

# HILL-SLOPE FORTS AND RELATED EARTHWORKS IN SOUTH-WEST ENGLAND AND SOUTH WALES

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## I. INTRODUCTION

'It has yet to be demonstrated' wrote Mr. W. J. Varley in this *Journal* in 1949 in discussing hill-forts of the Welsh March,<sup>1</sup> 'that hill-forts do belong to a single family and that they had a common history.' Field workers in south-west England, Wales and the North, know from experience of the diversity of structures represented on the Ordnance Survey maps by the term 'Camp', and that within a small district examples of varying strength, size and plan can be found, many of which do not conform to the orthodox classification of contour or promontory fort. In 1933 Cyril Fox and I described a group of forts on Margam Mountain, Glamorgan,<sup>2</sup> of unusual plan, slope-sited and with multiple enclosures (Fig. 4). Further field work in South Wales from 1934-1940 revealed others of which no full account has been given<sup>3</sup> and recently opportunities have occurred to study and describe their counterparts in south-west England.<sup>4</sup> It now seems time to review the accumulated evidence, to list and define the type and its variants, and to discuss its distribution and interpretation.

It is pleasant to acknowledge that the field work on which this paper is based was carried out in Wales with the aid of grants from the Board of Celtic Studies, and in the south-west from University College, Exeter. My husband has taken part in nearly all the field work and has re-drawn the maps and plans that illustrate this paper; we have talked over the problems of these sites for many years and the text embodies some of his suggestions; it is difficult to assess what I owe to his stimulating collaboration at all stages of the work, although I take responsibility for the final conclusions.

## II. THE HILL-SLOPE FORT DEFINED IN TERMS OF MILITARY WEAKNESS

The hill-slope fort, a term first coined by an able South Wales field worker, Colonel Llewellyn Morgan,<sup>5</sup> differs from the normal contour or promontory fort, as its title indicates, in the choice of situation. Instead of singling out in the tribal territory a dominant hill-top, spur, or cliff and ringing it round, or isolating it with one or a series of close-set ramparts, in the familiar Iron Age B fashion, the builders selected a site at the edge of the plateau, and by aligning the defences downhill, enclosed

<sup>1</sup> *Arch. Journ.*, cv (1948), 44.

<sup>2</sup> *Antiquity* (1934), 398.

<sup>3</sup> Interim account in *Bulletin of Board of Celtic Studies*, viii, 366; see also H. N. Savory, *ibid.*, xiii, 152.

<sup>4</sup> In Milber Down excavation report, *Proc. Dev. Arch. Exp. Soc.*, iv (1949-50), 28 and 58.

<sup>5</sup> *Arch. Camb.* (1920), 220, but ascribed to the Danes.

the upper part of the slope (Fig. 5). The series of plans (Figs. 1-10) show that despite the natural differences of terrain in three counties, this relation to contour is a constant factor, and cannot be dismissed as a local idiosyncrasy. It has been emphasised by stippling the higher ground on the plans, which are all drawn to the same scale and orientation.

UNRECORDED HILL-SLOPE FORT "B", MYNYDD GAER, BRITON FERRY, GLAM.

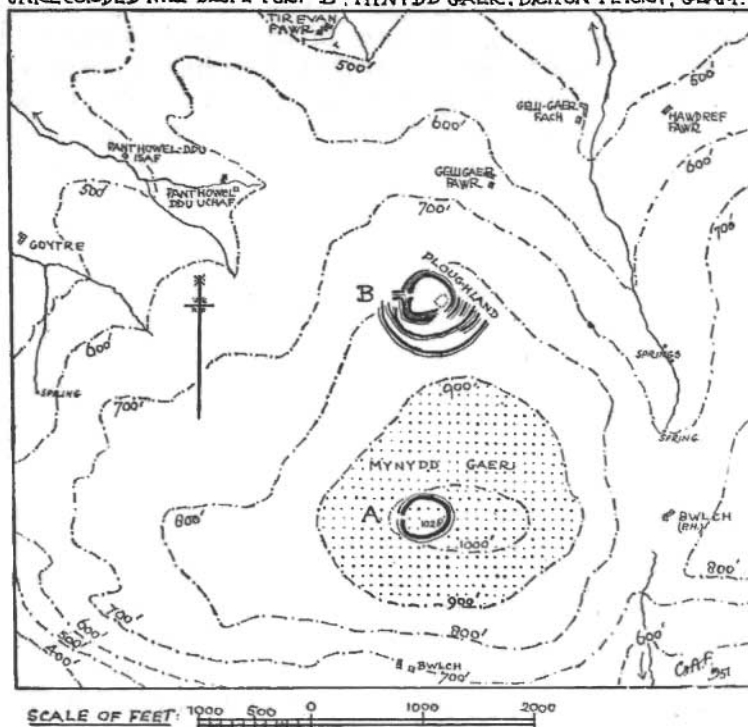


FIG. 1. A, CONTOUR-FORT ; B, HILL-SLOPE FORT CLASS II. ON THIS AND SUCCEEDING PLANS THE FORT RAMPARTS ARE SHOWN BY A THICK LINE, THE DITCHES BY A THIN LINE ; THE HIGHEST GROUND IN RELATION TO THE FORT IS STIPPLED

From the point of view of defence, the choice of such a site has inherent military weakness : what appears to be the main enclosure is on ground that may be as much as 100-200 ft. below the nearest hill-top, lacking a field of view, and thus exposing the inhabitants to observation, missiles, and a surprise rush delivered from the higher ground. Further, little attempt is made to incorporate topographical features such as steep scarps or rocky outcrops in the defences ; this is brought out very clearly on Mynydd Gaer, Briton Ferry (Fig. 1) where the steep falls south and south-west to the Welsh coast at Baglan provide an almost impregnable natural position ; these are utilised by a small ring

work (A), but the main fort (B) is placed on the gentle northern slopes.

The military weakness of the slope situation is further emphasised by the placing of the successive lines of ramparts of the multivallate forts in this series; instead of massing them together to make a formidable perimeter, in the familiar Wessex fashion as at Maiden Castle, the ramparts and ditches are spaced out singly, at varying distances, but generally

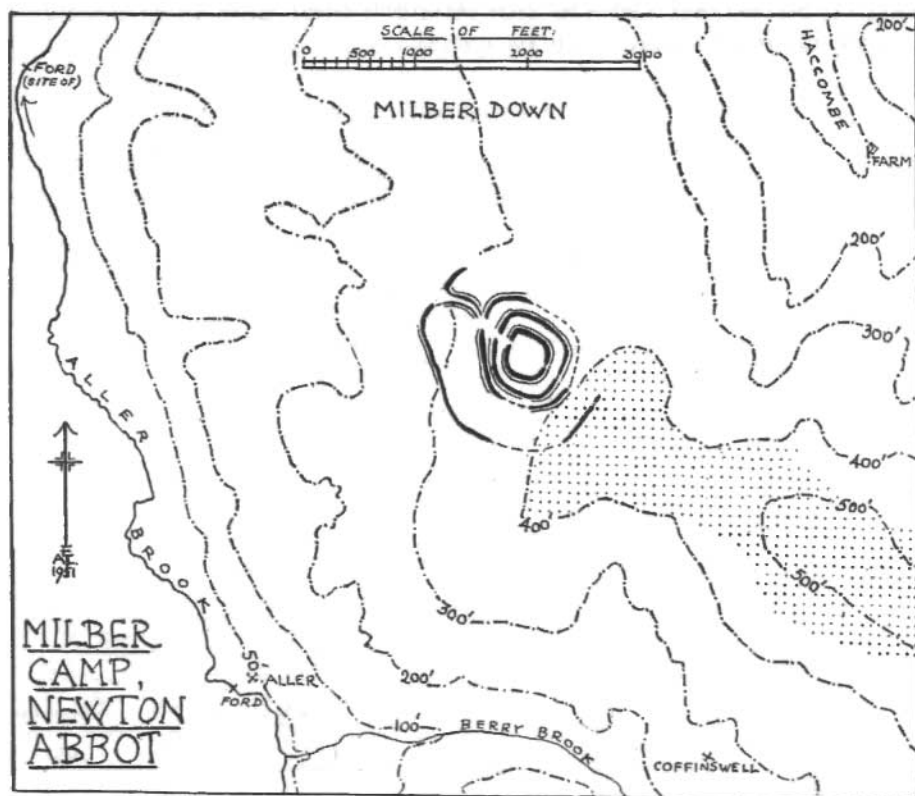


FIG. 2. HILL-SLOPE FORT CLASS II

about 100 ft. apart. In this way the fort is built up of 2, 3, and even 4 more or less concentric enclosures, another hall-mark of the type (Figs. 2-4, 6).

