

AN EXCAVATION AT ST. MAWGAN-IN-PYDER, NORTH CORNWALL

By LESLIE MURRAY THREIPLAND

In 1948-49 the Ministry of Works undertook the excavation of half the small camp at St. Mawgan-in-Pyder in North Cornwall near Newquay (Grid. Ref. Ordnance Survey Sheet 185.874654) which was threatened with a new housing scheme. I am extremely grateful to the owner of the site Col. E. N. Willyams D.S.O. of Carnanton and Nanskeval and his tenant who gave us every facility. The village of St. Mawgan lies at the crossing of the little river Menalhyl which drains down from the moors round the triple banked camp of Castle-an-Dinas, and the camp itself is sited above it on the promontory formed by the river and its tributary,

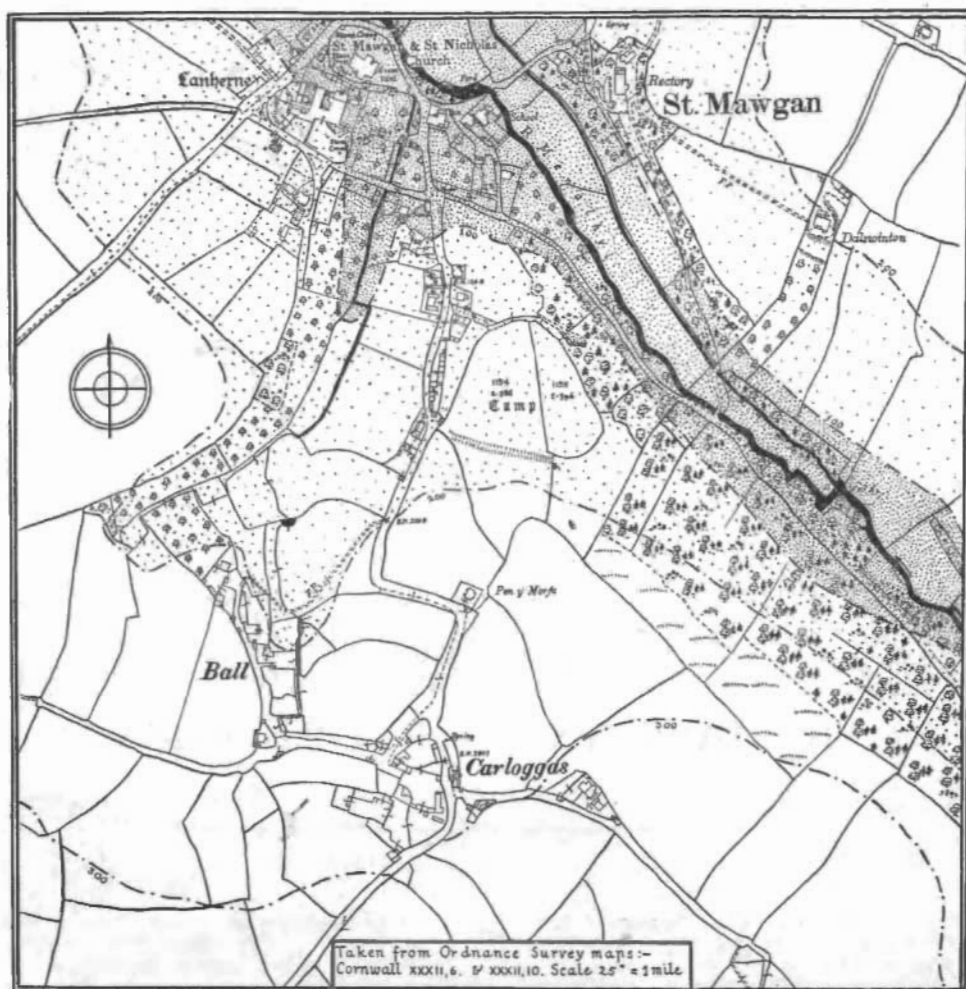


Fig. 1. St. Mawgan



A. St. Mawgan ; the camp sited on a ledge below the high ground to the South
(Crown Copyright reserved. Photograph by the R.A.F.)



B. Excavated areas within the camp, looking East
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ST. MAWGAN FROM THE AIR



St. Mawgan. The Entrance Way, looking outwards. Hut V on the left

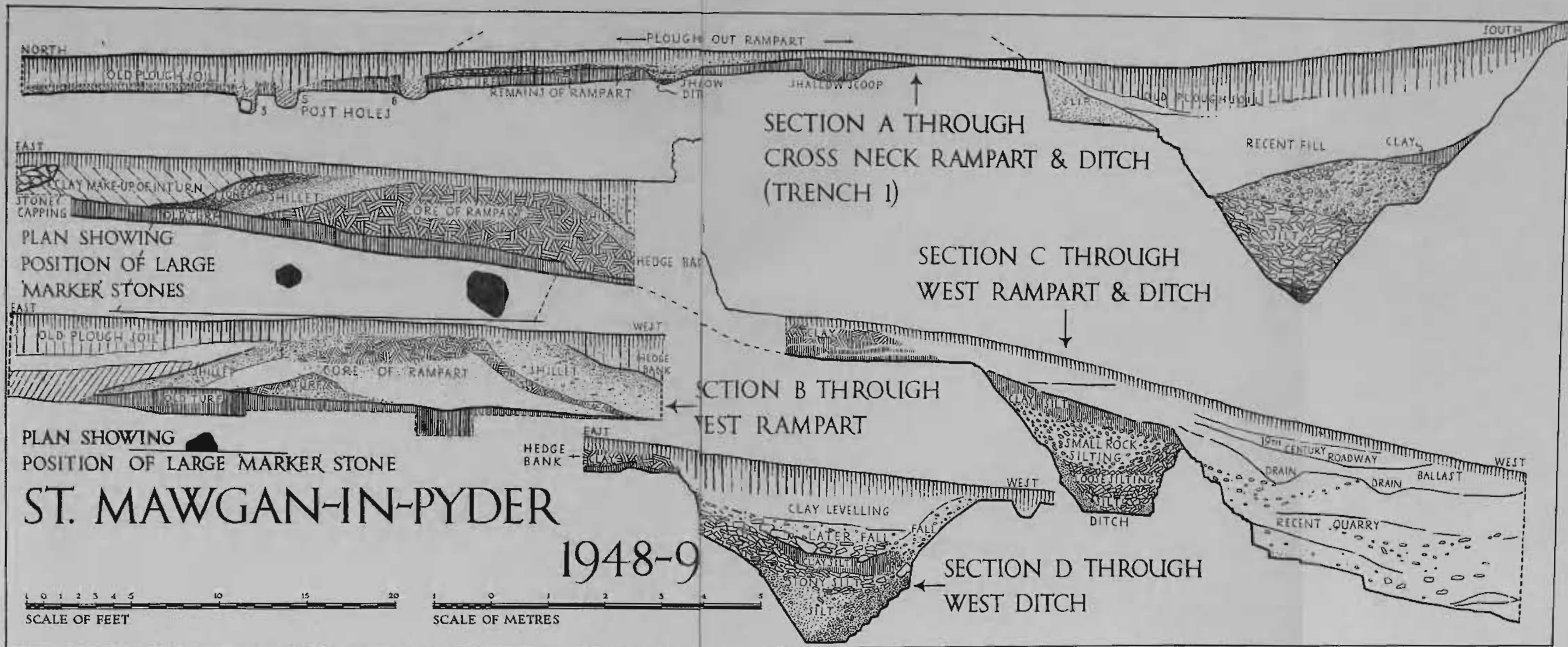


Fig. 3

The site is known locally as the "Castle Fields" and consists of two sloping fields defined, now, by field banks on the north, east and west, below which, on all sides, the ground falls steeply away. Except at the south-east where the rampart curves around from the river, the defences crossing the neck of the promontory are now barely visible. The ditch is marked only by a cart track and the rampart by a slight rise in the ground, the former having been ploughed in since the removal of the field boundary along it shewn in the Ordnance Survey Map (Cornwall XXXII. S.W., Edition 1907).

Most of the area of the proposed housing estate, the western half of the camp, was trenched, but only at the north-west corner was it found profitable to clear extensively, as there the covering soil was deepest, while in other areas ploughing had obliterated any structural remains. In this north-west area four complete huts and the remains of several others were uncovered, and although no trace showed on the surface, the main or one of the main entrances to the camp. Trenches were also cut through the defences on the west and south. The results are grouped below under the three headings; *the Defences*, *the North West Entrance*, and *the Occupation inside the Camp*.

The Defences (fig. 3).

A trench was first dug through the defences across the neck of the promontory. It showed that, although only a foot of material remained between the bottom of the present turf line and the top of the natural rock, the bank seems to have been some 35 feet wide at the base and was formed of an inner core of fine stones with larger ones at the back. These levels lay on the original turf which had, in its turn, been cut through by an earlier gully (see below Area C. p. 51) and the back of the rampart was broken through by a number of post-holes. A pit below the original turf line is one of several shallow scoops in this area and probably shows disturbance by old tree roots. Other cuts were made, Trenches XVIII, XL and XXXV, through the neck defences, all of which show the pre-rampart gully cutting into the old turf, and the occupation at the back of the rampart (fig. 2).

The structure of the rampart was borne out more fully in sections through it on the west (Trenches XIX, XXXIX and partially in Trenches XXV, XXX and XXII) although the foot of the rampart had been disturbed by a hedge bank along its whole length. It was built of earth and stones in inverse ratio to those dug out of the ditch, i.e. clay and soil at first, then fine stones and lastly larger ones.

In XIX, XXXIX and XXX there were large boulders lying on the old surface which may have been laid as markers for the line of the bank (fig. 3, Sections B and C). It is noticeable that in Trenches XXX and XXXV a terrace had been cut where the slope was steep, making a level shelf for the bank to prevent it slipping down into the ditch.

The ditch (fig. 3, Section A) across the neck of the promontory showed itself to be about 30 feet across and 14 feet deep, cut to a V shape. There was a trace of an old turf line above the secondary filling overlying the primary silt but this had been destroyed in recent times and a ledge also quarried out of the lip of the ditch on the north. A series of cuts were made along the line of the ditch to see if there was an entrance causeway, but none was found. In view, however, of the recent disturbance shown in Trench I, the result must still be inconclusive. No sign of a counterscarp bank was found. Two other sections (fig. 3, Sections C and D) through the ditch were taken on the west side near the entrance and showed it to be narrower and shallower than the cross-neck ditch, no doubt since it lay on a downward slope. Here the ditch was flat bottomed following the bedding of the natural rock. A 19th-century quarry with a later road running over it had, in

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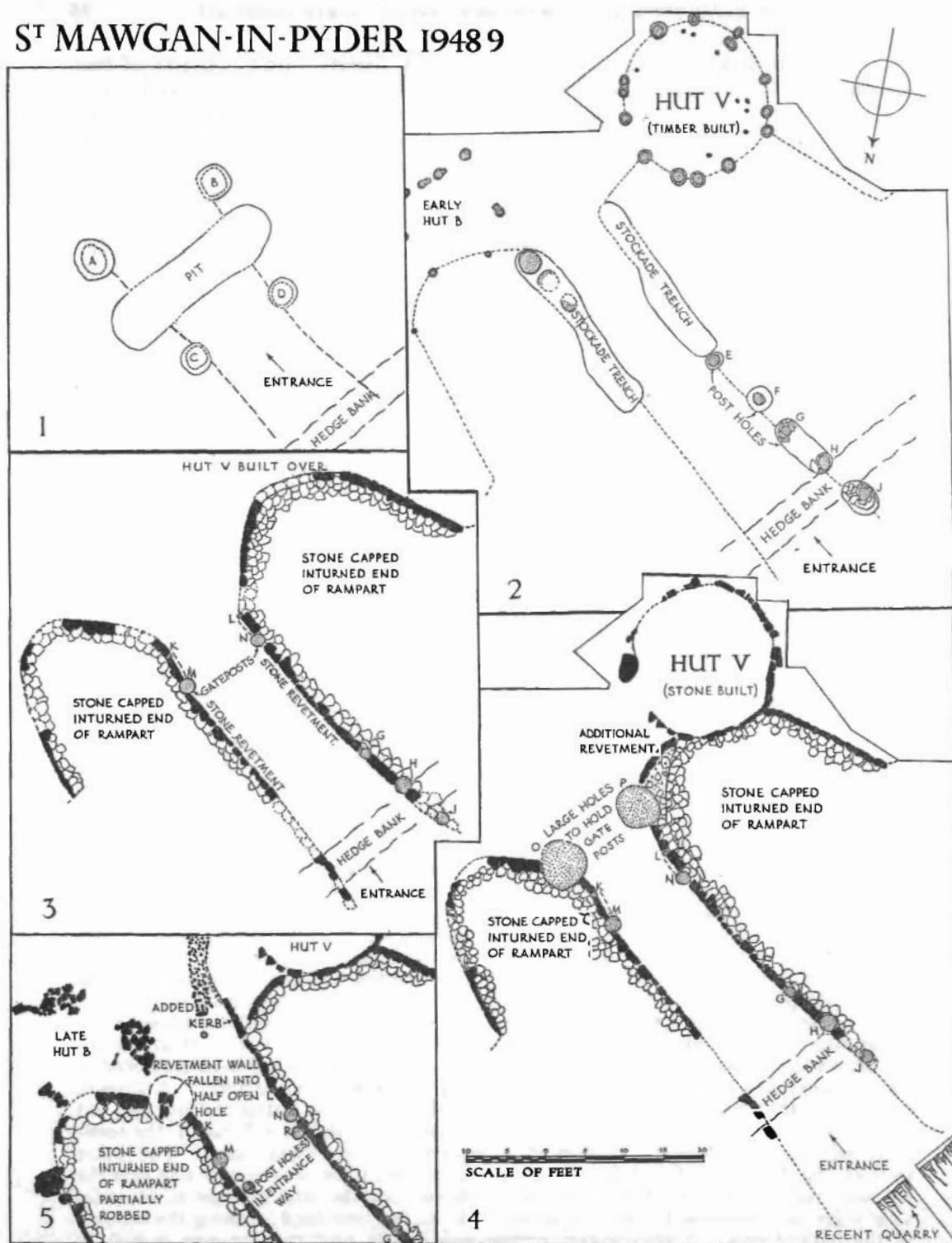


Fig. 4. The North-West Entrance

part, removed the outer edge of the ditch and completely removed the entrance causeway to the north of it.

North West Entrance (figs. 4 and 5).¹

No sign of this entrance appeared on the surface since the soil from the upper part of the field had formed a lynchet at the northern end against the hedge bank. The excavation showed a long narrow entrance passage between two inturned banks² which had been fortified in three main successive periods.

Period 1 (fig. 4, 1)

At this period it would seem that the banks on either side of the entrance were already inturned or club-ended, but were composed of the earth make-up found in the rampart generally (fig. 3). On either side of the entrance two pairs of holes (A, B, and C, D) were dug presumably for a gate and bridge (fig. 6, Section B-B'). Between them a round ended ditch originally some 3ft. 6in. deep was dug right across the entrance way. This would have acted as a trap or obstacle both for vehicles and men in time of war, but would presumably have been timbered over for ordinary traffic. It would have proved an effective obstacle, placed where it was, below the bridge and in front of the gate with no room to turn. Perhaps this pit was only a temporary measure as little silt had accumulated in it before it was filled up (fig. 6 Section C-C').

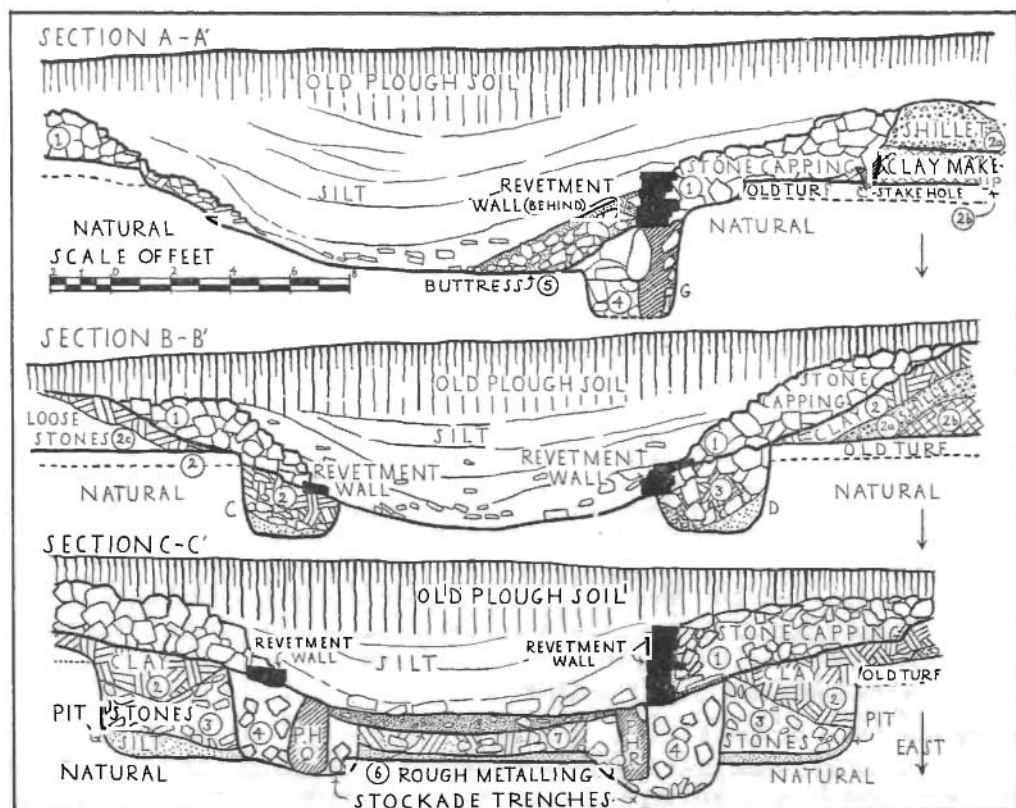


Fig. 6. Sections across N-W entrance

¹ Fig. 5. See folding plan facing page 52.

² Cf. Castle Dore. *J.R.I.C.* New Series Vol. 1. Appendix Pl. XIV, 58.

Period 2 (fig. 4, 2)

In this second period the pit or trap across the entrance was filled up and trenches, presumably for stockades, were dug, partly through this filling, on each side of the entrance way (fig. 6, Section C-C'). Five other post holes¹ (E, F, G, H, J), including a stretch of trench with two stone-packed holes in it were found on the south side of the entrance and perhaps supported the rampart here to form a fighting platform. On the northern side, where those entering would be protected by their shields, there were no signs of post holes. A clay capping on the rampart is associated with the second phase (fig. 6, Section C-C') where it can be seen filling the pit of the earlier period. A timber built hut, Hut V, lying behind the southern inturn and probably a guard house, seems contemporary with this period.

Period 3 (fig. 4, 3)

This third period is in itself sub-divided into three phases although all are characterised by the use of stone revetment walls. Both sides of the entrance way and the inturned ends of the rampart were now capped with a level of heavy stones, larger than any yet used in the fortifications; the stockade of Period 2 pulled out and its trench filled up. A dry stone revetment wall holding back the heavy capping was laid partly on top of this filling and the wall was carried round the whole outline of the inturned ends of the rampart and along both sides of the entrance passage. Two round gate post holes (M and N) were set into the revetment wall with two small square post holes (K and L) three feet behind them on the inner side, presumably to hold posts to which were attached the double doors when open. Two other post holes (R and Q) outside the revetment may have held replacements or props at a later phase (see below). The revetment walls were carried along both sides of the passage over the filling of post holes E and F, but it would seem that post holes G, H and J were retained in use and the revetment wall set between them. Fig 6, Section A-A' shows that either now or later a buttress of earth and stones was built against G and H and the intermediate revetment to support them against pressure presumably from the fighting platform above. This first phase showed the revetment wall of the inturned end of the southern rampart overlying the post holes of the earlier Hut V.

The second phase of this period (fig. 4, 4) shows a readjustment of the line of the revetment wall behind the gate posts (M and N) to meet a stone walled hut built nearly on the same site as that of the earlier guard hut. This necessitated pulling down the end of the southern inturn. The plan in fig. 10 shows how the stones of the revetment wall had been laid in a shallow foundation trench. Two large post holes (O and P) perhaps to hold the gate posts of this period, were dug at the curve of the inturned ends of the rampart.²

The last phase (fig. 4, 5) seems to show that the necessity for defending the entrance had lost its urgency. The large posts (O and P) of the previous period were pulled out and a stretch of kerbing was laid over the filling of the one on the south side and, on the other side, the hole must have been left half empty, for part of the revetment wall can be seen to have fallen into it (Pl. IXB). Only three stratified sherds were found at the entrance:

1. One decorated sherd from the filling of the stockade trench, Period 2.
2. Type C (fig. 25). Both this and No. 3 (below) come from the stony capping of the inturned ends of the rampart, thrown up in Period 3.
3. A cordoned sherd (Type F or G).

Occupation inside the Camp

The main area excavated was immediately inside the entrance and a number of huts were found there. Although a good deal of the structure remains, they do not present

¹ These might belong to the next period but cannot be definitely apportioned.

² For this gatepost position compare *Arch. Journ.* XCV, Bredon Hill, Pl. XXI and Pl. XXXIII.

an entirely clear picture. This is partly due to the fact that ploughing has removed the northern edge of the huts on the sloping hillside and also that there was only one level of occupation in the huts although they appear to have been in use for a considerable time. There were six huts uncovered which were almost complete, W, A, Y, Z, V and X. Of these W, A, and Y were occupied in the earlier period and Z and V, and probably X, in the later period. At the extreme north of the site the ground is intersected with gullies but very little of the structure above ground remains (Area B).

At the southern end of the site, at the back of the cross neck rampart, there are remains of two timber built huts E and D dug into the back of the rampart. There were no occupation levels associated with them and only a sherd or two were found in the post holes themselves. This is described below as Area C. A number of trenches were dug elsewhere on the site, along the crest and behind the west rampart, and these have been described below as Area D.

Area B (fig. 5.).

Gully 1. Part of the earliest occupation on the site, perhaps contemporary with Period 1 at the entrance, was shewn by Gully 1. It is not an unusual plan,¹ a more or less circular gully, too shallow to have held a palisade, some thirty feet across with an opening to the north-west. Here it must surely represent the drip trench outside a turf walled hut of which only four post holes and a pit now remain. The gully has been cut through by Gullies 5, 11 and 9 and is overlaid by the occupation of Hut W. There were only a few sherds found in the filling and these are tabulated below.

A, B	C	D, E	F, G	H	J	K	L	M	N	O	P	Q	R	S	Terra Sig.	Amph-orae
2		2	1		2											

Gullies 5 and 11. These gullies start from small pits and both cut through Gully 1. It is possible that Gully 5 encircled the north wall of Hut W, perhaps to take away the water falling from the roof.

A, B	C	D, E	F, G	H	J	K	L	M	N	O	P	Q	R	S	Terra Sig.	Amph-orae
5		5	2		1		1									✓

Gully 9. This gully runs north west, straight down the camp towards the northern rampart, cuts through Gully 1 and possibly Gully 11 but was filled in before the erection of Huts W and S. There is however, a probability that the lower end was reopened later.

Spindle Whorls	Fig.	Iron Objects	Fig.	Bronze Objects	Fig.	Miscellaneous	Fig.
1 (Type II)				Stud		Green and yellow glass bead (fragments) Loom weight	

¹ The sherds tabulated under the description of the huts, etc. are lettered according to the types dealt with in the pottery section. The

small finds are mainly tabulated according to material and also give the number (in the fig. column) of an object in the relevant illustration.

