

PROCEEDINGS
OF THE
CAMBRIDGE ANTIQUARIAN
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(INCORPORATING THE CAMBS & HUNTS ARCHAEOLOGICAL SOCIETY)



VOLUMES LVI & LVII

JANUARY 1962 TO DECEMBER 1963

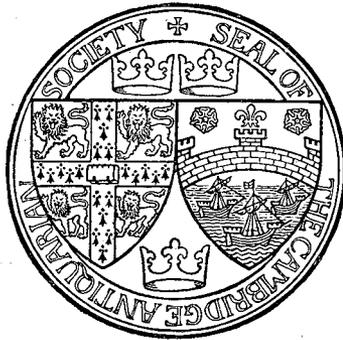
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EXCAVATIONS AT THE WAR DITCHES, CHERRY HINTON, 1961-62

D. A. WHITE

THIS is the first paper to be published about the War Ditches, Cherry Hinton, since T. Lethbridge's account of his excavations of 1939 appeared in this journal.¹ Since then there has been a great deal of archaeological activity at the site, as the whole area has been gradually cut away by mechanical excavator because of the enlargement of the chalk pit.

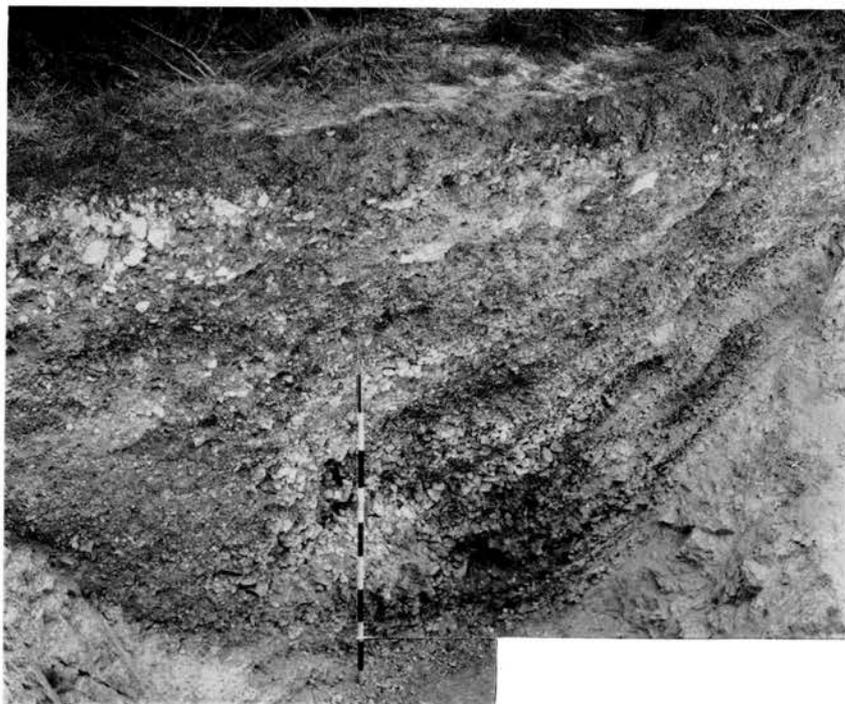
The present paper will cover the latter part of this period, from about 1957 to 1961, and the author's excavations in 1961-2. During this time the southern part of the War Ditches was destroyed. The material and site notes from the northern part of the ditch have been deposited at the Museum of Archaeology and Ethnology by previous excavators, and the finds, mostly Romano-British, will be published as a second part to this paper.

THE STATE OF THE SITE IN NOVEMBER 1961

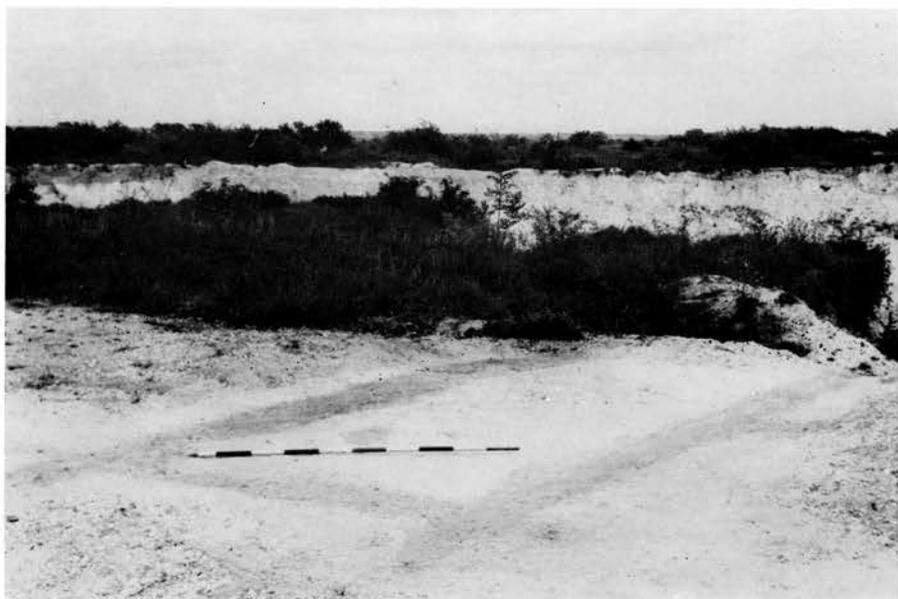
In the area of the hill-fort the chalk had been dug down to a depth of approximately 15 ft. The whole of the northern half of the main ditch had been removed, whilst the quarry now extended to the south-west and the south-east quadrants of the hill-fort, where the mechanical excavator had dug up to the ditch. Caius Pit had been left as an island in the middle, while Tebbutt's Pit and Lethbridge's trench remained as a peninsula on the western edge of the quarry. The only part of the interior of the hill-fort left was that under the Cambridge Water Works Reservoir to the south.

Caius Pit appeared to be a whole mass of 'ditches'; these however were places where the excavator had cut tangentially to the line of the Pit. In the south-west part of Caius Pit a fine section of the hill-fort ditch was to be seen. While this portion of the main ditch was being cleared away by mechanical grab in April 1962, a human skeleton was dislodged from a rubble and ash layer, roughly corresponding to layer 9 of the section, Fig. 1. A small area of the surface chalk inside the hill-fort was also left in the south-western corner of the quarry; this contained remains of Romano-British occupation. In the south face of the quarry, the section of a field drainage ditch discovered in 1959 could still be seen. In the south-east face of the chalk-pit was a longitudinal section of the hill-fort ditch, in the northern part of which the entrance of the fort still remained, although the ditch on the south side only of this entrance could be traced. Finally the stump of a well already dis-

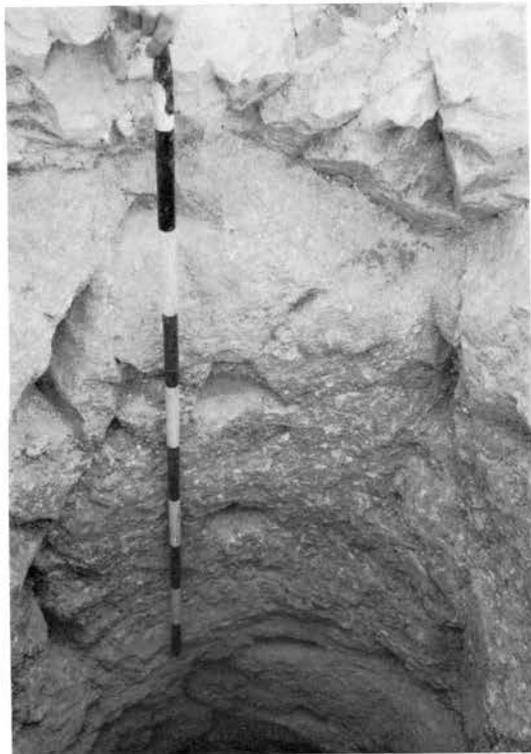
¹ T. Lethbridge, 'Further Excavations at the War Ditches', *Proc. C.A.S.* XLII (1948), p. 126.



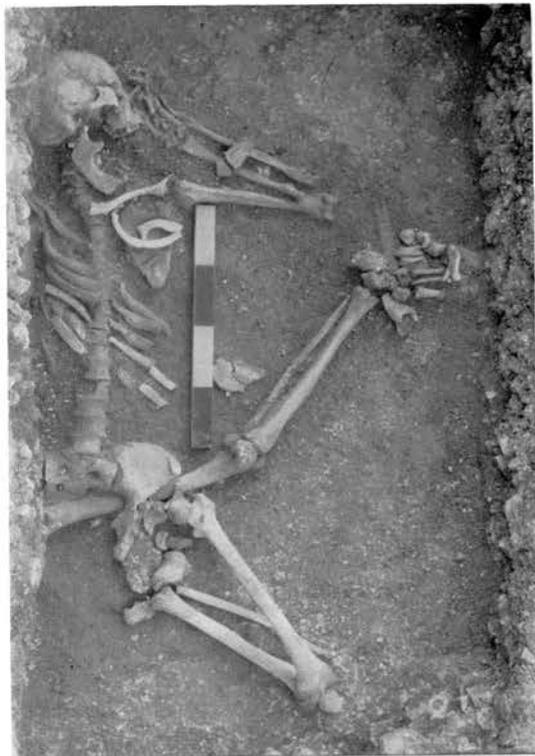
(a) Main hill-fort ditch, looking south-west. (Scale divisions: 9 in.)