It is noticeable that the ramparts are of no great strength; Milber, in South Devon, is one of the largest constructions, and there the ramparts, starting with those of the inner enclosure, measure superficially (i) 25 ft., (ii) 22 ft., (iii) 17 ft. and (iv) 11 ft. on the scarp, and stand from 5 to 3 ft. high. The largest is the second rampart at Tregeare Rounds in Cornwall (Fig. 6), which is 30 ft. on the inner scarp and 10 ft. high. These figures may be compared with those of a normal strong contour fort, such as

Hembury in East Devon, where the ramparts measure up to 50 ft. on the scarp. In general, the ramparts tend to be uniform in size and they often have a prominent counterscarp bank; in no case is the innermost markedly the strongest, as it is in so many contour forts, and in several cases, e.g. Tregeare, it is noticeably smaller than the outer ones. Excavation has not revealed any signs of interior stone revetments at Milber or Tregeare, such as occur at Maiden Castle or Sudbrook near Port Skewett,<sup>1</sup> and indeed devices for strengthening and heightening such small scale ramparts would not be necessary.

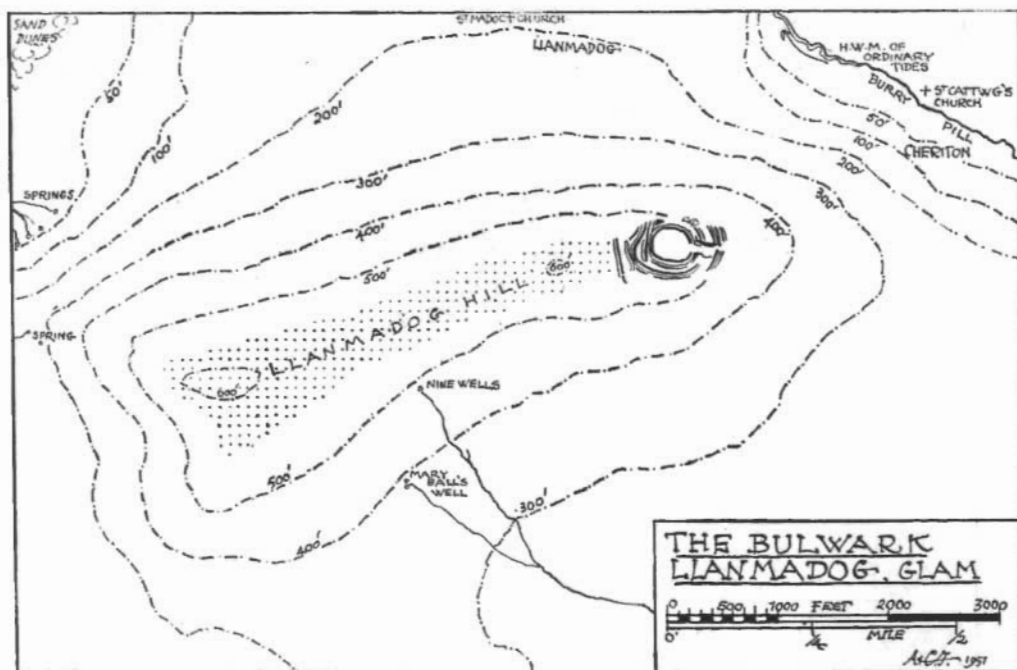


FIG. 3. HILL-SLOPE FORT CLASS II

Another peculiar feature of the ramparts is the construction of short lengths of bank and ditch, starting from an entrance as part of an outer zone: these end at what now appears to be an arbitrary point on the hill side, as at Milber outermost enclosure, Llanmadog Bulwark, and Wooston (Figs. 2, 3, 9). Even if these defences were continued by a palisade, so as to complete the perimeter of the enclosure, or carried on to a natural terminal such as the edge of a steep scarp, the junction would prove to be a weakness if the fort were attacked.

The entrances to these forts are simple. None of the widespread variants of rampart overlap, designed to force an attacker to turn and

<sup>1</sup> *Arch. Camb.* (1939), 46.

expose his fighting arm to the defenders, occur in the series. There is no example of an inturned entrance proper, with the partial exception of Wooston where one flank of the entrance to the 2nd enclosure turns in (Fig. 9). The only feature that is noticeable is the knobbing-up of *one* of the ends of the rampart beside the gate, as at Clovelly Dykes outer enclosure (Fig. 8), Tregeare and Wooston second enclosures, and for that an explanation other than military needs will be put forward in due course. The way into these forts is, in fact, from the lower side, and is nearly always a direct line passing through a simple gap in each of the

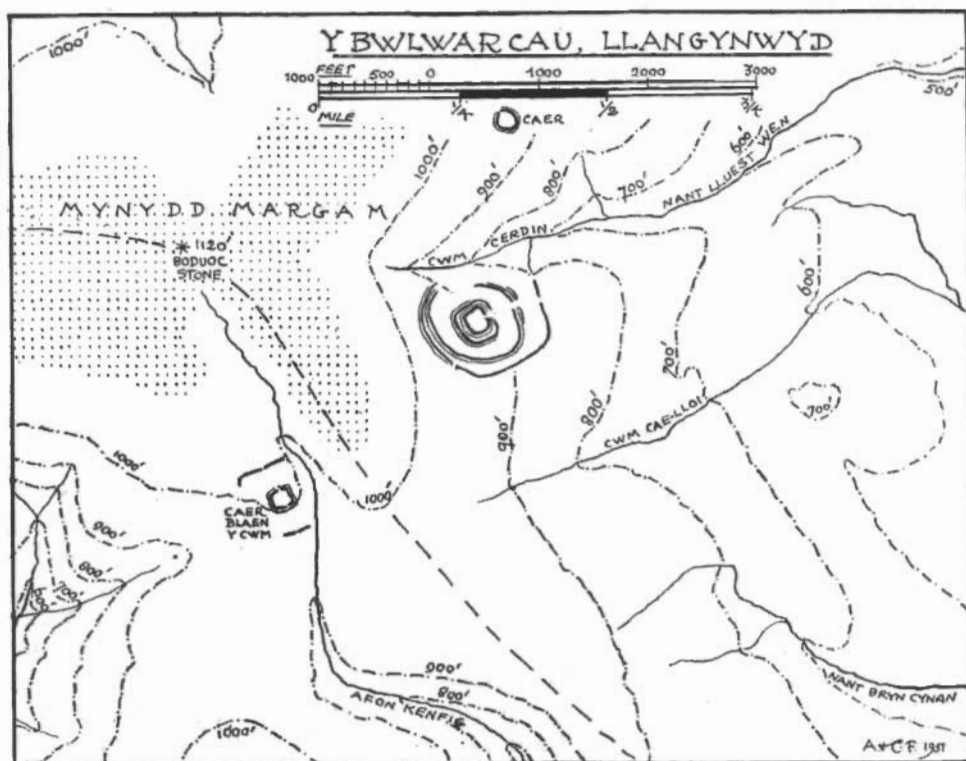


FIG. 4. HILL-SLOPE FORTS CLASS II

successive ramparts. In several cases, e.g. Mynydd Gaer, Milber, Llanmadog Bulwark, Tregeare, Wooston, and Castle Dore, phase I, the route is shown either by an embanked and/or ditched road or worn hollow-way across one of the enclosures (Figs. 1-3, 6, 9). On plans, some of these may look like the 'barbican' entrance as defined by Mr. B. H. St. J. O'Neil and Mr. W. J. Varley<sup>1</sup> and exemplified in our area by

<sup>1</sup> *Arch. Journ.*, cv, 48.



Blackbury Castle, South Devon,<sup>1</sup> but inspection on the ground quickly shows that they have no defensive value. The banks and their shallow quarry ditches flanking the curving track across the outermost enclosure at Milber for example, are only 2 ft. high and cannot be compared with the massive structure at Old Oswestry.<sup>2</sup>

Thus in situation, in design, in scale and details of construction, these forts differ from the normal hill-top citadel of southern Britain.

