

## A LATE BRONZE AGE SETTLEMENT ON TREWEY DOWNS, ZENNOR, CORNWALL

By DOROTHY DUDLEY

The excavation of the settlement at Trewey-Foage, Zennor, was made to discover its characteristics and its age and to develop the work of determining the relationship between the many groups of ancient settlements that are to be found in Cornwall both on the moor and elsewhere: hitherto, no modern excavation of the earlier sites has been made and knowledge concerning them has rested on analogies from other areas<sup>1</sup> examined many years ago.

### TOPOGRAPHY.

The moorland where this settlement lies forms part of the undulating plateau, from six to seven hundred feet above sea level, which occupies the central portion of West Penwith, the westernmost hundred of Cornwall. This location differentiates the settlement from that of the Courtyard Houses which are not found on this plateau but occupy the lower hill slopes at a height of three to five hundred feet.<sup>2</sup> The site lies on grey biotite granite which extends from Castle an Dinas, northwards and westwards for an area of about seven square miles. Chysauster and Trewey-Foage are the only sites in Cornwall yet excavated on this kind of rock. This granite differs considerably from the porphyritic granite<sup>3</sup> of which the Romano-British village of Porthmeor is built, being more uniformly crystalline and of finer grain; it is known locally as 'whitstone' and gives this name to several fields in the vicinity, but it is softer than the commoner variety and weathers into smaller blocks. These lie scattered on the moor offering an ever-ready supply of building material. This moorland is largely uncultivated and covered with a loose growth of grass,

<sup>1</sup> Hencken, *The Archaeology of Cornwall and Scilly*, 97-103; Hirst, *J.B.A.A.*, ii, 3rd series, 95.

<sup>2</sup> *Ibid.*, 76-7.

<sup>3</sup> *J.R.I.C.*, xxiv, appendix ii, 1937, 3.

bracken, heather and gorse. At the time when the settlement was inhabited the scene was much the same but for a growth of scrub-like trees on the slopes rather like that seen at Wistman's Wood on Dartmoor.<sup>1</sup>

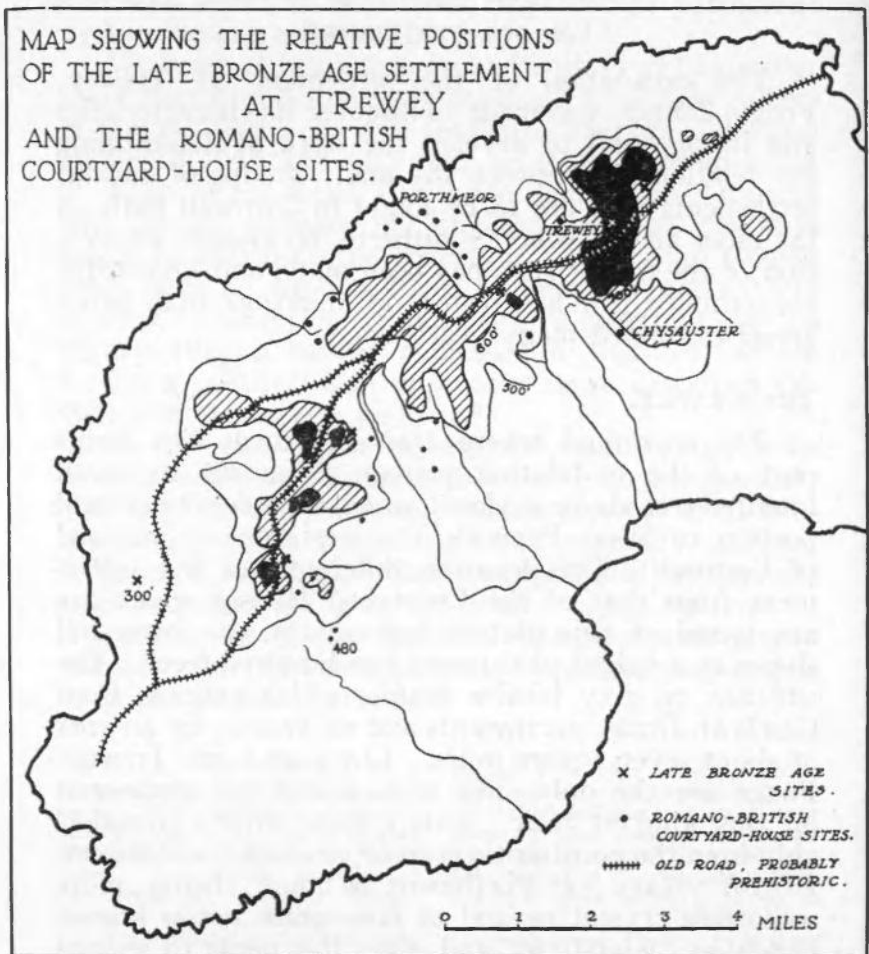


FIG. I.

The site itself is covered with an extremely thick growth of coarse grass. The field system of the settlement extends for about six acres and lies west of an old trackway, the 'old St. Ives Road' which

follows the central and higher part of the plateau from north to south-west. Traditionally, this track is of great age and its course is marked by barrow, circle, menhir and hill-camp; no modern excavation has been made on it.

### THE SITE.

The part of the Trewey-Foage Settlement surveyed by the late Lieut. Colonel Hirst, in which excavation took place, lies on a gentle incline facing north and east, dropping to small streams which unite to form the little river flowing to Zennor, one-and-a-half miles downstream. The components of the site are lynchet plots, hut-circles and narrow roads which appear to serve as approach-roads to the habitations. Many small, low mounds lie scattered in the fields and there was a small ruined barrow, possibly contemporary and opened at some time unknown. Tin mining operations dating from very early, if not pre-historic times<sup>1</sup> have been made at the foot of the slope facing north. The whole area has been much mutilated within the last few years and much stone taken to fill gaps in a track used as a service road from Foage Farm to the main road from Zennor to Penzance. This settlement is not marked on the Ordnance Survey Maps and is most easily approached by the route just mentioned. The size and extent of the settlement is shown on fig. 2.

### LYNCHET FIELDS

The settlement is an open one; there are no defensive banks or ditches and no holes in field banks were found which might have held the posts of a stockade: nor are there any cattle enclosures. The parts of the settlement that were examined, with the possible exception of the barrow, lie within the field system. The lynched plots which can be clearly seen are of the square or oblong, compact type and average about half an acre in size; they lie parallel with the contours of the slope and do not appear to

<sup>1</sup> *Traditions and Hearthside Stories of West Cornwall*, series i, 1870, 69; series iii, 82.