The finds from the rest of Area B, coming from an early occupation directly on the natural soil but not associated with any definite hut forms, are tabulated below.

A, B	C	D, E	F, G	H	J	K	L	M	N	O	P	Q	R	S	Terra Sig.	Amphorae
14	1	7	2		12				2					2		✓

Spindle Whorls	Fig.	Iron Objects	Fig.	Bronze Objects	Fig.	Miscellaneous	Fig.
1 (Type I)	1	Split iron socket	14	Finger-ring	7	Hammerstone	
		Nail		Droplet	12	Clay counter (dec. sherd)	20
		Small Knife				2 'Loom weights'	

Hut W (fig. 7 and Pl. XB)

Both huts A and W present rather an unusual plan. Both have an outer circle of post holes or post bases (Hut W has five nests of stones lying on the natural rock and containing decayed wood) and a platform or earth bank inside them.¹ This is revetted inside in W, with upright stones (Pl. XB) while there is a suggestion of timber revetment in Hut A. Both huts seemed to have shared a common wall,² and Hut S on the west also appears to share a wall with Hut W.³ The earth bank or platform may represent a turf wall with the outer posts as tie posts for the roof or, more probably, a sleeping shelf inside a timber and wattle outer wall. A quantity of daub with a light coloured clay wash was found in the debris of this Hut W.

Hut W has a central hearth, a shallow clay lined pit with a flat stone base and a low, upright, stone hearth-back on the west. Around this hearth is a rough circle of twelve large post holes to hold roof supports. There is now no trace of the completion of the outer wall of the hut on the north, although Gully 5 in part runs closely along this line. The filling of the earlier Gully 1 had been cut into by post hole W.1. but the latter had perhaps given an insecure hold so that the post had been removed and the top of the hole covered by a large pierced stone. Gully 9 must have also been filled up before Hut W was built, as both the post base W. 13 and the earth bank on the east overlie the filling. The stratified pottery and small finds are tabulated below.

A, B	C	D, E	F, G	H	J	K	L	M	N	O	P	Q	R	S	Terra Sig.	Amphorae
18		18	5	4	4	2		3	2	1				1	✓	✓

¹ Cf. Castle Dore, *J.R.I.C. New Series* Vol. 1. Appendix, 54, fig 5 where there is a paved area raised above the central floor.

² Lady Fox has informed me that there is a pair of semi-detached huts at Dean Moor

(Dartmoor) and eight other semi-detached huts in other settlements in the Avon Valley, Devon.

³ See below p. 51 for a shared wall between Huts E and D in Area C.



A. Revetment wall of S. inturn in 1st and 2nd phases of latest period of fortification, and kerbing of 3rd phase



B. North side, revetment wall fallen into post-hole of previous phase

ST. MAWGAN. THE ENTRANCE



A. Hut V showing post-holes of timber hut, and half-destroyed revetment wall of S. inturn seen under later walling of hut



B. Hut W showing post-holes and retaining wall pushed forward

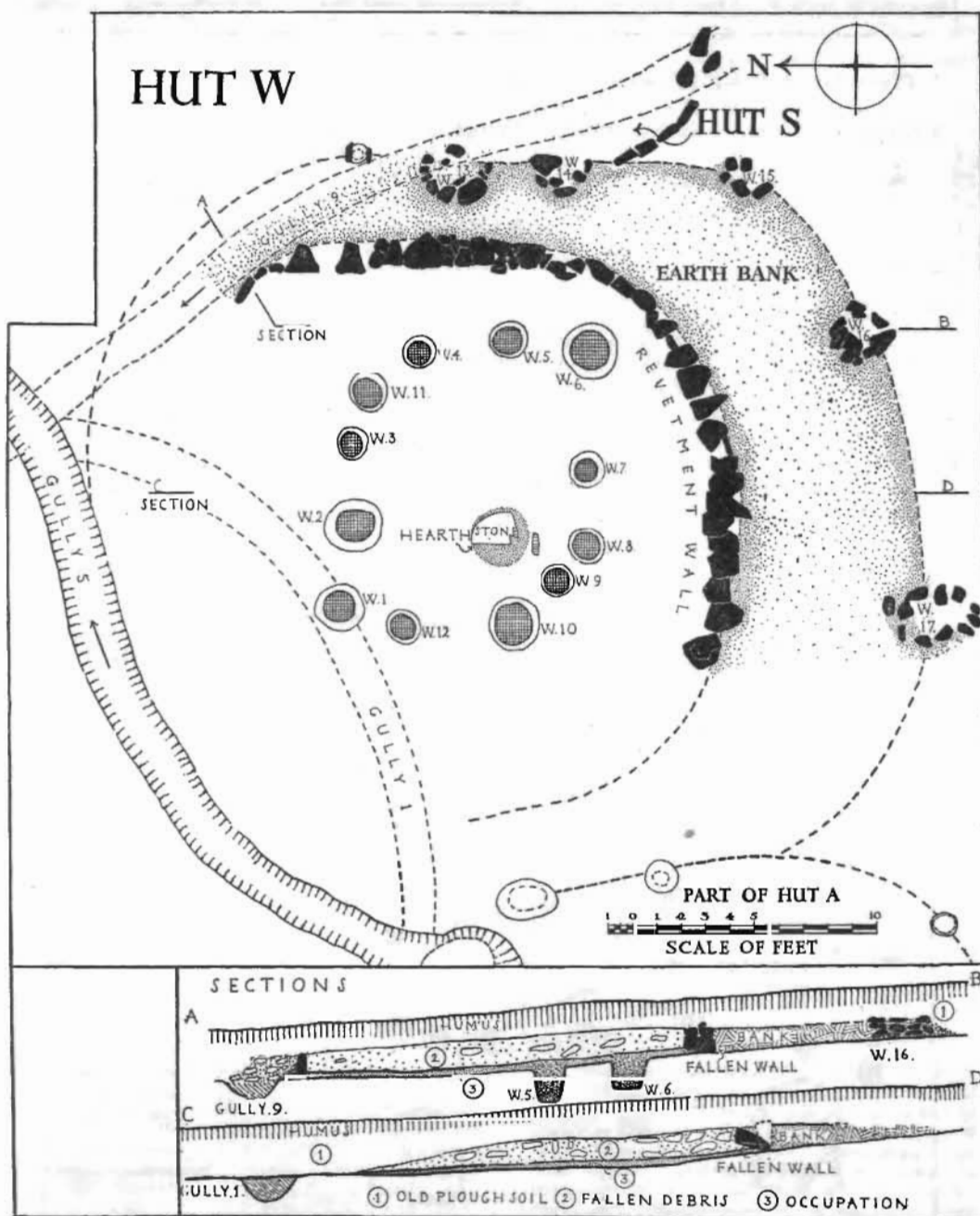


Fig. 7. Hut W

Spindle Whorls	Fig.	Iron Objects	Fig.	Bronze Objects	Fig.	Miscellaneous	Fig.
1 (Type I)	2	3 Brooches	16	Brooch	7	Glass Bead	6
1 (Type IV)	18	2 Bolt heads	15	Brooch	9	Light faced daub	
		Bead ?		Ring	1	3 ' Loom weights '	
				3 Droplets		Tin slag	

Hut A (fig. 8, and fig. 4)

The occupation of Hut A falls into two periods though the plans must be, to some extent, conjectural. The early Hut A described above with Hut W has a ring of posts—two shared with Hut W—outside a platform left in the natural soil some 4-5 feet across. There is a suggestion of timber revetting on the inner side of this platform. The line of outer posts is continued by three large pits 5, 6, and 7 which might possibly have held large timbers. The middle of the hut has been worn away to a hollow, and in the centre were two well made hearths (Hearth 1) with stone uprights on either side, and each with a shallow charcoal-filled channel leading to it. There is evidence that this hut was probably

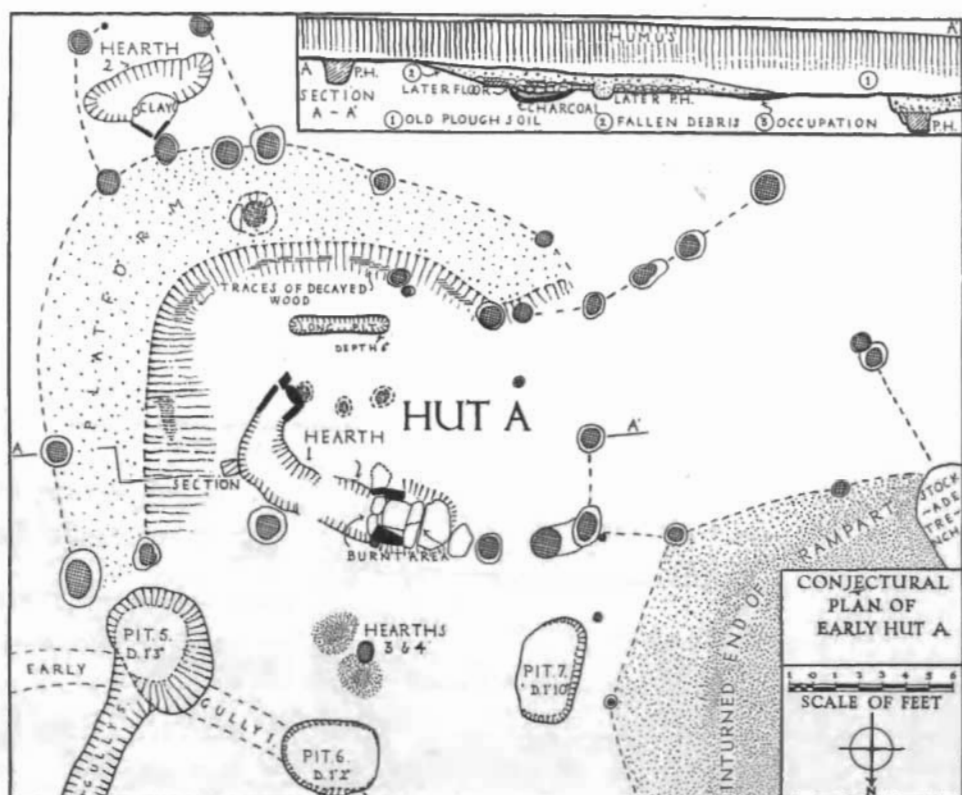


Fig. 8. Hut A

used as a smelter's or founder's workshop; lamps of partially reduced tin ore have been found, droplets¹ of bronze, pieces of crucible and, nearby, a small ingot of bronze and a folded piece of scrap bronze.² The 'long' pit was probably used for 'blowing.' There are two shallow charcoal-filled hollows (Hearths 3 and 4) north of Hearth 1 and there was also another hearth, Hearth 2, perhaps sheltered by a lean-to, against the back of the hut.

There are a number of post holes inside the area of the hut, some of which are difficult to assign to any particular period of occupation. But in this early period Hut A seems to have had a wooden porch on the west.³

In the later period (Fig. 5) of the occupation a very rough dry stone wall, made up partly of re-used material, stone pot lids, stone slabs, tin ore, etc., had been built over the top of the filled-up Pit 5, round in a flattened semi-circle to the northern inturn, and to some extent encroaching into the entrance approach. The western end lay over the filled-in palisade trench of Period 2 at the entrance. There is little sign of walling on the north. There are two hearth areas, perhaps of this period, depressions or pits, filled with charcoal and surrounded by stake holes which must have held wattle shelters or supports for spits. There is a pavement of small stones of this period overlying Hearth 1. This last phase of Hut A with its disregard of the entrance defences seems to represent the latest occupation of the site. The stratified pottery and small finds are tabulated below.

	A, B	C	D, E	F, G	H	J	K	L	M	N	O	P	Q	R	S	Terra Sig.	Amphorae
A1	12			2	1	4	1										
A2	1		1			3			3	3	4	1	2	1	1	✓	✓

	Spindle Whorls	Fig.	Iron Objects	Fig.	Bronze Objects	Fig.	Miscellaneous	Fig.
A1	1 (Type I)				Brooch	17	Schist counter	19
	2 (Type II)	9			Brooch pin		2 Whetstones	
					Droplets (4)		Tin slag	
							Crucible	
A2	1 (Type III)	12	Key	11	Brooch	10	6 Whetstones	
	1 (Type IV)				Brooch	11	Hammerstone	
							Tin slag (in wall)	

¹ Mr. H. Maryon has kindly reported on the bronze droplets in Hut A.

² I think that you have found the workshop of an early smelter and founder. The drop of metal is a bronze with approx. 10% of tin: possibly with a little zinc or other ingredients, though these were not specifically looked for. Quite definitely the droplet is ancient, and decay has spread all round the crystal boundaries. The metal could be the result of copper and the tin ores being smelted together on such a hearth as your drawing suggests, the fire being excited by bellows.

The large slab from Hut A (fig. 37), with the curious notch and semi-circular hole is of special interest. I think that it was meant to straddle the two halves of a mould; a mould with the main 'pour' in the centre line of one side or end. The metal would enter by the semi-circular hole and pour into the interior through a channel prepared for it leading from the semi-circular hole or 'pour'.

³ See below p. 80 described by Sir Cyril Fox.

⁴ Cf. Castle Dore *J.R.I.C.* New Series Vol. 1 Appendix fig. 5.

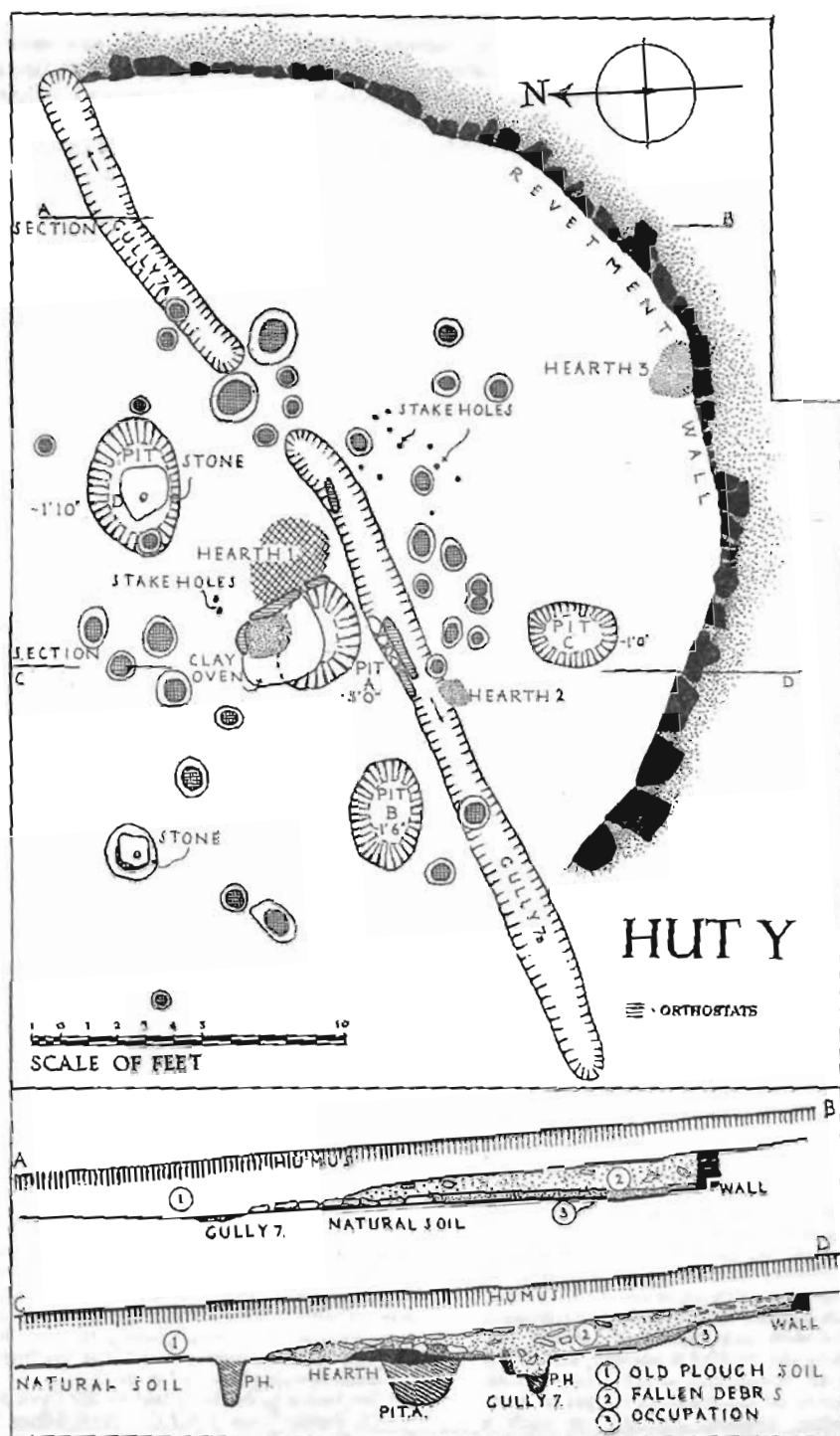


Fig. 9. Hut Y

Hut Y (fig. 9)

Hut Y, the largest of the huts found (some 32 feet in diameter) was similar in layout to Hut Z (fig. 11), but it had rather a different internal arrangement. A semi-circle cut back into the hill on the south is revetted by a dry stone wall. There is a central hearth and a confused inner circle of post holes.¹ There are four large pits, or post holes, in the hut floor, one of which is sealed by a small clay oven² near the central hearth. A gully, separated into two stretches of unequal length, drains in opposite directions out from the centre of the hut and suggests that at some period in the occupation there was a central opening in the roof. As the sections show, there is a single level of occupation which is covered by the fallen debris of the hut. There is, however, evidence that some of the large pits A to D belong to an early phase of the occupation; the clay oven seals the filling of A and a post hole is cut into the filling of D, large pierced stones lie on the top of the fillings of D and a post hole west of it. The thirty-four other post holes in this area form a sort of circle and it appears that the posts have been put in and pulled out from time to time to suit comfort or the condition of the roof. A number of stake holes occur, some near the hearth and the others round two post holes, and are probably the remains of wattle shelters. There is no sign of the completion of the hut on the north.

Hearth 1 is a burnt area with an upright hearth-back on the west, and has a small clay oven with a large stone at its base adjacent to it. There are two small burnt areas, Hearths 2 and 3, one on the edge of the gully and the other against the revetment wall. Some stones have been placed on edge on the north side of Gully B, presumably to prevent the side from falling in. A considerable amount of pottery and small finds were found in this hut and are tabulated below.

A, B	C	D, E	F, G	H	J	K	L	M	N	O	P	Q	R	S	Terra Sig.	Amph-orae
22	3	35	3	1	21					2				1	✓	✓

Spindle Whorls	Fig.	Iron Objects	Fig.	Bronze Objects	Fig.	Miscellaneous	Fig.
3 (Type II)	7, 8	Arrowhead		Penannular brooch	1	Schist 'saw'	9
7 (Type IV)	14-17	2 Nails		Ring	5	Clay counter	
				Pin		Worked flint flake	
				Small lump		4 'Loom weights'	
						Hammerstone	

¹ For a general discussion of huts with an inner circle of posts *v.* Castle Dore, *J.R.I.C.* New Series Vol. I Appendix, 52ff.

² For clay ovens, *v.* Maiden Castle, fig. 16. 55.

Hut S (fig. 7)

The remains of Hut S, which appeared to share a common wall with Hut W, only consisted of a portion of retaining wall and a level of occupation above the fill of Gully 9. The stratified pottery and small finds are tabulated below.

A, B	C	D, E	F, G	H	J	K	L	M	N	O	P	Q	R	S	Terra Sig.	Amphorae
2	1	3	2	1	4	1		1		3	2			1		

Spindle Whorls	Fig.	Iron Objects	Fig.	Bronze Objects	Fig.	Miscellaneous	Fig.
1 (Type IV)				Small lump		Whetstone Tin slag	

Hut V (fig. 10, and Pl. XA)

This hut lies behind the southern inturned rampart and perhaps at all times served as a guardhouse (see above p. 38); it represents a clear structural picture, though not a stratigraphical one.

The original hut, (apparently associated with the Period 2 defences at the entrance) some 18 ft. across, had an outer ring of thirteen post holes (A-N) and an inner ring of ten small post holes (1-10) to hold roof supports.

This wooden hut was pulled down to build the revetment wall of the southern inturned end of the rampart (Period 3) and a large burnt area lying behind the inturn and overlying one of the post holes of the wooden hut may belong to this interim period.

The second hut, built on the same site as the earlier one, (Period 4), had a stone revetment wall and there are traces of an earth backing behind the stones to the south. On the west the hut was now cut right back into the inturned end of the rampart, and only two stones in position and a shallow trench remained to show where the retaining wall of the inturn had been.

Four hearths were found in the hut but it was stratigraphically impossible to differentiate the earlier from the later. Hearth 1 was an irregular clay-lined pit about 8 ins. deep. Hearth 2 was an area of burnt yellow clay and Hearths 3 and 4 were burnt patches of which the former had an upright stone as a hearth back at the north and two small stake holes on either side opposite it, perhaps to hold uprights for a spit. The stratified pottery and small finds are tabulated below.

