

Circular Roman Building at Bozeat, Northamptonshire, 1964

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Summary

The excavation of a circular stone building, diameter 50 ft (15.25 m), with four central piers, dating to the third century A.D.

INTRODUCTION

This site is at Bozeat, Northamptonshire (SP 896600), near the north Bedfordshire border. Found on 23 July 1964 by G Coleman whilst deep ploughing, and recognised by E Corby as an ancient site, it was excavated 1-8 August 1964. Excavation was not total; parts of the ground plan were established by careful probing.

The remains found were footings of a circular stone building with four central piers, at present unique, dating to the third century A.D., probably to be associated with neighbouring Roman settlement (at Bozeat; site B.1), which like the present site lies on glacial sand.

Figure 1 shows the position of the site in the modern and medieval fields. The hedges were set at the inclosure of Bozeat in 1798, after which the field was no longer ploughed. In the nineteenth century there was a hovel half way along the north hedge. The field remained as grass ridge and furrow until about 1948, when it was levelled by bulldozing before ploughing. Some ditches in the marshy part of the field were filled, and stone placed in the marshes. The south hedge was pulled up soon after the present excavation.

EXCAVATION

The earliest remains of occupation on the site are the Belgic ditches D1 and D2 (fig 2). They probably formed part of an enclosure which was made about the middle of the first century A.D. according to sherds 1, 2 and 3 (fig 3). There was very little occupation refuse in the lowest ditch silts, and the structure probably fell into disuse soon after construction.

The larger ditch (D1) was 10 ft wide and 5-6 ft below the modern topsoil. The small ditch (D2)

was 6 to 8 ft wide and 4½ ft deep.

The next active phase of occupation is represented by the rich upper fillings of ditch D1, in the Antonine period (coin 1; pots 4 to 19 (fig. 3); and samian of Dragendorf form 45).

Third century A.D. activity was represented by a pit cutting through the later filling of ditch D1 (fig 4) and containing an indented castor ware beaker (fig 3, no. 20).

The final stage of occupation was the circular building (fig 2). All the remains were footings of limestone. They consisted of an outer perfectly circular wall of 50 ft outside diameter, and 2½ to 3 ft thick; footings for four crosswalls 2 ft thick; and circular footings, presumably intended for piers, of about 4 ft diameter. The internal crosswalls and piers were not placed symmetrically in the outer circular wall.

All the footings, except those of pier A, and crosswall I, were laid in the same manner. The stonework consisted of courses of pitched limestone 'flatstones'. The rough shape of the footing trenches, being U-section and of varying depths, necessitated the use of layers and rows of pitched stone. Sometimes one course deep sufficed, being made up to the right width by others alongside. But the trench diggers seem to have obeyed a rule to dig down until the subsoil (yellow sand) was reached. So when, for example, the outer wall crosses the infilled ditch D2 almost at right angles to it, the trench follows the ditch profile, also getting wider at the top due to the softer going and greater depth. The stonework now consists of several courses of pitching one above the other, separated by a few horizontal stones, with other courses in parallel higher up (pl. 5a). Always the pitch of the stone is the same way, no matter how many courses deep. Where a footing runs along a ditch side (as crosswall p, in trench I; fig 2), then part of the ditch side is dug away to level the bottom of the trench for the footings. The holes dug for the pier footings were roughly

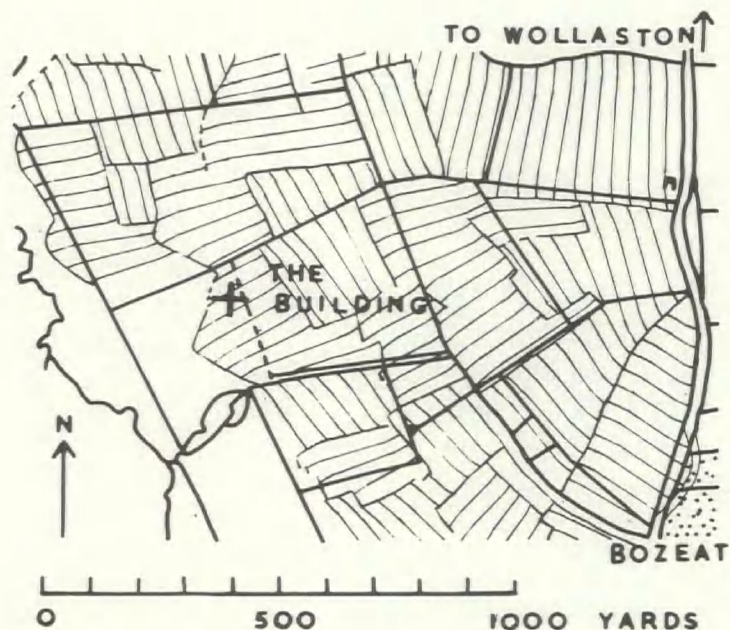


Fig 1. Position of the site in the modern and medieval fields.