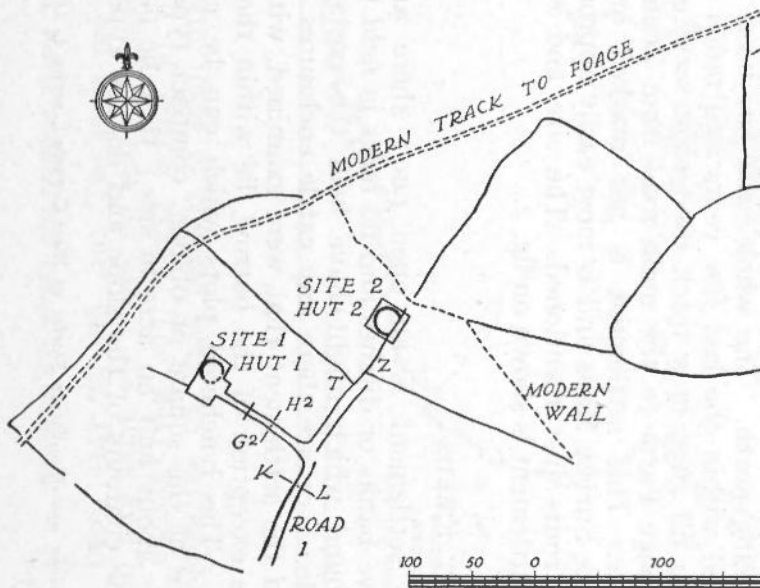
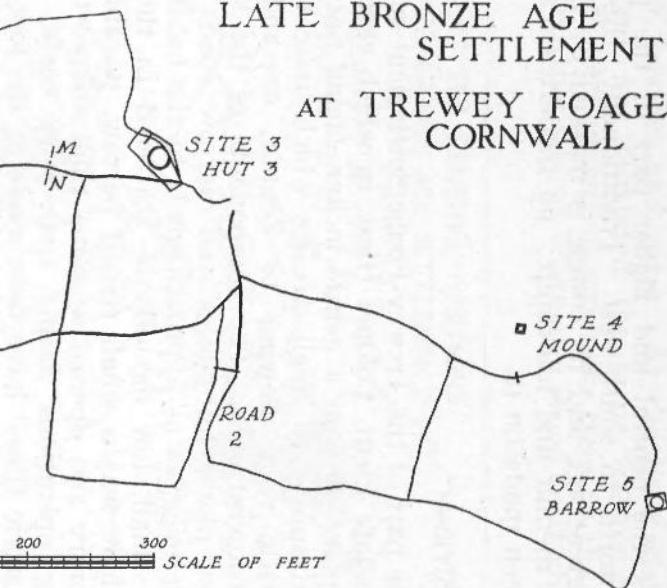


FIG. 2.

LATE BRONZE AGE  
SETTLEMENTAT TREWEY FOAGE  
CORNWALL

be especially connected with any individual hut. They are demarcated by banks from one to two feet in height which are now, like the fields, thickly covered with coarse grass; these field banks are composed of stone, mostly of small and medium size, collected from the fields and raised above the general level of the original slope. In the opinion of the late Lieut. Colonel Hirst, the amount of lyncheting in the fields is very small; he considered this to be due to the slight slope of the fields, generally about five to six degrees and the lack of heavy rainfall. The type of plough used, moreover, would not induce a heavy drift; probing gave no steady increase down the slope and the rab (the local name for the disintegrating material above the solid granite) was in general irregular wherever excavation was made.

The fields are divided across the contours by banks somewhat similar to that seen in fig. 4c, but not so high; they average nine to twelve inches in height and are not always co-terminous with adjacent plots. The banks are both straight and curved. A good example of the latter can be seen on Site 3 (fig. 3) where it curves to enclose the hut. No finds were made in any section cut across a field-bank except some flints in the one made on Site 3 (fig. 3).

The shape, size and arrangement of these fields shows them to be quite distinct from the small round and oval plots adjoining small huts on Bodmin Moor, near Rough Tor, or the infilled terraces at Chysauster<sup>1</sup> and Porthmeor.<sup>2</sup> The fields at Treway are, in fact, the first Cornish examples known and excavated, of the Celtic Field System. The fields on New Barn Down and Plumpton Plain (Site B) in Sussex, were the first of the type to be thoroughly excavated and provided, in the words of Dr. E. C. Curwen,<sup>3</sup> 'the most definite proof yet obtained that the so-called Celtic agricultural system had been introduced as early as the late Bronze Age'.<sup>4</sup> The fields of this new system of agriculture, unlike the little plots of the earlier people which were worked by hand, perhaps

<sup>1</sup> *Arch.*, lxxiii, 246.

<sup>2</sup> *J.R.I.C.*, xxiv, appendix 2, 17-18, 56.

<sup>3</sup> *Antiquity*, i, 281-4. Dr. Curwen here illustrates fields of the same

type to be found at Kestor and Foales Arrishes. Figs. 21 and 22.

<sup>4</sup> E. C. Curwen, *Sussex Arch. Coll.*, lxxv, 169.

# TREWEY CORNWALL

## HUT CIRCLE 3.

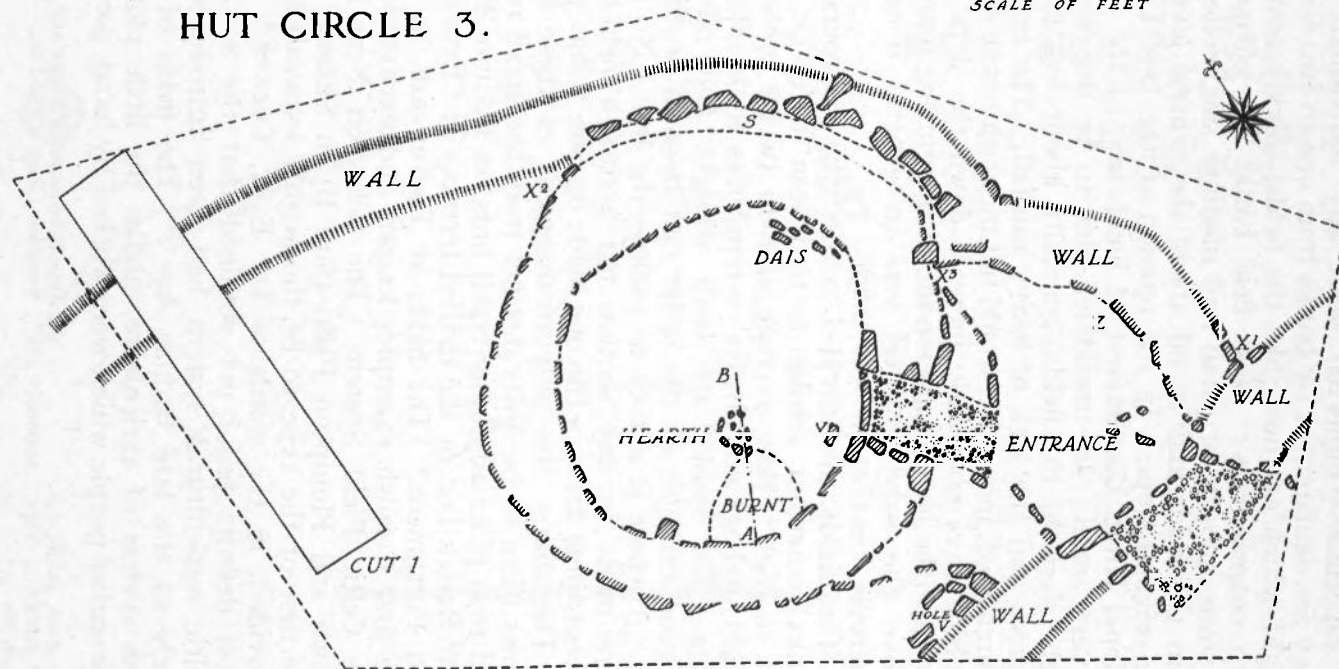
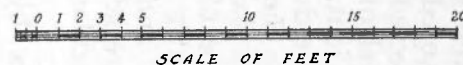


FIG. 3.



with the aid of the caschrom,<sup>1</sup> were worked by a two-ox plough ; this plough could not plough a deep furrow but scratched a shallow groove which would suit the light dry soil of the Cornish upland ; the amount of work at a stretch possible to two oxen would limit the size and shape of the plots, and the Treway fields are in accordance with this condition.

