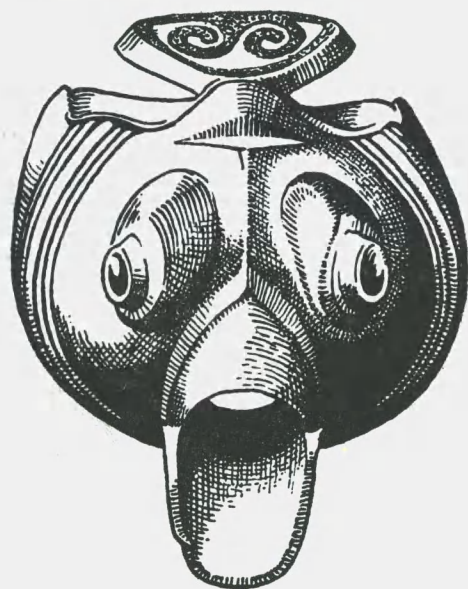


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BEDFORDSHIRE
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W. H. MANNING

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A Secondary Neolithic Camp at Waulud's Bank, Leagrave

JAMES F. DYER

WAULUD'S BANK has been well known as an earthwork in southern Bedfordshire for many years and has from time to time produced archaeological remains of various periods. It is situated between a quarter and half a mile due north of Leagrave Railway Station, at a height of approximately 400 ft above sea level, (National Grid: TL092247) and consists of a much denuded bank and ditch surrounding the north, east and south sides of an oval enclosure, some 18 acres in extent. The west side is formed by the River Lea which rises inside the earthwork.

The site, which is no longer marked as an earthwork on the 1 in. Ordnance Survey maps, is scheduled under the Ancient Monuments Act. The land was owned by Messrs. Ford of March Farm, Leagrave and the Parks Department of the Corporation of Luton. The excavations, directed and financed by the writer were carried out during July and August 1953 by members of the South Bedfordshire Archaeological Society.

SUMMARY

Waulud's Bank is a large semi-circular domestic enclosure which was probably constructed during the late Neolithic period by people using Rinyo-Clacton and undecorated pottery, leaf-shaped and barbed-and-tanged arrowheads, and apparently breeding large numbers of oxen. The foundations of a small scooped-out hut, possibly constructed of wattle and daub, were also found.

During the early medieval period a prolonged occupation of the site is attested by hand-made and early glazed pottery fragments, numerous iron nails and metal scraps. The ditch of the earthwork appears to have been enlarged in Norman times perhaps in connection with the Leagrave watermill.

THE EARTHWORK PRIOR TO EXCAVATION (Fig 1 and Pl I)

The earthwork is situated on the middle chalk which is capped by a deposit of river terrace gravel to form a ridge on the east. This creates a natural slope with a drop of about 25 ft from east to west. In a long basin some 10 ft deep and 100 ft wide on the northern side of the enclosed area are five springs which form the present source of the River Lea. In July 1953 the water level was 8 ft below the surrounding land and formed a long weed-choked pond, which made a natural boundary to the site on the western side; beyond it lies the Leagrave Common, a large area of once marshy ground which has been drained and built-up in recent years. The Common was cut in half by the Midland railway line in 1868.

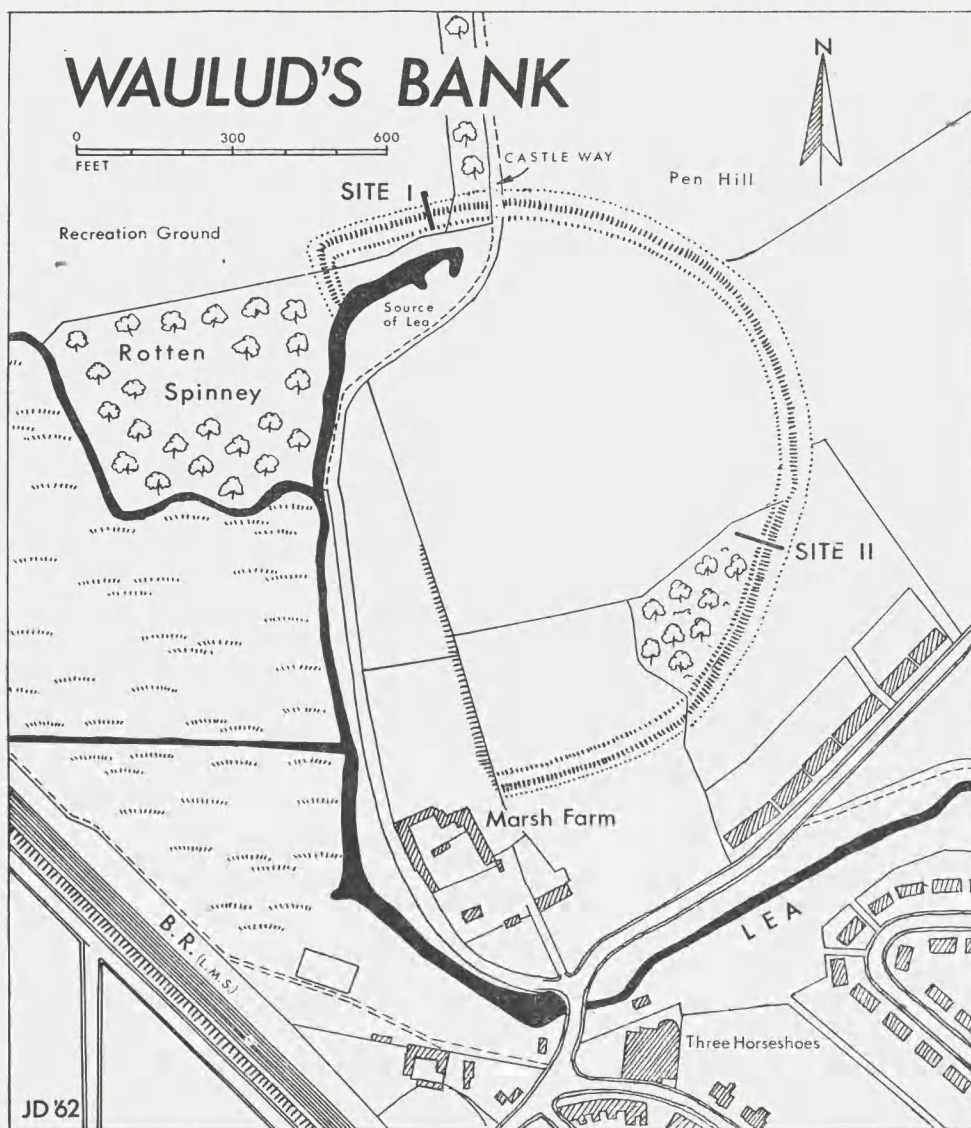


Fig 1. Map of Waulud's Bank, Leagrave, showing the positions of Sites I and II excavated in 1953.

As it now exists, the earthwork is semi-circular in plan and consists of a bank and external ditch crowning the circumference of a natural amphiatre. The bank is much flattened but rises at one point to a height of 8 ft above the original ground surface. In many places the bank is completely obliterated and since the site has only been ploughed once in living memory it seems probable that much of it was lowered by ploughing in the medieval period. The ditch is heavily silted and its maximum existing surface depth is 3 ft. There are no indications of an entrance, but it may have been on the northern side where a farm track and public footpath called 'Castle Way' now passes through the site. At this point there are no surface indications of either a bank or a ditch, but this may be due to continual use and wet-weather rut filling.

West of 'Castle Way' the bank and ditch are continued in the recreation ground north of the river for just over 100 yards before turning abruptly south into Rotten Spinney where they end at the water's edge. How the bank met the river on the southern side it is impossible to say since that area is now occupied by Marsh Farm and all indications have been destroyed. It is possible that the steep cliff-like lynchet east of Marsh Farm represents an artificially straightened river terrace, to the edge of which the bank and ditch originally ran. Frederick Davis, writing in 1855 described the ditch as "Very broad and deep, and perfect in many places". William Austin (1928) refers to a second bank outside the ditch. No trace of this survives today and it may have been the river terrace which is pronounced 50 yards south of the southern bank of the Camp. Accounts of the earthwork have been published from time to time, most notably by Brandreth in the 19th century.¹

PREVIOUS DISCOVERIES

Until the Second World War the interior of Waulud's Bank was used almost continuously for sheep grazing. The shepherd on the site for fifty years was the late Thomas Cumberland of Leagrave, a friend of Worthington G. Smith, the local antiquary. During the time that he shepherded the site he amassed a large collection of flint implements, mainly of Neolithic date, which he picked up on the surface. Amongst the implements were polished flint axes, scrapers and numerous arrowheads.

Two crouched burials were found to the south of Waulud's Bank in 1882 in the field due east of Marsh Farm called Barn or Burnt Close. (Nat. Grid: TL 062-243). They were apparently buried in a shallow pit with heads to the east; together with deposits of "black cinders, burnt bones, teeth of animals, broken pottery and charred wood". There is no satisfactory report of the discovery or what became of the finds.

¹*Arch.* XXVII, 102.

Gold coins of Tasciovanus, Addedomarus, and Cunobelinus are all recorded from the immediate vicinity of Leagrave Marsh.

In July, 1905 two Saxon burials were found a quarter of a mile west of Waulud's Bank in the region of what is now Onslow Road. (Nat. Grid: 057243). The local authorities ordered their reburial in the Biscot Churchyard at Luton, together with numerous animal bones.¹

LEGEND

Waulud's Bank was known by the older generation as 'The Castle' and the cart-track leading northwards from the earthwork as 'Castle Way'. The name Waulud's Bank (Ordnance Survey 1823) also appears as Wayland Bank, Waller's Bank and Wallards. In his *History of Luton Church* (1899) Henry Cobbe argued in favour of Wayland Bank, suggesting a West Saxon occupation of the camp, and William Austin (*History of Luton*, 1928) echoed a belief that the Saxons founded the town of Lygeanburgh inside Waulud's Bank before its destruction in A.D. 571; this idea was upheld by Beauchamp Wadmore in his *Earthworks of Bedfordshire* (1920). It was partly in order to establish the truth of this theory that the excavations here recorded were undertaken.

THE EXCAVATIONS

Two trenches were cut at right angles across the bank and ditch, one on the northern side of the earthwork in the Sundon Road Recreation Ground (known as White Field on the Tythe Map), and a subsidiary section on the eastern side in Marsh Farm Spinney, where the bank is still 8 ft high.

Section I: Sundon Recreation Ground (Fig. 2 and Pl II)

At this point the ditch surface was 1 ft below the level of the rest of the field and about 40 ft. wide. The top of the bank was about 4 ft above the centre of the ditch surface, and 10 ft above the water-table in the river Lea.

A trench 85 ft long and 5 ft wide was laid out at right angles to the length of the ditch, on an axis pointing due north. The filling was everywhere removed down to the undisturbed chalk. The bottom was 6 in. below the water table.

The primary silting of the ditch was 18 in. thick and contained three recognisable sherds of Rinyo-Clacton ware together with many fragments of decayed coarse kahki-coloured ware of Neolithic character. The layer was an evenly deposited chalky silt, showing signs of having been under water for a long time,

¹*Proc. Soc. Ant.* (2nd S.) XXI, 59.

thus indicating a higher water-table in the past. At one time the bottom of the ditch must have been almost marsh-like, and three sherds of Roman ware had worked their way into the top of this Neolithic layer. As the layer was forming, a slight amount of chalk rubble slipped back into the ditch from the bank.

A thick layer of orange clay next formed, quite devoid of finds. Darker brown flecks in the material suggest that it was the product of the natural decomposition of vegetable material.

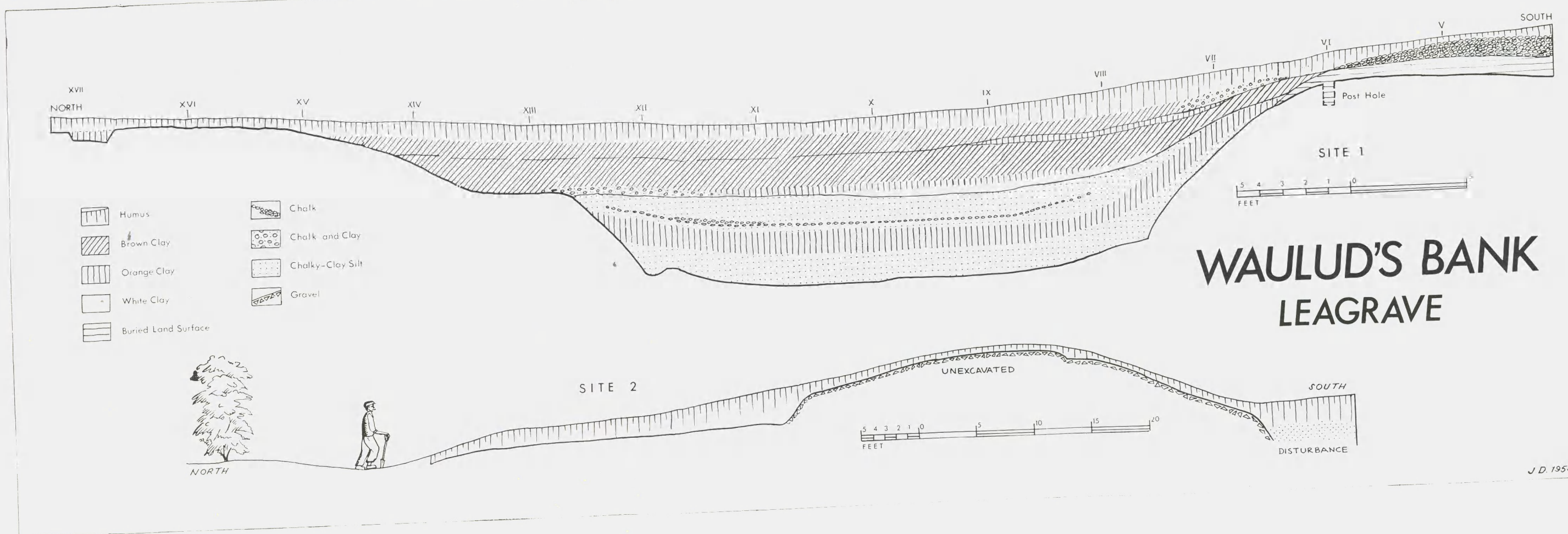
A layer of grey silt some 2 ft thick now covered the whole of the exposed ditch bottom. This was similar in character to the primary silting. Shortly after this layer had begun to form a thin tip of chalk seemed to have slipped across the ditch from the outside, at its thickest about 7 ft from the outer edge. In this chalk and the silt above it further Neolithic sherds were found.

A layer composed of a little chalk with much pure white water-logged clay extended half across the ditch from the inner side. It appears to represent the natural 'primary' sediment after the recutting of the ditch in Norman times. At this point the ditch was widened from a width at its silted bottom of 25 ft to 32 ft. the other 7 ft were added by cutting a step in the outer edge of the existing ditch, with a gently sloping back. The date of the cutting of this step is indicated by sherds of smooth black Norman ware, and above it sherds of 12th to 15th century pottery were thickly scattered, including glazed wares, roofing tiles and iron nails. These suggest the presence of some early medieval building in the area. Similar 11th century sherds were found close by in 'Rotten Spinney'. It may be possible to identify this enlarging with the well-head for the Legrave Water Mill.¹

Today the bank consists of about 2 ft of chalk rubble piled onto a former land surface represented by orange clay. This buried surface was almost 3 ft thick at the southern end of the section and may indicate that a turf core was piled up there, perhaps using material from the then undug ditch. (The southern 15 ft of the bank are not shown on the section, fig. 2). At the front of the bank a single post hole, 6 in in diameter and 1 ft deep, may indicate that the bank was supported by a timber revetment. It is interesting to notice that the chalk composing the bank was only 2 ft thick, whilst the amount of chalk that had fallen back into the ditch was negligible. The question arises what had happened to the remainder of the chalk originally dug from the ditch? Since the timber revetting held the front of the bank in position, it is possible that the bank slipped backwards down the slope into the river. It must be remembered that whilst the ditch, probably waterfilled, stood in front of the bank, the river, which it was doubtless wanted to enclose, lay immediately behind it. An alternative explanation might suggest that the bank was never higher than 2 ft, and that the surplus chalk was used in constructing a

¹Mentioned in the *Close Roll*: 9 Henry III, Part 1. m.19 (1224).

Fig 2. Section of Site 1 as excavated, showing Site 2 in profile.



J.D. 1953/1962

¹Mentioned in the *Close Roll*: 9 Henry III, Part 1. m.19 (1224).

causeway, now utilised by the 'CastleWay' as it passes through the earthwork, but originally intended to prevent the river from flooding into the interior of the camp.

Section II Marsh Farm Spinney (Fig 2).

The bank is best preserved in the spinney, although very overgrown with trees and bushes. Section II was cut at a point where the bank was relatively free from vegetation. Here it rose steeply from the outside to a height of 8 ft and then sloped gradually down to ground level again some 55 ft inside the earthwork.

The ditch was not visible on the ground and excavation showed that it had been completely destroyed by a recent gravel quarry. The filling consisted of modern animal bone, china and an 18th century clay pipe. The bank dropped sharply into the old quarry and had been constructed of tightly rammed gravel. Close to the top was a slight step which seemed to indicate the position of a stockade, though no signs of post-holes were detected. The bank sloped gently on the inside, but at 25 ft from the crown dropped rather sharply to the natural slope of the field.

The Neolithic Hut (Fig 3 and Pl III)

The northern end of Section I was extended so that the whole of a small hut found on the eastern edge might be investigated; even so the complete hut was not uncovered. The hut consisted of a small irregular kidney-shaped hollow, 2 ft wide, 4 ft long and 8 in deep, surrounded by a flat berm of chalk approximately 2 ft in width and then by an irregular circle of stake holes. The holes averaged 6 to 8 in in depth into the chalk, and would have been considerably deeper with the original top-soil replaced. There was an entrance with incurved walls on the west side, 3 ft wide. The average diameter of the hut was 8 ft. The stakes of the hut walls may have been daubed with clay, but ploughing had removed all trace of it. The central pit was filled with a uniform orange clay, and also contained the knee joint of an ox, four small flint flakes and a blade flake found in two halves on opposite sides of the pit. There were no signs of fire. At first sight, the hut would appear to be a temporary affair, – a hut built by workmen constructing the ditch perhaps. We must, however, remember that huts of this type are not uncommon in the Late Neolithic, the best parallel probably being Pit 3 from The Croft, Winterbourne Dauntsey, in Wiltshire excavated by J. F. S. Stone in 1932.¹

¹ W.A.M. CLX (1934) 445ff.

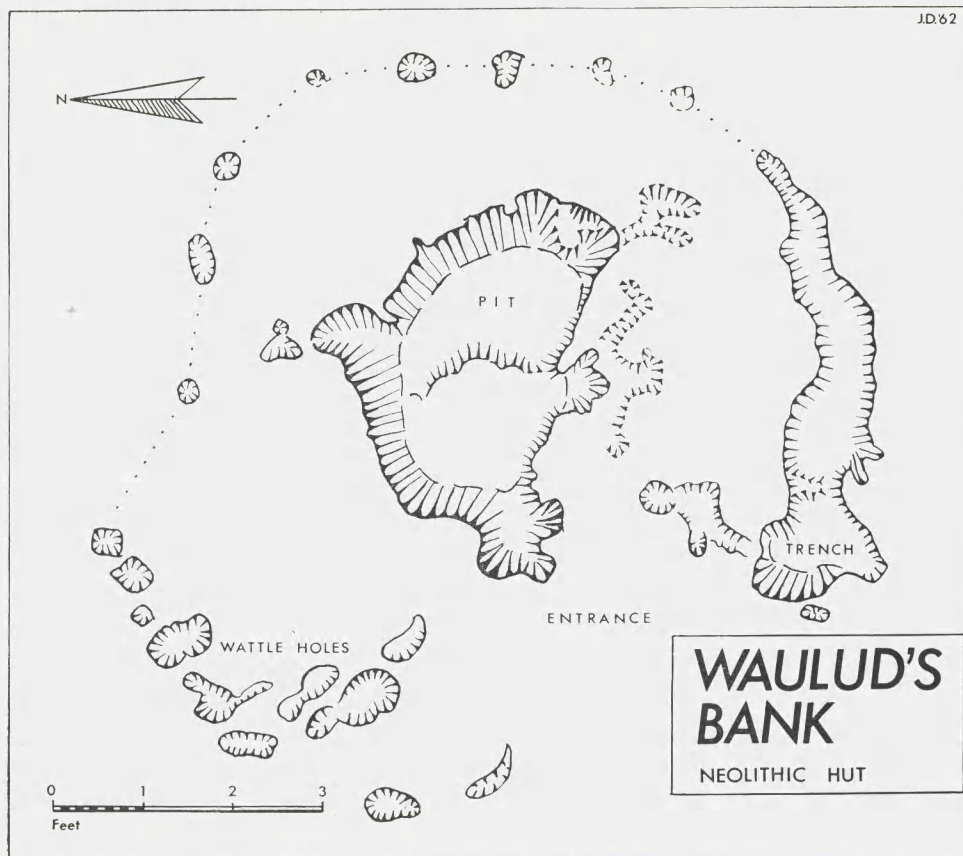


Fig 3. Ground plan of the Neolithic Hut uncovered at the northern end of Site I.

INTERPRETATION (Fig 4)

The interpretation of a site after only one season's excavation must be treated with a certain amount of caution, and since little has yet been published on the numerous other Neolithic sites and finds in the central Chilterns, these must be summarized so that Waulud's Bank may be fitted into its correct context.

CAUSEWAYED CAMPS

Maiden Bower, Dunstable (SP/996225)

In its first phase of occupation this represents one of the two probable causewayed camps in the Chilterns and underlies the bank and ditch of the Iron Age plateau camp. A chain of five sections of the Neolithic ditch was observed in 1898 by W. G. Smith outside the western edge of the Iron Age camp and have since been quarried away. The northernmost of the chain was 8 ft long and 10 ft deep and was filled with chalk rubble, the next was only 4 ft square and $4\frac{1}{2}$ ft deep, and contained broken human bones. The next was 20 ft long and 20 ft wide. Many of the bones in the latter two pits had been split 'for the extraction of marrow'. These same pits contained flakes, polishing stones, chalk rubble and 'rude British pottery'. The fifth excavation was very large, but only 4 ft deep and filled with chalk rubble, split bones and flint.¹ The site was first recognised as a causewayed camp by Piggott² who has illustrated sherds of Abingdon ware found there (now in Luton Museum) and refers to an antler comb of the Windmill Hill culture.³ The causewayed ditches can clearly be seen in the sides of the chalk quarry which lies to the north-west of the Iron Age camp.

Pitstone Hill, Buckinghamshire (SP/950142)

A length of causewayed ditch on Pitstone Hill may be of Neolithic origin. It seems probably that it was intended to isolate the northern end of the hill, where there are indications of a settlement within the 700 ft contour, as at Hambleton Hill in Dorset.⁴

Neither site throws any light on the function of the causewayed camps. Whilst the Pitstone ditches may well be defensive in outlook, the presence of so many human bones in the causewayed ditches at Maiden Bower support suggestions that such camps were used for 'religious' fairs, in which 'relics' played an important part. Some of the bones may have originated in an ossuary connected with the Mill Hill long barrow at Dunstable.

LONG BARROWS

Mill Hill, Dunstable (TL/012222)

There originally stood a long barrow in Union Street, Dunstable which has

¹*P. Soc. Ant.* XXVII (1915) 143 ff.

²*Arch. J.* LXXXVIII (1931) Fig. 6.

³*V.C.H. Beds.* I, 169. Fig 60.

⁴*Records of Bucks* (1961) XVII, 51 ff.

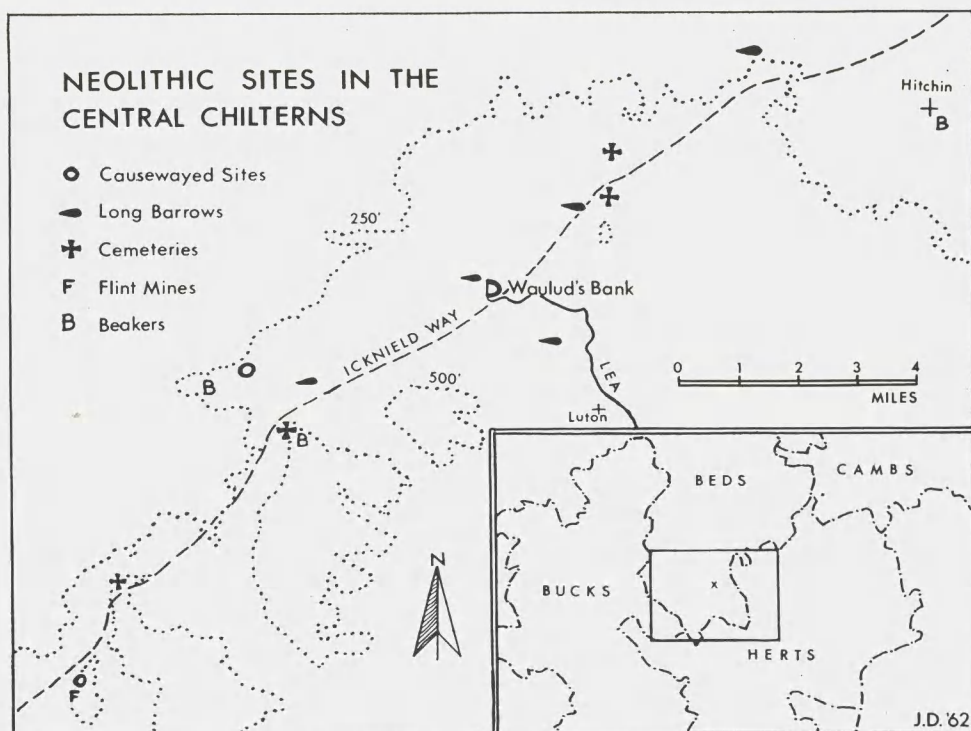


Fig. 4. Distribution of Neolithic sites and finds in the Central Chilterns between Pitstone and Hitchin

been destroyed in recent years. Described by Stukeley¹ and W. G. Smith it, was never excavated. It seems to have been about 100 ft long and was orientated from east to west. Another long barrow which is reported to have stood on the Dunstable Downs close to the Five Knolls barrow cemetery is more likely to be a pillow mound, or perhaps a mortuary enclosure associated with the barrows.

Galley Hill, Streatley (TL 068268)

This barrow, destroyed about 1900, lay to the west of Galley Hill, where the Icknield Way is deflected round its eastern end. The destruction of the barrow was witnessed by the late Mr A. Cumberland of the Dartford Antiquarian Society. No finds were observed. Air photographs suggest that the barrow was 300 ft long, but this is much larger than normal in the Chilterns, and 150 ft is more reasonable.

¹*Itinerarium Curiosum*, (1724) 109.