### III. THE DATE OF HILL-SLOPE FORTS

Excavations have taken place in three multivallate hill-slope forts, at Tregeare Rounds, North Cornwall, by the Rev. S. Baring Gould in 1902, at Castle Dore, South Cornwall, by Mr. C. A. Ralegh Radford and at Milber Down, South Devon, by Mr. F. Cottrill in 1937-8.<sup>3</sup> At all three sites decorated Iron Age pottery of Glastonbury type has been found in stratified deposits; sling stones, spindle whorls and loom weights (though not weaving combs) are also recorded. The cultural affinities of the fort-builders are not therefore in doubt; they belong to the south-western Celtic group of the 2nd-1st centuries B.C. - Early Iron Age B, to use the most convenient label. Since similar pottery has been found in hill-forts in the regions such as Hembury or Llanmelin, it is clear that these odd slope and concentric forts are the contemporaries of the contour and promontory strongholds in the south-west and South Wales, and not their successors, as we suggested originally in the case of Margam Mountain.<sup>4</sup>

Pending an authoritative study of south-western varieties of Glastonbury ware, it is difficult to give close dates for the occupation of individual forts. At Castle Dore Mr. Radford obtained some stratified sequences and was able to assign the decorated pottery of the 1st phase, characterised by scrolls in moulded relief, to the 2nd century B.C.<sup>5</sup> It is in this period that Castle Dore most resembles the hill-slope type, with its inner rampart weaker than the outer, and a simple entrance approached by an embanked way up the slope across the outer enclosure; these features disappeared when the fort was remodelled in the mid-1st century B.C.<sup>6</sup> The pottery from Milber is of later type in which incised designs predominate over the moulded styles; it is assigned by Mr. Radford to the 1st century B.C.<sup>7</sup> At Tregeare only a very little decorated pottery was recorded, of the incised type.<sup>8</sup> From the evidence available, it can be deduced that the building of hill-slope forts began early in Iron Age B in the south-west, but it was not limited to this initial phase.

<sup>1</sup> H. Allcroft, *Earthwork of England*, fig. 70, 198. The fort is now being excavated by Miss K. M. Richardson for the Devon Archaeological Exploration Society.

<sup>2</sup> Varley, *Arch. Journ.*, cv, fig. 3.

<sup>3</sup> See Appendix, p. 20, for references to all the forts.

<sup>4</sup> *Antiquity* (1934), 411.

<sup>5</sup> *J. R. I. Cornwall*, n.s. I. (1951), 78. I am much indebted to Mr. Radford for letting me read the report in MS. before publication.

<sup>6</sup> *Ibid.*, 45-6.

<sup>7</sup> *D.A.E.S.*, iv, 49.

<sup>8</sup> *J. R. I. Cornwall*, xvi (1904), 73, figs. 1-3.

There is, as yet, no evidence that occupation of such forts lasted on into the Roman period, although a survival of the old ways of life is inherently probable in the Highland Zone. At Milber the ditch of the second enclosure had silted up for 3 ft. by the time a small hoard of three attractive Celto-Roman bronze creatures was buried in it in the mid-1st century A.D. Here also during the decade A.D. 40-50 a small fortified homestead was built just outside the outermost enclosure, altering its bank and ditch, and with its fields superimposed on the older work. Mr. Cottrill's excavations showed that this homestead was occupied until *circa* A.D. 80.<sup>1</sup> Thus at Milber the hill-slope fort was deserted well before the conquest, and the Romano-British occupation was higher up the spur and of a different character.

On the other hand, surface finds at Buzbury in Dorset (p. 10) include Romano-British potsherds as well as counter-sunk lug handles of Iron Age B origin, though these may survive to a Roman date occasionally.<sup>2</sup>

#### IV. HILL-SLOPE FORTS AND RELATED EARTHWORKS CLASSIFIED

The forts can be divided into 4 groups. A distinction will now be made between the single rampart (Class I) and the multivallate hill-slope forts (Class II), whilst certain multivallate forts with wide-spaced lines of defence on plateau sites (Class III) and on promontory sites (Class IV) will be considered as related types. Individual forts are listed in an Appendix (p. 20) where 6 ins. map and other references are given: those of Classes II-IV are plotted on Fig. 11, p. 16.

The diversity in relief of the English and Welsh landscape is partly responsible for the variety in the fort plans but the four groups have a common denominator, namely that their forts are constructed on sites which lack natural defences.

##### *Class I. Single rampart hill-slope forts*

A typical example of this simple form is that on the Wenallt, just north of Cardiff,<sup>3</sup> drawn and planned by Sir Mortimer Wheeler as long ago as 1921, and reproduced here for the first time by his kind permission and that of the National Museum of Wales (Fig. 5). The rampart on the upper side hangs on the brow of the hill and the interior slopes steeply to the entrance on the lower side. In some examples the single enclosure has been strengthened by a short extra line of bank and ditch covering the fort on the upper side, as at the lower fort on Hardings Down in Gower<sup>4</sup>: in others, the rampart is larger where it faces the higher ground. There are also small ringworks, as Tokenbury, near Pensilva in East Cornwall, which are tucked away well down the hillside, but are on relatively level ground, so that the slope in their interior is slight: it is

<sup>1</sup> *D.A.E.S.*, iv, 49.

<sup>2</sup> A. Fox, *Roman Exeter*, 85, No. 22.

<sup>3</sup> *Bull. Board Celtic Studies*, i, 75.

<sup>4</sup> *Arch. Camb.* (1920), 221.

difficult to decide in such cases whether their indefensible siting and lower side entrance justifies describing them as hill-slope forts.

*Class II. Multivallate hill-slope forts*

The simplest form is exemplified at Llanquian Wood, St. Hilary, Glam., or at Castle Dore, Cornwall, consisting of an inner and outer

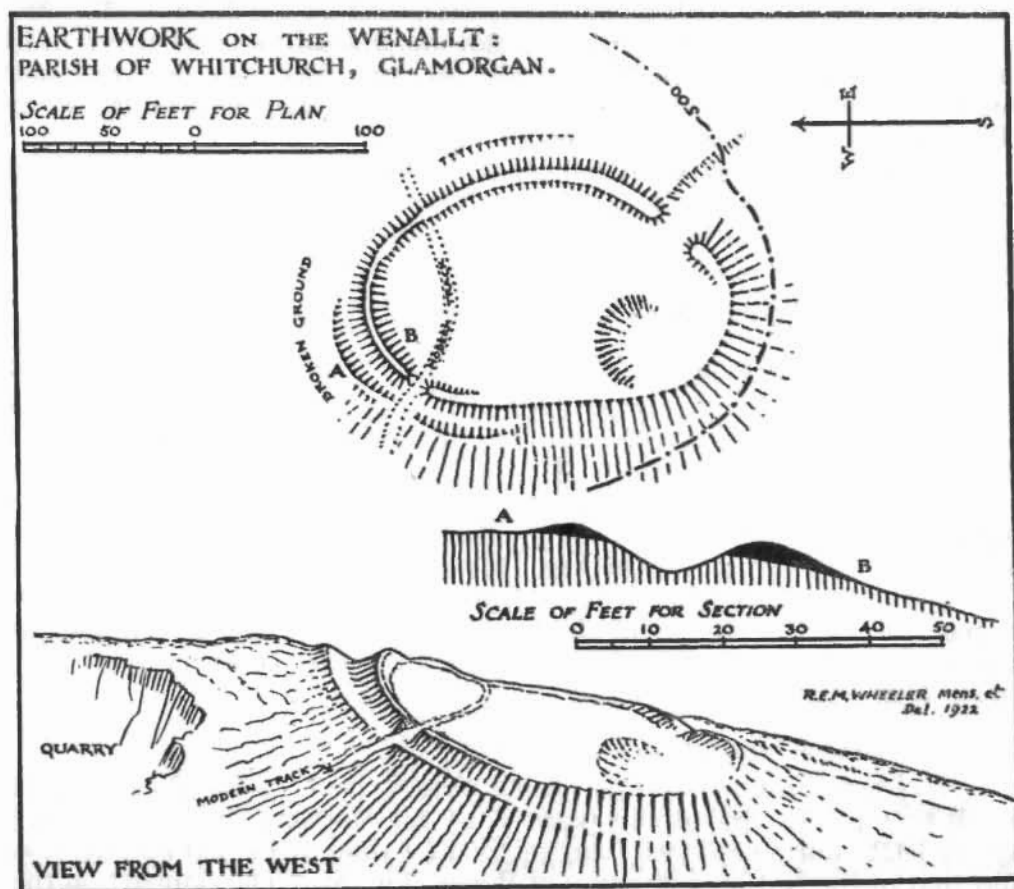


FIG. 5. HILL-SLOPE FORT CLASS I

(Reproduced by permission of Sir Mortimer Wheeler and the National Museum of Wales)