	A, B	C	D, E	F, G	H	J	K	L	M	N	O	P	Q	R	S	Terra Sig.	Amphorae
V1	1																
V2	3					1			3	7	6	4	1	2	2	✓	✓

	Spindle Whorls	Fig.	Iron Objects	Fig.	Bronze Objects	Fig.	Miscellaneous	Fig.
V2	2 (Type I)	4			Brooch	6	4 Whetstones	
	1 („ II)						' Loom weight '	
	1 („ III)	13					Tin slag	
	1 unperf. (Type IV)							

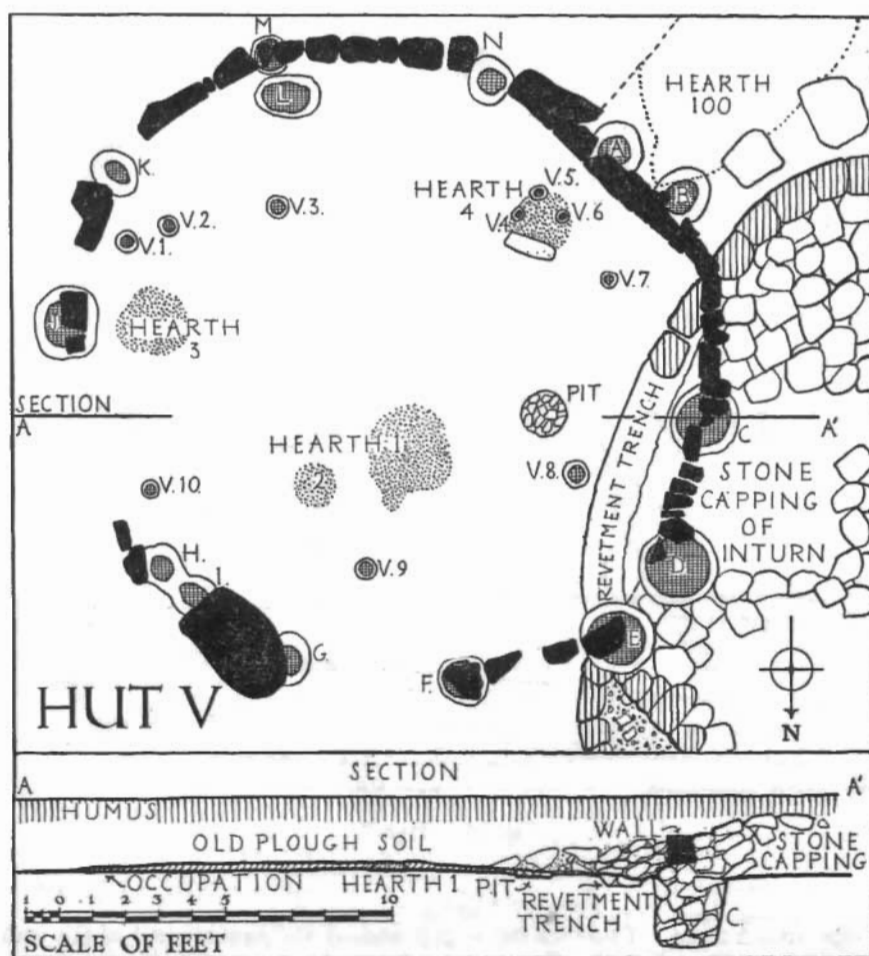


Fig. 10. Hut V

Hut Z (fig. 11)

This hut lies nearly on the eastern boundary of the site and, although in a more ruined condition, conformed to the general pattern of Hut Y. Most of the stones of a semi-circle of wall set against the natural rock on the south remain and still stand four courses high in one place. There are two central hearths of burnt clay, and part of an inner circle

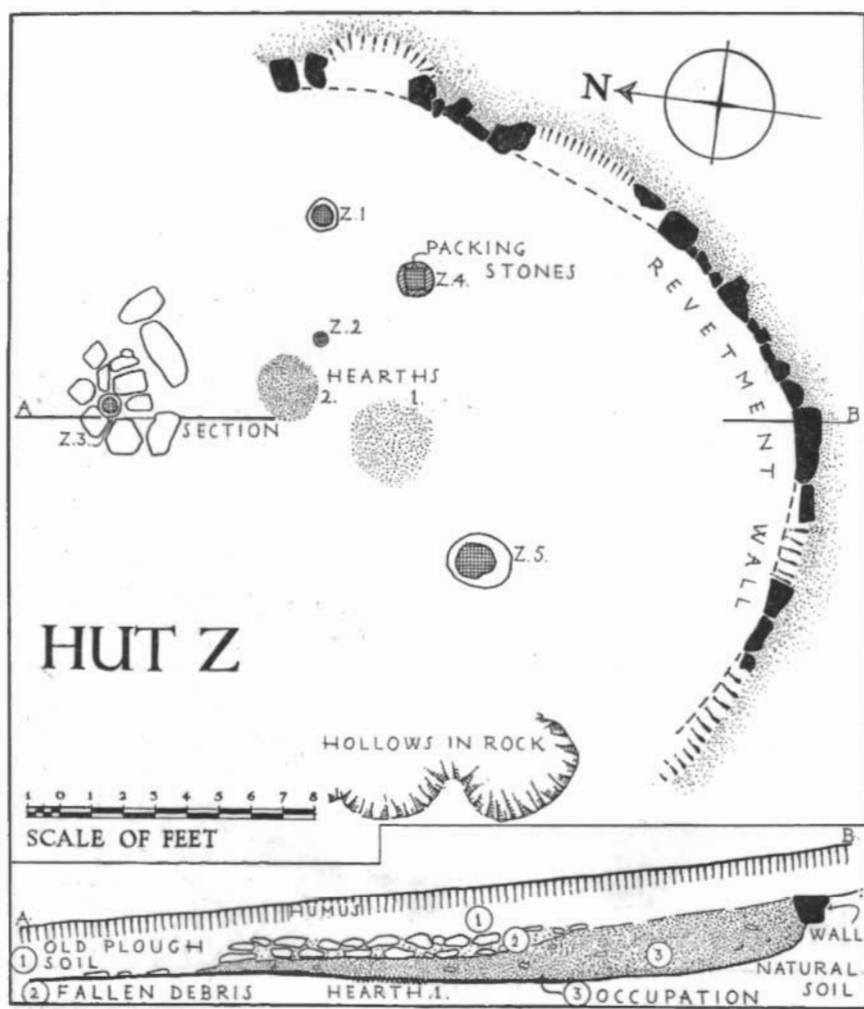


Fig. 11. Hut Z

of post holes round them. Two rock-cut depressions at the western end of the wall may have been structurally relevant. The section shows the occupation level covered by a layer of fallen building materials except where ploughing has partially removed it, and

there is now no trace of the northern wall of the hut. The stratified pottery and small finds are tabulated below.

A,B	C	D,E	F,G	H	J	K	L	M	N	O	P	Q	R	S	Terra Sig.	Amphorae
4	1	2			4		1	6	6	12	2	4	5	2	1	

Spindle Whorls	Fig.	Iron Objects	Fig.	Bronze Objects	Fig.	Miscellaneous	Fig.
4 (Type III) (2 are clay)	10, 11	Ring 2 Nails	13	Brooch Brooch	3 13	Stone counter Bone bead Daub	

Hut X (fig. 12)

This hut had utilised the back wall of the inturned end of the northern rampart at the entrance, and had added a projecting heap of stones half way along it to form one side of an entrance. There are enough stones left on the east of the hut to give a general impression of its shape, and it seems to have been a makeshift dwelling, using the shelter of the corner of the inturn and the main rampart. The important feature is a finely built hearth with

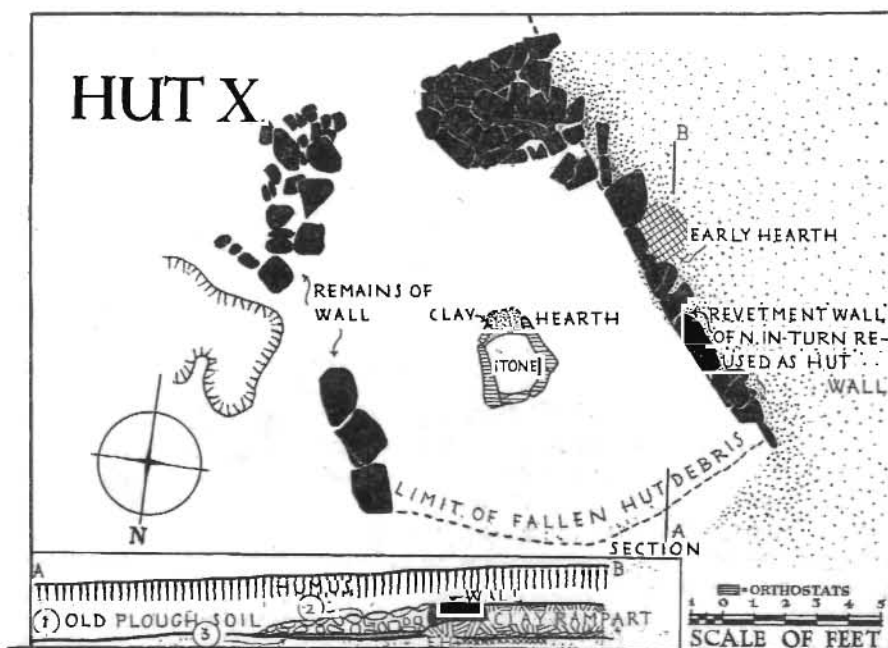


Fig. 12. Hut X

a flat stone base and edging of upright stones. As can be seen in the section there was an earlier occupation which underlay the inturned bank and consisted of a paving of small stones and a hearth. A heavy level of stones covers the later occupation and probably represents the fall of the top capping of the inturn. There was very little pottery from this site.

Area C (fig. 13)

The area behind the cross-neck rampart was excavated adjacent to Trench I. The original ground surface was found to be pitted with post holes and hollows, although any superstructure had been entirely removed by ploughing. The plan shows two huts, E

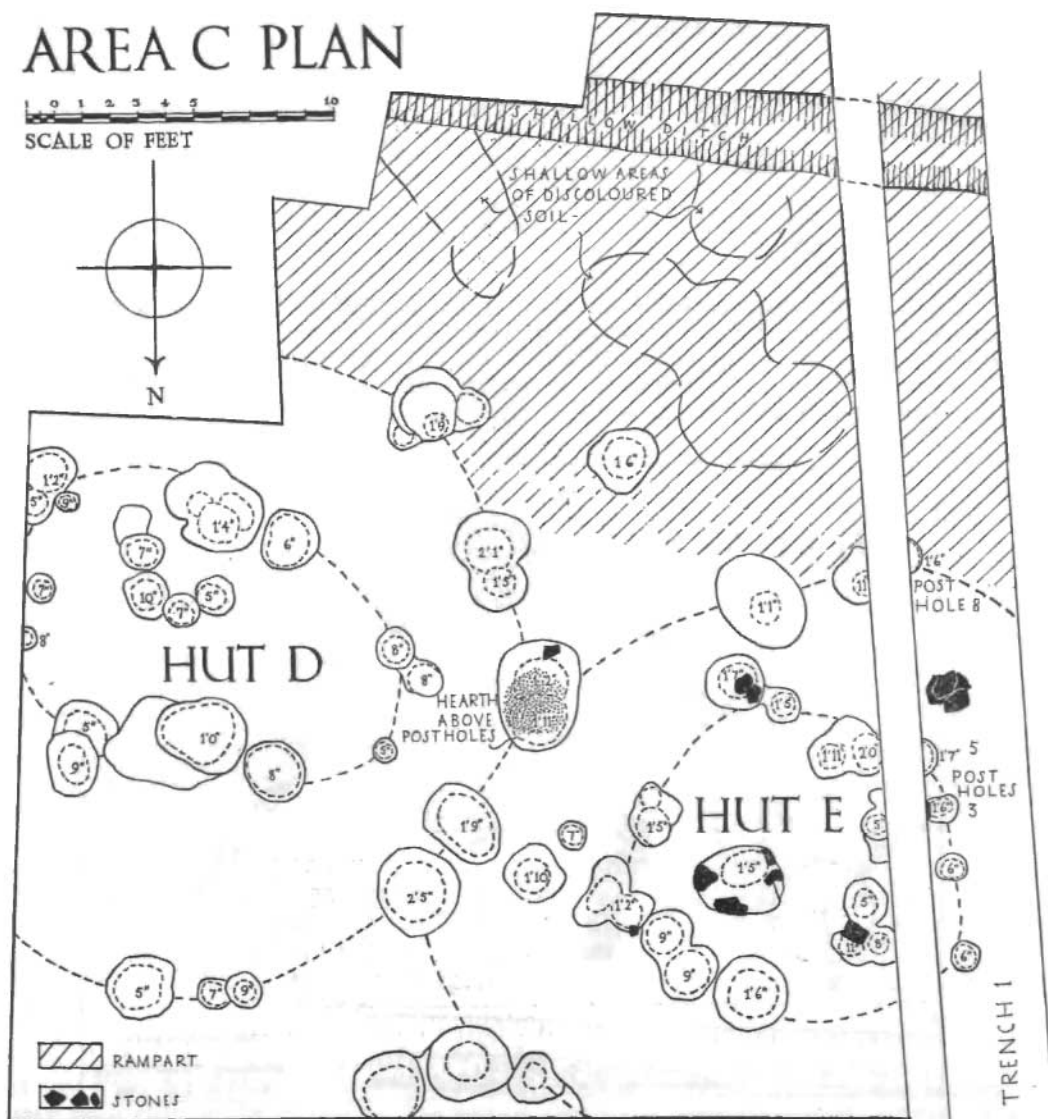


Fig. 13. Area C

and D, some twenty-five feet across, each consisting of an outer and inner ring of post holes, although three post holes of the outer ring appear to be shared between them as in the case of Huts W and A, and W and S, at the north end of the camp. The outer posts of these huts on the south are dug back into the tail of the rampart. There is a hearth above the filling of one of the common post holes. A piece of amphora and a flared rim (Type E) came from the filling of one of the post holes and the rim of a storage jar (Type J) from the hearth.

There were a number of shallow amorphous hollows of discoloured soil under the rampart (see also fig. 3, Section A) probably representing disturbance by tree roots.

Under the rampart, behind the huts, and dug through the original turf line was the shallow trench usually between two and four feet across (fig. 2) which appeared in all the trenches cut through the cross-neck rampart. It ran roughly under the centre of the rampart, but in one place broadened and turned out as if to form an entrance. It may represent an early timber palisade defence¹ put up perhaps as a temporary measure on the most vulnerable side of the camp or perhaps was merely a delineating line for the construction of the rampart.

Area D (fig. 2)

This consists of a number of trial areas on the crest of the site and behind the western rampart. Very little was found in them in the way of occupation beyond occasional post holes or pits. In II and III, and in XXXI and XXXII natural rock outcropped and the surface was strewn with boulders of Stadden Grit. Ninety-seven sling stones were found in the top filling of a small pit in Trench XXV.

SUMMARY.

The siting of the camp at St. Mawgan-in-Pyder must to some extent have been influenced by the availability of 'stream tin'. The river Menalhyl, rising from the granite uplands to the south, would have carried down pebbles of Cassiterite, the product of the disintegration of the primary tin stone veins in the granite mass now crowned by the camp of Castle-an-Dinas. Local tradition has it that the whole valley of Lanherne, or Mawgan, down to the sea itself was streamed for tin. Certainly tin streamers were working above the village at Lanherne in 1813 for they unearthed a Late Bronze Age hoard there deep in the alluvium², and an ingot of tin with a Roman stamp and inscription probably of the 3rd or 4th century A.D. was found at Carnanton³ just south of the camp.

From its earliest occupation, probably in the first quarter of the 1st century A.D., the camp was fortified by a single earth bank and ditch and no alteration in this fortification appears to have been made throughout its occupation⁴ except at the north-west entrance. There the ends of the rampart turn in to form a long narrow entry which had been fortified first by a gate, bridge (?) and pit, secondly with timber stockades on either side and some sort of fighting platform on the south, and thirdly with stone revetment walls and recapping of the rampart ends. Finally the fortification had been allowed to fall into disrepair. A number of huts, mainly timber built, were found in the area just inside the entrance and some of these could be associated with the second period of fortification there. These huts were 20-30 feet across and consisted of an outer circle of post holes, or stone revetted hill-slope, with an inner circle of post holes round a central hearth. Some appear to have shared part of a common outer wall and some had a raised platform inside,

¹ Cf. *Hembury Report*. IV. 167.

² *Arch. of Cornwall and Scilly*, p. 89.

³ *Ibid.*, p. 199.

⁴ Only the western and part of the southern defences were examined.

perhaps for sleeping on. The earlier huts contained a quantity of decorated, high-shouldered, and cordoned pottery, mainly burnished and some of it wheel turned, three brooches, some imported amphora sherds, and evidence of tin smelting, and appear to have been occupied from \pm 25 A.D. to 50-70 A.D. The fillings of gullies pre-dating the huts produced similar pottery except that no amphora sherds were found in them.

The later phase of hut occupation was associated with the period following the last fortification of the entrance, the latter perhaps occasioned by the threat of the Roman advance towards the south-west in or soon after 43 A.D. This period of occupation produced wheel-turned pottery of Roman type but still in local ware, some Samian, imported flagons and amphorae, and seems to have continued until the middle of the 2nd century A.D. It is interesting to note that such Roman influence as there was, appeared stronger in the latter part of the 1st century A.D., and that no Samian, flagons or amphorae of 2nd century A.D. date were found. Only three brooches of typical 2nd-century type were found on the site, and only one of these was stratified, in Hut Z. The fort at Nanstallon near Bodmin¹ appears to have been abandoned also in the early 2nd century and the secondary occupational activity of post conquest date at St. Mawgan may well have been bound up to some extent with the establishment of a fort there and Roman encouragement of the local tin industry.

ACKNOWLEDGMENTS

I am most grateful to the late Mr. B. H. St. J. O'Neil, M.A., F.S.A., and Mr. G. C. Dunning, B.Sc., F.S.A., of the Ministry of Works, for their help throughout, and to Mr. G. F. Willmot, F.S.A., who supervised the site for several months and to whose work much of the result of the excavation must be attributed. My thanks are due too to Miss Marian Wilson, F.S.A., who also helped supervise the excavations for a time. Much help has been given me by Mr. G. A. Garceau with his geological report, Mr. M. R. Hull, F.S.A., with his advice on the imported Roman ware and his notes on the brooches; Mr. C. A. R. Radford, V-P.S.A., and Mr. M. Callender with their opinions on the amphorae; Mr. H. A. Hyde, F.L.S., F.M.A., with his notes on the charcoal samples, and Mr. L. F. Cowley, M.Sc., with his examination of the bones. The Ancient Mining and Metallurgical Group of the Royal Anthropological Society have been very helpful with their tin analyses, and I am indebted also to Mr. H. Maryon, F.S.A., for his advice over the processes of smelting. I am most grateful to Sir Cyril Fox, D.Litt., Ph.D., F.B.A., Hon. V.-P.S.A., for his detailed notes on the decorated Bronze Strip, and I have had many helpful conversations with Lady Fox, M.A., F.S.A., and Miss D. Dudley, M.A., F.S.A.

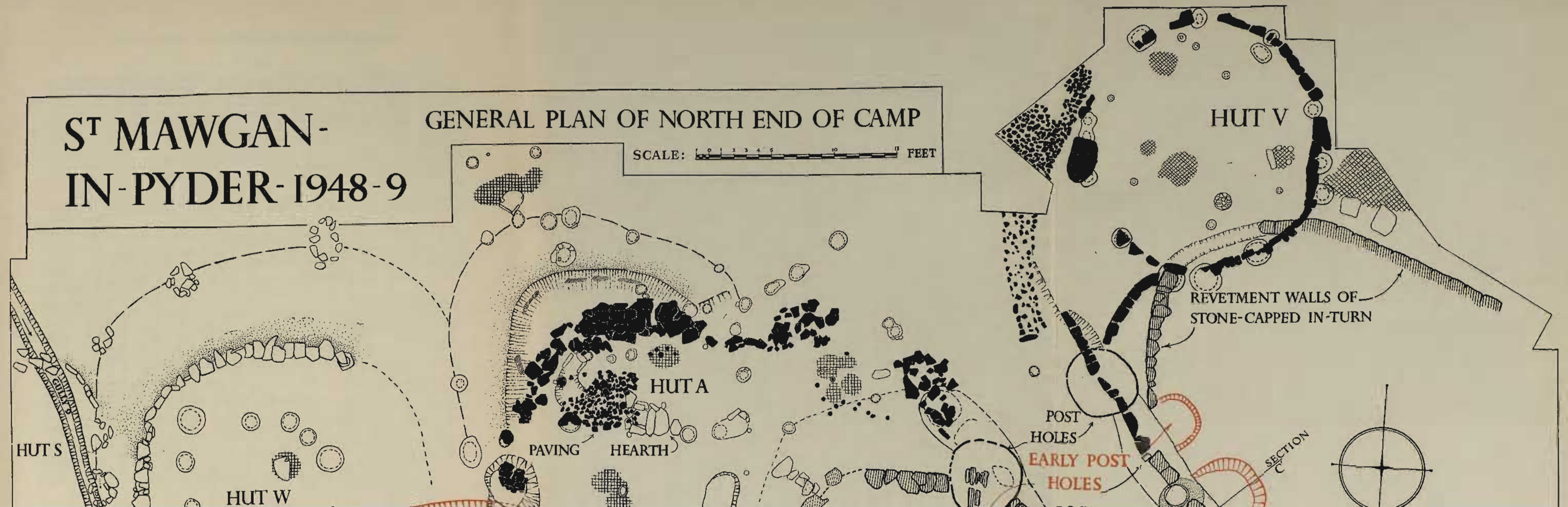
The Institute wishes to thank the Ministry of Works for the generous grant which enabled this paper to be published.

¹ *V.C.H., Cornwall*, Vol. II, pt. 5, p. 4-5.

ST MAWGAN- IN-PYDER-1948-9

GENERAL PLAN OF NORTH END OF CAMP

SCALE: 0 1 2 3 4 5 10 15 FEET



REVETMENT
WALLS OF STONE
CAPPED IN-TURN

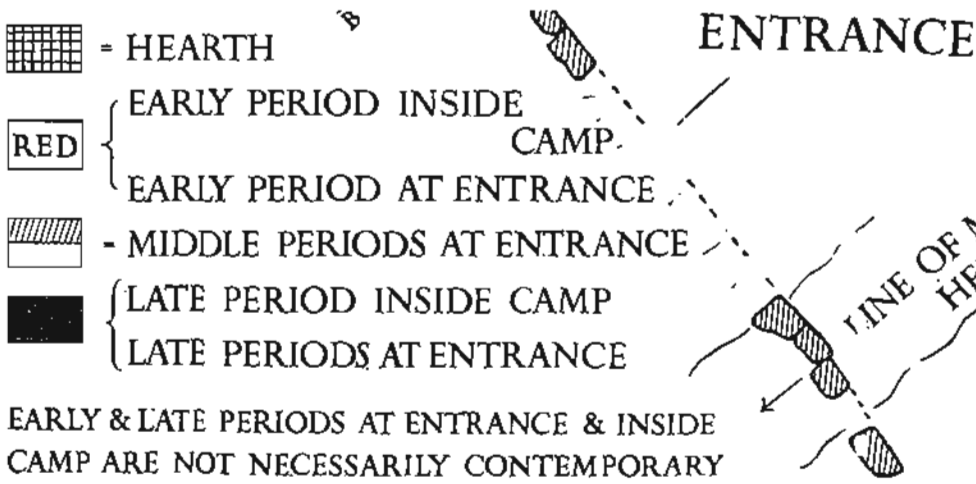
HUT X

EARLY POST
HOLES

AREA B

HEARTH

LIMIT OF EXCAVATION



POTTERY

The ware is more or less uniform in character; it was probably made locally and will only be mentioned below if it is exceptional. None of the pottery is very well fired so that the colour may vary from light red to dark grey on a single sherd. The paste is well mixed with small grit, but there are seldom any glittering mica particles. Where these are present, as in No. 66, one must, I think, assume an import from a granite area. The storage jars (Types H and J), although thicker, are made from the same paste as the smaller pots. All the earlier pots and some of the later appear to have been burnished not only externally but often on the internal rim as well. The later pottery, although Roman in form, continues to be made in the native ware. Except for Types A-E (with exceptions) all the pottery is wheel-turned. The cordoned pottery (Types F-J) bears a family resemblance to the Belgic ware of eastern Britain, but here in Cornwall seems to have evolved in a distinctive local fashion of its own. Perhaps the prototypes were brought from Gaulish sources by trade or by refugees in the latter part of the 1st century B.C., and by the beginning of the next century the derivatives are found well distributed in Cornwall, at Castle Dore, Trebarveth, Sennen and Chun, and have become part of the pattern of pre-Roman Cornish culture.

The table below gives a comparative survey of the types¹ of jars found in the various huts, etc. It shows that the two main phases of the occupation, except for a certain amount of overlap, are well distinguished.

	A, B	C	D, E	F, G	H	J	Amph- orae	Terra Sig.	Flagons	M	N	O	P	Q	R
Gully 1 ...	2		2	1		2									
Gullies 5, 11	5		5	2		1									
Early Hut A	12			2	1	4	✓								
Hut W ...	18		18	5	4	4	✓	✓		3	2	1			
Hut S ...	2	1	3	2	1	4			✓	1		3	2		
Hut Y ...	22	3	35	3	1	21	✓	✓	✓			2			
Early Hut V	1														
Area B ...	14	1	7	2		12	✓				2				
Late Hut V	3					1	✓	✓	✓	3	7	6	4	1	2
Hut Z ...	4	1	2			4	✓	✓	✓	6	6	12	2	4	5
Late Hut A	1	1				3		✓	✓	3	3	4	1	2	1

Several points appear from this table. First that the small cordoned bowls (F and G) are found in the earliest (Gully) levels but do not occur at all in the later levels, while the cordoned storage jar (Type J), although commoner in the early huts, was still found in the later occupation. No amphorae are found in the Gully fillings but otherwise are at both levels, while Samian sherds, although usually too small to date, are found in W and Y as well as V and Z. It appears that Huts Y and W and S continued in occupation perhaps into Flavian times, while the early Hut A was superseded about the middle of the 1st century A.D. The late Hut V and the late Hut A have only 9 early sherds between them and were both occupied after the last period of fortification at the entrance—probably about the middle of the 1st century A.D., and with Hut Z which has several earlier sherds, continued to be occupied presumably into the first half of the 2nd century A.D.²

¹ It has not always been easy to differentiate Types D and E, from Type M.

