EARTHWORKS OF THE POST-ROMAN & ENGLISH PERIOD. By GEO. T. CLARK.

But little is recorded of the internal condition of Britain between the departure of the Legions A.D. 411 and the arrival of the Northmen in force thirty or forty years later, but whatever may have been the effect of Roman dominion, or of the infusion of Roman blood, upon the social or commercial character of the Britons, it is at least certain that they had made little progress in the construction of places of defence. The Romans, as has been remarked, dealt rather with the country than with the The foreign trade under the Roman sway was no doubt considerable, and much land was under cultivation. but the Britons seem to have acquired but few of the Roman arts, and nothing of the Roman discipline. Neither have their descendants, the Welsh, many customs which can be traced distinctly to a Roman origin; and although there are many words in their language which shew its origin to be cognate with the Latin, there are comparatively few which can, with any probability, be shewn to be derived from the Latin. How far against the Scots and Picts they made use of Roman tactics or employed Roman weapons is but little In defending themselves against the Northmen they, no doubt, took advantage of the Roman walls at Richborough, Lymne, and Dover, and afterwards of Pevensey, but on the whole, without success; and from these they were driven back upon the earthworks of their probably remote predecessors. There is not a shadow of evidence that they constructed any new defensive works in masonry upon the Roman models, or even repaired those that were left to them in the same material.

There do however remain certain earthworks which seem to be laid out according to Roman rules, but which contain no traces of Roman habitations, are not connected with Roman roads, and the banks and ditches of which are of greater height and depth than those generally in use among the Romans in Britain, and which therefore there seems reason to attribute to the post-Roman Such are Tamworth, Wareham, Wallingford, possibly Cardiff, though upon a Roman road, and the additions to the Roman works at York. The name Wallingford, "the ford of the Welsh," may be quoted in support of this view. It is difficult to understand how it is that there are no remains in masonry which may be attributed to this period, for it is impossible that with the example of the Romans before their eyes, and a certain admixture of Roman blood in the veins of many of them, the Britons should not have possessed something of the art of construction. This difficulty does not occur in Gaul, whence the Romans were never formally withdrawn. On the Continent indeed, generally, buildings are found of all ages, from the Roman period downwards. Gregory of Tours, in his Historia Francorum, written towards the end of the sixth century, describes the fortified place of Merliar as of great extent and strength, in which there were included a sweet water lake, gardens and orchards; and M. de Caumont cites a description of an episcopal castle on the Moselle in the same century, which was defended by thirty towers, one of which contained a chapel, and was armed with a balista; and within the place were cultivated lands and a water-mill: and there were many such, like the defences of Carcassonne, of mixed Roman and post Roman work, that is, of work executed before and about the fifth century.

In Britain the course of events was different. The Northmen, men of the sea, and accustomed to life in the open air, had no sympathies with the Celts, and utterly disdained what remained of Roman civilisation; slaying the people, and burning and destroying the Roman buildings, which, in consequence, are in England fragmentary, and in most cases only preserved by having been covered up with earth or incorporated into later buildings. The Roman works were mostly on too large a scale for the wants of new settlers, and even where these occupied the Roman towns they cared not to restore or complete the walls, but buried what remained of them in

highearthen banks, upon which they pitched their palisades, and within which they threw up their moated citadels. The Northmen respected nothing, adopted nothing. Their earliest mission was one of violence and destruction. They appear, in the south and east at least, in a large measure to have slain and driven out the people of the land, and to have abolished such institutions as they possessed. But not the less did they carry with them the seeds of other institutions of a far more vigorous and very healthful character. Whether Saxons, Angles, or Jutes, though landing on the shores of Britain in quite independent parties, they had the substance of their speech, their customs, and their gods in common. had the same familiarity with the sea, the same indisposition to occupy Roman buildings, the same absence of all sympathy with the native Britons. If they still, which is doubtful, held most of their lands in common, the house and the homestead were already private property. Their family ties were strong, as is shewn in the nomenclature of their villages. As they conquered, they settled and practised agriculture, and as they embraced Christianity, they gradually established those divisions, civil and ecclesiastical, sokes and rapes, tythings, hundreds, wapentakes, and parishes, which still remain to attest the respect to which they had attained for law and order, for the rights of private property, and their capacity for self-government.

Much akin to and before long to be incorporated into the English nation were the Danes, or rather the Norsemen from the seaboard country north of the Elbe, the Danes of English history and of local tradition, who in the eighth century played the part of the Saxons in the fifth. They scoured the same seas, and harrassed the Saxons as the Saxons had harrassed the Britons, only the invaders and the invaded being, generally, of the same blood, finally coalesced, and the distinctions between them became well-nigh effaced; still, for three centuries, the ninth, tenth, and eleventh, the Danish name was the terror of the British Isles. They infested every strand, anchored in every bay, ascended every river, penetrated

and laid waste the interior of the country.

