

THE EXCAVATION OF AN EARLY BRONZE AGE CEMETERY AT PIN FARM, GAZELEY

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The barrow at Pin Farm, Gazeley (TL/72406727), is located on the south edge of the Breckland between Bury St. Edmunds and Newmarket, about 300 metres north of the course of the Icknield Way (See p. 2, Fig. 1). It is situated in the north-east corner of a modern field bounded to the south by the Icknield Way, to the west and east by arable fields, and to the north by a large conifer plantation (Fig. 11).

The field in which the barrow is situated is said to have been ploughed almost continuously since the Napoleonic Wars and in modern times has carried both root and cereal crops. The average ploughsoil depth proved to be about 30 cms, with a further zone of disturbance extending 5 cms or so below its base as a result of the recent use of a 'subsoiler' in the field, a potentially very destructive implement which, in time, would almost certainly have broken up most of the secondary burials described below.

The geology at Pin Farm is typical of large stretches of the Breckland with a subsoil consisting of calcareous sandy drift with its surface moulded by periglacial action into an extensive system of ridges and hollows. Mantling this deposit is a brown sandy soil ranging in thickness from about 50 cms to a metre or so depending on the surface relief of the immediately underlying subsoil, with quite marked variations in soil depth often occurring over lateral distances of only a metre or two. The soil itself is fairly flinty with, in places, broad spreads of red or brown flint gravel at or near its junction with the drift beneath. The ploughsoil over the mound was noticeably more chalky and less flinty than elsewhere, no doubt because it still retains substantial contributions from the material of the mound.

Before excavation, the barrow showed as a vaguely-defined elevation, *c.* 60 cms high, with an apparent prolongation eastwards into the hedgerow bordering the field. The visual impression was confirmed by a contour plan made of the site, the barrow appearing as a round-ended ridge, somewhat longer than broad, and at first glance representing a round or oval barrow truncated just east of centre by the hedge and the track bordering it. Excavation, however, established that only the eastern edge of the barrow passes under the hedge, the apparent near central position of the latter

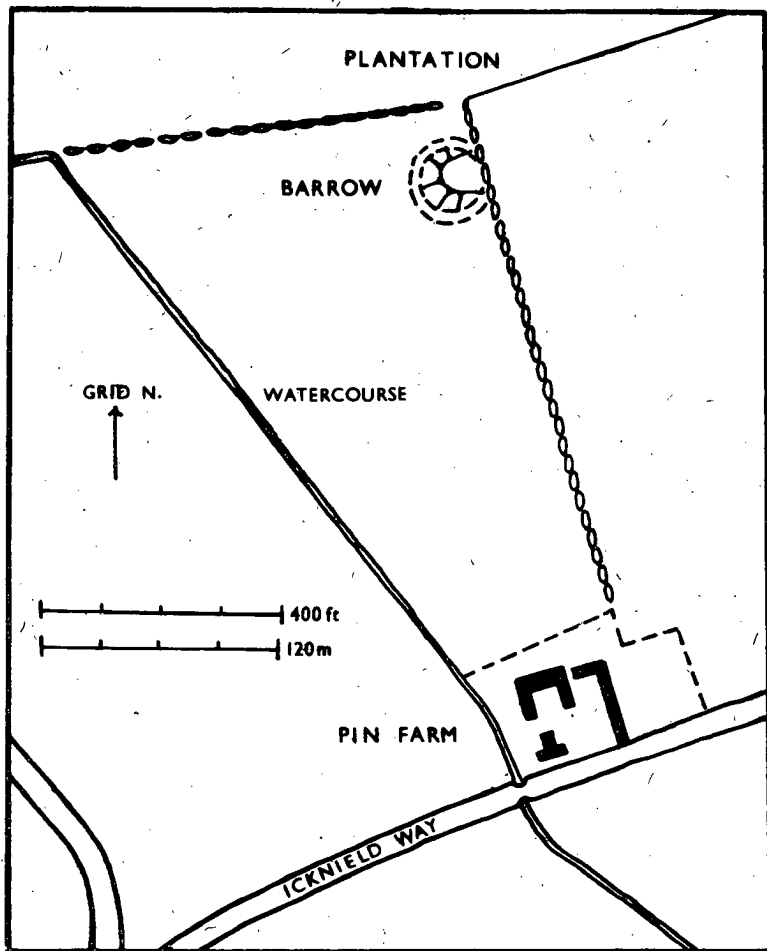


FIG. 11.—Location map of barrow at Pin Farm, Gazeley.

resulting from the progressive obliteration of the barrow westwards caused by ploughing.

The excavation took place between 9 August and 9 September 1969, and was by the quadrant method, the arms of the two main sections being aligned on the cardinal points. By the end of the dig a complete cross-section through the mound had been achieved, plus the excavation at depth of a large area at the centre (c. 40 square metres). In addition, the ploughsoil was stripped from almost the entire southern half of the barrow and from about two-thirds of

