumes.

The picture these volumes present is of a peaceful and comparatively civilized community engaged in handicrafts and agricultural pursuits. Although for safety or for other reasons they made their abode on an artificial island in a lake or swamp, they had territory on the mainland which they cultivated and where they kept their sheep, cattle and other domestic animals and disposed of their dead. The innumerable finds collected with such patience, skill and care by Dr. Bulleid and Mr. Gray and so ably described by them give us a considerable insight into the village life, but it is important to remember that they consist mainly of things that were broken or thrown away for other reasons. The successive hut floors have preserved for us only what was lost, overlooked, or discarded as valueless. As in many other cases where we owe our knowledge of antiquity mainly to its refuse-pits and rubbish-heaps, so here many of the most valued finds came from the rubbish dumped outside the village area. Finally when the Village was sacked and its inhabitants massacred or carried off, everything of use or value was removed by the conquerors, though the huts were left standing, doubtless giving occasional shelter to fishers and fowlers of the Romano-British period, relics of whose presence were found on the surface. The fact that these dwellers on a heap of clay in the middle of a marsh had horses, which they used for riding and driving, opens a wide door for speculation as to their real position in the life of their period, and is a reminder of the narrow limits of the knowledge that even these exhaustive volumes can give us.

ALBANY F. MAJOR.

BENCH ENDS IN ENGLISH CHURCHES, by the Rev. J. Charles Cox, LL.D., F.S.A. (Oxford University Press, 1916; 8vo., pp. viii, 208; with 164 illustrations; price 7*s.* 6*d.* net).

We had looked forward to this book, but we are disappointed with it. The illustrations are excellent, and the arrangement as far as it goes is good. Part I deals with the History of Church Seating and has chapters on Manorial Pews and Galleries. Part II consists of County lists, and there are also a Bibliography and Indices of Places, Persons and Subjects.

The letterpress is full of textual and more important mistakes too numerous to mention, but in the Somerset list Curry Rivel is credited with "several Passion symbols and a remarkable one of the Ascension." There are no Passion symbols, nor is there a representation of the Ascension or any of the bench-ends in that church.

Joint-editing may be responsible for many of these mistakes, but the value of the book for accuracy is to a large extent destroyed by their frequency.

The book will have served a good purpose if it inspires some one to deal with the subject more carefully and exhaustively. Some attempt at classifying local types should be made, and more needs to be said about the carvers and their work.

G. W. Saunders.

Primitive Sun Dials or Scratch Dials, by Dom Ethelbert Horne ; with a preface by Dr. J. C. Cox, F.S.A. (8vo., pp. xii, 90 ; illustrated ; to be obtained from the Author at Downside Abbey, near Bath ; price 4*s*. net).

These curious dials have attracted attention ever since 1888 and have generally been called Saxon Sundials. Father Horne has practically settled the question that they are not proper sundials but rather service markers, especially mass markers, and were in use from the time that the Saxon sundial went out of vogue and before the clock came into general use.

In the Appendix is a list of the scratch dials so far discovered in Somerset churches ; the list must be very nearly complete, though no doubt a few have been overlooked. We doubt very much if the example from Martock (Plate XV) is a scratch dial at all.

Father Horne has not attempted to treat these dials mathematically, and we would refer those interested in them to a note in the *Somerset and Dorset Notes and Queries* for December, 1917, where such an attempt has been made.

The book is a most valuable addition to our ecclesiology. It is well printed and excellently illustrated.

G. W. Saunders.

Palæolithic Man.

Ancient Hunters and their Modern Representatives, by W. J. Sollas, D.Sc., F.R.S., Professor of Geology and Palæontology in the University of Oxford ; second edition. (Macmillan & Co ; 8vo., pp. xxiv, 591 ; 314 illustrations ; price 18*s*. net).

This is an excellent book and fascinating, a book for us all, general readers and students ; the student finds a broad survey, sober judgment and adequate references ; the ordinary man is charmed on and on into a world the definiteness, extent and variations of which he had sceptically too long ignored. We have here

the advantage of being in the hands of a competent authority free from the dangers of specialism, with a gift of lucid exposition, long experience as a teacher of popular audiences and the exactness of one who has trained generations of students. When we remember that Professor Sollas is not without Somerset connections and that a Somerset lady saw the book through the press we begin with a local interest. This is also a book good for these times, a refreshment for those who can work for the war, a distraction for those who know only its strain, and the very thing to put into the hands of a convalescent or disabled educated soldier. It will take him again to the Seine, the Lys and the Somme, but in days when their banks were being carved out and enriched with those treasures which recent years have yielded to scientific investigators of man's past. It is the more just to note this use of the book because for some reason, perhaps the war, the volume has not yet come by anything like its own. On the Continent it has been welcomed and lauded; in his own country the writer has not yet had his full meed of honour.

We have here an account of what we are accustomed to call 'prehistoric' man in the 'palæolithic' ages,—terms becoming more and more unsuitable. Sir Arthur Evans showed us in his presidential address at the last meeting of the British Association how to go back from the period of history he has made his own into the neolithic age; Professor Sollas points out to us that various races of palæolithic man have representatives or direct descendants existing to-day in Australians, Bushmen, Eskimos and Algonkian Indians. Even school history books begin now with neolithic man when they do not start with the palæolithic stage. And the very title of this book suggests that the difference between polishing and chipping stone implements is not an essential distinction, that we find a surer one in the fact that palæolithic man was neither agricultural nor pastoral; he was essentially a hunter. Another reason for distrusting the terms neolithic and palæolithic is that they lead us to think of two ages similar in duration and character, when as a fact the neolithic age was nearly homogeneous and comparatively short, whilst palæolithic man stands for successive races of sharply differing culture through vast periods of time.