Orkney is full of their traces, their language is the key

to the topographical nomenclature of Caithness, the gigantic works at Flamborough Head are attributed to them; the great cutting, by which they carried a branch of the Thames across Southwark, is on record. 1,000, Ethelred found them forming the year A.D. much of the population of Cumberland. Such terminations as Eye, Ness, Holm, and By, so common along the shores of England, or over the lands watered by the Trent and the Humber, the Tees and the Tyne, and not unknown on the western coast, show the extent and permanence of their settlements. It does not, however, appear that the Danish earthworks differed materially from those thrown up by the other northern nations in England. Camps tending to the circular form and headlands fortified by segmental lines of bank and ditch belong to all, and all when they settled and acquired property underwent very similar changes in their habits and modes of life.

No doubt, among the earlier works of the Northmen, those thrown up to cover their landing and protect their ships, were the semicircular lines of ditch and bank, found on capes and headlands and projecting cliffs on various parts of the sea-coast. Usually they are of limited area, as the invaders came commonly in very small bodies, but the Flamborough entrenchment has a line of bank and ditch three and a half miles long, of a most formidable

character, and including a very large area.

Along the coast of South Wales are many small camps probably of Danish origin, such as Sully, Porthkerry, Collugh, Dunraven, Pennard, Penmaen, five others on the headland of Gower, and five or six along the southern shore of Pembrokeshire. Besides these material traces of the invaders are a long list of such names as Haverford (fiord), Stackpole, Hubberton, Angle, Hubberston, Herbrandston, Gateholm, Stockholm, Skomer, Musselwick, Haroldston, Ramsey, Strumble, Swansea, savouring intensely of the Baltic. The Dinas' Head between Newport and Fishguard bays, though bearing a Welsh name, is fortified by an entrenchment due without doubt to the Northmen.

These and similar works evidently belong to the earlier period of the northern invasions, when the long black

galleys of the vikings visited at not infrequent intervals the British and Irish shores, before they settled in either In the fifth and sixth centuries settlements began to be formed in Britain, and speedily assumed dimensions very formidable to the natives. The south-eastern coast of Britain, known as the Saxon shore, had been fortified by the Romans, but the works, intrinsically strong, were too weak in British hands to stem the progress of the foe. In A.D. 530 Cerdic and Cynric took the Isle of Wight, and slew many Britons at a place where Wightgar was afterwards buried, and where he probably threw up the work which bore his name, and afterwards, as now, was known as Carisbroke. In 547 Ida, the "flame-bearer" of the Welsh bards, founded Bebbanburgh, now Bamborough, and enclosed it first by a hedge, and afterwards by a wall; and in 552 Cynric engaged the Britons at Sorbiodunum, afterwards Searo-burh, and now Old Sarum; as did in 571 Cuthwulf or Cutha at Bedcanford or Bedford, in each of these two latter places, as at Carisbroke and probably at Twynham, or Christchurch, throwing up the works which yet remain. The conquest of the Romano-British cities of Cirencester, Bath, and Gloucester, and the whole left bank of the Severn, from the Avon of Bristol to that of Worcester, was the immediate consequence of the victory of Deorham in 571, and was followed by the possession of Pengwern, afterwards Shrewsbury, a most important post, and one by means of which the Mercians, and after them the Normans held the Middle March of Wales. All along the line from Christchurch and Carisbroke, by Berkeley and Gloucester, Worcester, Warwick and Shrewsbury, earthworks were then thrown up, most of which are still to be seen.

With the social changes among the invaders changed also the character of their military, or rather of their mixed military and domestic works. The British encampments, intended for the residence of a tribe having all things in common, were, both in position and arrangements, utterly unsuitable to the new inhabitants. The Roman stations, intended for garrisons, save where they formed part of an existing city, were scarcely less so, nor were the earlier works of the Northmen suited to their later wants. These were mostly of a hasty character, thrown up to cover a landing or to hold at bay a superior force. No sooner had the strangers gained a permanent footing in a district than their operations assumed a different character. Their ideas were not, like those of the Romans, of an imperial character; they laid out no great lines of road, took at first no precautions for the general defence or administration of the country. Self-government prevailed. Each family held and gave name to its special allotment. This is the key to the later and great majority of purely English earthworks. They were not intended for the defence of a tribe, nor for the accommodation of fighting men, but for the centre and defence of a private estate, for the accommodation of the lord and his household, for the protection of his tenants generally, should they be attacked, and for the safe housing, in time

of war, of their flocks and herds.

These works, thrown up in England in the ninth and tenth centuries, are seldom, if ever, rectangular, nor are they governed to any great extent by the character of the ground. First was cast up a truncated cone of earth, standing at its natural slope, from twelve to even fifty or sixty feet in height. This "mound," "motte," or "burh," the "Mota" of our records, was formed from the contents of a broad and deep circumscribing ditch. This ditch, proper to the mound, is now sometimes wholly or partially filled up, but it seems always to have been present, being in fact the parent of the mound. Berkhampstead is a fine example of such a mound, with the original ditch. At Caerleon, Tickhill, and Lincoln, it has been in part filled up; at Cardiff it was wholly so, but has recently been most carefully cleared out, and its original depth and breadth are seen to have been very formidable. Though usually artificial these mounds are not always so. Durham, Launceston, Montacute, Dunster, Restormel, Nant cribba, are natural hills; Windsor, Tickhill, and the Devizes, are partly so; at Sherborne and Hedingham the mound is a natural platform, scarped by art; at Tutbury, Pontefract, and Bramber, where the natural platform was also large, it has been scarped and a mound thrown up upon it.