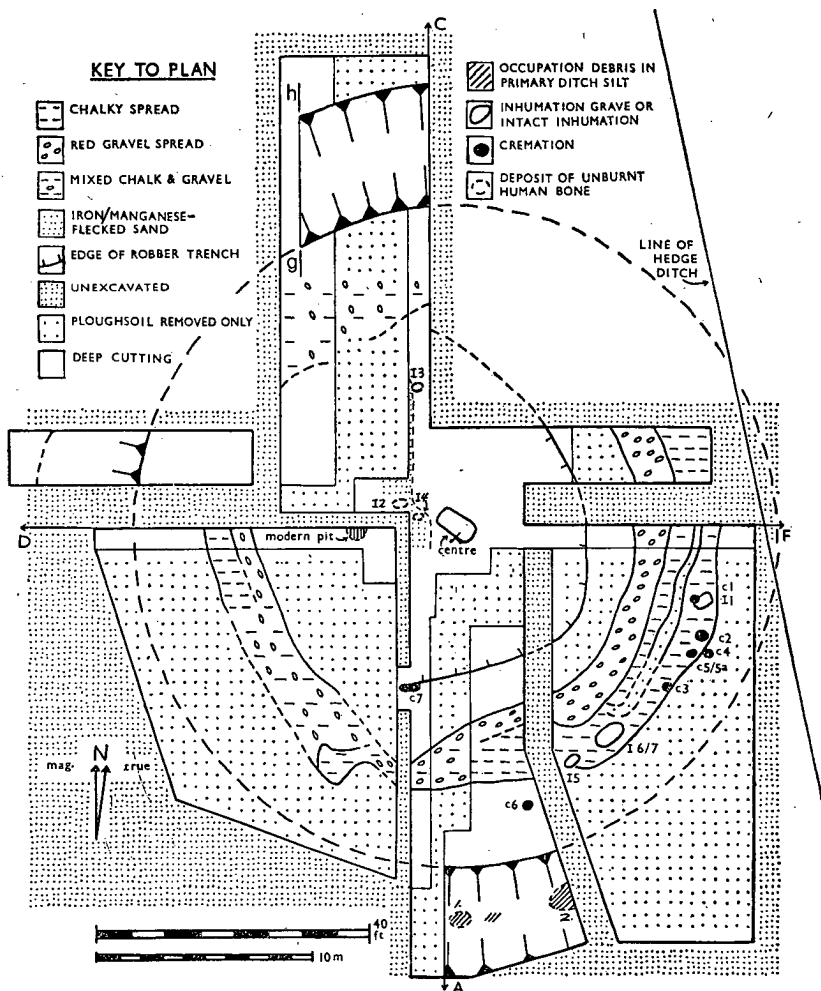


FIG. 12—Plan of barrow.

the north-west quadrant and the chalk and gravel cappings and other features in these areas defined on plan by trowelling. Deep cuttings taken well down into the subsoil, in addition to those involved in the main section trenches and in the examination of the central area, were made in three of the four quadrants (SE, NE and NW) and stretches of the encircling ditch totalling *c.* 15 metres in length were completely or partly cleared (Figs. 11 and 12).

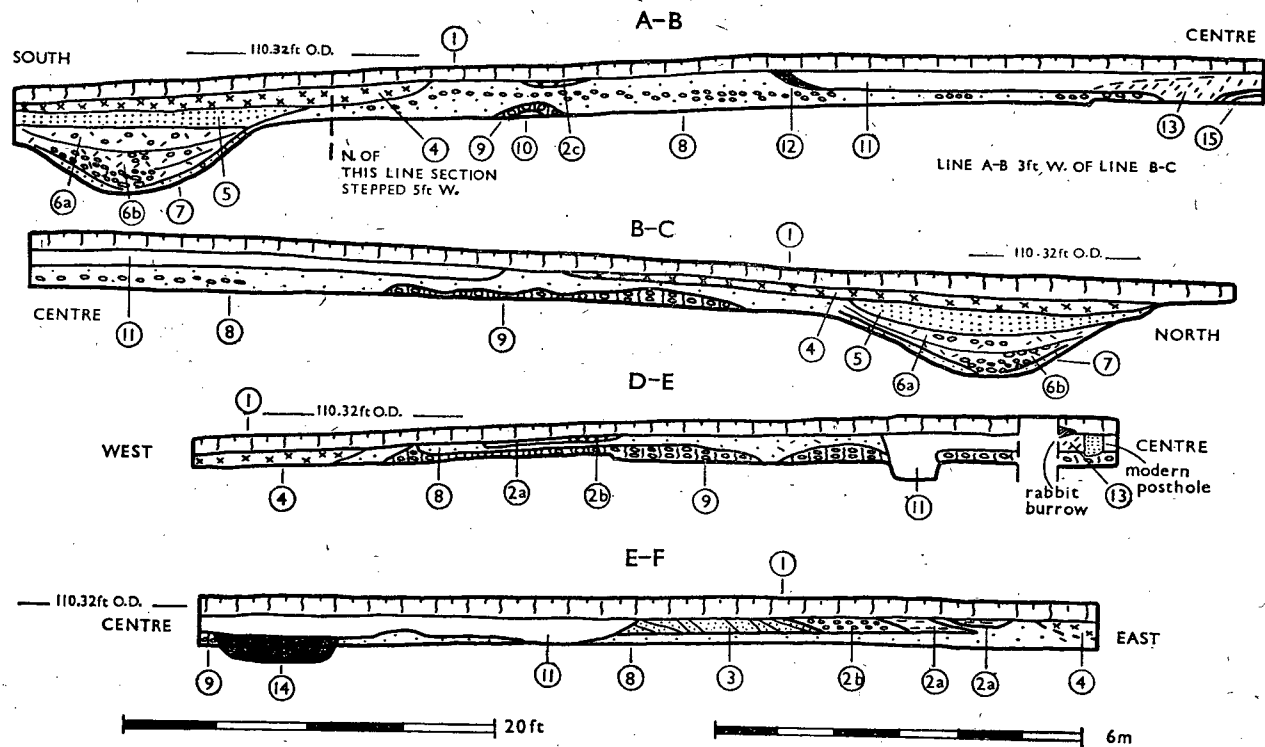


FIG 13.—Sections through barrow (see key below).