(b) South-west corner, showing ridge-and-furrow marks crossing hill-fort ditch.
(Scale divisions: 9 in.)



(a) Well, showing foot-holds.
(Scale divisions: 9 in.)



(b) Female skeleton in south entrance ditch.
(Scale divisions: 10 cm.)



(c) Skeleton in main ditch section. (Scale divisions: 10 cm.)

covered in 1958 remained in the south-east corner, although the top 15 ft. had been removed by the excavator.

During the small-scale excavations carried out from November 1961 to November 1962, a section was cut across the main hill-fort ditch in the south-east corner of the quarry. The south entrance ditch was sectioned, the south-west corner was examined and a further 15 ft. of the well cleared out.

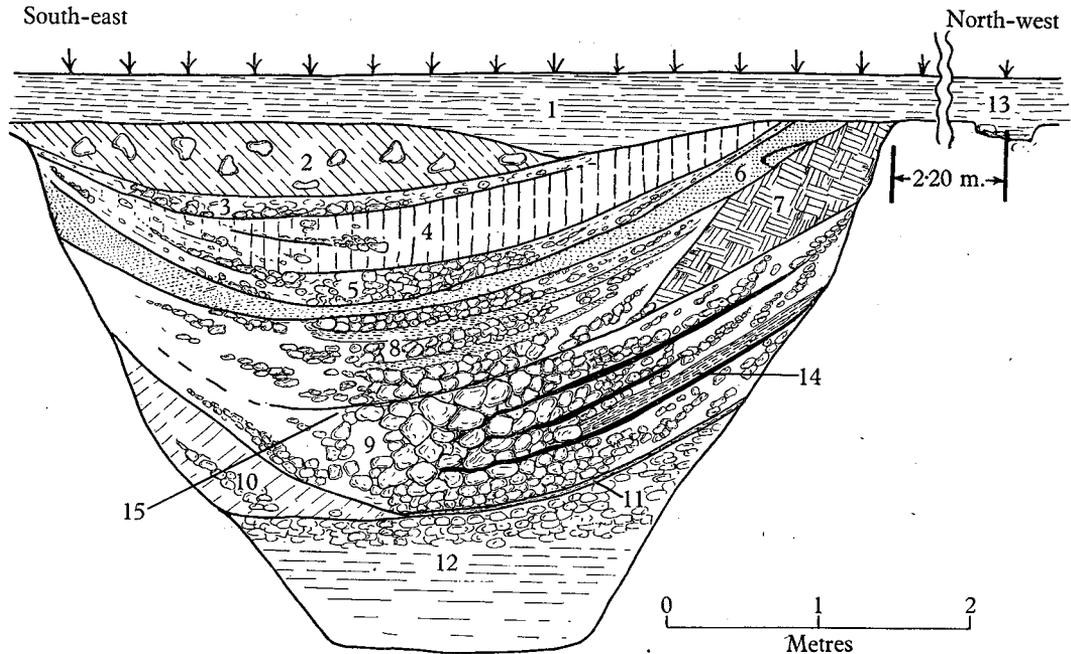


Fig. 1. Section of hill-fort ditch in south-east section looking south-west. KEY: 1, topsoil; 2, hard chalky fill; 3, small rubble band; 4, humus deposit of Phase II; 5, small chalk layer; 6, turf line; 7, cemented chalk layer; 8, heavy rubble and humus bands, little burning; 9, heavy rubble and charcoal bands; 10, rubble fill; 11, thin turf line; 12, primary silt; 13, post-hole of palisade; 14, heavy ash band; 15, position of skull (skeleton, Pl. IIIc).

THE MAIN DITCH

A section was cut across the main ditch of the hill-fort, where its south-east sector goes into the southern boundary fence of the quarry (Fig. 3, no. 1). This part of the ditch is not of the same dimensions throughout: where it meets the entrance causeway, the bottom of the ditch was found by Mr M. F. Howard to be an irregular system of 'steps', some areas of which were less than 2.0 m. below ground level. Halfway between the present section and the entrance (Fig. 3, no. 3), the ditch narrows considerably; this was first noticed by L. Barfield, and can be seen today as a 'crop mark' in the vegetation growing on the top of the chalk in the quarry.

At the point where it was sectioned, the ditch was 5.5 m. wide and 4.0 m. deep (Pl. II a). The primary silting (Fig. 1, no. 12) lay to a depth of about a metre. This was covered by a thin, patchy line of humus (Fig. 1, no. 11), probably produced by grass growing in the ditch during the period of Iron Age occupation. From the thinness

of this layer we must conclude that this phase of habitation must have been short in duration.

Above this turf line lay a thick deposit of rubble and charcoal (Fig. 1, no. 9), from the centre of which came two sherds similar in fabric to Iron Age A pottery found elsewhere on the site. A very striking feature of this level is the thick ash band (Fig. 1, no. 14). This layer represents debris from the rampart of the hill-fort, which was thrown in from the right of the section illustrated—the fragments of charcoal being the remains of the wooden palisade. Above the burnt deposit lay a layer of rubble and humus (Fig. 1, no. 8) about three-quarters of a metre deep, which is more fall from the ramparts to the west. Fig. 1, no. 7 is a chalky cemented layer, whose upper easterly edge may mark the position of the rampart after the slighting of the hill-fort defences.

Next (Fig. 1, no. 6) comes a turf line which extends all over the section and probably represents the first century A.D. ground level in the ditch; a 'Belgic' rilled sherd was found here and a wheel-turned pot rim. Above is a thin layer of small chalk rubble (no. 5). Then (Fig. 1, no. 4) a deposit containing a large number of animal bones and potsherds thrown into the ditch from the first century A.D. settlement.

Later a hard chalky fill (Fig. 1, no. 2) was laid over the ditch in the second century A.D., to cover it completely and to enable the whole of the area to be utilized as arable land.

The examination of the ditch has indicated the existence of three phases on the site:

(1) The period of the construction and use of the hill-fort and its subsequent destruction.

(2) The period of the layer (Fig. 1, no. 4) when the ditch, although slighted, could still be seen and used as a rubbish tip.

(3) The period after the ditch had been completely filled and levelled.

About 2 m. from the western edge of the main ditch (Fig. 1, no. 13), a round depression in the chalk 35 cm. in diameter and 10 cm. deep was excavated. From its position, it may have been one of the six post-holes (Fig. 3, no. 4) approximately 1 m. apart, found by L. Barfield and connected with the main fort ditch. These are most probably the remains of the palisade. A similarity of the defensive system with that of Wandlebury II is possible.¹

SKELETON IN MAIN DITCH SECTION

During the Long Vacation of 1962, much of the rubble from the sides of the section trench fell in. This layer was very loose and made digging most difficult. When it was visited in October 1962, a human skull was noted lying amongst the fallen rubble; its position is projected on to the section (Fig. 1, no. 15). A shaft was cut into

¹ B. R. Hartley, 'Excavations at the Wandlebury Iron Age Hill Fort', *Proc. C.A.S.* 1 (1956), p. 7, fig. 4c (left-hand palisade).

the side of the trench, and the skeleton disclosed; since it lay in heavy rubble, most of the long bones of the arm had been broken. The body was that of an adult male of about 30 years of age. He, like the female found near the entrance, had probably been thrown into the ditch (see Pl. III *c*). As the skull had already fallen into the trench, the body was headless, but otherwise complete. He lay on his back with the left arm over the right shoulder and the right arm lying across the chest. Both legs were drawn up with the knees together.

The skeleton lay in the heavy rubble in the main burnt deposit, and was thus associated with the destruction of the defences.

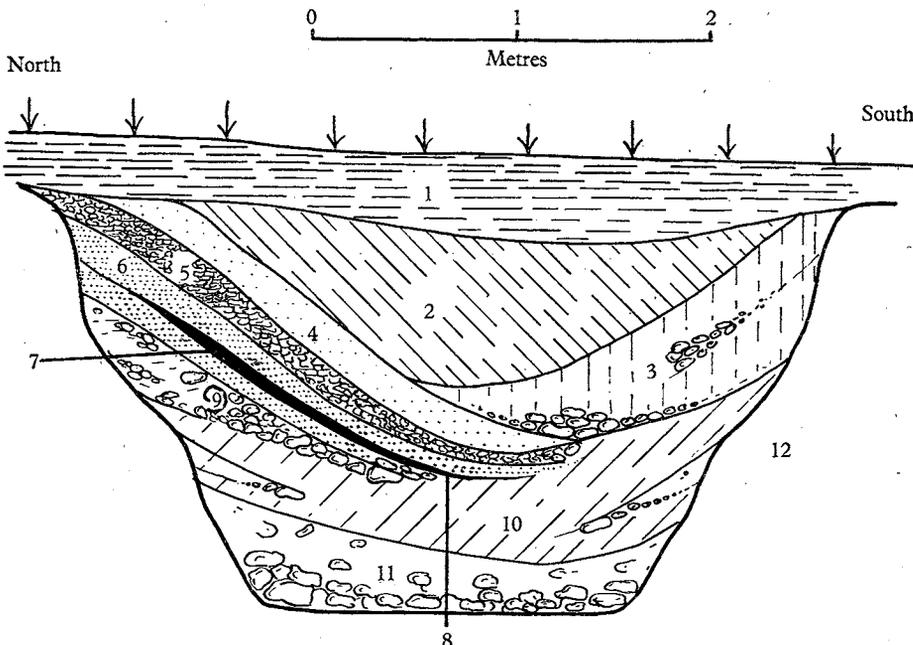


Fig. 2. Section of south entrance ditch looking east. KEY: 1, topsoil; 2, clayey fill; 3, clay and rubble; 4, humus band; 5, rubble; 6, humus and charcoal fragments; 7, charcoal band; 8, position of human skull (skeleton, Pl. III *b*); 9, rubble; 10, rubble fill; 11, primary fill.