Connected with the mound is usually a base court or enclosure, sometimes circular, more commonly oval, or

horseshoe-shaped, but, if of the age of the mound, always more or less rounded. This enclosure had also its bank and ditch, that in its rear being the ditch of the mound. and the area was often further strengthened by a bank along the crest of its scarp. Now and then as at Old Sarum, there is an additional bank placed outside the outer ditch, that is, upon the crest of the counterscarp. The use of this it is difficult to understand, as it would afford cover to an assailant; unless, indeed, it was intended to carry a palisade, and to fulfil the conditions of the covered-way along the crest of one of Vauban's counterscarps. Where the enclosure is circular the mound is either central as at Old Sarum, where it is possibly an addition to an older work, such as Badbury, or it stands on one side as at Tutbury. Where the area is oblong or oval the mound may be placed near one end as at Bramber. At Windsor and Arundel it is on one side, and where this is the case a part of its ditch coincides with the ditch of the place. Where the court is only part of a circle it rests upon a part of the ditch of the mound. At Sarum the two ditches are concentric. At Berkhampstead the mound is outside the court. On the whole, as at Lincoln, it is most usual to see the mound on the edge of the court so that it forms a part of the general "enceinte" of the place. Where the base court is of moderate area. as at Builth and Kilpeck. its platform is often slightly elevated by the addition of a part of the contents of the ditch, which is not the case in British camps. Wigmore and Builth, where the mound stands on the edge of a natural steep, the ditch is there discontinued. The base court is usually three or four times the area of the mound, and sometimes, as at Wallingford or Warwick, much more. No doubt the reason for placing the mound on one side rather than in the centre of the court was to allow of the concentration of the offices, stables, &c., on one spot, and to make the mound form a part of the exterior defences of the place.

The mound and base court, though the principal parts, were not always the whole work. Usually there was on the outside of the court and applied to it, as at Brinklow and Rockingham, a second enclosure, also with its bank and ditch, and often of larger area than the main court,

being intended to shelter the flocks and herds of the tenants in case of an attack. At Norham, the castle ditch was used for this purpose as late as the reign of Henry the VIII. There are a few cases in which the mound is placed within a rectangular enclosure, which has given rise to a notion that the whole was Roman. Tamworth is such a case, and there, fortunately, the mound is known historically to have been the work of Aethelflaed, as is that of Leicester, similarly placed. From this and from the evidence of the earthworks themselves a like conclusion may be drawn as to the super-added mounds at Wareham, Wallingford, and Cardiff. At Helmsley, as at Castle-Acre, Brougham and Brough, the earthworks stand upon part of a Roman camp, and at Kilpeck and Moat Lane near Llanidloes, part of the area may possibly be British.

The group of works, of which the mound was the principal feature, constituted a Burh. The burh was always fortified, and each inhabitant of the surrounding township was bound to aid in the repair of the works, which seem almost always to have been of timber, which the Saxons, like other German nations, appear usually to have preferred to stone, though some of their towns were walled, as Colchester and Exeter, and Domesday records the custom of repairing the walls of Oxford, Cambridge,

and Chester.

In these English, as before them in the British works, the ditches were sometimes used to contain and protect the approaches. This is well seen at Clun and Kilpeck. At Tutbury the main approach enters between two exterior platforms, and skirts the outer edge of the ditch, until it reaches the inner entrance. The object was to place the approach under the eyes and command of the garrison.

As there are still some archæologists whose experience entitles their opinions to respect, who attribute these moated mounds to the Britons, it will be necessary to point out that the attribution of them to the English, though materially strengthened by the evidence of the works themselves, does not wholly, or even mainly rest upon it. While the British camps are either prachistoric or unnoticed even in the earliest histories, and the age of the Roman works is only deducible from their plan and style,

and the known and limited period of the Roman stay in Britain, English works are continually mentioned in the chronicles, and the names of their founders and date of the construction of many of them are on record. Taunton was founded by Ine a little before 721-2, when Queen Aethelburh destroyed it. The original earthworks still remaining are considerable, and formed part of the defences of a fortress erected long afterwards. ninth century, as the Danish incursions became more frequent, works of defence became more general and are largely mentioned directly, or by implication, in the Anglo-Saxon chronicle. In 868-9 the Danish army was at Nottingham, a strong natural position, in which it was besieged by the West-Saxons. In 870 the Danes were a whole year at York and wintered at Thetford, where large earthworks remain. In 875 they were at Cambridge, and in 876 at Wareham, a West-Saxon fortress, whence they attacked Exeter, and at all these places are earthworks. In 878 we read that Alfred "wrought" a fortress "werede geweore," at Aethelney, and in 885 the Danes laid siege to Rochester, and "wrought" another fortress about their position, no doubt the great mound that still remains outside the castle and the Roman area. In 893 the Danes ascended four miles along the Limen or "Lymne" river in Kent, and there stormed a fastness "foestine," which was but half constructed. In the same year Haesten entered the Thames and "wrought" him a work at Milton, and other Danes landed at Appledore, at the mouth of the In 894 Aelfred fought with the Danes at Farnham, where the episcopal keep still stands upon a Haesten or Hastings had already constructed a burh at Benfleet, which was stormed by Aelfred, who in the same year blocked him up at Buttington, on the Severn. In 896 the Danes threw up a work on the Lea, twenty miles from London, on which Aelfred threw up another work on each bank of that river lower down, obstructing the stream and shutting in the Danish ships. The Danes, in consequence, marched inland, and crossed the country to Quatbridge, on the Severn, and there "wrought a work" and passed the winter. Some of these works remain.