Knocking Knoll, Pegsdon (TL/133311)

This large long barrow lies astride the county boundary and its Hertfordshire half has been ploughed away. This gives it the appearance of a large round barrow 100 ft in diameter. A chalk cist containing a crouched burial was incorporated in the eastern end. It was opened by William Ransom about 1855, but the only record is a watercolour painting in Hitchin Museum. Both Stukeley and Gough referred to the barrow.

Biscot Mill, Luton (TL/079232)

This barrow, referred to by William Austin¹ has been destroyed and its site is unknown. It may well have been the mound on which the Biscot Windmill was erected, and which stood behind what is now the Biscot Mill Public House. Two polished greenstone axes were found nearby and are now in Luton Museum.

Waulud's Bank, Leagrave (TL/057247)

It has been suggested that a mound in the recreation ground north-west of Waulud's Bank indicates a ploughed-out long barrow. The mound is 100 ft long, 60 ft wide and about 3 ft high.

ROUND BARROWS

A number of barrow cemeteries containing Neolithic material exist in the central Chilterns. Here, only those close to Waulud's Bank are considered.²

Five Knolls barrow cemetery (TL/006209)

This cemetery contained ten barrows, three of which were outliers, and two of which were destroyed in 1887. Barrow No. 5 of the group contained a crouched primary female burial accompanied by a polished-edge flint knife of Secondary Neolithic type. Barrow No. 2 has produced sherds of Abingdon, Ebbsfleet and Beaker wares, although only a cursory excavation took place in 1925. Beaker sherds have also been obtained from Barrows No's 3, 8 and 9; again these have not been properly excavated.

Galley Hill, Streatley (TL/092270)

This cemetery appears to contain at least four bowl barrows, although one, situated low on the side of the hill, must be regarded with some caution. Barrow

¹Austin: *History of Luton* (1928) 15.

²All the cemeteries are described in Dyer: *Arch J.* CXVI (1959) 1.

No. 3 produced two dismembered but articulated male burials together with Windmill Hill ware, and is reminiscent of the ritual burial in the Long Mound at Maiden Castle, Dorset. Barrow No. 4 contained Windmill Hill pottery associated with the primary build of the barrow.

HENGE BARROW

Barton Hill Farm, Streatley (TL/094282)

This henge barrow was discovered from the air by Dr J. K. St Joseph in 1948 and has been fully described in this Journal.¹

The footing-trench of a wooden mortuary enclosure and two crouched burials were enclosed within a circular ditch, 100 ft in diameter. This ditch and its external bank were broken by an entrance causeway from which a row of posts led to a site consisting of a number of interlocking pits, which may have been of a domestic nature, but which have not yet been fully excavated. The site exhibits features of Middle Neolithic origin. Whiteleaf type of Windmill Hill ware occurred in a primary position in the ditches, which also produced Peterborough ware.

Maulden Firs, Streatley (TL/095275)

What appears to be a large Henge monument, some 500 feet in diameter was discovered by the writer during 1962. Revealed as a crop mark, it appears to have an entrance on its southern side. A rectilinear site to the south-west is described elsewhere in this JOURNAL (page 47). A continuous line of pits leads from these two sites in a southerly direction for at least half a mile. A section cut across the pits in 1962 produced sherds of Neolithic pottery.

THE ICKNIELD WAY

The Icknield Way is the linking factor between each of the sites referred to above. Most of the sites are situated within half a mile of the trackway which followed the belt of relatively open country on the northern escarpment of the Chilterns.

DISCUSSION

Western Neolithic cultures are represented in the central Chilterns by Windmill Hill ware from Galley Hill, Abingdon ware from Maiden Bower and Galley Hill, and Whiteleaf ware from Barton Hill Farm, a site which also produced Secondary Neolithic Peterborough ware. The Secondary Neolithic cultures are

¹*Beds. Arch. J.* (1962) 1.

attested by the polished flint blade from Five Knolls No. 5 and the Rinyo-Clacton ware from Waulud's Bank. One of the most important sites is Five Knolls No. 3 which produced Western Abingdon ware, Secondary Ebbsfleet ware and sherds of Bell Beaker. Although no records have ever been published showing the stratification of finds from the barrow, it is highly probable that all sherds are broadly contemporaneous. Collared urn and Windmill Hill ware, together with sherds of indeterminate neolithic pottery, all lay on the old land surface below Galley Hill Barrow 4, and occurred in the material of the mound. Rinyo-Clacton ware with fragments of cord-zoned Bellbeakers, have been found close to the Icknield Way at Lodge Hill, Saunderton in Buckinghamshire, on the surface of a bell-barrow with apparent entrance causeway. The only complete cord-zoned Bell beaker from Bedfordshire was found with a dolicocephalic female burial in the ditch of a cursus at Kempston near Bedford in 1936.¹

CONCLUSIONS

The choice of site for Waulud's Bank at the source of a river and on the edge of a marsh where fish and game were abundant, is quite unlike any other known Neolithic site in the Chilterns. It is reminiscent of the habitation places favoured by Mesolithic hunter-fisher folk. The large number of fragments of cattle bones found in the ditch, together with Thomas Cumberland's discovery of about 500 flint scrapers in the immediate vicinity indicate that the builders were now stock-breeders. Here is demonstrated the fusion of a Mesolithic choice of settlement site with Western Neolithic ideas of farming, resulting in a Secondary Neolithic domestic site of a type at present unique in Great Britain. Much more excavation is required before we can work out the relationships which exist between Waulud's Bank and the large group of sites in the Barton Hill Farm - Galley Hill area. The Windmill Hill pottery from Galley Hill No. 4 must be broadly contemporary with that from Waulud's Bank, and this may indicate that the builders of both sites are one and the same people. It is likely that these two sites were constructed somewhere about the beginning of the second millenium B.C. What does emerge quite clearly, is that by 2000 B.C. both Western and Secondary Neolithic cultures were existing side by side with Bell Beaker cultures in Bedfordshire and the central Chilterns, and continued (as demonstrated at Barton Hill Site III)² well into the middle of the first millenium B.C.

¹*Ant. J.* XVIII, 285.

²*Beds. Arch. J.* (1962) 1ff.

APPENDICES

I: THE POTTERY (Fig 5 and Pl IIIb)

The pottery from the ditch filling and on the old land surface beneath the bank of Site I is all of Neolithic type. Of seventeen sherds preserved in Luton Museum most are small and undecorated wall sherds. Two distinct grooved sherds (138a and b) are illustrated in Fig. 5, whilst two others (152 and 132) show signs of similar grooved ornamentation.

The decorated sherds are unmistakably late Neolithic Rinyo-Clacton ware, with deep horizontal grooves well paralleled at Clacton, Pishobury and Woodhenge. Sherds 138a and b are relatively hard, loose textured and brown in colour. Sherd 132 is black in colour, very weathered and exhibits slight, rather indistinct traces of grooving. Other Rinyo-Clacton sherds have come from Lodge Hill at Saunderton, where they were associated with cord-zoned Bell Beaker sherds.¹



Fig 5. Bone Object and Rinyo-Clacton sherds (138a and b). ($\frac{2}{3}$)

The remaining thirteen sherds are undecorated and although undoubtedly of Neolithic fabric, it is not possible to say of which particular type. The majority are finely laminated and black or brown in colour. No. 169, a black sherd, has an almost burnished surface. Four fragments contain quartz particles, and others are considerably weathered.

A large number of khaki coloured sherds in the waterfilled bottom of the ditch were too soft to move and disintegrated on touch. Specimens embedded in clay have been preserved in the Museum.

High in the ditch four sherds of orange colour-coated ware of the late 3rd century A.D. (e.g. 115, 146) were found, together with a single Belgic sherd (139). Fragments of medieval pottery were also found.

¹Head: *Early Man in South Buckinghamshire* (1955) 52, Fig 13.

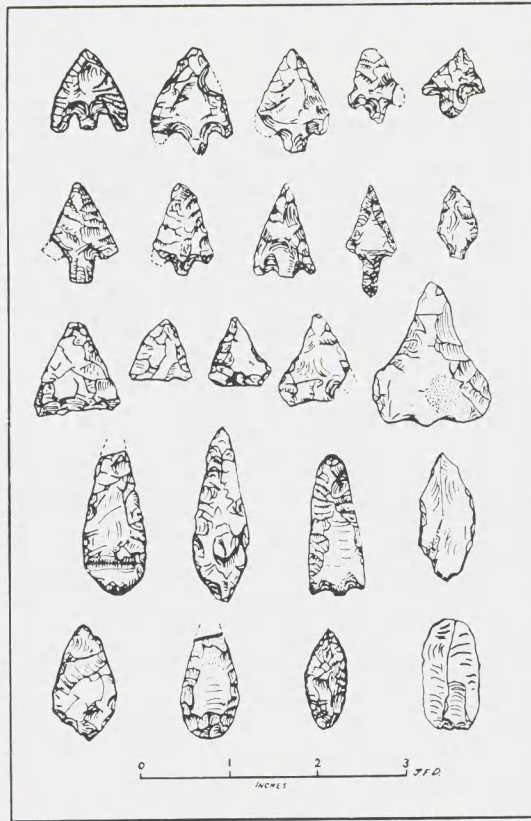


Fig 6. Part of the collection of flint arrowheads from Waulud's Bank, found by Thomas Cumberland and now in Luton Museum.

II: FLINT AND STONE (Fig 6)

Unworked flint flakes were found throughout the filling of the ditch, but none showed any secondary working or serration as at Barton Hill Farm. Thomas Cumberland had collected a large number of arrowheads from the interior of the earthwork during the early years of this century. They included leaf shapes and petit tranchet derivatives – both at home within the Rinyo-Clacton culture. The surface also produced both distinct and rudimentary barbed and tanged arrowheads.

High in the ditch filling a Mesolithic core-axe of the Thames pick variety was found. It had clearly been thrown there in historical times, and may well have been picked up from beside the marsh, where as hinted above, it may have been used by people of Mesolithic stock who had adopted a Neolithic way of life.

At a depth of 3 feet in the ditch of Site I a small piece of oolitic limestone, quite foreign to the area, was found. Oval in section and 1 in thick, it appeared to have been roughly flaked and smoothed on opposite sides. It is conceivable that it formed part of a stone disc of the type associated with the Severn-Cotswold and Clyde-Carlingford chambered tombs.¹

III: BONE OBJECT (Fig 5)

A piece of bone 2.0 in long, 0.7 in wide and 0.35 in thick was found at a depth of 6 ft in the ditch of Site I. It has been cut and smoothed at each end and resembled a small knife handle. Since the bone is split longitudinally, and is partially broken, it is not possible to say whether it ever acted as a haft as its appearance would suggest, or was bored at one end to form a bone pendant.

IV: ANIMAL BONES AND SHELLS

As in other Neolithic habitation sites the most striking feature is the large number of ox bones; dentition indicates both fully grown and immature animals. Pig is represented in a much smaller quantity. Three worn horse incisors from near the bottom of the ditch may represent wild species which could well have been common towards the end of the Neolithic period.

Oyster shells some 2½ feet from the modern surface of the ditch presumably can be related to the Medieval period.

V: METAL WORK

Some eighteen iron nails, probably connected with the water-mill were found in the upper 2½ ft of the ditch-filling, whilst the frame of an iron buckle measuring 1.9 in by 1.2 in occurred at a depth of 18 in in the centre of the ditch.

ACKNOWLEDGEMENTS

The writer wishes to thank the South Bedfordshire Archaeological Society for permission to reproduce this report in extended form from the cyclostyled *Bedfordshire Archaeologist*. He is indebted to the owners of the site, and the Borough Engineers Dept. of Luton Corporation for the loan of equipment and fencing. Mr and Mrs Fensome of Bramingham Road, Luton were a constant source of assistance. Miss Joan Kirk (now Mrs David Clarke), Mr Nicholas Thomas and Mr Charles Freeman gave help and advice whenever possible. A special debt of gratitude is owed to Mr A. C. Jordan, the excavation photographer, and Miss Freda Smith (now Mrs Norman Walker) who capably acted as Assistant Director. Dr Isobel Smith kindly confirmed the writer's identification of the Neolithic pottery and Mr William H. Manning identified the Roman sherds.

The publication of this report has been made possible by a grant from the
Council for British Archaeology.

¹cf. Pigott *The West Kennet Long Barrow* (1962) 48-9.

A Gazetteer of Neolithic and Bronze Age Sites and Antiquities in Bedfordshire

NICHOLAS THOMAS

THIS gazetteer of pre-Iron Age material from Bedfordshire was prepared in 1952 and incorporated in an address given that year to the South Bedfordshire Archaeological Society, of which the writer was President. It was subsequently published in the *Bedfordshire Archaeologist*, 1, 3, 1956. Since that time much excavation and research have taken place in the county and the classification and dating of these phases of our prehistory have undergone considerable change. This new Gazetteer has therefore been compiled in a form which takes into account the newly defined threefold division of our Neolithic; and it also includes the results of extensive excavations by J. F. Dyer and by the Manshead Society, directed by C. L. Matthews. To both of these the writer is deeply indebted for information and advice. He also wishes to acknowledge help freely given by G. C. Dunning, C. E. Freeman and F. W. Kuhlicke.

THE TOPOGRAPHICAL SETTING

Bedfordshire has four major geological divisions, the Chalk in the south, the Gault Clay, the Lower Greensand and in the north the Oxford and Boulder Clay. To these should be added the great sheets of river gravel spread by the Ouse, the Ivel and their tributaries, while there is a small but important outcrop of Oolite north-west of Bedford.

In the south, the Icknield Way runs across the Chalk, suggesting that this must have been almost as open in prehistoric times as it is to-day; and it avoids the clay-with-flints that covers the Chalk in the southernmost part of the county. The River Ivel gave access to the easily cleared Greensand and to those patches of glacial and river gravels that are to be found towards the centre of the county. In the north the Ouse gravels provided man with attractive country to open up, even though the clays north and south were quite impassable.

In Bedfordshire occupation was concentrated upon the Chalk and Greensand and followed the courses of the rivers and the Icknield Way. The areas of clay are devoid of the relics of occupation: but the alluvial deposits on either side of the Ouse, particularly around Bedford, and the Oolite and Cornbrash in the north-west were thickly populated by early man.

The picture of prehistoric occupation presented by this distribution is what we would expect. Where it is free from clay-with-flints, Chalk offered attractive hunting ground and pasture. It was, too, readily cleared and cultivated. The light,

porous soils of the Greensand were likewise easily opened up by these early farmers. Gault and Oxford Clay, however, were impenetrable: where the former was reached, this was achieved by Iron Age settlers, on deposits of gravel around Leighton Buzzard and Toddington.

Watling Street cuts across the south-west corner of our county, following the Chalk and Greensand because they happen to be in its path. By Roman times the clays could be developed with the aid of the more efficient equipment that was available. Ermine Street, to the east of our county, negotiates the clay lands lying in its path. If Roman finds were plotted on the map we should doubtless see an opening up of the northern half of Bedfordshire. But it is noteworthy that the map of *Domesday* manors suggests that the Saxons had not been attracted to cultivate the Oxford Clays. They utilised these areas very sparsely: even then their manors were often placed near rivers, whose alluvial deposits and gravel sheets had been lived on, as we have seen, from Neolithic times.

NEOLITHIC SITES AND REMAINS (C. 3500-1650 B.C.)

During the last ten years, research upon extant material, and fresh discoveries made with the spade and in field work, have altered our conception of the British Neolithic and enormously increased its content. The conception of a primary, Western Neolithic culture imposed, by cross Channel migration, upon the remnants of a Mesolithic population of hunter-fishers, and the emergence of various secondary, local Neolithic cultures which included elements from across the North Sea, remains basically sound. It has become clear, however, that much of the secondary Neolithic was more closely interwoven with and derived from the Western elements than had been thought, and that the length in time of the whole period was very much greater than Professor Piggott had allowed when he outlined it in 1954 (since that time Neolithic chronology in these Islands and generally in Europe has been given precision by a series of absolute dates obtained by the radio-carbon method). At present the earliest Neolithic remains in Bedfordshire are considered to belong to the Middle phase, since there is no direct evidence of earlier date for any of the long barrows nor for the causewayed camp of Maiden Bower. The variety of pottery styles listed in the *Gazetteer*, and the diversity of burial and ritual sites which have been excavated in recent years, reflect the geographical position of the county. For its southern chalk lands belong to the Chilterns, an area of fertile land where in Neolithic times, cultural streams from East Anglia, Wessex and ultimately the Irish Sea area were mingling, with additional influence from the Thames Valley and from the chalk lands of south-east England. Windmill Hill, Abingdon, Whiteleaf-Mildenhall and Ebbsfleet wares have all been recovered from the Luton-Dunstable area.

Together with the five long barrows which have been recorded, stands the slight mound on Dunstable Downs which may belong to the class of mortuary enclosure which recent research has shown to be an integral feature of the unchambered long barrow burial rite in England. It is also permissible, perhaps, to interpret a straight length of ditch interrupted by a causeway at Kempston, Bedford, as one side of a *cursus*, the type of ceremonial avenue intimately associated with unchambered long barrows, at least in Southern England, and often situated close to rivers. The Kempston *cursus*, if such this is, has yielded a Bell Beaker from its filling but this presumably represents a *terminus ante quem* for the date of construction of the earthwork.

In the area of Streatley, where the site of a possible causeway camp at Maulden Firs is currently under investigation, a group of Middle Neolithic ritual and burial sites has been uncovered with characteristics which cannot at present be matched outside the Chilterns. The structure excavated by Sir Lindsay Scott at Whiteleaf, Bucks.¹ belongs to this complex, whose features include mortuary structures within circular ditched enclosures, alignments of pits incorporating burials, and the practice of interring corpses already partly disintegrated through exposure.

The Late Neolithic in the county is represented by structures belonging to the makers of Peterborough and Grooved wares. The enigmatic earthwork of Waulud's Bank, Leagrave, has yielded Grooved ware and is described elsewhere in this *Journal*. So far without parallel in Britain—an enclosure defined by a large rampart with outer ditch, in low lying ground and controlling a natural water supply—this site might yet serve as a prototype for Early/Middle Bronze Age enclosures like that at Ram's Hill, Uffington, Berks.²

Part of a ditch with a hearth pit at Eaton Socon was associated with Peterborough pottery, and further sherds of this ware, classic examples of the Mortlake style, have been found without association on the Ouse gravels at Kempston.

A series of burials has been found in Bedfordshire, all but one unassociated with datable grave-goods or other finds, but which probably belongs to the Late Neolithic. Barrow No. 5 in the Five Knolls barrow cemetery on Dunstable Downs covered the crouched skeleton of a woman buried in an oval pit and provided with a flint blade-flake whose edge had been ground down. This burial matches closely the inhumation from Lynch Hill Corner, Stanton Harcourt (Oxon.), which was stratigraphically earlier than a barrow containing a late form of Bell Beaker.³

¹*P.P.S.* XX, 1954, 212ff.

²*Ant. J.* XX, 1940, 467ff.

³W. F. Grimes, *Excavations on Defence Sites*, 1939-45, H.M.S.O., 1960, 154ff.

J. F. Dyer's barrow no. 14 on Galley Hill may also belong to the Late Neolithic, although an earlier phase for it is not ruled out since a shallow pit containing the dismembered remains of two young men found beneath it recalls certain features of the Middle Neolithic sites at Barton Hill, Streatley.

The contracted inhumation of the well-known woman and child (imaginatively surrounded with fossil sea-urchins by Worthington Smith), and of a boy, on Dunstable Downs, and the similar burial of a man in Albion Street, Dunstable, represent the rite of individual inhumation burial in a contracted position which became popular in Britain with the arrival of colonists from northern Europe and the Rhine who made Beakers and already knew metal. The woman and child were associated with fragments of two Beakers and had been placed in one of six or seven pits, some containing cremations, which surrounded a central grave. The boy lay beneath a barrow situated a short distance south of the last. The mound was 46 feet in diameter and covered a central grave with pits arranged round it. There was no ditch, for the mound was composed of topsoil scraped up from round about. The only pit which had not been disturbed in antiquity contained the crouched skeleton of a boy aged 14-16; also in the grave were five flint tools, a nodule of iron pyrites and a group of potsherds representing a small vessel whose shoulder had been decorated with a series of circular reed-like impressions. The recurring feature of pits surrounding a central grave has been found many times in areas of Britain supporting large Beaker populations and its discovery in the Chilterns is not unexpected. To these should perhaps be added the crouched inhumations reported by C. L. Matthews at Totternhoe and on West Street Downs, Dunstable. On his recommendation these have been listed as Early Bronze Age in the *Gazetteer* (Nos. 5 and 6, p. 30), but their resemblance to certain burials of the Late Neolithic should not be ignored.

The area of major Beaker settlement in Bedfordshire was along the banks of the Ouse about Bedford, with extensions further west at Turvey and south-east around Shefford and Clifton, close to a tributary of the River Ivel. These settlements suggest entry to the area by river from the north-east, whereas the Beaker remains on the chalk lands of the Chilterns, already described, represent movement by land along the Icknield Way.

The establishment of Beaker people in Bedfordshire seems to have been late, for only three examples of Bell Beaker pottery have so far been found here, the vessel from the ditch at Kempston and sherds from Dunstable Downs and Blows Downs, Caddington. The slate bracer from Sandy is also, of course, a type of object associated with Bell Beakers.

There remain the Long-Necked Beakers from the county, which have been described by G. C. Dunning in 1938 and F. W. Kuhlicke in 1950.¹ All except one

¹*Ant. J.* XVIII, 1938, 284ff; *Beds. Magazine*, No. 2, Winter 1949-50, 105-6.

were stray finds, although close to the two vessels from the Fenlake area a flint leaf-shaped knife of Beaker type was also discovered. The Beaker from Clifton was found in circumstances which, if obscure, nevertheless suggest that it was associated with one of four skeletons of adults and one of a child.

THE EARLY AND MIDDLE BRONZE AGE (C. 1650-950 B.C.)

Recent excavations by J. F. Dyer and C. L. Matthews have established two main centres of population in the county at the beginning of the Bronze Age. The activities of the Manshead Society around Dunstable have shown that the well-known barrow cemetery on Dunstable Downs, the Five Knolls, is part of a larger concentration of burial structures and habitation sites extending north-west to Totternhoe. At Marina Drive, Dunstable¹ a grooved knife of bronze with two rivets has been found in a barrow with a cremation, the first typical Early Bronze Age grave to be recorded in the county. Cremations have been found in the three barrows or ring-ditches so far excavated here on the Totternhoe ridge by the Manshead Society, and a recurring feature has been the discovery of so-called ritual pits lying just outside the limits of the barrows.

J. F. Dyer's study of barrows in the Chilterns² has established the existence of two probable pond-barrows on the east side of the triple bell-barrow and two bowl-barrows constituting the Five Knolls cemetery. Here the presence of a Late Neolithic round barrow at the north end of the group (No. 5) demonstrates that continuity between barrows of successive periods in cemeteries that is also a feature of the great barrow groups in Wessex.

The second concentration of Early Bronze Age barrows and related structures extends from Galley Hill, north of Luton, to Barton Hill Farm, and, like the Five Knolls, it is close to the Icknield Way. The four bowl-barrows on Galley Hill are currently under examination by excavation. So far, the discovery of dismembered but articulated remains of two young men beneath No. 14 appears to link the group to the Barton Hill ritual sites and we have already suggested that this burial may be Late Neolithic (above, p. 19). Since writing in 1956, crop marks representing two barrows have been located from the air between Galley Hill and Barton Hill and serve to emphasise the strength of Early Bronze Age occupation hereabouts.

Excavation of Drays Ditches, a complex linear earthwork immediately south-west of Galley Hill³, has revealed evidence of some sort of continuity extending from a Bronze Age period represented by a flat-bottomed ditch

¹C. L. Matthews, *Ancient Dunstable*, 1963, 16ff; *B.A.J.* 1, 1962, 25ff.

²*Arch. J.* CXVI, 1959, 1ff.

³*Ant. J.* XLI, 1961, 34ff.

containing Collared Urn sherds to the Iron Age, when a series of V-shaped ditches and palisades replaced the earlier structure. This sequence resembles closely the succession of boundary ditches on Snail Down (Wilts.) excavated by the writer in 1957.¹

Domestic sites of the period are represented by a discovery of unusual interest at Totternhoe. Here C. L. Matthews has recorded traces of a circular hut, 23 ft in diameter, associated with a pit which had been submitted to intense heat, and a series of indeterminate timber structures represented by post-holes arranged in pairs and in groups of four. The presence of Collared Urn sherds among the 92 fragments of pottery found with these structures suggests the *possibility* of an Early or Middle Bronze Age date for this hut and furnace pit. The group of reputed hut depressions on Blows Downs, examined by Worthington Smith in 1888, may also belong to this period, but his finds of potsherds and flints have not survived for assessment.

Unassociated pottery, Collared Urns, Food Vessels and Bucket Urns of Devrim ware fill out this picture of the earlier Bronze Age occupation of the county and make it clear that occupation was not restricted to the chalk. A series of finds from the gravels of the Ouse shows that settlement in the area of Bedford was continued well into the Bronze Age by makers of these later wares. Of sixteen examples of Collared Urns from the county, four belong to the primary series recently defined by I. H. Longworth,² and together with the so-called Food Vessels from New Harroden, Heath and Newnham Walls Field, and the Incense Cup from Leighton Buzzard, they represent the first phase of Bronze Age occupation in Bedfordshire. The Five Knolls cemetery, with its specialised barrow forms, and perhaps the Galley Hill group, were probably contemporary.

The majority of stone implements found in Bedfordshire have been omitted from the Gazetteer, but in recording the extent of the Early Bronze Age settlement mention should be made of the two well-finished flint arrowheads of Wessex style³ found at Leagrave, on the Icknield Way, and a third of the same unmistakable type from Maiden Bower. Moreover J. F. Dyer has identified the two flint daggers of Danish Early Bronze Age type in the British Museum, which were found on the Luton-Dunstable road—the Icknield Way—in 1951. These help to fill out the distribution of such Scandinavian finds in south-eastern England plotted by Piggott in 1938⁴.

The distribution of Middle Bronze Age material in the county has a noticeable concentration in the south, most of the Devrim wares occurring at

¹ *Wilts. Arch. Mag.* LVII, 1958, 8, Sites VI/VII.

² *P.P.S.* XXVII, 1961, 263ff.

³ Discussed by S. Piggott in *Culture and Environment*, 1963, 77-8.

⁴ *P.P.S.* IV, 1938, 81, fig 16.

Toddington and Streatley, with early, low-flanged palstaves at Chalton and Silsoe and a socket looped spearhead of Brewis's Class IV at Sundon. Yet a similar spearhead and Devrim pottery from Kempston show that the Ouse gravels continued to attract settlers.

In the Late Bronze Age (c. 950-500 B.C.), the bronzes have a wider distribution in the county. The only substantial hoard, including sixty socketed axes of English type, was found at Wymington in the north-west of Bedfordshire, with socketed axes from Eaton Ford and Oakley also north of Bedford. A small hoard from Ickwell Bury and two isolated finds of Irish bag-shaped socketed axes from Biggleswade again lie north of the chalk.