THE HILL-FORT ENTRANCE

The edge of the quarry, which had taken a diagonal cut across the south entrance ditch and the adjoining part of the main ditch, was cleaned back to the east side of the main ditch. This part of the ditch had either been already excavated previously or had suffered badly from the mechanical grab. Here were found the fragments of the skull of an elderly woman and the base of a hand-made Iron Age A bowl with a burnished surface. Unfortunately all were disturbed, and so unstratified.

It appeared that some reasonable stratigraphy still existed down on the north side of the entrance ditch. The layers here remaining included the rubble (Fig. 2, no. 5) and the charcoal and rubble destruction bands 6 and 7; the southern half of the

trench was a blank. In layer 6 a complete skeleton of an adult female was found (see Pl. III *b*). She was put into the ditch lying flat on her back with the head tipped over to the left. The left arm was drawn up to the head and the left foot brought into a crouched position. The most surprising thing is the right leg, which was thrown out below the left leg at a very unusual angle, and is evidence for the body having been left about for some time before burial. The woman was slung into the ditch presumably head first from the right. After removing the skeleton a bone ring or toggle was found by her right foot (Fig. 7, no. 2). Probably this was used for her clothing, but since she was thrown in in a dishevelled state, we can say nothing of its probable use or position on the body.

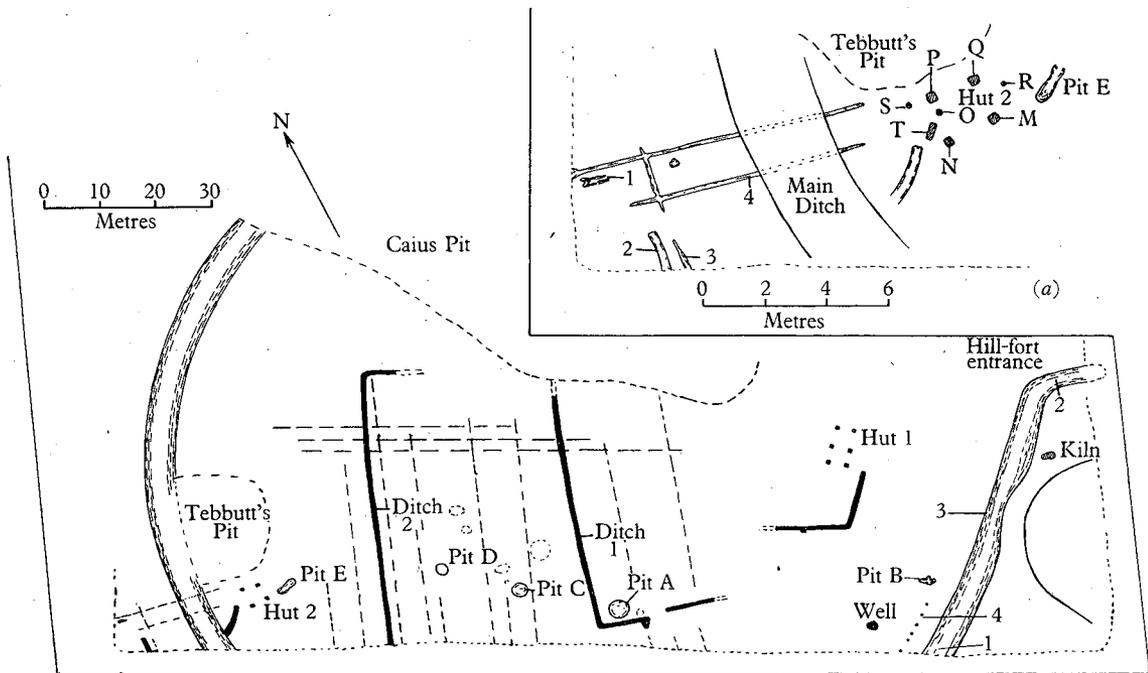


Fig. 3. General plan of southern part of War Ditches. (a) Detail of south-west corner.

Because of the absence of reasonable stratigraphy in the southern part of this area, another section was cut across the entrance ditch, which is about 2.1 m. deep and 4 m. broad (Fig. 3, no. 2).

Nothing was found in this trench except a few bones from layer 6. Layer 7 is a charcoal band which is found all over the site and is contemporary with the destruction of the hill-fort; 8 marks the position of the skull of the female, mentioned above; the legs came up to the left of the section as drawn. The striking thing about the section is the comparative absence of rubble; 3, 5, 9 and 11 are the only rubble layers.

Trenches were also dug along the sides of the entrance ditch, with the aim of obtaining its plan. A cut put in the field to the east revealed no traces of the entrance ditch. Presumably it terminates under the thick hawthorn hedge separating the

quarry and field. A proton-magnetometer survey was carried out in this part of the field, but failed to locate any archaeological feature. This entrance is similar in form to that found at the Caburn hill-fort¹ in Sussex.

THE WELL

The well was found in 1957 (Fig. 3), and in the interim 5·7 m. of chalk were removed from the area. The well was relocated in 1962 by Dr D. H. Clark who used a crowbar to probe for its position. The fill below this level was found to be stony—the larger stones round the sides of the well (as may be expected of a filling). The soil showed traces of burnt material.

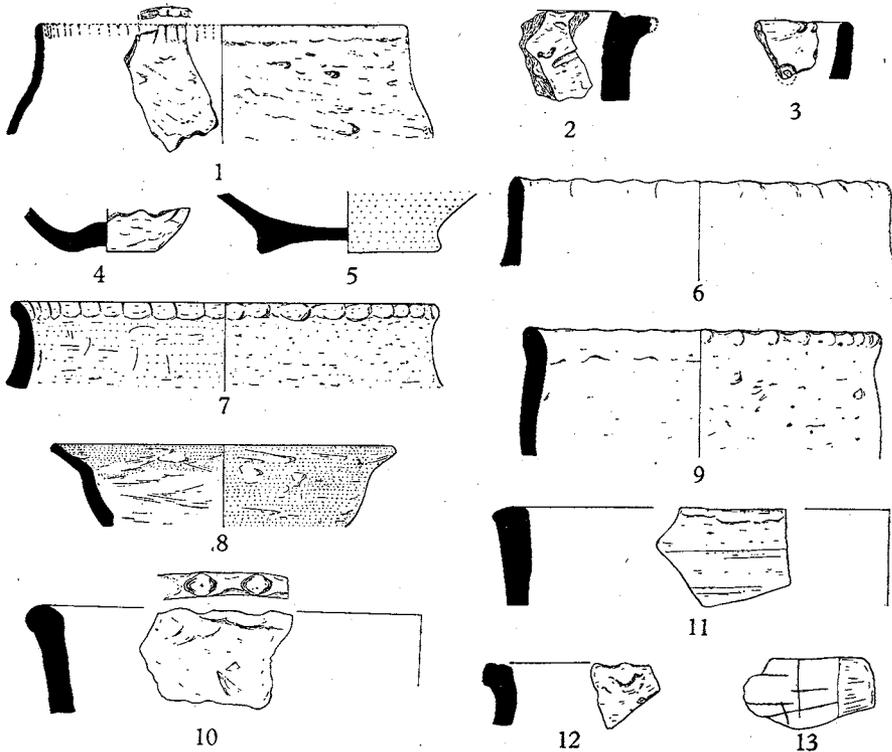


Fig. 4. Iron Age A pottery. Scale: $\frac{2}{3}$.

The pottery from this level was mostly crude, very coarse Iron Age A ware with white grit in the fabric; only about three small sherds appeared to be wheel-turned. Another interesting feature was the series of foot-holes (Pl. III *a*) in the sides of the wall. At a depth of 0·90 m. from the quarry surface—6·6 m. from the well top—a fragment of a bone knife handle was found (Fig. 7, no. 3).

At a depth of 1·75 m. below the quarry bottom (i.e. 6·45 m. from the top of the well), the fill suddenly changed to chalk lumps with a large number of flints and

¹ A. E. Wilson, 'Further Excavations at the Caburn', *Sussex Arch. Coll.* LXXX (1939), p. 193.

oyster shells; this layer lasted for 0.25 m., below which was fine rubble without any traces of burning. This clean fill was then dug to a depth of 4.65 m. below the quarry, or 10.35 m. down in the well. At that depth the fill was beginning to change to chalky silt.

The pottery from this lower layer was mostly wheel-turned, fine, grey, polished ware, very much superior in texture to the sherds found higher up in the well. The Iron Age A sherds from the top of the well should not be thought of as later than the pottery found below it. Despite the scarcity of this type of pottery on the site, it is probable that the well was filled with soil containing disturbed Iron Age A material.

