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SOME REMARKS UPON EARTHWORKS.

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Of the British Period.

The British Isles are rich in earthworks of various kinds, concerning the origin of most of which history is silent, while such internal evidence as they might afford has not as yet been fully investigated. Some of these works are among the most obscure of our archaeological remains: an obscurity, not so much as to their intent and purpose, usually obvious enough, but as to the periods at which, and the tribes by whom they were thrown up. The absolute date of many, perhaps of most of these remains, we cannot hope to discover, but it seems probable that their relative dates, and the tribes by whom they were formed, may some day be ascertained. For this, however, detailed plans and sections are absolutely necessary, and it is much to be desired that the subject should receive careful attention from those engaged in the construction of the large scale ordnance maps now in progress.

These earthworks are chiefly either sepulchral or military. With those of the sepulchral class, usually called lows and barrows, all are familiar. They occur all over the country, and are probably only more abundant in wild and hilly districts, because they have there escaped the effects of the plough. Most are British, but of various dates, and shewing by their contents very different degrees of civilisation. Some are Roman, and others Saxon or English or Danish. The former are found near Roman ways and camps, but no doubt many

so placed contain the remains of Britons in Roman employment, or of mixed Roman and British blood, or were thrown up after the Romans had left the island. The Romans both burned and buried their dead. When buried the corpse was enclosed in a coffin of stone, lead, or wood, and laid in a regular cemetery, as latterly was the practice with the English, but these, especially in the earlier times, seem to have burned and certainly raised a mound over their dead, as at Cwichelmsley Knowe, now Scutchamfly Barrow, in the vale of White Horse, and in the mounds round York, one of which bears the name of the celebrated Siward. Sepulchral mounds are now being very carefully investigated, and from their contents large additions have already been made to our knowledge of the prehistoric inhabitants of the country. One variety of these works, known as the chambered barrow, is remarkable for the quality of the stone work of the curved retaining walls which sometimes flank the entrance, and which have been brought to light by the removal of the earth at Uleybury, Stoney-Littleton, Nempnet, and the barrow opened by Mr. Vivian in Gower. In this latter especially, the walling, though without mortar, is to the full as neatly executed and as well bonded as in any modern work. If, as has been supposed, these be British, there is the less reason to be surprised at the traces of dry walls which have of late years been discovered in several camps of undoubted British origin, though none of these can be compared for design or execution with the corresponding works in Ireland.

There is a class of earthworks, no doubt of British origin, which was long supposed to be connected with religious observances. Such are those which surround Stonehenge, Marden, and Avebury, in Wilts. At Mayburh near Penrith is a large circular bank with an entrance, but no ditch, and near its centre a large upright stone ; also at Penrith is Arthur's Table, a circular work with an entrance, and a ditch within the bank. There is also a larger but little known circle at Knolton in Dorset, with the ditch within the bank ; within the area is the parish church. Of late years the opinion has prevailed that works of this character are sepulchral.

Military earthworks, if not quite so common as those of the sepulchral class, are yet very general, and are found all over the country. The traces of a camp are not so easily swept away as those of a barrow, but nevertheless most of those known to have existed in the lower and more highly cultivated lands are gone, or remain in their names only. It is impossible to examine a sheet of the ordnance survey, or to travel in any direction over England, without meeting with names or works of a military character. Thus caer and gaer, dun, dinas, tin, tre, and castell, in the Celtic counties; caister, caster, chester, cester, camp, castle, burgh, burh, or bury, in England; in Scotland kaims or ker; in Pembroke rath; are names that usually indicate a present or past fortification. Such for example are Caer-Caradog, Gelligaer, Dun-edin, Dinas brân, Tenby and Denbigh, Tredegar, and Castell-Coch, Casterton, Lancaster, Caister and Caistor, Cirencester, Manchester, Lanchester, Shudy and Castle camps, Horncastle, Coningsburgh, Worlebury, Roborough, and a thousand others; and the reader of the *Antiquary* will not have forgotten the kaim of Kimprunes. Sometimes the strong place was an enclosure of earth or stones with an exterior ditch, usually on high ground, and including from three or four to thirty or forty acres, as Cadbury or Roborough. Sometimes there was a large area more or less circular contained within double or triple banks and ditches; as the Catherthun in Aberdeenshire, old Sarum or Badbury; sometimes the area is rectangular, as at Gelligaer, Bitton, Brougham or Brough; and sometimes walled in as at Porchester, Silchester, Lincoln, or Chester, all of which latter works either the position, plan, material, or workmanship declare to be Roman. Of some works the enclosure is upon a sea cliff or promontory and of a horse-shoe shape or the segment of a circle, as at Porthkerry, St. David's Head, or the magnificent enclosure at Flamborough Head attributed to the Danes. Or, finally the earthwork may consist of a moated mound, like Barwick-in-Elmet, or Laughton-en-le-Morthen or Hendomen in Montgomery, with an appended base court, also moated, features which indicate works of the ninth and tenth centuries.