The concentration of Bronze Age material around Dunstable and Luton continued through this late period. Two groups of smiths' bronze scrap have been found near Toddington, with (but not associated) a socketed axe and two leaf-shaped spears with peg-holes through the sockets from Toddington itself. Chalton has also yielded a socketed axe.

The most important Late Bronze Age site was found by C. L. Matthews at Totternhoe, before the Second World War.¹ Here occupation material, which overlay a V-shaped ditch, included a vase-headed bronze pin of Alpine style and flat-rimmed pottery which must belong to the 6th century B.C. The ditch was thus earlier. With J. F. Dyer's crematorium, or ritual site at Cople, near Bedford, this survey is brought to a close, for while its flat-rimmed pottery recalls the vessels from Totternhoe, a blue glass bead of La Tène culture suggests that the use of this site extended well into the Iron Age.

The material described in this survey, representative of a wide variety of Neolithic and Bronze Age cultures, reflects the commanding geographical position of Bedfordshire. Continued research by fieldwork and excavation should throw valuable light upon the cultural connections between East Anglia, Wessex and the south-east in these periods of our prehistory.

¹*Ant. J.* XX, 1940, 487ff.

A GAZETTEER OF NEOLITHIC AND BRONZE AGE SITES AND ANTIQUITIES IN BEDFORDSHIRE

A letter or name in brackets placed after references indicates the present whereabouts of finds: numbers in brackets which follow the names of long and round barrows are those adopted by J. F. Dyer in his paper on barrows of the Chilterns (*Arch. J.* CXVI, 1959, 1ff.). The following abbreviations have been used in the Gazetteer:

Museums and collections.

B	Bedford Museum (incorporating collections of Bedford Modern School).
B.M.	British Museum.
C	Museum of Archaeology and Ethnology, Cambridge.
D	Manshead Society, Dunstable.
J.F.D.	Private collection, J. F. Dyer, Luton.
L	Luton Museum.

References

<i>Ant. J.</i>	<i>Antiquaries Journal.</i>
<i>Arch.</i>	<i>Archaeologia.</i>
<i>Arch. J.</i>	<i>Archaeological Journal.</i>
<i>B.A.J.</i>	<i>Bedfordshire Archaeological Journal.</i>
<i>B.A.P.</i>	J. Abercromby, 1912. <i>A Study of the Bronze Age Pottery of Great Britain and Ireland and its Associated Grave Goods.</i>
<i>Beds. Arch.</i>	<i>Bedfordshire Archaeologist.</i>
<i>B.M.S.M.G.</i>	<i>Bedford Modern School Museum Illustrated Guide</i> , 1925.
Dyer.	<i>Arch. J.</i> CXVI, 1959, 1ff, "Barrows of the Chilterns".
Evans, <i>Bronze</i> .	J. Evans, <i>The Ancient Bronze Implements, Weapons and Ornaments of Great Britain and Ireland</i> , 1872.
Evans, <i>Stone</i> .	J. Evans, <i>The Ancient Stone Implements, Weapons and Ornaments of Great Britain</i> , 1872.
Matthews.	C. L. Matthews, <i>Ancient Dunstable</i> , 1963.
<i>P.P.S.</i>	<i>Proceedings of the Prehistoric Society.</i>
<i>P.P.S.E.A.</i>	<i>Proceedings of the Prehistoric Society of East Anglia.</i>
<i>Proc. Soc. Ant.</i>	<i>Proceedings of the Society of Antiquaries of London.</i>
<i>V.C.H.</i>	<i>Victoria County History.</i>

EARLY NEOLITHIC (C. 3500-2600 B.C.)

No sites or antiquities of our earliest Neolithic colonists have yet been found in the county although it is possible that some of the long barrows may have belonged to the first phase of the Neolithic.

MIDDLE NEOLITHIC (C. 2600-2100 B.C.)

Causewayed camps

1. Maiden Bower, Dunstable.

V.C.H. Beds. I, 1904, 169; *Arch. J.* LXXXVIII, 1931, 90-2; *P.P.S.* XX, 1954, 228; *Beds. Arch.* I, No. 2, 1955, 47ff. (L)

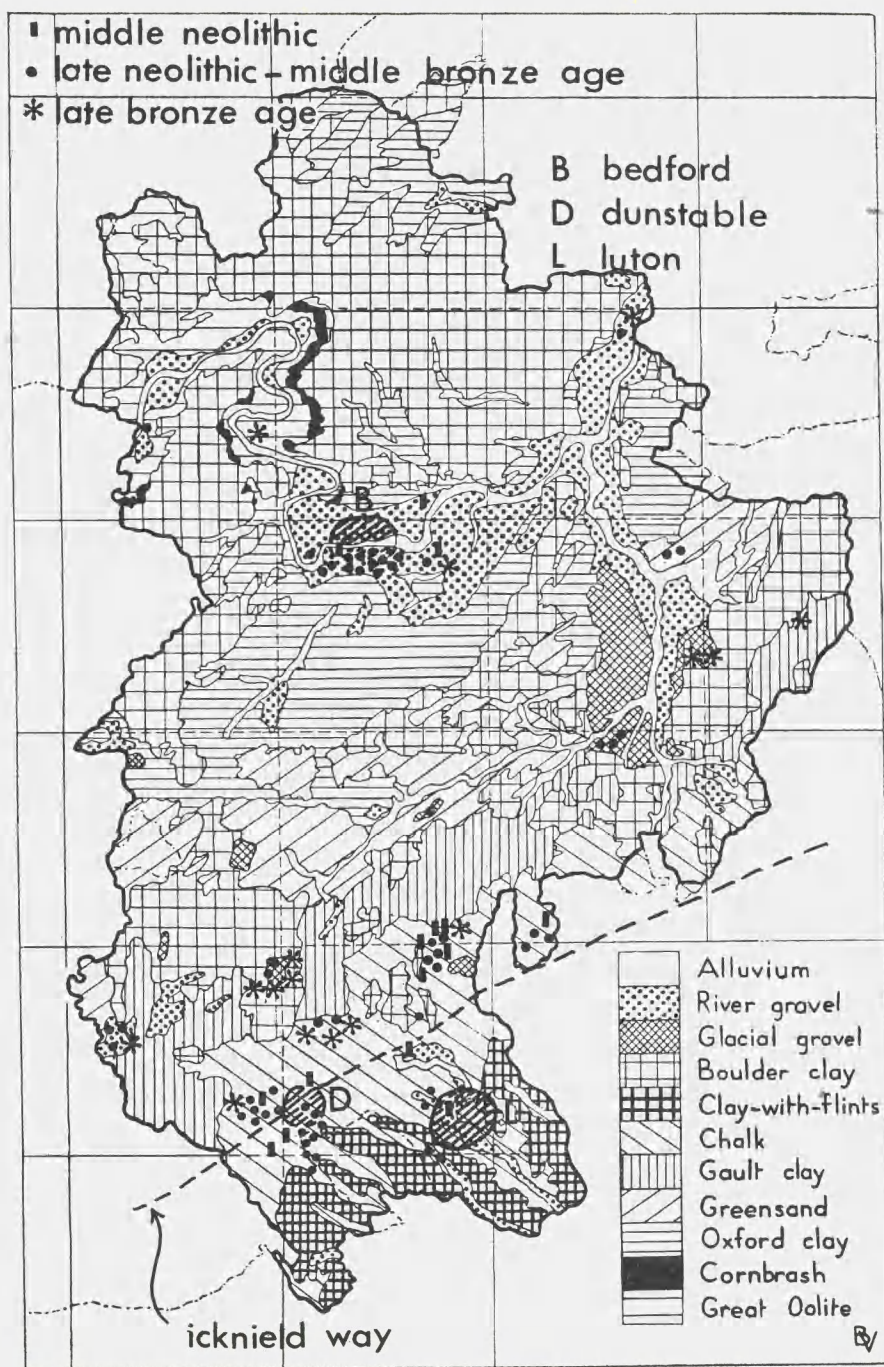


Fig 1. Distribution map of finds in the county.

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|---|--|
| 2. Maulden Firs, Streatley, TL/095277. | At present being investigated by J. F. Dyer: no information available, August 1963. |
| 3. Cardington, TL 093485; triple interrupted ditches. Romano-British pottery from trial trench. | <i>Beds. Arch.</i> I, No. 3, 1956, 94; <i>A matter of Time</i> , H.M.S.O., 1960, 54. (C) |

Long Barrows

- | | |
|---|--|
| 1. Knocking Knoll, Pegsdon (13). | <i>Beds. Arch.</i> I, No. 1, 1955, 14; Dyer, 14. |
| 2. Waulud's Bank, Legrave (20). | Dyer, 14. |
| 3. Union Street, Dunstable (21).
(Also called Mill Bank, Mill Hill and Windmill Hill). | <i>Arch.</i> XXVII, 1838, 101; <i>Beds. Arch. ibid</i> 14; Dyer, 14. But declared to be a natural mound in Matthews, 13. |
| 4. Galley Hill, Streatley (22). | Recently located from the air; <i>Beds. Arch. ibid</i> , 14; Dyer, 14. |
| 5. Biscot Mill, Luton (28). | <i>Beds. Arch. ibid</i> , 14; Dyer, 14. (Greenstone axes from nearby). (L) |
| 6. Dunstable Downs (West Street Downs), perhaps a long mortuary enclosure. | <i>Beds. Arch. ibid</i> , 14; Dyer 4. |

Ritual Structures

- | | |
|--|--|
| 1. Barton Hill, Streatley, Site I (30). A circular enclosure containing mortuary structure and inhumation burials. | <i>B.A.J.</i> I, 1962, 1ff. (L) |
| 2. Barton Hill, Streatley, Site II (31). Line of intersecting pits, inhumation burial and post hole etc. | <i>B.A.J. ibid</i> , 8. Inf. J. F. Dyer. (L) |
| 3. Kempston, Bedford. Length of ditch interrupted by causeway perhaps part of a cursus: destroyed. Bell Beaker from filling (below, late Neolithic pottery). | <i>Ant. J.</i> XVIII, 1938, 284ff. (B) |
| 4. Galley Hill, Streatley. Line of pits (? intersecting) on line, TL/095266-095271. | Unpublished. Inf. J. F. Dyer. |

Pottery

- | | |
|---|--------------------------------|
| <i>A. Windmill Hill Ware.</i> | |
| 1. Barton Hill, Streatley, Site II. | Unpublished. (J.F.D.) |
| 2. Barton Hill, Streatley, Site III. | <i>B.A.J.</i> I, 1962, 17. (L) |
| 3. Galley Hill, Streatley, No. 3, ware not certain. | Unpublished. (J.F.D.) |
| 4. Galley Hill, Streatley, line of pits. | Unpublished. (J.F.D.) |
| <i>B. Abingdon Ware.</i> | |
| 1. Five Knolls, Dunstable, No. 2. | Unpublished. (L) |

C. *Whiteleaf-Mildenhall Ware*.

1. Maiden Bower, Dunstable.
2. Barton Hill, Streatley, Site I.

Arch. J. LXXXVIII, 1931, 90ff. (L)
B.A.J. I, 1962, 14ff. (L)

D. *Ebbsfleet Ware*

1. Five Knolls, Dunstable, No. 2.

Unpublished. (L)

Other Objects

1. Part of antler comb, Maiden Bower, Dunstable. *V.C.H. Beds.*, I, 1904, 169, fig. 60, (now lost).
2. Polished flint knife-blade. Five Knolls, Dunstable, No. 5 (Fig. 2). *Arch. J.* LXXXVIII, 1931, 196, fig. 2; *Beds. Arch.* I, No. 3, 1956, 75, fig. 4. (L)
3. Antler sleeve for flint blade, Goldington (R. Ouse). *Beds. Arch.* I, No. 1, 1955, 30. (B.M.)
4. Biconical bead, shale, Barton Hill Site I. *B.A.J.* I, 1962, 19. (L)

LATE NEOLITHIC (C. 2100-1650 B.C.)

Barrows and burials

1. Dunstable Downs (Gold Club House) (8). Contracted inhumations of woman and child, Beaker sherds in mound. Dyer, 15. (L.B)
2. Dunstable Downs (9). Contracted inhumation of boy. Dyer, 15. (L)
3. Albion Street, Dunstable (10). Contracted male inhumation, date not established. Dyer, 15.
4. Clifton. Long-necked Beaker, five inhumations. *Ant. J.* XVIII, 1938, 285; *Beds. Magazine*, Winter, 1949-50, 2, 104ff. (B)
5. Five Knolls, Dunstable Down No. 5 (5). But period within Neolithic not closely established. *Arch. J.* LXXXVIII, 1931, 193; Dyer, 15. (L)
6. Galley Hill, Streatley, No. 14 (17). But period within Neolithic not closely established. May have covered shallow pit containing dismembered but articulated remains of two young men. Dyer, 15. Inf. J. F. Dyer.

Other Sites

1. Waulud's Bank, Leagrave. Enclosure. This Volume, p. 1ff. (L)
2. Eaton Socon, near St. Neots. Ditch, hearth, etc. *Beds. Arch.* I, No. 2. 1955, 54-5. (C)

Pottery

A. *Peterborough (Mortlake-Fengate) Wares.*

1. Eaton Socon, Mortlake Ware.
2. Kempston, Bedford. Mortlake Ware.
3. Barton Hill, Streatley, Site III. Mortlake and Fengate Wares.

Beds. Arch. I, No. 2, 1955, 54ff. (C)

Arch. J. LXXXVIII, 1931, 122, fig. 16. (B)

B.A.J. I, 1962, 17. (L)

B. *Rinyo - Clacton (Grooved) Ware.*

1. Waulud's Bank, Leagrave.

This volume, p. 1f. (L)

C. *Other Wares.*

1. Foster's Pit, Kempston, Bedford. Hard, black rusticated (paired finger-nail) sherds.
2. Dunstable Downs, Late Neolithic Barrow (Dyer's No. 9). Fragment of biconical vessel, circular impressions along shoulder; flint-gritted red ware. With inhumation of boy.

Unpublished. (B)

Unpublished. (B)

D. *Beakers.*

1. Kempston, Bedford, Bell Beaker; in filling of ? cursus ditch (above, Middle Neolithic ritual structures).
2. Kempston, Bedford, Long-Necked Beaker; stray find.
3. Turvey Abbey, Long-Necked Beaker; stray find.
- 4 and 5. Fenlake-Cardington area, Bedford, two Long-Necked Beakers, other Beaker sherds and flint dagger of Beaker style; stray finds.
6. Shefford or Clifton, Long-Necked Beaker; stray find.
7. Clifton, Long-Necked Beaker; associated with one of 5 skeletons (above, Late Neolithic burials).
8. Dunstable Downs, Late Neo. burial 1, (Dyer, No. 8), Rouletted and rusticated sherds.
9. Five Knolls, Dunstable, Bronze Age barrows 2 and 3. Sherds in mound.
10. Blows Downs, Caddington, TL/050187. Corded Beaker sherd.

Ant. J. XVIII 1938, 283-285. (B)

ibid. pl. LVIII, 1. (B.M.)

ibid. pl. LVIII, 2. (B)

Beds. Magazine, No. 2, Winter, 1949-50, 106. (B)

Beds. Historical Records Soc. IX, 1; *Ant. J.* XVIII, 1938, 284, pl. LIX, 1; *Beds. Magazine* *ibid.*, 105. (Huntingdon Institute).

Ant. J. opp. cit. pl. LIX, 2; *Beds. Magazine*, *ibid.* (B)

W. G. Smith, *Man the Primeval Savage*, 1894, 337, fig. 237. (B)

Unpublished. (L)

Unpublished. Inf. C. L. Matthews. (L)

Other objects

- | | |
|---|--|
| 1. Wrist-guard, Sandy; bi-convex, $4\frac{3}{8}$ in. x $1\frac{3}{16}$ in., central counter-sunk hole at each end. Classic European Bell Beaker type. | Evans, <i>Stone</i> , 427. (Ashmolean Museum). |
| 2. Flint dagger, Fenlake-Cardington area, with Beakers 4 and 5. | Above, Beaker Pottery, nos. 4 and 5. (B) |
| 3. Flint dagger, Kempston, Bedford. Stray find. | <i>Proc. Soc. Ant.</i> XXXII, 1919-20, 17, fig. 11; <i>P.P.S.E.A.</i> VI, 1931, 351. (B.M.) |
| 4. Flint dagger, Jackdaw Hill, Leighton Buzzard. Stray find. | <i>Arch.</i> LXIX, 1920, 5; <i>Annual Rep. Camb. Mus. Arch. and Ethn.</i> , 1909, pl. ii; <i>P.P.S.E.A. ibid.</i> , 351. (C) |

EARLY AND MIDDLE BRONZE AGE (C. 1650-1350: 1350-950 B.C.)

Barrows

- | | |
|---|--|
| 1. Bowl-barrow (1) | } Five Knolls, Dunstable Dyer, 15ff. (L)
Down. Barrow 5,
Late Neolithic,
described above. |
| 2. { | |
| 3. { Triple bell-barrow | |
| 4. { (2-4) | |
| 6. { | } described above. |
| 7. { Pond-barrows (6, 7) | |
| 8. S. of Five Knolls, Dunstable (12). | Dyer, 15. |
| 9. S. W. Maiden Bower, Dunstable (11). Crop mark. | Dyer, 15. |
| 10. Marina Drive, Dunstable (29) ? Ritual pit containing pig bones, potsherds and flints, lay not far from barrow (cf. below, No. 11). | <i>B.A.J.</i> I, 1962, 25ff. Matthews, 19. (L) |
| 11. Totternhoe Ridge, Dunstable. Ring ditch 20 ft. in diam. Primary crem. in urn within pit near centre; secondary crem. in miniature O.H.R. Urn in ditch; SP/989223. A ? ritual pit outside barrow 59 ft. S.E., like that close to No. 10 above. | Matthews, 17. (L) |
| 12. { Barrow group, Galley Hill, Streatley (15-18). | Dyer, 15; inf. J. F. Dyer |
| 13. { Dismembered but articulated remains of two | |
| 14. { young men beneath No. 14. | |
| 15. No. 15 possibly enlarged in Iron Age. | |
| 16. Galley Hill, Streatley. Crop mark (26). | Dyer, 15. |
| 17. Galley Hill, Streatley. Crop mark (27). | Dyer, 15. |
| 18. { The Plantation, Leighton Buzzard | (B), (Torquay Museum) |
| SP/919272. | |
| 19. { Bowl-barrows. | |
| ? Incense Cup and Food Vessel (below p. 73) from here. (fig. 2) | |
| 20. Tingley Plantation, Pegsdon (14). | Dyer, 15. |
| 21. Caddington (23). | Dyer, 15. |

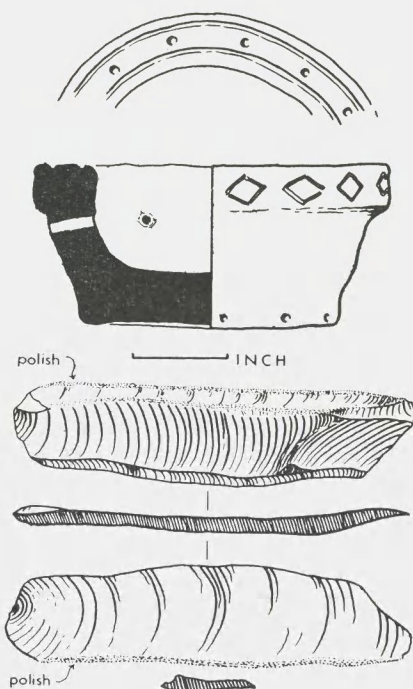


Fig 2. Incense Cup from Leighton Buzzard, and polished flint blade from Five Knolls, Dunstable Downs, no. 5. ($\frac{1}{2}$)

22. Clifton (24) This or the barrow below may have yielded Beaker 6 (above). Dyer, 16.

23. Clifton (25). Dyer, 16.

In addition, two barrows, on Totternhoe Ridge, now ploughed flat and classified as ring-ditches, have been excavated by the Manshead Society, Dunstable within recent years and their Director of Excavations, Mr C. L. Matthews, has kindly supplied details (also recorded in the Society's publication *The Manshead Magazine*, No. 8, 1962):

24. Ring-ditch 60 ft. in diam. Unenclosed cremation in pit 2 ft. from centre; perhaps female. SP/986219.

25. Fifty yards from above. Ring-ditch c. 75 ft. in diam. All traces of burials ploughed away.

Burials, secondary in barrows or barrows not recorded

1. New Harroden, Cardington. Inhumation Unpublished. (B)
(cephalic index 80.6) with undecorated
O.H.R. Urn and accessory vessel.
2. Foulke's Pit, Kempston, Bedford. O.H.R. *Arch. J.* CVIII, 1951, 22, no. 1. (B.M.)
Urn inverted over cremation.

3. Five Knolls, Dunstable Down; secondary cremation in O.H.R. Urn, in Late Neolithic round barrow 5 (Dyer's No. 5). Dyer, 15. (L)
4. Puddlehill, Dunstable, TL/009238. Crouched inhumation in oval grave, flints, potsherds. } Unpublished. Inf. C. L. Matthews.
5. Totternhoe, SP/989223. Crouched inhumation in oval grave. }
6. West Street Downs, Dunstable. Crouched inhumation. (? Bronze Age). *Dunstable Borough Gazette*, Sept. 1935.

Ritual Sites

1. Barton Hill, Streatley, Site III (31). *B.A.J.* 1, 1962, 8ff. (L)

Other Sites

1. Drays Ditches, Streatley. Ditch system (J. F. Dyer's A 1 and A 2). *Ant. J.* XLI, 1961, 34ff. (L)
2. Totternhoe, (SP. 988224). Traces of a hut and furnace pit associated with sherds of O.H.R. Urns and cordoned urns. Matthews, 20. Additional information, C. L. Matthews, and *The Manshead Magazine* No. 8, 1962.
3. Blow's Downs, Dunstable. Group of 24 hut depressions. Two examined by W. G. Smith in 1888. Unidentified pottery and flint scrapers. Excavations by Dunning in 1929 produced no further information. W. G. Smith, *Man the Primeval Savage*, 1894, 323ff.

Pottery

A. Overhanging Rim Urns.

1. Five Knolls, Dunstable, Late Neolithic round barrow 5. *Arch. J.* LXXXVIII, 1931, 197, fig 3. (L)
2. Ditto; cord-decorated potsherds found in barrow mound. *Arch. J.* LXXXVIII, 1931, 209, fig 7 (called 'Saxon'). (L)
3. Ditto, Bronze Age barrow 2. Potsherd from mound. *B.A.J.* 1, 1962, 19. (L)
4. Barton Hill, Streatley, Site I. Intrusive sherds. *ibid.*, 14ff. (L)
5. Barton Hill, Streatley, Site III. Sherds of at least five vessels. *ibid.*, 16ff. (L)
6. Dray's Ditches, Streatley. Sherds of five decorated urns with fragments of other plain urns and one of Devrim type. *Ant. J.* XLI, 1961, 36. (L)
7. Foulke's Pit, Kempston, Bedford. (above, Burials, No. 2). *English Prehistoric Pottery* (Victoria and Albert Museum) 1952, No. 13; *P.P.S.* XXVII, 1961, 296, No. 105. (B.M.)

8. Kempston, Bedford. No details of find. *B.M.S.M.G.* pl. 7, top centre; *P.P.S. ibid.*, No. 107. (B)
 9. Foulke's Pit, Kempston, Bedford. Sherds of two urns (tripartite, incised herringbone on collar). Unpublished. (B)
 10. Kempston, Bedford. Said to be found with necklace of pebbles (lost). *P.P.S. ibid.* 296, No. 106. (Cartwright Museum, Bradford).
 11. Totternhoe Ridge, Dunstable; miniature urn, secondary in barrow (No. 11). Matthews, 17, fig 4. (D)
 12. New Harroden, Cardington. Undecorated urn and accessory vessel with inhumation (above, Burials, No. 1). Unpublished. (B)
 13. Elstow, Bedford. *B.M.S.M.G.* pl. 7, top left. (B)
 14. Newnham Walls Field, Bedford. Sherds of 3 urns, but one possibly a Food Vessel. *B.M.S.M.G.* pl. 7, bottom left and right; *P.P.S.* XXVII, 1961, 296, No. 108. (B)
 15. Sandyhill. No records. *B.A.P.* II, No. 91. (Pitt-Rivers Museum, Dorset).
 16. Deacon Hill, Pegsdon. From hillwash exposed in Home Guard trench. Perhaps derived from site higher up. Inf. J. F. Dyer. (J.F.D.)
 17. West Street Downs, Dunstable, TL/007215. Cord impressed potsherds, flint gritted. Surface finds. Unpublished. Inf. C. L. Matthews. (L)
 18. Knocking Knoll long barrow, Pegsdon, cord-impressed rim sherd found on surface. *This Journal*, p. 77
- B. Food Vessels.*
1. New Harroden, Bedford. Ht. 9 cms. 'Maggot-applied' herringbone dec. on upper half. Unpublished. (B)
 2. Heath, Leighton Buzzard. *This Journal*, p. 73. (Torquay Museum).
 3. Newnham Walls Field, Bedford. Sherds, decorated vessel. *B.M.S.M.G.* pl. 7, bottom left and right. (B)
- C. Incense Cups.*
1. ? The Plantation, Leighton Buzzard. Perhaps from one of the barrows (above, Bronze Age Barrows, Nos. 18, 19). (fig 2) *Beds. Arch.* I, 3, 1956, 82, fig 6. (B)
- D. Accessory Vessels*
1. Totternhoe Ridge, Dunstable. (above, Bronze Age pottery, no. 11) Comb-decorated, lugged vessel with min. O.H.R. Urn. Matthews, 17, fig 4. (L)
 2. New Harroden, Cardington. Found with O.H.R. Urn, above, Bronze Age pottery, No. 12. Ht. 6 in., plain flower-pot shape. Unpublished. (B)

E. Devrim series of Middle Bronze Age

1. Toddington, gravel pit adjoining Tebworth Road. Bucket Urn, ht. 8 in. *B.A.P. II*, No. 472; *Ant. J.* XIII, 1933, 442. (B.M.)
2. Toddington, same pit. Bucket Urn, diam. 10 in. *B.M.S.M.G.* pl. 7, row B, centre, p. 41-2. (B)
3. Dray's Ditches, Streatley. Associated with O.H.R. Urn sherds (above, Bronze Age, Other Sites, No. 1). *Ant. J.* XLI, 1961, 36. (L)
4. Kempston, Bedford. No details. Sherds. Unpublished. (B)

Objects of Flint

1. Arrowheads, Wessex Culture type, Lea-grave. *V.C.H. Beds.* I, 1904, 166-7; W. G. Smith, *Dunstable and its Surroundings*, 1904, 32. (? Lost)
2. Arrowhead, Wessex Culture type, Maiden Bower, Dunstable. Matthews, 19, fig 6. (D)
3. Two flint daggers, Danish type, Luton-Dunstable Road (TL 041224). *Beds. Arch.* I, 3, 1956, 84, fig 5 (B.M.)