² See the dateable evidence of brooches, p. 71, although none of the pottery need be much later than 100 A.D.

DECORATED WARES

Type A.

This group of 'Glastonbury' decorated ware is characterised by the internal rim groove typical of Brittany pottery (*Maiden Castle*, p. 216). The jars are, for the most part, handmade, but Nos. 5, 9 and 10 appear to have been turned on a wheel. The decoration occurs in a single or double band, usually between cordons, in a zone below the neck, and traces of burnish can be found on all the sherds. There are one or two pieces of 'mature' decoration (Nos. 1-3), but for the most part the designs are geometric and in one or two cases there are cordons only. There seems an overlap between these decorated pots and the cordoned wheel-turned storage jars (Type J, p. 60), Nos. 5 and 9 might belong to the latter type except that they are smaller and have an internal rim groove, while some of the storage jars have been decorated (Nos. 63, 64). No. 18 (Type B), too, although it has no neck cordon, is a large pot of thick storage jar ware.

Decorated pottery, not always with an internal rim groove, is found well distributed in Cornwall: Castle Dore,¹ Porthmeor,² Bodrifty,³ Kelsey Head,⁴ Constantine Island,⁵ Chun,⁶ Treveneague Fougou,⁷ Trevelgue Head.⁸

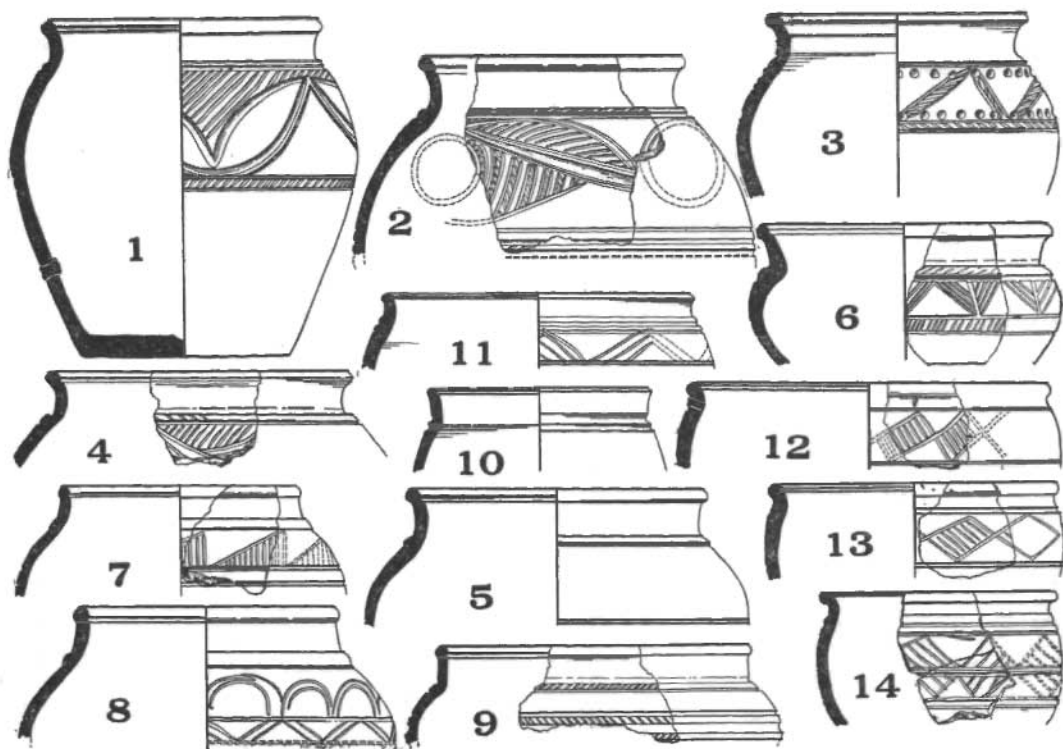


Fig. 14. Types A 1, 2 and 3. ($\frac{1}{4}$)

As can be seen on the table above decorated sherds were found in the occupation levels of all the early huts and in the filling of Gully 1 and other gullies. But out of 84 stratified decorated sherds only 8 came from known late levels. These decorated pots were apparently prized enough to merit riveting and several have been found thus mended.

The type is divided into three sections: A1 (1-6) consisting of round-bodied or high-shouldered jars with everted necks, A2 (7-10) have similar bodies but upright necks, A3 (11-14) wide-mouthed jars with little or no neck and everted rims.

¹ *J.R.I.C.*, New Series I, Appendix, fig. 14.

² *J.R.I.C.*, XXIV, Appendix II, Part 4, fig. 6.

³ See Miss D. Dudley, above; Bodrifty, Mulfra Hill, *Arch. Journ.*, CXIII, p. 27.

⁴ In Truro Museum.

⁵ *Arch. of Cornwall & Scilly*, p. 123 and Truro Museum.

⁶ *Archaeologia*, 76, fig. 12.

⁷ *Arch. of Cornwall and Scilly*, fig. 42.

⁸ *Arch. News Letter*, December, 1949. Report on Prehistoric Soc. Meeting at Exeter.

A1. (fig. 14)

1. Jar with internal rim groove, flat base, and decoration consisting of alternating semicircles forming a petal pattern (*Maiden Castle*, fig. 71, 167; c. A.D. 25) between cordons. The background is hatched diagonally. The jar has been mended with iron rivets in two places. From the occupation level in Hut W.
2. Top of similar jar with scroll decoration and hatching. (For this type of decoration cf. J.R.I.C. *New Series I*, fig. 14; *Maiden Castle*, fig. 71, 163, 'beginning of 1st cent. A.D. or end of previous century'; *Glastonbury II*, Pl. LXXXV, 268, Pl. LXXI, 15A, etc.; Hele's Cross, Torquay, *Devon Arch. Expl. Soc. IV*, part 2, Appendix II, fig. 9). From the occupation level in Area B.
3. Top of similar jar with remains of grooved and hatched decoration below a cordon. From the occupation level in Hut W.
4. Part of jar with an internal rim groove and body decoration of small circular depressions and hatched chevrons. There are circular depressions of this sort on a pot from Meare,¹ and it is perhaps related to those from Hengistbury.² From the filling of one of the post holes of the early guard hut V.
5. Top part of a wheel-turned jar with internal rim groove and cordons at neck and shoulder. There is an identical rim on a decorated jar from Constantine Island.³ Unstratified.
6. Part of a shallower jar with everted rim and high-shouldered rounded body. There is an internal rim groove and the decoration is of chevrons in a tree pattern between cordons (cf. *Meare I*, Pl. II, 26). From the occupation level in Hut W.

A2. (fig. 14)

7. Top of a jar with upright rim internally grooved. There is a band of hatched, right-angle triangles between cordons. Sloping necks of this type are found at Meare⁴ and similar decoration at Glastonbury.⁵ From the earlier occupation of Hut A.
8. Similar jar to No. 7 with decoration in two bands, the upper of semicircles, the lower of chevrons. (cf. a pot from Constantine Island in Truro Museum). Unstratified.
9. Top of a jar with upright rim internally grooved. The decoration consists of three cordons and the pot has been turned on a wheel. Unstratified.
10. This is a small wheel-turned jar which has been riveted. It has an upright and internally grooved rim but no decoration except a sharp cordon at the neck. (cf. *Glastonbury II*, Pl. LXXXII, 226, and perhaps Verulamium (Praewood), fig. 18, 59). From fallen debris in Area B.

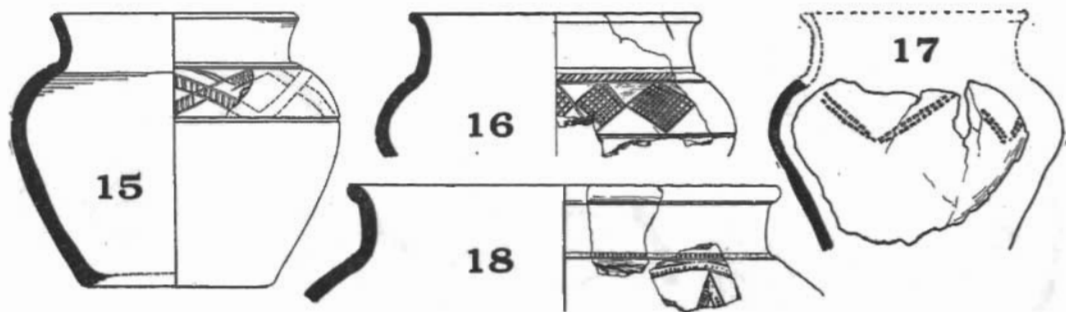


Fig. 15. Type B. (4)

A3. (fig. 14)

11. Top of a short-necked, wide-mouthed jar with internally grooved rim. There is a pattern of chevrons below two cordons (cf. *Glastonbury II*, Pl. LXXXVII, 292). Unstratified.
12. A wide-mouthed jar with internally grooved bead-rim showing a rivet below it. The decoration consists of hatched diamonds (cf. *Glastonbury II*, Pl. LXXXI, 204; Pl. LXXXIV, 254). Unstratified.
13. Similar jar to No. 12 and similar decoration. Unstratified.
14. A small jar with everted rim and internal rim groove. The decoration is of hatched triangles in two bands, between cordons (cf. *Glastonbury II*, Pl. LXXXIII, 240). From the occupation in Hut Z.

¹ *Meare I*, Pl. XI, 241.² *Hengistbury Head*, Class E, Pl. XX, 1-8.³ In Truro Museum.⁴ *Meare I*, Pl. XIV, 230.⁵ *Glastonbury II*, Pl. LXXXIV, 258.

Type B. (fig. 15)

This is a group of high-shouldered jars with upright rims and a zone of decoration on the shoulder. They have no internal rim groove, but all have been burnished except perhaps No. 18, which was less heavily fired and thus is more abraded than the rest. Nos. 17 and 18 may have been turned on a wheel.

15. High-shouldered jar with upright rim and decoration of alternating hatched chevrons. From the occupation of Hut W.
16. Top of similar jar with tall and slightly everted rim with a pattern of cross-hatched diamonds. Unstratified.
17. Lower portion of a high-shouldered jar with rouletted chevrons on the shoulder. This is probably wheel-turned (cf. *Castle Dore*, J.R.I.C. *New Series*, fig. 16, 2 and Trevenague Fougou, *Arch. Corn. and Scilly*, p. 145, fig. 42). From the occupation of Hut Y.
18. Rim of large jar with upright neck, everted rim and rouletted decoration. It is made of coarse ware similar to that of storage jars¹ (see above, p. 53) and was perhaps turned on a wheel (cf. *Castle Dore*, J.R.I.C. *New Series*, Pl. XA, 1). From the occupation level of Hut W.

DECORATED SHERDS

(fig. 16)

- a-e. Mature 'Glastonbury' decoration with concave discs in scroll pattern (*Maiden Castle*, fig. 71, 163, 'beginning of 1st century A.D. or end of previous century'; *Hengistbury*, Class D., Pl. XX, 1 and 2; *Glastonbury II*, Pl. LXXI, 15A, Pl. LXXXV, 268; *Castle Dore*, J.R.I.C. *New Series*, Vol. 1. Appendix, fig. 14; 3, 7, 26).

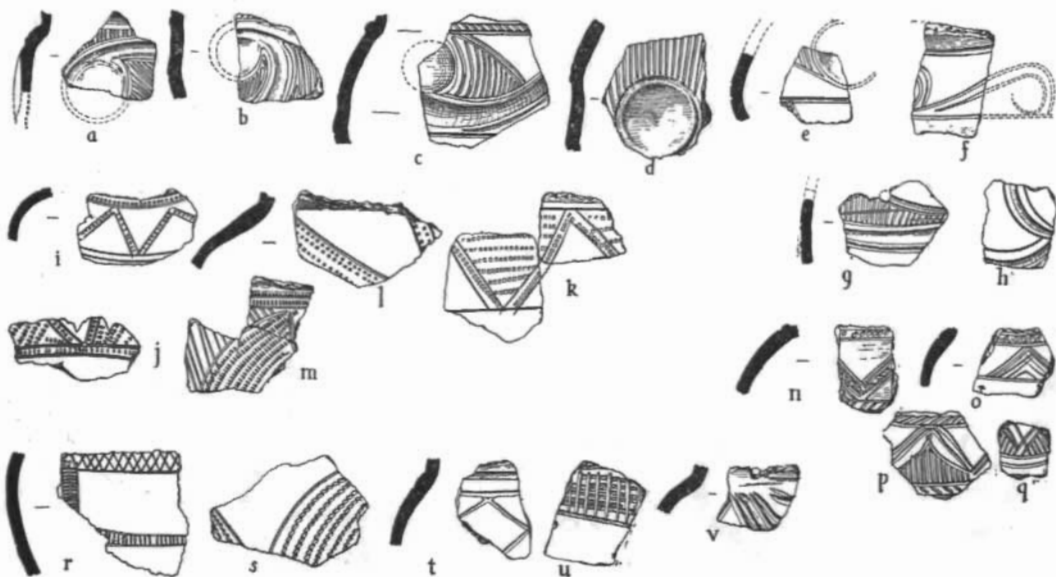


Fig. 16. Decorated Sherds. (1)

- f. Degenerate scroll pattern (cf. Hele's Cross, *Proc. Devon Arch. Expl. Soc.* IV, Parts 2 and 3, fig. 9).
- g-h. Examples of 'mature' decoration—perhaps both of scroll type. (For h, cf. *Maiden Castle*, Pl. XXIX, A, g.)
- i-m. Rouletted decoration, either with squared or triangular cogs and except for m associated with chevrons. The rouletting found at Glastonbury² and Meare³ is a different type, but this is similar to sherds from Castle Dore (*ibid.*, Pl. Xa).
- n-q. Chevrons in various forms, with hatching or decoration of small crosses between the chevrons, or on the cordon (cf. *Arch. Corn. and Scilly*, fig. 42; *Hengistbury*, Class D., Pl. XX, 1; *Maiden Castle*, Pl. XXIX a, 5; *Milber Down*, *ibid.*, Pl. XV; *Castle Dore*, *ibid.*, Pl. IXb.).

¹ A very similar pot with rouletted decoration was found at Bodrifty, see above, *Arch. Journ.*, CXIII, p. 27, fig. 10, 13.

² *Glastonbury II*, Pl. LXXI, 249; Pl. XXXI, 215.

³ *Meare I*, Pl. XII, 121 and 122.

- r. Panel decoration with various hatching.
- s. Semicircular design with impressed cord pattern.
- t. Scored diamond decoration (*Meare I*, Pl. IX, 158).
- u. Deep scored cross-hatching (*Glastonbury II*, Pl. LXXXIV, 239; *Castle Dore, ibid.*, fig. 16, 13).
- v. Neck of jar with rivet hole. There is no cordon and the decoration is in broad grooves.

UNDECORATED WARES

Type C. (fig. 17)

This comprises a group of bag-shaped, handmade, bead-rim bowls, of Iron Age B form (*cf. Maiden Castle*, fig. 67, 126, c. 25 A.D., and with small eyelet handles, fig. 68, 137, dated to the first quarter of the 1st century A.D., and *Meare I*, Pl. XIX, 105). Three of them have small vertically pierced lugs on the rim and, one, a horizontally pierced lug. Similar lugs have been found at Chun¹ and Bodrifty.² No. 23 has a handle springing from the rim for a hanging attachment (*cf. Glastonbury II*, fig. 169) and two examples are shown without handles. They are all burnished externally except for No. 23.

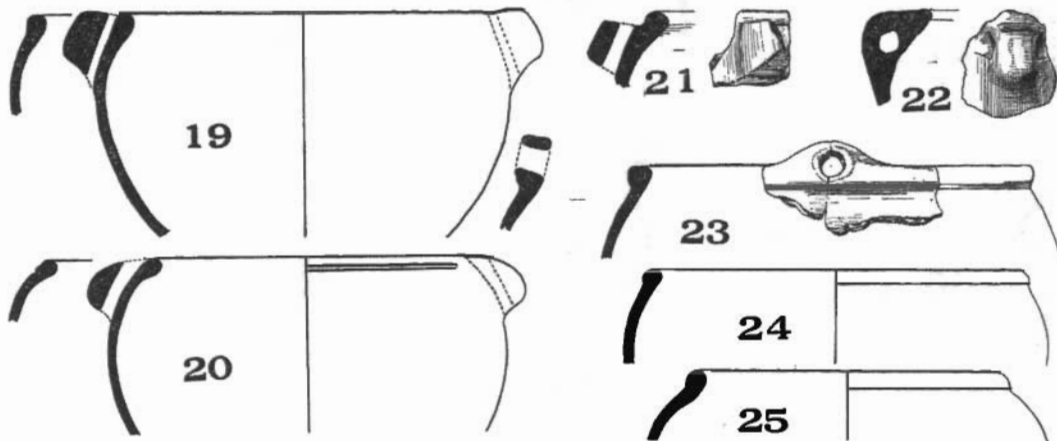


Fig. 17. Type C. (1/4)

19. Bowl with flat-topped bead-rim and squared, vertically pierced lug springing slightly up from it. From the occupation level in Hut Y.
20. Similar bowl to No. 19, but with a late type of bead-rim only defined externally by a groove below it. The vertically pierced lug is rounded and turns down from the rim. From the occupation level in Hut Y.
21. Vertically pierced lug of squared section from a bead-rim bowl. Unstratified.
22. Horizontally pierced, rounded lug on rim of similar bowl. From the occupation level in Hut S.
23. Top of bowl with pierced handle rising from flattened rim. There is no sign of burnish, and it may be wheel-turned. From the occupation level in Hut Z.
24. Sherd from bead-rim bowl similar to those above. From the occupation level in Hut Y.
25. Sherd from bead-rim bowl similar to No. 24 but with a narrower mouth. From the stony capping behind the southern revetment wall of Period 3 at the north-west entrance.

Type D. (fig. 18)

This group is similar to Type B, but is undecorated. They are high shouldered jars, sometimes handmade, with upright rims and usually a definite constricting line where the neck joins the body. They are not only burnished externally, but internally, on the rim and neck. Similar jars have been found in Cornwall at Gurnard's Head,³ Chysauster,⁴ Castle Dore,⁵ Bodrifty,⁶ and in the Isles of Scilly,⁷ and are a common Iron Age C type elsewhere (*Maiden Castle*, fig. 75, 238; *Pitt-Rivers, Excavations II*, Pl. CVIII).

¹ *Archaeologia* 76, fig. 8, Class 2.

² See Bodrifty, above, *Arch. Journ.*, CXIII, p. 27, Fig. 10.

³ *Arch. Journ.*, XCVII, fig. 72.

⁴ *Archaeologia* 85, fig. 64.

⁵ *J.R.I.C.*, New Series, vol. I, Appendix, fig. 16.

⁶ See above, *Arch. Journ.*, CXIII, p. 27.

⁷ *Arch. Journ.*, CXI, fig. 7, 1, though not similar in ware.

26-28. No. 28 is perhaps wheel-turned. From the occupation level of Hut Y.

29. This jar has no constricting line at the neck, but in other respects is similar to Nos. 26-28. It is handmade. From the occupation level in Hut S.

Type E. (fig. 18)

These jars have a flared rim and slacker profile than Type D, and usually a groove or defining line where the neck meets the body. All are burnished externally and internally on the rim and neck. Some are wheel-turned and some handmade (*cf.* Collingwood, *Arch. Roman Britain*, fig. 50, 80, 81 of Claudian date).

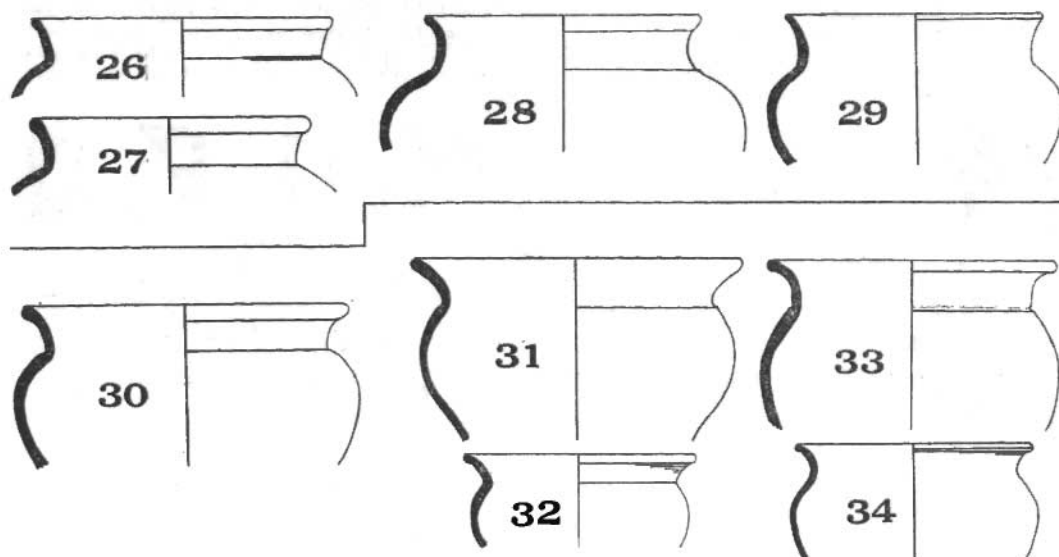


Fig. 18. Types D and E. ($\frac{1}{4}$)

30-31. Handmade with flared rim (*cf.* Chysauster, *Archaeologia* 85, fig. 6, 8, where a similar sherd associated with one of Type D above was dated 3rd century A.D., and *Meare I*, fig. 6, pp. 24, 63). From the occupation level of Hut Y.

32-33. Wheel-turned. From the occupation level of Hut W.

CORDONED BOWLS.

Type F. (fig. 19)

High-shouldered wheel-turned bowls with a cordon at the base of the neck. Except for No. 37, all are burnished externally and Nos. 35 and 36 on the inside of the rim as well. Bowls of this type are not uncommon in S.W. Britain. They have been found at Trebarveth,¹ Chun,² Glastonbury,³ Wookey Hole,⁴ Maiden Castle,⁵ Rotherley,⁶ Kingsdown Camp, Somerset,⁷ and Sudbrook,⁸ for example, and there is also an example from Praewood.⁹ They would seem to be ultimately derived from bowls of Hengistbury, Class B¹⁰ (Class C, Pl. XIX, 10, shows a later and closer type to ours) which are duplicated by similar bowls of Caesarian date from Le Petit Celland near Avranches.

34. Similar to the above but with no groove or defining line at base of neck, handmade. From the filling of Gully 6, Area B.

35. From the occupation level in Hut Y.

36. From an early post hole in Hut A.

37. This, like 38 below, is brick-red in colour and of finer ware than usual. From the early occupation of Hut A.

¹ Truro Museum.

² *Glastonbury II*, Pl. LXXXIV, 228.

³ *Archaeologia* 62, fig. 11, 4.