bowl-shaped. These were stone-filled by lining them with flatstones, and filling the centre part concentrically, or as best possible, with more flatstones. This process being repeated up a course until the bowl was filled. In the case of pier *B*, which was set in the ditch D2, many such courses were needed (pl. 5b).

Pier *A*, and crosswall *I*, are anomalous in their construction. With pier *A*, after the liner stones had been placed, the centre was filled up with small bits of stone and earth slurry. The trench for crosswall *I* was filled similarly, one course of pitched stone being laid on top of this to finish off (pl. 5c). From this it appears that the supply of flatstone had run out, due likely to the original estimate of the amount needed being in error—extra stone having been used where the footings cross the ditch. (On computation 49 cu ft of extra stone was used in D2, whilst 35 cu ft of it would have replaced the rubbishy filling of the pier and crosswall). So although short of good stone it was thought best to finish off the parts under construction. This suggests that pier *A* and crosswall *I* were the last to be done; (and possibly that no more flatstones were needed in the construction, i.e. no more footings, and also the building above ground was not to be of this type

of stone).

In all the wall footings the direction of the pitch of the stones shows the direction in which the worker went in laying them; i.e. stones laid \\\\\\\\\\\ show wall being laid from left to right, and stones laid ///// show wall being laid from right to left. On fig. 2, arrows show in which direction the footings were laid. In laying the outer wall it can be seen (pl. 6a) that work started from a single point—a sort of keystone—and proceeded away from it in both directions. The finish point would result in an easily filled wedge shape, about opposite the start point on the circle. But where the finish point had been expected, the footings were badly damaged by mediaeval ploughing. This method of footing the outer wall implies the use of two teams of masons. Most of the footings were not all done at the same time. They were each (i.e. each pier, crosswall, and the outer wall) dug out separately and then stone filled, before another was dug. This is shown in the remains by the gaps of subsoil left at intersections of footings (pl. 5a). E.G. the junction *R* of crosswall *p* with the outer wall; at ancient ground level (i.e. about the top of the footings) these two footings meet right up, but lower they fall away from one another to leave a wedge of subsoil. These