The term castle in the ordnance map may mean a

structure in masonry, as Warwick or Kenilworth, or the site of a castle as Castleton, Castle-Garth, Castle-Hill; but it is also often applied to a mere hill-camp where there never was a work in masonry.

Although it is easy enough as a rule, to distinguish a military earthwork from one of a different character, or between a British and a Roman camp, it is by no means so easy to distinguish between British camps of different dates or to decide what is Danish and what English. In the consideration of these questions the position is important, whether on the sea coast, whether one of a line of works, and whether connected with any great boundary dyke.

The camps of the British, meaning thereby the prae-Roman tribes have certain peculiarities. They are not set out by any rules of castramentation. They are usually on high ground, and by its irregularities their outline is governed, and where they appear to be circular, as at Badbury Rings and the camps near Weymouth, they are so accidentally, because the hill is conical, and its horizontal section therefore a circle. Their defence is a bank and exterior ditch cresting the edge of the hill top, or where this is steep the ditch is wanting, and when precipitous there is either no bank or a very light one. On the other hand where the slope admits of it, the ground is formed into terraces each with its bank and ditch, and sometimes, as at Cadbury, there are three of these lines on the hill side producing a very grand appearance. When the camp is upon the ridge as at Worle, or is part of a larger platform, the more level side is defended by additional banks and ditches placed some yards in advance. On the level ground the banks are from five to ten feet high and often from twenty to thirty feet in breadth, and the ditch is of about the same dimensions, giving a slope or scarp of about twenty feet; and when, as at Cadbury, the natural ground is made a part of the scarp, it is much more, perhaps fifty or sixty feet. No doubt, when such a camp was defended, the lower or exterior platforms were manned, but when these were forced, their defenders must have scrambled up the slope behind them, as there is never any trace of steps, or, in purely British camps, of a tunnel or covered way

between the lines. The White Catherthun had banks of stone and earth 100 feet broad at the base and 25 feet at the summit. The ditches appear to have been V shaped in section, "fastigata," and sometimes there is a small bank outside the outer ditch as at Moel Fenlli, near Ruthyn. It is said that there was a tunnel from the interior of Worle to the exterior hill side, but this wants confirmation. The approaches to these camps were usually in traverses, carried obliquely up the hill side for the convenience of men with burdens. The entrance was commonly oblique where it traversed the defences, and the ditches were crossed by solid causeways. Sometimes the main entrance was twelve to fifteen feet broad, and a small mound was thrown up in its centre at the outer end to check a sudden assault. There was usually but one main entrance, and that on the least steep side. Any subordinate entrance was smaller, a sort of postern, and often with very steep approaches. There is such a side entrance at Cadbury. Usually the banks appear to be mere ridges of earth or fragments of stone heaped up, with no trace of masonry, either with or without mortar. Real masonry, that is, stone laid in mortar, no one alleges to have discovered in a clearly British work, but dry walling has occasionally been found in camps as in sepulchral mounds. At Worle Mr. Warre thought he saw traces of it, and in a Caermarthenshire hill camp the wall is said to resemble those round the fields in Westmoreland, eight or nine feet thick, and composed of the stones cleared from the land. It is also said that in this camp cells are found in the wall, probably for the storage of grain. On Penmaen-Maur are traces of dry walling, and on Moel-gaer near Ruthyn, and within the camp of Moel Arthur, near Denbigh, Mr. Ffoulkes describes dry walling, but of doubtful date. In Ireland, indeed, the earliest camps, those in Aran, have regular dry walls with doors and other architectural features, as is shewn in Lord Dunraven's excellent photographs, and graphically described by Miss Stokes. In Ireland also the glacis or space outside the wall was set thick with upright stones, to break the force of an attack, somewhat resembling the "trous de loups" of modern engineers, used to protect the gorges of "lunettes" and "ravelins"