In the tenth century the number of English fortresses was prodigiously increased, chiefly by the energy of

Aethelflaed. Aelfred died in 901, and was succeeded by Eadward, his son, who attacked, in the fortress of Badbury, his cousin Aethelwald, who held Christchurch and Wimborne. In 907, Chester, the Roman walls of which had long lain in ruin, was strengthened, probably by the earthworks still to be seen in its south-western corner; the mound indeed has been almost entirely removed. In 910 Aethelflaed, sister to Aedward, and Lady of the Mercians, comes upon the scene, as the greatest founder of fortresses in that century. In that year she built a burh at Bramsbury, and in 913 one at Scergeat or Sarrat, and at Bridgenorth (Oldbury). In 913, about the 14th of April, Eadward built the north burh at Hertford, between the rivers Memera or Maran, the Benefica or Bean, and the Lygea or Lea, and after May and before midsummer he encamped at Maldon while Witham burh was being built. Then also the second burh of Hertford, south of the Lea, was built. In the same year, 913, Aethelflaed and her Mercians built the burh of Tamworth in the early summer, and in August that of Stafford; and in the next year, 914, also in the summer, that of Eddesbury, and towards the end of autumn, that of Warwick.

In 915 Aethelflaed constructed a burh at Chirbury, probably in the field still known as the King's Orchard, and at Wardbury, and before mid-winter that of Runcorn, where was afterwards a Norman castle. In that year the Danes ascended the Bristol Channel and entered Irchenfield. west of Hereford, remarkable, amongst many others, for its burhs of Kilpeck and Ewias-Harold, whence they were driven back by the men of Hereford and Gloucester, and of the surrounding burhs. In 916 Aethelflaed stormed the mound of Brecknock, and took thence the Welsh king's wife and thirty-four persons. Late in the year Eadward was some weeks at Buckingham, and there constructed two burhs, one on each bank of the river. In 917 Aethelflaed took Derby, the gates of which town are mentioned, and in 918 the burh of Leicester, soon after which she died in her palace in Tamworth. In 919 Eadward went to Bedford, took its burh, and there remained for four weeks, during which time he threw up a second burh on the opposite or south bank of the river Ouse. In 920 he constructed the burh at Maldon, and in 921, in April, that at Towcester, which in the autumn he girdled with a wall of stone. In the following May he directed the burh at Wigmore to be built, and in August the whole Danish army spent a day before Towcester but failed to take it by In that year the Danes abandoned their work at Huntingdon and wrought one at Tempsford, and thence moved to Bedford, whence they were repulsed. They also attacked the burh at Wigmore for a day, but without success. This was a busy year. In it the English stormed Tempsford burh, and beset Colchester burh, and slew there all but one man who escaped over the wall. Maldon burh also was attacked by the Danish army, but without success. In November Eadward repaired the burhs at Huntingdon and Colchester, and raised that at Cledemutha. In 922 the same great English leader, between May and midsummer, "wrought" a burh at Stamford on the south bank of the Welland, opposite to that already existing. He reduced the burh at Nottingham, repaired it, and garrisoned it with Englishmen and Danes. In 923 Eadward erected a burh at Thelwall, and in 924 one at Bakewell, and at Nottingham he erected a new burh, opposite to the existing one, the Trent flowing between In 943 Olaf the Dane took Tamworth by storm. In 952 mention is made of the fastness of Jedburgh, and of the town of Thetford. In 993 Bamborough was stormed.

Of the fifty burhs named in the chronicle, about forty one have been identified, and of these about twentynine still exist. Of this number twenty-two are moated mounds, mostly with base courts also moated. Taunton there is reason to suppose that there was a mound, and the works at Chirbury, Exeter, Rochester, Colchester, and Pevensey, which are Roman, probably succeeding earlier British works, have been taken possession of and altered by the English, as is the case also at Chester, where, as at Pevensey, are traces of a mound. At Rochester is a large mound, though outside the fortress. Rougemont in Exeter is itself a natural mound, and Bamborough from its great height and size, needed neither mound nor earthwork of any kind. Of double burhs, commanding the passage of a river, the chronicle mentions Nottingham and those on the Lea, Hertford, Bedford, Stamford, and Buckingham. Unfortunately none of these are perfect. At Nottingham and on the Lea both mounds have long been removed; one is remembered at Stamford and Buckingham, and one may still be seen at Hertford. But the only double mounds remaining to show how, in the tenth century, the English defended the passage of a river, are those at York, which are not mentioned in the chronicle.