#### CONNECTING ROADS.

Huts 1 and 2 are connected by a narrow, curving road averaging nine to twelve feet in width, from crest to crest of the banks delimiting it : the spread of the banks is now about six feet. Their construction resembles that of the field walls. Road 1, slightly hollowed, leads in from the open moorland for some distance to a point about thirty yards from Huts 1 and 2. Here the road divides ; one part continues in an almost straight line towards Hut 2. At the point of division, the wall delimiting the road and the field to the south is ruined by the imposition of a modern farm track. The other branch turns at right angles and leads to Hut 1. On reaching within eight feet of the hut it appears to widen out as if to make a forecourt. Although many stones were spread over this wider area all were loose ; none could be considered paving or even loose cobbling. Where the southern wall ends there were a few flattish stones, rather larger than those in general use, placed against the wall similarly to those at Z shown on fig. 3, where they are part of the forecourt to Hut 3. A large block of unworked moorstone lay at the end of the road almost in the middle of the track. It appeared to have fallen there from the road and may have been an end stone or gatepost. Severe mutilation of Site 1 by the taking of stone from the hut walls to fill farm tracks has handicapped useful excavation there. Road 2 (fig. 2) leads in, like Road 1, from the moor ; it runs apparently towards Hut 3 for a distance of fifty yards and then disappears.

Several sections were cut to see if there was any

<sup>1</sup> The caschrom is said to have lingered long in highland districts and in Brittany. Is the Cornish shovel of to-day (used also in

Brittany), a descendant of the caschrom ? The action of the shovel seems reminiscent of that of the caschrom.



hollowing in the roads. Sections L-K and G2-H2 (fig. 4) show a depression in the loam below the humus which, except in the depression, is shallower than on each side of the enclosing banks.<sup>1</sup> These sections appear to be analagous to a section made in the Late Bronze Age Lynchet-Settlements Site B on Plumpton Plain, Sussex, which proved the road contemporary with the enclosures.<sup>2</sup> The section L-K also shows the double lynchet nature of this roadway. Another

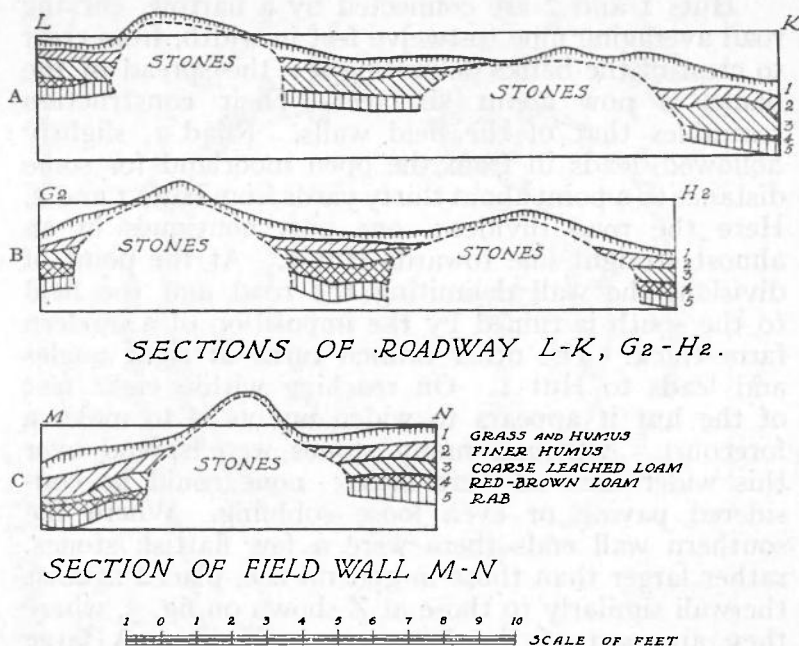


FIG. 4.

factor indicating the contemporaneity of fields and roadways can be seen at points T and Z near Site 2 (fig. 2) where the field banks go off irregularly from the road and not opposite to one another as would have happened had the roadway cut through pre-existing field banks; thus, it can be stated that roads and fields are contemporary.

At this point it is useful to recall the provenance of the gold hoard found at Towednack, a mile or two

<sup>1</sup> From the late Lieut. Col. F. C. Hirst's note.

<sup>2</sup> *Proc. Prehist. Soc.*, 1935, 21, fig. 4, G.H.

east of the Trewey site. This hoard of bracelets, torcs and raw material was found in a bank, presumed ancient, at Amalveor Farm, adjoining the old St. Ives' road. When the discovery was made, the tenant was taking into his farm a piece of uncultivated moorland, and the destruction of the old bank occasioned the find. The hoard has been minutely examined by Mr. C. F. C. Hawkes in *Man*. Mr. Hawkes describes the bracelets as having a Middle Bronze Age form and of the torcs he remarks, 'Not only do they represent in their way a Middle Bronze Age tradition, they represent a native tradition, which came to be swamped in the unrest and confusion of the Late Bronze Age with its invasions and imported novelties',<sup>1</sup> and he dates the find to the period of transition from the Middle to the Late Bronze Age culture, i.e., 1000-750 B.C. with a personal preference for the lower date.

The bank in which these ornaments were hidden lies north and south and is parallel to an ancient lynchet, lying along the contours of the hillside about eighty feet below, whilst a third bank lies at right-angles to these others. A worked stone has been found near and there is a suspicion of a hut-circle against the lynchet. There has been no excavation here, but in the light of the dating of Trewey it is tempting to see in these banks a mutilated field of the Trewey type and the provision of an extra factor in its dating; traces of fields with banks of similar appearance exist on the downs between Amalveor and Trewey and in at least one case there is also a roadway between them. These fields lie along the contours and in the same regional area as the Trewey site. The presence of similar field-systems is suspected in other areas;<sup>2</sup> they are not evident as those at Trewey for some are in stretches of country disfigured by turf-cutting and by the growth of bracken.

#### HUT CIRCLES.

The presence of several hut circles is suspected but three only have been excavated. They are isolated

<sup>1</sup> *Man*, xxxii, 178, 186.

<sup>2</sup> Since writing above, visits seem to show possibly similar systems on Trevegean Downs, Calvadnack, Gold Herring, Bartinney Boswens.

from each other. Huts 2 and 3 were protected, to some extent from the near approach of cattle and from cold winds by their position within the field wall; this is well seen at Hut 3, where the field wall curves with the obvious intention of shielding the hut (fig. 2, 3.) Very slight remains were to be seen before excavation. The infill in the huts was removed to the rab. The stratification can be seen in a section in

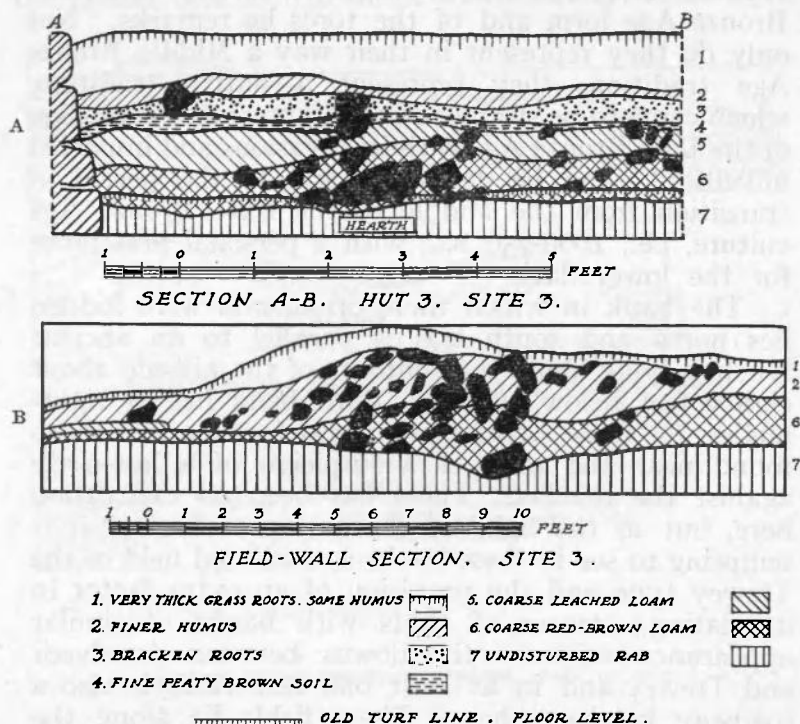


FIG. 5.