in advance of a regular work. These upright stones are said to have been observed in one instance in North Wales. On St. David's Head the promontory is fortified by a double line of large flattish stones set on edge and fixed in the ground, and the entrance has side pieces of stone, but no trace of a lintel. The work is rough, without any marks of a tool or of mortar, and its fashion was probably dictated by the great abundance of large stones on the spot. This camp is however quite as likely to be the work of the Northmen as of the Britons. Asser describes a castle at Cynwit on the coast of Devon, which was held by the Christian English against the pagan Danes in 877, before Alfred's famous battle of Scesdun in 878. He says it was without water or any defence save walls, "more nostro," that is, after the British fashion. Bishop Clifford places Cynwit at Cymwich or Combwich in Cannington Park, west of the Parret, where is a camp with banks of loose stone. No doubt the English occasionally made use of these older camps when pressed by the Danes, and that they recognised their character is clear from the names they gave them, as Sheet Castle, Safety Castle, Castle Comfort, and the like. A well does not appear as part of the furniture of hill camps, and they but seldom contain a spring. Water seems to have been stored in basins, neatly lined with clay, as at Hamden Hill. At Badbury is a spring, and at Moel Fenlli a spring combined with a small tank. In the area are usually found a number of circles from ten feet to thirty feet diameter, composed of rough stone of moderate size. These were evidently the bases of wigwams, and surrounded the feet of the poles which carried the sides and roof. Usually within each circle are traces of a hearth. Now and then, both inside and outside these camps, sepulchral barrows are found, and sometimes within them graves containing, as at Worle, the bones evidently of persons killed in war. The pottery and weapons found are of a rude description, and the latter are mostly of stone.

On the great ranges, as Mendip, Cotteswold, and the Chilterns, and the hills on the Welsh border, the camps are almost all of a large area, containing twenty to even sixty acres. Worle contains eighteen acres, and its

approach on the weakest side is covered by seven ditches. Hamden Hill camp in Somerset is three miles in girth. Cadbury covers twenty-five acres; Roborough in Mendip is of immense size and strength. It is evident that almost all these camps were intended to accommodate a whole tribe, whose hunting grounds lay in the wooded plain below, and looking to the immense labour bestowed upon them and to the quantity of black mould within them, they must have been intended for permanent residences, and so occupied, possibly for many centuries.

Some of the larger camps, as the Herefordshire Beacon and Sinodun on the Thames, are isolated, and seem to have been held by independent tribes. But by far the greater number are so ranged as to appear intended for the defence of some province or kingdom common to them all, and are connected by or have an obvious reference to some one of the long lines of bank and ditch known as dykes, and the aspect and course of which sufficiently show the purpose for which they were constructed. Thus Wansdyke, supposed to be a Belgic work, the ditch of which is always to the north or east of the bank, was evidently constructed for the defence of a southern province. It has been traced from the heart of Berkshire, across Wiltshire to near Bath, and thence probably to Portishead, and along the coast to the Parret, and thence perhaps across Dorset to the sea, covering the chief Belgic cities of Winchester and Ilchester. This vast entrenchment just includes within its limits the large hill camps of Hampton Down, Stantonbury, and Maes Knoll, and those of Hawkesdon, Musbury, Membury, Lambert's Castle, and Pillesdon on the margin of Dorset, the land of the Morini. These seem intended as in opposition to those of Woodbury, Sidbury, Henbury, and Neroche, which crown at no great distance the heights of the Damnonii. The Cattrail, certainly a pre-Roman work, was intended to protect the eastern country from the people of Strathclwyd, and may still be traced from Cumberland to the Tweed. Besides these may be mentioned the Recken dyke, the almost universal Grimsdyke, the Devil's dyke and Fleam ditch in Cambridgeshire. Offa's dyke is of course much later. Similarly disposed, to indicate or protect the limit of a province,

are the earthworks posted along the heights of Hertford and Essex, north of the London basin; others are found along the scarp of the chalk where it forms the southern boundary of the Vale of Whitehorse, and are continued along the Chilterns through the shires of Oxford, Bedford and Cambridge. A grand line of camps crowns the ridge of Mendip, and one still longer extends from Lansdown, Dyrrham, and Sodbury along the edge of the Cotteswold, including Horton Castle, Uleybury, Standish, Kingsbury, Leckhampton, Nottingham Hill, and Saintbury, and running northwards to the Warwickshire Avon. Opposite to these are the camps of Hereford and Salop and the Welsh border, a district, in British times, as in those of the Saxons and Normans, bristling with fortresses, and truly the "Old Castile" of Britain. In the west and north where the ground is hilly, the camps were high, but where the features of the ground are less strongly marked, as in the east and near London, they were necessarily on lower ground. Such are the British camps called Cæsar's at Wimbledon and Chertsey, and at Horwood in Kent. At St. Albans, the British bank and ditch supposed to have been attacked by Cæsar, may still be traced, resting on the Ver, and possibly included the later Roman town within their area.