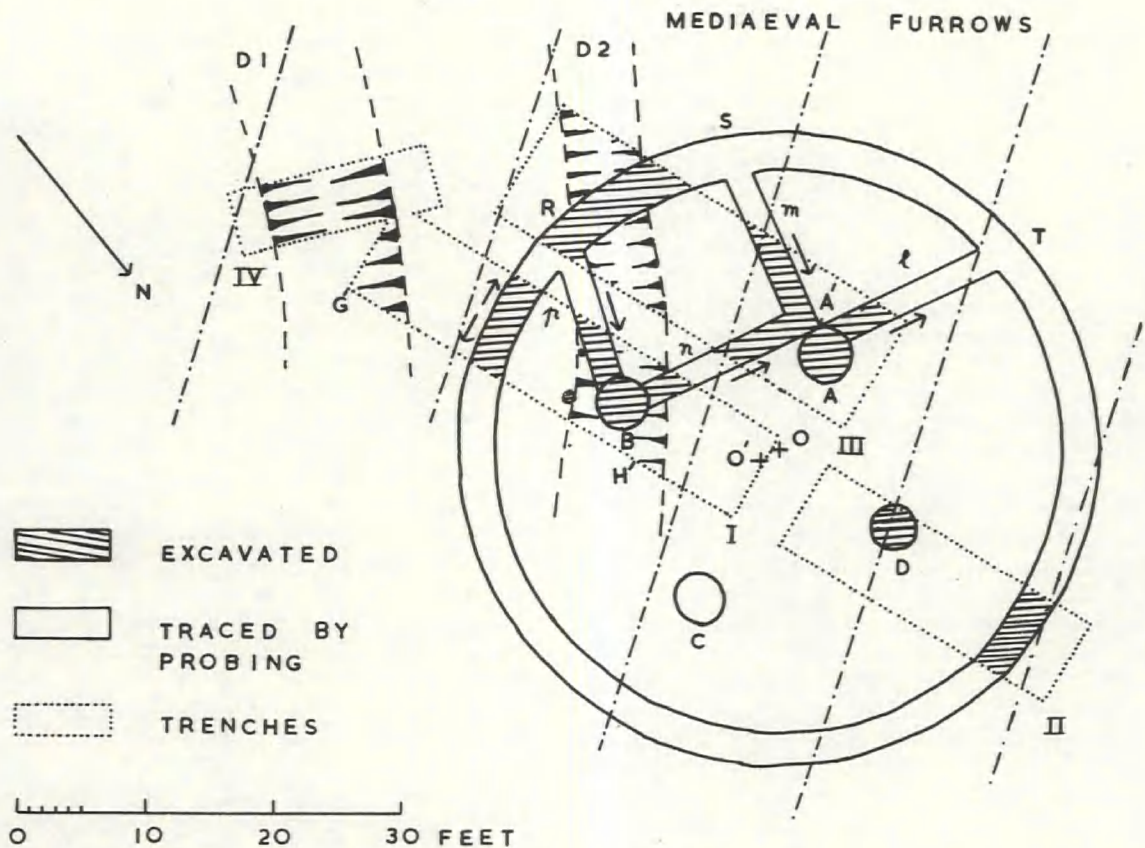


Fig 2. Plan of 3rd. century Romano-British building at Bozeat, Northants.

gaps would not have occurred if the complete ground plan for the building had been excavated at once, and then stone filled. They can be explained if the outer wall had first been completed and then the trench for cross wall *p* dug. Since neither the outer wall trench nor the end of the crosswall trench have vertical sides, some soil is left between them, especially lower down. The gaps were present at all footing intersections, except that between crosswalls *m* and *n*: here the footings meet up over their entire depth (pl. 6b), showing that the trenches for them were open at the same time.

Effects of Medieval Ploughing on the Site

The grooving effect left by medieval ridge and furrow cultivation (after it has been flattened by modern farming) can clearly be seen on all the present sections (e.g. fig 4). The lines of the furrow bottoms are marked on fig 2. Where these cross

the wall footings there is most damage to the remains (see the holes in crosswalls *m* and *n*, pl. 6b). The stone which is ploughed out from the footings in this manner is carried some distance along the line of the old ridge and furrow.

GEOMETRY OF THE BUILDING

The rather asymmetrical layout of the internal structure of the building looks as though it may have been unintentional. The form shown in fig 5 may well have been what was intended. This would be simple to construct by first marking out two concentric circles of 24 ft and 12 ft radius. On the inner circle the pier bases *A B C D* making a square would be marked. The lines of the crosswalls *l m n p* are readily obtained by projecting *CB*, *DA*, and *BA* to the outer circle to give points *R*, *S*, and *T* respectively.

The actual plan of the building can be explained by assuming various errors during the attempted

construction of the above hypothetical form.

The first important difference is that the inner circle, on which the piers lie and the positions of the crosswalls largely depend, has a different centre (O' fig 2) from that of the outer wall (centre O). (The position of pier A being ignored for the moment, as it is subject to further errors). This must mean that after the outer circle had been marked out, it was immediately dug and footed. Next and before any more footings were marked out or begun, the original centre O was lost for some reason. Before work could now proceed the centre had to be recreated and the pier and cross-wall positions then marked out from it. Unfortunately the new centre (O') was incorrect by 1 ft 6 in, and as a result the pier positions and intersection points—although geometrically correct for this new centre—were wrong as regards the original geometry of the building.

After the pier and crosswall positions had been delineated, construction again proceeded. It seems that a common error now was to place the (long) sides of crosswall footings where the mid-axes should have laid. Thus wall m lies its whole length with its west face just about where its mid-axis ought to have been. Wall n finishes with its north face likewise, whilst wall l starts similarly. These errors in walls m and n together which occur around where pier A should have been (at A'), may have led partly to its misplacing, especially since it was not constructed until after walls m and n .

Whether or not a further crosswall from pier B eastwards to the outer wall was ever intended cannot be surmised, as no traces of one were present.