It appears then that setting aside works that have not been identified, or which have been destroyed before note was taken of them, there are above a score of burhs, the date of the erection of which, and the name of the founder, are entered in a trustworthy record, and which are still to be seen. What then is a burh? A burh is a moated mound with a table top, and a base court, also moated, either appended to one side of it, or within which it stands. But the burhs, the dates of which are on record, and which are thus described, are but a very few only of those of precisely the same character found all over England, in the lowlands of Scotland, and on the marches bordering on Wales, and which may therefore safely be attributed to the ninth and tenth and possibly to the eighth centuries, and to the English people, that is to the Northern settlers generally, as distinguished from the Britons and the Romans.

It happens, also, that, in very many cases where these burhs are found, they can be shewn to have been the "caput" or centre of an estate. It is probable that this was always the case, but as a rule it is only with respect to the very large estates that this can be proved from records. Thus the mound of Wallingford was the seat of Wigod, whose heiress married Robert D'Oyley; Bourne or Brum was held by Earl Morcar in 870; Edwin, Earl of Mercia, Lord of Strafford Wapentake, in Yorkshire, had an "aula" at Laughton-en-le-Morthen, and Conyngsborough was the centre of a royal fee. The English Earl of Richmondshire had a seat at Gilling, the mound of which has not long been levelled. The mound at Halton was the seat of Earl Tosti. At Berry Banks, near Stone, dwelt Wulfer, Lord of Mercia. The chief seats of the English lords of Hallamshire are not known, but in that district the later thanes were Waltheof, Tost, Sweyn Lord

of Sheffield, and Harold, whose seats must be sought for in the mounds and banks of Castle Hill and Castle Bailey, near Bradford; Castle Hill, at the meeting of the Sheaf and Don; Tickhill, Wincobank, and Mexborough, all moated mounds; to which may be added Melling and Hornby in Lonsdale, Castle Hill at Black Bourton, Robin Hood's butt at Clapham, and Sedbury or Sedda's burh, a well-known mound with oval courts; such also, in Yorkshire, were Castle-dykes at Ledescal and Langwith, Maiden Castle at Grinton, and Kirkby Malessant. The great mound at Clare was the fortified seat of Earl Aluric, who held an enormous estate in that district. Eye, in the same county of Suffolk, the seat of Earl Edric, has a fine mound, and such are Thetford and Haughley. The hill of Hedingham and that of Norwich are natural, but the latter was occupied and fortified with a double ditch and horseshoe appendages, probably in the ninth or tenth centuries. Dudley also was a great English residence, as was Bennington mound in Hertfordshire. Hereford was fortified by the great Harold, Ewyas by another Harold, Kilpeck and Richard's Castle were also early seats, as were the mounds of Clun, Oswestry, and Whittington, in Shropshire. In Scotland upon the mound called the "Butte of Dunsinane," tradition places the residence of Macbeth early in the eleventh century. The butte stands within an oval area defended, says Pennant, by banks and ditches. Opposite Kingussie on the Spey is a very curious natural mound, rising on three sides out of the marshes of the river, and which is known to have been the residence of the celebrated Wolf of Badenoch.

The burhs are mentioned in the early laws of England, but by this time the signification of the word had become extended, so that it was applied not only to a moated mound but to the town that had sprung up around it. By the laws of Aethelstan, every burh was to be repaired within fourteen days after the Rogation days, and money was allowed to be coined at royal burhs. By the laws of Edmund the king's burh was a place of refuge, and under those of Aethelred, he who fought in a king's burh was liable to death. Burh-bryce was the violation of a castle or dwelling. Burh-bote, a payment for keeping burhs or fortresses in a state of defence, was a branch of the well-

known "trinoda necessitas." Originally the English burh was a fortified house, the "Domus defensabilis" of Domesday, the "Aula," the German "Saal," of the owner of the surrounding estate or manor, which the tenants were bound to defend; of which the designation may be Norman, but the thing designated is undoubtedly of far earlier origin. The term burn naturally became extended to the cluster of surrounding huts, and a hedge with a ditch was their primary enclosure, the repair of which is provided for in very early Saxon laws. A good stout hedge, even of quickset, is not to be despised, and the cactus and bamboo hedges of India will turn a band of soldiers. The word "Haia" is not infrequent in Domesday, and it there means an enclosure into which wild beasts were driven, "Haia in qua capiebantur ferate." It was also used for the enclosure of a park, as the Haye Park at Knaresborough, and the Hawe Park attached to Skipton Castle. King Ida's hedge at Bamborough was for the defence of annexed pasture lands, for the castle scarce needed any such addition to its surpassing strength. The word was also extensively used in Normandy both for a defence, and for an enclosure. of the older Herefordshire castles bears the name of Hay.