In many districts there are still traces of the trackways by which these strongholds were connected, and which from their frequent course along the crest of an escarpment are often known as "the ridgeways." They are mere trackways, formed upon the direct surface of the ground, though sometimes protected by low lateral banks of earth. Where these primitive ways occur on the slope or at the base of a hill they are usually much worn and hollowed out, partly by traffic, but still more by the action of running water.

Besides the great frontier camps of Wales, the Principality itself is studded all over with entrenchments of irregular outline, on high ground, and evidently British. Some are of large size, as Moel Fenlli, and Moel Gaer near Ruthyn, which measure 500 yards by 260 yards, and 160 yards by 200 yards; but usually they are small, though far more numerous than in any part of England.

Also they occupy positions where they never could have been intended for the general defence of the country.

Probably by far the greater number of British camps were thrown up at a remote period, when the inhabitants were absolutely savage, living in wigwams and by hunting, without wheel-carriages, without money, with arms and pottery of a very simple character, such as indeed they continued to be down to Cæsar's visit to Britain. During the century that elapsed between that time and the Roman Conquest, the Britons of the plains made great progress in commerce and the arts, coined money, and used chariots in war, but under the Roman sway their progress does not appear to have been very considerable, and after the departure of the Romans, their civilization did not enable them to combine for the defence of their country. Still it cannot be supposed that they fell back into the habits of savage life, or lived in hill camps in wigwams.

Of camps still visible, and which from their position and irregular outline may safely be pronounced British, there are comparatively but few in the eastern, southern, and midland counties of England; but in the west they are more numerous and better preserved. In Wales, where their remains are tolerably perfect, there are about 500, of which Pembroke contributes 105, Cardigan 78, Montgomery 56, Caernarvon 50, Monmouth 48, and Glamorgan 40. In Pembroke the terms castell or castle occur 63 times; in Cardigan 28. In Anglesea there are but few camps, and those chiefly along the Menai strait, corresponding to others upon the mainland shore of Arvon. There are several upon the headland of Caernarvon, fringing the sea-coast: some about the mouth of the Conwy River, and many of great strength upon the high land between the vale of Clwyd and the estuary of the Dee. Merioneth, though extending from the Severn to the Bay of Cardigan, contains but few British camps, and those chiefly on the upper Dee, between Corwen and Bala, about Towyn, and along the rocky hills above the marshes of the Dovey. In parts of Montgomery these camps are thickly posted especially upon the Vyrnwy and the upper Severn. The camps of Radnor are chiefly on the English border, about Knighton and in the valley

of the Ython. Those of Cardigan are posted in two parallel lines, one at the foot of the hills from Yspetty-Ystwith, by Tregaron and Lampeter, towards Newcastle-Emlyn; the other along the shore of the bay about Aberystwith, and very thickly from Aberaeron to Strumble Head.

Pembroke is dotted all over with earthworks, chiefly entrenchments of a British character, specially frequent upon the seaward flanks of the Preselau range, and along the deep indentations of the coast from Strumble and St David's Head's to St. Bride's Bay and Milford Haven. The southern counties of Caermarthen and Glamorgan, so rich in castles of masonry, show in proportion to their acreage but few British encampments, and scarcely any along the seaboard, nor are there many in Brecknock or Monmouth. Some of the finest and most perfect works west of the Severn are to be seen in the March lands of Hereford and Salop, on Caer Caradog and Coxwall Knoll, and of these some have been attributed to the period when Caractacus made head against the Romans under Ostorius Scapula, though it is far more probable that they were then only made use of. Probably the abundance of British works in Pembroke was caused by the necessity for opposing the Northmen, whose piratical incursions were frequent, attracted no doubt by the excellence of the harbourage and by the number of small islands off the coast. The prevalence of Northern names in this district seems to shew that the early settlers from the Baltic contributed as much as the later Flemish colony to infuse Teutonic blood into the peninsular portion of the shire.

It can scarcely be an error to attribute the larger and perhaps all the stronger hill camps of irregular outline and containing hut circles to the British before the arrival of the Romans. After 380 years intimate contact with that people, remains of whose residences are found even in the fastnesses of Wales, it is impossible to suppose that the Britons would inhabit permanently a hill camp, although they may have made use of these works of their forefathers, as the Romans certainly sometimes did, for purposes of temporary defence.