Hut 3 (fig. 5 A). This resembles Dr. H. O'Neill Hencken's stratification at Chysauster, a site, it will be recalled, on the same geological formation.<sup>1</sup> The layer of grass with its roots was extraordinarily thick and a fair quantity of stone was taken out, especially in the lower sections of the bracken layer; the stone was smaller in size and less in quantity, relatively, than that removed from the village at Porthmeor.<sup>2</sup> The

<sup>1</sup> *Arch.*, lxxxiii, 244.

<sup>2</sup> *J.R.I.C.*, xxiv, 1937, appendix ii, 5, 6, 25, 60, 67.



GENERAL VIEW OF HUT 3: DOORWAY ALIGNED WITH OPENING IN FIELD-WALL



A. HUT 2 : INTERNAL FACE OF BRONZE AGE WALLING



B. HUT 2 : INTERNAL FACE OF BRONZE AGE WALLING

internal diameter of the huts is about sixteen feet and their shape approximately circular; the walls of the huts were built of local moorstone which here weathers into irregularly shaped blocks, mostly of small or medium size. There were only a few pieces of 'foreign' stone, i.e., not found naturally on the site. This is unlike the stone in the building at Porthmeor.<sup>1</sup> The lowest blocks were not consistently set in the rab but were often in three to six inches of grey soil, above the present rab level (pls. ii, iii A.) Possibly the present rab level of the hut is due to the wearing down of the floor when inhabited; the position of the ancient turf in Hut 3 (fig. 5 A) can be taken to substantiate this. The floor level was twenty-four to thirty inches below the present ground level and the few finds made came mostly from it. The walls are double, being built of a core of stones and earth tightly packed together. (See pl. iv, near the doorway, where the facing of the wall has been destroyed.) This core was faced with blocks, normally, on both sides. Owing to the sinking of the ground and the extensive robbery of stone, the facing on the core, now, frequently presents an irregular appearance. These walls must originally have been stable erections; even, now, in some places, they are very solid, reaching three feet in width; in one part of Hut 3 the wall measures four feet in height; usually, now, the wall remains are low and the mutilation of Hut 1 is quite recent.<sup>2</sup> The facing of the walls, both externally and internally, is of two kinds; one sort consists of vertically placed slabs of undressed moorstone varying in height from eighteen inches to three feet; the other is made up of much smaller blocks of stone, placed upon one another without breaking band for a considerable distance (pls. ii, iii A); there are no pinnings of small stones, a later feature. It would be useful if the problem of building technique could be elucidated for it would help in the dating of granite dry-walling in the Lands End area, and the facts above are interesting, for they show a distinct difference in building method from that of the huts at Porthmeor and Chysauster, which are dated by

<sup>1</sup> *J.R.I.C.*, xxiv, appendix ii, 60.

<sup>2</sup> Communicated by late Lieut. Col. Hirst.



their pottery about A.D. 50-400.<sup>1</sup> There the building of the hut walls is, on the whole, made with larger stones; this may be due at Porthmeor partly to the porphyritic granite of which it is built, for this weathers into larger blocks than that found on the Trewey Downs. But the stones at Porthmeor are placed, to a great extent, in a horizontal position and often bonded. It is different from the style at Caerau, North Wales, dated A.D. 300-400,<sup>2</sup> and it is unlike the building in the earliest Iron Age habitations yet excavated in Cornwall, at the Cliff Castle, Gurnard's Head.<sup>3</sup> Thus, the Trewey technique in hut building does not appear to be that of the Iron Age. On Dartmoor, where some of the granite-built huts, notably those at Foales Arrishes, present the nearest analogies to Trewey, the walling technique has not been described in much detail<sup>4</sup>; there appears to be more than one method but the style in general seems to show some likeness to that at Trewey; many of the Dartmoor Huts are ascribed to sub-periods of the Bronze Age, Foales Arrishes to Early Iron Age.<sup>5</sup> The use of large flat stones set on edge at the base of the wall is mentioned by Mr. A. Curle<sup>6</sup> as used in the Bronze Age house at Sumburgh, Orkney, and, he adds, 'a fashion to be observed in the chambered cairns on Mainland'. Building is obviously determined to a great extent by the nature of the stone found locally but that conscious building was made seems apparent by the similarity of the pattern in wall-building in cairns in Orkney and on Unstan pottery.<sup>7</sup> The technique in Trewey Huts recalls the walling of the Bronze Age tombs at Chapel Carn Brea,<sup>8</sup> Ballowal and Tregiffian Vean<sup>9</sup> (fig. 6).

The further excavation of the huts did not present features of special interest with the exception of the pottery. Doorways were found in Huts 2 and 3 to the SSE. (in Hut 1 this area was destroyed

<sup>1</sup> *J.R.I.C.*, xxiv, appendix ii, 75; *Arch.*, lxxxiii, 277.

<sup>2</sup> B.H. St. J. O'Neil, *Antiq. Journ.*, xvi, 318.

<sup>3</sup> *Arch. Journ.*, xcvi (1941), plate i b, p. III.

<sup>4</sup> *T.D.A.*, xxix, 151-7.

<sup>5</sup> This may represent a survival of earlier people.

<sup>6</sup> *P.S.A.S.*, 67, 100.

<sup>7</sup> University of London Institute of Archaeology, *Second Annual Report* (1938), 33.

<sup>8</sup> Lukis, *Pre-Historic Stone Monuments*, pls. xiv, xvi.

<sup>9</sup> *J.R.I.C.*, vi, 210.



by stone robbers). The threshold stone remains *in situ* in Hut 3, but no lintels were found. Both doorways opened on a little cobbled path, leading, in Hut 3, through a small court to the opening in the field walls (fig. 3). This little court lies between the field walls, the hut and a line of stones set in the rab stretching from the southern field wall to the hut. Against the field wall there is a thickening of this line with a small hollow centred in it; its purpose is unknown. There is a somewhat similar group of stones projecting from the wall inside Hut 1. There is no sign of intense burning in this court. Inside Huts 2 and 3 a few stones, firmly set, remained in the position usually assigned to the platform in somewhat similar huts on Dartmoor. There was a stone,