The Edictum Pistense of Charles the Bald, in 864, (cap. i) expressly orders all "Castella et firmitates et haias," made without his license, to be destroyed "disfactas," because they were injurious to the district. "Vicini et circummanentes exinde multas depraedationes et impedimenta sustinent. (Rerum Gallicarum Scriptores, vii, 677.) Hedges therefore were not always mere enclosures, but

sometimes a military defence.

These mounds, where they have descended to us, and have undergone no change at the hands of the Norman architect, are mere green hillocks, clear indeed in their simplicity, though having lost by time the sharpness of their profile and more or less of their height and of the depth of their ditches. No masonry has ever been observed upon them which could by any possibility be attributed to their founders, or which could be supposed to be part of their original design. It is evident, however, that the earthwork was only the support of some additional defence. On the mound was certainly a residence, and both its crest and base, as well as the appended courts, must have been encircled by some sort

of barrier besides the earth-bank. We read that Towcester was defended by a wall, which however was built very quickly, and probably was like a field wall, without mortar. But with or without mortar no wall could have been placed upon a fresh heap of earth, and that spoken of must have stood upon the natural ground at or around the base of the mound. No doubt Exeter was walled by Aethelstan, and Colchester had walls, partly, as we see, Roman, but partly no doubt, English; and Derby had gates, though of what material is not stated. At Corfe is some masonry, certainly older than the Conquest, and part of its outer defences, but Corfe is a natural hill. It is well known that the English were from a remote period conversant with masonry, and constructed churches of stone or timber as suited them best, and nothing is more natural than that they should have employed the former where the object was to resist an attack. But upon a burh, or upon an artificial earthwork of any height, masonry of any kind was obviously out of the question. Timber, and timber alone, would have been the proper material. Timber was always at hand, and it was a material of which, possibly from their early maritime habits, the English were very fond. rapidity with which these burhs were constructed shews that timber must have been largely employed. were thrown up, completed, attacked, burnt, and restored, all within a few months.

There are not wanting descriptions of these timberdefended works. M. de Caumont cites a curious passage from Ernaldus Nigellus, an author of the ninth century, who relates an expedition under Louis le Debonnaire against the Breton king Marman, whose stronghold was

protected by ditches and palisades.

"Est locus hinc silvis, hinc flumine cinctus amoeno. Sepibus et sulcis atque palude situs."

This however was a Breton work and there is no mention of a mound. Two centuries later the mound was in general use, and another quotation taken also from M. de Caumont, from the life of John, a canonized prelate of the church of Terouane, by Archdeacon Colmier, gives an account of the fortress of Merchen, near Dixmude, in which

the material employed and the mode of construction are clearly set forth. The original, taken from the "Acta Sanctorum," is appended to this paper, and is in truth a description of a moated mound, with its fence and turrets of timber, its central dwelling, and the bridge across the ditch rising to the top of the mound. The description is illustrated by the representation of the taking of Dinan, in the Bayeaux tapestry. There is seen the conical mound surmounted by a timber building, which two men with torches are attempting to set on fire, while others are ascending by a steep bridge which spans the moat and rises to a gateway on the crest of the mound.

Many of these mounds under the name of motes (motae) retained their timber defences to the twelfth and thirteenth centuries, and that on the Shropshire and

Welsh border, crowded with castles of masonry.

In viewing one of these moated mounds we have only to imagine a central timber house on the top of the mound, built of half trunks of trees set upright between two waling pieces at the top and bottom, like the old church at Greensted, with a close paling round it along the edge of the table top, perhaps a second line at its base, and a third along the outer edge of the ditch, and others not so strong upon the edges of the outer courts, with bridges of planks across the ditches, and huts of "wattle and dab" or of timber, within the enclosures, and we shall have a very fair idea of a fortified dwelling of a Thane or Franklin in England, or of the corresponding classes in Normandy from the eighth or ninth centuries down to the date of the Norman Conquest.

The existence of these mounds in distinct Welsh territory is very curious and requires explanation. That this form of dwelling was in common use among the Welsh is certainly not the case. Where moated mounds occur in Wales it is usually on the border, or near the sea coast, or in or near the open valleys accessible to the English, and which the English or Northmen are known to have invaded in the eighth and ninth centuries. The mound near Llanidloes is an exception, being distinctly within the hills. But that of Tafolwern, from which the Welsh princes dated several charters, is near the open valley. That of Talybont, whence Llewelyn dated a letter

to the Archbishop of Canterbury in 1275, and which was afterwards visited by Edward the First, is on a plain within easy reach of the sea. Still, as the Welsh princes intermarried and had frequent communication with the English, they must have been familiar with a form of fortification very simple and easy to construct, and yet very capable of being held against a sudden attack. It must be observed, also, that the English hold upon the Welsh border was of a very fluctuating description, and the Welshmen must not only have been perfectly familiar with the English method of construction, but from time to time have been actually in possession of their strongholds. That the Welsh used timber for defensive purposes appears from their law by which the vassals were to attend at the lord's castle for its repairs or for rebuilding, each with his axe in his hand.