Objects of Bronze

1. Knife-dagger; Marina Drive, Dunstable (see Bronze Age Barrows, No. 10). Matthews, 19, fig 6, but inaccurately drawn and scale wrong. (L)
2. Miniature flanged axe; Bedford. Unpublished. (C)
3. Awl, square tang, central expansion, circular section point; Sandy. Unpublished. (C)
4. Palstave, unlooped, shield pattern on blade; Silsoe. Unpublished. (L)
5. Palstave, looped; Chalton. Unpublished. (L)
6. Palstave, unlooped; Chalton. Unpublished. (L)
7. Palstave, unlooped; Chalton. *Beds. Arch.* I, No. 3, 1956, 64. (J.F.D.)
8. Spearhead, leaf-shaped blade, string-loops on shaft; Sundon. Said to be associated with human bones at depth of 6 ft. in chalk. Unpublished. (L)
9. Spearhead, leaf-shaped blade, string-loops on shaft; Kempston-Elstow. Unpublished. (B)

Other Objects

1. Ring money, Well Head. Gold on copper core. *Arch.* XXVII, 1838, 102. (Lost)

LATE BRONZE AGE (C. 950-500 B.C.)

Sites

1. Totternhoe. Occupation overlying V-shaped boundary ditch. Flat-rimmed storage jars *Ant. J.* XX, 1940, 487ff. (L)

- and Alpine vase-headed bronze pin of ultimate Late Bronze Age (± 6th Cent. B.C.).
2. Cople (TL/102497). Possible crematorium, or at least ritual site. Two inhumations within ditch 90 ft. in diam.; limestone footings of structure at centre. Flat-rimmed pottery and blue glass bead. Period perhaps running into Iron Age. Unpublished. Inf. J. F. Dyer. (B)
 3. Maulden Firs, Streatley, rectilinear enclosure 75 ft. x 45 ft., irregular U-shaped ditch; indeterminate pottery. Perhaps L.B.A. This Journal, p. 47. Inf. J. F. Dyer. (L)

Pottery

1. Flat-rimmed wares: see above, late Bronze Age sites.
2. Indeterminate wares: see above *ibid.* No. 3.

Bronzes

1. Socketed axe, Chalton. Two ribs around mouth. Unpublished. (L)
2. Socketed axe, Toddington. Rib around mouth. Unpublished. (Ashmolean Museum. Evans Coll.)
3. Socketed axe, Biggleswade. Bag-shaped Irish type. Unpublished. (C:Z4807)
4. Socketed axe, Biggleswade. Bag-shaped Irish type. Unpublished. (C:F.B.31)
5. Socketed axe, Oakley. Unpublished. (Peterborough Museum, now lost).
6. Socketed axe, Eaton Ford. Three ribs on face. *V.C.H. Hunts.* I, 1926, 208, pl. II, 9; *Ant. J.* XIX, 1939, 403.
7. Two leaf-shaped spearheads, Toddington. Lengths, $7\frac{3}{4}$ in., 6 in.; peg-holes in sockets. Evans, *Bronze*, 321; *Arch.* XXVII, 1838, 105. (± Lost).
8. Leaf-shaped spearhead, Bedford. Greenwell/Brewis, Class V. *P.P.S.E.A.* VII, 1933, 161, pl. VII, 8b. (Lost)
9. Hoard, Park Close, Toddington. Raw material. *B.M.S.M.G.* pl. 5, right. (B)
10. Hoard, Fancott, Toddington. Raw material. *ibid.*, pl. 5, left. (B)
11. Hoard, Wynington. Sixty socketed axes, looped. Majority one or two ribs around mouth, one has three ribs on face. Also fragments and raw material. Evans, *Bronze*, 113, 466; *V.C.H. Northants.* I, 1902, 143; *B.M.S.M.G.* pl. 5. (B: cast in L)
12. Hoard, Ickwell Bury. Palstave (LBA type), socketed axe with rib around mouth, frag. ditto, raw material (bun-shaped ingots?). *Ant. J.* XXXIV, 1954, 232ff. (Destroyed).

Excavations at Wilbury Hill, an Iron Age Hill-Fort, Near Letchworth, Herts. 1959.

by JOHN MOSS-ECCARDT

THE work was carried out on behalf of the Ancient Monuments Inspectorate of the Ministry of Works and Letchworth Museum. It consisted of a trial excavation in a small area destined to become the site of a Royal Observer Corps observation post. Operations occupied a period of three weeks during September and October 1959. The writer wishes to place on record his thanks for the help and support received from Letchworth Urban District Council and from the Curator of the Museum, Mr A. T. Clarke, F.M.A.

Wilbury Hill lies about one mile to the west of Letchworth (Nat. Grid. Ref. 52/212326) at a height of 285 ft above Ordnance Datum. E. S. Applebaum considered the area of the camp to be about 15 acres but further excavation will have to decide this matter. Traces of the rampart can be seen for just under half of its estimated circuit and the camp appears to be of an oval shape (Fig 1 and Pl IV). A full account of the site is given by Applebaum in his report on the 1933 excavations.¹

The camp is mentioned by various writers, among them Camden,² Salmon,³ Brayley,⁴ and Clutterbuck⁵. Roman finds are reported from Wilbury and its vicinity including coins,⁶ interments, and a bronze figure.⁷ No doubt these finds have been responsible for the local tradition of referring to the Wilbury gravel pit as 'the Roman Camp'. Bronze bracelets, rings, buckles, Roman and Iron Age potsherds from Wilbury are in Letchworth Museum.

Digging was carried out by William Lucas and Joseph Lister about 1810, and William Ransome between 1848 and 1850. In 1929 W. P. Westell dug a small area to the north of the supposed south gate of the Camp and found pits, hearths, flint pavements and potsherds.⁸ He also dug trenches somewhere in the region of 1959 trenches but the position is very inexact on the plan (see Fig 1). In 1933 E. S. Applebaum conducted excavations at Wilbury which consisted of sectioning the rampart in four places and discovering the south gate⁹ (see Fig 1). The majority of the finds is in Letchworth Museum.

¹E. S. Applebaum 'Excavations at Wilbury Hill'. *Arch. J.* CVI.

²*Britannia*. ed. Gough. ii. 46.

³*Hist. of Herts* (1728). 160.

⁴*Beauties of Britain: Herts*. 176.

⁵*Hist. of Herts*. iii. 12-13.

⁶*Arch.* liii. 257.

⁷Cussans. *Hist. of Herts*. ii. 5.

⁸*J.B.A.A.*² xxxviii. 248 ff.

⁹Applebaum. *op. cit.*

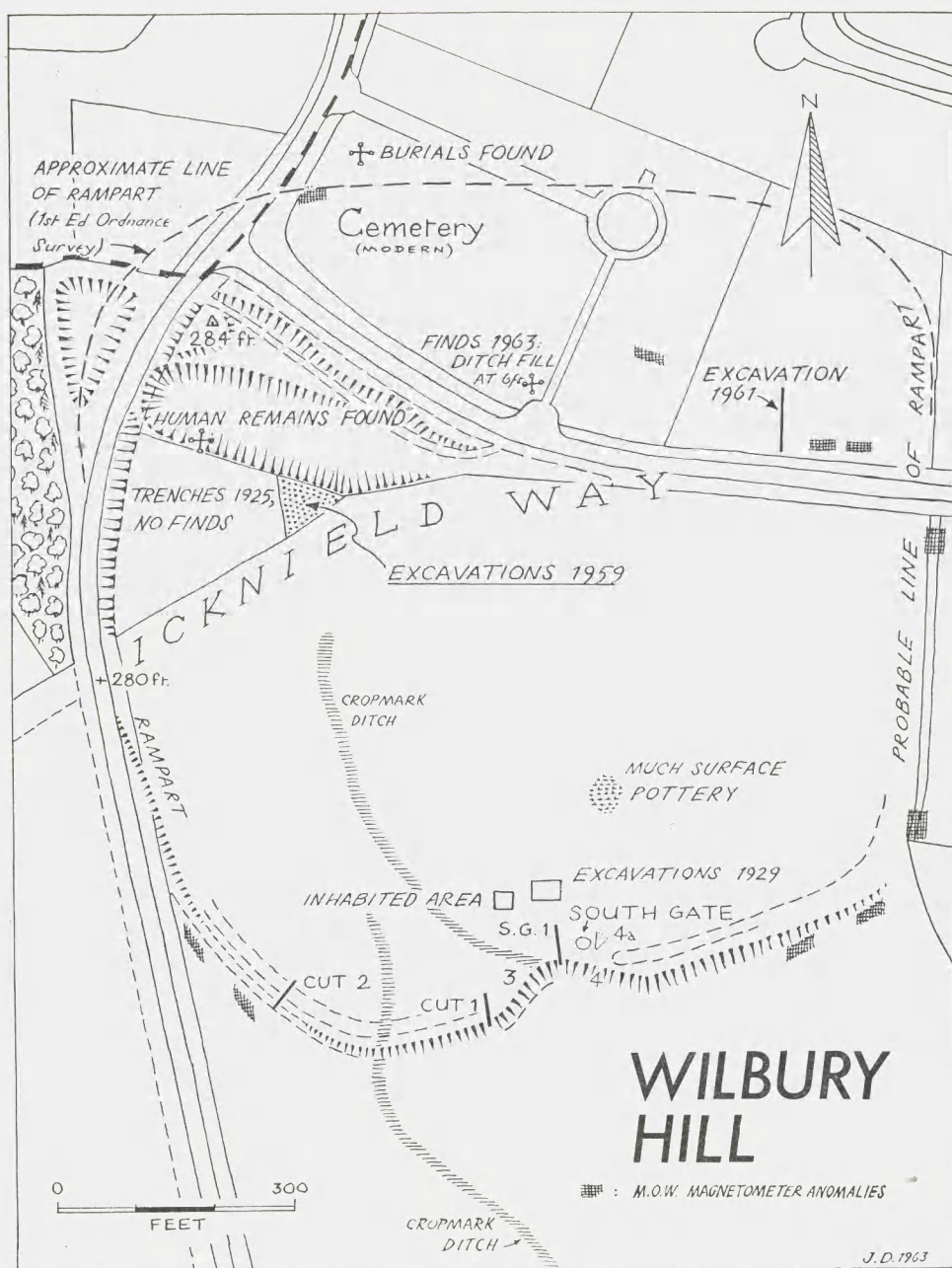


Fig 1. Map of Wilbury Hill, near Letchworth, showing the position of 1959 Excavations.

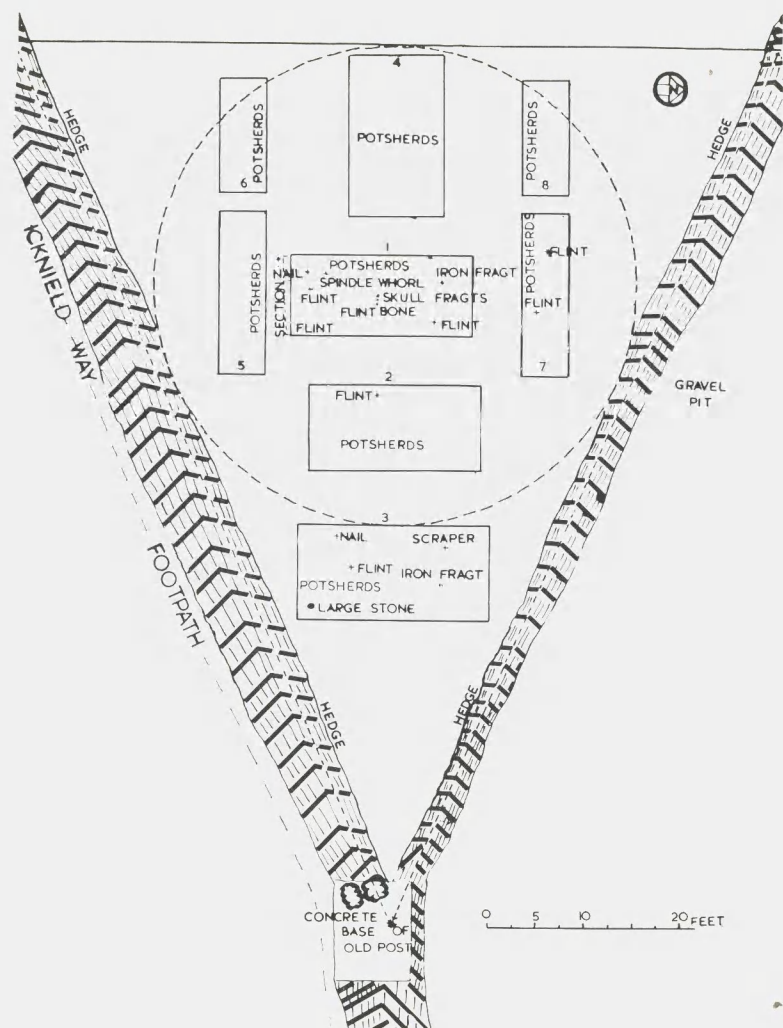


Fig 2. Wilbury Hill, plan 1959 of Excavation.

PRESENT EXCAVATION (Fig 2)

The present excavation was carried out in the angle formed by the footpath and hedge which follow the track known as the 'Icknield Way', and the disused gravel pit. Eight cuttings of varying dimensions were made and the greater part of the area was investigated to a depth of c. $2\frac{1}{2}$ ft, into the natural sand and gravel.

No signs of structures occurred but finds of potsherds, iron objects and other occupation material were made in a homogeneous layer of black sand which indicated an occupation area somewhere in the near vicinity.

The pottery is of the Early Iron Age of which both the 'A' and 'C' phases are represented; these examples are characteristic of the site. Some small fragments of human skull were found in Cutting 1 together with part of a human humerus, calcined bone fragments, a broken spindle whorl, a small iron nail and a small iron hook. A few pieces of daub and flint flakes were also found in this area.

The site is covered with glacial drift and much irregularity in the occurrence of sand and gravel is common. The stratification (Fig 3) was as follows: topsoil, (2) red-brown fine sand with (2a) a layer of blackened sand containing occupation debris c. 6 in thick, (3) red ferruginous sand containing flints. In some places occurred (3a) as a band of large flint nodules under (2a). This band was not a pavement or road.

The greatest number of finds was concentrated in the area of Cutting 1. No structures exist to explain this neither do hearths or other indications of habitation. The number of finds occurring in the area of excavation is not enough, or distributed in such a way as to suggest a rubbish pit. Organic material and animal bones are completely absent but this may be mainly due to the nature of the subsoil. One can only conclude that here we have a scatter of material from a nearby occupation area and it is hoped that further excavation will be carried out in the adjacent areas, in order to discover it.

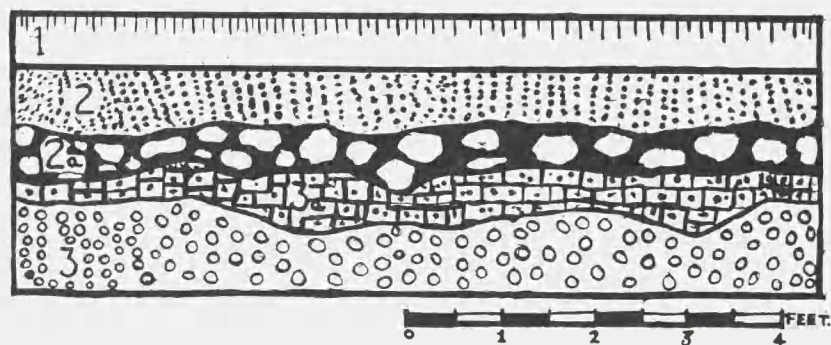


Fig 3. Section of 1959 Excavation

THE FINDS

THE POTTERY (Figs 4 & 5)

A total of $12\frac{1}{4}$ pounds of pottery was found and this consisted entirely of fragments. The wares were all gritted but there are degrees of fineness, and they may be grouped as follows:

A. Coarse gritted wares, mainly buff or black, and of a 'biscuit-like' consistency. (fig 4, nos. 1-25). These fragments make up 55.3% of the total pottery found. (Diameters are all approximate.)

1. Everted rim of buff ware with brown surface; slight flattening of the rim. Diameter 7 in. Cutting 1. (Like Fengate Fig 8: XI).
2. Everted rim of black sandy ware. Diameter 9 in. Cutting 4. Possibly showing Marnian influence (see Fengate Fig 5: K3).
3. Rim, coarse brown ware, outside surface reddish, flat top extended outwards on edge, shallow cabling. Diameter 9 in. Cutting 2. (Similar at Wilbury 1933, Fig 8: 15; Holwell Fig 3: 7; Scarborough p. 187, Figs 16-18). Rims like this occur on urns with applied bands.
4. Rim of situlate bowl, black ware with sandy buff exterior. Short fairly upright neck with high shoulder. Rim slopes outwards slightly—well-defined boundary between interior wall of neck and rim. Diameter $7\frac{1}{4}$ in. Cutting 2. (See Holwell Fig 3: 4; Hunsbury Fig 7: FT4a).
5. Rim of situlate bowl, buff ware, more angular than (4) but less well-made. Rim curves down sharply to the top of the neck. Neck short and upright, shoulder curves away sharply. Diameter 5 in. Cutting 2. (Chinnor Fig 5: 5 for form).
6. Flattened rim of black-brown ware, vertical neck, beginning of thickening for a shoulder. Diameter 10 in. Cutting 8. (Danbury Fig 1: 1, but our example is undecorated.)
7. Small out-turned rim of dark-grey ware. Cutting 1.
8. Small rim, crudely shaped, of black ware, shows signs of 'pinching'. Diameter $9\frac{1}{2}$ in. Cutting 2. See no (5) above.
9. Small rim of black ware, protruding slightly, pinched at end of neck. Diameter 9 in. Cutting 1. Probably a debasement of a situlate jar. (See Hunsbury FT9.)
10. Rim of brown ware with smoothed surface, extended inwards. Finger-nail impression just below rim. Signs of smoothing with fingers. Cutting 3. (See Wandlebury Fig 8: 47; Hunsbury Fig 10: C1.)
- 11a. Rim of buff ware, rounded and everted, paste smoothed over the neck. Diameter $9\frac{1}{4}$ in. (Fengate Fig 5: K3).
11. Small rim of bowl, black ware, brown internally, neck upright, slight shoulder. Cutting 4. (West Harling Fig 28.)
12. Shoulder fragment of buff sandy ware or urn-like pot. Reminiscent of the applied band. Diameter 10 in. Cutting 4.
13. As above. Cutting 8.
14. Fragment of rusticated ware, black inside, with finger-nail impressions. Cutting 8. (Like Linton Fig 5: 34.)
15. Shoulder of situlate jar, thin sandy, brown ware with finger-nail impressions. Cutting 1.
16. Fragment of hard black ware decorated with close horizontal furrowing. Cutting 7.
17. Angular shoulder of brown ware, burnt red on outside. Possibly of biconical vessel. Cutting 2.
18. As above. Cutting 4.

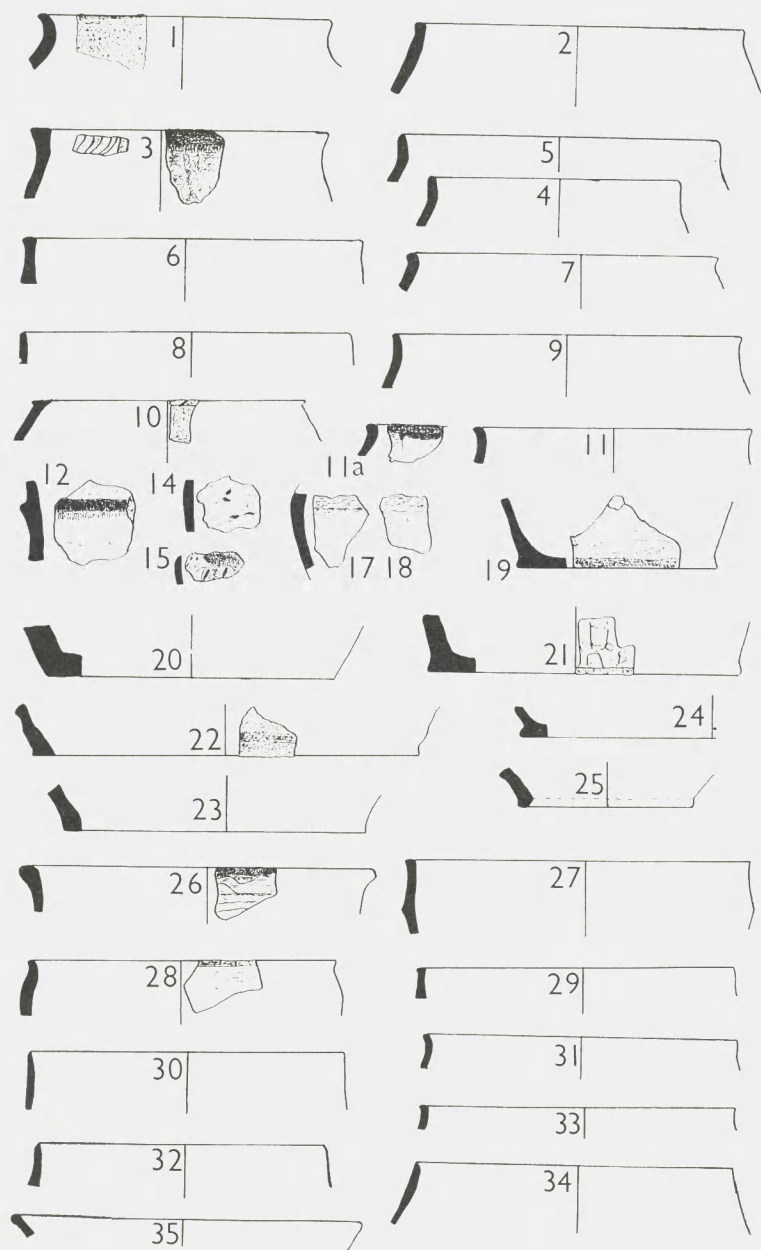


Fig 4. Pottery from 1959 Excavation. Sherds 1-35. (4)

19. Fragment of base of brown ware, soapy feel inside. Diameter 4 in. Cutting 7. (Scarborough p.187. Fig 21f; Chinnor Fig 5: 21.)
20. Fragment of flat base of brown ware, brick-red outside and black inside. Diameter 6 in. Cutting 4. (Hunsbury Fig 11: B8).
21. Fragment of flat base of grey-brown ware, pinched out at bottom. Diameter $6\frac{1}{2}$ in. Cutting 1. Similar to (19) above but heavier.
22. Fragment of wall near base of black ware, probably slightly raised. Diameter 8 in. Cutting 1.
23. Fragment of wall base of brown ware, smooth red exterior, base flat. Diameter $6\frac{1}{2}$ in. Cutting 1. (Like West Harling Fig 48.)
24. Fragment of base of brown ware, smoothed on inside. Diameter 8 in. Cutting 6.
25. Fragment of base of brown ware with signs of base ring. Diameter 3 in. Cutting 1.

B. Hard-baked, gritted wares, smaller grits with less flint, and vessels with smoother surfaces. These fragments represent smaller pots and many fragments are decorated. This group represents 32.5 % of the total pottery found. (Figs 4 & 5).

26. Thick rim of dark brown ware, flat but uneven at the top, smoothed all over. Rim extended outwards (Cf. no 3 above). Diameter 8 in. Cutting 7.
27. Rim of jar of grey ware, black exterior, smooth brown interior. Rim flat-topped with very slight bevel. Diameter 6 in. Cutting 6. (Fengate Fig 1: A3.) From Harpstedt origins.
28. Slightly everted rim of reddish-brown ware. Upright neck and slight shoulder, very slight S-profile. Diameter 63 in. Cutting 4. (Lakenheath Fig 3: (q); Hunsbury FT1. La Tène.
29. Small flat-topped rim of brown ware smoothed on both surfaces. Diameter 6 in. Cutting 6. (Danbury Fig 1: 1, form only.)
30. Thin upright rim of brown ware, black inside and out. Cutting 1. (Wandlebury Fig 7: 35.)
31. Rim of brown ware, red on both surfaces. Diameter 10 in. Cutting 2. (Form like Warborough Hill (in Kenyon Fig 8: 7.))
32. Small nearly upright rim of hard grey ware, of situlate form. Diameter 10 in. Cutting 2. See (5) above.
33. Small flat rim of brown ware, orange on both smoothed surfaces. Inclining outwards towards a shoulder. Diameter $6\frac{1}{4}$ in. Cutting 6. (Fengate Fig 1: A3.)
34. Fragment of bowl of grey ware, smoothed on both sides. Cutting 4. (Like West Harling Fig. 38.)
35. Very small fragment of everted rim of bowl in brown ware, red inside. Stray.
36. Small rim of black ware, short neck inclining outwards towards shoulder. Red outside with finger-nail impression. Cutting 1.
37. Fragment of slightly everted rim of red ware, well smoothed inside and out. Cutting 4.
38. Small fragment of flat-topped rim of black ware with straight sides. Cutting 1. Probably situlate.
39. As above (38) but reddish ware, turned out slightly with curve on neck. Cutting 1.
40. Extended flat topped rim of brown ware, pinched at end of a short neck. Cutting 1. Selsey Fig. 7.
41. Thin small rim with upright neck of black ware.
42. Thick everted rim of black ware, smoothed inside and out. Cutting 1. (Perhaps Hunsbury L2.)
43. Fragment of bowl near rim, grey ware, dark brown on outside. Diameter 9 in. Cutting 1. (See Hunsbury FT1.) La Tène I.