These ages have been neglected by the ordinary man because he has gained the impression that they are wholly disjointed from his own time and a realm highly controversial wherein a few men—maybe cranks—dispute over scanty evidence, a single skull, or only a jaw-bone. In fact the evidence is abundant and varied. It is found in geology, stratification, contemporary fauna, comparative anatomy; it is found in diverse and distant areas; it has become the business of many men of intellectual rank; it is of cumulative force and frequently reinforced by fresh discovery.

Dr. Keith and others pursue man and his humanoid forerunners back into Tertiary times. Dr. Sollas holds that our own *species*, homo sapiens, is first found in the Quaternary or Pleistocene system, saving the Recent, the latest geological period; for him man is 'a pleistocene creature, the latest child of time.' Fortunately the Pleistocene was the time of the Great Ice age. That age was marked by climates which slowly swung from arctic to genial conditions, again and again. Four glacial with as many genial periods are ineffaceably recorded in Europe and elsewhere. In the latest of these genial periods neolithic man and the existing types have flourished; in the third genial period we first find man's tools and before the fourth glacial period had set in man himself.

At the beginning of the Quaternary or Pleistocene time our land was continental and one or more ridges bridged the Mediterranean, whilst another such bridge by way of Iceland connected us with America. Thus man and animals were free to emigrate as the oscillations of climate prompted from the valley of the Thames to Africa, or on through Asia to India and nearly to Australia, or by way of Iceland to the American continent. These changes from arctic to sub-tropical and back again to glacial conditions were accompanied by deposition from glacier and denudation from melting ice. Thus river-beds have been alternately filled or deepened, with the result that there are on the banks successive ledges where in chronological sequence remains of animals and man are preserved separate and distinct. The latest remains are next the present river-bed.

Besides the purely geological alternation caused by changing physical conditions there is the stratification which is partly physical partly human. As the fourth glacial period came on the fourth (or fifth) palæolithic race of men sought the shelter of overhanging rocks and caves. In these rock-shelters and caves we find this mixed stratification with testimony as clear as succeeding folios of parchment. Take Kent's Hole where was found (1) some inches of vegetable mould with Roman and bronze remains; (2—4) a granular stalagmite floor, a few inches of charred wood, and a layer of loam; with reindeer bones and implements both of bone and stone; (5) a crystalline floor several feet thick with remains of the cave bear; (6) a breccia with bones of extinct mammals and flint implements similar to those of the fourth palæolithic race. What but the historic hunger of modern man would have pierced through a ten feet thick stalagmite floor and disturbed the record? The diagram, p. 177, of the cave at Sirgenstein, Württemberg, with its Recent floor, Tertiary bed, and ten intervening layers belonging to four different palæolithic cultures, with hearths on eight levels, is another convincing instance of these stratified records of successive but interrupted habitation covering thousands of years.

We are now ready for the classification of these stages of human and cultural development: —I, Uppermost or Final Palæolithic: Azilian. II, Upper Palæolithic: Magdalenian, Solutrian, Aurignacian. III, Lower Palæolithic: Mousterian, Acheulian, Chellean, Pre-Chellean. IV, Lowermost or Early Palæolithic: Anglian (?). These titles are derived from the places where the type of culture was first discovered or most thoroughly examined. The Mas d'Azil is near Lourdes, Aurignac is 50 miles N.E.E., La Madeleine and Le Moustier are on the Vézère 30 miles N.E. of Perigueux, Solutré is N. of Lyons, St. Acheul is on the Somme, Chelles is near Paris, and the Anglian stands for the disputed finds in 1910 near Ipswich.

What the ordinary man lusts after is that these, to him, vague periods should be expressed in terms of time, if not in centuries of years at least in milleniums. And here Professor Sollas does not fail us. He shows us the grounds of computation and his reasons for revising earlier estimates. He puts the Azilian 7,500 years ago, the Magdalenian at 12,000, the Solutrian and Aurignacian at 17,000, the Chellean age from 27,000-32,000, and beyond that he is not disposed to continue the scale of time. We must go to Dr. Keith for far longer drafts upon time and for the contention that homo sapiens was not an evolution from those ape-like men whose remains have been found but a contemporary of other species and even genera, and that man with the modern cranial capacity existed in times far beyond those to which Dr. Sollas is able securely to go. Dr. H. F. Osborn (*Men of the Old Stone Age*) is in substantial agreement with Dr. Sollas.

In conclusion. As soon as we pass from mere implements and come to man himself in the Mousterian age, say 25,000 years ago, we find him making ceremonial interments which witness to a belief in man's survival of death, in the Aurignacian times fashioning ornaments for the adornment of his body, whilst in the Magdalenian age there was an outburst of art in carvings of ivory, painting in colours, and engravings on rocks which for truth to nature astonish the big-game hunter of to-day and by their beauty made one of our eminent artists say 'but what these men did was what we pre-raphaelites had to set ourselves to do.' Show an etcher one of these engravings and then the flint burin with which it was achieved, or a carver in ivory the Venus innominata on page 380, and there will be 'no more spirit in him.'

This is a book, with a portfolio of maps, pictures and diagrams, to read, read again, and keep always at hand, for 'the prehistoric world is one of which no cultivated person can now-a-days afford to remain wholly ignorant, and this is a popular introduction to it by a first-hand and first-rate authority.' The writer deserves well of men of English speech wherever found.

J. Hamlet.