⁴ *Maiden Castle*, fig. 75, 234, 236.

⁵ Pitt-Rivers, *Excavations I*, Pl. XXXII, 4.

⁷ Taunton Museum.

⁸ *Arch. Camb.*, 94, fig. 6, 34 in local ware.

⁹ *Verulamium*, fig. 21, 70.

¹⁰ *Hengistbury*, Pl. XVII, 1-6.

38. This bowl differs somewhat from the foregoing in that it has a slight grooved line on the internal rim, no cordon at the neck join, and a very sharply recurved body. It is of finer ware than usual and brick-red in colour. A very similar bowl was found at Colchester¹ (49-65 A.D.) in *Terra Rubra*. From the occupation level of a hut in Trench XV.
39. Unstratified.
40. From the occupation level in Hut S.

Type G. (fig. 19)

These are wide-mouthed carinated bowls with deep necks and a cordon or cordons at the handle. All are wheel-turned and burnished externally and inside on the neck. No. 45 has a pattern of chevrons between the cordons. This type has been found in Cornwall at Chun² and perhaps at Castle Dore³ and at Ham Hill⁴ and Rotherley,⁵ and would appear to be derived from the sharply angled concave-walled mortar-like vessels found in eastern Britain, for example at Camulodunum⁶ and Verulamium.⁷ A late type nearer to those at St. Mawgan but without a cordon was found at Maiden Castle.⁸

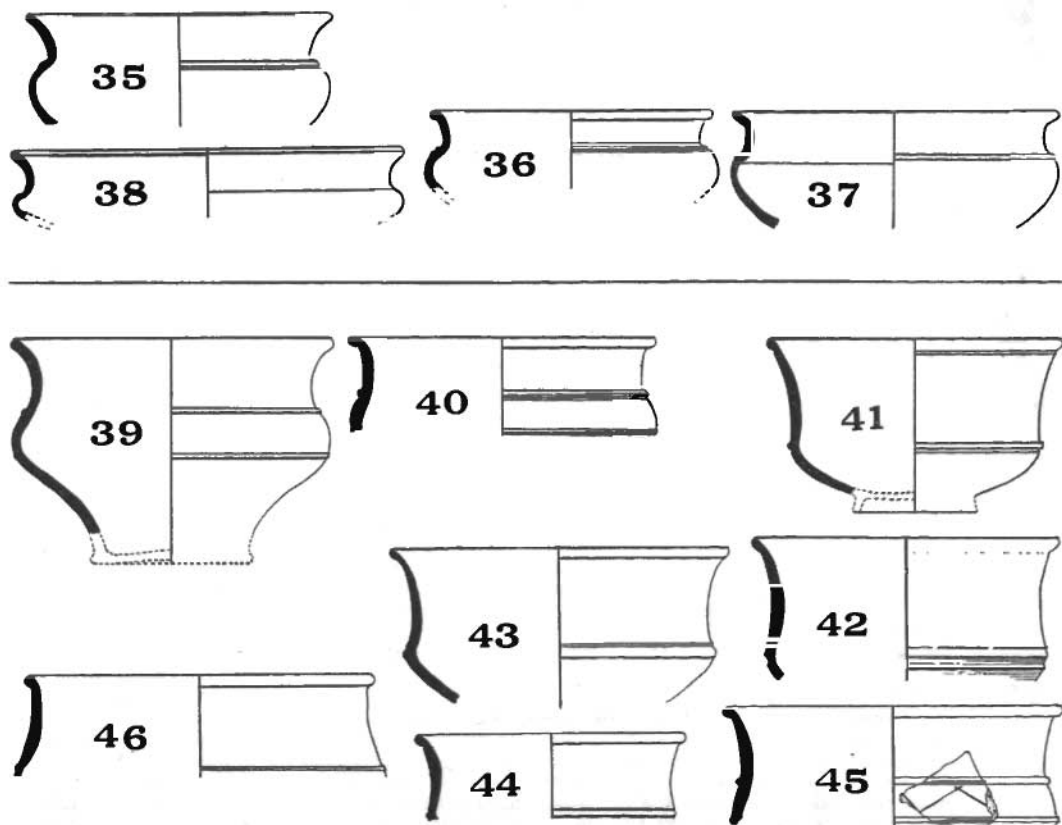


Fig. 19. Types F and G. (1/4)

41. With single cordon and groove below rim. Unstratified.
42. Two slight cordons separated by a deep groove. From Gully 5.
43. More sharply carinated than the above and with a single cordon. From the early occupation in Area B.

¹ Camulodunum, fig. 57, 13.

² Truro Museum.

³ J.R.I.C., New Series, vol. I, Appendix, Pl. xb, 1.

⁴ Taunton Museum.

⁵ Pitt-Rivers, *Excavation II* and Pl. CLX, 1.

⁶ Camulodunum, Pl. LXXV, 221A.

⁷ Verulamium, fig. 15, 34-7.

⁸ Maiden Castle, fig. 74, 229.

44. Small bowl with a single cordon. From the occupation level in Hut W.
45. Bowl with two cordons and pattern of lightly grooved chevrons between them (*cf.* Pitt-Rivers, *Excavations II*, Pl. CXII, 12, for similar decoration on a cordoned bowl). From Gully 11.
46. Top of a bowl with a narrowed mouth and single cordon. From the early occupation of Area B.

STORAGE JARS.

Type H. (fig. 20)

These are ovoid cordoned jars, wheel-turned and smoothed or burnished externally. They seem to be clumsy derivatives of butt beakers (*cf.* Verulamium,¹ 5-35 A.D.; and Colchester,² 10-65 A.D.). Similar sherds have been found in Cornwall at Chysauster,³ and Trebarveth.⁴

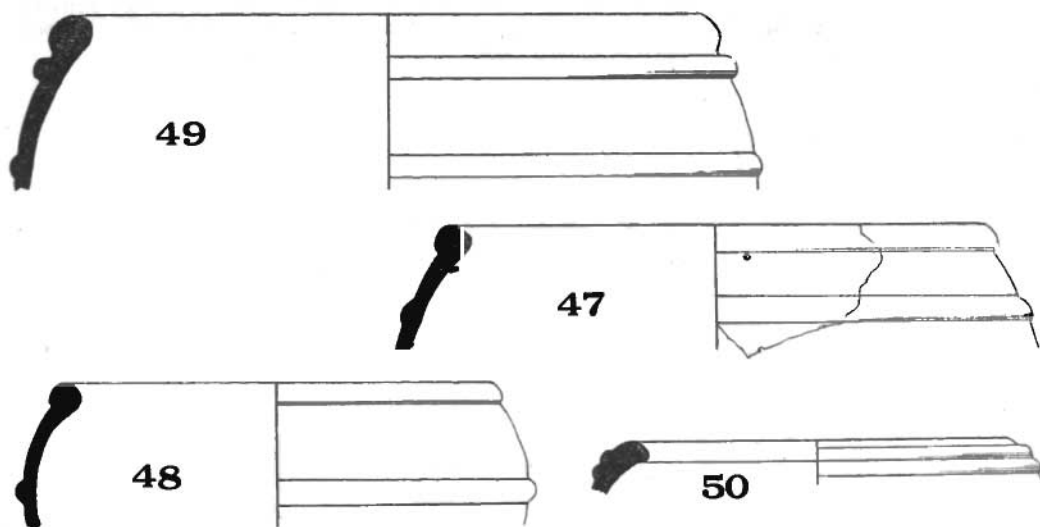


Fig. 20. Type H. (4)

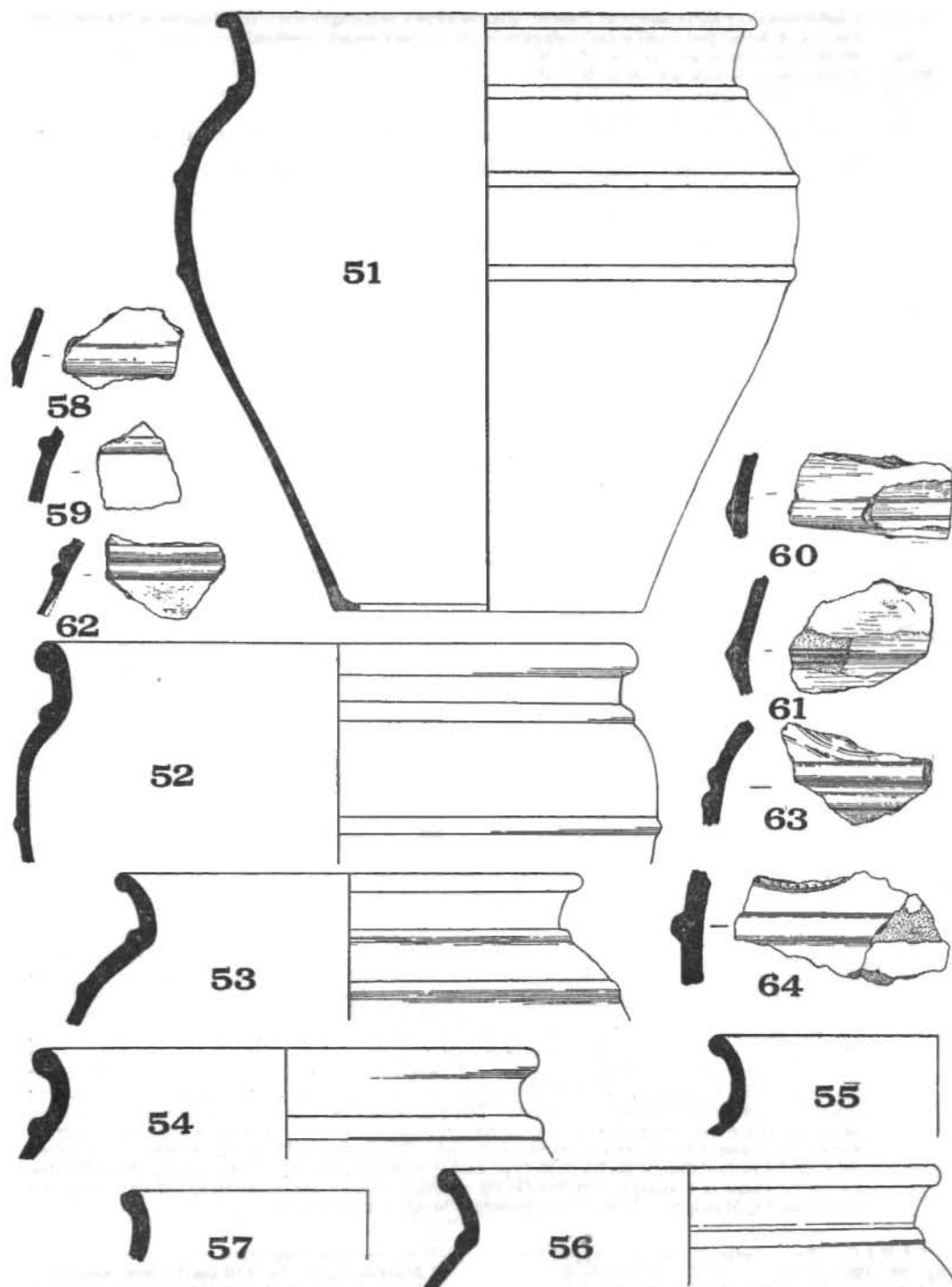
47. There are two iron rivets in position on this example, one below the heavy bead-rim, and the other below the cordon. From the occupation level in Hut Y.
48. Flattened bead-rim and single cordon on the body. From the occupation level in Hut W.
49. A very large jar with a cordon just below the heavy rim. Two examples of this type were found at Trebarveth.⁴ From the occupation level in Hut W.
50. An incurved rim with two cordons, externally, just below it. Unstratified.

Type J. (fig. 21)

Large storage jars with high shoulders and upright necks, everted and rolled rims, and two or three cordons on the body. They are all probably wheel-turned, and are burnished or smoothed externally and on the inner neck and lip. The necks and cordons vary in outline. The latter are abrupt, smoothly moulded, or double, and where broken show that although some are made in one with the jar, others have been added afterwards on the guiding lines that were scored for them (59 and 66). Two sherds were found in this thick ware with the remains of curvilinear decoration (62 and 63).

These jars seem derived from the pedestal urns of north-eastern France,⁵ and bear a family resemblance to the pear-shaped versions in eastern Britain.⁶ Similar sherds have been found in Cornwall at Chun,⁷ Trebarveth,⁷ and Castle Dore.⁸ Although Class B and Class C at Hengistbury⁹ show jars of this type, they are not found at Glastonbury or Meare, at Maiden

¹ Verulamium, fig. 14.² Camulodunum, Pl. LVIII, 115D, 117.³ In Truro Museum.⁴ *Ibid.*⁵ The Belgae of Gaul and Britain, *Arch. Journ.*, LXXXVII, fig. 12, 15, 20 and fig. 13, 23, 26.⁶ Swarling Report, Pl. VI, VII, etc.⁷ In Truro Museum.⁸ J.R.I.C., New Series, vol. I, Appendix, Pl. Xb, 4 and 5.⁹ Hengistbury Report, Class B, Pl. XVII, 2, Class C, Pl. XVIII, 26.

Fig. 21. Type J. ($\frac{1}{4}$)

- Castle or in the early levels at Exeter, and perhaps were originally brought over or traded from Gaul and developed locally and independently in the Cornish peninsula.
- 51. From the occupation level in Hut Y.
 - 52-53. From the occupation level in Hut W.
 - 54-56. From the occupation level in Hut Y.
 - 57. Flattened rim, from the occupation level in Hut Y.
 - 58. Sherd with smoothly moulded cordon made in one with the body of the jar. From the occupation level in Hut Y.
 - 59. Sherd with small abrupt cordon. From the occupation level in Hut Y.
 - 60. Where the cordon has been broken away two guiding lines can be seen on the body of the jar itself. The ware here is red and less gritty than other examples and has been covered with a white slip. From the occupation level in Hut Y.
 - 61. Sherd with pointed moulding along guiding grooves on the body of the pot. From the occupation level in Hut Y.
 - 62. Double cordon. From the occupation level in Hut Y.
 - 63. Double cordon with traces of curvilinear decoration above it (see above p. 54). From the occupation level in Hut Y.
 - 64. Sherd with single cordon and traces of decoration above it. From the occupation level in Area B.

Type K. (fig. 22)

These jars do not form a homogeneous group, but all were found in the occupation levels of the earlier huts.

- 65. Upright rim of gritty buff ware, smoothed externally and with a cordon at the base of the neck. There is an internal projection to hold a lid, and a small hole for a hanging thong (?) beneath it. Similar rims, without the hole, have been found at Castle Dore¹ and Carn Euny.² From the occupation level in Hut S.

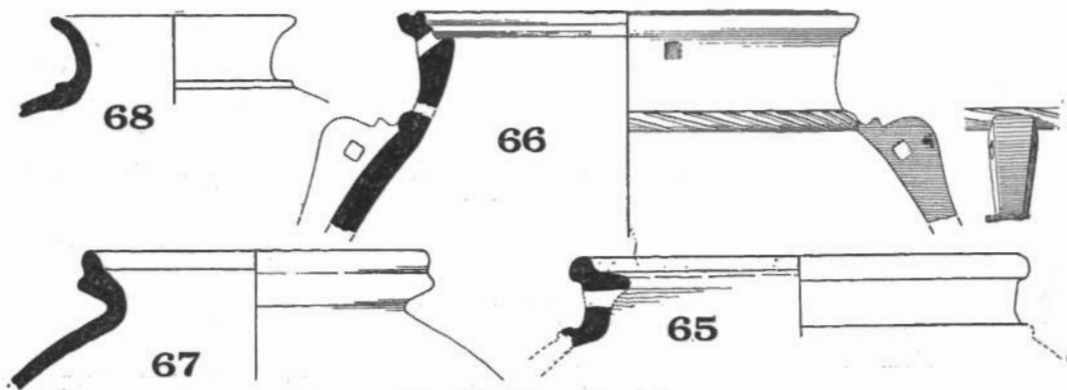


Fig. 22. Type K. (4)

- 66. A rather similar but more elaborate version of No. 65. The ware here is dark grey with glittering mica particles and would appear an import from a granite area. The jar is burnished outside, and inside the rim. The everted rim with a square slanting hole beneath it, has a groove along its flattened top and there is an internal offset for a lid, with a groove above it. On the shoulder, below a hatched cordon, is an angular handle pierced with a square hole. The main body of the jar has almost certainly been turned on a wheel, but the handle and cordon are one with the body of the pot and were not applied later. The extra width could have been left on the upper part of the body of the jar and then cut away with a knife, leaving the sharp square handle and the cordon. The rim would have been added later. The upward slanting square hole under the rim has no sign of wear and cannot have been used for a hanging thong, as it would have been blocked by the lid. This pot would appear to have been based on a shale³ rather than a metal prototype and is similar to the top of a shale jar from Maiden Castle.⁴ There is a sharply cut handle on a thin cordoned pot from Hengistbury⁵ very like this from St. Mawgan. From the occupation level of the early Hut A.

¹ *J.R.I.C.*, New Series, vol. I, Appendix, fig. 18, 19.

² *Arch. of Cornwall and Scilly*, fig. 39, A.

³ I am grateful to Prof. C. F. C. Hawkes,

F.B.A., for this suggestion.

⁴ *Maiden Castle*, fig. 110 (early Iron Age C).

⁵ *Hengistbury*, Pl. XVII, 15 (probably shown upside down).

67. Top of jar with narrow neck and a stop inside the rim to take a lid. It is wheel-turned and burnished externally. From the occupation level in Hut W.
 68. Top of jar with flared rim and sharp cordon round the neck. In gritty red-buff ware, wheel-turned and unburnished (cf. *Richborough* IV, Pl. LXXXVII, 382). From the occupation level in Hut W.

Type L. (fig. 23)

A group of three small handmade jars, two with decoration below the rim, and one with decoration on the body of the pot.

69. Top of a small jar with flattened in-sloped rim and two bands of rouletting below it. Handmade and not apparently burnished. From Gully 5.



Fig. 23. Type L. (1/4)

70. Top of a small jar with flattened bead-rim strongly defined by an underlying groove and with a drag and stab pattern below it (*Hengistbury*, Pl. XIII, 6). Handmade, and not apparently burnished. This seems related to 'Severn B' jars, but the flattened rim and particular decoration used here below it does not occur at Sutton Walls¹ or Bredon Hill.² From a rubbish tip outside Hut A.
 71. Two sherds from a pot with impressed decoration (Bredon Hill, *Arch. Journ.* XCVI, fig. 14, 3) perhaps representing a degenerate 'duck' pattern. Probably handmade. From the occupation of Hut Z.

Type M. (fig. 24)

This is a group of jars with short upright necks, everted rims and high shoulders. They are all wheel-turned, but only two of the illustrated examples show signs of smoothing or burnishing. Pots of this type are common in the third quarter of the 1st century A.D., Corfe Mullen³ (50-70 A.D.), *Richborough*⁴ (50-75 A.D.), and *Exeter*⁵ (50-80 A.D.).

72. Very sandy red ware, much abraded (Chun, *Archaeologia* 81, fig. 2). From the filling of Pit 6 outside Hut A.

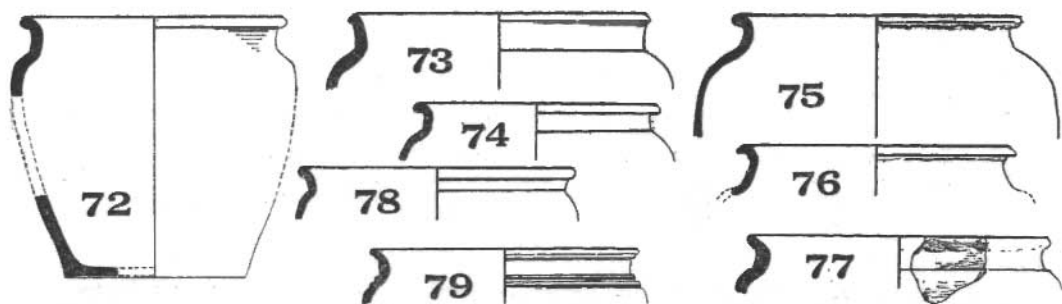


Fig. 24. Type M. (1/4)

73. Smoothed on neck and shoulder externally. From the occupation level in Hut Z (*Roman Exeter*, fig. 16, 28).
 74. From the occupation level in Hut W.
 75. Jar with roughly moulded rim and traces of exterior burnishing. (*Roman Exeter*, fig. 16, 26; 50-80 A.D.). From the occupation level in Hut V.
 76. Thin-walled jar with sloping neck and sharply out-turned rim. A sherd from a similar pot comes from Trebarveth (Truro Museum). From the occupation level in Hut Z.

¹ *Arch. Journ.*, CX.

² *Arch. Journ.*, XCV.

³ *Arch. Journ.*, XV, Class E, fig. 5.

⁴ *Richborough III*, Pl. XXXVI, 258.

⁵ *Roman Exeter*, fig. 16, 23-29.

77. Short-necked pot with nail marks below the rim. From the occupation level in Hut V.
 78. From the occupation level in Hut Z.
 79. Jar with two cordons at the base of the neck. A similar sherd comes from Trebarveth (Truro Museum). From the occupation level in Hut Z.

Type N. (fig. 25)

- N. 1. These jars have a slacker profile than Type M. but again have short upright necks, and are wheel-turned. None appears to have been burnished.
 80. Rough grooves on neck. (*Roman Exeter*, fig. 16, 29; 50-75 A.D.). From the occupation level in Hut Z.
 81, 82. Cf. *Proc. Dev. Arch. Exp. Soc.* IV, Parts 2 and 3, fig. 10, B 7. From the occupation level in Hut Z, Cooking pot with slightly thickened rim. From the occupation level in Hut V.
 N. 2. Similar jars to Type N.1. but with flared rims and slacker profiles. All are wheel-turned.

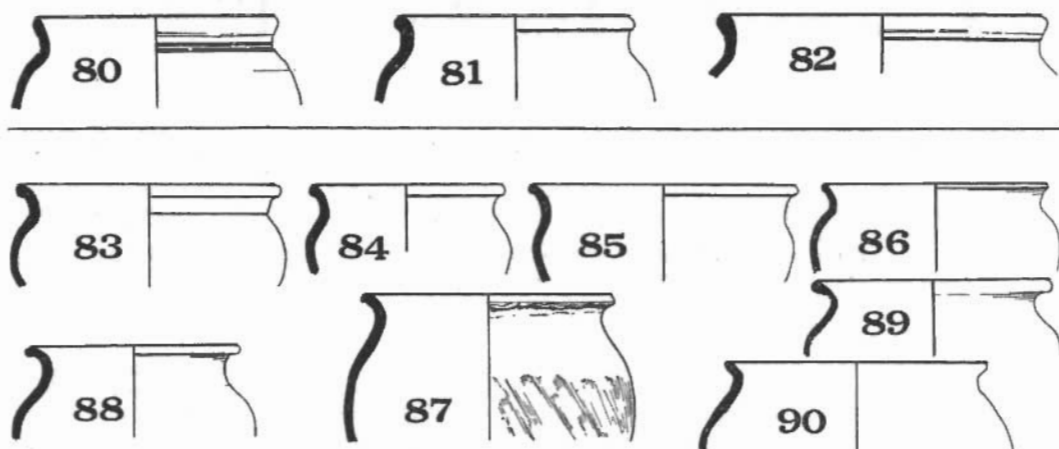


Fig. 25. Type N. 1 and 2. ($\frac{1}{4}$)

83. From the occupation level in Hut Z.
 84. From the occupation level in Hut Z.
 85. Traces of external burnish. From the occupation level in Hut W.
 86. Burnished externally. From the occupation level in Hut V.
 87. The rim is roughly moulded and the body has been apparently shaved down with a knife. From the occupation level in Hut V.
 88. Burnished externally and inside the rim. Unstratified outside Hut V.
 89. Sharply everted thickened rim, burnished externally and inside rim. (*Roman Exeter*, fig. 16, 27; 50-80 A.D., and *J.R.S.* 33, fig. 2, 26). From the occupation level in Hut W.
 90. Small everted rim. From the occupation level in Hut V.