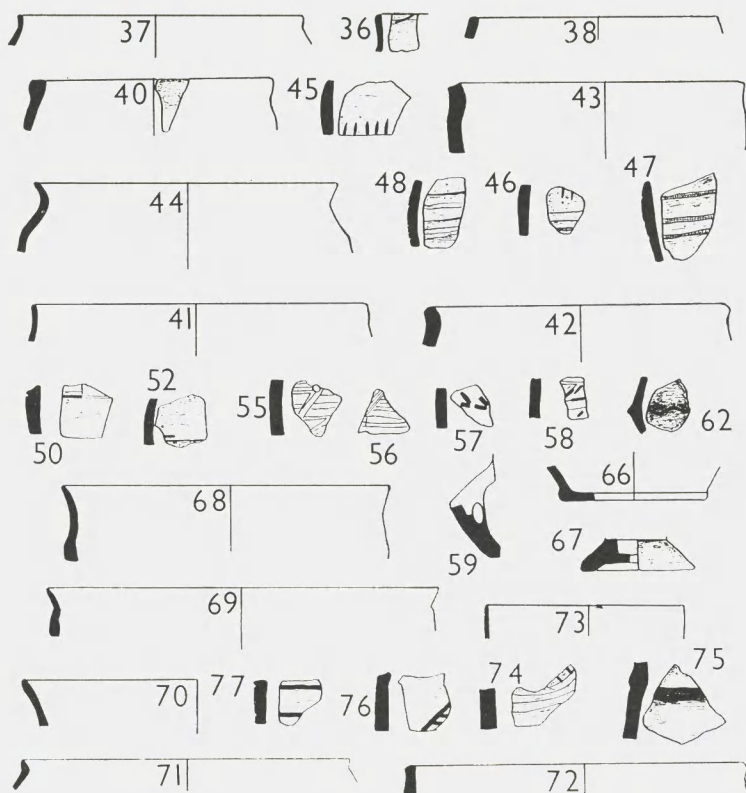


Fig 5. Pottery from 1959 Excavation. Sherds 36-78. (4)

44. Fragment of neck and shoulder of bowl, smooth black ware, grey outside and in. Cutting 6. (Form Fengate R2.)
45. Fragment of black ware, red on outside, decorated with finger-nail impressions. Cutting 1.
46. Fragment of brown ware, purplish on outside, decorated with finger-nail impressions and horizontal furrowing. Cutting 7.
47. Fragment of dark grey ware, red on outside and in. Smoothed and striated on the outside. Cutting 8.
48. Fragment of light brown ware with close horizontal furrows. Cutting 2.
49. Fragment of grey ware, partly red. Brown outside with horizontal furrows bisected by verticals in one corner. Cutting 1.
50. Fragment of buff ware, dark inside and smooth on both surfaces. Suggestion of zoned decoration. Cutting 1.

51. Small fragment of brown ware, chocolate in places, furrowed on the surface. Cutting 3.
52. Fragment of black ware smoothed inside and out. Signs of furrowed decoration. Cutting 3.
53. Very small fragment of dark grey ware with furrowed decoration. Cutting 5.
54. Fragment of black ware, red exterior. Decorated with parallel incisions and raised area between Cutting 1.
55. Fragment of dark brown ware, red outside, black inside, both smooth. Decoration of shallowly executed stroke-filled triangle. Cutting 2.
56. Small fragment of sandy black ware, decorated with shallow stroke-filled triangle. Cutting 1.
57. Small fragment of smooth grey ware, decorated with 'punch marks' arranged in pairs. Cutting 1. (Decoration see All Cannings pl. 48. 1.)
58. Small fragment of smooth brown ware decorated with a form of zig-zag lines and punch marks. Cutting 1.
59. Fragment of lug of dark grey ware, smoothed on both surfaces. Signs of its having been through a pot wall. Cutting 1. (Like Hunsbury L2 in form but the shape of the hole is similar to Fengate Fig 3: C5.)
60. Fragment of lug of orange brown ware. Cutting 1.
61. Fragment of lug of hard red ware, rather angular. Cutting 4.
62. Fragment of shoulder of bowl, brown ware, orange outside. Smoothed, and decorated with raised swags on the angle, outline strongly incised. Cutting 5.
63. Small fragment of angular shoulder of bowl, dark grey ware. Cutting 1.
64. Fragment of black ware with vertical scorings. Cutting 3.
65. Fragment of black ware, from near the base of large vessel, decorated with wide vertical furrow. Diameter 10 in. Cutting 4.
66. Fragment of well-made flat base of brown ware, smoothed on both surfaces. Diameter 4 in. Cutting 1. (Wandlebury fig 7: 5.)
67. Part of pedestal base of black ware, black and rusty smooth surfaces. Diameter 4 in. Cutting 5. (Swarling type 1.) 75-50 B.C.

C. Finer wares (fig. 5, nos. 68-78) containing very small grits of shell, mica, calcite and flint. Mostly wheel-made and burnished. These represent 12.2% of the total pottery found.

68. Everted rim of bowl, dark grey ware with black burnished surface. Wheelmade. Diameter 7 in. Cutting 2. (Hauxton Mill A.C.R. pl XVI. 13.) Belgic.
69. Small fragment of everted rim of bowl, red-brown ware, burnished inside and out. Wheel-made. Diameter 8 in. Cutting 2. (Newnham A.C.R. pl. XVI. 2.) 1st cent. B.C.
70. Fragment of black ware burnished inside and out. Upright neck and beginning of a shoulder. Wheel-made. Diameter 9½ in. Cutting 5. (War Ditches, Cherryhinton. A.C.R. pl. XVI. 6.)
71. Small bead rim of brown burnished ware. Wheelmade. Cutting 2. (Hengistbury Head Class I. pl XXII. 1.) Late 1st century B.C.
72. Fragment of flat rim, brown burnished ware, smoothed inside and out. Short neck curves outwards, rim curves over slightly. Diameter 9 in. Cutting 2.
73. Very thin straight rim of brown ware, burnished inside and out. Diameter 4 in. Cutting 2. (Form probably like Hengistbury pl. XIX. 9.)
74. Fragment of chocolate-brown ware, surfaces burnished, exterior decorated with shallow furrowing. Diameter 9 in. Cutting 5.

75. Large fragment of beaker, grey ware, black burnished surfaces. Large horizontal furrow just below neck. Diameter 10 in. Cutting 6. (Lockleys Villa. Fig 6: 16.)
76. Fragment of grey ware, burnished outside. Part of decoration in bottom corner of stroke-filled triangle. Cutting 2.
77. Fragment of brown ware decorated with two parallel incised lines. Cutting 2.
78. Shoulder of hard grey ware with marked angle. Cutting 1.

Abbreviations used for references

A.C.R.: Fox, *Archaeology of the Cambridge Region*.

All Cannings: Cunnington, *An Early Iron Age Inhabited Site at All Cannings Cross Farm, Wiltshire*.

Chinnor: Richardson & Young, 'An Iron Age A Site in the Chilterns'. *Antiquaries Journal* XXXI. p. 132.

Danbury: Dunning, note in *Antiquaries Journal* XIV. p. 186.

Fengate: Hawkes & Fell, 'An Early Iron Age Site at Fengate, Peterborough'. *Archaeological Journal* C. p. 188.

Hengistbury Head: Bushe Fox, 'Excavations at Hengistbury Head, Hampshire'. *Society of Antiquaries Report III*.

Hunsbury: Fell, 'The Hunsbury Hill-Fort, Northants; a new survey of the material'. *Archaeological Journal* XCIII. p. 57.

Kenyon: 'Survey of evidence concerning the chronology & origins of Iron Age A in Southern & Midland Britain'. *Institute of Archaeology Report* 1952. p. 29.

Lakenheath: Gell, 'An Early Iron Age Site at Lakenheath, Suffolk'. *Cambridge Antiquarian Society* XLII p. 112.

Linton: Fell, 'An Early Iron Age settlement at Linton, Cambs'. *Cambridge Antiquarian Society* XLVI p. 31.

Scarborough: *Archaeologia* 77. p. 187.

Swarling: Bushe-Fox, *Society of Antiquaries Report V*.

Wandlebury: Hartley, 'Wandlebury Iron Age Hill-fort excavations 1955-6.' *Cambridge Antiquarian Society* L. p. 1.

West Harling: Apling, 'A Hallstatt settlement at West Harling' *Proceedings of Prehistoric Society of East Anglia* VII p. 111.

Parallels, or similarities have been found mainly at sites in East Anglia.¹ The earliest types seem to have features associated with urn-like pots (e.g. nos. 3, 4 and 12); vessels of Harpstedt origin are represented by nos. 27 and 33, while a series of situlate jars (nos. 4, 5, 8, 32 and 38) show features which suggest an A2 dating.

Marnian influence may be seen in examples 2 and 11a while a third century date may be given to nos. 6 and 29 which have parallels in the Kent-Surrey group. This latter group has been shown to have a common origin with the East Anglian

¹For definition of region see Kenyon op. cit. p. 42.

in the Low Countries. Influence from Wessex appears in the forms of decoration – punch marks, rectilinear design, stroke-filled triangles and especially finger-nail decoration rather than of the whole tip. Unfortunately, the decorated fragments are too small to be of any chronological use here.

The pottery from Wilbury 1959 shows characteristics of the East Anglian group of Iron Age 'A' pottery traditions and demonstrates, once more that the position of Wilbury astride the Icknield Way laid it open to a certain number of influences from the South-West and the Midlands, and in particular to that brought via the Chilterns-Northants route.

SMALL FINDS (Fig 6)

Iron

1. Fragment of an iron object, broken off. Possibly upper part of a small knife blade. Length 2.5 cm. Thickness 8 mm. Cutting 1. 22 in down.
2. Small iron nail with head of lunate profile. Length 2.3 cm. Greatest width of head 1.7 cm. Thickness 5 mm. Cutting 3. 19 in down.
3. Square-headed, thin sectioned iron nail. Length 3.2 cm. Shaft thickness 3 mm. Head thickness 4 mm. Cutting 1. 27 in down.
4. Small iron hook or link, broken into two pieces. Total length 2.8 cm. Thickness 4 mm. Cutting 1. 24 in. down.

Clay

5. Spindle whorl of hard baked grey clay with a raised cylindrical end and hole. Diameter 3.5 cm. Thickness 2.3 cm. Cutting 1. 25 in down.

Flint

6. Flint scraper of horseshoe form. Nine flakes were found and are described below.

Flint flakes were submitted to Mr John Wymer of Reading Museum to whom I am indebted for his report and the drawing (Fig 6: 6).

REPORT ON THE FLINTS

by JOHN WYMER

Nine flint artifacts were submitted: eight are small, simple flakes and one is a neatly made scraper of horseshoe form. Four of the flakes have relatively broad striking platforms and very obtuse flaking angles. The striking platform is, in each case, prepared, but there is no indication that the flakes have come from conical or prismatic cores. One of these flakes has slight secondary working on the back edge of the striking platform to form a rough, hollow scraper. It also has slight traces of patination as has one other of these four flakes. Of the four remaining flakes, two are mere spalls, one has a smaller striking platform than those of the other group, and the last is certainly struck with precision from a prepared core. The latter is of finer quality flint than the others and, although unpatinated, is also different in being lustrous. This flake, showing signs of

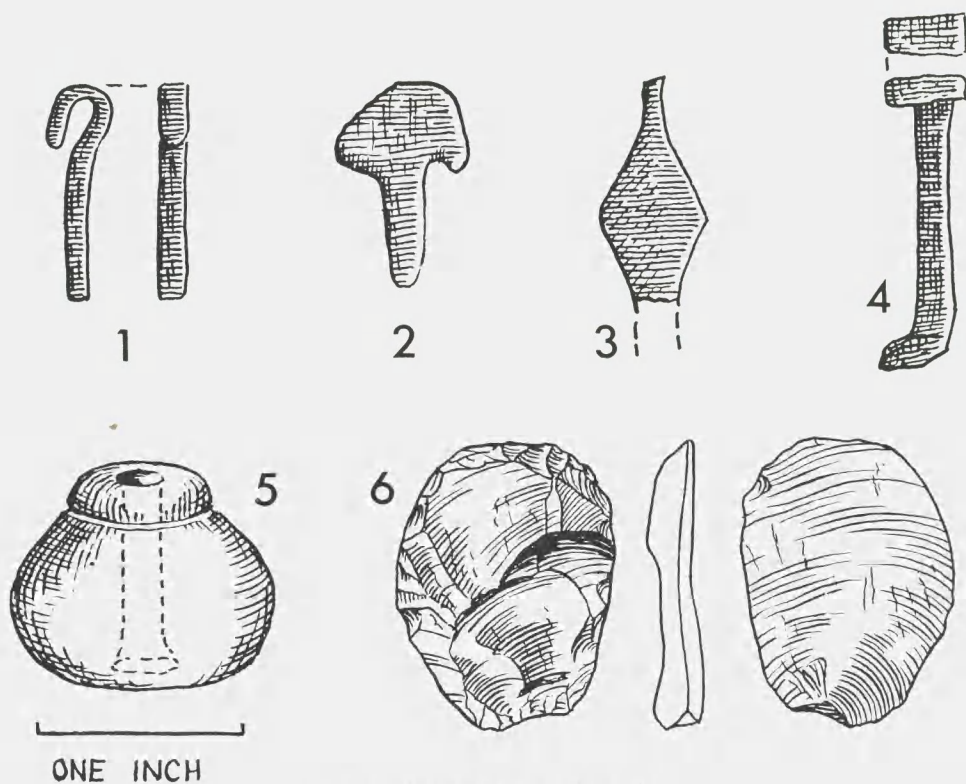


Fig 6. Small Finds from 1959 Excavations.

use along one edge, is probably Neolithic but the remainder would not be out of context on an Early Iron Age Site.

The same is true of the horseshoe scraper (Fig 6: 6); it is of a form that dates from the Mesolithic period, but its appearance has been noted on Iron Age sites¹. Flint was still in general use during the Early Iron Age but, to judge from the scarcity of tool forms, it was almost restricted to cutting and scraping. A flake was struck when a sharp edge was required, but the methodical tradition of Neolithic flintwork was lost.

A small rectangular piece of frost-fractured flint showed some minute secondary working along its edge.

¹Clark & Fell, 'Early Iron Age Site at Micklemoor Hill, West Harling: *P.P.S.* XIX. p. 35. Fig 19. 2.

SURVEY AND TRIAL EXCAVATION 1961

In the Spring of 1961 six weeks were devoted to a limited resistivity survey and the digging of a trial trench to the north of the modern road known as Icknield Way in an area to the east of the cemetery. The object of the work was to discover the limits of the hill-fort and to obtain further dating material from the ditch.

The resistivity survey confirmed, on the whole, the position of the ditch as shown on the 1st edition of the Ordnance Survey map and on the plan drawn by Applebaum in his report. In the north, however, it seems likely that the rampart and ditch lie farther south than was originally thought unless there was a duplication of the defences at this point. The trial trench (see fig 1) failed to reveal anything significant and one must assume that the line suggested by the resistivity survey was missed here. The survey does seem consistent in that it runs directly through the present cemetery to a bank opposite the Wilbury Hotel which appears to be part of the original rampart. Here it would also come into line with a length of possible rampart to the east of the Stotfold-Walsworth road.

Mr J. F. Dyer has kindly drawn my attention to the aerial photographs taken by Dr J. K. St Joseph which show some very interesting cropmarks running into the interior of the hill-fort. These suggest the existence of other ditches (see fig 1) which may well have formed a smaller fortified area before the construction of the larger works. If the interior ditch is connected with the indications shown by the survey we would then have a smaller oval hill-fort with its northern rampart and ditch a little off the line of the modern road. An interesting discovery was made during the digging of two graves when an antler and jaw of a fallow deer were uncovered at a depth of six feet in a pocket of rich brown loam. All other grave digging over the years has failed to produce any archaeological material at all but now that an area in line with the survey results is being dug it may be possible to trace the location of the northern ditch, although this will be a long process. If the existence of a smaller defensive area can be proved it may help to solve some of the problems connected with the earlier phases of this site.¹

The Bedfordshire Archaeological Council wishes to acknowledge a generous grant towards the cost of publishing this paper from the Ministry of Public Building and Works.

¹I wish to acknowledge the kind assistance of the Engineering Test Branch of the Ministry of Public Buildings and Works and of Messrs. Mayes and Callaghan who carried out the survey. I am also indebted to Mr J. F. Dyer for his help and advice and for his drawing of the site plan. Amongst the many people who helped on the site I should like to mention Messrs C. Green, K. G. Wilson, V. G. Fenton and R. G. Castledine.

A Rectilinear Enclosure at Maulden Firs, Barton

JAMES F. DYER

WHILST digging Barrow No. 4 on Galley Hill, Streatley during August 1962, a number of cropmarks were observed in a field to the north of the hill. One of the marks showed as a small oval enclosure, close to the plantation known as Maulden Firs. A much larger crop-mark close by suggested a ditched camp of some kind. Both of these sites lie in a field known as Mauldens in Barton parish belonging to Mr R. F. Farr of Barton Hill Farm. Permission was given in August 1963 for excavations to determine the nature of the larger cropmark, but due to the unprecedented lateness of the harvest, it was not possible to carry out this examination, and the small oval shaped enclosure was examined instead. (Nat. Grid Ref. TL094275).

The site, which lies on chalk, was approximately located from observations made the previous year. This was followed by a proton magnetometer survey by Dr Martin Aitken of the Research Laboratory for Archaeology at Oxford. The survey revealed the oval ditch plan with considerable clarity and accuracy. Trenches were laid out on a modified quadrant system to cover the main features revealed by the magnetometer. An additional larger trench was cut on the north-west side where more marked anomalies had appeared; and the northern section was extended eastwards to investigate a minimum anomaly.

Excavation shewed an oval ditch plan with internal measurements of 71 feet by 45 feet. The ditch varied in width from 5 feet to 8 feet, and in depth from 2 feet to 3 feet. The filling was fairly uniform throughout. Chalk rubble at the bottom was covered by loose grey-brown soil, and a layer of more compact orange coloured earth which contained very many snail shells. A humic layer above contained varying scatters of chalk rubble, especially on the eastern side of the enclosure, suggesting that an outer bank had been ploughed away from that side. The bottom of the ditch was flat on the western side of the site, but 'U' shaped on the south and east. The lower sides of the chalk ditches were very weathered, making it often difficult to determine their exact shape.

The enclosure appears to be without an entrance gap. The magnetometer survey suggested a possible break on the northern side, but the excavation showed that although the ditch contracted to its narrowest width, five feet, it did not terminate. It seems likely that an entrance bridge of planks may have provided access at this point. A search for post holes to hold such a structure in position proved fruitless, although it is worth noting that the magnetometer shewed a reverse anomaly at this point. Similarly, an examination of the inner and outer edges of the ditch for traces of a palisade also proved negative. The interior area had been so closely ploughed, only 7 inches topsoil remaining above the chalk,

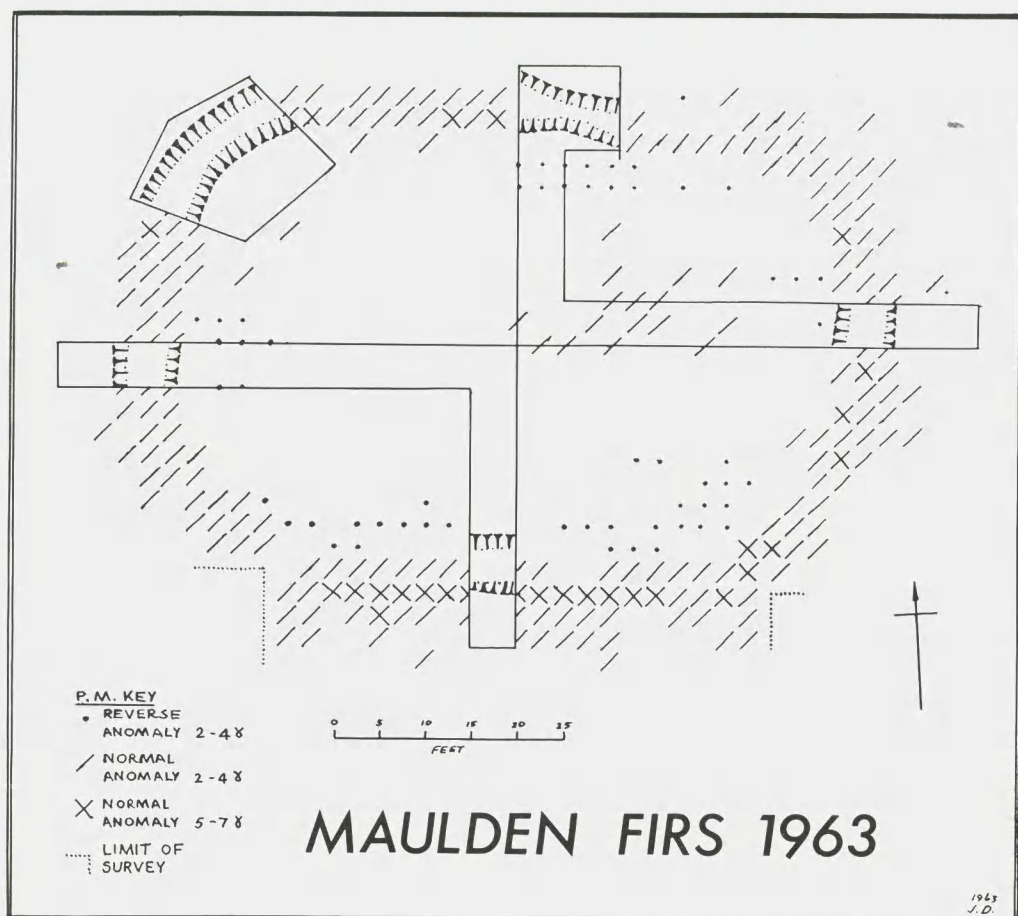


Fig 1. Plan of Rectilinear Enclosure at Maulden Firs showing results of Proton Magnetometer survey and excavation.

that all traces of surface features had been destroyed. An area of possible disturbance east of the centre of the site proved to have been caused by tree root holes.

Eight small sherds of pottery were the total finds from the site. Of these two from a depth of 1 foot below the humus are of Early Iron Age character being closely paralleled by material from Dray's Ditches. The other six sherds lay on the chalk surface inside the enclosure. Two appear to be Early Iron Age, the rest Belgic.

From these limited finds it would be unwise to try and date the site rigidly. An origin fairly early in the Iron Age suggests itself, with the ditches slowly silting up into the Roman era. The final destruction of a possible external bank by ploughing must have taken place in relatively recent times.

As to the purpose of the site, lack of habitation and domestic refuse suggests a cattle or sheep pound, and its proximity to the Icknield Way may connect it with animal round-ups prior to trading. Mrs M. A. Cotton has recently drawn our attention to the large number of rectilinear enclosures dating from Neolithic to medieval times to be found in Britain and France, and the site described above would fit conveniently into her series.¹ Her only Bedfordshire example at Wyboston was of Belgic date, with deep 'V' shaped ditches and later additions and alterations.² This was unlike the majority of enclosures and our own site which seem to have had a single period of occupation.

The writer would like to acknowledge the generosity and help of the land owner Mr R. F. Farr throughout the excavation, and Mr L. A. Speed who provided transport for equipment. Mr John Fossey acted as assistant director, and to him and all the volunteer diggers who cannot be named individually, our thanks are offered. We are particularly indebted to Dr Martin Aitken and his assistants for providing what we believe to have been the first magnometer survey of a Bedfordshire site.

¹*Berks. A.J.* 59, (1961) 14ff.

²*C.A.S. L* (1956) 75.

A Roman Hoard of Ironwork from Sandy, Bedfordshire

W. H. MANNING

THE group of objects which forms the subject of this paper was discovered at Sandy¹ probably between 1893 and 1895, though the circumstances and exact find spot are not recorded. Although the accounts do not specifically state that it was a hoard there can be little doubt that this was the case. By 1905 they had passed into the collection of Mr W. Ransom, F.S.A., and he exhibited them to the Society of Antiquaries on 22nd June of that year. A terse account of the group was subsequently published,² but the first and only previous illustration of the group came in the *Victoria County History*³ where they are shown in a sadly inadequate photograph. The accompanying description is of little value since it fails to identify most of the objects and confuses some of those it does. In 1915 the group passed into the British Museum (Department of British and Medieval Antiquities) with much else from Ransom's collection.

The hoard is a fairly typical collection of scrap iron with a majority of pieces coming from carts. In this variety it reflects, on a smaller scale, the larger and better known hoards from Silchester and Great Chesterford,⁴ and can perhaps be most closely compared with the hoards found in 1962 and 1963 at Dorchester-on-Thames, Oxon⁵.

The exact dating of Romano-British iron objects is made extremely difficult by the continuance of types throughout the period. In the absence of associated material, therefore, a precise date cannot be given to this hoard with any degree of certainty. The Silchester, Dorchester and Great Chesterford hoards are all of the fourth century⁶ or later and there appear to be no hoards from the south of the province before this date, although several occur in parts of Scotland under Roman influence.⁷ There is certainly nothing in the Sandy hoard inconsistent with a fourth-century dating, and the linch pins, in particular, are only paralleled by material of that date. In the absence of any evidence to the contrary, therefore, this would seem to be the most likely date for its deposition.

The reasons for the deposition of these hoards in the fourth century are uncertain. The most obvious explanation is that they were the stock, and in some

¹Nat. Grid. Ref. TL(52) 1848.

²*Proc. Soc. Ant.* (2nd Ser.) XX, 341.

³*V.C.H. (Beds.)* II, (1908), 11, pl. II.

⁴Silchester, *Arch.* LIV, (1894) 139 ff. (1890 hoard) and LVII, (1901), 246 ff. (1900 hoard); Great Chesterford *Arch. J.* XIII, (1856), 1 ff.

⁵Publication forthcoming.

⁶cf. op. cit., also Boon, *Roman Silchester*, (1957), 187.

⁷Piggott, *Three Metal-Work Hoards*, *Proc. Soc. Ant. Scot.* LXXXVII, 1 ff., and Curle, *Newstead* (1911), 119-120.

cases the tools as well, of smiths which were buried for security, but the fact that they occur mainly within walled towns¹ argues to some extent against this. In many ways they seem to parallel the great Iron Age deposits such as Llyn Cerrig Bach² and La Tène³ which were probably votive. That the fourth century saw a resurgence of pagan cults in Britain is certain and the possibility that these hoards are votive should be borne in mind⁴. With our present knowledge neither theory can be considered decisive, though concealment for security would, perhaps, seem to be more probable.

ABBREVIATIONS

The following works are cited in an abbreviated form in the Catalogue.

Piggott. Piggott, S., "Three Metal Work Hoards of the Roman Period from Southern Scotland", *Proc. Soc. Antiq. of Scot.* LXXXVII, 1952-53, 1ff.

Newstead. Curle, J. *A Roman Frontier Post and its People: The Fort of Newstead*, 1911.

Maiden Castle. Wheeler, R. E. M., *Maiden Castle, Dorset*, Soc. Ant. Lond. Research Committee Report XII, 1943.

O.R.L. *Der Obergermanisch-rätische Limes des Römerreiches*.

Jacobi. Jacobi, L., *Das Römerkastell Saalburg*, 1897.

Lindenschmit. Lindenschmit, L., *Die Altertümer Unserer Heidnischen Vorzeit*, Band I-V.

Richborough. Bushe-Fox, J. P., *Excavations of the Roman Fort at Richborough, Kent*, Vol. IV, Soc. Ant. Lond. Res. Commit. Report XVI.

B.M. (1922) *Guide*. British Museum, *Guide to the Antiquities of Roman Britain*, 1922.

B.M. (1958) *Guide*. British Museum, *Guide to the Antiquities of Roman Britain*, 1958.

CATALOGUE

The number following the name in each case is the British Museum Accession Number. All the objects are of iron.

1. LEAF-HEADED LINCH PIN (1915.12-8.331) with crescentic arms and a leaf-shaped head at right angles to the stem. Between the arms a pierced lug protrudes at right angles, and the leaf-shaped head ends in a conical point. Overall length 10.8 inches.

In addition to that illustrated there are three others in the hoard (1915.12-8.332, 333, and 334) with lengths of 10.3 inches, 10.5 inches and 9.9 inches respectively.