THE SOUTH-WEST CORNER

In the south-west corner of the quarry lies a small area of the hill-fort, from which the topsoil only has been removed. When the grass began to grow here in the spring of 1962, buried linear features could be observed as crop marks. When the area had been scraped clean (Pl. II*b*) two long shallow marks about 20 cm. deep were found running from west to east (Fig. 3*a*, no. 4), crossing the main ditch, where their continuation was traced in 1959 by Dr Clark. These form part of a 'ridge and furrow' system found elsewhere on the site and shown in Fig. 3 by dotted lines. This type of ridge and hollow field seems to be not infrequent in Roman times, and may be seen to this day at Bullocks Haste near Cottenham.¹ Another similar line went approximately north to south, and in its southerly extension (Fig. 3*a*, no. 3) a Roman flagon neck was found (Fig. 6, no. 7). A piece of 'Samian' Form 31 was found at Fig. 3*a*, no. 4. Both these sherds were in good condition.

Fig. 3*a*, no 3 marks the position of a larger feature, probably a field drainage ditch, which is about 20 cm. deep. Some Romano-British sherds came from this; however the small number and poor quality give no idea of the probable age of the ditch. The whole field system is superimposed on the hill-fort ditch, which must have been filled in by that time. At Fig. 3*a*, no. 1, a skeleton appeared unexpectedly. Only part of the pelvis and the long bones of the leg were preserved and the bones were in a terrible condition. The body was lying on its back and its feet are pointing eastwards.

THE KILN

This lies just outside the main ditch in a similar position to the one found by Lethbridge² on the other side of the quarry. Dr Clark examined this in July 1957. The bulldozer had removed most of the kiln and only about 10 cm. of the structure remained. Its plan was dumb-bell shaped, 70 cm. by 1.70 m., with the long axis east-west.

With the kiln were a number of oxidized pink wasters. Unfortunately the pots these came from must have been stacked top uppermost—no rims appeared, and only the presence of a couple of sherds with horizontal, Belgic-type rilling give any dating evidence. A pot with this type of decoration also came from Lethbridge's kiln.

¹ J. G. D. Clark, 'Excavations on the Car Dyke 1947', *Ant. Jour.* xxix (1949), p. 145, pl. xiv.

² T. Lethbridge, 'Further Excavations at the War Ditches', *Proc. C.A.S.* xlii (1948), p. 126.

PITS AND OTHER FEATURES

During the whole of the period under review, the mechanical excavator moved slowly and methodically westwards. By April 1958 it had removed about 20 ft. of the well (later partly cleared in 1962). In July 1958 the excavator uncovered a flat-bottomed pit (pit A, Fig. 3), 3.5 m. in diameter and 0.6 m. deep, with sides meeting the bottom at an angle of 100 degrees. The corners were filled with chalk rubble. The excavator only allowed time to dig out half the pit; however a quantity of Iron Age A material came from it.

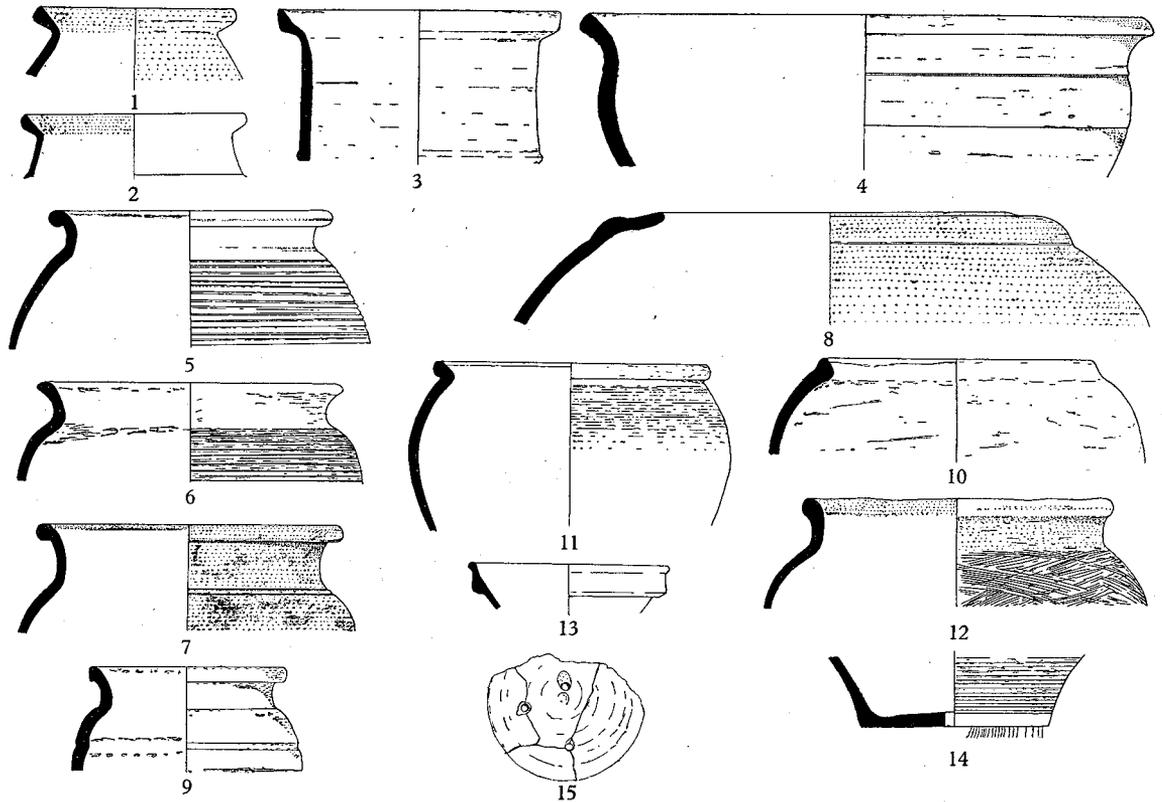


Fig. 5. First-century A.D. pottery in the Belgic tradition. Scale: $\frac{1}{4}$.

Around the pit lay ditch 1, which was about 80 cm. wide and 0.25–0.3 m. deep; the top 0.10–0.15 m. of the ditch was silty soil and the bottom was rubble. From this rubble a small base-herd of a strainer in native Romano-British ware was found. Unlike the strainers found with the Belgic style pottery, the holes of this one were made before firing and not drilled into the base afterwards (Fig. 5, no. 15).

Pit C is 2 m. in diameter and 20 cm. deep; it contained a couple of Iron Age A sherds. In ditch 2 a fragment of 'Samian' of first-century date was found (Appendix I, no. 2). Pit D had been cut by the bulldozer and contained nothing of interest.

Just south of Tebbutt's Pit, an interesting concentration of Romano-British

features were found (Fig. 3*a*). Pit E ('Rosalind's Pit') was oval shaped, 3 by 1.50 m. The excavator had already cut a section across one end, and there appeared to be three levels. The top 15 cm. was an earthy layer, which when excavated yielded the iron knife (Fig. 7, no. 1), lying in the centre of the pit, 8 cm. below the surface. Two

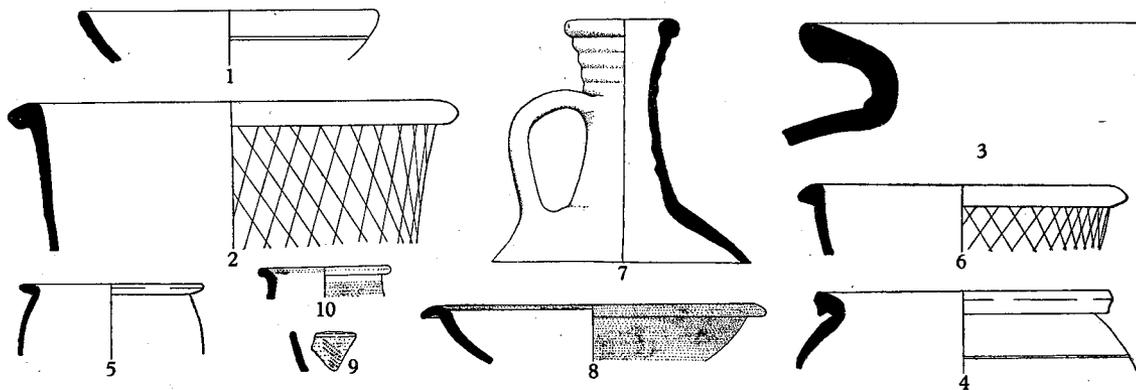


Fig. 6. Later Roman pottery. Scale: $\frac{1}{4}$.

other layers existed, one of chalk rubble 1 m. deep, and one of black silt 15 cm. thick at the bottom. There was no time to investigate the lower levels of the pit. Pit E must have been the rubbish pit for the nearby Roman hut. For the pottery found in it, see Fig. 6, nos. 4-6.

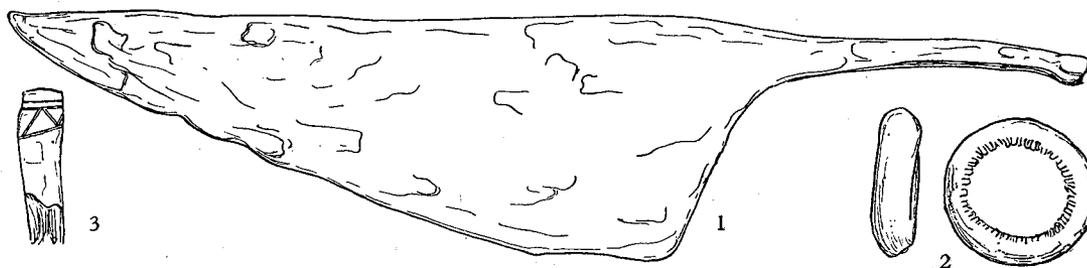


Fig. 7. Small finds. Scale: $\frac{2}{3}$.