Type O. (fig. 26)

O. 1. This is a group of small beakers with the sharply everted rims common in the late 1st century (Corfe Mullen, *Ant. Journ.*, Class D; 50-70 A.D.). They are found in Cornwall at Trebarveth,¹ Chysauster,² and Porthmeor.³

91. Beaker with everted rim. From the occupation level in Hut Z.
 92. Small jar with inner rim groove. From the occupation level in Hut Z.
 93. Beaker with a narrow groove on the inside of the rim. From the occupation level in Hut V.
 94. Smoothed externally. From the occupation level in Hut Z.
 95. From the occupation level in Hut V.
 96. Trace of external smoothing (Sutton Walls, *Arch. Journ.*, CX, fig. 14, nos. 13-15, 20, and Porthmeor).⁴ From the occupation level in Hut Z.
 97. A wide-mouthed jar with grooved rim (Collingwood, *Arch. Roman Britain*, fig. 53, 28; late 1st-early 2nd century A.D.; *Wroxeter* I, fig. 17, 12, in different ware; 80-120 A.D.). Unstratified.
 98. From the occupation level in Hut Z.

¹, ², Truro Museum.

³ *J.R.I.C.*, Pl. IV, Appendix II, fig. 5c.

⁴ *Ibid.*

O. 2. These are a group of bowls with small everted or bead-rims.

99. Very small everted rim and traces of grooved decoration under it (Corfe Mullen, *Ant. Journ.*, XV, fig. 5, Class C). From the occupation level in Hut W.

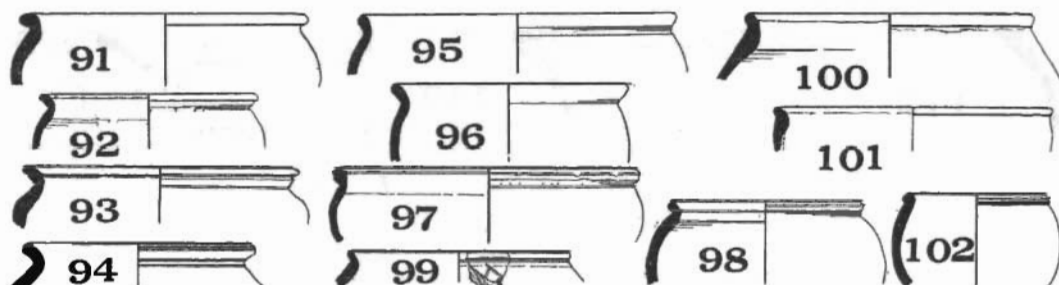


Fig. 26. Type O, 1 and 2. (4)

100. Traces of burnishing. From the occupation level in Hut V.
 101. Perhaps handmade. From the occupation level in Hut S.
 102. Small bead-rim jar, smoothed externally (cf. Type L, fig. 70) and sherds from Porthmeor and Trebarveth in Truro Museum. Unstratified.

Type P. (fig. 27)

Mainly beakers with bead-rims, characteristically bevelled on the inside to form a ledge. They are wheel-turned and, except for 104, not burnished.

103. Cf. Sutton Walls, *Arch. Journ.*, CX, fig. 12, 16 and 22, and Richborough I, Pl. XXI, 17, Claudian.
 104. Similar to 103. From the occupation level in Hut Z.
 105. Similar to 103 (Chun, *Archaeologia* 76, fig. 8, Class 2). From the occupation level in Hut V.
 106. A similar jar with two cordons on body, smoothed externally, and on the inner lip (Caerleon, *Arch. Camb.*, 1929, fig. 30, 34, Flavian; *Leicester*, fig. 38, 23, Trajanic). From the occupation level in Hut V.

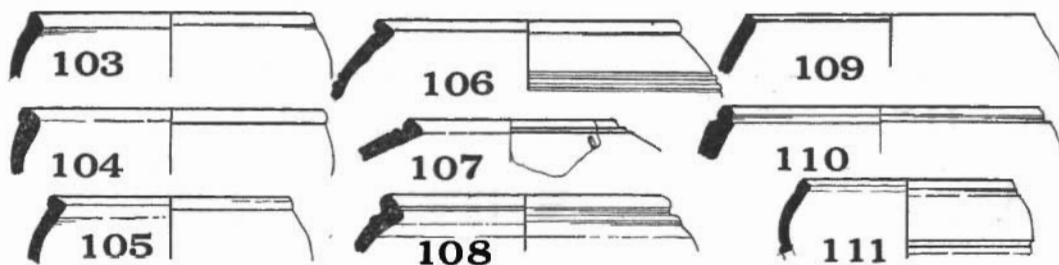


Fig. 27. Type P. (4)

107. A similar jar with a cordon below the rim (*Roman Exeter*, fig. 14, 21; 50-80 A.D.; and Caerleon, *ibid.*, fig. 30, 36, late 1st century A.D.; *Leicester*, fig. 36, 25; Claudius-Nero). Unstratified.
 108. Similar to 107 but with a shallow groove on the inner lip. Cf. sherds from Chysauster and Trebarveth in Truro Museum. From a rubbish-tip outside Hut A.
 109. Plain rim with internal groove (Chysauster, *Archaeologia* 83, fig. 9, 9, and Sutton Walls, *Arch. Journ.*, CX, fig. 14, 5; *Leicester*, fig. 35, 2; 35-50 A.D.). Unstratified in the entrance way.
 110. Small upright beaded rim with inner and outer groove below it. From the occupation level in Hut Z.
 111. A small ovoid jar with a cordon on body and slight rim internally grooved. From the filling of Pit 6 outside Hut A.

Type Q. (fig. 28)

This is a group of narrow-mouthed ovoid jars similar to Type P but characterised by a flattened rim grooved to take a lid, but not internally bevelled. 114, although without the rim groove, perhaps belongs to the same group. They are wheel-turned and, except for 113, not burnished.

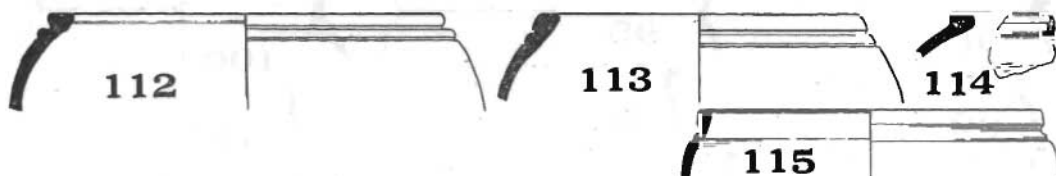


Fig. 28. Type Q. (4)

112. With a cordon below the grooved rim. From the occupation level in Hut Z.
 113. Similar to 112, burnished. From the occupation level in Hut Z.
 114. Small everted grooved rim, with no cordon below it. From the occupation level in Hut Y.
 115. Upright rim with internal groove and external cordon below it. Unstratified.

Type R. (fig. 29)

Shallow cordoned bowls with rims grooved for lids and flat bases. They are wheel-turned and usually burnished. They would seem to be local variants of Belgic platters or of the flanged bowls discussed in *Camulodunum*, p. 223, Pl. LI, 41 and 42, but some are closer to the common deeper, flanged bowls of late 1st-early 2nd century date (*Camulodunum*, Pl. LXXX, 246A; Collingwood, *Arch. Roman Britain*, fig. 52, 18-20; *Richborough I*, Pl. XXVII, 78-80). They have been found in Cornwall at Chysauster,¹ Chun,² Trebarveth,³ and Porthmeor.⁴

116. Shallow burnished bowl with a single cordon below the rim. From the occupation level in Hut V.

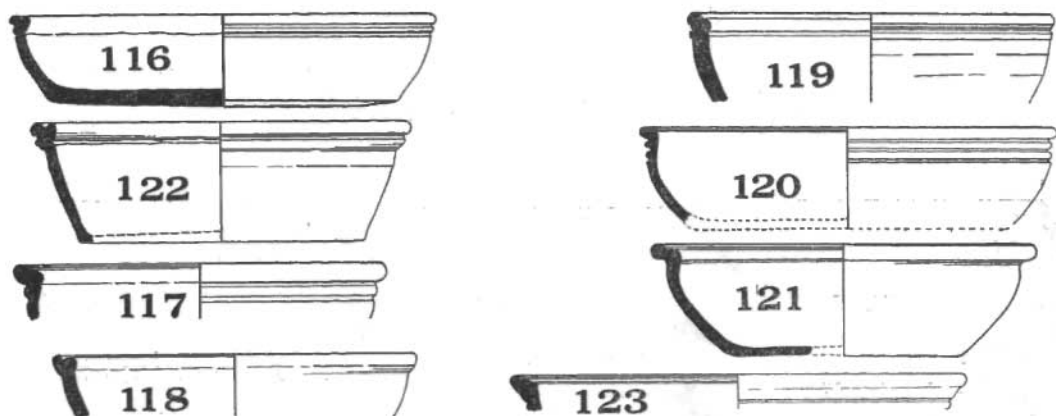


Fig. 29. Type R. (4)

117. A grooved rim but no cordon and burnished externally (*Camulodunum*, Pl. LI, 44A; 43-61 A.D., and Corfe Mullen, *Arch. Journ.*, fig. 6, 47; 50-70 A.D.). From the occupation level in Hut Z.
 118. A single cordon below a slightly grooved rim. From the occupation level in Hut Z.
 119. Small squared cordon below a grooved rim. There is another internal groove below the rim. From the occupation level in Hut Z.
 120. Two cordons externally below the grooved rim. It is burnished outside and perhaps inside (*Camulodunum*, Pl. LI, 42; 43-65 A.D.). From the occupation level in Hut Z.
 121. This example has no cordon below the grooved rim. It is burnished externally (*Verulamium*, fig. 13, 30; *Camulodunum*, Pl. LXXX, 246A; and Caerleon, *Arch. Camb.*, 1932, fig. 60, 349-52). From the later occupation level in Hut A.

¹ *Archaeologia*, 85, fig. 8 (two examples).

² *Archaeologia*, 76, fig. 8, Class 2.

³ Truro Museum.

⁴ *J.R.I.C.*, XXIV, Part 4, fig. 5, B.

122. Straight-sided bowl with grooved rim and a single cordon below it (*Camulodunum*, Pl. LII, 44B; 43-61 A.D., and *Arch. Camb.*, 1932, fig. 60, 345, Flavian). Unstratified.
 123. Rim sherd showing two grooves on internally bevelled lip and remains of external cordon below the rim. There are traces of burnish (*Richborough*, I, Pl. XXII, 31; late 1st century). From the fallen debris in Hut Z.

LIDS. (fig. 30)

- Only sherds from three lids were found.
 124. Slightly concave outline with upturned rim (*Camulodunum*, Pl. LXXXV, 9). From the occupation level in Hut V.
 125. Similar to 124 but with convex outline. Unstratified.
 126. Top of lid with hollow knob and central vent-hole. Traces of external burnish (*cf. Roman Exeter*, fig. 14, 10 for discussion of this type of lid, and Pitt-Rivers, *Excavations* II, Pl. CVII, 1; Pl. CX, 3 for lids with central vents). From the filling of a post hole in the early Hut V.

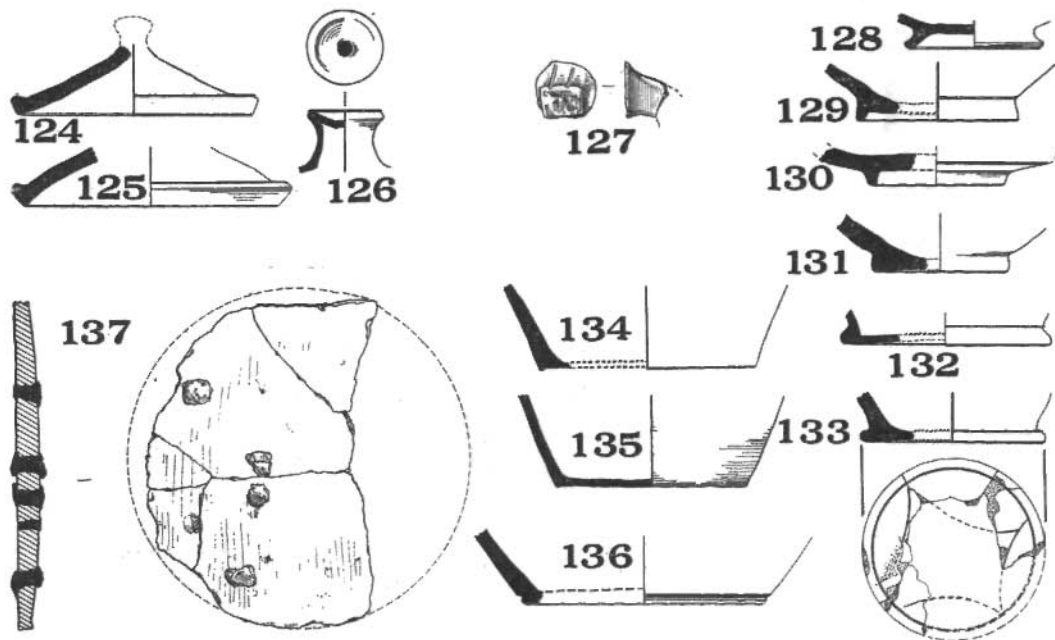


Fig. 30. (1)

HANDLES. (fig. 30)

127. Handle with square section and two grooves on upper surface. From the occupation level in Hut Y.

BASES. (fig. 30)

Most of the bases found were flat, sometimes abruptly cut off at the foot, sometimes rounded. The illustrated examples below show those differing from the normal and consist mainly of foot rings in various forms. These are found in equal quantities in the earlier and later levels and cannot be assigned particularly to any given type.

128. Shallow burnished pedestal base, wheel-turned. From the occupation level in Area B.
 129. Small wheel-turned foot ring. From the occupation level in Hut Z.
 130. Small burnished wheel-turned foot ring from a jar with a suggestion of a cordon on the lower body (*Chun, Archaeologia* 76, fig. 8, Class C). From the filling of Gully 11.
 131. Thickened stump-like base (or perhaps a lid) (*Maiden Castle*, fig. 72, 183-4). From the occupation level in Hut Z.
 132. Projecting burnished ring-base, wheel-turned, with slight upward slope towards the centre (*Chun, Archaeologia* 78, fig. 8, Class C). From the occupation level in Hut Z.
 133. Similar burnished base to 130 with less central kick and possibly handmade. It is decorated underneath with a circular groove and four semicircular grooves (*cf. Glastonbury* II, Pl. LXXXVIII, 156, for identical pattern). From the occupation level in Hut Y.

134. Base with very slight foot ring. From the occupation level in Hut Z.
 135. Similar base to 132 but only a suggestion of foot ring. It is burnished and wheel-turned. From the occupation level in Area B.
 136. Flat wheel-turned base with exterior groove just above it. From the occupation level in Hut V.
 137. Half a large flat base with five iron rivets. These do not appear to be broken-off legs, but to be round-headed rivets. It has been burnished and is probably handmade (cf. 'griddle' from Castle Dore, *J.R.I.C. New Series*, Vol. 1, Appendix, Pl. VII, 28). Unstratified.

MISCELLANEOUS. (figs. 31 and 32)

138. Upper part of amphora. The drawing is made up from a rim of pink ware (occupation level in Hut S) and a handle of soft buff ware (unstratified).
 139. Rim of spindle amphora in soft buff ware. From the occupation level in Hut W.
 140. Rim of spindle amphora in soft buff ware. From the early occupation level in Hut A.

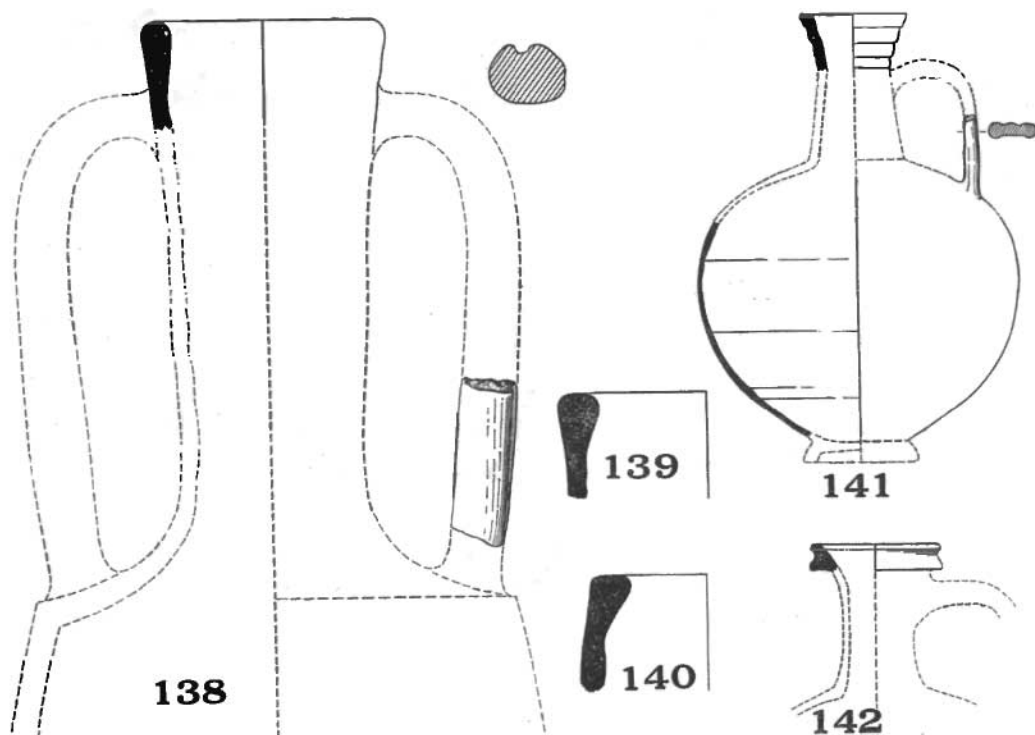


Fig. 31. (4)

Mr. C. A. Raleigh Radford has kindly sent the following note:—'The fragments belong to amphorae of the type often called Italo-Greek. The type is tall and cylindrical with a comparatively thin body and high straight handles often ribbed. The handle fragment in your collection is conclusive; it is borne out by the comparatively small diameter of the body fragments.

This type preceded the normal Roman globular type. For a drawing see the example from Welwyn (*Archaeologia* 63, 4). This is a pre-Roman site and others are cited in the text (cf. also *Richborough* I, No. 25 of mid-1st century, less close).

For the rim type see *Camulodunum* form 185b . . . the expanding bell mouth may be collared or *left quite plain*. The *Camulodunum* range of the type is pre-Flavian. I have seen rims like yours at *Richborough* also in pre-Flavian deposits.

I would not like to pronounce definitely on the place of origin, but the presumption is Italy or the Balkans. It is definitely not local. The dating is likely to be c. A.D. 40–70. It does not fall into the class of imports that are definitely Augustan-Tiberian, though I would not exclude a date before A.D. 40'.

141. Jug rim of light buff ware (cf. *Camulodunum*, Pl. LXI, 140 (8); 49-65 A.D.; *Richborough* III, Pl. XXXIII, 197; 75-100 A.D.). From the late occupation level in Hut A.
142. Round-bodied jug of soft ware with ringed neck and ribbed handle (cf. *Camulodunum*, Pl. LXII, 154; 43-65 A.D.; *Richborough* I, Pl. XXIII, 33; mid-1st century A.D.; and Collingwood, *Arch. Roman Britain*, fig. 55, 56; Flavian). From the late occupation level in Hut A.
143. Top of swollen-bellied, wheel-turned jar, with short everted rim. It is in fine light grey ware, foreign to the site, with a dark burnished slip and lattice pattern of faintly tooled lines (cf. *Camulodunum*, Pl. LII, 249D, and *Arch. Journ.*, LXXXVII, fig. 32, 4, for shape but not for ware). From the occupation level in Hut V.

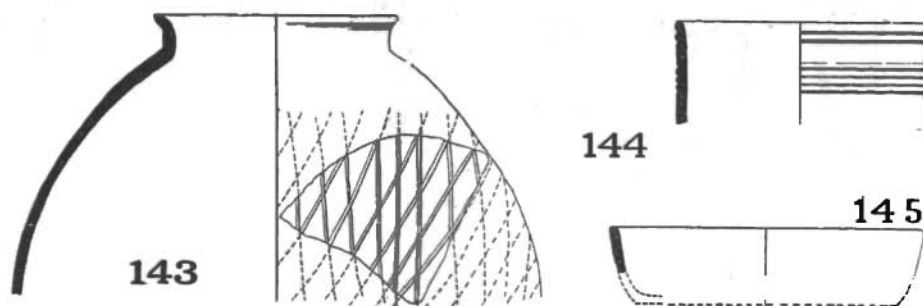


Fig. 32. (1/4)

144. Black burnished local ware with straight cordoned section. Probably a copy of Drag. Form 30 or perhaps a tankard (cf. *Arch. Camb.*, 1939, fig. 6, 27-31, and *J.R.S.* XXXIII, fig. 1, 3). From the occupation level in Hut Z.
145. Rim of Belgic saucer of common type with plain rim, in light grey ware with black polished surface (cf. *Camulodunum*, Pl. LXIX, Type 16). From the occupation level in Hut Y.

SAMIAN

By E. B. Birley and Miss Grace Simpson

1. A base fragment, with rivet-hole, of Dr. 18 (c. A.D. 60-80) and fragment of Dr. 29, with part of upper frieze and central moulding (the arrow-heads, vertical bead-row and terminal rosettes are characteristic of MOMMO, to whom the piece may be assigned with confidence—and it may therefore be dated c. 75-80 (cf. Atkinson, *Pompeii*, *J.R.S.* IV, Pl. II, 3 rc; the *hare to r* is not exactly matched by Dechelette 944 f. or Oswald 20-40 f). Hut V, occupation.
2. Dr. 18/31 base fragment which looks to be Flavian (c. 70-90 A.D.). Hut Z, occupation.
3. Part of the floor of a Dr. 18, just missing the stamp (could, but need not, be pre-Flavian). Hut Y. Hearth 1.
4. A base fragment of Dr. 18 certainly South Gaulish, probably c. 70 A.D. Unstratified.
5. Worn scrap, probably Ritterling 12 (O. and P., Pl. LXXI, c. 40-75 A.D.). Unstratified.
6. Dr. 27. From the base of a large example. It was manufactured in South Gaul before the time of Vespasian, for there is an external groove on the footstand. The reading of the broken potter's stamps appears to be I A or A S (?) . Unstratified.

BROOCHES. (fig. 33)

1. Bronze penannular brooch with knurled ring. The terminals are folded back in the same plane as the ring and each is nicked and hollow-moulded. From the occupation level in Hut Y.
2. Bronze penannular brooch with terminals turned back in the same plane as the ring and marked by two notches. Penannular brooches with recurved terminals occur in the Romano-Belgic levels at Maiden Castle, dated c. 25-70 A.D. (*Maiden Castle*, p. 264, fig. 86, 7-8), and the type is well known on purely Roman sites (*Lydney Report*, p. 78, fig. 14). Unstratified, outside Hut A.
3. Bronze hinge-pin brooch with solid catch plate. The bow, hollow behind, is tapered from the head to the foot and is decorated with two lines of ribbon ornament and a central wavy line defining alternate medial punch holes (cf. *Maiden Castle*, fig. 84, 20, 22). From the occupation level in Hut Z.