It is very evident, both from the existence of Offa's dyke, and from the immense number of these moated mounds thrown up along its course, that the English had early and long possession of immense tracts of the border Offa ruled over Mercia from A.D. 757 to 796, and his dyke extends from the mouth of the Wye to that of the Dee. At its northern part, for about forty miles, is a second work, known as Wat's Dyke, a little in its rear, and thought to be a somewhat earlier work, also by Offa. Before the actual line of a work so galling to the spirit of a turbulent people could have been decided upon, there must have been many years of contest along the border, and the English must have had something like permanent possession of the land on either side, and have held estates of which the mounds still existing were the "capita" or chief seats. The dyke, it should be remembered, was rather a civil boundary than a military defence.

It is further to be remarked that moated mounds corresponding precisely in pattern to those in England, are very numerous in Normandy. In size they vary within much the same limits. All have or had a proper ditch, some, as Briquessart and des Olivets, stand in the centre of the court, some at one end, others on the edge. The court is sometimes circular, most commonly oblong, very rarely indeed rectangular. The outer enclosures have their ditches, which communicate with those of the inner

defences. M. de Caumont gives a list of fifty-four of these mounds, within a radius of sixty miles from Caen, and since he wrote many more have been observed. These also were, from an early period, the seats of great land-owners, and from very many of them came the knights and barons who accompanied William to England, and there settled in posts very similar. Sir F. Palgrave gives a list of 131 in the Cotentin, the Avranchin, and the Bessin, which includes only six of those mentioned by de Caumont. A large number of those earthworks seem never to have had, at any time, defences of masonry. Others, upon the

mounds, had Norman shell keeps.

In concluding this paper a few words must be added upon certain of these mounds which are rendered peculiar, not by anything in themselves, but by the position in which they are placed. It happens occasionally that the English lord took up his quarters within a Roman camp or station, and when he did so he employed the Roman banks or walls as his outer line of defence, and placed his mound inside, and usually in one corner, thus not only giving more space for his dependents and their wants, but strengthening his outer works. Thus at Pevensey, Leicester, Cambridge, Lincoln, Southampton, Winchester, Chichester, Caerleon, Chester, English mounds and inner base courts are placed within Roman enclosures which either are or were walled; also at Auldchester, near Bicester, the Roman Alauna, in a camp of a thousand feet square, is a mound called the Castle Hill, which is pronounced to be of later date than the camp. At Plessy, Tamworth, Wallingford, Wareham, Cardiff, where the areas though banked only, are rectangular, are found mounds of very decidedly later date than the larger work. There are also some others where a mound is placed within an earthwork with something of a tendency to the rectangular, though scarcely to be pronounced either Roman or Romano-British; such are Clare in Suffolk, and Hereford, and at Eaton Socon, where however the mound is very small indeed. Tempsford is very peculiar; it is a small rectangular enclosure, about thirty feet by forty feet, with bank and ditch, close to the river Ouse, in Bedfordshire, and in one corner, upon the bank, is a small mound. As this is the only known earthwork in the parish, it is probably the work which we learn from the Anglo-Saxon chronicle the Danes threw up and occupied in 921, though if this be the case, here as at Quatford, the earthwork could have been occupied by the leaders only, and the army must have bivouacked around it.

Besides the British theory, these mounds have been claimed as sepulchral. It is of course possible that such mounds as Arundel or Marlborough, may have been originally sepulchral, and therefore older than their defensive additions. To few if any has the crucial experiment of opening them been applied; but this is not a very probable explanation, and could certainly not be applied to those mounds as a class. Among many other for taking this view it may be observed that sepulchral mounds are always artificial, whereas moated mounds are often natural, and still more frequently partly so. No one could suppose Hawarden, or Dunster, or Montacute, to be sepulchres, and yet these are as much moated mounds as Arundel and Tonbridge. Moreover sepulchral mounds are not often placed where a defensive work is obviously needed, and most rude nations are superstitious, and would object to dwell upon, or around a grave. Tynewald in Man and Cwichelmsley Knowe in Berkshire are the only known sepulchral mounds which have been employed for other purposes, and those are judicial not The barrows round York, though smaller than most burhs, are big enough to have carried residences, but do not appear to have been so employed. Moreover the common testimony of the country has generally given to the moated mounds some name, such as Castle hill or Burh, indicative of their military origin.

It has been observed that moated mounds are usually near the parish church. This might be expected, since the parish, like the manor, was usually a private estate, and the church was originally provided by the lord for the

accommodation of his tenants and himself.

In claiming for these earthworks a northern, and in Britain an English origin, it would be too much to assert that in no other class of works is the mound employed, or by no other people than the Northmen, but it may be safely laid down that in no other class of early fortification does the mound occur as the leading and typical feature. In Roman and Norman, and possibly in purely British works, the mound may be occasionally seen, like the cavalier in the works of Vauban, or as an outwork, as at Caerphilly, or it may be employed to cover an entrance, but such mounds are of irregular shape, mere detached and elevated parts of the general bank, and not likely to be confounded with the moated mound described above.

APPENDIX.