Time did not allow a thorough investigation of this hut. Post-hole M was 50 cm. square and 63 cm. deep; in the filling a colour-coated sherd was found. Post-holes N, P, Q and M form a square on the plan. O and R are small round post-holes 30 cm. in diameter and about 25 cm. deep. S has the same diameter and T is a rectangular hole 1.20 m. by 40 cm. by 20 cm. deep.

The material from Pit B near the south-eastern arc of the fort (Fig. 6, nos. 1-3), and the Iron Age A sherd from the north-eastern corner of the main ditch in the primary silting (Fig. 4, no. 6), were found by Mr Howard of the Leys School during his investigations at War Ditches in 1957.

CONCLUSIONS

Despite the small amount of Iron Age A pottery found at the War Ditches, the close similarity between the sherds from Wandlebury and Cherry Hinton may indicate that both hill-forts were built by the same cultural group, possibly subjects of the chieftains of the Iceni. However, Iron Age hill-forts are uncommon structures in East Anglia,¹ and since the construction of a hill-fort would be an extremely difficult task for a primitive community, it seems unlikely that the War Ditch and Wandlebury, only a few miles apart, were occupied at the same time.

The pottery gives no indication of which is the earlier; for this the conservatism of the Iron Age A potter is responsible and here is yet another example of the persistence of this pottery without any significant change over a long period of time. There is only one small shred of evidence as to which of the two hill-forts is the later. Assuming that both Wandlebury and the War Ditches were equally suitable sites for Romano-Belgic occupation, the settlers are more likely to have made their farm on the clearer site of the more recent hill-fort, rather than resort to clearing scrub covering the older, abandoned fort. No 'Belgic' pottery has been found at Wandlebury, hence one may conclude that War Ditches is the later fort.

The War Ditches were never completed before they were overrun, the palisades burned and the ramparts slighted. There is strong evidence of a considerable slaughter of the defenders, who were then slung into the ditch by the workmen engaged in destroying the fort. Some of the bodies found by previous excavators showed signs of mutilation,² whilst the female found by the present author in the south entrance ditch had assumed such a fantastic posture that she must have rotted for some time before being thrown in the ditch. The six skeletons found since 1949 associated with this destruction are all of young individuals, two males and two females under twenty years old and a male and female under thirty years at death. The youth and the large proportion of women among the defending force make an interesting comparison with the defenders of Belgic Maiden Castle.³ The War Cemetery at Maiden Castle contained twenty-three adult males, ten adult females and an adolescent female.

Although with only six skeletons from the War Ditches available for study, any conclusions about the defending force are only tentative—the absence of adult warriors does seem surprising and the composition of the force defending War Ditches is not what one would have expected. Possibly the warriors may have been killed in an earlier battle leaving desperate women and youths to make a last stand at Cherry Hinton. The date of the battle would appear to be some time between the mid second century before Christ and the first decade of Roman rule in Britain, more probably later in this period than Wandlebury. On available evidence it is not possible to be more precise.

¹ R. R. Clarke, *East Anglia* (Ancient Peoples and Places) (Thames and Hudson, 1960).

² T. Lethbridge, 'Further Excavations at the War Ditches', *Proc. C.A.S.* XLII (1948), p. 126.

³ R. E. M. Wheeler, 'Excavations at Maiden Castle', *Research Committee of the Society of Antiquaries of London*, no. XII (1943).

There is another point which has been made about the War Ditches by Fox.¹ He suggests that the site was refortified by 'Belgae' who subsequently suffered a 'second massacre'. No evidence of a refortification was found by the author in the section dug in 1962, and Fox's evidence seems difficult to understand. Wandlebury, a completed hill-fort with two ditches—a far superior construction to that of the single incomplete ditch at the War Ditches—was never occupied by the 'Belgae'. Fox's theory appears to have been based on finding 'Belgic' pottery from the rampart debris in the ditch; but this could indicate that workmen using pottery of that type had been engaged in slighting the ramparts of the hill-fort, which would confirm a later date of construction for the War Ditches.

The site was subsequently resettled by Romano-Belgic folk who used the hill-fort ditch as a rubbish tip. To this period belong the kiln and burials found by Lethbridge.² The date of this phase is almost certainly the latter half of the first century A.D. Eventually the ditches were entirely filled in and the area used for agriculture. On the evidence of the 'Samian' sherd found in ditch 1 (Appendix I, no. 1) and the flagon neck from the south-west corner, a date at the beginning of the second century A.D. can be assigned provisionally to this phase. Finally, no typical third-century fragments have yet been seen by the author, and it is possible that the Roman occupation of the site had ended by then. The details of this period will be better known when the Romano-British material now lying in the Museum of Archaeology and Ethnology has been published as a sequel to this paper.

ACKNOWLEDGEMENTS

I am grateful to Miss M. D. Cra'ster for providing me with working space in the Museum and with advice on this publication. The reports at the end of this paper were kindly written by B. R. Hartley (the Samian ware), D. R. Hughes and C. B. Denston (the human remains) and D. W. Phillipson (the animal bones). Barry Cunliffe gave me advice on the Iron Age A material. My thanks also go to previous excavators, Dr D. H. Clark of Fulbourn Hospital and Mr M. F. Howard of the Leys School. I must also acknowledge the large amount of help given me by members of the Archaeological Field Club, A. L. Prentice, C. J. Knowles, D. W. Phillipson, C. Turner, H. Newton and Miss Anne Wallis, and by C. Spode and R. L. Stevens of Linton. I am also grateful to John Mudie of the Department of Geophysics who spent a day doing a proton-magnetometer survey on the site.

For permission to excavate I am grateful to the British Portland Cement Company and to Mr Lacey of Fulbourn.

IRON AGE A POTTERY

(Fig. 4)

Since the Iron Age hill-fort was not completed, the occupation connected with Phase I would be short in duration. This would help to explain the comparative

¹ C. Fox, *Archaeology of the Cambridge Region* (Cambridge, 1923).

² T. Lethbridge, *op. cit.*

scarcity of Iron Age A material from this site, considering the size of the area which had been cleared for the quarry. Other factors which would have contributed to this shortage were agriculture during the Roman period and the difficulties experienced in carrying out the rescue dig 1957-60.

The material falls into three groups:

- (1) Pit A dug in 1958 by Dr Clark. Nos. 1-5.
- (2) One sherd found in 1957 in the primary silting of the main ditch (north-east sector). No. 6.
- (3) Material obtained by the present author in the top 1.70 m. of the well dug in 1962. Nos. 7-13.

Pit A (1-5)

Quite a large amount of material came from this pit. Most of it was badly fired, grey ware with patches of oxidized fabric and fragments of flint grit. A few sherds of better quality were found; these contained no grit, were fired a uniform grey colour and were usually burnished.

(1) Grey fabric, slightly oxidized on outside. Large fingernail impressions on inside of rim. A jar whose shape is derived from the Hallstatt situla (Maiden Castle,¹ p. 204). Situlate jars with this rim decoration are only known from Wandlebury² (nos. 10, 14, 60 and 62).

(2) Coarse pot with inturned rim, orange outside, grey within; large flint grit in fabric.

(3) Soft light grey fabric decorated with small incised 'chevrons' on rim and a little circle on the shoulder probably made with a small bone before firing (Wandlebury,³ nos. 30, 37).

(4) Base in soft grey fabric.

(5) Ring base in grey burnished ware (Wandlebury,⁴ nos. 24, 63; Barley,⁵ no. 85). Typical of Late Iron Age in the Weald⁶ and also has connections with Wessex.⁷

Primary silting. Main ditch, north-east sector

(6) Black, well made fabric. Rim of a situlate jar (Wandlebury,⁸ no. 26).

Top 1.70 m. of well

A number of Iron Age A sherds were found here, together with a few pieces of wheel-turned pottery. This deposit overlaid a level containing Gallo-Belgic pottery.

(7) Black, hard, rough fabric with small white grit. Fingernail impressions on the inside of the rim (see no. 1).

(8) Dark brownish-grey fabric, well burnished on the outside and inside the rim. This bowl rim is related to Wandlebury,⁹ no. 28, but is better represented by the bowls of group B from Barley¹⁰ which were also found with burnished fabrics.

(9) Dark grey fabric, white and grey grit. The outer surface of the pot is lighter in colour. Same form as no. 6.

¹ R. E. M. Wheeler, 'Excavations at Maiden Castle', *Research Committee of the Society of Antiquaries of London*, no. XII (1943).

² B. R. Hartley, 'Excavations at the Wandlebury Iron Age Hill Fort', *Proc. C.A.S.* L (1956), p. 1.

³ B. R. Hartley, *op. cit.*

⁴ B. R. Hartley, *op. cit.*

⁵ M. D. Cra'ster, 'Iron Age Settlement at Barley', *Proc. C.A.S.* LIV (1960), p. 22.

⁶ J. B. Ward-Perkins, 'Oldbury', *Archaeologia*, xc, p. 144.

⁷ K. M. Kenyon, *University of London Institute of Archaeology, 8th Annual Report* (1952).

⁸ B. R. Hartley, *op. cit.*

⁹ B. R. Hartley, *op. cit.*

¹⁰ M. D. Cra'ster, *op. cit.*

(10) Light brown-grey fabric, small grit. Finger impressions on top of rim (Wandlebury,¹ no. 21; Barley,² p. 43, Rim G(i)).