1. Ploughsoil.
2. Capping to barrow: (a) Calcareous sand. (b) Red gravel. (c) Mixed.
3. Sand core of barrow.
4. Final level of ditch fill.
5. Secondary ditch silt (rainwash).
6. Main mass of primary silting. (a) Upper and finer. (b) Lower and coarser.
7. Initial ditch silting.
8. Subsoil (brown sandy loam with lines of flints as indicated).
9. Red gravel (natural).
10. Calcareous sand (natural).
11. Robber trench fill.
12. Cremation no. 7.
13. Iron-manganese flecks.
14. Central grave.
15. Boss of calcareous sand lined with crust of iron-manganese pan and capped by a thin layer of clay followed by a thin layer of gravel.

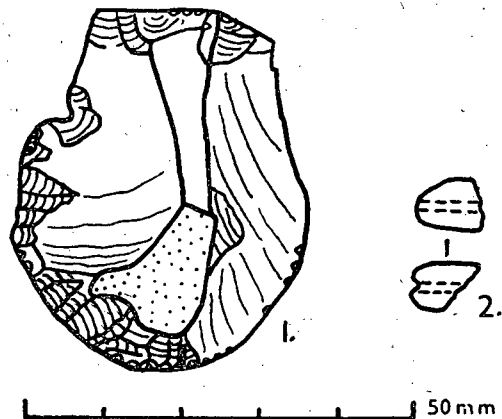


FIG. 14.—1. Flint scraper (SF 3) from ploughsoil.
2. Amber bead (SF 48) from central grave. Actual size.

The Ditch

The barrow was surrounded by a large deep ditch, completely filled-in and invisible at the time of excavation, with an inner diameter of *c.* 29 m, width at the top of 4.25 – 4.85 m, and a depth averaging *c.* 1.80 m. Both edges of the eastern part of the ditch were inaccessible as they were covered by the hedgerow but three stretches were partly or wholly cleared in the north, south and west respectively as parts of the main section lines. The northern stretch, with a length of *c.* 6.1 m was completely cleared; the southern, also *c.* 6.1 m long, was bottomed for most of its width but lack of time precluded the definition of the outer edge and stopped work on the western stretch (length approximately 2.80 m) with an estimated depth of 30 cms of primary silting still in position and the sides and the outer edge undefined. As far as it is possible to judge on the basis of the excavated portions, the ditch appears to be more or less circular in plan with its inner edge concentric both with the central grave described below and, in a rough and ready way, with the remnants of the sandy core and its gravel and chalk cappings. There was no sign of a causeway in the parts of the ditch exposed on plan but its line proved extremely difficult to pick out at the immediately sub-ploughsoil level even against a freshly-trowelled surface¹ and the bare possibility remains that such a feature exists undetected in the eastern or southwestern parts of the circumference.

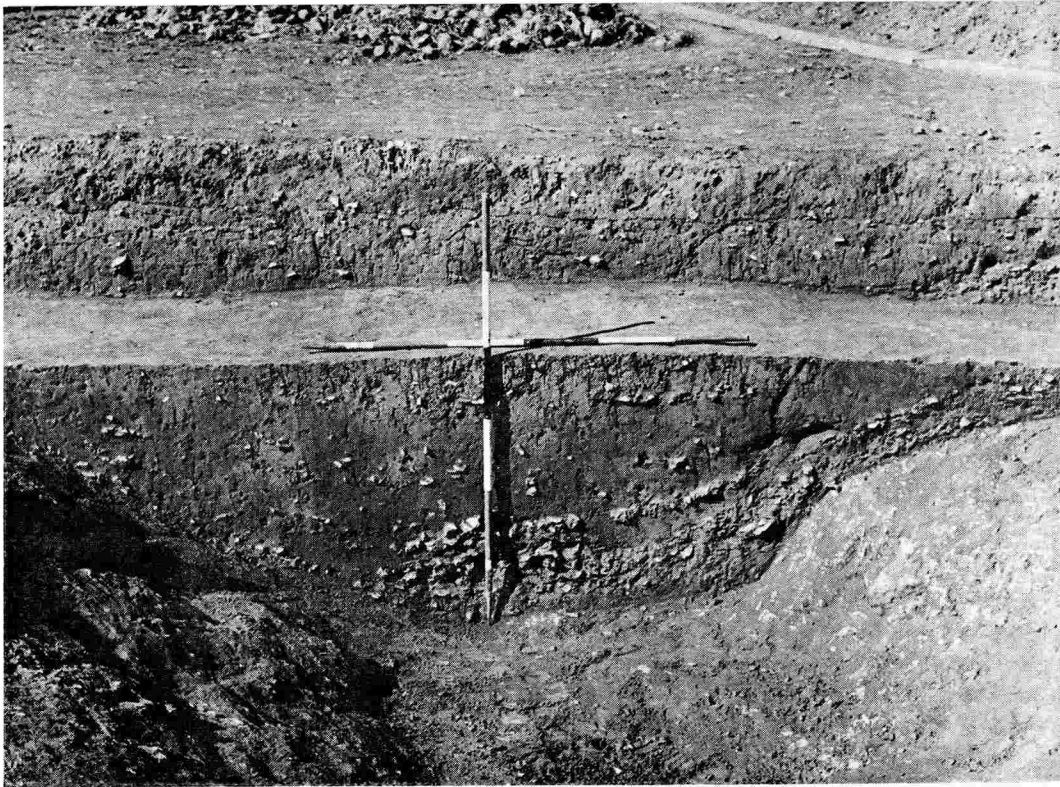
The stratification of all excavated sections of the ditch proved similar and is as follows (Fig. 13; Plate I):

7. Light yellow sandy loam with small pebbles but otherwise clean forming a thin skin, generally more or less continuous though sometimes patchy, lining the floor and sides of the ditch and evidently constituting material eroded from the sides and surface prior to the downrush of layer 6 below.