Vita Sti Johannis Epis: Morinorum. Ob: 1130.

[Acta Sanctorum], Januari 27.

Contigit ut in villa, cui Morchem vocabulum est, hospitii mansionem haberet [Johannes]. Erat autem secus atrium ecclesiae munitio quaedam quam castrum vel municipium dicere possumus valde excelsa, juxta morem terrae illius, a domino villae ipsius a multis retro annis extructa. namque est ditioribus quibusque regionis hujus hominibus et nobilioribus, eo quod maxime inimicitiis vacare soleant exercendis et caedibus, ut ab hostibus eo modo maneant tutiores, et potentia majore vel vincant pares, vel premant inferiores, terrae aggerem quantae praevalent celsitudinis congerere eique fossam quam late patentem, multamque profunditatis altitudinem habentem circumfodere, et supremam ejusdem aggeris crepidinem, vallo ex lignis tabulatis firmissime confacto undique vice muri circummunire, turribusque, secundum quod possibile fuerit, per gyrum dispositis, intra vallum, domum vel, quae omnia despiciat, arcem in medio aedificare, ita videlicet ut porta introitus ipsius villae non nisi per pontem valeat adiri, qui ab exteriori labro fossae primum exoriens est in processus paulatim elevatus, columnisque binis et binis, vel etiam trinis altrinsecus per congrua spatia suffixis innixus, eo ascendendi moderamine per transversum fossae consurgit, ut supremam aggeris superficiem coaequando oram extremi marginis ejus, et in ea parte limen prima fronte contingat.

In hujus-modi ergo asylo Pontifex, cum suo frequenti et reverendo comitatu hospitali, quum ingentem populi turbam tam in ecclesia, quam in atrio ejus, manus impositione, et sacri Chrismatis unctione confirmasset, ut vestimenta mutaret, eo quod coemiterium humandis fidelium corporibus benedicere statuisset, ad hospitium regressus est, unde illo, ut propositum perficeret opus, iterum descendente, et circa medium pontis, triginta quinque vel eo amplius pedum, altitudinem habentis, certa de caussa subsistente, populique non modica caterva ante et retro, dextra lævaque circumstipante, continuo antiqui machinante hostis invidia, pons ponderi cessit, et dissipatus corruit, magnamque illorum hominum turbam cum episcopo suo ad ima dejicit; fragore autem ingentie vestigio consecuto, transtris, trabibusque tabulatis, et ruderibus magno cum impetu pariter et strepitu concidentibus: nebula quaedam tenebrosa ita omnem illam ruinam repente circumfudit, ut quid ageretur vix quisquam discernere

potuerit.

TRANSLATION.

It chanced that in a town called Merchem, Bishop John had a guesthouse. There was also close to the court of the church a strong place, which might be regarded as a castle or a municipium, very lofty, built after the fashion of the country by the lord of the town many years ago. For it was customary for the rich men and nobles of those parts, in order the more freely to wage their feuds and violence, and with the greater power to put down their equals and keep down their inferiors, to heap up a mound of earth as high as they were able, and to dig round it a broad open and deep ditch, and to girdle the whole upper edge of the mound, instead of a wall, with a barrier of wooden planks, stoutly fixed together with numerous turrets set round. Within was constructed a house or rather a citadel, commanding the whole, so that the gate of entry could only be approached by a bridge, which first springing from the counterscarp of the ditch, was gradually raised as it advanced, supported by piers two and two, or even three, trussed on either side over convenient spans, crossing the ditch with a managed ascent so as to reach the upper level of the mound, landing at its edge on a level at the threshold of the gate.

In this retreat the Bishop with his numerous and reverend retinue, after having confirmed a vast crowd of people both in the church and its court, by laying on of hands and the unction of the sacred chrism, returned to his lodging that he might change his vestments, because he had resolved to consecrate a cemetery for the burial of the bodies of believers. With that view, to effect the proposed work, he again descended, and about the middle of the bridge, having there a height of twenty-five or thirty feet, for some reason halting, the people pressing behind and before, and on either side, straightway, the malice of the old enemy so contriving, the bridge yielded to the weight and fell shattered, and the crowd with the bishop fell to the bottom with a great crash of joists, beams, and planks, with great force and noise, while a thick dust at once enveloped the ruin so that scarce any one could see what had happened.

The following is also curious:--

(Ludovicus Grossus, A.D. 1109). "Puteolum regreditur antiquam antecessorum suorum destitutam *Motam* castro jactu lapidis propinquam, occupat. Castrum fundibalariorum, balistariorum, saggitariorum, emissa pericula sustinentes; etc.")

Note—Motam: "Collis, seu tumulus, cui inaedificatum est castellum. Olim castella nunquam nisi in eminentissimis locis extruebantur. In Flandrie vero, humili ac planissima regione, congestis undequaque terram molibus fieri solabant motae quibus arces imponerentur." [Suger, De vita etc. Rerum Gallic: Script. xii., 39.]

Orderic mentions that in 1119 Fulk of Anjou with 500 knights laid

siege "ad motam Galterii" which the king had fortified.