Since crosswall p lies between the outer wall and pier B , it is impossible practically that its footing trench could have been dug before both the outer wall and pier B had had their footings completed. Also it has triangular gaps with both of them, and thus cannot have been done at the same time as them; therefore crosswall p was preceded in order of construction by the outer wall and pier B . Similarly pier B must have also preceded wall n , since at this end n has a gap with pier B . Wall n does not meet up with pier A at a gap, but instead meets up with crosswall m without any gap. Thus both walls m and n were dug together and footed before pier A . Crosswall l has a gap with pier A , and so must have been done after it, being the last piece of footing to be completed.

This sequence is supported by previous evidence; i.e. that from geometrical considerations, the outer wall was completed first; and that pier A and crosswall l were the last to be done, on account of their inferior fillings.

DATING

As described earlier, occupation before the building remains includes the late Belgic period through until the third century. Since the outer wall footings in trench I cut into a pit (see fig 4) they are later, therefore, than the date of pot 20 (fig 3)—third century A.D.—which was found in it. Only one find that could be later than pot 20 was found, this was pot 22, a late third century Castor ware type. Thus activity ceased on the site at about the middle of the third century A.D., and this is likely to be the date of the footings for the building.

Pot 21 (fig 3) was found in the disturbed part of the outer wall to the north in trench II. It is likely that it got there after the footings were laid, and would thus give an indication of date of abandonment. But dates cannot at present be safely given to this type of coarse ware.

Use of the Building

No contemporary occupation layers were found, so the purpose of the remains must necessarily remain speculative. There was no destruction layer of stone in the ploughsoil (fig 4) as is common with stone buildings; this may suggest that the building above ground was of a wooden structure, or that the footings never had a building set on them.

Neither the pier bases nor any of the wall footings examined were socketed for wood posts; also they were unnecessarily bulky for an all-wood building. Apart from this there are abundant supplies of good building stone in the vicinity. Thus it is most likely that a building on these footings would be chiefly of stone construction.

From the size of the footings, such a building would have an outer circular wall of some height and four sturdy circular piers, all capable of roof support. The narrow size of the crosswall footings suggests that these would not be structural walls, but rather partition or dwarf walls.

Parallels for a building of this plan are few. The wooden Iron Age building found at Little Woodbury, Wilts, was interpreted by Bersu as of similar plan (*P.P.S.* 6 (1940) 81 fig 21) but as

Musson has suggested (*Current Arch.* 2 (1970) 271-273 with figs) the four posts may not be contemporary with the outer post hole circles. Iron Age B hut circles of 50 ft diameter without central posts occur locally at Bozeat (SP/900566) and Wollaston (SP/909641). A Romano-British round-house from Winterton, Lincs., (*J.R.S.* 55 (1965) 205) is of similar plan but does not have internal crosswalls. On Baker's plan of Irchester is marked the outer wall of a circular building of identical size to the present one, with pitched footings, but further details (attributed to Sir Henry Dryden) could not be found (*Assoc. Arch. Soc. Rep.* 15 (1879) 49-59).

Circular buildings are often shrines, but no votive objects were found. The absence of domestic occupation associated with the structure may suggest that it was intended to be a public building for the small neighbouring settlement. Although little area outside the footings was excavated, domestic refuse would normally have been found in the ploughsoil had it been a house.

A further suggestion, made by Dr and Mrs Taylor of Rothamstead, is that the building could have been a dovecote, the central piers being necessary to support a platform to reach the higher nesting boxes.

Appendix I

The Pottery

The pottery drawings are given in fig 3. They were made using a template former, which is much quicker and more accurate than most methods.

The colour and texture of each pot is described, e.g. pink; pink; grey, shelly.

The first is the colour of the outside; the second the colour of the inside; the third the colour of the core, followed by a note of the pot's texture. If the pot is of the same colour throughout, only one colour is given. For rims not drawn in full the radius is also given in inches, e.g. $r = 3\frac{1}{2}$. Finally, any remarks or references are given.

Belgic

Not many large sherds of Belgic material were recovered, but the fragments were of the characteristic textures found locally at Irchester (*Arch. J.* 124 (1967) 65-99) No. 1 was found in the bottom of the ditch D2 (trench 1) and nos. 2 and 3 in the bottom of D1 (trench IV).

1. Black; black; grey, sandy and hard. De-

volved butt-beaker rim. The fabric is characteristic of local late Belgic of the mid-first century A.D.

2. Orange-brown; orange-brown; blue, Pattern common on local butt-beakers and carinated bowls.
3. Orange; orange; blue. Rim of carinated type bowl.