concentric enclosure. The defences of the outer work tend to be larger (c.f. Fig. 8. Clovelly Dykes I). In the more elaborate forts, with 3, 4, or 5 lines of rampart, it is noticeable that the innermost enclosure is very small in comparison with the final perimeter, and that it tends to be squarish in shape, e.g. Milber (Fig. 2), the two Margam forts (Fig. 4). There are no surface indications of huts inside these forts with the exception of Briton Ferry (Fig. 1), where there is a rectangular flat



probably levelled for habitation in the innermost enclosure.<sup>1</sup> Excavation, however, at Castle Dore revealed the post-holes of five or six circular huts in the inner enclosures in Period I. The partial excavations at Tregear and Milber produced evidence of occupation in the 2nd enclosures, though no structures were uncovered ; but no signs of habitation in the innermost enclosure were found at either site.

At three sites in South Wales, Briton Ferry (Fig. 1), Llanmadog Bulwark (Fig. 3) and Margam (Fig. 4), the fort plan is complicated by the insertion of two or three extra banks and ditches on the plateau or upper side. These reduce parts of the outer enclosure to narrow strips and have the appearance of additions to the original plan. They may perhaps be an attempt to strengthen the defences in a crisis, such as that of the Roman advance against the Silures under Frontinus, *circa* A.D. 75.

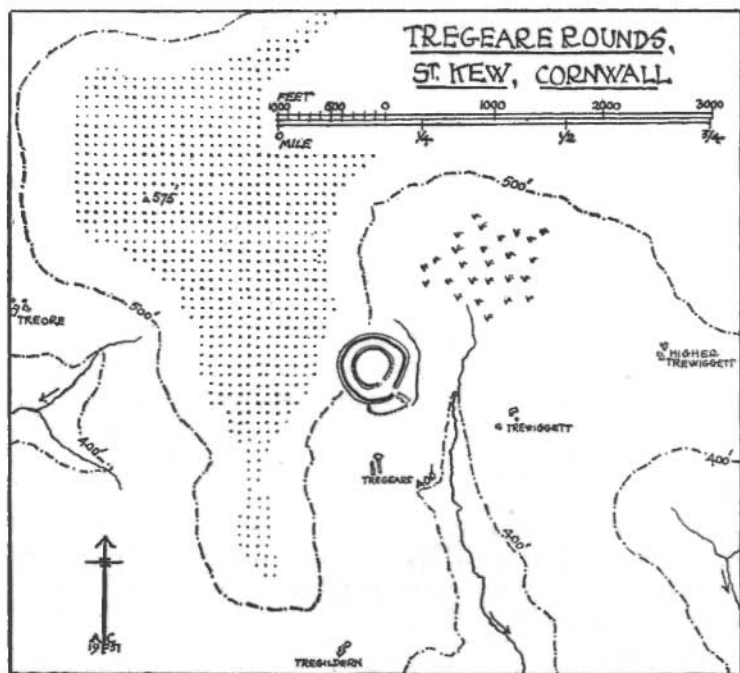


FIG. 6. HILL-SLOPE FORT CLASS II

It is now necessary to consider whether the rings of earthwork of Class II forts are, in general, of one build, or whether there are indications that they were constructed successively. Do these fort plans represent an original design, or have they grown almost casually by successive enlargements? In the case of contour forts the practice of enlargement is well established from excavated examples as at Maiden Castle, as well

<sup>1</sup> This is not necessarily contemporary with the fort as there is a gap in the rampart beside it.

as the multiplication of ramparts due to the needs of sling warfare. In the south-west, single banked 'annexes' to multivallate hill-top forts are of common occurrence, as at Denbury on a hill-top within sight of Milber in South Devon, so it would not be surprising if similar needs for space for an increased population and its stock were reflected in hill-slope forts. Nevertheless (apart from Clovelly, p. 13), the evidence is against it. Mr. Cottrill's excavations at Milber showed no difference in the construction of the three inner ramparts and he concluded that they were of one period. The fourth outermost rampart is a slighter work, which looks secondary, yet, as I have pointed out elsewhere,<sup>1</sup> the alignment of the western arm of the third rampart at the entrance appears to be related to the embanked roadway, which is tied up with the fourth rampart (Fig. 2). At Castle Dore also, Mr. Radford has shown that the two lines of earthwork are contemporary. At Tregear, the excavators did not consider the problem, and since no drawn rampart sections were published there is no evidence for making any deductions. It will be recalled that the innermost rampart at Tregear is smaller than the second one and it might perhaps be argued that as the population grew, the inhabitants constructed a larger and stronger fort, leaving the defences of their original settlement intact as easier than levelling them. I believe that, if this had been the case, gaps in the rampart and causeways across the ditch would have been made from time to time, instead of the innermost zone remaining accessible only from the single entrance on the lower side. These considerations apply also to the South Wales forts of this class.

It should be added that both in South Wales, Devon and Cornwall there are other multivallate forts that have the characteristic wide-spaced lines of defence; examples will be found at Caerau, Llantrisant, Glam.,<sup>2</sup> Prestonbury, South Devon,<sup>3</sup> and Warbstow Burrows, Cornwall.<sup>4</sup> Their sites, however, either incorporate natural defences, or are not markedly sloped, or in rampart or entrance construction have greater affinities with contour forts. Their existence shows that the need for several enclosures was not confined to the hill-slope group and that there was interplay between what may be briefly described as the military and non-military schools of fort architecture.

*Class III. Multivallate forts, with wide-spaced lines of defence on plateau sites*

There are two forts which resemble in plan the concentric forts of Class II, but differ from them in situation, Buzbury Rings in Dorset, and Clovelly Dykes in North Devon. Both are situated on elevated but comparatively level ground, in positions that are not an obvious choice for a defended settlement.

Buzbury Rings is on the broad summit of the chalk ridge dividing the rivers Stour and Tarrant, two miles SE. of Blandford Forum. It has

<sup>1</sup> *D.A.E.S.*, iv, 32.

<sup>2</sup> *Bull. Board Celtic Studies*, xiii, 154.

<sup>3</sup> *V.C.H., Devon*, i, 595.

<sup>4</sup> *V.C.H., Cornwall*, 463, plan.



(A) CLOVELLY DYKES, N. DEVON, AIR-PHOTOGRAPH FROM S., LOOKING TOWARDS THE COAST.  
THE DEEP SHADOW COVERS THE PERIOD I FORT



(B) CLOVELLY DYKES, AIR-PHOTOGRAPH FROM N. THE PERIOD II FORT ENTRANCES TO  
W. ENCLOSURES ARE IN THE FOREGROUND. EAST DYKES FARM IS ON THE LEFT  
(Photographs lent and reproduced by permission of Mr. J. H. Hilton)



been planned and described by Heywood Sumner,<sup>1</sup> Crawford<sup>2</sup> and others, and has always been recognised as a work puzzlingly different from the great hill-forts of the district such as Spettisbury or Badbury. It resembles the south-western multivallates in the small scale of its defences, and in their wide spacing, forming two if not three, enclosures. From north to south the site is level, but from west to east the ground falls gently towards a wide chalk 'bottom'; the defences of the outer enclosure descend 30 ft.

