1921

NOTES ON ARCHÆOLOGY FOR GUIDANCE IN THE FIELD.

The following notes are intended as a guide to assist in recognising antiquities at sight. During fieldwork many opportunities occur for making new discoveries. A large number of barrows and other earthworks are still not marked in the Ordnance Maps, and the inclusion of them will add considerably to their scientific interest and value.

Antiquities may be defined (from the point of view of the Survey) as objects made or placed in position by human agency before A.D. 1688. These objects are now divided for Ordnance Survey purposes into three classes :—

(1) Those belonging to the prehistoric period, that is to say, all which are older than the Roman Conquest, which took place in A.D. 43. Objects of this class will be marked in Old English characters.

(2) Those belonging to the period of the Roman occupation of Britain, from A.D. 43 to A.D. 420. Objects of this class will be marked in Egyptian characters.

(3) Those belonging to post-Roman times, from A.D. 420 to A.D. 1688. Within this class come all Saxon and mediæval antiquities. Objects of this class will be marked in German text.

Certain objects of natural origin are sometimes wrongly regarded as antiquities. Amongst such are :—

(1) Logan stones or rocking stones.
(2) Natural archways in the rock on the sea shore and elsewhere.
(3) Natural clefts or chasms.
(4) Pinnacles of rock not artificially formed.
(5) Natural caves.
(6) Natural knolls or eminences.
(7) Glacial boulders or erratic blocks.

Objects belonging to these classes will be typed in stump and not in the characters reserved for antiquities.

CLASS I.—ANTIQUITIES BELONGING TO THE PREHISTORIC PERIOD.

Prehistoric antiquities fall naturally into a small number of groups, the objects composing each being easily distinguishable at sight after a little experience. They consist of :—

(1) Long Barrows.
(2) Tumuli.
(3) Stone Circles.
(4) Standing Stones.
(5) Stone Avenues.
(6) Camps.
(7) Ancient Villages.

(1) LONG BARROWS.

A Long Barrow is an oval mound of earth, slightly higher and broader at one end. The usual length is about 100 to 150 feet ; some, however, are as long as 300 feet. The height at the highest end is generally about 6 feet, but may be considerably more ; the mound slopes gradually away to the lower end which often merges without any marked break into the natural surface of the ground. Long Barrows are the graves in which the dead were buried during the latter part of the Neolithic Age (Late Stone Age) which is generally believed to have ended in this country about 2,500 - 2,000 B.C. They differ in construction and consequently in external appearance, according to the geological nature of the country in which they occur.

In country where stone is scarce they consist entirely of earth, and are flanked on each side by a broad ditch parallel with the length of the mound. These flanking ditches are never continued round the ends of the mound. Earthen Long Barrows are particularly common in Wiltshire which contains not far short of a hundred examples; next after Wiltshire comes Dorset, but so far no attempt has been made to survey or count those in this county; Hampshire contains at least twenty and probably more ; the only one known in Berkshire is Wayland's Smithy, but there are probably more to be found. Outside Wessex a few occur in the Yorkshire Wolds ; near Dunstable in Bedfordshire ; near Royston in Hertfordshire ; and in Kent. With the exception of one or two in southern Dorset every one of these Long Barrows occurs on chalk.

In country where stone occurs naturally, large slabs of stone were set upright and covered by another (called the "capstone") so as to form a burial chamber. This burial chamber is always at the highest and broadest end. Sometimes additional burial chambers were constructed in the sides of the mound. (Long Barrows of this kind are called Chambered Long Barrows ; but the distinction will not, as a rule, be indicated in the Ordnance Maps, where they will be called Long Barrows simply). No flanking ditches occur beside the majority of Chambered Long Barrows, except in a few examples in chalk country where sarsen stones have been used to construct a chamber.

The monuments which have hitherto been called "cromlechs" (in Wales) or "dolmens" (in Cornwall and elsewhere) are in all probability simply the burial chambers of Long Barrows which have been exposed to view by the removal of the covering mound of earth or cairn of loose stones. In all instances where such exposed burial chambers occur, careful search should be made for traces of their mound.

Long Barrows of both kinds are generally oriented N.E.-S.W. and N.W.-S.E. In Chambered Long Barrows the principal burial chamber is invariably at the eastern (north eastern or south eastern) end. The greater part of the mound lay therefore to the west (north west or south west). When searching for traces of the mound, the area to the west (north west or south west) should therefore be more closely examined.

Certain objects are liable to be mistaken for Long Barrows :—

(a) Low, flat mounds of earth have been noticed, especially in the vicinity of hill-top camps. They appear to be burial mounds of a much later date. One such outside Uffington Castle in Berkshire was excavated and found to contain skeletons of Roman age (see Thurnam, *Crania Britannica*). They can easily be distinguished from Long Barrows by their lower elevation, by the absence of a higher and broader end and of flanking ditches, and by their smaller size and shorter length.

(b) Sometimes two tumuli (or Round Barrows—see Tumuli) are placed close together in contact. They are called "twin barrows" and there are naturally two summits of about the same elevation. The ditch in these instances is carried *round the ends* and is narrower and shallower than the flanking ditches of Long Barrows.