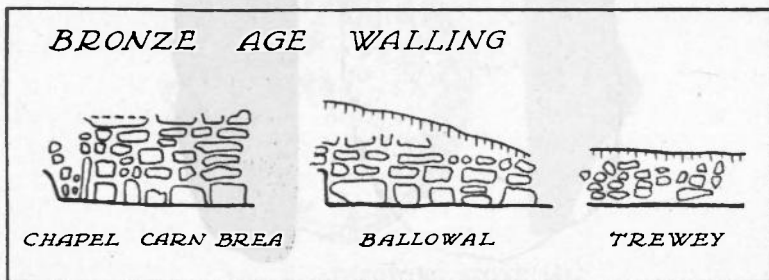


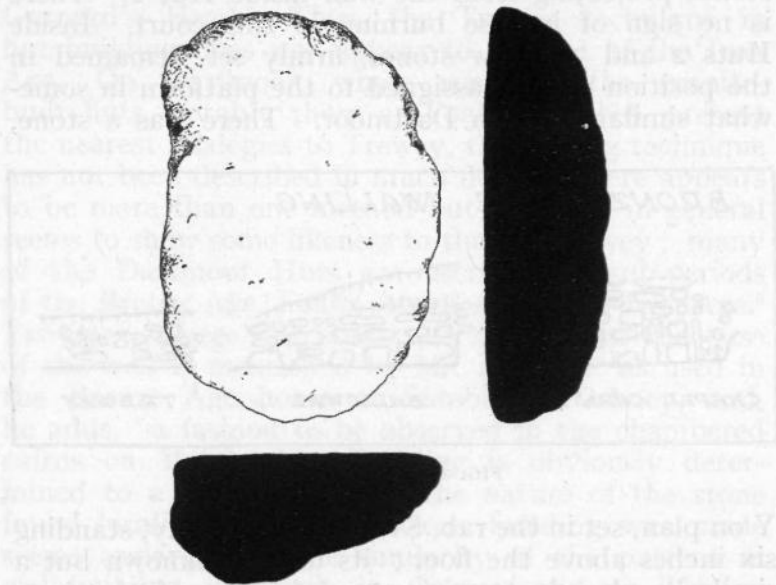
FIG. 6. (Scale  $\frac{3}{16}$ ).

Y on plan, set in the rab, SW. of the doorway, standing six inches above the floor; its use is unknown but a similarly placed stone occurred in one of the huts at Foales Arrishes on Dartmoor.<sup>1</sup> No sign of heavy burning occurred in any hut, but stones roughly placed indicated a fireplace, for material from this hearth showed much organic matter including phosphate, according to a report by Dr. Zeuner. The area between this hearth and the south wall showed a sprinkling of charcoal and more evidence of burning than elsewhere; the charcoal was fragmentary and badly preserved and consequently the wood from which it came could not be identified; there appeared to be more than one kind of tree and each of a broad-leaved type, according to Mr. A. Hill, of the Royal Botanic Gardens, Kew.

<sup>1</sup> *T.D.A.*, xxix, 151-7.

## FINDS IN HUTS.

There was a paucity of finds in these huts as in the Dartmoor huts; the acid nature of the Cornish soil precludes the finding of bone, leather and wooden articles and the most meticulous care was rewarded only by a few sherds of pottery found in Huts 2 and 3. The most important sherds are shown in fig. 9 and are separately described, and are dated to Late Bronze Age by Mr. C. A. Raleigh Radford (*infra* p. 127).

FIG. 7. MULLER ( $\frac{1}{4}$ ).

In Hut 2 the preservation of these sherds may have been due to protection afforded by some of the large retaining stones which were leaning inwards; a similar circumstance was reported in one of the Dartmoor excavations. A useful find in Hut 3 was a saddle-quern muller (fig. 7) of porphyritic granite (one of five pieces of that stone found); another was a small basin ground out of the fine granite. There were a few throwing stones (fig. 8) and numerous pieces of quartz. The flints (fig. 10) were few and are elsewhere described by Mr. A. D. Lacaille (p. 128). No beach boulders and only two pieces of slate such

as were so plentiful at Porthmeor<sup>1</sup> were found and there were no store holes in the floor. Most of the finds occurred at the floor level which was usually about twenty inches from present ground level. In Hut 2 the rab sank about a foot on the north side but in the other huts the floor was, in general, level. There was no posthole evidence in Huts 1 or 3 and it was slight in Hut 2. By analogy with the Dartmoor huts of the same type the roof of heather and turf rested on a light framework upheld by a centre pole.<sup>2</sup>

Thus, whilst dating by the walling to a sub-period of the Bronze Age is tentative, the pottery indicates the occupation of the huts in the Late Bronze Age.

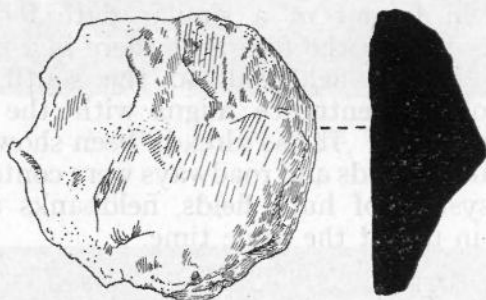


FIG. 8. THROWING STONE ( $\frac{1}{2}$ ).

#### CONTEMPORANEITY OF HUTS, FIELDBANKS AND ROADWAYS.

Another important factor to be determined was the nature of the relationship of the huts to the fieldbanks and roadways; Road 1 provided no definite evidence other than its obvious direction towards the huts. Hut 2 proved to be contemporary with Road 1; the western bank of this road and the adjoining portion of the hut were stripped to the rab on each side and could be seen neatly and tightly fitted together (see pl. iv, A). The corresponding part on the opposite side of the hut could not be checked as it has been robbed of stone for the erection of a modern wall (see Plan, fig. 2). On Site 3 the curved field wall was found to be contemporary with Hut 3, and with the field wall to the south; at X2,

<sup>1</sup> *J.R.I.C.*, xxiv, appendix ii, 66.

<sup>2</sup> *T.D.A.*, xxix in H.C.7.

X3 (fig. 3), the hut and field walls were built into one another in a similar way to those at Hut 2. Hut 3 was built against the curved field wall, X1 (fig. 3); the outer side of the hut wall where it abuts on the field wall showed no retaining stonework and the uneven mass of the core protruded there. The field wall was strongly built and the small, intervening space between the two walls was fitted with tightly-packed stone. Some of the largest blocks of stone on the site lay along the top of the field wall here, as if to give additional height and strength and to hold down the roof in order to protect the hut from cattle (pl. iii, B). There seems no reason for the curve of this wall except the protection of the hut.<sup>1</sup> Another argument in favour of a similar date for hut and field banks here is the fact that there is a break, five feet wide, in the field wall to the south, where a roughly cobbled entrance aligns with the pathway to the hut (fig. 3). It has already been shown (p. 112, above) that the fields and roadways were contemporary, thus the system of huts, fields, fieldbanks and roadways was in use at the same time.

#### MOUNDS. SITE 4.

The presence of small mounds near groups of open, and fortified, habitation sites on the moors has been observed in Yorkshire, Cumberland, Westmorland, Northumberland, Furness, Galloway, Sutherland, and the Shetland Islands; they are numerous also in the fields at Trewey. They are easily seen, both in winter when the ground is comparatively clear of vegetation, and in summer when their bulk shows up below the light-coloured tops of the seeding grasses. They vary from two to twelve feet in diameter and from one to three feet in height. They occur at all levels but are more numerous on the lower slopes. A large one and a small one were carefully excavated. After the thick outer coating of tussocky grass and its roots was removed the series of sections showed a core of stones packed tighter in the centre than on the skirts of the mound, well mixed with soil and covered by a

<sup>1</sup> The Reports of the Dartmoor Excavations mention protecting walls to huts, and diagrams in *Royal Com. H.M. Sutherlandshire* show

walls of apparently similar nature to huts on the moorland (unexcavated), 118, 170, 176.