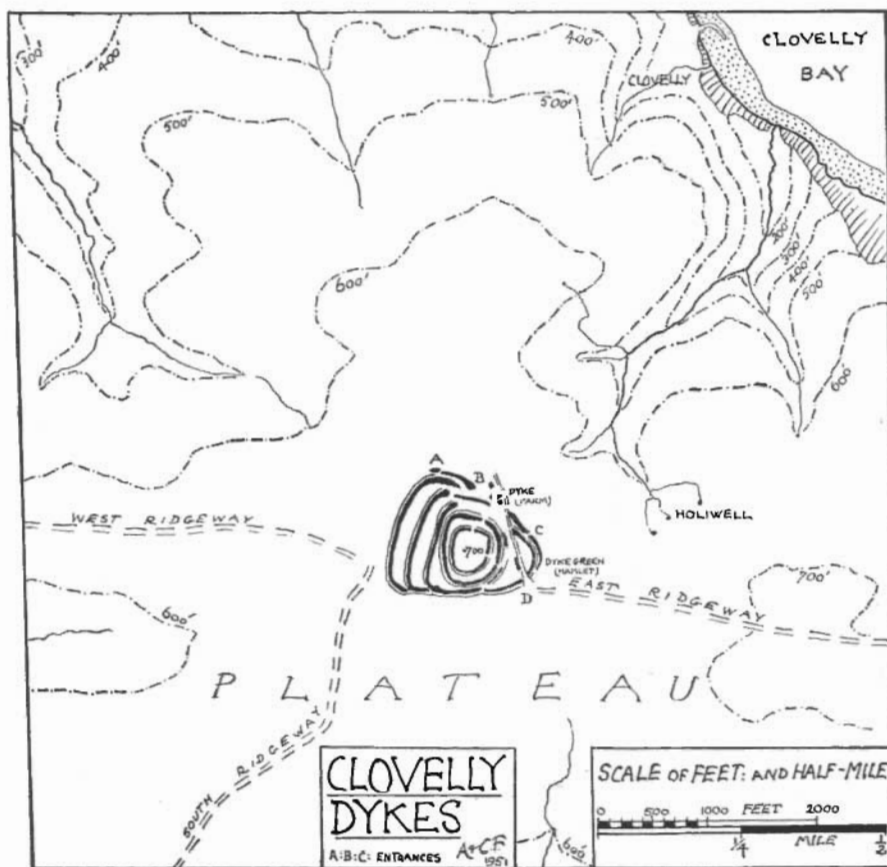


FIG. 7. CLASS III PLATEAU FORT

down this incline, to the east of the Blandford-Wimborne road which cuts diagonally across the fort. The main entrance<sup>3</sup> is on the SW. and is marked by the knobbing-up of rampart terminals in the south-western

<sup>1</sup> *Earthworks of Cranborne Chase*, pl. VIII, 25.

<sup>2</sup> *Wessex from the Air*, pl. V, 64.

<sup>3</sup> It is impossible to say whether there were any other entrances on the N. or E. sides as the earthwork is so fragmentary. The gaps on the

W. do not appear to be original. The main entrance is not distinguished on Sumner's plan: the Wimborne road crosses the outer entry diagonally; the inner entry, with its inturn, lies to the W. of the road.



manner, and by a slight semi-inturn on the west side. The chief approach, then, was not on the lower side as in most of these forts, but from the plateau over Keynston Down, along the axis of the ridge. On this side, too, the defences converge and are strengthened by an additional length of rampart<sup>1</sup> reminiscent of the Briton Ferry, Llanmadog, and Margam forts (Figs. 1, 3, 4).

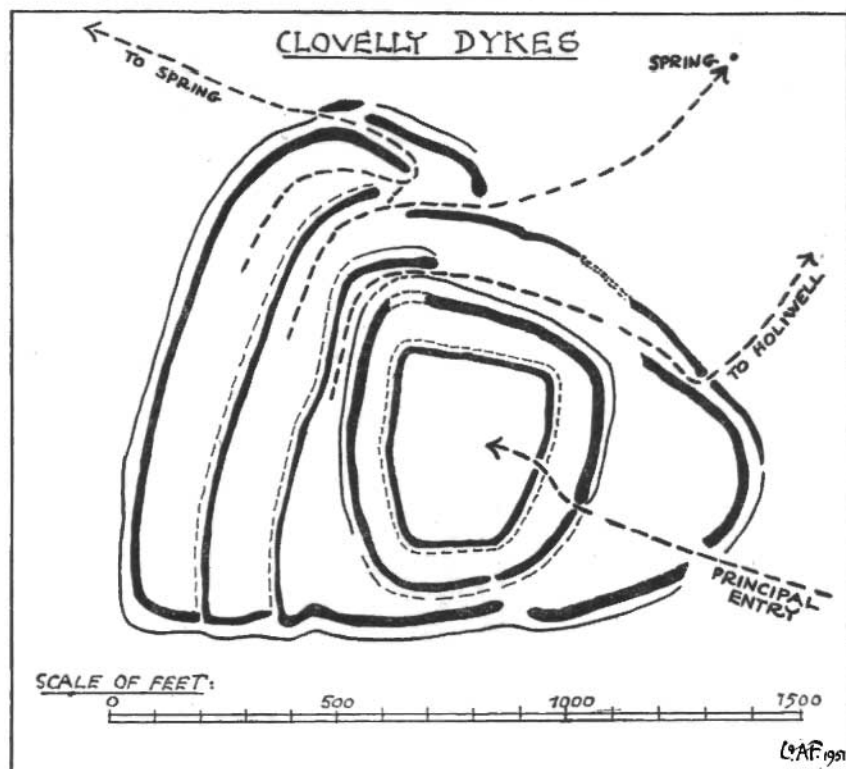


FIG. 8. DIAGRAM SHOWING PERIOD II ENTRANCES. THE HEAVY BROKEN LINES SHOW CONJECTURAL TRAFFIC WAYS; THE LIGHT BROKEN LINES SHOW WHERE THE DITCHES HAVE BEEN PLOUGHED IN

Clovelly Dykes is a far finer work than Buzbury, of great extent and complexity, and of much interest. I am very grateful to Mr. and Mrs. J. Hilton, the tenants of East Dyke farm, for permission to study it on several occasions, and for their kindness and interest in the site. The excellent air photographs (Pl. I) were taken specially for Mr. Hilton and he has generously allowed their reproduction.

The fort is situated about a mile inland, on the wind-swept North Devon plateau, at the base of the Hartland peninsula. Although on level ground at about 700 ft. above sea level, it occupies a nodal point in the

<sup>1</sup> Not planned by Sumner but visible as an undulation in the arable field and in the air-photo.

hill system, being on the watershed at the junction of three ridgeways (Fig. 7).

The earthwork appears to be of two, if not three periods (Fig. 8). In the first, it was a double concentric enclosure of the familiar type, sub-rectangular in outline. It lies in shadow on Pl. IA. The outer enclosure was the more strongly defended, the second rampart measuring 26 ft. on the scarp in comparison with 16 ft. of the first. The entrance was on the east side; its position is certain because the terminals of the second ditch are preserved, although the passages through the ramparts have been widened and the inner ditch ploughed in.

In the second phase, the fort was greatly enlarged by the addition of three rectangular strip-like enclosures on the west side, and by a semi-circular enclosure on the east side, involving the construction of approximately a mile and a half of new earthwork. As in the first phase, the defences of the final perimeter are stronger than those of the secondary internal divisions. On the southern and western sides there are signs that an alteration in plan took place, perhaps in the course of construction. The third rampart starts to curve in, as though it were intended to follow the course of the two inner enclosures; instead it stops, and returns to its original course and makes the junction with the fourth enclosure practically at right angles (Pl. IB). This alteration suggests that it was at first planned to enlarge the fort by making it into a triple concentric work; this cannot be proved, however, without excavation.

On the eastern side of the fort, the farms of East Dyke and Dyke Green have been built into the earthwork and the main road to Clovelly also cuts across it, so that it is impossible to be certain of every detail of the complex.<sup>1</sup> It is clear, however, that the principal entrance to the inner enclosures continued to be used in Period II/III, and after crossing the new semi-circular enclosure in the same direction, debouched on the E.-W. ridgeway through the gap used by the modern road at Clovelly Cross (D on Fig. 7).

The entries to the other new enclosures were quite separate, and were all three on the northern, lower, and seaward side (A, B, C, on Fig. 7). Each opening faces in the direction of the springs at the head of the little valleys falling steeply to the coast. There is a pronounced knobbing of the rampart terminal on the right flank of the central entry at B, whilst that at A was screened by two short lengths of extra earthwork and also marked by an inturn of the outermost rampart (Pl. IB). Each of the strip-like western enclosures could be reached from any of the three entries, in the ways shown by the heavy dotted lines on Fig. 8, passing through wide gaps (14-20 ft.) and past the knobbed rampart ends.