(c) A few tumuli are oval rather than round in plan ; not much is known about them, but here again they can be recognised at once from the fact that the ditch is always continued round the ends. Probably these oval tumuli are merely two round tumuli placed very close together.

(d) In small (round) tumuli the interment was placed in a rectangular "box" made of four upright slabs, originally covered by a fifth. These "boxes" or "cists" can easily be distinguished from the burial chambers of Long Barrows since the slabs are much smaller, the cist being rarely larger than two feet by four feet, and since the mound or cairn which covered the cist was round instead of long.

The following terms will be used on the Ordnance Survey Maps to describe Long Barrows :—

Long Barrow (where the mound is of earth).
Long Cairn (where the mound is mainly of stones).
Horned Cairn (a variety peculiar to Scotland).
Burial-chamber (to supersede "dolmen" and "cromlech" and similar terms, and to be used in certain cases where the chamber is the more conspicuous object).

(2) TUMULI.

A tumulus is a round mound of earth or cairn of stones generally covering a grave. Tumuli are called by different names in different parts of the kingdom—barrow, low, howe, carn, carnedd, tump, cairn. To avoid confusion the general term tumulus will be retained on the Ordnance Maps as a descriptive term for all. In cases where the local word—barrow, etc.—is in use and is associated with some adjectival name (such as Robin Hood's Barrow, Minning Low), the local and adjectival names will be given, the word "tumulus" being added in brackets below on the 25" and 6" maps.

Tumuli are by far the commonest objects of antiquity met with in the field. They are nearly all burial mounds, the material used varying with the locality. In rocky regions, instead of earth, a cairn of loose stones was piled up over the grave. The majority of tumuli belong to the Bronze Age (about 2,500 B.C., or 2,000 B.C. to 500 B.C.) but it is not unlikely that mound-burial was the custom in certain parts right up to the Roman invasion. A few tumuli (such as the Bartlow Hills in Essex) even belong to the Roman period.

Though most easily recognised when standing on open unploughed land like the Wiltshire Downs, tumuli occur also on land that is under plough. They may often be recognised by a difference in the colour or nature of the soil, as well as by the presence of a low swelling in the ground. In districts of oolite formation, like the Cotswolds, they are often indicated by the presence of a quantity of slate-like slabs (of no great size) associated with a slight mound. Care must however be taken to distinguish such signs from old surface quarries which have been ploughed over. Quarries may be recognised (1) by the presence of many such stony patches close together and (2) by the presence of *depressions* as well as elevations. In general, where quarrying has taken place, the depressions are much more numerous and extensive than the elevations. In any kind of country the presence of a pit close to a mound, and of the same size, is generally sufficient evidence that the mound in question is not a tumulus. (It is more likely to be the materials thrown up in making a pond, now disused and dry, or trial diggings for industrial purposes). The material of which tumuli are constructed was obtained partly from the circular ditch which surrounds them and partly from surface scrapings, never from pits. Conversely, it may be stated that the absence of any pit close to a mound from which the material can have been obtained is strong evidence that it is a tumulus.

Experience alone can enable one to recognise tumuli at sight under different conditions of soil and cultivation. There are however a great number in almost every county which are not yet recorded on the Ordnance Maps.

Though occuring singly, tumuli are often found in groups; and whenever one occurs others should be looked for in the immediate neighbourhood. A certain class of tumulus (known as a "disc-barrow") is particularly liable, from its nature, to be overlooked. It consists of a very small mound of earth, seldom more than a foot high, surrounded at a distance of several yards by a circular ditch with the bank on the *outside*. Such disc-barrows probably accompany nearly every large group of tumuli, but from the ease with which they can be obliterated, have escaped notice. They may be recognised (1) in ploughed fields on the chalk by a ring of lighter coloured soil (the bank of the ditch which is mixed with chalk), (2) on the downs by the greener and more luxuriant growth of the grass. (This last is true only of the grass in late spring. In unusually dry summers, such as 1921, it was possible to recognise filled-in ditches by the *browner* colour of the turf above them, due to the loss of more moisture through the loose silt filling). Disc-barrows are burial mounds of a peculiarly ceremonial kind; they have often been found on excavation to contain the body of a woman; but sometimes the interment had been cremated.

(3) STONE CIRCLES.

A Stone Circle consists of a circle of stones, generally placed in an upright position, with a diameter of 60 to 100 feet—sometimes considerably more but seldom less. The stones are generally placed several feet apart, and the centre of the circle is often marked by a single standing stone or by an arrangement of stones in the form of a burial chamber. Sometimes, in addition to the stones on the circumference there is a low bank and ditch; further observations of this feature are needed, especially with regard to the relative position of the ditch to the bank. (At Stonehenge the ditch is inside the bank; at Avebury also the ditch is on the inner side, and both ditch and bank are of huge and most unusual size).

Very few stone circles are now complete. Most of them have been destroyed, often quite recently, for building materials. Sometimes the originally upright stones have fallen, or have been broken up so that only the stumps remain. Sometimes the stones have been torn out bodily from their holes. In instances of the last kind, it is often possible to find the holes where the stones stood; when so, the exact position of the holes should be noted.