(11) Brown-grey fabric, no grit (Wandlebury,³ no. 53).

(12) Orange fabric, grey centre, gritless.

(13) Grey, slightly orange fabric. This incised decoration is paralleled in Wessex⁴ (Wandlebury,⁵ no. 6). However, this example is not burnished and may be a local imitation; the incision was made before firing.

The cultural links of this group are with Wandlebury and Barley. No angular vessels characteristic of the Early Iron Age at Linton⁶ and West Harling⁷ have been found at the War Ditch.

The two main types represented are the degenerate situlate jar (nos. 1, 6, 7 and 9, possibly 10 and 11), and a bowl with a wide mouth no. 8.

In common with Barley and Wandlebury a late date should be given to this group, and, since the Iron Age A of this area is notoriously difficult to date, a wide range of time can be assigned to this pottery. The outside dates would seem to be the second century B.C. and the first few years of the Roman conquest, as has been shown at Barley.

FIRST CENTURY A.D. POTTERY, IN THE BELGIC TRADITION

(Fig. 5)

This pottery comes from the tip-line in the main ditch (Fig. 1, layer no. 4). It is a deposit of many vessels, spread over a large area of the half-filled main ditch, which was used by the Phase II inhabitants for their rubbish. Connected also with Phase II is the kiln excavated by Lethbridge whose products were published by Hartley.⁸

(1) Rim of butt beaker, grey core, orange on outside, well burnished.

(2) Rim of butt beaker, black core, outside brown, well burnished.

Several other fragments of butt beakers were found; some had vertical incisions in groups of four. These had either orange burnished fabrics, or reddish unburnished surfaces. This is a normal Gallo-Belgic type.⁹ However, it apparently continues into the Flavian period in one form or another.¹⁰

(3) Light core with white pipe-clay slip, burnished. This must represent an extremely debased form of the tazza. This kind of fabric occurs very commonly at Camulodunum.¹¹ It is typically Gallo-Belgic and believed to be made in the Colchester area. It does not occur at Camulodunum after A.D. 61.

(4) Dark fabric, brown slip. This is a simple wide-mouthed bowl, 'an archaic type' at Camulodunum.¹²

¹ B. R. Hartley, *op. cit.*

² M. D. Cra'ster, *op. cit.*

³ B. R. Hartley, *op. cit.*

⁴ K. M. Kenyon, *University of London Institute of Archaeology, 8th Annual Report (1952)*.

⁵ B. R. Hartley, *op. cit.*

⁶ C. I. Fell, 'An Early Iron Age Site at Linton, Cambs.', *Proc. C.A.S.* XLVI (1952), p. 31.

⁷ J. G. D. Clark and C. I. Fell, 'An Early Iron Age Site at West Harling', *P.P.S.* XIX (1953), p. 1.

⁸ B. R. Hartley, 'Notes on Roman Pottery Kilns in the Cambridge Area', *Proc. C.A.S.* LIII (1959), p. 23.

⁹ C. F. C. Hawkes and M. R. Hull, 'Camulodunum', *Research Committee of the Society of Antiquaries*, no. XIV (1947), p. 237, types 111-19.

¹⁰ H. J. M. Green, 'Roman Godmanchester', *Proc. C.A.S.* LIII (1959), p. 18, nos. 24, 25.

¹¹ C. F. C. Hawkes and M. R. Hull, *op. cit.* p. 238.

¹² C. F. C. Hawkes and M. R. Hull, *op. cit.* p. 264, type 230.

Medium-mouthed jars

(5) Grey core with black smoked exterior, decorated with horizontal rilling on the shoulder. Burnished on top of rim.

(6) Grey fabric oxidized at the end of firing; horizontal rilling on the shoulder.

The use of horizontal rilling begins in the early first century A.D. Jars decorated in this manner come from the primary silt of the Belgic *oppidum* at Verulamium.¹ These have a beaded rim and are in orange fabric. This type is found at Camolodunum (form 260B) before A.D. 61, and locally was one of the main products of the War Ditch kiln.² The fabric of no. 6 is similar to that found at this kiln, whereas no. 5 is in a Romano-British smoked fabric—typical of the second century on Hadrian's Wall.³

(7) Dark fabric, burnished. This jar with its cordoned rim is of Hartley's type 2B.⁴

(8) Rim of jar with inturned rim to support a lid. Black polished ware. A typical Belgic form in similar ware from Verulamium⁵ and Camolodunum.⁶ In both contexts it is pre-A.D. 61. Even at large sites it occurs very infrequently, and seems unparalleled from this district.

(9) Small jar, in light grey fabric with a burnished rim. This form is reasonably closely paralleled at Godmanchester.⁷

Cooking pots

These are roughly made vessels in hard fabric.

(10) Pot with grey core and oxidized surface. The fabric contains small fragments of shell grit.

(11) Same fabric as 10, but with slight horizontal combings on the shoulder.

This is found at Camolodunum.⁸ Such bead-rim cooking pots were rare in Belgic Verulamium⁹ but became more abundant there later in the first Roman city.

(12) Necked cooking pot, dark sandy fabric, whitish inside. Shoulder decorated with rough combings.

(13) Bell-shaped cup in reddish fabric, imitating the Arretine krater Loeschke 8. This is type 57 at Camolodunum,¹⁰ and also appears in rough local ware from a mid first-century context at Verulamium.

Bases

(14) Base with horizontal rilling, and incised concentric grooves on the bottom. This example is in the same fabric as the medium-mouthed jar no. 5 paralleled by Hartley.¹¹ This type is typical of this group, and fragments of other similar bases were found.

(15) Base in brown fabric with holes bored after firing. Another common occurrence here. This may have been the base of a broken pot which was subsequently used as a strainer.

The discovery of a late first-century 'Samian' sherd in a field ditch in the centre of the quarry suggests that this group may not be later than the early Flavian period.

¹ R. E. M. Wheeler and T. V. Wheeler, 'Verulamium', *Research Committee of the Society of Antiquaries*, no. XI (1936), p. 27, form 60.

² B. R. Hartley, 'Notes on Roman Pottery Kilns in the Cambridge Area', *Proc. C.A.S.* LIII (1959), p. 24, type 24.

³ J. P. Gillam, 'Types of Roman Coarse Pottery Vessels', *Archaeologia Aeliana*, xxxv (1957), pp. 193, 202.

⁴ B. R. Hartley, *op. cit.* p. 24.

⁵ R. E. M. Wheeler and T. V. Wheeler, *op. cit.* p. 172, fig. 22, no. 4.

⁶ C. F. C. Hawkes and M. R. Hull, *op. cit.* p. 267, form 253.

⁷ H. J. M. Green, 'Roman Godmanchester', *Proc. C.A.S.* LIII (1959), p. 15, type 12.

⁸ C. F. C. Hawkes and M. R. Hull, *op. cit.* type 257.

⁹ R. E. M. Wheeler and T. V. Wheeler, *op. cit.* p. 195.

¹⁰ C. F. C. Hawkes and M. R. Hull, *op. cit.* p. 227.

¹¹ B. R. Hartley, 'Notes on Roman Pottery in the Cambridge Area', *Proc. C.A.S.* LIII (1959), p. 25, no. 14.

Survival rates of Belgic pottery in East Anglia have still to be worked out however, and since no 'Samian' was found with this group, its actual dates are vague. It will be of great importance to discover groups of Belgic pottery from local sites, securely dated by associated 'Samian', which can date survivals of Gallo-Belgic types in the Cambridge Region.

LATER ROMAN POTTERY

(Fig. 6)

Pits B and E

The pottery from pit B are nos. 1-3, from pit E, 4-6. The filling of both pits contained colour-coated ware, thus placing the group well into the Antonine Period. From pit B came a 'Samian' fragment, dated A.D. 80-110; From pit E one dated A.D. 115-50. The groups are probably late second century, though it is difficult to be certain with such small quantities.

- (1) Rim of dish with curved sides in light orange fabric.¹
- (2) Dish in black fumed ware similar to Gillam, type 219.²
- (3) Storage jar with reddish core and light grey wash—probably from the Horningsea pottery.
- (4) Medium-mouthed jar; grey core, red on outside.
- (5) Small open bowl in fine grey fabric.
- (6) Ware and type similar to no. 2.

From plough scratch (Fig. 3A, no. 3).

- (7) Single-handled ring-necked flagon in light yellow ware, Gillam, type 2,³ Godmanchester,⁴ p. 20, no. 31. Late first, early second century A.D.

Pottery from lower part of well

- (8) Bowl with flanged rim—light grey, very fine and well-polished ware. Camolodunum.⁵ A Belgic form.
- (9) Ware similar to no. 7—with rouletting.
- (10) Dark fabric with burnished rim.

SMALL FINDS

(Fig. 7)

- (1) Iron knife blade: Wandlebury,⁶ Camolodunum,⁷ Maiden Castle.⁸ A common type lasting throughout the Roman Period. Pit E.
- (2) Bone ring or toggle in association with skeleton in South Entrance Ditch.
- (3) Knife handle or comb fragment. Decoration in Iron Age A tradition.⁹ Associated with Iron Age pot in the top of the well.

¹ H. J. M. Green, 'Roman Godmanchester', *Proc. C.A.S.* LIII (1959), p. 14, type 2.

² J. P. Gillam, 'Types of Roman Coarse Pottery Vessels', *Archaeologia Aeliana*, xxxv (1957), 180.