6. Thick deposit of reddish-brown sandy loam filling the ditch to half its depth or more and containing flints up to 15 cms in diameter sometimes as whole nodules. In all sections the flints were concentrated at the base of the layer in a tumbled mass with trails and scatters at different levels leading down to it from the sides. At higher levels (6a) the flints tended to be smaller and fewer than lower down (6b). The main mass of primary silting, its lower levels resulting from cave-ins of the ditch sides occurring within a few

¹ In favourable conditions the ditch was just visible against such a surface as a diffuse dull brown band merging imperceptibly into the brown-red subsoil on each side. In early morning the area of the ditch could sometimes be identified by the heavy concentration of open earthworm burrows which marked its line, the rich earthy deposits forming the upper fill no doubt providing more congenial conditions for the activities of these creatures than the comparatively sterile subsoil on either side.

PLATE I



Section through ditch in north-west quadrant (W. end of excavated segment; line g - h on plan). Scale in 1 ft units.

months of completion, the upper levels accumulating more slowly though they grade into the lower and the whole deposit was obviously formed as the result of a continuous process. In most sections the runs and scatters of flints in the lower part of the layer were heavily concentrated in the outer half of the ditch; this could be taken as evidence that flints were piled round the outer circumference in the form of a low bank though other explanations are equally plausible (for example, flints may have been dislodged by the hooves of cattle or other stock whose activities would necessarily have been restricted to the outer edge of the ditch until it had silted up sufficiently to enable them to cross to the interior).

5. Dark brown clayey loam with a pronounced greenish cast when first exposed but drying to light brown. Secondary silting representing rainwash from the sides and adjacent surfaces mixed with coarser materials derived from the same source; relatively stone-free at the top but with increasing numbers of small flint pebbles and chalk flecks towards the base. During the excavation a deposit (c. 2.5 cms thick) of stonefree bright greenish-grey silt very similar to the upper part of this layer accumulated on the ditch floor and in other depressions on the site as a result of heavy rain lasting about 15 minutes.

4. Light brown sandy loam containing small flints and chalk flecks. Sharply demarcated by colour and texture from layer 5 and apparently continuous with a thin spread of similar material directly overlying the subsoil in the area of the berm (see below). Final silting layer possibly truncated by plough and subsoiler.

1. Ploughsoil.

Deposits of black charcoally soil containing occupation debris (flint flakes, decayed animal bones and teeth, potsherds) mixed with quantities of large unburnt flintstones were found at two places in the primary silt of the south ditch segment. Their positions are indicated on the plan. No. 1 comprised an oval patch, 60 by 90 cms and 18 cms thick, situated along the centre line of the ditch in the lower part of layer 6a about 30 cms directly above the mass of tumbled flintstones at the base of layer 6b. The second concentration (no. 2), also more or less centrally located, covered an area c. 1.20 m by 1.05 m and was 18 cms thick; it lay wholly within layer 6b where it formed part of the tumble of flintstones at the layer's base. Its height above the ditch floor was 25 cms. A thin spread of black charcoally earth in the primary silting a metre or so east of deposit 1 (see Fig. 12) lacked a definite outline and tended to merge with the normal ditch fill (layer 6a) of which it obviously formed a part. As the plan shows, deposit 2 continues eastwards into an unexcavated part of the ditch.

The pottery found in the two occupation deposits just described comprised three small coarse sherds of probable Iron Age date (groups 28 and 58). A few other small plain Iron Age sherds (SF 35-6; groups 27, 33, 45) were recovered from all three of the excavated ditch segments, in each case from the upper part of layer 6a. The presence of Iron Age pottery at this level is, of course, easily accounted for in terms of earthworm activities which would cause objects originally deposited on the stabilised surface of the primary silt to sink into the underlying layers.

The Barrow

As the sections show, undisturbed mound material only survives to any depth in the eastern half of the site where it attains a maximum thickness of *c.* 30 cms and where it appears to owe its preservation to the partial protection from plough damage afforded by its proximity to the hedge. In this area the barrow can be seen to be composite in structure with an inner core of sandy material capped by reddish gravel which in turn is followed by calcareous sand and gravel. This sequence reproduces the natural stratification of the site from the modern sub-ploughsoil surface downwards suggesting that the mound was built up of successive levels of spoil derived from the digging of the ditch, supplemented, perhaps in the case of the sand core, by surface scrapings.