Certain earthen circles occur, generally in groups, and are probably the equivalent of stone circles in stoneless regions. They have not been much noticed and are probably commoner than is generally supposed. The ditch is always inside the bank which is an accurate circle.

Certain objects have been confused with Stone Circles. They are:—

(1) Hill-top and other Camps. These should easily be recognised as such by the presence of a ditch outside the bank, and by their general defensive character.

(2) Hut-Circles. The foundations of primitive stone huts are often circular in plan, but are always composed of a number of small stones (instead of single monoliths) and are of course, of much smaller diameter than Stone Circles.

(3) Cairn-Circles. Certain burial cairns (tumuli) had a ring of supports round their circumference to keep the loose stones from rolling away. The cairn has often disappeared leaving only the ring of uprights. The diameter is much less than that of Stone Circles, being in one case seven yards. The uprights are set close together and in contact, and have often an outward lean, due probably to the former pressure of the cairn they retained.

(4) STANDING STONES.

Under this term are included objects formerly described by the names menhir and monolith. In future the words "menhir" and "monolith" will not be used on the Ordnance Maps, but will be replaced by "Standing Stone." The word "Longstone" may be retained in a few instances where its use seems to be native to the locality.

Standing Stones need no definition, The term does not of course include any natural erratic boulders, being confined to stones which have been set up by the hand of men before the year 1688. Standing Stones are often simply the last surviving vestiges of the burial chamber of a Long Barrow; such, for example, is the Long Stone at Mottistone in the Isle of Wight, and many of the hoar stones in Gloucestershire and Oxfordshire. Whenever a single upright stone is being inspected, careful search should be made for any other large stones close by, and for any traces of the mound of a Long Barrow, or, in stony country, for signs of loose stones which have been, or still are, piled up to form a Long Cairn.

With the exception of the above, it is not possible to assign the majority of Standing Stones to any single period. Many of those in Wales are inscribed with inscriptions in Latin or in Ogam characters, and belong therefore to the present era. It is possible that the fine Celtic crosses were evolved from single upright stones marked with an incised cross. Few, if any, isolated Standing Stones can at present be *proved* to have been erected in this country during the prehistoric period:

Standing Stones with an inscription should be described as "Inscribed Standing Stone;" those with an inscription in Ogam characters as "Ogam stone."

Many Standing Stones are not now on the original site where they were erected. When this is known a note to this effect should be added.

(5) STONE ROWS AND STONE AVENUES.

All double rows of Standing Stones will in future be called Stone Avenues, the term "Stone Row" being reserved for single lines of stones.

There are still many Stone Avenues not recorded upon any map. Examples have come to hand quite recently from Dartmoor, where there are probably others to be found. With the exception of those connected with the Stone Circles of Avebury and Stonehenge, Stone Avenues are practically unknown elsewhere in Southern Britain.

(6) CAMPS.

All prehistoric enclosed defensive works of stone or earth will be called Camps. The only exception to this rule will be those which have some distinctive adjectival name, such as Uffington Castle; in these cases the same procedure will be adopted on the 25″ and 6″ maps as with Tumuli (q.v.) The word Camp will be added in brackets below. There will in this instance be no great departure from the present Ordnance Survey custom.

It is probable that by far the greater number of camps were constructed during the 500 years preceding the Roman Conquest and especially during the latter part of this period. Such a general statement rests, it is true, upon a very few particular instances where scientific excavation has proved the age of the camps in question; but although absolute proof is rare, the evidence is unanimous, and it is strongly supported by the casual finds which have been made within the area of a great many camps. These consist almost exclusively of objects of La Tène type (characteristic of what is known as the Early Iron Age or Late Celtic period in this country). Objects characteristic of the preceding Bronze Age are very rarely found in the Camps, nor has any typical hill-top Camp ever been found to have been constructed in the Bronze Age, much less in the Neolithic period.

Certain nearly square "plateau" camps, however, with very low banks appear to belong to the latter part of the Bronze Age. Only two have been thoroughly and scientifically excavated—Martin Down Camp and South Lodge Camp in Dorset, by General Pitt-Rivers. It is practically impossible by mere inspection to distinguish Camps of this kind from the rectangular camps made by the Romans. But where such square camps occur by the side of a Roman road (as at Gussage, Dorset) and at points on them where a named station is mentioned by the Antonine Itineraries (as at Bitton, between Bath and Bristol, and in many places in Wales) we may safely assume them to be of Roman origin. This assumption is strengthened when it is supported by surface or other finds of Roman character.

A third class of square earthwork is that of Moated Homesteads; but it is not usually difficult to recognise these as such, and as a matter of fact, the majority of them are correctly described already on the maps. (See below under the post-Roman period).

(7) ANCIENT VILLAGES.

These village sites have up to now been described as "British villages." The term "British," however, is a legacy from pre-scientific days and conveys no precise meaning. It will therefore be dropped and the term "ancient" will be used instead. It is unfortunately impossible in most cases to assign these villages to a single period, since many of them were continuously occupied from pre-Roman times into the period of the Roman occupation. Neither the term "prehistoric" nor the term "Romano-British" is therefore strictly accurate; and for the reason given the words "ancient village" will be marked in Old English characters.