<sup>1</sup> It is not certain whether the hedge bank behind Dyke Green farmyard is the remnant of an original bank as shown on the Ordnance Survey map, and if so, when it was gapped.

It is also impossible to know what happened to the two outer banks in East Dyke farm and garden, and whether there was yet another entry here.

The way into the third enclosure on the west is, in contrast, restricted to a narrow 6 ft. passageway along the margin on the second ditch; that this was intended as an entry is shown by the characteristic terminal knob to the third rampart. It is possible that there was a similar narrow way into the semi-circular enclosure on the east side, but if so, East Dyke farm, garden and the road cutting have obscured it.

It should also be noticed that on the south side the ditches of the two western enclosures cut through the outermost rampart, and that there is a third breach at the junction of the eastern semi-circular enclosure. A visit to the fort after the prolonged winter rains of 1951 showed that these gaps acted as drainage channels to each of the outer enclosures, emptying into the external ditch, which is here both broad and deep. They could never have been entries to the fort.<sup>1</sup>

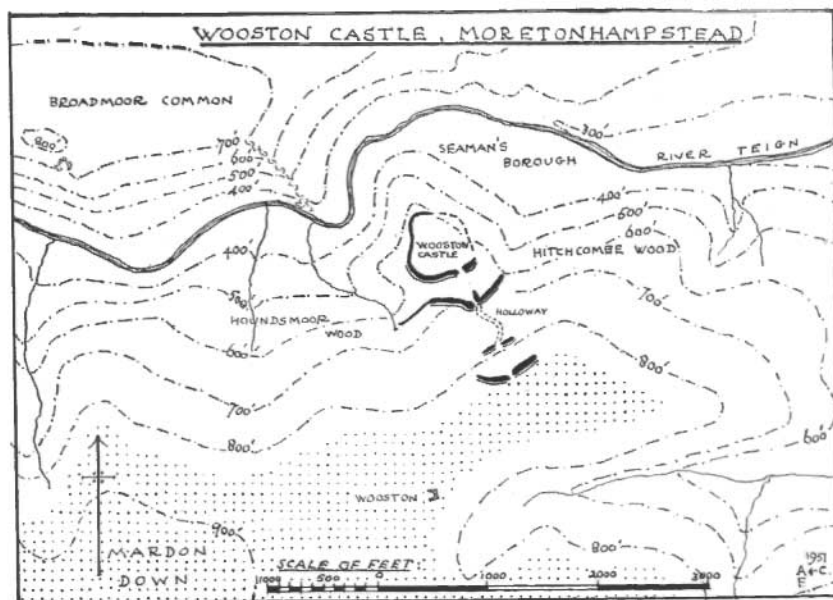


FIG. 9. CLASS IV FORT

Whilst the interest of Buzbury is mainly its position as an outlier of the south-western group in an area of strong contour works, Clovelly Dykes, in its second phase with its multiple enclosures and entries, shows more clearly than any other example that economic rather than military needs governed its layout. These needs included access to water, and flexibility of approach to and exit from the outer enclosures: they may provide the clue to the interpretation of this vast construction.

<sup>1</sup> As suggested in *V.C.H., Devon*, 593.

*Class IV. Multivallate forts with wide-spaced lines of defence on promontory sites*

Wooston Castle (Fig. 9) on the south bank of the Teign near Moretonhampstead, Devon, is a structure that resembles the hill-slope forts in certain ways, yet its peculiar plan and situation demand it be assigned to a separate category. The whole fort lies on sloping ground between Mardon Down and the edge of a precipitous fall to the river, running in a wooded gorge, 250 ft. below. Thus, whilst the inner zone has good natural defences on the north, the fort as a whole is at a disadvantage in relation to the plateau.

The innermost zone is probably a complete enclosure<sup>1</sup> on the end of the bluff jutting into the gorge. The second enclosure is defined by a bank and ditch, stronger than the inner one, drawn across the neck and with its ends resting on the steep scarps in the manner of a promontory fort; the western end has been extended by a slighter bank along the edge of a re-entrant in the gorge as far as the spring head. Two more outer zones are indicated by short lengths of earthwork aligned along the contour, 100 to 200 ft. higher up the hillside: these may have been extended by palisades, as has been conjectured at Milber or Llanmadog.

The whole fort is entered steeply downhill through simple gaps in the two outer lines of ramparts. The way between the second and third lines is a remarkable hollow-way which winds downhill in an S curve, deepening as it goes. The entry to the second enclosure has a characteristic knobbed rampart end on the west side and a well marked inturn on the east. The entry to the innermost zone is again a simple gap.

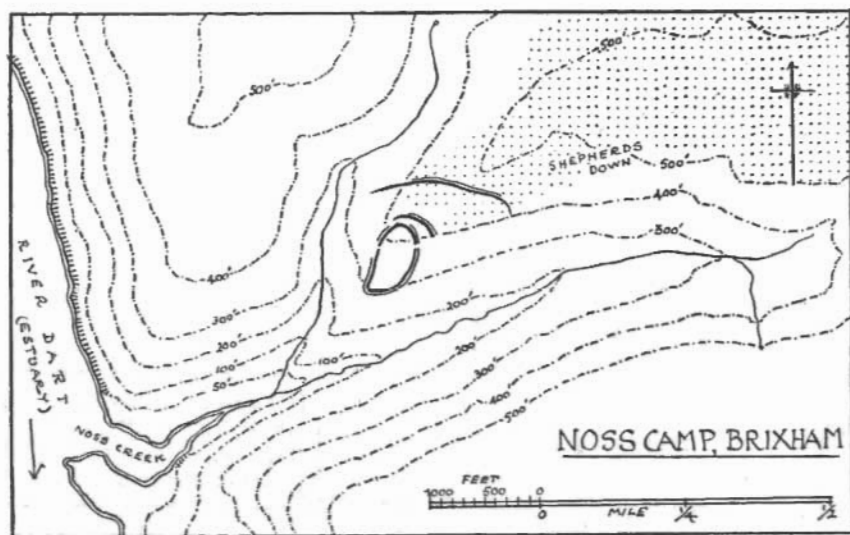


FIG. 10. CLASS IV FORT

<sup>1</sup> The plantation here was too thick to penetrate in March, 1949-50, and trace the eastern side.

One other Devon fort, Noss Camp, near Kingswear on the lower Dart (Fig. 10) also combines promontory and slope techniques. The inner enclosure occupies a steeply sloping end of a spur between two streams which unite at Noss creek: it is strengthened by an extra semi-circle of bank on the upper side in the manner of a Type I fort. The outer enclosure, which may be an addition, is formed by a rampart drawn across the spur 100 yards distant, in the normal manner of a promontory fort. The entrances to the inner enclosure appear to be at the sides, but modern field roads have confused them.

## V. THE DISTRIBUTION OF HILL-SLOPE FORTS

Forts of Classes II-IV are mapped on Fig. 11: it will be seen that they are limited to South Wales and south-west England, to the territory of the Dumnonii and the Silures, with one outlier, Buzbury, a little farther to the east in the territory of the Durotriges. It has not been possible to