These linch pins are clearly derived from the common crescentic headed type which Ward Perkins (*Ant. J.* XX, 359ff.) has argued is Belgic in origin. This conclusion was, however, based on the fact that their distribution is confined to the south east of Britain. One example from Maiden Castle (*Maiden Castle*, 275, fig 90, 10) was found on a 'Belgic' road surface and so could as well be early Roman as Iron Age. The remainder, where dated, were Roman. A very typical specimen,

¹Silchester, Great Chesterford and Dorchester were all walled by the time the hoards were deposited.

²Fox, *A Find of the Early Iron Age from Llyn Cerrig Bach, Anglesey*, (1946).

³Vouga, *La Tène* (1923).

⁴Piggott (*P.S.A.S.* LXXXVII, 4ff.) considers this possibility at some length and then leaves the question open, at least for these late Roman deposits.

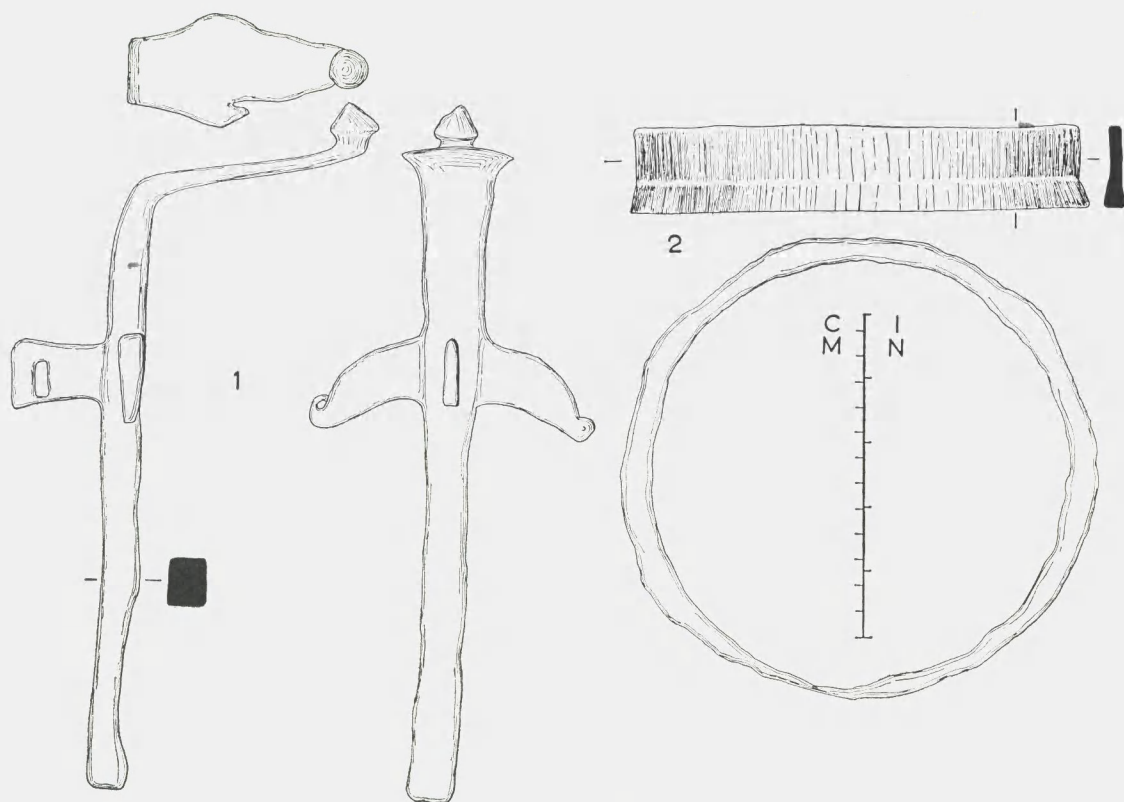


Fig 1. Roman ironwork from Sandy, Nos. 1 and 2.

however, is among the unpublished material from Pompeii in the Museo Nazionale in Naples, and is thus securely dated to before A.D. 79. It seems most unlikely that this can be the result of Belgic influence and it is more reasonable to assume that the crescentic-headed linch pin is a Roman type introduced with, or soon after, the conquest.

The leaf-headed variety is rare; there is a single example in the 1900 hoard from Silchester (*Arch. LVII*, 247, fig 4) and two in the Great Chesterford hoard (*Arch. J. XIII*, 11, pl. I fig 10) where they are tentatively called wall pegs. Another from the 1958 excavations at Verulamium has a leaf-shaped head but is derived from the spatulate and not the crescentic headed type. The function of the leaf-shaped head is not obvious though it may have acted as a step into the vehicle or been intended to help in fastening the pin to the axle. These linch pins are more likely to be cart than chariot fittings.

In as much as no earlier examples are known the leaf-headed type would seem to be fourth-century, but the number of examples is too few for any degree of certainty.

(Previously illustrated in *B.M. (1922) Guide*, 40, fig 36, and *B.M. (1958) Guide* 50, fig 23, IIIe, 1.)

2. HUB RIM (1915.12-8.342). This is a simple iron band slightly thicker on one edge than the other. In use it was shrunk onto the outer edge of the hub. Parallels occur at Newstead (*Newstead* 293, pl LXX, 5) and Great Chesterford (*Arch. J.* XIII, 6). Diameter 7.2 in.

3. HUB LINING (1915.12-8.339). This consists of a circular iron band with the ends turned slightly outwards to form flanges which would originally have been sharpened and driven into the wood of the hub to secure the band. External diameter 5.6 inches. There are three other hub linings in the Sandy hoard (1915.12-8.338, 340, 341) with diameters of 4.8 inches, 4.5 inches and 4.7 inches respectively. There is an example from Newstead (*Newstead* 293, pl. LXX, 9) and another from Silchester (unpublished), and the recent excavations at Verulamium.

4. AXLE GUARD BAND (1915.12-8.335) consisting of a wide ring with a long plate of semi-circular section attached to one side, and a square hole in the plate for the linch pin to pass through. It was fitted to the end of the axle with the plate running along it so that the ring and part of the plate extended beyond the wheel itself. Overall length 6.3 inches, diameter of ring 3.9 inches.

Although these guards bear some resemblance to the bronze object from the Charioteer's Barrow at Arras, E. Yorks, which Sir Cyril Fox has identified as a draught-pole sheath (*Antiq. Journ.* XXIX, 1949, 81, fig 1) I doubt whether their function was really the same.

Two similar guards in the Great Chesterford hoard (*Arch. J.* XIII, 3, pl. 1 figs 14 and 15) have nail holes in the plate and the Sandy example was probably similar in its original state though corrosion has destroyed too much of the plate for certainty. These guards were shown by Neville, their excavator, to a blacksmith who told him that "he makes the same thing now [i.e. 1854] for strengthening axles". There are two examples in Germany, one from Kastell Kapersburg (*O.R.L. B, Band 112, No. 12, taf VII, 35*) and another from Kastell Niederberg (*O.R.L. B, Band I, No. 2a, taf VII, 28*).

5. FARRIER'S BUTTRESS (1915.12-8.344) with a characteristically shaped handle and a blade of V-section. Overall length 9.2 inches. They were used for operating on horses' hooves.

There are two in Dorchester (Dorset) Museum from the Colliton Park House excavation (unpublished) and single examples from Eckford, Roxburghshire (*Piggott* 27, fig 6, E 17), Silchester (1900 Hoard, *Arch.* LVII, 248, fig 6) and Caerwent (unpublished). Of these the Eckford and Caerwent examples have broader and flatter blades than the others. Lindenschmit (I, taf V, 7) figures an example from Stotzingen, and Fox and Hope in publishing the Silchester example mentioned three others from Bar-le-Duc, Grenoble and Pompeii. This latter, which they figure (*Arch.* LVII, 248, fig 7) is of interest in having a small model on the handle showing the instrument in use.

6. CURRY COMB HANDLE (1915.12-8.346) with three arms and a tang. The two outer arms end in elongated plates with two rivets through each of them, while the tip of the centre arm is expanded to receive a single rivet. These rivets fastened the comb to the handle and there is also a small rivet through the tang. Overall length 3.3 inches, overall width 5.5 inches.

I am aware of only one parallel from Roman Britain, that from the Newport (I.O.W.) Villa (*Antiq. Journ.* IX (1929), 148, fig 2, 22) which has only one rivet on each arm. The resemblance to the Sandy example was noted in the report but its purpose was not decided. A fourteenth century example from the Mount, Princes Risborough is figured in *Records of Bucks.* (XVI, 161, fig 12, 5) and a number of medieval continental parallels are quoted.

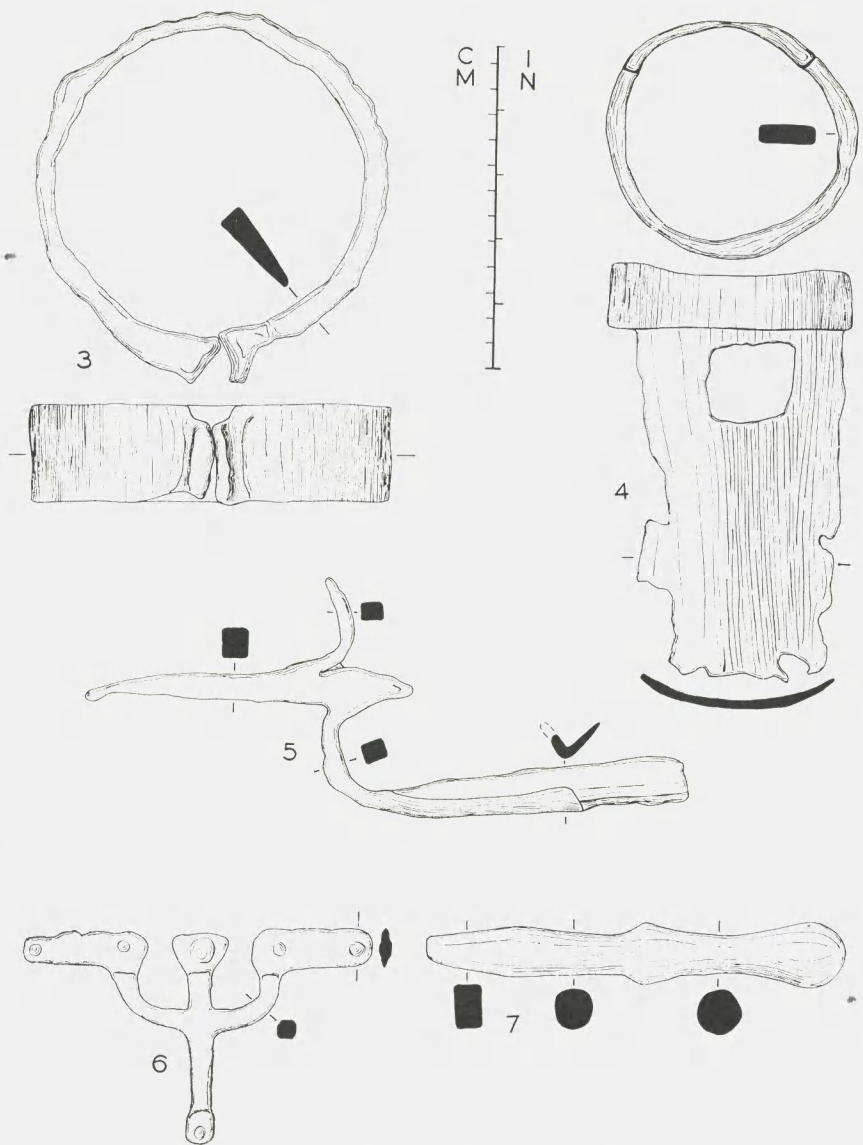


Fig 2. Roman Ironwork from Sandy, Nos. 3-7.

7. FIRMER OR PARING CHISEL (1915.12-8.336.) It is unusual in having this form of handle made in one piece with the blade. Since it clearly copies a turned wooden handle it is of interest in showing one of the forms which these took. Although chisels are common in the Roman period this feature would appear to make the present example unique. Overall length 6.6 inches.

8. MOWER'S ANVIL (1915.12-8.330) with an octagonal head and a square sectioned stem. The two loops are formed from a single strip of iron which passes through a hole in the body of the stem. Overall length 9.6 inches.

These anvils were used by mowers in the field to rest their scythes on when beating out the kinks and dents caused by striking stones, and the loops or coils, of which there are normally two or four, prevented the anvil sinking too far into the ground. Sir John Evans in publishing those in the Silchester 1890 hoard in 1893 stated that they were still in common use in Spain and Northern Italy and were made in Birmingham for shipment to the Spanish settlements of South America (*Arch.* LIV, 143) but efforts made in 1957 to find if they were still in production failed and it is probable that they are no longer made.

They were a Roman introduction into Britain and are fairly common, occurring at Newstead in a first century context (*Newstead* 248, pl. LXII, 1), and at Blackburn Mill, Berwicks, and Eckford, Roxburghshire, in the late first or second century (*Piggott*, 48, fig 13, B38, and p. 28 fig 6, E19). They are present in considerable numbers in the fourth century hoards, with five at Great Chesterford (identified by Neville as anvil pegs, *Arch. J.* XIII, 3 pl. 1, 8), and eleven in the two Silchester hoards (*Arch.* LIV, 143, and LVII, 246). In addition there is an undated example from Caerwent. In Germany they occur at Stockstadt (*O.R.L. B.* Band III, No. 33, taf IX, 79), Marköbel (*O.R.L. B.* Band 122, No. 21, taf III), Zugmantel (*Saalburg Jahrbuch* V, (1921) taf II, 1) and Büdinger Wald (*Saalburg Jahrbuch* IX, taf 29, 15).

9. COBBLER'S LAST (1915.12-8.337). In general form this is very similar to modern examples with a stop ridge between the stem and the tang. Overall length 15.1 inches.

Others are known from Caerwent (unpublished) and Silchester, where two occurred in the 1890 hoard and one in the 1900 hoard (*Arch.* LIV, 142, and LVII, 247). Although the Sandy example is longer than those from Silchester it is very similar in design. The German Limes forts at Zugmantel (*O.R.L.B.* Band III, taf XVI, 29) and Saalburg (*Jacobi*, taf XXXVIII, 19) have each produced a single example and what may be a third is figured in Lindenschmit (V, taf 46, 788) from a hoard of ironwork at Heidenburg. In a relief from Reims (*St. Germain Mus. Cat.* I, 247, fig 264) a last is shown fitted to a low bench on which the cobbler sits as he works.

(Previously illustrated in *B.M.* (1958) *Guide*, 53, fig 24, 10, and mentioned but not illustrated in *B.M.* (1922) *Guide*, 40.)

10. L-SHAPED TUMBLER LOCK KEY (1915.12-8.343). This type is probably the commonest of all Roman keys. Overall length 6.1 inches.

11. ANVIL (Lost). Although exhibited to the Society of Antiquaries and illustrated in the *Victoria County History* this anvil was not presented to the British Museum nor to the Museum of Archaeology and Ethnology in Cambridge with the rest of Ransom's Collection. We are thus forced back to the account and photograph in the *Victoria County History* where it is inexplicably described as a farrier's buttress. It was seven inches in height and seven inches square at the bottom reducing with a distinct shoulder about half-way up to give a top face four inches

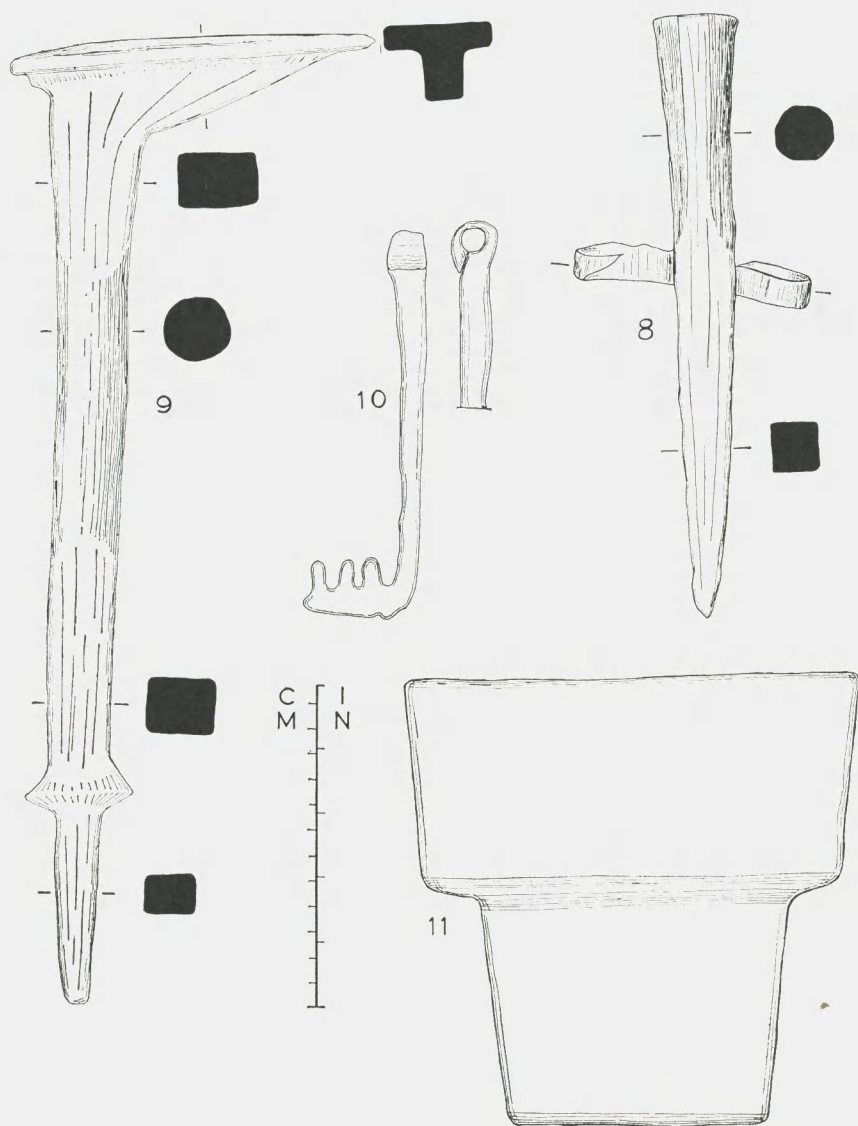


Fig 3. Roman Ironwork from Sandy, Nos. 8-11.

square. It seems most probable that it was upside down in the photograph (and therefore in the description) and was actually used with the larger face uppermost and the smaller one perhaps set in a recess in the work bench. Anvils of about this size and shape were common in the Roman world and are figured on many reliefs as well as occurring at Pompeii. The Sandy anvil was unusual in having such a large difference between the sizes of the two faces, but the closest parallel would seem to be the anvil from Sutton Walls, Herefordshire recently published by Tylecote. (*Trans. of the Woolhope Naturalists' Field Club* XXXVII, 1961.) (Redrawn from *V.C.H.* II pl. II).

12. AXE (1915.12-8.337) of the normal slightly curving type which is common in the Roman period. It is exactly paralleled at Great Chesterford (*Arch. J.* XIII, 3, pl. 1 fig 9), Richborough (*Richborough* IV, 154, pl. LXI, 341 and 342), and other sites. (*Not illustrated*).

I am indebted to the Trustees of the British Museum for permission to examine, draw and publish this hoard, to Mr J. W. Brailsford and Mr K. S. Painter for their ready help when I was doing so, and to Professor S. S. Frere who read the paper and made a number of valuable suggestions.

Excavations at Warden Abbey in 1960 and 1961

A PRELIMINARY REPORT

GRANVILLE T. RUDD AND BERNARD B. WEST

RECORDED history of Warden Abbey is scarce. We have records of its foundation in 1135 by Walter Espec, of its settlement by Cistercian monks from Rievaulx Abbey, of the rebuilding of the Church between 1323 and 1366, of the excellent discipline of the community until its latter days, and of its suppression under Henry VIII in 1537. Apart from these very broad outlines we know very little of its history. The abbey is interesting as the earliest Cistercian house in Bedfordshire, and although nothing in the records indicate that the community was large or important, the indications on the ground are that the Abbey was a very large one indeed.

The site lies to the west of Old Warden on part of the Whitbread Estate at Abbey Farm, tenanted by Mr S. E. Saunderson. It is marked by an extensive area of depressions and mounds on the ground surface. Dominating the site is the ruin of part of a red brick sixteenth century mansion, built soon after the suppression of the Abbey. It has no direct connection with the monastery, but its builders were possibly the Gostwick family to whom the lands were granted at the Dissolution, and who were largely responsible for the destruction of the Abbey buildings and the dissemination of the building materials. Built inside the west end of the ruin, however, is a large thirteenth century buttress, the last remaining structure *in situ*.

Some excavation work was carried out in the early part of the last century by Bradford Rudge, a local artist and schoolmaster, apparently in the usual method of the day, simply trenching to follow the walls. Careful reading of the records of the Bedford Archaeological Society has failed to reveal any evidence of these excavations, with the exception of a visit paid to the site in 1851, although no reference to actual field work is made. Extensive drawings survive of finds, in the Bedford Record Office and the complete booklet of illustrations survives in the Prichard museum. Since this is dated 1839, visitors twelve years later would not be very likely to see much evidence of work on the ground, though a few tiles apparently from the site are also to be found in the same museum. The drawings are interesting in that they show several tiles of a pattern found in 1960/61, some very fine bosses of typical mid fourteenth century design, a fine taper stand, and a magnificent crozier, but most tantalisingly a fine piece of *in situ* tiling of an entirely different pattern from that in fig 3. These finds are all lost and have unfortunately little relevance to the site as now understood. One discovery, however, is of outstanding importance and is shewn in fig 2. This is a plan, to a

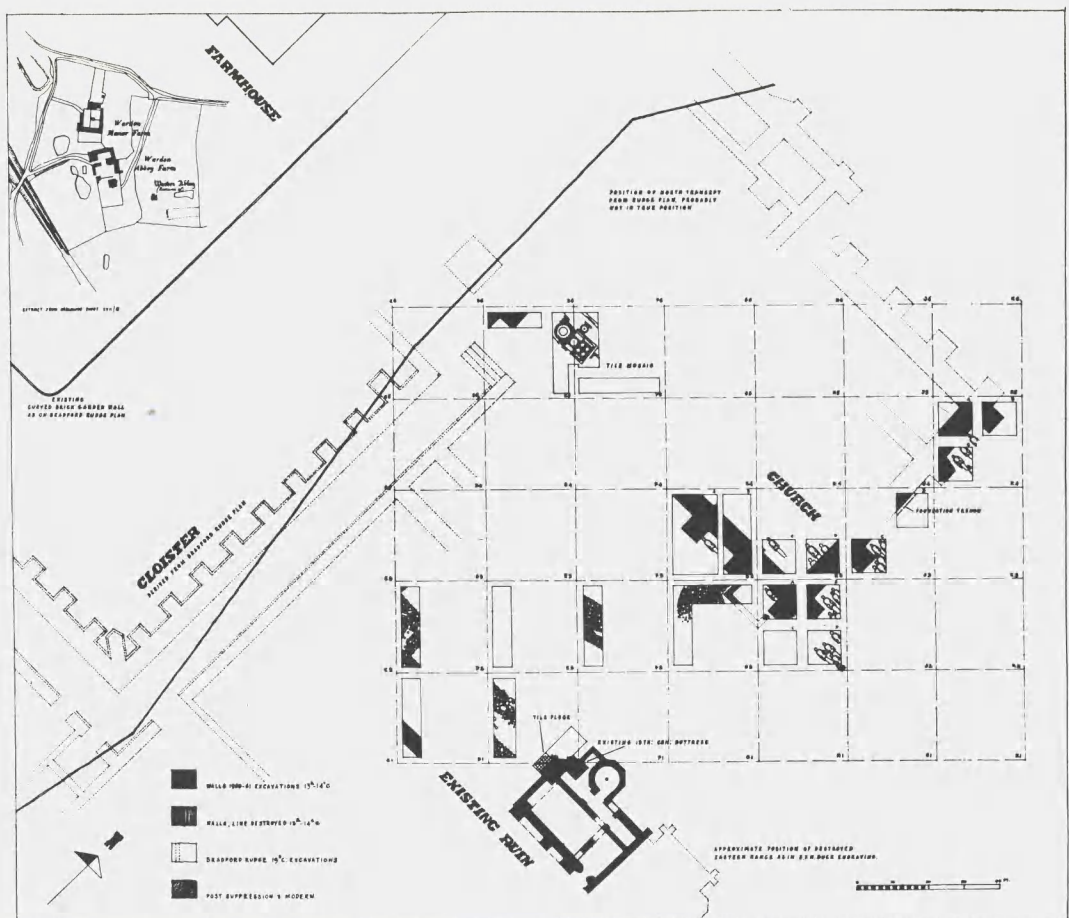


Fig 1. Ground plan of Excavations at Warden Abbey, incorporating layout of 19th century excavations shown in Fig 2.

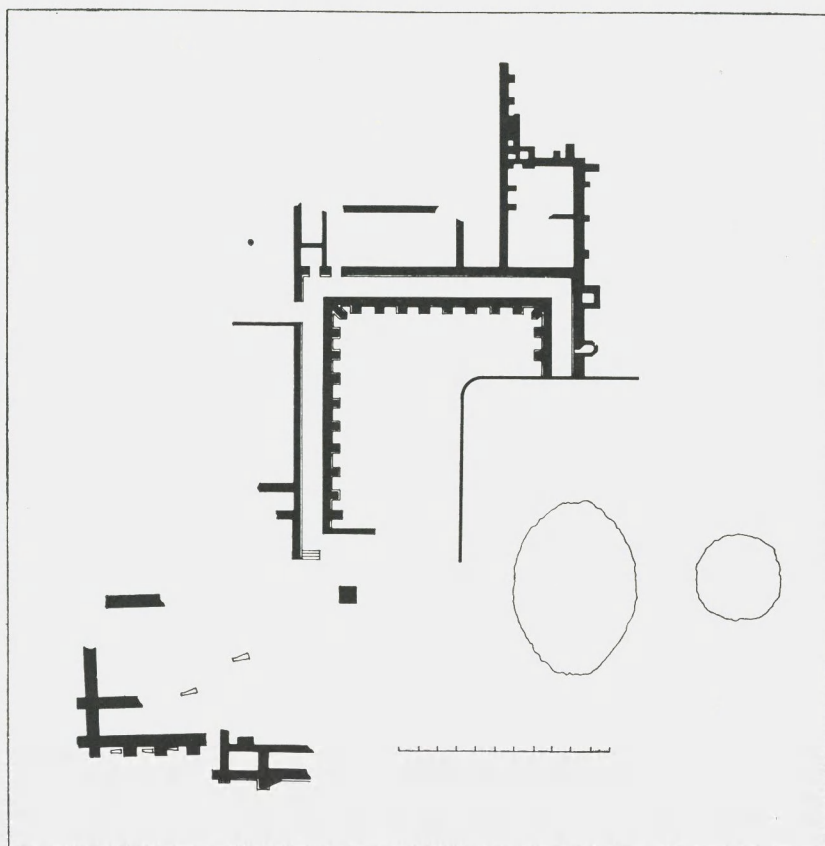


Fig 2. Ground plan of Bradford Rudge's excavations (1839) showing existing garden wall with curved corner.
(The seals on the original drawings are shown in outline)

scale of 50 feet to an inch, carrying also two drawings of seals with a thick black line separating them from the plan. It was discovered that this line was not however, purely one of separation but in fact a representation of the still existing garden wall of Mr Saunderson's farm, and with this one point still existing on the ground it was possible to set out the site and rediscover the position of the church.