Ancient villages are easily recognised on the open downs by the presence of hummocky mounds and banks closely set over a small area. The turf grows evenly over them as on the surrounding downland and there is a visible order and arrangement. In this way it is possible with very little practice to distinguish an ancient village site from old flint-diggings or quarries. Such comparatively modern disturbances of the soil consist mainly of pits; the mounds seldom rise above the *natural* level of the soil; there is usually an abandoned working-face to be found; they respect the present system of field boundaries; and their surface is often overgrown with sting-nettles, a certain sign of *recent* disturbance. On the other hand the presence of potsherds in the molehills and rabbit-scrapes and of black soil is a sure sign of ancient habitation.

There is little room nowadays for the "pit-dwellings" about which so much has been written. That such forms of habitation were in use is certain, but the pits in question are found either on village sites or within the area of camps. In both cases a descriptive term ("camp" and "ancient village") already exists and will be used, and there is no need to make special mention of the pits on the published maps. Moreover, it is by no means certain in any given case that the pits in question were used as dwellings; they may have been—and certainly were in some cases—used for storage purposes. Even after careful excavation it is extremely difficult to determine what their original purpose was. If a description is necessary in isolated examples the word "pit" or "pits" will be used simply.

Two kinds of pits have in the past been regarded as "pit dwellings" and have been wrongly so described. Examples of the first kind (which are largest in size) occur in chalk country. They are shallow saucer-shaped depressions, resembling an inverted barrow. They are of recent origin and are caused by digging to obtain clay, chalk or flints. Old clay-pits occur principally upon the uplands where pockets of clay-with-flints have been worked for brick-making or similar purposes. The pits caused by chalk-working are more complex in origin. Until almost within living memory, chalk was mined by sinking a vertical shaft through the thin covering layer of clay-with-flints; the chalk was then scattered over the fields for fertilizing purposes. When this method was abandoned, the underground galleries collapsed, the shaft fell in and a conical depression was formed. In the course of time the outlines became rounded off and the pit gradually assumed its present appearance. Old flint-diggings occur chiefly along the stony bottoms of dry valleys. (It is possible that some of these last may be of natural formation).

Examples of the second kind of pit occur on the oolite plateaus of the Cotswolds, especially in the neighbourhood of Stroud (Selsley Common, Minchinhampton Common, The Copse at Avening, etc.) They are much smaller and of oval shape with a low mound on one side. They closely resemble the pits dug by infantry to provide cover. They are barely six feet in length and two or three in width, occur close together, and in thousands over the areas cited. They are far too numerous to be of artificial origin, nor has excavation added any support to this conjecture. Possibly they may be the stump-holes of large trees which flourished there at a time when climatic conditions were different (as during the last "submerged forest" period).

CLASS II.—ANTIQUITIES BELONGING TO THE PERIOD OF THE ROMAN OCCUPATION. (A.D. 43—420).

For Ordnance Survey purposes the period of the Roman occupation is taken as A.D. 43-420. All antiquities which can be assigned to this period will be marked, as at present, in Egyptian characters.

The principal Roman antiquities (other than towns and Romano-British villages) are villas and roads.

(1) ROMAN VILLAS.

Without some disturbance of the soil it is seldom possible to be certain that a given site is that of an inhabited house. Surface indications, such as bricks, large flints, box-tiles, roof-tiles (of stone or brick) coins, tesseræ and potsherds may make this highly probable, but such finds do not constitute proof. The presence of tiles, however, may be taken as proof of the former existence of a *building*, and in such cases the site may be described as "Roman building, site of." Should the existence of a building be at all doubtful, the principal kinds of objects found will be enumerated thus (for example) "Roman coins, potsherds, etc., found." The presence of foundations (often known to exist by the occupier of the land) in addition to such finds will always of course, justify the use of the description "Roman building." Enquiries should be made, when possible, of the occupier, to determine this point.

There is ample scope for the field worker in recording on the 6″ maps the sites of Roman villas. Even the sites of many which have been thoroughly excavated and covered up again) are still unrecorded. In addition to those villas which are thus known and recorded in archæological transactions, there are in every county many entirely unknown sites where surface-indications of the kind described may be found in ploughed fields. In regions like North Hampshire, where energetic field work is being done, such sites are constantly being discovered. In counties which are fortunate in possessing one of the late Professor Haverfield's Roman articles (in the Victoria County History) the field worker cannot do better than take this as a starting-point and set out to visit and mark on the 6″ maps the sites recorded by him. In going over his lists it should be remembered that the record of a single coin or potsherd *may* lead to the discovery of an important site.

Other clues should be sought in the local museum. The localities from which specimens have been obtained should be visited and marked on the 6″ map, with full details in the margin. (This also applies to the prehistoric and other remains which are displayed in the show-cases; a single potsherd thus exhibited and followed up by field work has before now led to the re-discovery of a site of first-rate importance).

(2) ROMAN ROADS.