Romano-British

Pots 4 and 19 came from the main upper fillings of ditch 1 (trenches I and IV). The relatively large quantity and size of the sherds shows that they are an undisturbed related group (see also appendix II). A large sherd of Samian type 45 (Antonine) and the coin of A.D. 163 were found with this group.

Pot 4 compares fairly with the Lincoln race course kiln type 4b (*A Romano-British pottery kiln on Lincoln Racecourse (1950)*) dated at 180-220 A.D., and more precisely with numbers 31-32 at Lincoln Colonia (*Arch. J.* 117 (1962) 65) which are Antonine. The jars, nos. 10, 13, 14, and 15, are similar to those of the Lincoln Antonine collection (*Arch. J.* 117 (1962) 65). Thus a date of 150 to 200 A.D. is likely for this group.

4. Grey and red, sandy. Lattice patterned cooking pot. Burnished around the shoulder.
5. Grey, sandy. A dish. Other sandy-ware dishes are:—
 6. Black; black; grey. $r = 3\frac{1}{2}$.
 7. Black. $r = 3$.
 8. Grey. $r = 3\frac{1}{2}$.
9. Pink; pink; grey, shelly. A dish. $r = 5$.
10. Grey, sandy, hard.
11. Grey, sandy. $r = 2\frac{1}{2}$.
12. Grey, sandy. $r = 2\frac{3}{4}$.
13. Black; black; grey, sandy.
14. Buff; buff-pink; grey, shelly and coarse; commonly called 'calcite gritted ware', but in the present case the authors consider that the white flecky pieces are from natural fossil shells found in the local jurassic clay, and are not deliberate additives.
15. Pink, shelly.
16. Pink, shelly. $r = 3\frac{1}{2}$.
17. Blackened pink; blackened pink; grey, shelly. Cooking pot with grooved rim to take a lid. $r = 3\frac{1}{2}$ (about).
18. White-buff. Very hard. $r = 3$.
19. White. Top of a flagon.