As indicated on the section drawing (E-F), the sandy core is divided into clearly defined bands of sand differentiated from one another and from the underlying soil largely by colour, some of the layers being somewhat browner, greyer or redder than others. The upper 2.5 cms or so of the sandy core along its boundary with the red gravel layer forms a particularly conspicuous band, being considerably darker than any of the others. The existence of these layers appears to reflect minor differences in the constituents of the natural surface deposits used for the make-up of the core. The possibility that the dark surface band referred to above represented an incipient soil or weathering horizon of some sort was in fact considered but was rejected for the following reasons. Firstly, if this band represented a weathered surface it would have been expected to merge into the buried soil immediately peripheral to it; as the section shows, however, it does not so merge but is clearly demarcated from the underlying soil.² Secondly, chemical tests revealed that more calcium carbonate (CaCO_3) was present in the

² The implications of this fact were first brought to my attention by Dr. I. W. Cornwall of the London Institute of Archaeology. He also very kindly undertook the chemical examination of the soil samples referred to below and gave helpful advice on several other points concerned with the stratification of the mound.

material of the supposed weathered surface than in a sample taken from the interior of the core. This result in itself is not conclusive though, on the assumption that the outer layer constituted a weathered surface, it would normally have been expected to contain less rather than more calcium carbonate than samples from the body of the core.

From the surviving remnants it can be estimated that the inner sand core had an approximate diameter of 18 m; the basal portions of the red gravel and chalky cappings survive to widths of 1.20 - 1.50 m and 2.00 - 3.10 m respectively. The boundary hedge crossing the eastern part of the site made it impossible to do more than estimate the line of the ditch in this area. On the basis of this estimate, however, it would seem that mound and ditch were originally separated by a narrow berm, probably about 1.80 to 2.10 metres wide, a possibility which is supported by the absence of traces of the chalky capping in the primary ditch silt. Unfortunately, in other parts of the site where the ditch edge could be identified accurately on the ground, the evidence bearing on this question had been ploughed out long ago.

The western half of the site was ploughed out and all that remained of the barrow were thin spreads, 2.5 - 5 cms thick, representing the remnants of the chalk and gravel cappings. These could be traced as separate entities only in the part of the southwest quadrant immediately adjacent to the southern arm of the north-south section, though in the section itself the distinction between the two layers had been lost. Elsewhere in this quadrant, the inner edge of the red gravel layer remained fairly conspicuous on plan but its boundary with the chalky layer was ill-defined or completely lost as was the latter's outer margin. Traces of the division between the two layers, however, were just discernable in section in the western arm of the east-west baulk. In the north-west quadrant, the rough position of the cappings was occupied by a broad spread of sandy earth mixed with small flints and chalk flecks and merging peripherally in the final level of the ditch fill. No recognisable traces of the sand core survived in the two western quadrants.

The pre-barrow surface survived as a recognisable feature only in the eastern part of the site where it was protected by the remnants of the barrow. It consisted of a thick layer of grey brown stonefree sandy soil distinguishable visually only by slight colour differences from the make-up of the sandy core.

The Robber Trench

A large robber trench, 12 m or more wide and possibly about 15 m long, had been driven through the barrow centre in a roughly

north-west/south-east direction.³ The limits of this trench could only be accurately traced east of centre having been virtually obliterated westwards of this point by ploughing. Its fill consisted of coarse sandy material mixed with small bits of chalk and flints and exhibiting a rough stratification based on slight differences in colour or texture but becoming, towards the centre, much less homogeneous with small patches of sand of various colours alternating with lenses of coarser material. Scattered through some of the sandy patches were small flecks of iron-manganese salts, patches with such salts alternating irregularly with similar patches lacking them. An actual iron-manganese pan, was found at a depth of 60 cms lining a small natural boss of calcareous sand⁴ located near the south-west corner of the central grave described below.

Northwards of the east-west baulk in the north-west quadrant the patches of iron-manganese flecked sand coalesced to form a compact layer, the excavated limits of which are shown on the plan. Unfortunately time did not permit a full investigation of the complete extent of this deposit except in the central area where it could be seen to gradually fray out westwards to merge with the mixed sand fill of the robber trench. The layer was first definable in plan at a depth of 43 cms below the modern surface and appeared to rest on undisturbed grey-brown sand forming the floor of the robber pit in this area (depth 71 cms). Its maximum thickness (28 cms) occurred along the line where it disappeared under the west side of the deep cutting; eastwards of this line the layer thinned down slightly before abruptly terminating at its eastern margin.

The causes of pan formation under the predominantly calcareous conditions at Pin Farm are problematical but possibly relate to the former presence of turf in parts of the core.⁵ If this is so there

³ The excavators of this trench are unknown though they can possibly be identified with the persons reputed locally to have indulged in 'unofficial' digging on the barrow on an occasion sometime before the last war. An item of folklore still current in the neighbourhood and heard from several sources during the excavation was that the barrow contained 'silver bells' and it may be that the robber trench resulted from an ill-judged attempt to confirm this legend. Nothing was found to date the trench except a shapeless lump of corroded iron from its fill in the S.E. quadrant.

⁴ The presence of Mn was confirmed by chemical tests conducted by Dr. Cornwall. The boss in question is shown on section A-B where it can be seen that the pan crust was itself capped by thin layers of red clay and red gravel.

⁵ See P. M. Christie, 'A Bronze Age Round Barrow on Earl's Farm Down, Amesbury', *Wilts Arch. & Nat. Hist. Mag.*, LIX (1964), pp. 30-45, for a discussion of pan formation in the turf core of a Wiltshire round barrow. She suggests that the pan formation at this site was facilitated by the surface of the core being left uncovered by the chalk forming the barrow flanks and thus fully exposed to the effects of percolating rainwater. Pin Farm may be an analogous case as there is no evidence that the 'cappings' had ever extended over the top of the barrow.

are no conclusive reasons for believing that anything other than scattered heaps or local inclusions of turf were involved. On the other hand the possibility that formal turf structures may have once existed, such as small stacks over individual burials or a funerary enclosure or enclosures of some sort, is worth considering if only because the deposits of human bones described below all occupied areas where manganese-flecked sand also occurred. Unfortunately modern disturbance had destroyed whatever more convincing evidence for such structures may have originally existed.