It is not possible within the limit of these notes to describe the various ways in which Roman roads may be recognised. It must be sufficient to state that no road will be called a Roman road unless it was *made*—that is to say,

unless it consists of a raised causeway of locally quarried material. Everywhere except in the mountainous districts of Wales and the North, Roman roads were laid out in straight lines from one high point to another. That the Romans improved some of the existing trackways by metalling them is now proved conclusively; but it is not yet possible to incorporate this new knowledge on the Ordnance Maps.

For further information on the subject reference should be made to *The Roman Roads of Britain*, by T. Codrington (S.P.C.K., 3rd edition, 1918), and to Chapters 15 and 16, of *Man and His Past* by O. G. S. Crawford (Humphrey Milford, 1921. 10/6).

CLASS III. ANTIQUITIES BELONGING TO THE POST-ROMAN PERIOD (A.D. 420 - 1688).

All post-Roman antiquities will in future be marked in German text. The actual alterations rendered necessary by this change will in fact, be very few, since the period A.D. 420-1066, (at the latter of which dates the change has hitherto been made) is unusually devoid of visible remains that can definitely be assigned to it. The principal sites affected are (a) Saxon burial grounds (b) the sites of Saxon and Danish battlefields (c) the sites of some of the older and more important monasteries like Chertsey and Abingdon. A useful summary will be found in Messrs. Morris and Jordan's *Introduction to the Study of Local History and Antiquities* (George Routledge, 1910, 4/6). Chapter 3 deals with Anglo-Saxon England, and describes what is known of Saxon and Danish earthworks.

The rarity of remains makes it difficult to offer many hints to the field worker. Here again the articles in the Victoria County History should be taken as a basis. It is well also to remember, in connection with Saxon burial grounds (which are nearly all of pre-Christian date) that it was not the custom of the Saxons to bury their dead singly, except occasionally on the tops of prehistoric barrows. When therefore, a flat grave is recorded, it is highly probable that a burial ground exists there.

In districts where stone exists, and particularly in "Celtic" regions, like Wales, Cornwall and Northern Britain, many sculptured crosses exist. Some of them have been used for purposes for which they were not designed (e.g., as gate-posts and stiles). Records of the site of such should be made and a report forwarded in order that steps may be taken to ensure their proper preservation.

The site of many important battles, and of other places of historical importance is still unknown, and can only be discovered by local research. Such research however, must be largely documentary, and therefore cannot be dealt with here.

It is practically certain that the earthern ramparts surrounding certain towns were constructed during the Danish invasions—possibly through the initiative of King Alfred. Cricklade (Wilts) and Wareham (Dorset) are both still protected by ramparts of rectangular plan; nor is there any possibility that they can be Roman, since not a fragment of Roman material has ever been found in either of these towns. Some of the Burhs of Ethelfleda and Edward the Elder (*e.g.* Witham and Maldon in Essex) have been identified with certainty on the evidence of the Anglo-Saxon Chronicle.

Very few earthworks have been proved to be of Danish origin.

(1) CASTLE MOUNDS.

The Norman invasion was the cause of the introduction of a new type of fortification—the Castle Mound with or without a Bailey. Such fortresses will be called "Castle Mounds." The typical Castle Mound consists of a high, round, steep-sided earthen mound, which is sometimes surmounted by a stone keep. In many instances it overlooks a large embanked courtyard called a Bailey. In plan the whole often resembles a loaf of bread or flattened figure of eight, the smaller upper loop or top representing the mound and keep, and the lower the bailey. Variations of this plan occur, but for further information reference must be made to books such as Mrs. Armytage's *Norman Castles*, Mr. Hadrian Allcroft's *Earthwork of England* and Dr. Williams-Freeman's *Field Archæology as illustrated by Hampshire*, all of which contain numerous plans.

Castle Mounds are very numerous in certain parts of the country; they are generally placed near some important road (often a Roman road) and at fords, passes and other crucial points. Most of the smaller castles were probably little more than the strongholds of robbers and highwaymen who must have infested the country during the turmoils of the 12th century. That they were such is also suggested by the absence of all reference to many of them in contemporary documents. Many Castle Mounds are not once mentioned; and as it was theoretically necessary to obtain royal sanction to erect one, we may conclude that they were erected in defiance of the crown. The more wealthy and influential barons took care, of course, to obtain this sanction.

The mound was surmounted by a stone or wooden tower. If of wood it was called a "bretasche" (illustrations can be seen on the Bayeux tapestry); those of stone are usually called "keeps." The area at the top of these mounds was necessarily small and confined, but not more so than that within a modern "pill-box." The ditch surrounding the mound (much steeper and deeper then) was crossed by a wooden drawbridge into the bailey—a large courtyard where the men's quarters were. Here was often a well. Castle Mounds ceased to be built after the 12th century and were superseded by fortified manor houses—a development of the moated homestead. There are still a number of smaller Castle Mounds to be discovered. Owing to its size the Mound is generally marked on the map, but it is sometimes incorrectly called a "tumulus." In fact it is by no means easy to distinguish large tumuli from small Castle Mounds. The presence of a bailey, or of some remains of it, is of course conclusive, and this should be the first thing to be looked for. On the other hand some Castle Mounds, especially in Wales, never had baileys, so that the absence of a bailey proves nothing. If it is a Castle Mound there must have been some way of approach; signs of this—a hollow track, or terrace on the hillside—should be looked for. If near a spring or river, signs of hollow tracks may be visible. The top of the mound is naturally flat, unless it has been subsequently disturbed; if in stony country, the keep was probably of stone, and remains of masonry may be visible round the edge of the platform. There is often traditional evidence of value, such as the name of the field or wood in which it stands; when the name "castle" is found close to the site it may generally be assumed that the mound is not a tumulus.