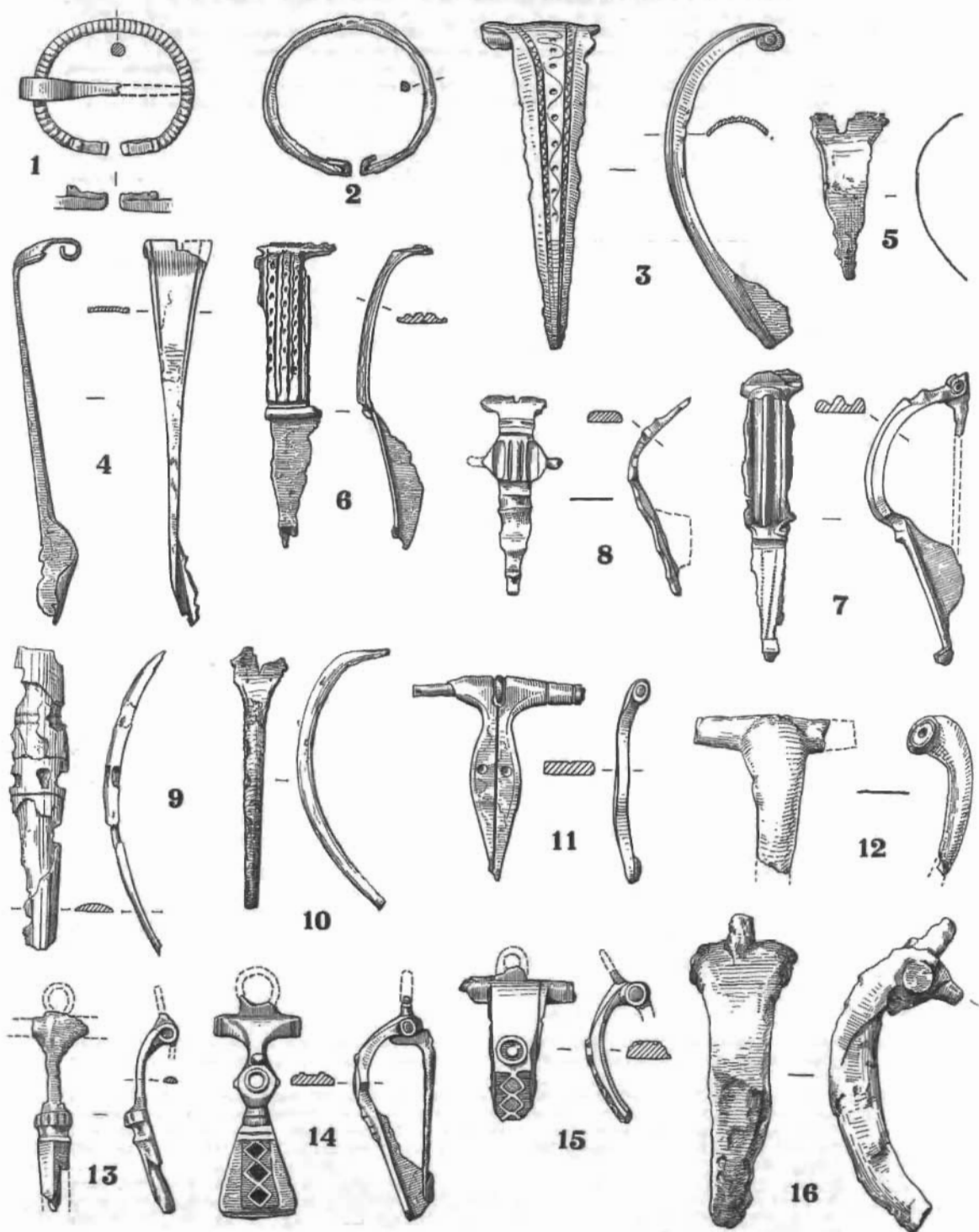


Fig. 33. Brooches. (†)

4. Bronze brooch with flat triangular bow, incised side grooves and solid catch plate. The head is bent over and rolled to hold the axis for the pin (cf. *Maiden Castle*, fig. 84, 18, 20—which however, expands at the head—; *Camulodunum*, Type VIa, p. 312, Pl. XCII, 52, with perforated catch plate where it is thought to be a pre-Conquest import, c. 10–43 A.D.). From the old plough soil above Hut Y.
5. Paper-thin bow of bronze hinge-pin brooch. The tapering bow, expanding at the head, turns down to clasp the hinge-pin. There are traces of grooves along the edges (cf. *Maiden Castle*, fig. 84, 18, 20, 22 and No. 4 above). Unstratified.
6. Bronze hinge-pin brooch with solid catch plate and knobbed foot of 'Hod Hill' type. The bow has horizontal ribbing decorated with a punched ribbon pattern (cf. *Camulodunum*, Type XVIII, Class A, c. 25–70 A.D.). From the occupation level in Hut V.
7. Bronze brooch with solid catch plate and iron axis. The bow is decorated with horizontal ribbing and has a knobbed foot. It is of similar type to No. 5 above. From the occupation level in Hut W.
8. Very worn, tinned, bronze hinge-pin brooch of 'Hod Hill' type (cf. *Camulodunum*, Type XVIII, Class B, 323–4, dated Claudius-Nero). The bow is channelled transversely on both sides of a square plate with lateral knobs. From the old plough soil above Hut Y.
9. Corroded curved bow of bronze brooch (?) with transverse markings. From the occupation level in Hut W.
10. Curved bow of hinged bronze brooch with rounded cross section. From unstratified material outside Hut A.
11. Bronze brooch with hinge-pin on long axis. The head of the brooch is expanded and turned down around the pivot pin. There are possibly two punch holes on either side of a medial line where the bow expands centrally. From a late rubbish tip outside Hut A.
12. Bronze T-shaped brooch with plain cylindrical cross piece and iron axis for hinge-pin. The head is expanded and the bow plain and hollow beneath (cf. Collingwood, *Arch. Roman Britain*, Group H, 247. The hinged type was not found at *Camulodunum* (p. 311), so perhaps this should be dated late 1st century A.D.). From the old plough soil above Hut Z.
13. Bronze hinge-pin brooch of debased 'trumpet' type with head expanded laterally and a cast loop for the attachment of a chain. There are mouldings on the crest of the bow, the central one largest and knurled (Collingwood, *ibid.*, Group R. (IV) suggests that this type was already current before the middle of the 2nd century A.D.). From the occupation level in Hut Z.
14. Bronze hinge-pin brooch with head expanded laterally and cast loop for chain. The crest of the bow has a lozenge-shaped plate with ring and dot ornament. The fantailed foot has a medial panel of three lozenges of blue enamel bordered by pale green and yellow enamel. There is a small knob above the lozenge on the bow and transverse mouldings below it (cf. Collingwood, *ibid.*, Group S. (iii), dated mainly to mid-2nd century A.D.). From Hut Y, destruction level.
15. Part of bronze hinge-pin brooch with tubular cross piece and remains of cast loop. In the centre of the bow there is a stud and ring ornament with pale green enamel and below it part of a pattern of lozenges decorated with pale green and orange enamel (cf. Wroxeter III, 24, 10, and Collingwood, *ibid.*, Group Q. This example must be dated towards the middle of the 2nd century A.D.). From the old plough soil above Hut V.
16. Iron brooch with hinge-pin and a suggestion of a cast loop. The curved bow is much corroded. From Hut W, occupation level.

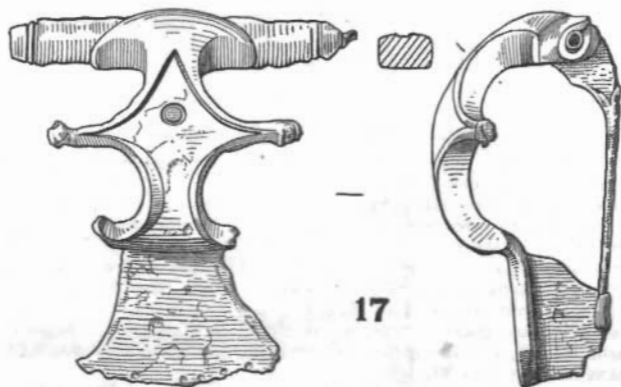


Fig. 34. Bronze Brooch. (†)

17. Large, tinned, bronze brooch with hinge-pin on an iron axis inside a long tubular cross piece. The bow is strongly arched and is slightly concave on the inside surface. It has lateral wings terminating in knobs projecting outwards and downwards. The bow has a shallow groove along the margin, and near the centre is a rivet which originally may have held a stud. The bow is expanded into trumpet-like plates where it meets the cross piece and the foot. The latter is a plain triangular plate and there is a deep solid catch-plate. This brooch has affinities with the 'Hod Hill' type in the form of the bow and the use of tinning, but the fan-tail foot is more reminiscent of the 'Thistle' type. It could, perhaps, be dated mid-1st century A.D. From the earlier occupation level in Hut A.

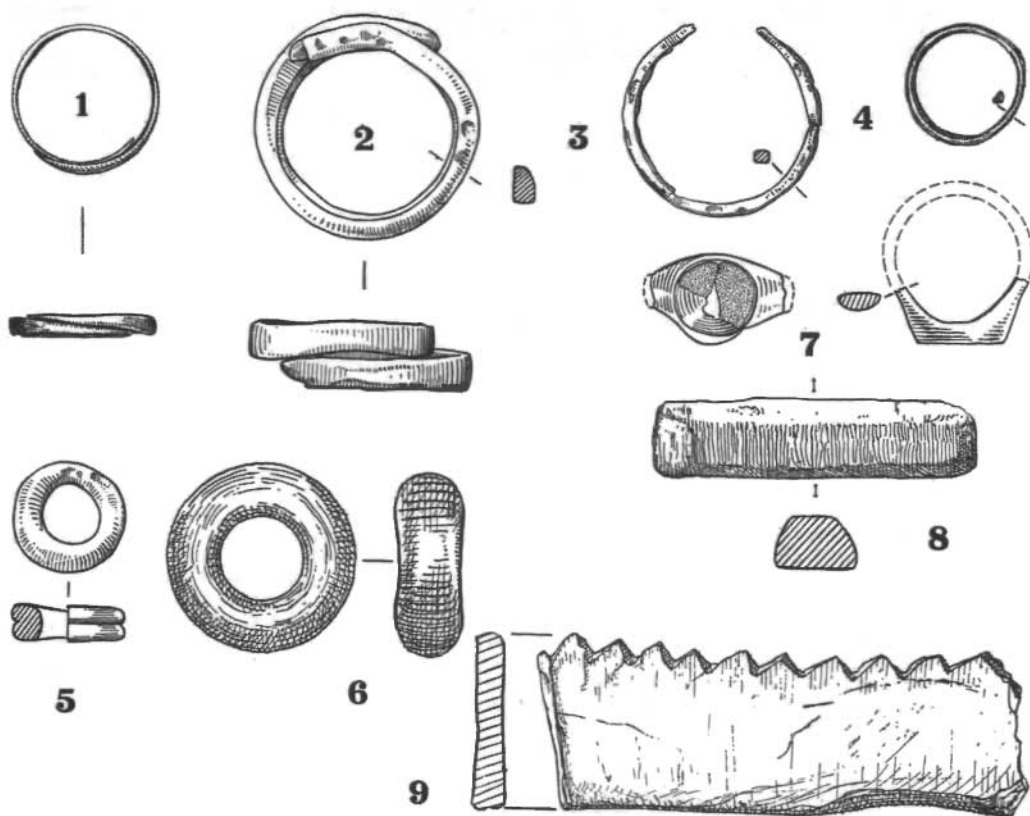


Fig. 35. Small Objects. (†)

SMALL OBJECTS (figs. 35 and 36)

1. A flat spiral bronze ring. (See *Maiden Castle*, 266, for a general discussion of these Iron Age rings.) From the occupation level in Hut W.
2. Heavy bronze ring with overlapping ends. From the old plough soil above Hut Y.
3. Bronze spiral ring with one terminal broken off. Unstratified.
4. Small bronze ring. Unstratified.
5. Small heavy bronze ring, wider on one side than the other and with an outer groove round the circumference. Perhaps an ear-ring or bead. (*Proc. Dev. Expl. Soc.* IV, parts 2 and 3, p. 44, Pl. XIV.) From Hearth I in Hut Y.
6. Annular bead of yellow glass, a type familiar on Iron Age sites, though usually of blue glass. (*Maiden Castle*, fig. 98, 1; *Glastonbury II*, Pl. LIX, G. 4; *Arch. Journ.* XCV, fig. 12, 5.) From the occupation level in Hut W.
- 6a. *Not illustrated.* Small fragments of a blue-green glass bead with inlaid circular decoration of opaque yellow glass. From Gully 9.
7. Bronze finger-ring of common Roman type, with stone missing. From the occupation level in Area B.

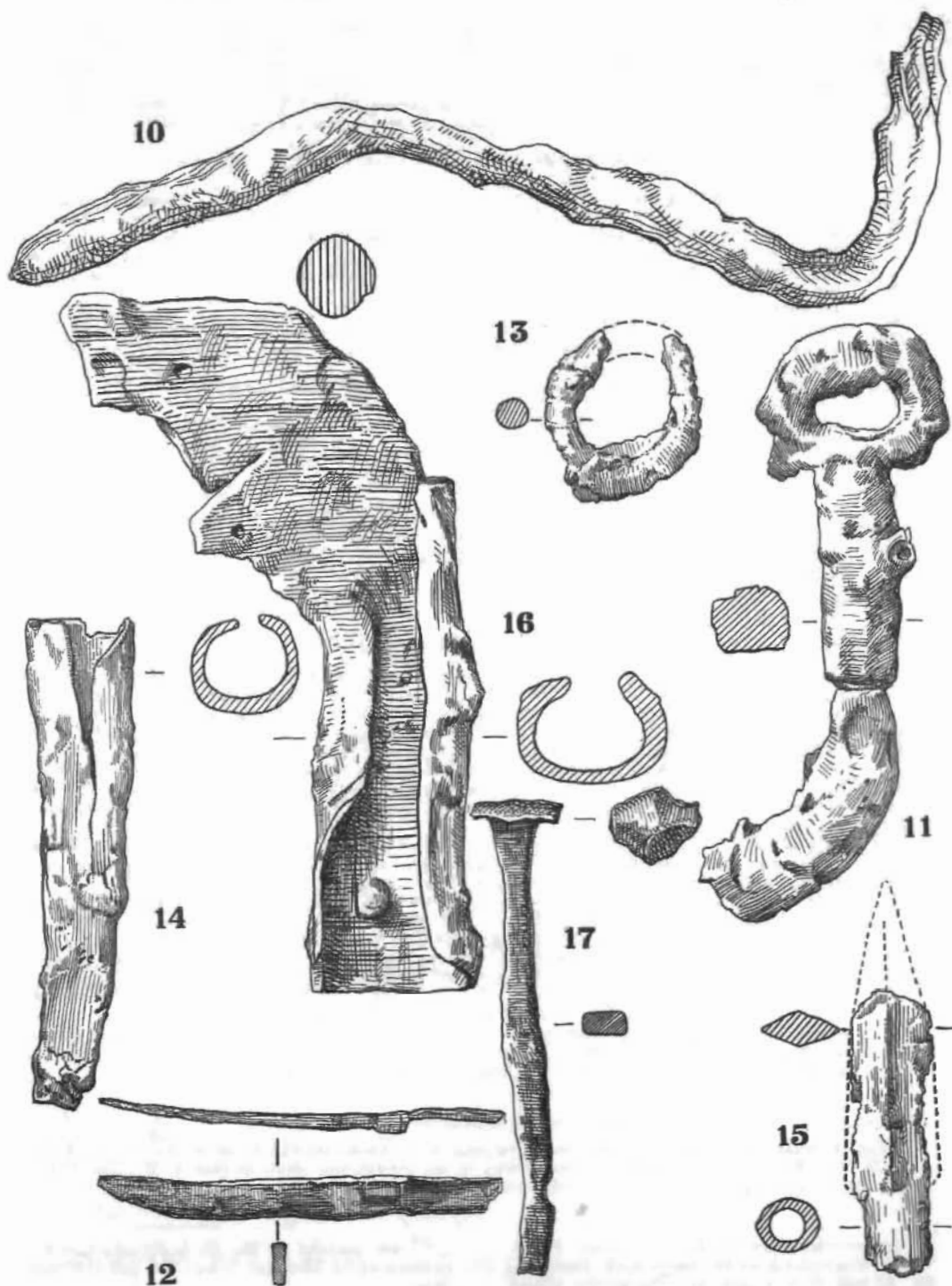


Fig. 36. Metal Objects. (†)

8. Small bronze bar, bevelled on its upper surface. It weighs 11 oz. 9 dwt. (Troy), and would seem to be a convenient small commercial ingot. From the old plough soil in Area B.
9. A small saw-shaped object of schist, with traces of wear on teeth and back. It was probably an implement used for applying decoration to pottery, and, on trial, is useful for many designs, particularly hatching (cf. Wookey Hole, *Archaeologia* 62, 583, 589, where a similar bone saw is described. There is also a small bone saw from Meare in the Taunton Museum). From the occupation level in Hut Y.
10. Iron hook, probably a latch-lifter. (Meare I, Pl. LI, I. 104.) From the occupation level in Hut X.
11. Iron hook with ring-head, probably a key. (Maiden Castle, Pl. 94, 4.) From the filling of Pit 6.
12. Very small tanged iron knife with slightly curved blunt blade, the point broken off. This must be a craftsman's knife, perhaps a wood carver's, for only the point can have been sharpened (cf. a small knife from Ham Hill in the Taunton Museum). From the occupation level in Area B.
13. Iron ring. From the occupation level in Hut Z.
14. A split iron socket, perhaps a spear butt. From the occupation level in Area B.
15. Part of an iron socketed bolt-head or arrow-head with central rib. (Maiden Castle, fig. 93, 1-2.) From the occupation level in Hut W.
16. Iron sickle or bill-hook of native type with rolled-over socket. (Meare I, Pl. LI, I. 118; *Camulodunum*, Pl. CV, 11-12.) Unstratified.
17. Iron nail with flat diamond-shaped head and rectangular stem section. From the occupation level in Hut Y.

COINS

By B. W. Pearce, M.B.E., M.A., F.S.A.

Only two coins were found on the site and both were very corroded.

1. Rev. probably VICTORIA AVGVSTI. Victory moving left. Nero. A.D. 64-66. In the fallen wall debris of Hut Z.
2. Probably an 'as' or 'Antoninianus', otherwise indeterminate. Unstratified.

OBJECTS OF STONE (fig. 37)

A number of worked pieces of schist, most of them with central hole, were found on the site and are shown in fig. 37. These blue stones with dark cherty bands are characteristic of the middle Devonian to the north, and in the absence of quarries were almost certainly obtained from the shore between Porthmeor and Trevarnon Bay just over four miles away to the north-west.¹ They were probably used as rick or thatch weights,² since similar stones are used for this purpose in Cornwall today.³ They have been re-used in walls and have been found on the top or bottom of filled-in post holes and pits. There are often signs of wear around the central hole. The material of the stone itself is quite unsuitable for grinding purposes.

1. A large blue stone some 2 ft. 6 ins. across which had been re-used in the wall of the late Hut A. Signs of wear were shown on both its inside edges as well as around the central hole. The purpose of this stone is difficult to determine (but see above p. 43).
- 2-9. Blue schist of varying sizes, some complete with a central hole, usually bored from both sides, and others of which half only remains. Two others not shown in fig. 37 were found in a broken condition; one circular one with a central hole, at the bottom of Pit 109 (fig. 5), and the other half only, covering a filled-in post hole in Hut A (fig. 5). No. 7 is one example from a number of circular pieces of schist which are certainly pot lids.

There is a group of pierced stones smaller than those in fig. 37, yet probably too big for spindle whorls (cf. Maiden Castle, 294, Pl. XXXIII, 41-45). They are of varying shapes and were perhaps used as loom weights, or as thatch weights like the heavier ones above. There are heavy ones $\frac{3}{4}$ in. thick and others of thin schist barely $\frac{1}{4}$ in. thick. They are found in the occupation levels in Huts Y (4), V (1), Area B (2) and Gully 9 (1).

HAMMERSTONES, WHETSTONES AND RUBBERS

Four stratified hammerstones were found, coming from the occupation levels in Hut Y (1), A (2), Area B (1). Rubbers and whetstones were found in the occupation levels in Hut A (8), Hut V (4), Hut S (1), Area B (1). The two illustrated come from Hut A and Hut S.

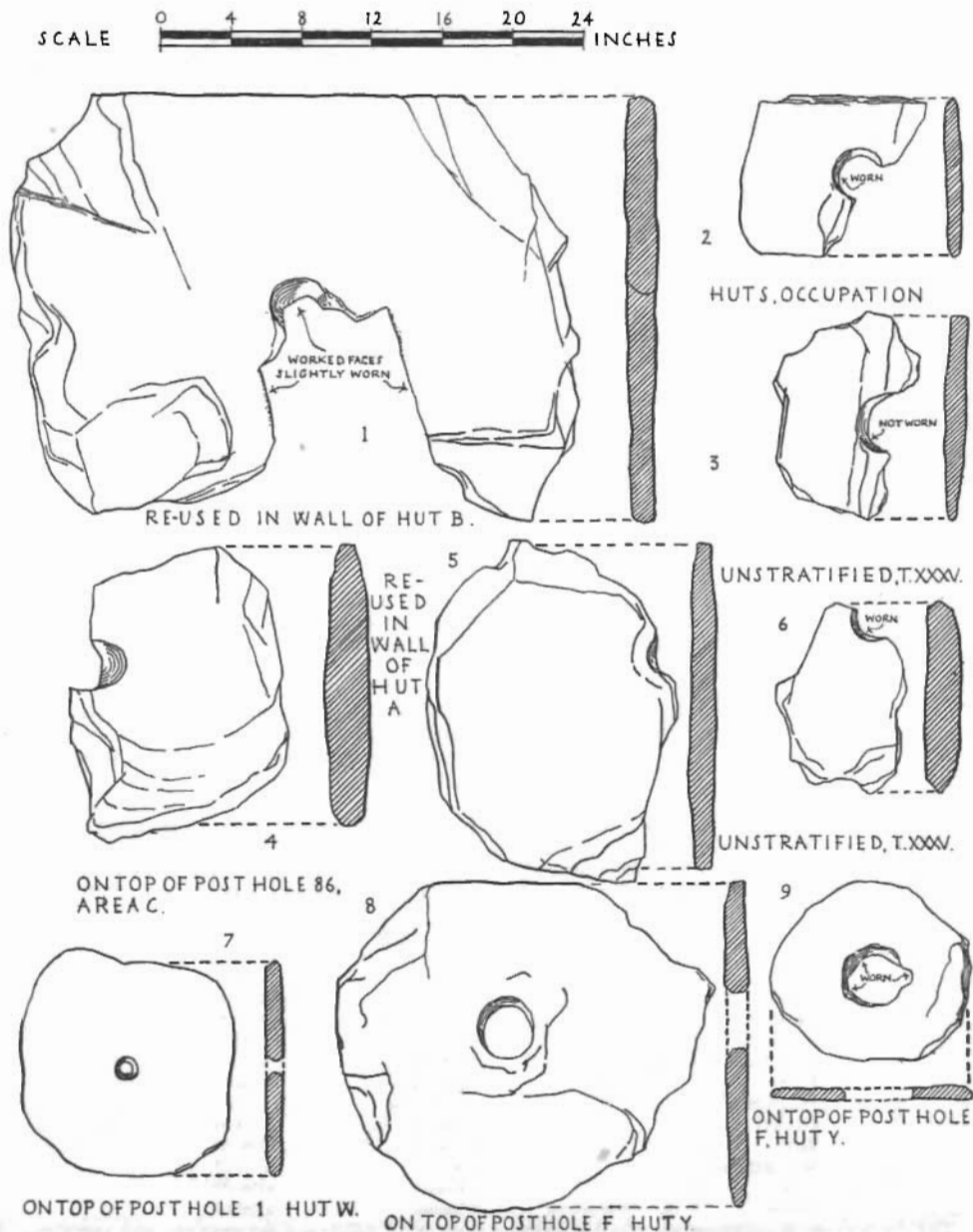
¹ Information from Mr. G. A. Garceau, F.G.S.