³ J. P. Gillam, *op. cit.*

⁴ H. J. M. Green, *op. cit.*

⁵ C. F. C. Hawkes and M. R. Hull, 'Camolodunum', *Research Committee of the Society of Antiquaries*, no. XIV (1947), p. 225, type 46.

⁶ B. R. Hartley, 'Excavations at the Wandlebury Iron Age Hill Fort', *Proc. C.A.S.* L (1956), p. 19.

⁷ C. F. C. Hawkes and M. R. Hull, 'Camolodunum', *Research Committee of the Society of Antiquaries*, no. XIV (1947), p. 343, no. 24.

⁸ R. E. M. Wheeler, 'Excavations at Maiden Castle', *Research Committee of the Society of Antiquaries*, no. XII (1943), p. 272, fig. 89, no. 10.

⁹ N. Smedley, 'Iron Age Wearing Combs', *Proc. C.A.S.* LIV (1960), p. 47.

APPENDIX I

SAMIAN WARE

B. R. HARTLEY

- (1) South-west corner. Fig. 3a, no. 4. Central Gaulish Form 31. Antonine.
- (2) Ditch 2. Form 15/17 South Gaulish Fabric. Fabric and relatively careless finish put this piece late in series, c. A.D. 70-90.
- (3) South-west corner scatter. Flanged bowl Form 38, Central Gaulish. Antonine, though not necessarily later than A.D. 150.
- (4) South-west corner scatter. Form 64. Orange fabric and red glaze can be matched with examples of Form 64 of the Hadrianic period from both Lezoux and Martres de Veyre.
- (5) Pit B. Curle 11. Colour of fabric has been changed by fire after fracture. More likely to be South Gaulish rather than Central Gaulish. c. A.D. 80-110.
- (6) Pit E. Form 18/31R or 31. Fabric suggests origin at Martres de Veyre; a Hadrianic date is possible though early Antonine period would not be impossible. c. A.D. 115-50.

APPENDIX II

THE HUMAN REMAINS FROM THE CHERRY HINTON
WAR DITCHES, CAMBRIDGESHIRE

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NOTE. The six skeletons upon which this report has been written are all known to date from the destruction of the Iron Age hill-fort. Three of them were found during the period that D. A. White was excavating at War Ditches. Eu. 1.3.243 is the female found in the entrance ditch (p. 13), Eu. 1.3.245 the female found by the mechanical grab in April 1962 (p. 9), and Eu. 1.3.246 the male found in the main ditch (p. 11). The other three skeletons dealt with were excavated at sundry periods and by divers excavators, and deposited in the Duckworth Laboratory. However, information supplied by the excavators has enabled an Iron Age date to be put to these remains, since they were all found in heavy rubble in the main ditch of the fort. D.A.W.

The remains

The human remains that form the subject of this report were forwarded to the laboratory by the excavators at various dates between November 1956 and September 1962. It appears, however, that they can be considered collectively, on archaeological grounds, and the opportunity has now been taken, therefore, to describe them together. Brief routine reports on the individual finds were prepared as a matter of course, and these are filed in the laboratory archives, under the appropriate reference numbers. It will be seen, as a result of this procedure, that the reference numbers used in the present report do not all run consecutively.

The identifiable individuals in this group are six in number, the actual total being, of course, unknown but probably in excess of that number. The six are as follows:

Eu. 1.3.211—adult, male sex; age about 18-23 years.

Eu. 1.3.212—adult, undetermined sex; age about 17-21 years.

- Eu. 1.3.213—child, female sex; age about 14 years.
 Eu. 1.3.243—adult, female sex; age about 30 years.
 Eu. 1.3.245—adult, female sex; age about 20 years.
 Eu. 1.3.246—adult, male sex; aged about 20-25 years.

There is, in addition, a mandible of an immature individual Eu. 1.3.244, which, from the archaeological evidence now forthcoming, almost certainly belongs to the immature female Eu. 1.3.213 listed above.

Estimations of sex and age at death

The estimations of sex were made on a basis of anatomical appreciation, a high degree of certainty being attached if both skulls and pelvis were preserved. Additional criteria such as the overall size and general robustness of long bones were also taken into consideration, whenever possible. Only in one instance (Eu. 1.3.212) could no clear estimate of the sex of the individual be made.

Estimations of age at death were made on a basis of the examination (whenever possible) of such criteria as (1) the degree and extent of endocranial and ectocranial sutural closure, (2) dental eruption, and the degree and nature of dental attrition, (3) the appearance of the pubic symphyses, (4) the degree of ossification of certain epiphyses. Generally, no great conflict occurred between estimates based upon different sets of criteria, and, in particular, a reassuring correlation between estimates based upon sutural closure and those based upon other criteria was noted.

Estimations of stature

Estimations of stature are only possible when long bones (preferably several long bones) are preserved. The regression formulae of Trotter and Gleser (for 'whites') were utilized for reconstructing stature, and it was possible to calculate the following estimates:

Individual	Reconstructed stature (approx.)	
	ft.	in.
Eu. 1.3.211 (♂)	5	6
Eu. 1.3.243 (♀)	5	1½
Eu. 1.3.246 (♂)	5	7½

Metrical characters

Measurements were taken on all available bones in accordance with the biometric technique described by Buxton and Morant (1933), Morant (1936) and Mukherjee, Rao and Trevor (1955). Unless otherwise stated, data are shown in millimetres.

TABLE I. *Metrical data relating to the War Ditches skeletal remains*

(measurements in millimetres, unless otherwise stated)

Eu. 1.3.211. *Cranial measurements*: none. *Mandibular measurements*: W_1 116.0; CyL 19.2; RB' 30.0; M_2P_1 27.2; ZZ 46.0; $M\angle$ 126°; CpL 75.0; RL 49.0; ML 102.0; CrH 62.0; M_2H 25.5. *Femoral measurements* (right side only): FeD_1 24.2; FeD_2 36.2. *Tibial measurements* (right side only): TiL_1 ? 345.0; TiL_2 345.0; TiD_1 36.0; TiD_2 25.0.

Eu. 1.3.212. *Cranial measurements*: L 185.0; B 142.0; B' 102.5; S_1 122.0; S_3 116.0; S 370.0; T' 318.0; U 519.0; S'_1 114.0; S'_2 110.0; S'_3 97.0; G_2 40.0; FL 36.8; FB 29.3. *Mandibular measurements*: W_1 113.0; CyL 19.0; RB' 34.0; M_2P_1 31.0; $M\angle$ 128°; CpL 73.5; RL 55.0; $GoGo$ 91.0; ML 105.5; CrH 56.5; M_2H 23.5. *Long bone measurements*: none.

Eu. 1.3.213. *Cranial measurements*: none. *Mandibular measurements*: none.

Eu. 1.3.243. *Cranial measurements*: L 174.0; B 135.0; B' 94.0; H' 134.5; LB 99.0; S_1 119.0; S_2 125.0; S_3 116.0; S 360.0; S'_1 105.5; S'_2 114.0; S'_3 99.5; $G'H$?67.5; GL ?95.0; GB 84.0; G'_1 47.0; G_2 38.4

TABLE I (continued)

(γ ?118.0; OH 112.0; BOH 112.0; T' 298.0; NB 21.9; NH' 48.4; O₁ ?39.5; O₂ 31.2; FL 36.5; FB 31.0. Mandibular measurements: W₁ 113.0; GoGo 84.0; ZZ 45.0; RB 29.2; ML 99.0; RL 55.0; CyL 19.1; M \angle 122.0; CpL 71.5. Femoral measurements: FeL₁ (L) 397.0, (R) 389.0; FeL₂ (L) 391.0, (R) 383.0; FeL₃ (L) 377.0, (R) 372.0; FeD₁ (L) 22.0, (R) 21.5; FeD₂ (L) 31.0, (R) 30.0. Tibial measurements: TiL₃ (L) 320.0, (R) 320.0; TiD₁ (L) 31.0, (R) 31.2; TiD₂ (L) 22.5, (R) 23.0. Humeral measurements: HuL₁ (L) 278.0, (R) 290.0; HuD₁ (L) 23.0, (R) 21.6; HuD₂ (L) 17.6, (R) 16.1; Radial measurements: RaL₁ (L) 220.0, (R) 221.0. Ulnar measurements: ULL₁ (L) 240.0, (R) 242.0. Fibular measurements: FiL₁ (L) 329.0, (R) 329.0.

Eu. I.3.245. Cranial measurements: L 185.0; B ?144.0; B' 100.0; H' 144.0; LB 100.5; S₁ 128.0; S₂ 133.0; S'₁ 111.0; S'₂ 118.0; G'H 71.0; GL 89.0; GB 85.0; G₁ 43.0; G₂ 37.2; T' ?318.0; U ?527.0; NH' 48.7; O₁ ?40.1; O₂ ?35.4. Mandibular measurements: none. Long bone measurements: none.