A. HUT 3: EXTERNAL WALLING



B. HUT 3: POSITION OF HUT AND FIELD WALLS



A. JUNCTION BETWEEN FIELD WALL AND WALL OF HUT 2



B. BARROW SHOWING CAPSTONE THROWN OVER



layer of humus six inches thick. The finds included a small, oval, metamorphic, waterworn pebble, possibly burnt, found slightly below ground-level near the centre, and two broken pieces of burnt flint lay centrally. There was a much-worn granite object (? celt) lying in a small hollow on a little fine charcoal, covered with a yellowish powdery substance twelve inches above the centre of the mound. There was no cist nor any sign of a burial: the stones were placed upon the unburnt grey soil lying three inches above the rab. The stones of the innermost section of the mound contained a high percentage of 'ornamental' stone, i.e. quartz or tinstone. The small mound resembled the larger and there were no finds in it. Mounds excavated in Yorkshire which seem to resemble these are said to have been 'placed over unburnt bodies which have entirely perished'.<sup>1</sup> Excavations at Wiltrow<sup>2</sup> assigned to the Early Iron Age were considered by Mr. A. Curle to be 'in the majority of such cases . . . collections of stones from patches of cultivated land'. At Park Brow stones were collected in balks beside fields.<sup>3</sup> Prof. Childe writing of mounds near hut circles in Galloway<sup>4</sup> and the northern counties (none of which sites has been excavated) states: 'Such might be merely dumps of stones cleared from the fields; it is more likely that they once covered the skeletons of the villagers.' He gives the acidity of the soil as the reason for the destruction of the bones; it will be recalled that the soil of the Trewey site is extremely acid. At Foales Arrishes heaps of stones were there remarked on but not excavated. Further excavation of such mounds in Cornwall and elsewhere seems desirable before a definite decision as to their purpose can be made.

#### BARROW. SITE 5.

A small dilapidated barrow lay on the sloping side of the settlement south-east of the mound just described. There are a number of barrows in the neighbourhood, but none has been recently examined. Although this one had been much mutilated at some time

<sup>1</sup> F. Elgee, *Early Man in NE. Yorkshire*, 99.

<sup>2</sup> *P.S.A.S.*, January 1936.

<sup>3</sup> *Antiquity*, December 1932, 39ff.

<sup>4</sup> Childe, *Prehistory of Scotland*, 216.



unknown, it was thought worth while to examine it because its relationship to the field boundaries would make its date of great interest. It adjoined a trackway of uncertain age that runs from the old St. Ives road past Foage Farm to Zennor; this was used comparatively recently for sledge traffic in connection with the farm and with tin and granite workings near Zennor.<sup>1</sup> The barrow was low, about three feet in height and about twenty feet in diameter. It was indented at its highest point and appeared before excavation to encroach on the field wall marking the eastern edge of the settlement.

The mound was first stripped of its very thick overgrowth of grass roots, bracken and gorse: it then appeared very stony. The central area, which was depressed, showed clearly that it had been roughly broken into from the top; the capstone of a cist appeared to have been thrown over on one of its long sides: this damaged central area was carefully examined; the contents of the depression were removed and consisted of the following material named in order from the top: a thick layer of matted roots mostly grass, loose pieces of granite, brown humus, more stone, rather smaller, such as might have slipped in when the mound was previously opened. As these materials were removed, the lower part of the depression appeared to be part of a small cist, three feet by two feet, of dry stone walling; three sides showed two courses and the removal of the capstone (three feet eight inches by two feet six inches by four inches) from the fourth side revealed three courses of walling. The floor of the cist was thirty inches from the present field level. The finds were nine pieces of flint, two small beach pebbles and a small piece of quartz; below this floor was six inches of grey soil resting on the rab.

#### GENERAL EXCAVATION OF BARROW.

The sections were first taken out to the floor level. At the end of the third section a small piece of decayed slate was found; this was the second piece of slate found on the Settlement. Until Section 4 was reached

<sup>1</sup> The late Lieut. Col. F. C. Hirst in conversation.

every profile was similar and consisted entirely of small pieces of the local (fine) granite with a very small quantity of ordinary brown humus. As the fourth section was reached a change occurred; the stone was in larger pieces and there was a much greater amount of humus than previously, both on top and throughout the section; many large pieces of quartz were taken out—one being a beautiful piece in the shape of a twelve inch cube. In the locality of the cist the humus was very black, quite unlike that in previous (and the final) sections. Finely divided charcoal was evident but no piece large enough for examination was found. Some stone was slightly burnt. All the finds, except the one previously mentioned, were in an area of about four by three feet, in Sections 4 and 5 only. The finds included fifty-three pieces of flint found on the floor, some of which were worked (see separate description, p. 128). There was one burnt throwing stone and four tiny quartz pebbles, which, also, are very rare on this site though common at Porthmeor.<sup>1</sup> It was unfortunate that the utmost care revealed no trace of bone or pottery; if any bone were unburnt, the acid nature of the granite soil would render such finds very difficult to detect. The excavation of Section 5 showed that stone and soil of the barrow lay against and on the field boundary and were not in anyway bonded into it: as in the first sections the stones were smaller and the humus lighter in colour and less in quantity. The ground was eventually cleared to the rab, which was here very uneven; there was no sign of a ditch or of any retaining stones; this means that the outer limits of the barrow were not determined with any certainty (pl. iv, B).

It is regrettable that no datable object was found in this barrow. No scientific excavation of a barrow has been made in Penwith, but the scanty facts relating to barrows opened many years ago present a few analogies. Not far from Trewey, on Conquer Downs, a barrow was opened by Dr. W. C. Borlase and the urn found dated to Late Bronze Age; his notes included this remark: ‘. . . no regular kistvaen had been formed but stones were carefully built

<sup>1</sup> *J.R.I.C.*, xxiv, appendix ii, 24.

round the urn which was protected from above by a large slab'.<sup>1</sup> At Tredinney, also of Late Bronze Age, the cist is mentioned as being 'built of eight stones in two layers of four each'.<sup>2</sup> Burial with accompanying flints is remarked on by Dr. Borlase,<sup>3</sup> and, also the great amount of spar sometimes found.<sup>4</sup> In both West Penwith and North-west Cornwall Dr. Borlase states that 'promising barrows had no interments'.<sup>5</sup> Thus what information was gained was insufficient to date the barrow but it can be added that the type of building seen in the wall behind the overturned capstone resembles the building technique of the smaller stones in the huts: as it was on the same site it is possible that the barrow is contemporary with the huts, i.e. within 750-450 B.C. by the dating of the pottery in the huts.

#### CONCLUSIONS—SUMMARY.

1. This site, the first of its kind in Cornwall, to be discovered and excavated, is complete with lynched fields, huts and roadways intimately connected. The field system is of the Celtic type, the layout resembling that of sites like Plumpton Plain, Sussex, which belong to the Late Bronze Age.

2. The pottery which is the first domestic Bronze Age pottery to be found in Cornwall, though extremely meagre in quantity, is sufficient for dating purposes. It belongs to the Late Bronze Age and to a series of wares which represent the earlier native tradition as modified by elements borrowed from the intrusive Deverel Rimbury complex; this probably reached Cornwall in the period 800-600 B.C.

3. If the evidence for the inclusion of the old field system at Amalveor in the Trewey type is admitted and the gold hoard to have been placed in the wall contemporaneously with the early working of the field, another factor is provided which confirms the dating at Trewey itself, for the Amalveor fields must have been in use about 700 B.C.

4. The paucity of finds in the Trewey site and the slight amount of lynching might seem to suggest a

<sup>1</sup> *Gent. Mag.*, 1865.

<sup>2</sup> *Nenia Cornubia*, 232.

<sup>3</sup> *Ibid.*, 113.

<sup>4</sup> *Ibid.*, 143.

<sup>5</sup> *Ibid.*, 113, 243.

short occupation of the settlement ; but utensils of wood, bone and leather may have been in use and only a small amount of pottery : such articles would soon be destroyed in the Cornish soil. Moreover, the deterioration of climate, taking place about the time of the settlement, having rendered these uplands cold and wet, the inhabitants may have come down to lower and more clement areas. One wonders if they produced on the coastal shelf the small fields seen there now which are so different in appearance<sup>1</sup> from those known to be recent.