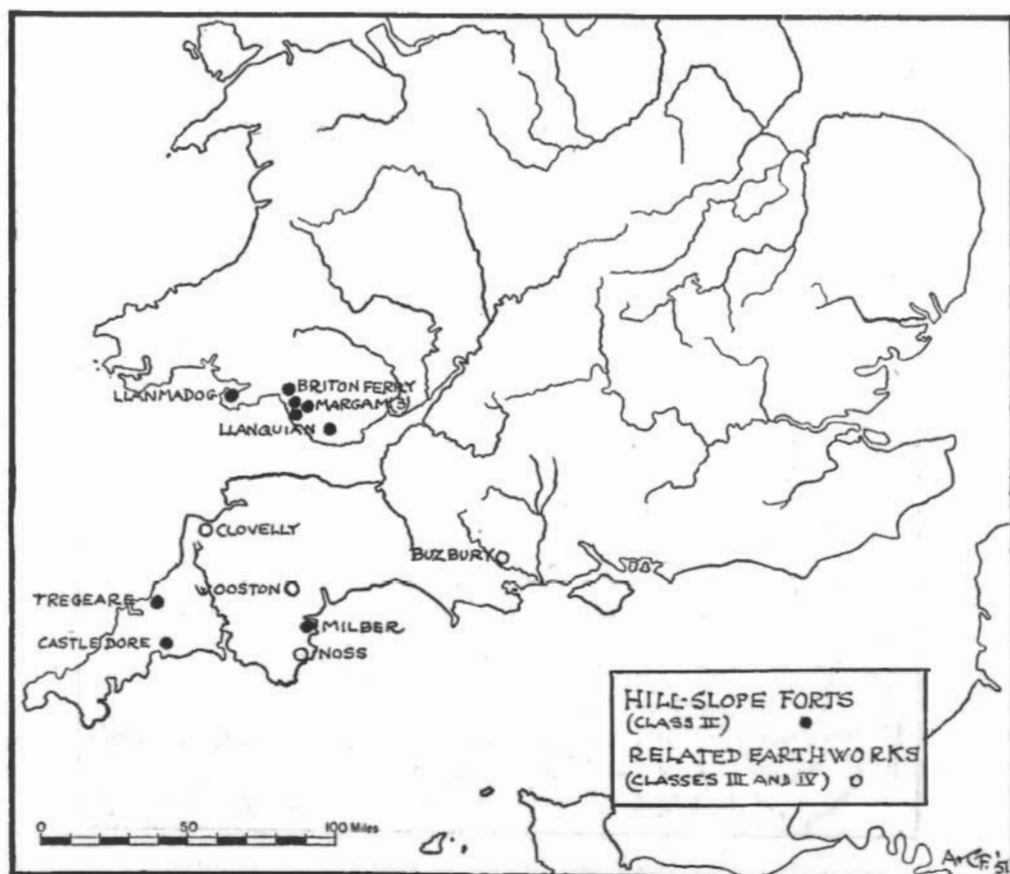


FIG. 11. DISTRIBUTION MAP



pursue field research over a wide area outside the south-west,<sup>1</sup> but discussion with workers in other areas since 1934 has not produced any real analogy for the multivallate hill-slope forts.

The pattern, as known at present therefore, is strongly south-western and predominantly coastal. Several forts are near estuaries or harbours, as Milber on the Teign, Tregeare near Port Isaac, Llanmadog Bulwark near Cheriton Pill, whilst Clovelly Dykes, the Margam forts and Briton Ferry are very near the Bristol Channel coasts. The pattern suggests settlement by peoples coming by the western sea route, up the Bristol Channel, and along the southern English coast. Although localised in distribution, these forts are not the sole nor indeed the dominant type in a district; they occur side by side with contour hill-top and promontory forts, as for example, Mynydd Castell at Margam, Glam.,<sup>2</sup> or Denbury or Berry Wood close by Milber in South Devon.<sup>3</sup> It is possible that a development of sea trade in these areas by certain groups would explain the distribution equally well (p. 20).

The distribution of Class I hill-slope forts is likely to be more extensive. An inspection of the 6 in. maps shows that they are probably widespread in Cornwall, but it has not been possible to check them on the ground. In South Wales eight sites are known and have been listed by Dr. Savory recently.<sup>4</sup> Dr. Angus Graham has kindly informed me of their existence in south-west Scotland in Dumfriesshire and Peebles<sup>5</sup>; this opens up interesting possibilities of a seaward movement up the western coasts such as the late Sir Lindsay Scott has postulated in the case of the brochs and aisled houses of the north-west.<sup>6</sup> It is hoped that this paper will attract the attention of field workers in different areas and that information will be forthcoming on which a revised map could be based, including Class I forts.

## VI. THE MULTIVALLATE HILL-SLOPE FORT INTERPRETED

The previous sections of this paper have dealt factually with these forts; in conclusion an attempt will be made to explain them.<sup>7</sup> The interpretation is put forward as a hypothesis to be tested by future field work and excavation. It will have served its purpose if in any way it helps to start new trains of thought concerning the economy of the Early Iron Age.

First, the salient points on which an interpretation must be based can be summarized as follows:

- (a) The forts are not designed primarily for military needs;

<sup>1</sup> I am personally acquainted with the majority of hill-forts in Wales in the counties of Glamorgan, Monmouth Carmarthen, Anglesey and Caernarvon, and in England, Devon and Somerset, and to a lesser extent, Gloucestershire and Dorset: for Cornwall the 6 inch O.S. maps have been examined.

<sup>2</sup> *Bull. Board Celtic Studies*, xiii, 154.

<sup>3</sup> *Roman Exeter*, fig. 2, 4.

<sup>4</sup> *Bull. Board Celtic Studies*, xiii, 160.

<sup>5</sup> See p. 22.

<sup>6</sup> *P.P.S.* (1947), 1, and (1948), 46.

<sup>7</sup> It does not necessarily apply to the simple Class I forts.

- (b) they were built by an Iron Age B folk, culturally indistinguishable from the builders of contour and promontory forts ;
- (c) they are localised in distribution in the south-west but occur in districts alongside normal hill-forts ;
- (d) the building of these forts is not limited to a short phase of Iron Age B.

From these considerations it appears that the forts must have served a special and a constant need of the Iron Age B population in the south-west, and that need was economic rather than military. Turning to the forts themselves there are two points to be stressed ; first that the position of the entrances and the associated hollow-ways on the lower side shows that the inhabitants had an interest in the traffic to and from the valley slopes ; and secondly, the plans are devised to provide a number of self-contained enclosures.

The explanation I want to put forward is that the main occupation of these fort builders was cattle keeping ; and that safety for their herds from raiders and from wild animals was as important to them as their own. The chief needs of pastoralists are grazing, and water for their stock ; all the multivallate forts are within easy reach of extensive grazings, either on the upland above the tree line as on Margam Mountain or Mardon Down, or on coastal tracts as Milber Down or near Clovelly. The west country is still predominantly pastoral because the mild winters and heavy rainfall provide permanent grazing, and the climatic conditions of the Early Iron Age are held to be similar to those uncertainties now prevailing.

Similarly the forts, by being on the hill-slopes, are near to water. The entrances, as at Milber or Tregeare (Figs. 2, 6), open downhill at the nearest point to the stream in the valley, or, as at Briton Ferry or Clovelly II (Figs. 1, 7), on the side facing the spring heads. The deep worn hollow-way at Wooston (Fig. 9) and that formerly existing at Tregeare could only have been caused by frequent and heavy animal movement down the slopes across the outer enclosures. Salt, or a salt-lick, is another need of cattle and it would be easy to obtain in the neighbourhood of the forts, the majority of which are near the coast.

The daily needs of milking and segregating the herds could explain the building of the multiple enclosures, particularly where they are planned, as at Clovelly II (Fig. 8), so that movement from one to the other is made easy. Whilst, perhaps, in many cases the herds ranged widely, at regular intervals all the beasts would need to be rounded up and brought to the settlement for marking, or gelding, or for the autumn slaughtering. Thinking of the great press of small cattle coming up to the gates on such occasions, it is evident that the knobbed rampart terminals (previously described at Clovelly, Tregeare and Wooston) would provide a vantage point for an overseer directing operations, out of the way of the trampling and with a view of the progress of the herd. The embanked entrance ways (as at Briton Ferry, Milber and Llanmadog (Figs. 1-3) ) would also function on such occasions, by preventing

stock on their way in or out from straying or trespassing on enclosures that may have been cultivated.

The function of the different enclosures probably varied from fort to fort; excavations at Milber and Tregeare have hinted that permanent dwellings were not set up in the innermost enclosure, and it may be that some of these forts were designed only for occasional use by herdsmen. On the other hand, much labour has gone into the building of these elaborate earthworks, which implies that defence of the herds by the whole tribe was envisaged in time of internecine war. On such occasions it might be better to pen the cattle in the innermost enclosure so as to avoid a stampede, and to concentrate the defence on the second or other outer line of rampart. It has been pointed out that the innermost zone is often weaker than the outer, as at Tregeare or Wooston, and that ramparts are reinforced on the perimeter as at Llanmadog or Margam (Figs. 3-4).