Owing to the rough and ready archaeological methods of the time any stratification over and near the wall foundations which would have dated the destruction and robbing of the walls will have been destroyed by trenching.

THE TRIAL EXCAVATION OF 1960

Digging was carried out on the site for three weeks during July and August 1960, under the direction of the writers, by a small party of Bedford Archaeological Society members augmented by helpers who volunteered as a result of a Council for British Archaeology advertisement. The aim of the excavation was to locate the foundations of the Abbey buildings in readiness for excavation in following years. At that time the Bradford Rudge ground plan had not been discovered, and the only guide was the buttress incorporated in the Tudor ruin.

A grid of pegs was set out at twenty-five foot intervals orientated at forty-five degrees to the cardinal points of the compass, on the assumption that the buttress if aligned with any buried footings would allow of their exposure on the diagonal. Cuttings were made inside the boxes so formed, and each box was named after the number of the peg at its south-west corner.

Excavation close to the ruin of the Tudor house revealed the foundation of a second buttress set at right angles to the standing buttress, indicating the south-west corner of a building. A series of trenches was opened to the west, in Boxes C1, C2, D1, D2 and E2, in the hope of finding a wall, or walls, leading from the corner, but only cobbled areas were found about four feet wide running east-west. They had the appearance of paths, but their depth and the fact that sandstone blocks were upon them in places seemed to indicate sub-foundations laid to give true foundations a firmer footing than the clay beneath them. Due to the many disturbances of the area (by subsequent building and gardening) the stratification had been destroyed down to the level of the cobbles, and it was not possible to say for certain whether or not walls had been removed. Attention was turned to the north of the corner, therefore, to try to find the wall running northwards, but here again the same problem was met. A cobbled carriage-way was encountered, drains, the foundation of a small stone outhouse, and garden edgings, all probably connected with the Tudor mansion, but very little definite monastic material – other than scattered small finds of pottery, tile, and stained glass – until the last few days of the excavation. Then, in Box F3, a wall foundation some 6 feet thick was found, running east-west, with a 6 feet square buttress on it. In the angle of the wall and buttress was a burial.

On the Site Plan (fig 1) the Tudor features are in line, monastic wall foundations are black or diagonal line where the stone has been robbed away and the wall traced by robber trenches. The burials are marked by skeleton outlines.

The most common finds were floor tiles. The majority of these were mid-fourteenth century, and were of two main types: (a) with impressed geometric patterns, and (b) with inlaid designs. Most were cut from a large slab of stiff clay, possibly with the aid of a template, and then decorated. Some tiles were found with a high embossed pattern. These, and some of the inlaid tiles, were made in moulds.

The clay body of which most of the tiles were made is of the same type as the local clay with the addition of grog. Before firing and glazing, some had been covered with a white slip to give the pale yellow-green glaze a clean colour.

Monastic pottery was quite common, and showed a range from late twelfth to sixteenth century, although fourteenth and fifteenth century wares were in the majority. Perhaps the most interesting sherds were fragments of an altar vase in white with a blue design, (kindly identified and reconstructed by Mr J. M. Hurst of the Ministry of Works). No 'Cistercian Ware', the dark brown pottery with the white slip-trailed decoration so popular on similar abbey sites, was found, doubtless due to the fact that the main area of investigation was on the site of the church and not the monastic buildings.

Painted window glass was found scattered throughout the site. Much of it is certainly monastic and fourteenth century, but it is safe to suppose that at least a proportion comes from the destruction of the Tudor mansion. Patterns on the fragments seem to consist mostly of geometric designs and foliage. One piece of stained glass, a rich blue in colour, was found. This is certainly later than the painted glass, most of which has become completely devitrified, opaque and friable.

Roofing lead, window cames, nails and such metal objects were plentiful. A small iron knife with an engraved bone handle, a book clasp and bronze lace-tags were also found. A few small pieces of iron and copper slag were found, but not enough to suggest that smelting had been carried on at the Abbey.

(The finds have been deposited in the Prichard Museum, Bedford.)

THE EXCAVATION OF 1961

A much larger party than that which did the trial excavation, made up chiefly of members of Bedford Archaeological Society and Council for British Archaeology volunteers, excavated the site of the Abbey Church at Old Warden for a month during July and August 1961. The Bradford Rudge plan of the site had been discovered by Miss Joyce Godber, M.A. during the previous winter. This confirmed that the wall and buttress found associated with the burial at the end of the trial dig was part of the church, probably the south wall of the chancel, and it was to follow this, and if possible, to define the size of the chancel that the excavation was especially concerned.

The length of wall and the buttress found during the trial excavation were in part of Box F3, so the first cutting opened in 1961 was to complete this box. The results of this trench were better than was expected, for not only did the wall length continue, but its foundations stood several courses high, and on it was another south-facing, 6 feet square buttress which stood at least ten courses high. At floor level, beneath the surviving ashlar block of limestone which represented the

first course above the original ground level, was a course of tiles, intended to level up the rough sandstone foundations rather than as a damp course (Pl VIb.)

All subsequent boxes were subdivided into four, ten feet square cuttings.

In the four cuttings in Box G3, the wall continued due east of the wall in F3 to a pair of corner buttresses from which it began to run to the north. This was clearly the south-east corner of the chancel. Clustered near the wall on its east side were twelve graves. Part of the south-facing buttress of the pair was robbed away, and was only visible as a robber trench. In the south cutting of G2 was a complex of tiles, some inlaid with a heraldic lion design, obviously relaid at a later date, and a stack of roof tiles set on edge. These were not the bed of a hearth as their appearance suggested, but were tiles removed by those responsible for the demolition to be taken away later, and subsequently forgotten.

North of the corner, in the east cutting of Box G3 the wall had been completely robbed away, but the line of the robber trench, which was exactly the same width as the wall itself, cut unceremoniously through three burials, two inside the walls being cut through at about knee level, and one east of the wall just below the shoulders. This is evidence that the church was enlarged when rebuilt in the fourteenth century, the foundations for the enlarged chancel being dug through the monk's cemetery which must have lain to the east of the original building. In the robber trench at this point, too, were the jumbled bones of at least forty individuals buried together in a heap. With them were fragments of nineteenth century clay pipe stems, showing that they represented the reburial of skeletons disturbed during Bradford Rudge's excavations.

Further north, in Box H3, the east wall of the chancel continued and had a buttress facing east. More burials were arranged on the east side of the wall, one of which was again cut through by the foundations. The last box opened in this direction, J4, revealed another buttress in the south cutting through more graves, yet another buttress in the north cutting and the beginning of a return wall running westwards opposite it. This wall appears to be the north wall of the chancel, but further excavation will be necessary to prove this, although the Bradford Rudge plan indicates its extension to an apparent north transept. It is suggested that this part of the plan, though reproduced in fig 1 is probably a distortion of the blockmaker in order to accommodate the plan above its title. Certainly at this point near the present field gate there are indications of masonry on the surface but they may not be *in situ*, which may also apply to several courses of sandstone further west beyond the farm track which were formerly part of the foundations of a barn shewn on the O.S. sheet XVII/15 but now destroyed.

Trenches west of the south chancel wall were then opened in order to discover the location of the south transept, if one existed. The first trench, on the north side of Box D5, revealed mosaic floor tiles laid in an intricate pattern.

A parallel trench was opened on the south side of Box E5 to reveal more of the pattern. The baulk between the two trenches was taken out, and the remainder of the floor still surviving was exposed. A small trench to the west of D5 showed a north-south running wall and either an east-facing buttress or the foundation of an arch column. This could be the beginning of the transept arch, but time did not permit the opening of more cuttings to prove whether or not this is the case.

On the whole the season's work was very successful. It revealed the south wall of the chancel, the entire east end of the chancel, and probably the north limit of it. It has also revealed part of the north cloister wall and what may be the site of the south transept, besides part of the floor of the crossing of the church.

THE MOSAIC FLOOR (fig 3 and pl V) was the most important discovery of the season. Much work and research will have to be done before its real significance is known. Mosaic floors of any kind are very rare in monastic buildings in the southern half of England, and the indications at this stage are that the Old Warden floor is unique in its intricate tile patterns. A few comparable designs have been discovered in the Cistercian abbeys of Yorkshire, notably at Meaux, Byland and Rievaulx, but while the same tile shapes and patterns occur in many of these, almost all of the tiles and patterns on our floor are peculiar to Warden. Three methods of making floor tiles were in common use in the Middle Ages: (a) using moulds, (b) cutting the shapes from a large slab of stiff clay using templates and (c) by simply drawing the design on the slab and cutting round the lines later. The tilers responsible for the Old Warden floor seem to have used the second and third methods together, for while the main shapes match exactly as though cut round a template, the detail within the main shapes is more individual in character. The tiles are made of a fine earthenware body, which could very well be local, fired to a light red colour with a blue-grey core. Although most of the glaze has been worn off, the remaining traces show that the pattern was originally in two main colours, a light yellow-green and a dark green-black. The light coloured tiles were coated with white slip before firing and glazing.

Few kilns for mosaic-tile making have been found to date, and while we have no real evidence that the Warden mosaic tiles were made on this site, it seems that there was a kiln making at least moulded embossed tiles, for tile wasters, unfinished and unglazed, and pieces of kiln props were found in the fill of the robber trenches.

Very little pottery was discovered during 1961. What was found was chiefly of the fourteenth and fifteenth centuries.

Roofing lead and nails were again plentiful, but more interesting metal finds included a toilet implement with an ear scoop at one end and a nail cleaner at the

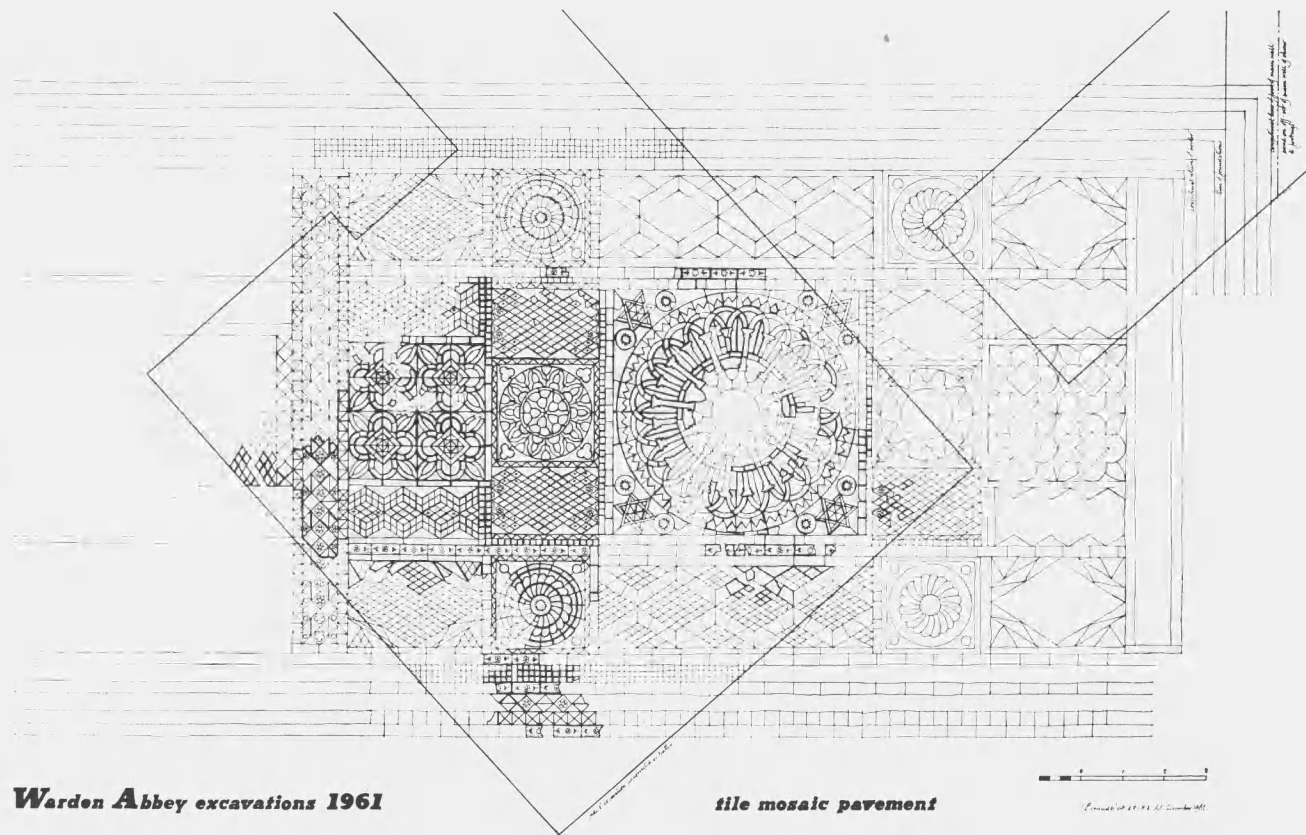


Fig 3. Tile mosaic floor (surviving portion indicated in heavier line).

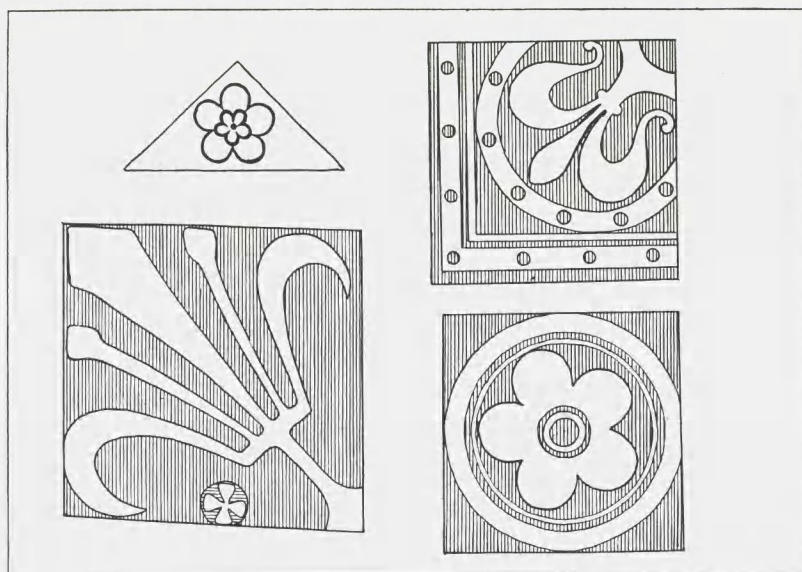


Fig 4. Three Inlaid tiles and one stamped tile with typical rose pattern.

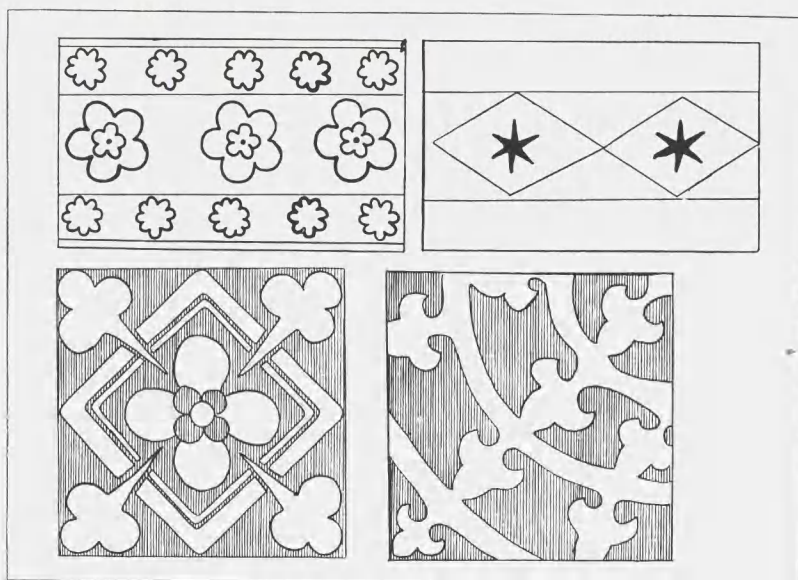


Fig 5. Inlaid Tiles (left). Stamped tiles (right).

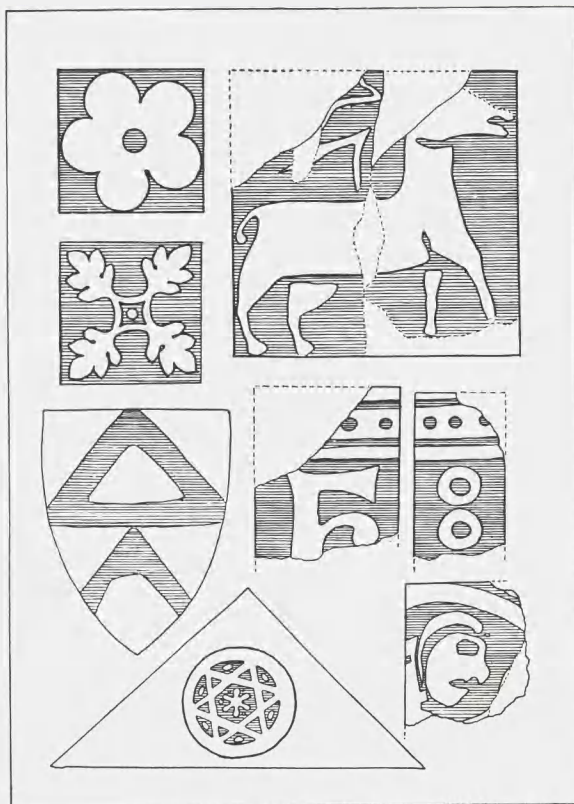


Fig 6. Inlaid tiles with star of David stamped tile at bottom.

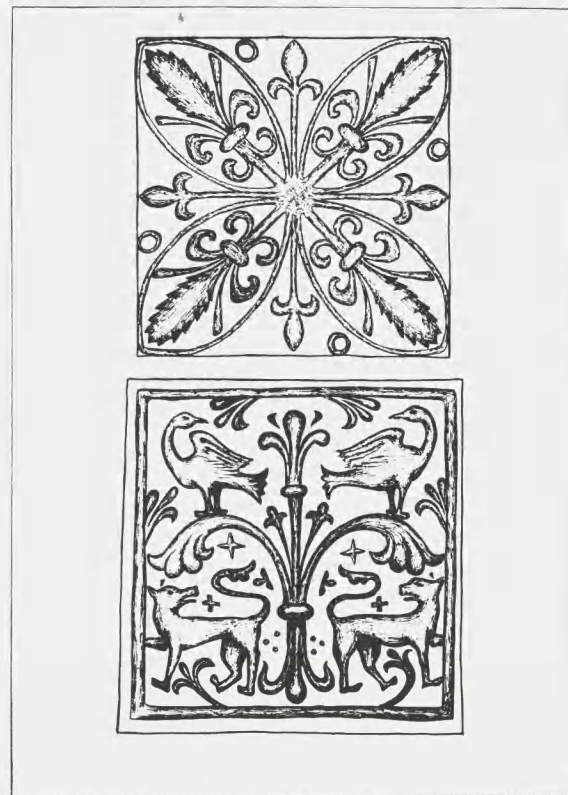


Fig 7. Embossed tiles.

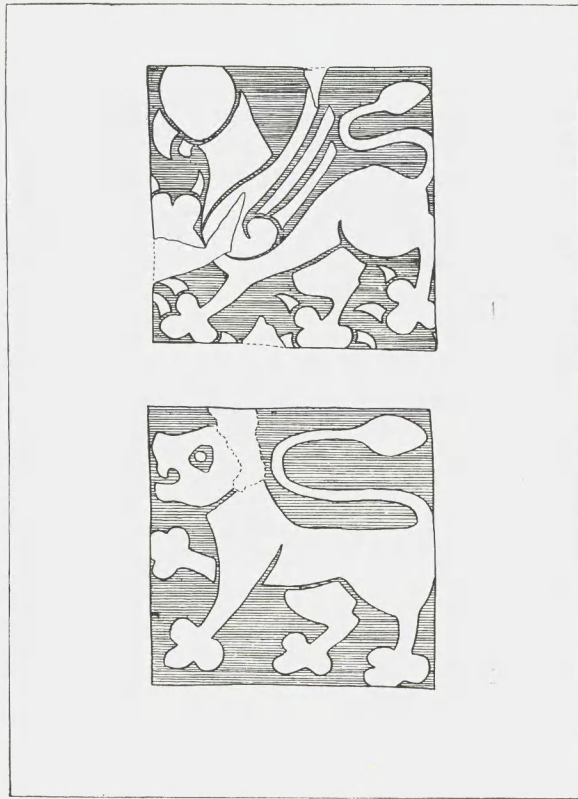


Fig. 8. Inlaid tiles

other and three coins, one of which is from a Nuremberg mint, and the others are French jettons. They are fifteenth century.
(All the finds are in the Prichard Museum, Bedford.)

A note on the post suppression remains at Warden Abbey Farm

BERNARD B. WEST

The well known series of Bedfordshire Religious houses engraved by S. and N. Buck in the middle of the eighteenth century includes 'the North East view of Warden-Monastery' which is in fact a drawing of a largely post suppression building. (Pl VII a).

Pl. VII b is a redrawing of this engraving in corrected perspective which gives some indication of the magnificence of the main block which was destroyed in 1790. This part of the building was aligned north-south and the present surviving fragment joined it on its west side.

The whole complex of this post suppression development of the site was built in the angle of the cloister and church of the mediaeval plan and on the evidence of a surviving thirteenth century buttress in the present remains must have incorporated portions of mediaeval work. It is significant that the buttress as shewn on Fig 1 is one of a pair on a south east angle which would mean that the extension westwards as shewn in the illustration would have a former inside face as its north wall. From Buck's illustration it can be seen that the fenestration is quite different beyond the small staircase tower with its 'candle snuffer' roof, from that of the typical sixteenth century work in front, and in fact two round headed windows one above the other are recognisable at the end of the range adjoining what are apparently two thatched barns.

The evidence of the Ely infirmary range could account for the reversal of inside to outside wall, the new work having probably been built as a 'lean to' initially, and later altered with a central ridge, but the question of the identity and date of the mediaeval work must inevitably arise. It is possible that we are dealing here with the south wall of a Chapter house, and perhaps one of the Transitional period, if the apparent conflict of round headed windows with typical thirteenth century detailing of the buttress is taken into account. Certainly it is characteristic of typical monastery development for the Chapter house and east Cloister range to be older work than the church. Bristol Cathedral, Much Wenlock Priory and Westminster Abbey come to mind as examples.

For the rest of the illustration one or two other small points of interest may be mentioned. Firstly, the overlay in black line indicates the profile of the existing ruin, looking in a south westerly direction. From this it can be seen that the former 'candle snuffer' roof has been raised to a simple parapet. The remains of the early eighteenth century plaster quoining shewn in the illustration round the staircase window are still visible today, as is the line of the former 'lean to' roof of the barn on the north side.

There is one other very puzzling element in the Buck engraving which possibly only careful excavation would explain and that is at the southern end of the main east facing range. South of a point where the parapet is abruptly terminated, short of the centre of the left hand dormer, a vertical joint of ragged masonry or brickwork runs throughout the height of the building. Half-way up, the left hand springing of a two centred arch is clearly visible, and it is just possible that the buttress is meant to be on an angle. Does this indicate a piece of fourteenth century building up to which the sixteenth century work was carried with the intention to replace it? Such uncompleted survivals are not uncommon, as for example in the very bad junction in the courtyard of Phillibert de l'Orme's work with that of the Francois Premier period at Blois.

It is difficult to find an identity for a conventual building at this point but full excavation might explain it.

APPENDIX

DENTAL REPORT ON SKULLS FROM OLD WARDEN

by P. G. WILLIS

DENTAL TERMS. The skulls examined show several features of dental interest. The teeth all exhibit considerable attrition, (i.e. the occlusal or biting surface, which normally is broken up by cusps and fissures, has been ground flat) and this has occurred to such an extent in all specimens as to expose the dentine occlusally.

Dental caries occurs most frequently in areas of stagnation, such as the fissures of the molars and premolars, and at the contact point between teeth (interstitially). Attrition removes the fissures because it removes the cusps, so that there is very little evidence of occlusal caries in the examples seen.

Dental caries can progress, unless checked, to expose the pulp chamber; this leads to infection of the pulp tissue (nerve-cells, blood vessels etc.) and abscess or cyst formation. Fibrous food pulled through the contact points keeps them free from caries.

The teeth have a normal relationship with one another in occlusion, the lower incisors bite up behind the upper incisors. Several of the Warden skulls depart from the normal, and have the incisors edge to edge, indicating a grinding rather than cutting action when eating.

THE BONE. Normally all the root of a tooth is supported in the bone. As the teeth erupt, the gum attachment is just above the amelo-cementinal junction (junction of enamel covering the crown and the cementum covering the root). At the junction of the gum and the tooth there is a shallow channel or trough, this in a healthy mouth is $1-1\frac{1}{2}$ mm deep. If for any reason, (such as food stagnation, poor oral hygiene or vitamin lack), the gingival soft tissues become inflamed and infected and this trough deepens to form a pocket the bone is resorbed away from the infection and the pocket deepens. Calculus (tartar) forms in this pocket, debris collects and becomes pus like, and one sees the condition known as pyorrhoea, or pus in the gums.

Throughout life there is a certain amount of bone loss and exposure of the root of the tooth, causing apparent elongation of the teeth. The gums or gingival in this condition remain healthy. It is the presence of sub-gingival calculus, greenish or dark yellow in appearance, which indicates pocketing and so paradental disease, a dental condition. Calculus formed above the gum margin on the crown of the tooth is supragingival tartar or calculus, and is not necessarily indicative of paradental disease and pocket formation.

All the Warden skulls show gross bone loss and all have, to a greater or lesser degree, sub-gingival calculus present.

AGE OF SPECIMENS. My knowledge is slight here. Wear is not even on teeth so that individual teeth are no real guide to age. However the wisdom teeth – or third permanent molars, usually erupt between the ages of 18–25 years provided there is room. The angle of the mandible becomes more obtuse with age. Of the Warden mandibles, all except that of specimen B are virtually right angles. However against this, all bony muscle attachments are well marked so that the stresses on the mandible were greater than we see nowadays, which might account for the steeper angles. I should not, therefore, really like to commit myself on age at all.