5. The excavation fulfilled its first object, that of characterizing and dating the settlement, but the information gained on the second was not so useful in adding to our knowledge. The earliest living places yet known in Cornwall are the Neolithic huts on Carn Brea<sup>2</sup> and the tiny homes of the people who left the rubbish dumps on St. Mary's in the Isles of Scilly<sup>3</sup> and others, somewhat similar, to be found on Bodmin Moor. Trewey, obviously, is later than these and later, also, than most of the small huts with lynched plots near Rough Tor, for these are dated by analogy to an earlier Bronze Age.<sup>4</sup> On the other hand Trewey is earlier than the recently excavated huts on Gurnard's Head, Zennor,<sup>5</sup> and the huts inside the stone-built fort of Chun which date from the pre-Roman Iron Age.<sup>6</sup>

Still later are the Romano-British sites of Chysauster and Porthmeor, the only excavated examples of the 'courtyard house' type, which appears to be widespread throughout West Penwith<sup>7</sup>. Though their association is not yet proved, the courtyard house appears in close connection with the stone fort and the fogou, which are both so much at home in Ireland<sup>8</sup>. Neither Trewey nor the Iron Age Huts yet examined give a clue to the plan of the courtyard house. Nor have the 'courtyard' houses yet provided any Bronze Age evidence. It is stated that in Scotland the

<sup>1</sup> See *Antiquity*, x, 164-6, where this is noticed in O. G. S. Crawford's stimulating remarks on Cornish fields and walls.

<sup>2</sup> Hencken, loc. cit., 9, 10.

<sup>3</sup> *Ibid.*, 29-30.

<sup>4</sup> *Ibid.*, 97, 98.

<sup>5</sup> *P.P.S.*, N.S., v, part 2, no. 49,

76, 77.; *Arch. Journ.*, xcvi (1941), 111.

<sup>6</sup> *Arch.*, lxxvi, 220-35.

<sup>7</sup> *J.B.A.A.*, 3rd series, ii, 71, 96-7 ; *Arch.*, lxxvi, 220-35.

<sup>8</sup> Hencken, *Arch. of Cornwall and Scilly*, 126, 143, 153-5, 183.

courtyard house appears to be the prototype of the broch,<sup>1</sup> that it was not the outcome of native building tradition<sup>2</sup> but was introduced by sea from the south.

There certainly was vigorous life in the Cornish courtyard houses when the Romans were interested in Cornish tin; this is shown by the activities evident at Chysauster<sup>3</sup> and Porthmeor<sup>4</sup> and by later finds, including the hoards of Roman coins which are more deeply concentrated in West Penwith<sup>5</sup> than elsewhere. There are instances of two occupation levels at Porthmeor and there was rebuilding of the defences there, probably after A.D. 200.<sup>6</sup> At Chun, too, there appears to have been alteration of the entrance, though this has not been fully examined.<sup>7</sup> Whether such activity is the result of further invasion by Iron Age people following the settlements above mentioned there is nothing yet to show; excavation of well-selected courtyard houses and habitations within the forts, as suggested by the late Lieut. Colonel Hirst,<sup>8</sup> may fill the gap.

#### ACKNOWLEDGEMENTS.

The site was discovered by Mrs. K. Grant in 1934 and the inception of the excavation was entirely due to the late Lieut. Colonel F. C. Hirst, President of the West Cornwall Field Club. Permission to excavate was willingly given by the proprietor, the late Lady Dyson, and by Messrs. J. and W. Edwards, W. and W. E. Noy, the tenants of Foage and Trewey Farms: to these the Club expresses its grateful thanks.

The work was mainly carried out in August and September 1936, 1937, under the personal direction of Lieut. Colonel Hirst. Mr. G. Cave Day and the writer were in charge and the following members were present: Mrs. W. Lloyd, Miss D. Cooke, Major J. Thompson, Mr. B. Hutchinson; Miss Daphne Harper and Mr. David Jeffrey helped also. The gratitude of the Club is due also to Miss P. Keef;

<sup>1</sup> Kendrick and Hawkes, *Archæology of England*, 1914-31, p. 179.

<sup>2</sup> Childe, *Prehistoric Scotland*, 1940, (Hist. Assoc. Pamphlets, no. 115), 18-19.

<sup>3</sup> *Arch.*, lxxxiii, 258-9.

<sup>4</sup> *J.R.I.C.*, xxiv, appendix ii, 35, 40, 45.

<sup>5</sup> Hencken, loc. cit., 198-9.

<sup>6</sup> *J.R.I.C.*, xxiv, 32-9, 22, 68.

<sup>7</sup> *Arch.*, lxxxiii, 209.

<sup>8</sup> *Proc. W. Cornwall Field Club*, 1937, 6-10.

to Miss F. M. Patchett, especially for help with the drawings; to Mr. A. D. Lacaille, for his report on the flint implements; to Dr. Zeuner, for examination of material from the hearth, and to Mr. A. Hill, for an analysis of the charcoal. Finally, I should like to thank Mr. C. A. Raleigh Radford for his invaluable advice both during and after the excavation.

### THE POTTERY

By C. A. RALEGH RADFORD

Only two fragments of pottery were found in the course of the excavations, both in Hut 2 on the floor (fig. 9).

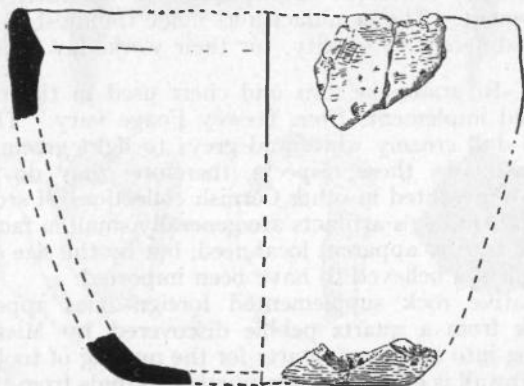


FIG. 9. POTTERY ( $\frac{1}{2}$ )

1. Fine brown clay with small particles of grit. Surface smooth brown to black and pitted with small holes from which the grit has fallen in the firing. Rim of a small bowl or pot with internal bevel.

2. Same clay but the grit has been retained in the firing. The outer surface is smooth but the interior left irregular. Base of a small pot.

Both fragments belong to a type illustrated from the later site on Plumpton Plain (*Proc. Prehist. Soc.*, i, 53, fig. 12e) and both may have formed part of the same pot.

The rarity of pottery at Trewey affords a striking contrast to the conditions of the normal Iron Age site in Cornwall. The fabric of the two fragments and the internal bevel of the rim are both characteristic of the Bronze Age, and are not found in wares belonging to settlements of the south-western culture of Chun and Castle Dore. Nor are they normal in the earlier pottery from



Trevelgue.<sup>1</sup> These facts strengthen the comparison with Plumpton Plain and suggest that Trewey belongs to approximately the same period (750-500 B.C.) though the possibility of a rather later survival of the parallel culture in Cornwall must not be disregarded. Such a dating bears out the evidence of the field system and of the flint implements.

## THE STONE ARTIFACTS

By A. D. LACAILLE

Viewed from the angle of typology there is nothing to distinguish the stone artifacts found by Miss Dorothy Dudley within the hut-circles and in the round barrow from those picked up on the surface near the sites examined by her. On the score of their facies all the relics may justifiably be considered together. They are such as may be expected in a local industry whose exponents possessed a well-developed technique as expressed in an early metal age lithic equipment. The manufacturers made the most of materials, generally indifferent in quality, for their workaday requirements.