Mention must be made of a single mound which is very celebrated—Silbury Hill in Wiltshire on the Bath Road between West Kennet and Beckhampton, one mile south of Avebury. No satisfactory solution of its age or purpose has ever been arrived at, but it is certainly pre-Roman and is probably an enormous tumulus.

In Scotland, Castle Mounds are called "Motes," and this word will be used to describe them on the Ordnance Maps.

(2) MOATED HOMESTEADS.

Moated homesteads will be called "Moats" on the Ordnance Maps, as at present. They are exceedingly common and a large number are still undiscovered. They consist usually of a wet ditch enclosing a (generally) rectangular platform on which the house was built. They are most common in clayey country and in lowland areas and river valleys. The ditch was once filled with water, the supply being generally assured by the diversion into it of some small streamlet. In certain districts, such as Essex and North Wilts, nearly every parish contains at least one moated homestead. In some cases the moat is marked on the 25″ and 6″ map without the word "moat" being added. It is often possible for anyone who is familiar with the use of 6″ maps in the field, to spot on them the presence of sites which subsequent inspection proves to be moated homesteads. Field-names and the names of woods and copses are here very helpful; and it may be accepted as highly probable that the name "moot" (as it is usually spelt on tithe maps and old estate maps) refers to the site of a moated homestead. (It may however refer to the ramparts of a prehistoric camp, the name meaning simply "ditch").

There is little direct evidence in individual instances as to the date when moated homesteads were constructed. Very few of them however, are earlier than the Norman Conquest, and it is probable that the majority were made during the 12th, 13th and 14th centuries, and may have served to drain the site of the house, as well as to defend it against men and animals. In their neighbourhood are generally to be seen a number of banks and ditches, the remains doubtless, of small enclosures—gardens, meadows, arable fields and copses. These banks appear to us strangely high for such purposes; but it must be remembered that in those days the surrounding country was mostly quite wild and in a state of nature—woodland and open heath or moor. It was necessary therefore to protect the crops and gardens from the ravages of deer (which abounded and were stringently protected by royal game-laws) and of the

swine which roamed free. The sheep and cattle too had to be protected from wolves. A high bank, and surmounted by a live hedge or a pale (fossa cum haia viva seu mortua) was required for this purpose; but the royal interest in deer ordained that such enclosures or "closes" (clausa) should not be made without special license, under penalty of a heavy fine. Records of such fines are still extant and are very numerous.

Fishponds are often found near moated homesteads.

(3). MONASTERIES.

Although the sites of most of the important monasteries are known, those of the lesser monastic houses are still uncertain. There has also arisen some confusion between monasteries proper, and their outlying farms and branch houses. In districts where a big monastery held land, it was the custom to appoint an agent who administered it and received the rents. Such persons resided in important houses, remains of which sometimes survive, but the houses were not monasteries in any possible sense of the word. The distinction is between monasteries and manor houses in parishes where a monastery held land.

The monks were energetic landlords, and on their land may be found many relics of their enterprise. Chief among these are mill-ponds and fishponds. Sometimes the ponds have disappeared, leaving only the dam across the valley. These dams should always be looked for near monasteries and monastic dependencies. They may often be found close to other old sites where an important house stood. The banks and ditches so common round old sites again occur round monasteries and are the old boundaries of gardens, orchards and other enclosures.

(4). MEDIÆVAL ENCLOSURE BANKS.

Many earthworks which are really of mediæval origin have been mistaken for prehistoric entrenchments and even camps. It must be remembered that during the Middle Ages a great many high banks were thrown up round chaces, parks, woods, fields and smaller enclosures. These, which are amongst the youngest earthworks met with by the field archæologist, may be recognised by three main characteristics:—(a) the bank has spread less and its sides have a steeper slope, and in consequence the ditch is less deeply silted up than in the older examples; (b) in following its course across the country on the map, it will be observed that a mediæval enclosure bank respects the older modern field boundaries; it is part and parcel of the same system, and, except in regions like the Aldershot district, where the face of the land has changed completely in the last hundred years, a mediæval bank is generally also a field boundary for a good part of its course; (c) old trees may frequently be observed growing on the bank.

The age of these banks is, however, not necessarily merely a matter of opinion. Documentary records exist in most cases of the enclosure of a park, wood or assart ("assart" was the legal name for any area enclosed for settlement, the making of which involved clearing trees and undergrowth). These records expressly mention the construction of a bounding bank and hedge or pale (see also p. 4 under Moated Homesteads). In a few rare instances where contemporary perambulations of such enclosures were made and written down, a further proof of age is provided. Generally speaking it may be said that the majorityof the large woods of the South of England existed in approximately their present shape at least as early as the 13th century. In two instances it can be proved that the woods in question (Boreham and Southgrove, outliers of Savernake Forest) are to-day exactly the same size as when they were perambulated in A.D. 1330. Most of this mediæval construction of earthworks took place during the 13th century, and all of it probably between 1150 and 1450.