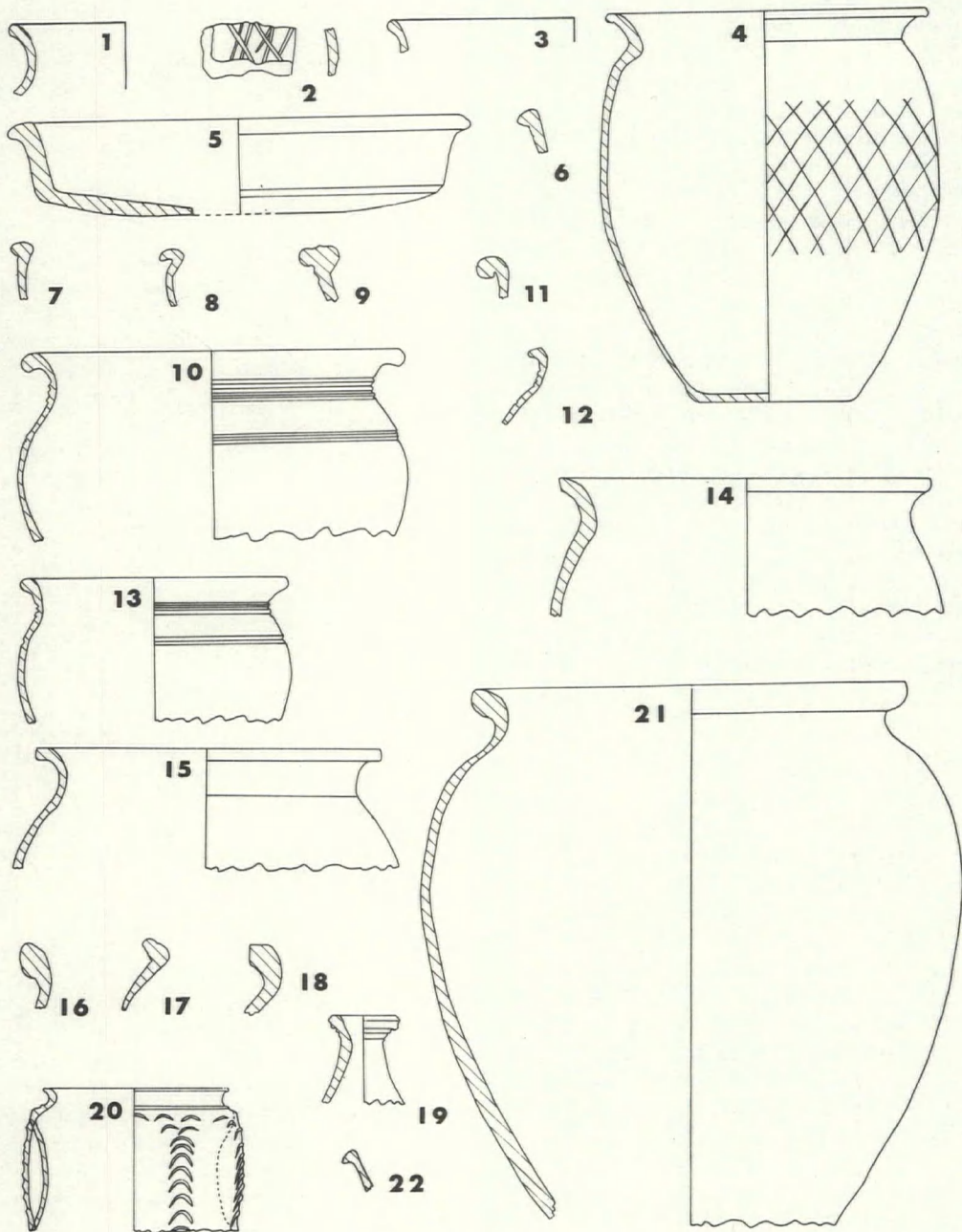


Fig 3. The pottery. Numbers 4 to 19 are Antonine.

20. White. Black colour coat inside and out. Indented scale beaker (6 indentations). Third century type. Found in the shallow pit between the wall and ditch 1, (trench I; fig. 4).
21. Grey, buff; grey, shelly. Not datable. Found in the disturbed outer wall footings in trench II.
22. White. Black colour coat inside and out. Late third century type. Found in the ploughsoil of trench I. r = 4.

Appendix II

Analysis of finds

Trench I was set out with the intention of it being part of a first quadrant, should a total excavation of the site be needed. By the time that this trench and trench II were under way, it became clear that interesting material might be to the west of trench I (and that a total excavation was not called for), so trench III was placed there. Trench IV was to obtain a cross section of the ditch found in the corner of trench I.

Except where archaeological layers can be easily followed during excavation, horizontal cuts are taken and given numbers. These are shown as dotted lines on the trench section, along with real layers, (drawn in firm lines) which become visible after balk cleaning.

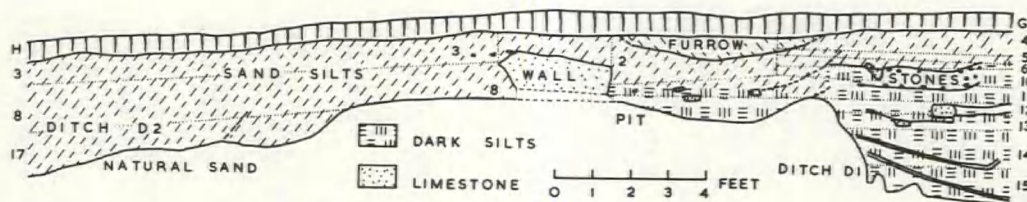


Fig 4. Section of the east face of trench I.

Trench I. (Section of east face (GH) shown on fig. 4).

Details of the pottery are given in table I. Other finds:— Daub in cuts 10, 11 and 13. Nails, and small pieces of iron etc., in cuts 2, 3, and 10.

Coin 1, in cut 12 (163 A.D.).

Obv. IMPMANTONINVS AVG rev. CONCORD AVG TRPXVII COS III (Marcus Aurelius, A.D. 161 to 180, fine condition).

Trenches II, III, and IV

Other finds:—

Daub in trench III, cut 5; IV, cut 2.

Nails etc., in trench IV, cut 3; IV.5; IV.8

Horseshoe in III.3.

Cremated bone in IV.3 to bottom of ditch, but always in the same area, in the middle of the west part of the trench.

Remarks

Some of the pottery drawn (fig. 3) was made up of fragments found in more than one cut.

No. 4 was found in I.11 (6 pieces); and 1.12 (32 pieces).

No. 5 in IV.4 (3); IV.6 (1).

No. 13 in IV.6 (1); IV.7 (3).

No. 14 in 1.6 (1); 1.7 (2) 1.10 (3).

No. 20 in 1.2 (5); 1.6 (1); 1.10 (4); 1.11 (1); IV.2 (1).