In addition to those associated with the robber trench, various other signs⁶ of recent disturbance were apparent near the barrow centre presumably accounting for the heterogeneous character of the robber trench fill in this area. There were also various irregularities in the level of the robber trench floor at or near the centre in the form of pits and hollows; some of these are indicated on the section drawings. None appear to have any archaeological significance. The same applies to the small pit showing in the section face due west of centre: this was cut into the floor of the robber trench after the latter had been filled in or so the very clear break in the section apparently coinciding with the pit's western edge may indicate though to the east its fill was indistinguishable from that of the robber trench and it was only doubtfully definable on plan.

The Central Grave and Burials

Burnt and unburnt human bones representing a minimum of six individuals occurred within the limits of the robber trench.

At the barrow centre⁷ was a shallow grave cut into the subsoil. It was sub-rectangular in shape, measuring at the top 1.70 m by 89 cms and *c.* 33 cms deep, with more or less vertical sides; its long axis was oriented north-west/south-east. The grave had evidently

⁶ These included 4 small modern postholes on the summit of the barrow and a large pit dug through the robber trench fill to a depth of 70 cm into the subsoil just S. of the central grave. A complex of ill-defined pits and depressions, varying irregularly in plan at different depths and attaining a maximum penetration of *c.* 30 cms into the subsoil, occupied the S. end of the large N/S. deep cutting in the N.W. quadrant and probably represents the basal parts of animal burrows the tops of which had been eroded away (one of these features contained 2 small plain sherds of Bronze Age pottery: group 6). Burrowing by small mammals had also extensively occurred in the vicinity of the central grave. Deposits of bones comprising respectively most of a rabbit and 3 pheasant skeletons lay at the base of the ploughsoil in various places in the central area as did scattered bones of these species, a few pieces of sheep/goat bone and a large fragment of badger jaw.

⁷ Or near the centre; the grave actually lay *c.* 60 cms N. of the barrow centre as calculated from points on the ditch circumference where the inner edge could be accurately identified.

been thoroughly ransacked by the diggers of the robber trench. Its fill consisted of a homogeneous dark brown sandy material strongly contrasting both with the fill of the robber pit and with the grey-brown sand of the subsoil. Of the burial or burials originally contained in the grave nothing remained except part of the crown of a human incisor and eight tiny pieces of bone, all fresh and undecayed and all possibly fragments of a single human long bone. Also in the fill were seven small unworked flint flakes, a single plain body sherd of Bronze Age pottery and the end of a tiny amber bead (Fig. 14, 2). The bone fragments and artifacts were scattered randomly through the fill and had presumably been re-interred accidentally when the grave was backfilled by the robbers.

The potsherd from the grave is similar in thickness and fabric to eight small sherds (SF 41, 45) found in the robber trench fill at various depths just west of the grave's southwest corner where they occurred over an area *c.* 30 cms square. All eight sherds, which included a decorated fragment of the collar of a small Collared Urn (Fig. 17), probably belonged to the same vessel; one of the sherds (undecorated) occurred within 10 cms of the south edge of the nearer of the two bone deposits (burial 4) described below.

Also in the near vicinity of the grave, at the positions marked on the plan, were two heaps of broken bones in each case comprising considerably less than the full complement of bones belonging to a normal human skeleton. The one nearest the grave (burial 4) occupied an area of about 46 cms by 30 cms and comprised cranial and long bone fragments of a *c.* 10-12 year old child. The second deposit (burial 2) was scattered over an area of *c.* 60 x 50 cms and consisted of unburnt cranial and long bone fragments belonging to an adult female; part of an unburnt sheep humerus; and pieces of a human cremation comprising cranial and post-cranial bones probably referable to the remains of an adult female. The bones of both deposits were distributed vertically from the base of the ploughsoil downwards to the floor of the robber trench (at a depth of 63 cms in each case) and may represent the remnants of burials roughly thrown back into their present positions after discovery and breaking up by the robbers. Like the potsherds referred to above, both deposits were situated within the limits of occurrence of the iron-manganese flecked sand. The unburnt bone in both deposits was in an excellent state of preservation with clean and sharp fractured edges where broken.

Unfortunately, the skeletal material from the grave is too indeterminate for it to be referred to either of the inhumed individuals represented in the nearby bone deposits. The proximity to burial 4 of sherds which could belong to the same vessel as the sherd from the grave fill is suggestive, however, and may indicate that some, at

any rate, of the grave's contents were shovelled out in this direction by the robbers, though the possibility, pointed out by Dr. Longworth (see below, p. 41), that all these sherds originally formed part of the urn associated with cremation 7 underlines the unwisdom of taking such speculations too seriously. There are many other possibilities. It could be, for instance, that the missing skeletal material from the grave still remains undetected in some unexcavated sector of the site, for example the unexcavated portions of the western and southern arms of the baulk; alternatively, it could have found its way into a high level of the robber trench fill since completely dispersed by ploughing. The possibility also exists that some disturbance of the burials took place in antiquity.⁸

Two further burials occurred within the limits of the robber trench. The first of these (burial 3) was located in the north-west quadrant c. 6.70 m from centre where it rested on the floor of the robber trench at a depth of 71 cms from the barrow surface. The western edge of the deposit was covered by the layer of iron-manganese flecked sand described earlier, the remainder by the mixed sandy material forming the normal fill of the robber trench in this area. In contrast with the loose and scattered character of burials 2 and 4, the bones of burial 3 were tightly packed together into a compact heap measuring approximately 41 cms across and 10-13 cms thick. Fragments of the skeletons of two persons were represented in this deposit, a middle-aged male and an adolescent female respectively, cranial and post-cranial bones being present in both cases. The bones, all unburnt, were in good condition with cleanly fractured edges where broken.