Eu. I.3.246. Cranial measurements: L 185.0; B ?122.0; B' 94.5; H' 144.0; LB 109.0; S₁ 124.0; S₂ 126.5; S₃ ?111.0; S 363.0; T₁ 295.0; U 507.0; S'₁ 111.5; S'₂ 116.0; S'₃ ?93.0; G'H 69.0; GL 104.5; GB 93.0; G'₁ 51.2; G₂ 37.0; O₁ 31.0; O₂ 42.4; FL ?40.5; FB 30.2; NB 23.3; NH' (R) 50.0; OH 114.5; BOH 114.0. Mandibular measurements: W₁ 120.0; CyL 21.0; RB' 32.2; M₂P₁ 29.8; H₁ 35.0; ZZ 42.0; CrCr 97.5; M \angle 129.0; CpL 78.0; RL 61.0; GoGo 91.0; ML 114.0; CrH 65.5; M₂H 27.0. Femoral measurements: FeL₁ (L) 454.0, (R) 450.0; FeL₂ (R) 444.0; FeL₃ (R) 432.0; FeD₁ (L) 24.5, (R) 24.0; FeD₂ (L) 34.5, (R) 35.0. Tibial measurements: TiL₁ (L) ?365 (R) 373; TiL₂ (L) ?365.0, (R) 369.0; TiL₃ (R) 353.0; TiD₁ (L) 42.0, (R) 42.2; TiD₂ (L) 24.0, (R) 25.0; Humeral measurements: HuL₁ (R) 327.0; HuD₁ (L) 21.7 (R) 22.1; HuD₂ (L) 19.1, (R) 20.0; Radial measurements: RaL₁ (L) 249.0, (R) 250.0. Ulnar measurements: ULL₁ (L) 269.0, (R) 258.0.

Non-metrical characters

Wormian bones

The presence of wormian bones was noted in each of the six crania available for examination. The bones were, in all cases, present in the lambdoid suture. The numbers of these supernumerary ossicles are shown below, with the reference numbers of the crania.

Eu. I.3.211	9	Eu. I.3.243	16
Eu. I.3.212	8	Eu. I.3.245	9
* Eu. I.3.213	2	Eu. I.3.246	4
(at least)			

* This cranium was incomplete.

Figures, in each case, are minima, as ossicles of less than 2 mm. overall length are excluded.

Metopism

No case of the persistence of a metopic suture was seen. The frontal bone was available for inspection in all six crania.

Parietal notch bone

Four out of the six crania could be inspected in connection with this character.

Eu. I.3.212—one parietal notch bone present, on the left side.

Eu. I.3.213—two parietal notch bones, on the right side (the left side of the neurocranium was damaged).

Eu. I.3.243—one parietal notch bone present, on the left side.

Eu. I.3.246—no occurrence of a parietal notch bone.

Orbital osteoporosis

Three cases were noted where a slight degree of osteoporosis is exhibited. These were: Eu. I.3.211, Eu. I.3.213 and Eu. I.3.243. No signs were visible in the orbits of the other crania.

Tori mandibulares

One case of slight bilateral development of mandibular tori was noted, viz. Eu. 1.3.246. There were no signs of these tori in four other mandibles, and in one case, Eu. 1.3.245, the mandible was not preserved.

Tori auditivi

No case was observed in the six crania that were examined.

Torus palativus

Two cases of slight development of this palatine torus were recorded, viz. Eu. 1.3.243 and Eu. 1.3.246. In three other crania there was no such torus, and in the case of Eu. 1.3.211 the palate was damaged.

Tori maxillares

No case of these maxillary tori was observed, and Eu. 1.3.211 could not be examined in this connection.

Articulation at pterion

Three cases of normal pteric articulation, i.e. sphenoparietal, were observed. The type of articulation could not be ascertained in the cases of Eu. 1.3.211, Eu. 1.3.213 and Eu. 1.3.245, because of damage or incompleteness. No cases of the existence of epipterice bones were observed.

Pre-maxillary suture

In all cases, the suture dividing the premaxilla from the palatine processes of the maxilla was clearly visible.

*General pathology**Osteo-arthritis*

Signs suggesting the existence of osteo-arthritis were noted in only one individual, Eu. 1.3.243, and were confined to slight degrees of lipping on the axis and atlas, the 5th lumbar vertebra, and (possibly) on the head of the humerus and the proximal extremities of the ulnae.

Other disease or injury

(1) The following points of interest were noted in the case of Eu. 1.3.243:

(a) The spinous process had failed to unite with the body of the 5th lumbar vertebra.
 (b) The right clavicle has a more flattened and broader appearance than the left one, and there are signs suggesting the healing of an old fracture. The right first rib is also appreciably broader than its left homologue.

(c) The left pubic symphysis is abnormal in appearance. (The right symphysis is missing.)

(d) The left fibula presents an unusual amount of bowing, in the posterior direction.

(2) In the case of Eu. 1.3.246, the following points were noted:

(a) There are signs of a healed fracture in the distal third of the right ulna.

(b) Numerous striations and small foramina are noticeable on the medial surfaces of the mid-sections of both tibial shafts.

(c) There is a well-defined articular facet to be seen at the mid-point of the posterior border of the foramen magnum. This appears to articulate with the posterior tubercle of the atlas. There are also small bone nodules along the perimeter of the foramen magnum and bordering the occipital condyles.

- (3) Abnormally numerous small foramina were noted in a number of cases:
- (a) Eu. 1.3.211: a cluster visible on that portion of the palate that was preserved.
- (b) Eu. 1.3.212: hundreds of very small foramina covering the parietal bones about 50 mm. from the sagittal suture, and also on the occipital bone near the lambdoid suture.
- (4) A femoral neck anomaly was noted in two individuals, viz. Eu. 1.3.211 and Eu. 1.3.246.

Dental pathology

With the exception of Eu. 1.3.211 (left portion of alveolar arch missing) and Eu. 1.3.245 (mandible missing), many features of the lower and upper dentitions were preserved for inspection, despite a certain amount of post-mortem tooth loss. The majority of the findings are summarized in Table 2.

TABLE 2. *Dental pathology: data relating to War Ditches—human remains*

	Reference number					
	Eu.1.3.211	212†	213†	243	245	246
Post-mortem loss*	8/24	10/32	4/25	6/32	4/16	1/32
Ante-mortem loss*	0/24	0/32	0/25	4/32	0/16	0/32
Carious teeth‡	0/16	0/22	0/23	4/19	0/12	0/31
Periodontal disease	Nil	Nil	Nil	Slight	Nil	Medium
Hypoplasia	Slight	Slight	Slight	Slight	Slight	Medium
Abscesses	Nil	Nil	Nil	Nil	Nil	Nil
Calculus	Slight	Slight to medium	Slight	Slight	Nil	Slight to medium
Tooth rotation§	1/16	10/22	13/23	5/19	2/12	8/31

* Loss shown as a fraction of possible total of teeth.

† Immature individuals, thus third molars erupting or unerupted.

‡ Number of carious teeth shown as a fraction of total teeth remaining *in situ*.

§ Number of teeth affected shown as a fraction of total teeth remaining *in situ*.

Reference to Table 2 will show that, in general, the condition of the teeth of these individuals was good, ante-mortem loss and carious cavities being present in only one individual, viz. Eu. 1.3.243. The possibility of the true incidence of carious teeth being higher cannot be excluded, however, in view of the post-mortem loss of a number of teeth. It should also be remembered that, with the exception of Eu. 1.3.243, all the individuals are young adults or adolescents. The incidence of hypoplasia may indicate dietary insufficiency of some kind during the period of the growth of the permanent teeth or possibly some non-chronic early disease. The degree of tooth rotation noted is in no case excessive, and is often caused by overcrowding of teeth in the dental arch.

The molar teeth were examined for attrition and, as might be expected from the age of the individuals, the degree observed was only slight (corresponding to Broca's 'class I') in all cases.

When upper and lower teeth were in occlusion, overbite was noted in Eu. 1.3.211, 212, 213 and 246. The type of bite could not be ascertained for the other two individuals.

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APPENDIX III

FAUNAL REPORT

DAVID W. PHILLIPSON

Of the animal bones submitted for examination only those groups from the Iron Age levels of the main ditch and from the first-century Roman deposits were sufficiently numerous to allow a useful study to be made. Even so, with a total of 118 bones in the Iron Age group and 241 in the first-century Roman, the figures given below must be treated with extreme caution.

Most of the bones in both samples were very fragmentary. Those in the Iron Age group also usually showed signs of prolonged weathering.

The species were present in the following proportions:

Species	Iron Age (%)	First-century Roman (%)
Cattle	13	41
Horse	2	5
Sheep or goat	80	40
Pig	—	11
Fallow deer	2	—
Bird	—	2
Rodents	3	—
Man	—	1
	100	100

Despite the small samples on which they are based, it seems reasonable to interpret these figures as indicating that the Roman farmers of the first century A.D. kept sheep (and/or goats) and cattle in roughly equal numbers, whereas their Iron Age predecessors had been predominantly herders of sheep. Pig bones formed over one-tenth of the Roman sample but were not present in the Iron Age sample. If pigs were not present during the Iron Age occupation of the site, they were certainly present in the area, as at Wandlebury¹ and Barley.

Horses were not numerous in either period and it seems likely that they were kept mainly for work rather than for food.

The meat supply of both periods would appear to have been derived from domestic animals; the only trace of wild species is a fragment of worked fallow-deer antler in the Iron Age group. There is thus no evidence for the hunting of wild animals to supplement the food supply.

It was found that the samples were not sufficiently large for analyses of the ages at death, indicated by the jaws and teeth, to produce results of any validity.

One human tooth, the partly decayed molar of an adult individual, was found in the sample from the first-century Roman layers.

¹ B. R. Hartley, 'Wandlebury Iron Age Hill Fort, Excavations of 1955-56', *Proc. C.A.S. L* (1956), p. 25.

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