From this it is clear that in trench I cuts 7/10 and 11/12 are the same archaeological stratum. The high pottery 'density' (number of pieces per cubic foot) in trench I, cuts 7, 10, 11, and 12, confirms this. Likewise in trench IV, cuts 4 and 6 are equivalent.

The distribution of pot 20 is rather complicated. The section of trench I (fig. 4) shows the ditch edge to be disturbed by a shallow pit, mostly excavated as cut 2 and part of cut 11. The largest fragments of the pot were found in cut

2, and the remainder were recovered from the other cuts which encroach on the pit.

The tables and section, in conjunction with the pottery, suggest the following sequence of events:—

- 1) Cutting of the Belgic ditches in the mid-first century A.D. The ditch (D1) silted up about half-way before the next stage: the finds below trench I cut 12, are few, and the ditch bottom in trench IV yielded nothing in the bottom two feet. Ditch D2

Table 1

ANALYSIS OF POTTERY

Cut	Total Sherds	Sherds /cu.ft.	Iron Age B	Belgic	Samian	Romano-British Castor	Sandy	Coarse Shelly
Trench 1								
1	17	0.2			1	1	2	13
2	57	1.5			1	6	25	25
3	58	0.8					5	53
4	10	0.5					4	6
5	12	1.3					6	6
6	7	0.7				1	1	5
7	25	11.3			1		5	19
8	10	0.1	1				1	8
9	11	0.1	1		1		8	1
10	92	6.5			4	5	23	60
11	71	4.5		1	1	2	30	37
12	72	13.9			3		49	20
13	7	1.4					1	6
14								
15	6	2.1					1	5
16	4	2.0		2				2
17	6	0.3		6				
Trench 2								
2	32	0.7				2	6	24
3	14	0.1			1		1	12
Trench 3								
2	10	0.3		2	3		1	6
3	21	0.1			2		4	15
4	9	0.1						9
5	5	0.6			2			3
6	5	0.1			1			2
7	5	0.4			2			3
8	5	0.4					1	4
Trench 4								
2	24	0.3			1		8	15
3	20	2.5					7	13
4	33	0.9			2	1	8	22
5	18	1			1			17
6	50	4			2		29	19
7	19	1.9		3			8	8
8	12	1.3		1	2			9

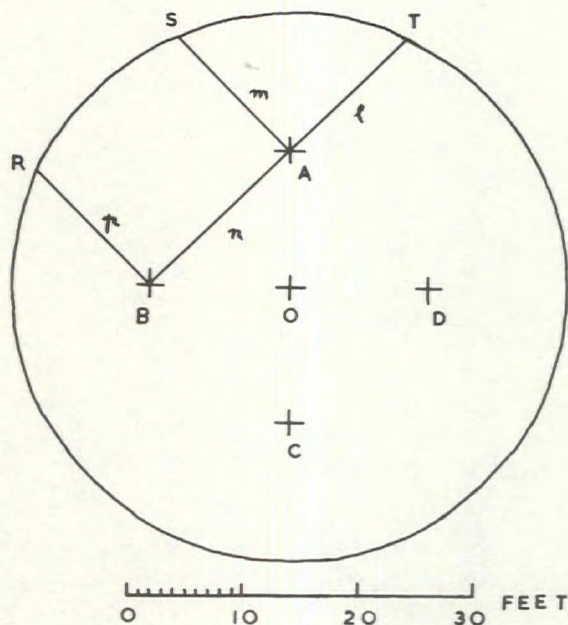


Fig 5. Conjectured plan of the building.

- was completely silted.
- 2) Occupation close by the ditches about 150-200 A.D., gave rise to the rich layers of refuse in the upper fillings of ditch D1.
 - 3) Occupation represented by the cutting of the pit (in trench I) which yielded the scale beaker (pot 20). This is probably continuous with phase 2 (above) going into the first half of the 3rd century A.D.
 - 4) Construction of the building, which cuts the pit in phase 3. No further activity is represented on the site.

Cremation remains

Cremated bone fragments were found in all levels

of ditch D1. They were, therefore, placed there after the ditch was filled, i.e. after the end of the second century A.D. As activity stopped on this part of the site at about this time, it would seem that the cremation is of about the same date as the building remains, though not directly relatable to them.

Acknowledgements

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This report is the full account of the work noted in the *J.R.S.* 55 (1965) 210.