**ROCKS.**—In grade the flint and chert used in the production of the flaked implements from Trewey Foage vary. The colours range from dull creamy white and greys to light greenish, brown and yellowish. In these respects, therefore, they do not differ from rocks represented in other Cornish collections of stone implements. Miss Dudley's artifacts are generally small, a fact dictated not so much by any apparent local need, but by the size of the raw material which is believed to have been imported.

That native rock supplemented foreign ones appears in a flake struck from a quartz pebble discovered by Miss Dudley. This pressing into service of quartz for the making of tools in other parts of Cornwall is evidenced in a number of finds from the Land's End district to which the writer's attention has been drawn. All these are thought particularly deserving of notice as so little comment has been made hitherto on the employment of quartz in English stone industries.

**THE INDUSTRY.**—Miss Dudley's series consists of untreated (fig. 10, no. 4), utilized and marginally dressed flakes, scrapers on flakes and the nodules and cores from which the basic flakes were detached. On account of the size of the raw material none of the finished products is large. Besides, the texture of the rocks employed rarely permitted the knapper to obtain delicate blades. Still, some quite fine examples occur, e.g. fig. 10, no. 3. Of the simpler and more familiar sorts of tools a well-made end-scraper on a blade may be figured (fig. 10, no. 2). These two specimens suffice to show that when good material was at hand the Trewey Foage settlers were skilful enough to fashion implements in the best style.

<sup>1</sup> Material examined at County Museum, Truro, by the courtesy of Mr. G. K. C. Andrew.



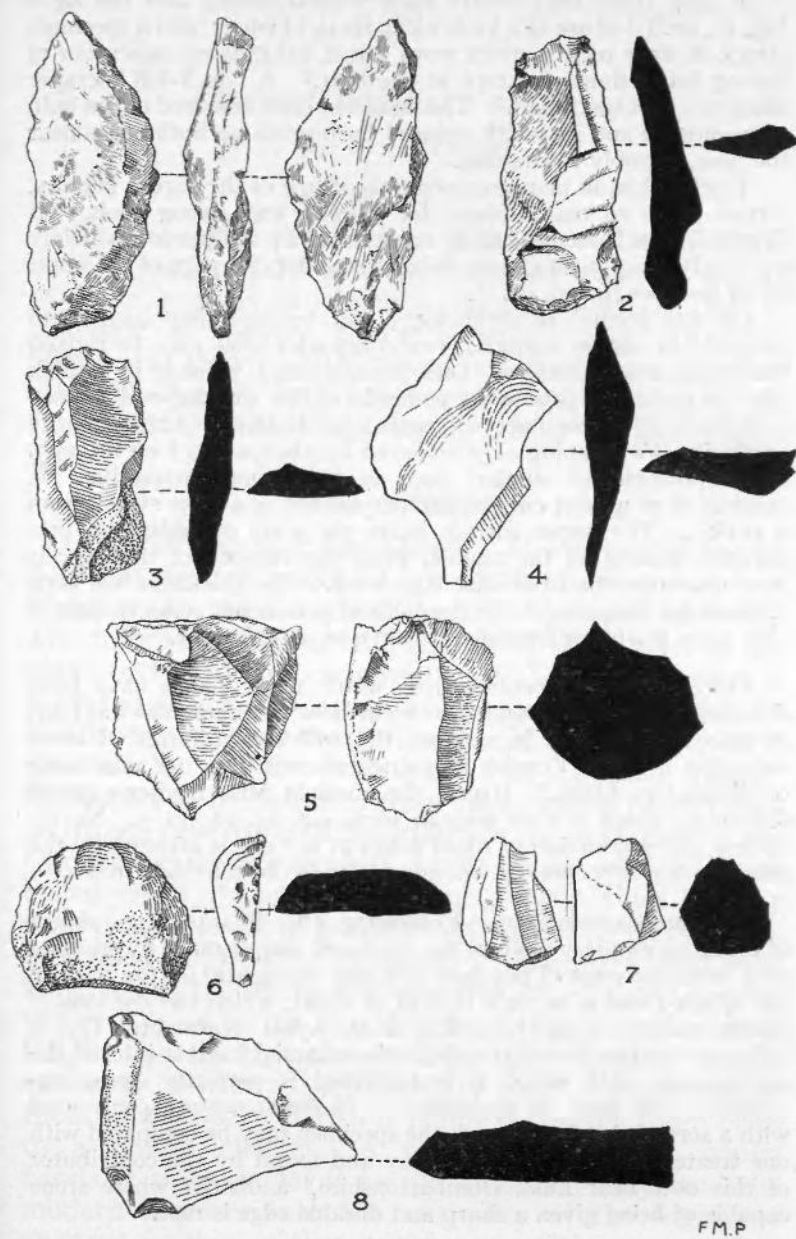


FIG. 10. FLINTS (†)

A long chert blade bears some edge-trimming and the signs (fig. 10, no. 1)<sup>1</sup> of use as a knife along its right edge; and a specimen struck in finer rock is much worn but it exhibits no indication of having been trimmed except at the butt.<sup>1</sup> A 'duck-bill' scraper attracts by its treatment.<sup>1</sup> The flake has been deprived of the bulb of percussion and its width reduced by retouch on both edges near the base, possibly for hafting.

Thick flakes, in plan preserving the shape of the parent pebbles, served as in so many places for heavier and strong tools. At Trewey Foage these are chiefly represented by scraper forms boldly and fairly steeply retouched along a considerable part of the edge, as for instance fig. 10, no. 6<sup>2</sup>.

On the ground of technology, and because they have been prepared in similar material, two compound tools may be ranked with these thick scrapers. One, though small, is made in a thick piece of dark flint pebble, its pointed awl-like working-end dressed to shape by the trimming of alternate lateral edges.<sup>1</sup> At its opposite extremity is a scraping edge achieved by abrupt and long retouch. A morphologically similar piece is even more attractive. It consists of an almost circular scraper worked in a flake struck from a pebble. The upper surface bears the scars of additional preparative flaking on the nodule, while the retouch of the edge is very characteristic of Bronze Age work. The thickness has been reduced by trimming down the bulb of percussion so as to form a thin spur, doubtless intended to serve as a perforator.

CORES.—Though pebbles from which many flakes have been detached are well represented, none of sizeable dimensions has been so flaked down that it assumes the well-known forms of cores occurring in those Cornish industries wherein free use was made of diminutive flakes.<sup>3</sup> Hence, the cores in Miss Dudley's group still retain much of their nodular form, e.g. fig. 10, no. 5. Nevertheless, the production of small flakes at her site is attested by the presence of a tiny core (fig. 10, no. 7), flaked down to the utmost.

ACCOMMODATION-TOOL.—Enhancing the Bronze Age aspect of the stone industry is a tool (fig. 10, no. 8), simply made by grinding to a bevel the edge of one face and ever so slightly on the back of the splayed end of a piece of flint or chert, which has the look of having suffered from the action of fire *before* treatment. This is indicated by the fact that though the material itself is injured the cutting-edge with which it is furnished is perfectly keen, unimpaired and fresh in appearance. It seems we are confronted with a sort of chisel. As such the specimen may be compared with one treated much in the same way and found by the contributor of this note near Luss, Dumbartonshire,<sup>4</sup> a district where stone capable of being given a sharp and durable edge is rare.

<sup>1</sup> Surface find.

<sup>2</sup> These are bigger than the 'thumb-nail' scrapers to which I am used.

<sup>3</sup> J. G. Marsden, 'Cone Cultures at

the Land's End,' in *Proc. Prehist. Soc. of East Anglia*, iii, part i (1918-19), 59-66.

<sup>4</sup> *P.S.A.S.*, lxxiv (1939-40), 6 and fig. 1, no. 2.