MISCELLANEOUS.

A certain number of earthworks very commonly observed cannot be tied down to any one period. They are (1) cultivation terraces, (2) hollow trackways, (3) travelling earthworks.

(1). CULTIVATION TERRACES.

No special term will be used on the Ordnance Maps to denote cultivation terraces, which are often shown on the 25" and 6" maps by hachures. They are known locally in Wiltshire by the name "lynch." In Gloucestershire the word is spelt "lench." They are formed naturally on the lower boundary of cultivated lands, through the gradual downward creep of the soil. This creep is only possible on land where the soil is annually disturbed by ploughing. Lynches are very common in all chalk lands where they may be observed in process of formation to-day. In mediæval times the common fields were divided into acres and furlongs, each held (in rotation) by different owners. Each of these "strips" was separated from its neighbours by a "balk" of untilled land, and if the common field so divided lay on the slope of a hill, a cultivation terrace or "lynch" formed on the lower side.

On the downs there may often be observed lynches of another and an older kind. They differ from the first, or mediæval kind, in that the unit was not a narrow strip but a square enclosure, whose other sides (up and down the hill) are bounded by broad low banks. These chequer-pattern lynches bear no relation to the existing system of field boundaries which dates from Saxon times. They are often found in close association with Romano-British villages, and there can be little doubt that they represent the remains of the cultivated fields round these villages. Their present form and arrangement naturally is that which obtained when they were finally abandoned by the villagers at the coming of the Saxons. But since many of these villages were certainly occupied before the Romans came, it is highly probable that the agricultural system they belong to dates from pre-Roman times, to the prehistoric Iron Age. Another proof of the antiquity of these chequer-pattern fields is seen in their relation to Roman roads. Whenever the raised causeway of a Roman road runs across a piece of open down, covered by such lynches, it will be observed neither does the Roman road ever intersect one of these lynches, nor do they ever cover or obliterate the Roman causeway. From this mutual respect it may be concluded that in their present form both are contemporary, and that the field plots were being tilled when the Roman road was in use.

(2). HOLLOW TRACKWAYS.

By the side of nearly every important highway, where it descends a hill may be seen a number of parallel ditches, or sometimes a single deep ditch. These represent the tracks made by the traffic before the roads were metalled. Their origin is a natural one. The traffic itself (mostly horses and mules) would wear away the surface and every fall of rain would turn the track into a rivulet; the rivulet in turn hollowed out for itself a channel. In the course of centuries small ravines were formed. As each grew deeper and more impassable a fresh track was taken along the outer margin. The same process was repeated again and again until the limit of convenient straying was reached, by which time probably the original hollow-track had become overgrown with grass and comparatively passable again. These fan-shaped tracks may be often observed forming a regular pattern on the open hillside.

They may also nearly always be observed by the side of Roman roads on hillsides, showing that the traffic was not by any means confined to the crown of the causeway. But the tracks probably began first to form when the Romans had left and there was no central authority to keep the road itself in good repair. This is strongly suggested by another fact, namely, that often two such hollow-tracks, one on each side of the causeway, have become worn so deep that they have eaten away the causeway on each side. In such instances the causeway is represented only by a narrow stony ridge, far too narrow for any traffic to follow. Tracks of this kind by the side of now entirely disused Roman roads may have been in use right down into the Middle Ages.

With the exception of a few hollow trackways leading up to hill-top camps (often called, and probably rightly, "cattle tracks"), there are few remains of hollow ways which—*in their present state*—can be said to be prehistoric, and none which can be attributed to at earlier period than the Iron Age. Nor have any such tracks been recorded which appear to have been bridged by the causeway of a Roman road and so to be older than it.

The process of erosion had its counterpart in the deposition of the eroded material in a kind of delta on the low ground below. Often this takes the form of a low broad causeway which is liable to be mistaken at first sight for the causeway of a Roman road. The deposition is most clearly seen, as a rule, in sandy soil, and is seldon visible in chalk where the material washed out has subsequently been dissolved.

(3) TRAVELLING EARTHWORKS.

This term "Travelling Earthwork" is used to describe earthworks like Wansdyke, Bokerley Dyke and the numerous Grim's Dykes and Devil's Dykes, and minor examples which do not enclose an area. They consist of a bank and ditch, and may be of any length from a few yards, such as those across a ridge of high ground, to 60 miles, like Wansdyke. The age of Wansdyke has been proved by General Pitt-Rivers, who dug two sections across it near Devizes, to be very late Roman or slightly post-Roman. To this period, when the legions were departing, belong, in the writer's opinion, the majority of the travelling earthworks of the downs. Wansdyke was made possibly in imitation of the great Roman sea-to-sea walls in North Britain. It will be noticed that defensive earthworks cover the approaches of nearly every Roman town—Silchester, Chichester, London, Folly Farm near Marlborough, and many others.