EXAMINATION OF INDIVIDUAL SPECIMENS

These were skulls taken at random from the site. For convenience they were labelled from A to E. No exact measurements were taken.

A. Maxilla and Mandible

- Teeth**
- Evidence of occlusal caries $\begin{array}{c} 7 \\ | \\ \hline 7 \end{array}$
 - Missing teeth $\begin{array}{c} 2 \\ | \\ \hline 8 \\ | \\ 8 \end{array}$ only $\begin{array}{c} \hline 8 \end{array}$ missing *in vivo*
 - Normal incisal relationship.
 - Attrition dentine visible on all teeth except $\begin{array}{c} 87 \\ \hline 7 \end{array}$
- Bone**
- Bone loss even all round; about one third of root visible.
 - Sub- and supra-gingival tartar present. However the sub-gingival tartar is limited to the amelo-cementinal junction. Paradontal condition fair.
 - Mandibular angle virtually a right angle.

B. Maxilla and Mandible

- Teeth**
- Caries present $\begin{array}{c} \hline 5 \end{array}$ $\begin{array}{c} \hline 8 \end{array}$. The whole of $\begin{array}{c} \hline 5 \end{array}$ buccal surface is missing and the pulp chamber has been exposed. Occlusal caries $\begin{array}{c} \hline 8 \end{array}$.
 - Missing teeth $\begin{array}{c} 8 \ 6 \ 5 \\ \hline 76 \end{array}$ $\begin{array}{c} 4 \ 5 \ 6 \ 8 \\ \hline 5 \ 6 \ 7 \end{array}$ probably $\begin{array}{c} 4 \\ \hline 4 \\ \hline 4 \end{array}$ were present *in vivo*, but lost during excavations. Bone loss around $\begin{array}{c} 4 \\ \hline 4 \end{array}$ palatally and buccally suggest that it was involved in a cyst which became infected, or at least was palpable palatally. The bone is quite smooth and one can trace the smooth outlines of the cyst. The bone was completely resorbed palatally.
 - Edge to edge incisal relationship.
 - Very severe attrition all teeth.
- Bone**
- Gross bone loss $\frac{1}{2}$ – $\frac{2}{3}$ at least of all teeth unsupported.
 - Sub-gingival calculus.
 - Mandibular angle more obtuse.

C. Maxilla and Mandible

- Teeth**
- Caries interstitially $\begin{array}{c} \hline 4 \end{array}$. No occlusal caries. The $\begin{array}{c} \hline 5 \end{array}$ worn right down so that the two root canals are visible. Possible apical abscess $\begin{array}{c} \hline 6 \end{array}$.
 - Missing teeth $\begin{array}{c} 8 \ 6 \\ \hline 7 \ 6 \end{array}$ $\begin{array}{c} 6 \ 8 \\ \hline 6 \end{array}$, only $\begin{array}{c} \hline 7 \ 6 \end{array}$ $\begin{array}{c} \hline 6 \end{array}$ lost *in vivo*.
 - Normal incisal relationship.

4. Severe attrition except for $\overline{7}$ which occluded in the gap left by $\overline{7}$ indicating that $\overline{7}$ had been missing for some time *in vivo*.

- Bone**
1. Bone loss severe in molar and premolar regions $\frac{1}{2}$ root exposed. Less in incisor regions, $\frac{1}{4}$ – $\frac{1}{3}$ root exposed.
 2. Heavy supra-gingival deposits of calculus, slight sub-gingival deposits.
 3. Mandibular angle 90% plus.

D. Maxilla and Mandible

- Teeth**
1. No caries.
 2. $\overline{8}$ | 8 missing, all others present *in vivo*.
 3. Occlusal attrition down to dentine.
 4. Edge to edge incisal relationship.

- Bone**
1. Even bone loss $\frac{1}{3}$ – $\frac{1}{2}$ root unsupported.
 2. Sub gingival deposits, only slight supra gingival.
 3. Mandibular angle 90%.

E. Maxilla and Mandible

- Teeth**
1. Caries present in $\overline{6}$. The pulp chamber is exposed and the tooth split.
 2. Only $\overline{6}$ | lost *in vivo*.
 3. Edge to edge incisal relationship.
 4. Attrition of dentine visible on all occlusal surfaces.

- Bone**
1. Gross bone loss $\frac{1}{2}$ root at least unsupported.
 2. Sub-gingival deposits.
 3. Mandibular angle 90%.

CONCLUSION AND SUMMARY

The caries incidence in all specimens is very slight, where it is present the results are severe because it was untreated. Certain teeth were lost during life, there is no evidence to show how or why, although it would seem from one specimen (B), that bone loss following an apical abscess could loosen the tooth which could then be removed by fingers alone.

The severe attrition indicates a coarse diet and the size of the muscle attachments indicates an aggressive manner of grinding the food. The teeth are not particularly large as compared with teeth today. The jaws, however, are bigger and stronger and would suggest a more prognathous profile than that which is normal today.

The bone loss and sub gingival calculus deposits indicate that the paradental condition of the members of the Warden community left a lot to be desired. Of interest maybe, is the fact that one sees similar oral conditions in every way in certain patients from the poorer and under-developed countries. They show severe attrition, no caries (until they live for a while on our diet) and severe paradental conditions. They show larger and more developed jaws and have a more prognathous and squarer profile.

Notes

An Early Bronze Age Pot from Heath

The pot described below came from an unidentified sand-pit at Heath, owned by Joseph Arnold and Sons. It was given by Mr Ernest Arnold to Mr F. Fairbrother of Leighton Buzzard who used it for several years as a respoitory for pipe-ash! On removing to Torquay Mr Fairbrother presented it to the Museum of the Torquay Natural History Society, where it is now displayed. (Accession No. 313 1961).

The pot is made of a hard and very gritty pinkish clay, burnt orange and black on the base, suggesting firing in an open hearth. It is poorly hand-made and asymmetrical. There are traces of an iron incrustation low down on one side.

Decoration consists of cord impressed horseshoes, varying in size and depth of imprint. The horseshoes on the rim tend to be smaller than those on the body. The neck is marked by a row of vertical corded stabs, and an intermittent line of cord impressions. At one point on the inside of the rim, there are three rows of cord impressions stretching for 1.5 inches. The rest of the rim interior is undecorated.



Fig. 1. An Early Bronze Age Pot from Heath.

Whilst the shape of this pot is reminiscent of a squashed beaker, the rim and decoration are clearly related to Food Vessels. Dr Isobel Smith has pointed out that the cord ornament must surely stem from the Peterborough – Food Vessel – collared urn tradition. These pots are fairly common in southern Britain, and are also represented in the true Food Vessel provinces in Yorkshire and Scotland. At present we must regard such vessels as oddities which do not fall into any sort of pattern or seem to mean very much. We can at least place the Heath example safely in the Early Bronze Age sequence.

Since the details of the finding of this vessel are unknown we cannot consider its associations. It is worth remembering the presence of a number of barrows in the area, one of which produced the incense cup now in Bedford Museum.

JAMES F. DYER

The Felmersham Fish-Head Spout

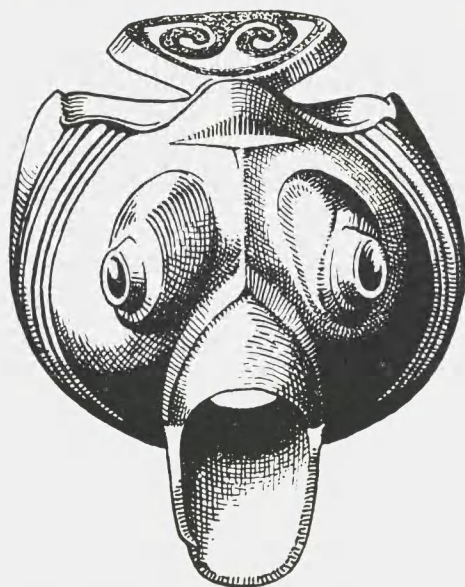


Fig 2. The Felmersham Fish-Head Spout.

The Belgic bronze fish-head spout, which forms the centrepiece for the front cover of this Journal, was found with other bronzes and pottery in gravel digging on the north bank of the Ouse near Felmersham Bridge, Sharnbrook, in 1942. Mr W. Watson, who published the group,¹ concludes that it was made early in the first century A.D. to serve as the mouth of a fairly shallow bowl possibly fixed at a spring-head to collect the water and direct it in a jet from the fish's mouth. It is apparently the only example known from Britain of a fish in Belgic art.

It is now in the Bedford Museum and has been redrawn for this Journal by Mr C. E. Freeman.

W. H. Manning

Field System Survey at the Knocking Hoe National Nature Reserve, Pegsdon

The Knocking Hoe National Nature Reserve is situated in south-eastern Bedfordshire, three-quarters of a mile north-east of Pegsdon village.² The Reserve comprises some 22 acres of lower chalk downland, consisting of a rounded knoll known locally as Knocking Hoe, and a steep-sided dry valley to the south. All form part of the Chiltern escarpment. Archaeologically the reserve is of considerable importance because of its wealth of ancient field systems.

¹*Antiq. Journ.* XXIX (1949), 37ff, especially 41-42 and 50-51, and fig 3, 4 and 8; more recently Sir Cyril Fox *Pattern and Purpose* (1958) 80, fig 49 and pl. 46 a and b.

²I am indebted to the Nature Conservancy and the owner of the land, Mr R. Franklin, for permission to examine the field systems. Permission to visit the Reserve should be obtained from the Nature Conservancy, 19 Belgrave Square, London, S.W.1.

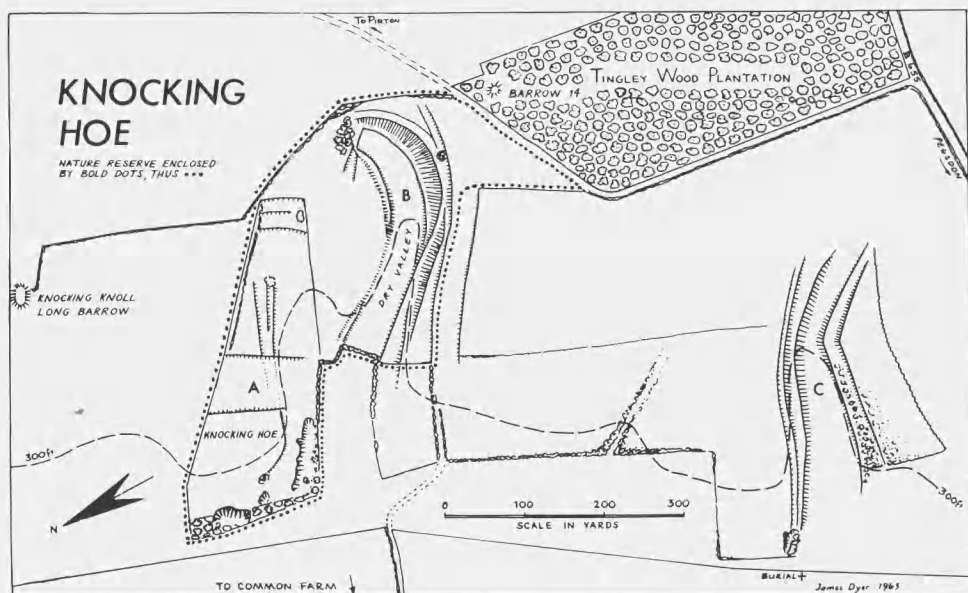


Fig 3. Field System at Knocking Hoe.

The Reserve lies half a mile north of the present Icknield Way, and beside the medieval track-way which passes from Tingley Wood to Pirton village. Due north of Knocking Hoe on the county boundary is Knocking Knoll, the truncated remains of a long barrow. This was dug into by William Ransom about 1855 with uncertain results. His reference to a 'rectangular cavity containing nothing but soil' may allude to this barrow. A grave cut into the chalk of the adjoining field contained human remains which may be connected with the long barrow.

In Tingley Wood Plantation is a round barrow (County No. 14) which is probably unexcavated. According to William Stukeley, writing in 1724, east of the Reserve at 'High downs is a pleasant house by a wood, where is a place called Chapel close; in this wood are barrows and dykes, perhaps of British original'.¹ This must refer to part of Tingley Wood since the Plantations beside the Reserve did not exist in Stukeley's day. The dykes may refer to some form of Iron Age camp at present unidentified. Beacon Hill south of the Reserve, seems a likely spot for such a camp, but there are no surface indications; the whole hilltop having been scarred by chalk workings and Home Guard trenches. Like the Reserve, the slopes of Beacon Hill and the hills west of it, are covered with strip-lynchets.

About 1840 a large number of human skeletons together with those of horses and fragments of metal work were found in Danes Field half a mile north-east. In 1879 William Ransom excavated two small mounds at the foot of Knocking Hoe on Pegsdon Common and found a Saxon burial, Belgic cremation urns and Romano-British pottery.² Hitchin Museum contains Saxon weapons and beads from Ransom's excavations. Unfortunately the exact find-spots are unknown, but Ransom's vague note suggest that a settlement site of presumably Roman-British date existed about

¹W. Stukeley: *Itinerarium Curiosum* (1724) I, 73.

²*Trans. Herts. Nat. Hist. Soc.* (1886) IV, 39.

midway between Pegsdon Common Farm and the present village. Almost every period seems to be represented by some monument in the district.

As has already been stated the Reserve covers a spur of the lower chalk and its adjoining dry valley. For the purposes of this report a second dry valley outside the Reserve to the south is also considered. The highest point of the Reserve is at almost 400 feet O.D. and the lowest 225 feet O.D. The Reserve is being maintained as chalk downland and is still grazed by cattle and sheep. The nearest water supply is a small stream close to Pegsdon Common Farm, a quarter of a mile west of the dry valley.

The ancient fields form three groups marked A, B, and C on the map. Group A is centred on the slopes to the east of Knocking Hoe, Group B in the dry valley to the south-east of it; Group C lies outside the Reserve, a little less than half a mile to the south-west and is known as the Pegsdon lynchets.

Group A: East of Knocking Hoe.

Three contour lynchets, the lowest originally 250 yards long, run east-west. The upper was 150 yards long, whilst the intermediate was about 80 yards. The upper and lower have been cut across and almost ploughed out by a square field, bounded by two *up-and-down lynchets*¹ running north-south. This occurs on a saddle of more gently sloping land and has been described in the past as a 'Celtic Field', but a much more recent origin should be sought. It measures almost exactly an acre in extent.

Further east on the same spur three low lynchets face west, one being partly disturbed by an ancient quarry.

Group B: The dry valley group. (Pl. VIII)

All the lynchets in this group are of contour type. On the northern face of the valley is a single *bench lynchet* about 5 feet above the valley floor. This is prominent at the eastern and western ends of the valley, but fades out in between. The western section runs from the valley floor to a pointed end 50 yards south-east. The eastern section stays above the floor. It is 15 yards wide and very flat, trailing to a pointed western end. The southern face is covered by the greatest number of lynchets. A valley floor bench runs from the head of the valley for 180 yards to the west; here, less than a yard wide, it is drawn out to a point. Sweeping up from the floor of the valley to the upper head of the coombe is an *approach lynchet* 320 yards in length. At its lower end this lynchet is 22 yards wide, but it is reduced immediately it starts to climb the hill. One end of this approach lynchet terminates close to the entrance to the Reserve, north of Barrow 14; a branch track follows the upper edge of the dry valley and passes round to the eastern end of the Knocking Hoe spur where it fades out. A second approach lynchet branches off close to the bottom of the valley to give access to a terrace 45 yards wide. This terrace is triangular in shape and is narrowest where it joins the main approach lynchet at its eastern end. Two further terraces lie above this on more gently sloping ground with easy access from east or west. The fence bounding the Reserve on its southern side passes between them.

Group C: The Pegsdon Group.

This group comprises long contour lynchets on either side of a dry valley. Those on the northern face, three in number, average 350 yards in length. Two lynchets on the southern face are about 300 yards long. Access to these lynchets was an easy matter from either end.

¹For definition of lynchet types see Bowen: *Ancient Fields* (1962) 40 and *W.A.M.* CCVIII (1960) 336.

Discussion

A number of general observations emerge from examination of these lynchets:

1. They can be of any length; there being no apparent criterion beyond the amount of land available.
2. The treads of each terrace are sloping in length, and, with the wider ones, in width also.
3. Where the hill slope is at its gentlest, the terrace is at its widest.
4. The direction in which the lynchets face is of no importance. Whilst the majority of Group B face north, Group C faces south.
5. The slopes were apparently utilised when the hilltops were already fully cultivated, and we can assume that the clay in the valley bottoms was too heavy for single furrow ploughs.

The problem of use and date of these, and indeed of all, lynchets is an intriguing one, which has long been open to speculation. It has been suggested that the terraces were used for flax and vine cultivation, but it is more likely that less exotic crops such as wheat or barley were produced. As to date, Wood and Whittington¹ found a filled-in Romano-British ditch under lynchets at Horton in Wiltshire, and this leads them to consider that that group probably date from Romano-British times onwards. They suggest that some lynchets may date even from the Belgic period if a pre-Roman heavy plough can be attested. It is perhaps significant that William Ransom found Belgic and Romano-British remains at the foot of Knocking Hoe on Pegsdon Common. In choosing a local date we should bear in mind the fine series of lynchets lying immediately west of the entrance to the hill-fort of Ravensburgh, near Hexton, only two miles south-west of Knocking Hoe, which are surely connected with the occupation of the fort. Their situation on the furthest side of the hill-mass from Hexton, makes their connection with the medieval village extremely unlikely. Finally, it is worth recalling that all strip lynchets need not necessarily be of the same date; many are medieval, and some are still being formed today in Belgium and the Isle of Portland for example.²

JAMES F. DYER

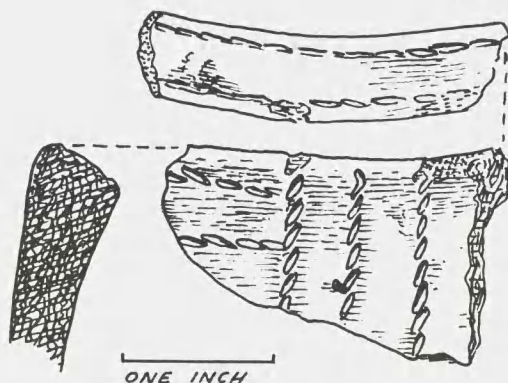


Fig 4. Rim-sherd of a collared urn found on the surface of Knocking Knoll (now in Luton Museum.)

Since this paper was written Mr J. E. Thrusell of Pirton has given the writer a decorated rim-sherd from a collared urn, found by him on the surface of the Knocking Knoll long barrow

¹W.A.M. CCVIII, (1960) 337.

²*Antiquity* VI, pl. IV; XXII, 79-81.

some years ago. The fabric is grey in colour and is decorated with bands of vertical and horizontal cord impressions.

JAMES F. DYER

The trial excavation of a Roman Site at Tempsford in 1962 (Nat. Grid TL 165522)

Deep cultivation during the winter of 1961-62 on land belonging to Mr C. Zwetsloot on the West side of the Great North Road at Tempsford, near the parish boundary with Sandy, revealed large quantities of high quality Roman pottery, metal objects, roof tiles and building materials. Among these finds was an almost complete castor ware pot with an abstract design of flowers in barbotine. An investigation of higher ground to the east of the road showed it to be scattered with pottery and building materials.

I excavated part of the most promising area of this scatter with members of the Ouse Valley Excavation Group for four weeks in July and August. Although no trace of any building foundations were found, the results of the excavation were most gratifying. The area proved to be part of the industrial area of a Roman villa of a luxurious type, which produced coarse pottery. Ditches, and pits of the type used for preparing clay for pottery making, were filled with soot and ash, the rakings of kilns or furnaces, together with pot wasters.

Many small finds were made, including a number of complete pots, many sherds, an iron ladle, two knives, a spearhead, part of a sword, the bowl of a small silver spoon, bone pins and a needle, a bronze pin, a ligula and a number of small third century coins. The building materials found included ashlar blocks, tesserae and marble wall facings. Unfortunately, many of the finds mentioned were stolen when the site exhibition was broken into one night towards the end of the excavation.

At the present stage of the excavation the indications are that the villa was burnt and vacated without warning, and the house itself, once discovered, should make a very interesting excavation another year. A more detailed report will be published later when further work on the site has been completed.

GRANVILLE T. RUDD

Review

ANCIENT DUNSTABLE. A PREHISTORY OF THE DISTRICT.

By C. L. MATTHEWS

Published by the Manshead Archaeological Society of Dunstable, Bedfordshire. Pp. 90, Pls. VI, Figs 29. 5s.

In 1951 a group of enthusiasts centred on Dunstable formed the Manshead Archaeological Society. A strong stimulus for this act was the rapid rate at which industrial development, new housing estates and chalk quarrying were destroying prehistoric and other evidence in their district. Since then the Group has been engaged, almost continuously, in rescue excavation work at week-ends and in any other spare time. They have needed, contemporaneously, to spend some of that spare time in education and the acquisition of what was, to nearly all, a new discipline. They joined the Dunstable branch of the W.E.A. and applied to this Association and The Board of Extra-Mural Studies of Cambridge University for tutors. They have been fortunate, both in the tutors, and especially so in the continuing perseverance and enthusiasm of the author of this book. He describes it "as an interim report on the progress the Manshead has made in the first twelve years. It is offered to the people of Dunstable as a contribution to the heritage of the town". Local advertisers have so supported this readable and useful booklet that its purchase cost is within the reach of all.

The area covered is that of Dunstable and its immediate vicinity of some 50-60 square miles. The geological formation of the area is described and the successive cultural influences, from Palaeolithic times to the coming of the Danes. Whilst the detail for each period is local, a valiant attempt has been made to set it against a much wider background, so that a more comprehensible picture is offered to the lay reader. It is understandable that the text is at its best in reporting some of the results of local work and of these finds: much of this work is still in process of preparation for full reports. Archaeologists will find these preliminary summaries useful, though they may find a certain unevenness in the blending of this factual material into the wider background. For example, paragraphs on hill-forts, for which there was then little or no excavation evidence, are padded out with a dissertation on the Gauls, and a long quotation from Livy describing how Manlius Vulso conquered two hill-forts as far away as Galatia. Insofar as can be seen, the hill-fort of Maiden Bower is ascribed to 'The Iron Age "B" People', presumably on the strength of the sling-stones found in the ditch silt. The description of its defence, however, resembles a timber-laced rampart of a typically 'A' cultural form (rather than a palisade with internal revetting as shown in the reconstructed drawing).

One of the best achievements of the Society has been the long and patient work expended on the Puddle Hill site, working always but a short distance ahead of chalk quarrying operations. Here, successive occupations from Early Iron Age to Saxon times have been found. Structures and burials, with a wealth of associated material, make this site one of great importance. For many, the preliminary notes and material illustrated for this site will prove its greatest asset. Saxon cemeteries elsewhere are also 'news', as are some barrow excavations. In general, the bulk of the new material is derived from Iron Age and Saxon sites.

This publication has already proved to be popular in its home-town, but it deserves the attention of a wider circle of readers. For specialists local archaeological detail will have its interest; for non-specialists, and perhaps especially for School Archaeological Societies, the non-local educational background will also serve their purpose. In the next decade, the reviewer would appreciate a second handbook from the Manshead Society, which would again show the results of more new work in which it is hoped that they will still be engaged. This present book is recommended to the attention of all groups and societies engaged in active archaeology as showing what can be done. How useful it would be if they would all produce similar local studies, with their most up-to-date material, like this contribution of *Ancient Dunstable*.

M. AYLWIN COTTON

PLATE I



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Photo: by J. K. St. Joseph

Waulud's Bank aerial photograph looking north-west. The excavation sites are marked I and II.

PLATE II



WAULUD'S BANK Section I, looking towards the interior of the camp.

PLATE III



(a) WAULUD'S BANK, the Neolithic Hur site looking north-east.



(b) WAULUD'S BANK, Rinyo-Clacton and Indeterminate Neolithic sherds.

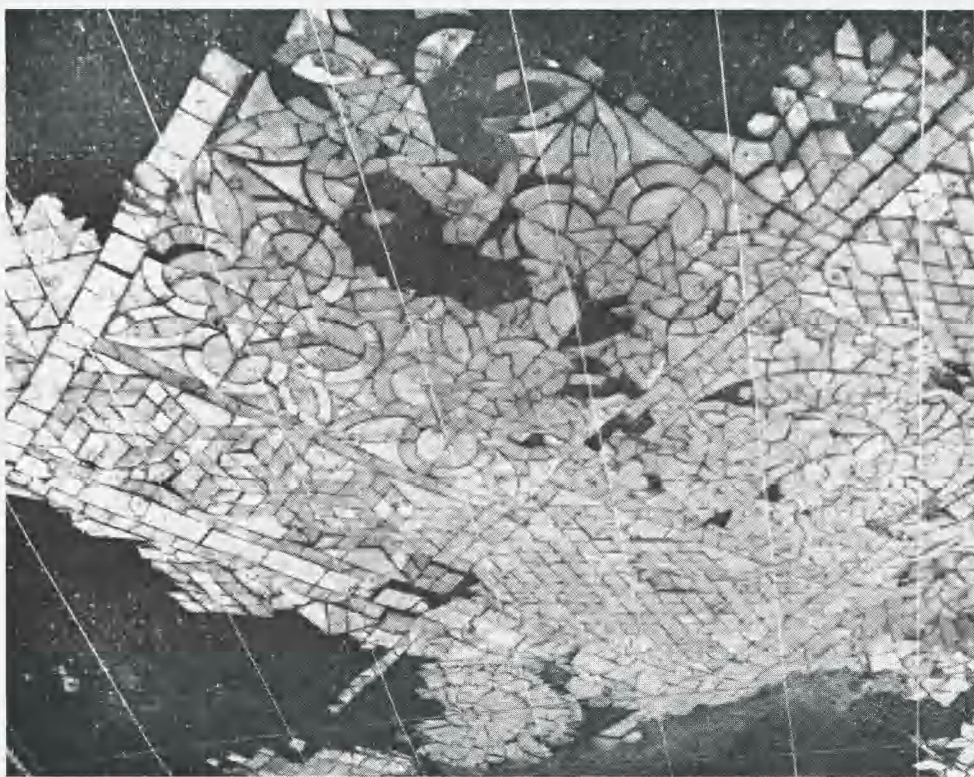
PLATE IV



Crown Copyright Reserved

Photo: by J. K. St. Joseph

WILBURY HILL from the south. Excavation → 1959 - 1960 -



WARDEN ABBEY. Tile mosaic floor looking northwards.
Photo: Alexander Chyristal, A.R.I.B.A.

PLATE VI



WARDEN ABBEY

- (a) Box G2/A South eastern angle buttress of choir, showing depth at which foundations were found. The light coloured brick feature to the right of the picture is part of a Tudor out house.



WARDEN ABBEY

- (b) Box F3/B looking south eastwards, south wall of choir with part of buttress showing single block of dressed limestone plinth at original ground level.