The second burial (cremation 7: an adult ? female) was located c. 6.70 m south of centre where it partly underlay the southern arm of the north-south baulk. It had been disturbed, the bones occurring partly in a thin scatter just below the ploughsoil south of the robber trench but mostly in a lens of dark earth lining the latter's sloping sides and presumably representing the *in-situ* remnants of the contents of a small pit sliced through by the robbers. With the bones in the upper part of the deposit at the base of the ploughsoil were fragments of a small collared urn comprising two plain body sherds and two large joining cord-ornamented pieces forming a substantial section of rim and collar (Fig. 16). The position of the rim/collar sherds in the ground suggests that the urn may have been inverted,

⁸ Fragmentary and disarticulated human bones resulting from successive interment in the same grave are common in Bronze Age barrows on the Yorkshire Wolds and in Wessex. Such graves are so far unrecorded from E. Anglia but it is conceivable that analogous practices involving some form of successive or reserved burial might partly account for the disturbed condition of the Pin Farm bones. See F. Petersen, 'Traditions of Multiple Burial in Later Neolithic and Early Bronze Age England', *Arch. Jour.*, cxxix (1973), pp. 27-34.

an inference supported by the absence of base sherds in the deposit, though there is no guarantee that more than sherds of this vessel were ever present. No recognisable mound material survived in the vicinity of this find and its stratigraphic position in relation to the barrow is uncertain.

The Peripheral Burials

In the south-east quadrant a total of nine burial deposits comprising the remains of four inhumed and seven cremated bodies had been arranged in an irregular arc running along the skirts of the chalk capping.

With the exception noted below, in all cases where stratigraphic relationships were determinable the burials could be seen to cut through the chalky spread and were therefore secondary to it, though interpretation is complicated by uncertainty as to the precise status of the latter in parts of the quadrant. As indicated on the plan and section drawing (E-F) the chalky material appears to be divided here by a stratum of coarse brown sand into two components, an inner consisting of the base of the capping still *in-situ*, and an outer of more problematic status resting at a slightly higher level. In the southern and western parts of the quadrant, where the capping itself became progressively more eroded with increasing distance from the E/W section-face, the division gradually became less distinct, and finally disappeared altogether. It is possible that this division is simply the result of minor faulting or slippage or relates to slight local differences in the composition of the capping; on the other hand it might document a small extension of the barrow in the south-east quadrant, perhaps in the form of a thin pavement of chalky sand through which burials were later inserted. The evidence however is inconclusive on this point.

The peripheral burials are listed in north to south order below.

Cremation 1/Skeleton 1 (Plate III). (a). Crouched skeleton of a *c.* 8 years old child on right side with head to S.S.W on floor of shallow sub-rectangular grave, 90 by 65 cms S.W/N.E and cut to maximum depth of 23 cms into the subsoil. The grave had more or less vertical sides and a very slightly dished floor; its fill consisted of dark grey sand. The skull had been smashed by the plough and the rest of the skeleton was soft and badly decayed in places but otherwise intact and undisturbed. (b). Adult (?) female cremation in an oval pit, 33 x 41 cms, separated from the vertebral column of skeleton 1. by a gap *c.* 7.5 cms wide. The base of the pit was 15 cms deeper than the floor of the grave. The bones were scattered throughout the pit fill which consisted of greasy black sand and also contained burnt pieces of flint, a few tiny flecks of charcoal and two struck flint flakes (SF 42). The sides and bottom of the pit were unburnt.

The stratigraphic relationship of these burials to each other and to the chalky capping was clear. The western half of the cremation pit was sealed by the chalky capping (here *c.* 7.5 cms thick) which east of the pit centre had been sliced through by the western edge of the inhumation grave which had also cut into a corner of the underlying cremation deposit. The cremation was thus primary both to the chalk capping and to the inhumation while the latter was secondary to the chalk capping. About a dozen pieces of burnt human bone were scattered in the grave fill covering and surrounding the skeleton all presumably being fragments of the disturbed portion of the cremation deposit accidentally re-interred with the skeleton when the grave was filled in.

Cremation 2. Adult (?) female cremation in a circular pit with a shallow bowl-shaped profile, 51 cms across and cut to a depth of 12.5 cms below the base of the ploughsoil. The bones were scattered throughout the fill which consisted of black charcoally sand containing numerous burnt flints, some up to 5.7.5 cms long; two unburnt flint flakes (SF 43); and a small quantity of charcoal lumps. The pit was secondary to the chalky capping which here was about 10 cms thick though thinning down somewhat to the east as it approached its limits, in this direction. The pit base just penetrated the surface of the subsoil which, to a depth of 12.5 cms below it, was discoloured by prominent vertical streaks and mottlings of black resulting from the downward seepage of finely divided charcoal from the cremation deposit.