It was a time of great unrest when the dwellers in the towns became seriously alarmed by the raids of the "pagan" Saxons, who had no love for town life. The whole province was put under military control; a Count of the Saxon Shore (East and South-East England) was appointed; and we can hardly doubt that similar measures were taken for purposes of internal defence.

Without, however, committing oneself to the question of their age, it is possible to divide all travelling earthworks into two classes (*a*) those made primarily for defensive, that is to say, military purposes, (*b*) those constructed primarily as boundaries.

To class (*a*) belong, besides Wansdyke, the many bank-and-ditch earthworks of Cambridgeshire and Norfolk which run from impassable fen (on the North-West) to pathless bush-country and forest (on the South-East). Similar earthworks occur astride the Icknield Way further to the South-West in its course through Hertfordshire and Buckinghamshire and Oxfordshire. To this class also belong Bokerley Dyke in Cranborne Chace, the Coombe Ditch between Bere Regis and Dorchester, the Devil's Dyke (across the Roman road and Harroway) near Andover in Hants, and many others. Shorter but equally strongly made examples may be found on almost every chalk ridge that has a "ridgeway" along it; their purpose was clearly obstruction of a natural highway.

To class (*b*), boundary banks, belong earthworks of less imposing construction, not made primarily for military purposes. Such is Grim's Ditch in the North-Eastern part of Cranborne Chace. Similar ditches, often of shorter length, occur all over Salisbury Plain (Old Ditch is an example). They may have been the boundaries of cattle ranches or large sheep-walks. In their original state, strengthened by a wooden fence or rows of hurdles, they would have been quite sufficient obstacles for this purpose. Their close connection with ancient village sites supports this explanation.

The course of many of these ditches still remains to be traced and marked upon the map. Where they run across open downland there is no difficulty in following them. Nor is it much more difficult when they cross arable land, if the cultivation is, as usually happens on the downs of Wessex, of comparatively recent origin. A band of lighter coloured soil, usually associated with a slight very flat mound, will reveal their course. But when they go over land that has reverted from arable to pasture, it is more difficult to follow them. Here a method used by General Pitt-Rivers and recently revived with great success, may be found useful, if time permits, by Honorary Correspondents and others; it is to tap or sound the surface with the butt end of a pick, the handle being held vertically. Where a silted up ditch exists, a much deeper, softer sound is heard. When undisturbed soil is tapped the sound is harder. There is also more vibration of the soil over a silted-up ditch. In chalk land, which is under grass, a ditch may be followed in this way with great ease, accuracy, and rapidity. This method is equally applicable, of course, to village sites which have been ploughed flat and are now under grass. A plan of the ditches and pits may be made by sounding before excavation; such a plan will be found a most useful guide when excavation—the real test— begins.

TERMINOLOGY.

The following archæological terms will be used in future on the Ordnance Maps:—

1. LONG BARROW (where the mound is of earth).
   LONG CAIRN (where the mound is mainly of stones).
   HORNED CAIRN (a variety peculiar to Scotland).
   BURIAL-CHAMBER (to supersede "dolmen" and "cromlech" and similar terms, and to be used in certain cases where the chamber is the more conspicuous object).
2. STANDING STONE.
3. STONE ROW & STONE AVENUE.
4. TUMULUS.
5. CAMP.
6. EARTHWORK(S).
7. ROMAN ROAD.
8. CASTLE MOUND.
   MOTE (in Scotland).
9. BURIAL-GROUND.
10. *Probable* to be used instead of "supposed."
    Course of to be used in the case of Roman roads.
11. When possible the age of certain antiquities will be indicated by the descriptive name. The terms used will be *palæolithic*, *pre-historic*, *Romano-British* or *Roman*, *Saxon*, *Mediæval*. No sub-divisions of these periods will, as a rule be attempted. In cases of doubt *ancient* will be used instead.
12. Two sets of descriptions to be applied.
    I. To a point (sites).
       (a) *Remains of.*
           Ruins of.
       (b) *Site of.*
    II. To a line (roads, etc.)
       (a) *Course of.*
       (b) *Probable course of.*

    Site of [I. (b)] will be used only of remains which are not now visible on the surface.

    The usual symbol ⊱┼° will be inserted whenever the site is known with sufficient accuracy, but will not be used on the 25″ and 6″ maps to denote the sites of battles. In cases where the site is not known with sufficient accuracy it will be indicated by the position of the descriptive term (*e.g.* "Roman Villa.")

    Course of [II. (a)] will be used instead of "site of" for Roman and other roads, for "travelling" earthworks like Wansdyke and similar remains.

    Probable [(b)] will replace "supposed."
13. *Lettering*, "Old English" characters will be used for all pre-Roman remains, *i.e.*, before A.D. 43.
    "Egyptian" characters will continue to be used for Roman remains (A.D. 43-420).
    "German text" will be used for Saxon and Mediæval remains (A.D. 420-1688).
    The break will therefore occur with the Roman invasion, instead of with the Norman Conquest as hitherto.
14. The words cromlech and dolmen will not be used in future on the Ordnance Maps; they will be replaced by the terms described in Para. 1.