² Cf. Examples from Brittany, *Arch. Journ.*, C. fig. 9, and from a hut on Constantine Island (Truro Museum).

³ I am grateful to Mr. H. I. Douch, Curator of the County Museum, Truro, for this information.

FLINTS

Flint pebbles and flakes were found in the occupation levels in Huts W, Y, Z and V, Area B, and the filling of Gully 11. Only four flakes, destruction level in Hut W (2), and destruction level in Area B (2), showed signs of secondary working and may have been used as scrapers. A small tanged arrowhead was found in the top soil.

Fig. 37. Stone Objects. ($\frac{1}{2}$)

QUERNS

A few pieces of granite, most of them in an advanced stage of disintegration, were found on the site, and those which preserve some shape appear to be parts of querns. Mr. G. A. Garceau, F.G.S., reports that, on the assumption that the stones were brought from no great distance, they fall in with the geology of the northern half of the St. Austell Granite Mass and could have come from the area around St. Dennis and Roche. All the samples except one are altered granite with the felspar changed to secondary micas.

SPINDLE WHORLS (fig. 38)

A number of spindle whorls were found on the site and a typological selection is shown. Except for Type III, which is associated with the later occupation of the site, the other types are found both in early and late levels.

Type I (1-6). *Decorated*

The decoration for the most part consists of small drilled holes, but Nos. 3 and 5 have been scored with a knife. They are mainly tall and biconical and made of schist. Stratified examples come from the occupation levels in Huts A, W, Y and V. No decorated spindle whorls were found at Glastonbury or Castle Dore, but at Meare (*Meare Lake Village* I, Pl. XXIII, W. 85) there is a drilled example of this type and others scored with a knife (*ibid.*, W. 137, 175). Decorated spindle whorls such as that found at Bredon Hill (*Arch. Journ.*, XCV, fig. 11, 6), Milber Down and Kents Cavern (*Devon Arch. Exp. Soc.* IV, parts 2 and 3, fig. 7, 1 and 2; fig. 13, 1 and 2; and *Maiden Castle*, fig. 996) are dissimilar, both in shape and type of decoration.

Type II (7-9). *Tall but undecorated*

These are similar to Type I, but undecorated, and not all biconical. They come from the occupational level in Hut Y, and other early levels from Hut V.

No. 7 is made of clay.

Type III (11-13). *Flat*

Seven of this type were found in all, and of the stratified examples four came from the occupation level in Hut Z and one from Hut V. One example from Hut Z is made of clay. This type appears to be associated with the later occupation of the site.

Type IV (14-18). *Thin Schist*

These are the most numerous of all on the site and vary from very rough ones, Nos. 14 and 15, to those cut and ground smoothly, No. 18. Out of the fifteen examples, eight came from the occupation level in Hut Y and one each from Huts V, S and W.

COUNTERS (fig. 38)

19. Stone counter from trampled area south of Hut A. A similar counter was found in Hut Z.
20. Counter made from a sherd of decorated pottery from the fallen debris of a hut in Area B. Another pottery counter, undecorated, was found in Hut Y.

BONES

Practically no bones had survived in the acid soil. The few that were found, and a number of teeth, have been identified by Mr. L. F. Cowley, M.Sc., Department of Zoology, National Museum of Wales, as those of ox, pig and sheep. There is one horse's tooth. A few oyster and mussel shells were found.

TIN

Two samples were tested. One in the form of a pebble (No. 1) and one in the form of slag (No. 2). The latter cannot be the original waste product; it is partially reduced ore ready for its final smelt in the furnace and contains a higher percentage of tin than the original ore (No. 1). The Romans had a preliminary process by which they extracted gold from tin and this metal is noticeably absent (spectrographical test).

	Number 1 (Pebble)	No. 2 (Slag)
Tin	78.71%	79.71%
Silica	1.45%	0.40%
Lead	trace	trace
Copper	trace	trace
Titania	0.07%	Nil
Iron Oxide + Alumina	1.40%	0.33%
Lime	0.20%	0.28%
Magnesia	Nil	Nil
Nickel	absent	absent
Zinc	absent	absent
Manganese	absent	absent
Gold	absent	absent
Silver	absent	absent

The tin content is expressed as metal, and there is no great difference between the two samples. In both, no doubt, the metal is in the oxidised form; some reduction may have occurred from the usual ore of tin which is Cassiterite.

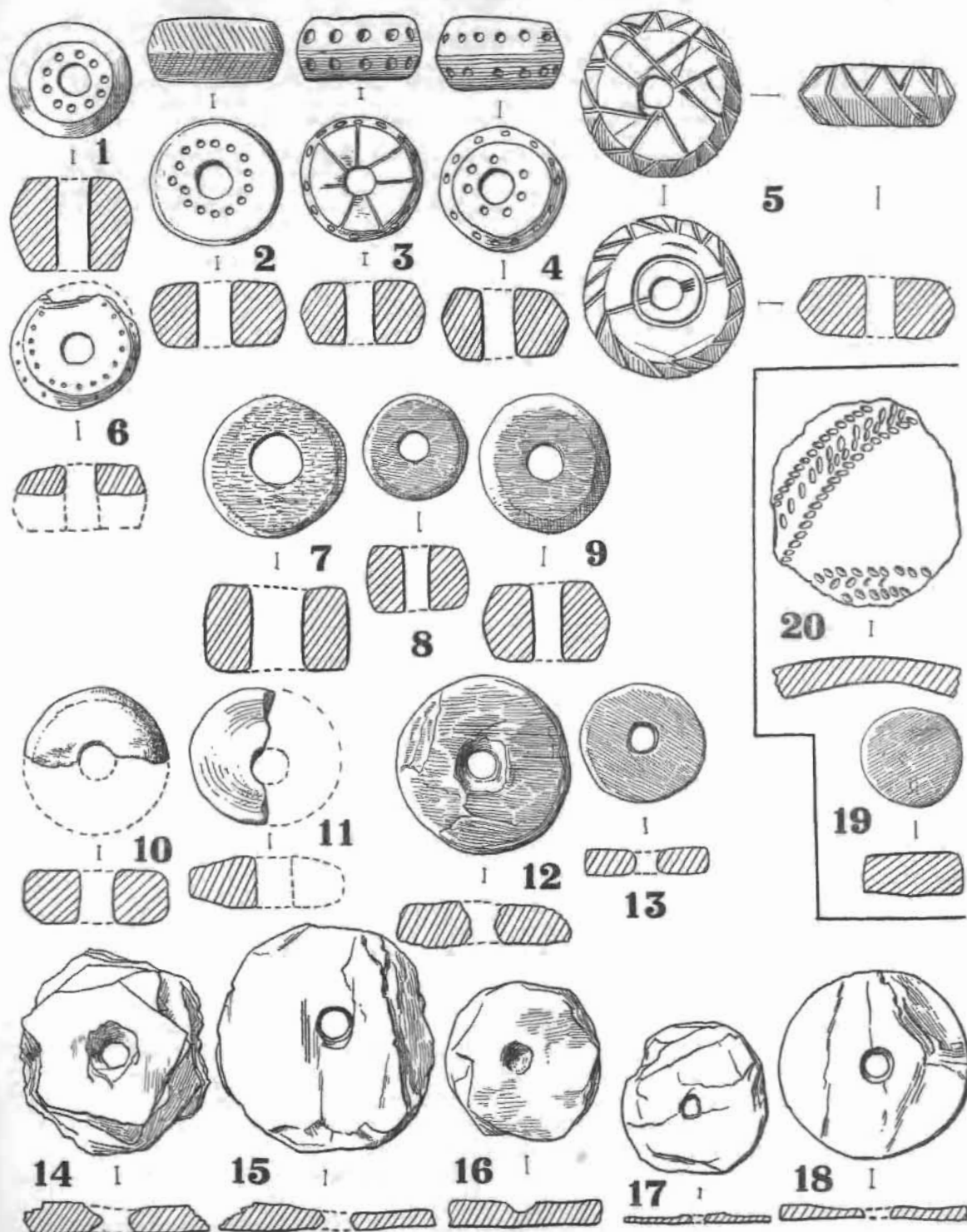


Fig. 38. Spindle Whorls. (§)

CHARCOAL

By H. A. Hyde, F.L.S., F.M.A.

The material consisted exclusively of small fragments of wood carbonised (it may be presumed) by fire. Each fragment was broken across and the resulting clean fracture examined microscopically; in some few instances radial and tangential longitudinal fractures were also examined. In all, 42 fragments were determined as follows:—

OAK (31). Pedunculate oak (*Quercus robur*) and Sessile oak (*Q. petraea*) the two species native to Great Britain are anatomically indistinguishable; the present specimens might belong to either of the two species or to their hybrid, or might be a mixture. The specimens were all small, none exceeding 5 cm. in any direction; ten were from branches or small stems; those from mature stems all appear to come from scrubby trees having a growth rate corresponding with 7 or 8 rings to each centimetre (measured radially).

HAZEL (*Corylus avellana*) (5). Determinations confirmed by scalariform perforations. Three of the specimens were small stems or branches of less than 2 cm. diameter.

WILLOW (*Salix* sp.) (2). One young stem split longitudinally, the other a very friable fragment.

GORSE (*Ulex* sp.) (3). All small stems, 0.8–1.2 cm. diameter.

ROSACEAE: probably hawthorn (*Crataegus* sp.) (1). Some fragments were indeterminable.

All the above species are common in Cornwall today and the investigation adds nothing to what was known or might be presumed about the flora of that part of Britain as it existed around the beginning of the present era. It has shown, however, that the occupants of the site used almost exclusively cordwood or brushwood. Since the site was a valley several miles inland the presence of gorse almost certainly implies a certain amount of local deforestation.

APPENDIX A
 CORNISH SITES WITH CORDONED SHERDS (fig. 39)
 (ST. MAWGAN-IN-PYDER, TYPES F, G, H, J)

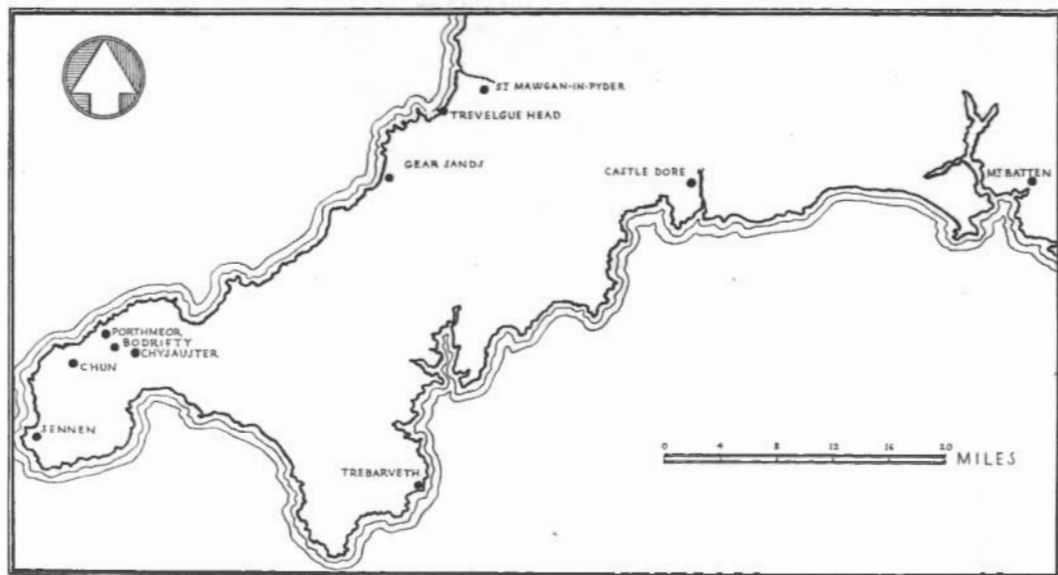


Fig. 39. Cornish Sites with Cordoned Sherds

1. ST. MAWGAN-IN-PYDER. Types F, G, H, J.
2. CASTLE DORE. *J.R.I.C. New Series*, Vol. 1. Appendix Pl. Xb, 4 and 5, fig. 18. 25. Types F, J.
3. TREVELGUE HEAD. Mr. C. K. Croft Andrew, F.S.A., reports that this type of cordoned pottery was very sparsely represented. Type G and possibly Type H.
4. TREBARVETH. *Ant. J.*, 1949, XXIX, fig. 4, B2, B8 etc., and E14 etc. Referred to as 'Dark Age' but in fact Types H and J. There is also a good example of Type F in the Truro Museum.
5. CHYSAUSTER. *C.A.S.*, 1938, p. 17, Type G ('tazza of a form found at Welwyn') and *Arch.*, 83, fig. 6, 5 and 7, Type J; and Type H in Truro Museum.
6. PORTHMEOR. In Penzance Museum, a bowl of Type F. Unpublished.
7. CHUN. *Arch.*, 76, fig. 8, Class 2 and Truro Museum. Types F and J.
8. SENNEN. *Arch. Corn. and Scilly*, fig. 34A. Type J.
9. GEAR AND PERRAN SANDS AREA. I am grateful to Mr. A. D. Nicholls and Mr. L. J. Penna for information on these sites. Types G, J. and H.
10. MOUNT BATTEN. Plymouth, Devon, habitation site. Sherds of Type F and G noted and drawn by Sir Cyril Fox, in Plymouth Athenaeum.¹ This was bombed during the Second World War and the finds presumed lost.
11. BODRIFTY. See above, Miss D. Dudley in *Arch. Journ.*, CXIII (1956), 28, fig. 10. Only four cordoned sherds, type indeterminate.

¹ I am very grateful to Sir Cyril Fox for this information.

APPENDIX B

A REPORT ON THE BRONZE STRIP

BY SIR CYRIL FOX

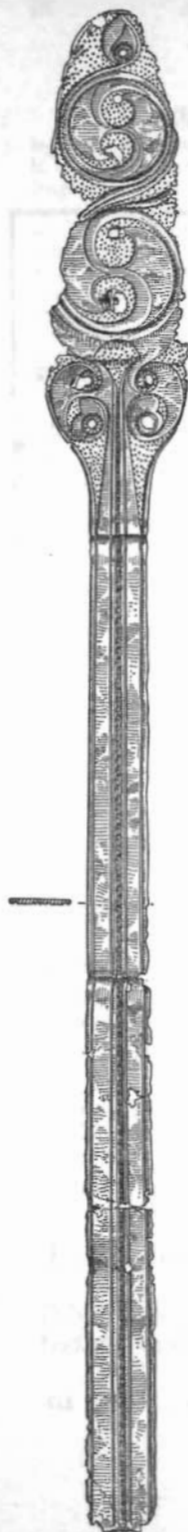


Fig. 40. (§)

Fig. 40 and Pl. XI. This interesting and important piece, 31 cm. ($12\frac{3}{8}$ ins.) long and 5.9 cm. ($2\frac{1}{4}$ ins.) in greatest breadth, is almost certainly part of the decorative bronze-work on a shield.

It consists of the central spine 20.4 cm. (8 ins.) long and practically the whole of one of the expanded, spear-shaped, terminals (10.8 cm.). The shield will, of course, have been oblong with straight or slightly indented sides. The design of this portion—we cannot tell whether upper or lower—will have been related to the central feature, the boss, and we must study the decorative scheme it presents, from the centre outwards.

The spine is nearly parallel-sided, diminishing from 15 to 12 mm. in a length of 230 mm. The central ribbon, 3 mm. wide, defining the long axis of the shield, has a delicate wavy pattern, derived from the alternate punch-marks on the joint of a metal tube¹. There are narrow grooves parallel to this pattern, and similar incised lines defining the margins of the bronze. The latter almost certainly continued round the whole piece.

The axial wavy pattern dies into a pelta-shaped terminal stippled for emphasis; this is sited where the expanded portion of the piece begins. The flanking bands each curve outwards to form a tiny dual pelta-shaped pattern with boldly coiled tips modelled as 'snail-shells' in the Marnian tradition² and with holes (for decorative rivet heads?) at their tops. The bands do not stop here, but continue on either side as narrow ribbons, dying into bold rounded scrolls which initiate the two successive coils which form the major pattern of the piece, making, in their course, a double curve across each of them. One of the ribbons leaves the second coil at the tip, ending in a Llyn Cerrig trumpet³ with radially ornamented boss, axially aligned.

The pattern within each coil is complex. Two opposed comma-forms, one extending to the left, the other to the right of the axis, fit into each of the double curves mentioned above; they are stippled, and help to define 'double peltas', based on the coil, and expanding from it⁴. Here again, the movement is alternate and interlocked. The pairs of free pelta tips in each unit had rivet heads, probably ornamented.

Put briefly, the continuous coil incorporates, successively, four peltas, linked in pairs: the comma-shaped voids thus created are stippled.

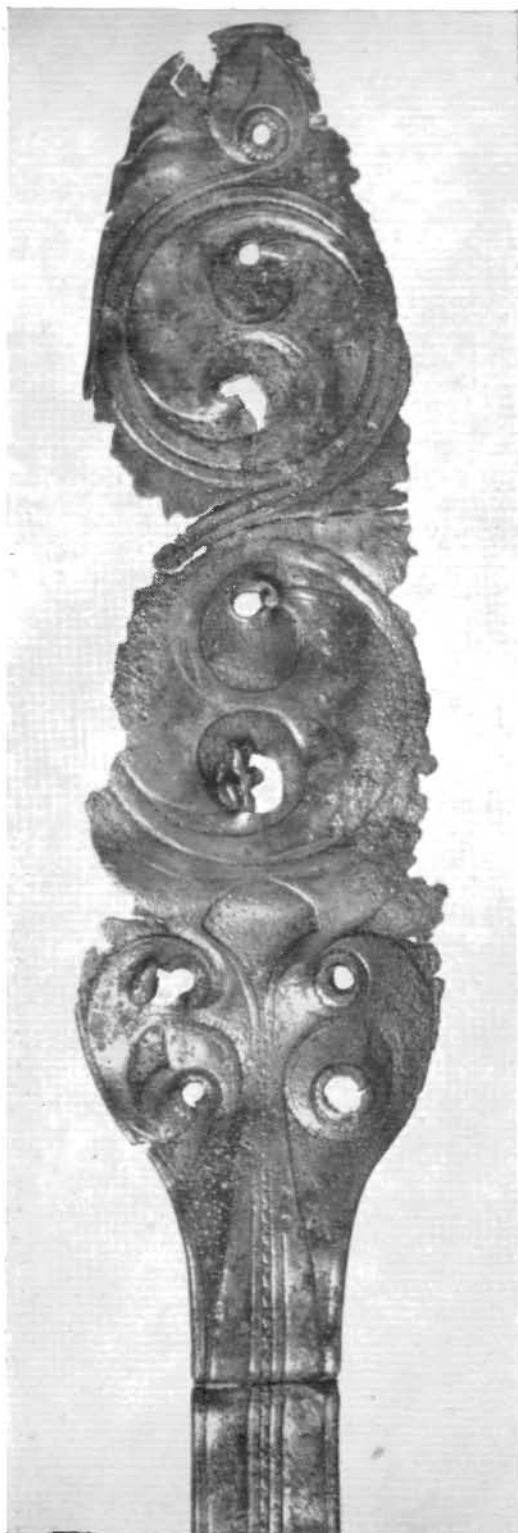
The partially lost (marginal) elements of the pattern are not difficult to recover; they consisted of ribbon-work and stippled, triangular voids, balancing the series of comma-voids in the centre, and matching two such units at the base of the expanding terminal.

¹ *A Find of the Early Iron Age from Llyn Cerrig, Anglesey*, (1946), cf. bridle-bit ring 49, Pl. XXII.

² *Archaeologia* 60, 267, fig. 13.

³ *Llyn Cerrig, op. cit.*, fig. 24, 7.

⁴ The coil is, perhaps, 0.25 mm. above the plane of the rest of the pelta-shape; perceptible, therefore, in certain lighting only. The intentional ambiguity in design met with in many Celtic works of art is here well illustrated.



Bronze Strip from Shield Mount : detail

When the study of this work of art is completed, its mazy paths threaded, the counterpoint¹ movement understood, the question remains—why such virtuosity? The piece is so small, the ornament so delicately contrived, its unity of plan discernible only by studying the planes of the pattern in various lights; as decoration of a shield such ornament should be at least twice the scale for due effect.

It would seem that when complete control of the tool and the medium is attained, a stage in early art may be reached when the craftsman indulges the intellectual pleasure of intensive refinement in logical pattern-making: pattern imposed on pattern is sometimes visible, sometimes invisible. Such work can surely only have been carried out to please his equals—his fellow craftsmen, in a workshop with a long craft-history behind it.

'Workshop with a long history'. Only so can the amazing long life of a primary (late 3rd-century) Marnian motif, the 'snail-coil' be accounted for. I would add that the recognition of this survival may be supported by the fact that the decoration of the trumpet boss is also seen on early Marnian works².

Where was the piece made? Certainly not in the Cornish peninsula. The folds show that it was scrap-bronze, in so far as the dwellers in the St. Mawgan settlement of the mid-1st century A.D. and later were concerned; and the parallels are far away. Indeed, I know of no close parallel to the refinements and ambiguities of design discussed here, but the double coil is the main feature of two well-known chariot-harness ornaments in the 'Seven-Sisters' hoard, Glamorgan, Neath³ in the National Museum of Wales. The design of one of these, a looped ring, makes full use of and indeed, amplifies an unusual and striking feature of our Cornish piece, *the deep groove running outward to the margin between two coils*, and can with assurance be regarded as a late (mid-1st century A.D.) development of the western school of craftsmen which produced it. Other late examples of the same school are the Rodborough, Glos. bronze strip⁴ and the Chepstow, Mon. harness-mount⁵.

The shield mount from St. Mawgan, then, will have been the product of a craftsman trained in a workshop at the southern end of the Jurassic Zone (Gloucestershire) at the turn of the 1st centuries B.C. and A.D.

¹ 'The art of adding one or more melodies as accompaniment to a plain-song, according to certain rules'; a word which admirably suits such manifestations, in another medium of expression, as I am trying to describe.

² It also is seen on late pieces, e.g. the eye of the ram's head of the Snailwell, Cambs., armlet

(cf. T. C. Lethbridge in *Proc. Camb. Antiq. Soc.*, (1954), p. 36).

³ Romilly Allen, in *Arch. Camb.*, (1905), 132; W. F. Grimes, *Prehistory of Wales*, (1951), fig. 40, 24.

⁴ *B.M. Guide*, (1925), fig. 169.

⁵ W. F. Grimes, *op. cit.*, Pl. XIX, 2.