Cattle keeping is mentioned by ancient writers describing Britain before the Roman conquest. Caesar comments on the great store of cattle (*pecorum magnus numerus*<sup>1</sup>), in Kent: he also mentions tribes in the interior who lived on milk and flesh and wore skins, implying that these were pastoralists.<sup>2</sup> Strabo lists cattle second only to corn in British products that were exported.<sup>3</sup> Both writers give us a glimpse of the herds brought into hill-forts. A great quantity of cattle was found, according to Caesar, in Cassivellaunus' stronghold north of the Thames (? Wheathampstead) after the successful Roman assault.<sup>4</sup> Strabo describes the British custom of building a timber stockade in the woodland with temporary huts, where the cattle were lodged for a short time.<sup>5</sup> It is evident from these writers that cattle keeping was an important item in Early Iron Age economy in general, although it is uncertain whether either writer intended his information to be applied to the Dumnonii or the Silures in particular.

Cattle are still units and symbols of wealth amongst primitive peoples to-day and much can be learnt from the survival of such economies. For instance, amongst the Masai of East Africa<sup>6</sup> such young men as are not needed to look after the beasts are organised in warrior bands, and live in separate kraals from the remainder of the tribe. Their job is to defend their herds when attacked, and to raid their neighbours' cattle in return. Such an arrangement provides a suggestive analogy for the Celtic heroic age in the south-west, where the hill-slope forts and normal *oppida* occur in the same district. The Masai also put their beasts in the centre of their encampments at nights.<sup>7</sup>

Finally, one last suggestion; cattle and hides are both mentioned by

<sup>1</sup> *B.G.*, v, 12.

<sup>2</sup> *Ibid.* v, 14.

<sup>3</sup> *Geog.*, Bk. iv, ch. v, 2.

<sup>4</sup> *B.G.*, v, 21.

<sup>5</sup> *Geog.*, Bk. iv, ch. v, 2. Possibly the counter-

part of Milber existed in S.E. Britain, constructed in timber on some hill-slope.

<sup>6</sup> See C. Daryll Forde, *Habitat, Economy and Society*, ch. xiv generally, and p. 297.

<sup>7</sup> *Antiquity* (1934), 432.

Strabo amongst the exports from Britain to Gaul in Augustan times<sup>1</sup>; might not this be the explanation of the building of so many of these forts near estuaries and harbours where a Gallic merchantman might lie to take-on such a cargo? The Roman world had need of hides especially for military equipment, and in Gaul the Veneti, Caesar tells us,<sup>2</sup> used leather for their ships' sails; did they come to Britain<sup>3</sup> for the raw material? Another point in favour of an overseas trading connection for one of these forts may be mentioned. Buzbury on the Stour lies in the hinterland of the great Dorset harbours at Christchurch (Hengistbury) and Poole. Just across the river is Charlton Marshall, the parish in which the Rev. Thomas Rackett made a collection of Greek coins in 1836,<sup>4</sup> now in the Ashmolean. Dr. Milne has identified ten bronze coins from Charlton, mostly 3rd and 2nd centuries B.C. issues of Greek cities and rulers in Sicily, Macedon, Syria and Bithynia.<sup>5</sup> These are good evidence for foreign trade; in return what products other than the archaeological intangibles listed by Strabo—corn and cattle—could the Durotriges of this district have to offer? Perhaps an old antiquary was not so very fanciful when he described Buzbury as 'the Smithfield of the Durotriges'.<sup>6</sup>

# APPENDIX I

## FORTS OF CLASSES II-IV

MAPPED ON FIG. 11

<i>Site and Parish</i>	<i>County</i>	<i>6 in. Map</i>	<i>Enclosures</i>	<i>Entrances</i>	<i>Class</i>	<i>References</i>
Briton Ferry, Gaer Fawr	Glamorgan	25 NW.	3	Embanked	II	Fig. 1
Buzbury Rings, Tarrant Keynston ph.	Dorset	24 SE. and NE.	2-3	Knobbed outer rampart, innermost in- turned on W.	III	Sumner, <i>Earthworks of Cranborne Chase</i> , 25.
Castle Dore, Golant St. Samson ph.	Cornwall	51 SE.	2	Embanked, Period I	II	Radford, <i>J. R. I. Cornwall</i> , n.s. I
Clovelly Dykes, Clovelly ph.	Devon	17 SE.	2 5	Simple period I, Knobbed period II	III	Figs 7-8

<sup>1</sup> Strabo, *Geog.*, Bk. iv, ch. v, 2.

<sup>2</sup> Caesar, *B.G.*, iii, 13.

<sup>3</sup> *Ibid.*, iii, 8. An iron anchor held by a chain in the Venetian fashion was found in a small hill-fort at Bulbury, Dorset, near Poole harbour, suggesting that they voyaged to this part of the

south coast. *Archaeologia* 48, 115, Dorchester Museum.

<sup>4</sup> J. G. Milne, *Finds of Greek Coins in the British Isles*, 5 and 18.

<sup>5</sup> *Ibid.*, 24 and 34.

<sup>6</sup> Richman, *Proc. Dorset A.S.*, iv, 95.

<i>Site and Parish</i>	<i>County</i>	<i>6 in. Map</i>	<i>Enclosures</i>	<i>Entrances</i>	<i>Class</i>	<i>References</i>
Llanmadoc ph., the Bulwark	Glamorgan	21 SE.	3?	Embanked	II	Fig. 3 and <i>Bull. B.C.S.</i> , viii, 336
Llanquian Wood, Llanblethian ph.	Glamorgan	45 NE.	2	Simple	II	<i>Bull. B.C.S.</i> , i, 171
Margam, Y Bwlwarcau Llangynwyd ph.	Glamorgan	34 NW.	4	Simple	II	Fig. 4 and <i>Antiquity</i> (1934), 398
Margam ph. Gaer Blaen y cwm	Glamorgan	33 NE.	2	Simple	II	Fig. 4 and <i>Antiquity</i> (1934), 400, Fig. 3
Margam ph. Cwm Phillip	Glamorgan	33 NE.	2	Simple	II	<i>Antiquity</i> (1934), 400, Fig. 2
Milber Down, Coffinswell ph.	Devon	110 SW. 116 NW.	4	Embanked 3rd enclosure	II	Fig. 2 and <i>D.A.E.S.</i> , iv., 27
Noss, Brixham ph.	Devon	138 NW., SW.	2-3	Uncertain	IV	Fig. 10
Tregeare Rounds, St. Kew ph.	Cornwall	19 NE.	3	Knobbed inner ramparts; hollow-way outer enclosure	II	Fig. 6 and <i>J.R.I.</i> <i>Cornwall</i> , xvi (1904), 73
Wooston Castle, Moretonhampstead	Devon	78 SE.	4	2nd rampart knobbed and inturned; hollow-way 2nd enclosure	IV	Fig. 9

## APPENDIX II

## HILL-SLOPE FORTS AND RELATED EARTHWORKS

## NOT SHOWN ON FIG. 11

The following sites have been brought to my notice since this paper was read to the Institute :—

## CORNWALL

Perranzabuloe, Caer Dane. Cornwall 48 SW. Four concentric enclosures, partly on the slope; the two outermost banks have been levelled; entrance on the upper side: perhaps a Class II fort.



St. Martin in Meneage, Caer Vallack, Gear and Tremayne. Cornwall 76 SE. and 77 SW. Mr. C. A. R. Radford has drawn my attention to this group of three forts on the Helford estuary, which are not crest-sited : possibly related types.

#### SUSSEX

Goosehill Camp, Bowhill. Sussex 48 NW. Mr. I. D. Margary drew my attention to this small-scale earthwork on the downs NE. of Chichester. It has two concentric enclosures, slope-sited, outer entrance on upper side. See Allcroft, *Sussex Arch. Coll.*, lviii, 81, with plan. Probably a Class II fort.

#### SCOTLAND

Bankhead Hill, Dumfriesshire. Mrs. Alison Young told me of a circular earthwork, built on sloping ground at 700 ft. with an extra bank on the upper side; ramparts are of turf with a stone revetment; simple entrance, on lower side facing river Esk. Probably a Class I fort.

Dr. Angus Graham writes : ' I have seen these forts chiefly in Eskdale, Dumfriesshire, and one or two in Peeblesshire. The type of structure I have in mind often sits on the shoulder of the hill in a totally indefensible position. It has a plain wide entrance at the lowest point, and is generally scooped out inside the entrance and has occupation terraces at the inner (upper) end. Sometimes they are not even on a hill shoulder but quite near the bottom of a valley, for example, on a low cliff above the haugh. In my experience they do not have multiple enclosures and their distribution is not coastal '.