Cremation 4. Cremated bones of an immature person scattered in a diffuse patch 30 cms or so across just below the base of the ploughsoil. The bones were all clean and white; no charcoal, dark soil or sign of any pit were associated with them and it is unclear to what extent this burial was *in-situ* when found. The bones lay in the apparent area of the berm, about 20 cms beyond the eastern fringes of the chalky layer, and nothing can be said about their stratigraphic relationship to other features.

Cremation 5/5a (Plate IV; Fig. 15). Cremation of a 2-4 year old child in bowl-shaped pit, 38 cms across and 22 cms deep, with the usual black charcoally fill. The bones were partly covered by a small inverted Collared Urn which occupied the centre of the upper two-thirds of the pit, where it was closely packed round with small angular burnt flints. The urn was completely intact and in good condition except for a small part of the rim which was missing. Pieces of burnt bone (5), comprising about 3/5ths of the total deposit, were scattered in the fill around and below the urn, being particularly heavily concentrated in the lower half of the pit but occurring at higher levels also. The remainder of the bones (5a) were in the urn where they were embedded in a compact mass of black charcoally sand identical to the material filling the pit, but

occupying the lower quarter of the urn only, the upper three-fourths containing clean brown sand so loosely packed as to leave the urn's base hollow. Except for one or two bits of cremated bone this part of the urn's contents was archaeologically sterile. Apart from the bones, finds comprising a burnt core fragment (SF 50) from the black cremation deposit inside the urn and a small quantity of charcoal from the pit fill outside it. The pit had been cut through the chalky spread, here 12 cms thick and very well-defined, to a depth of 7.5 cms into the subsoil which, under the pit, was stained with finely-divided charcoal in the same way as the subsoil below the pit containing cremation 2. The calcareous sand forming the upper part of the pit sides (*i.e.*, the material of the chalky spread through which it was cut) was bright orange-red to a lateral depth of *c.* 6 mm, doubtless as a result of burning *in-situ*. The sequence of events associated with the deposition of this burial can be reconstructed as follows. The pit was dug and partially filled with cremated bones and burnt material still hot and smouldering from the pyre and producing enough heat to oxidize the chalk sides of the upper half of the pit. The urn (after suffering slight damage to its rim) was then loosely filled with clean sandy loam, perhaps spoil from the lower part of the pit, before being inverted and ground down into the surface of the material already in the pit. Operations were concluded by packing additional material from the pyre, including burnt flints and bits of cremated bone, between the urn and the pit sides.

Cremation 3 (Individuals 1 and 2). Large deposit, of burnt human bones resting on the bottom of a circular pit, 53 cms deep, and probably constituting the remains of two persons, an adult (?) female (no. 1) and an adult male (no. 2). The bones were entirely confined to the basal 18 cms of the pit where they were embedded in charcoally sand and burnt flints containing a small quantity of charcoal flakes. The upper 36 cms of the fill consisted of mottled grey-brown sandy loam streaked in places with black, but containing no burnt bones or burnt flints; which was sharply demarcated from the black cremation deposit directly underlying it. A radial section through the pit clearly showed its north-west edge to cut through the whitish calcareous sand of the chalky spread which here attained a thickness of 9-10 cms. East of the pit, the chalky spread was missing having terminated along a line coincident with the eastern edge of the pit. The parts of the sides in contact with the cremation deposit were severely eroded and undercut, the pit measuring at this level 56 x 51 cms; higher up the pit was roughly circular in plan and the diameter contracted to 46 cms. The pit sides from top to bottom and around the whole circumference were stained bright orange-red, the discoloured zone varying in thickness from *c.* 1.25 - 1.90 cms. The small section of the pit sides formed by the

material of the chalky spread was discoloured equally with the rest but not the floor which was completely unaffected. A hot fire had evidently been left to burn itself out on the pit floor before being covered over with replaced turf and brown sandy loam. The source of this fire is likely to have been the cremation deposit itself, shovelled into the pit while still blazing from the pyre, though obviously fires could also have been built in the pit prior to the interment of the bones in accordance with some ritual requirement.

Skeletons 6/7 (Plate V). Adult female (no. 6) on its back with its legs partly flexed and turned over to the south and the arms folded across the chest. The skull (measuring along the line of the vertebral column) pointed approximately 50° south of true west with the face turned to the south-east. All the bones were in good condition and present in correct anatomical order, except for the skull which had been badly smashed by the plough. To the south-east of the skeleton, under the bones of the flexed right forearm near the elbow joint, were the ribcage and cranial fragments of a 6-12 month old infant (no. 7). The bones of the ribcage were the only remains of this burial identifiable in the field where they seemed to be in correct anatomical order and it appears probable that the burial was interred as an intact corpse contemporaneously with the adult body. The burials rested in a shallow hollow scooped to a maximum depth of 7.5 cms into the subsoil. The edge of the grave was impossible to accurately define on plan while its fill was identical in composition to the thin crust of coarse sandy material containing flecks and smears of chalk and representing the last degraded remnants of the chalky spread in this part of the quadrant. The stratigraphic relationship of the burials to the latter was thus unclear.

Skeleton 5. Child (about 8 years old) resting on the left side with its legs tightly flexed, arms folded in front of the chest, face turned to the W.N.W. and skull (measuring along the line of the vertebral column) pointing approximately 38° south of true west. The bones were in correct anatomical order but soft with eroded surfaces and rotted ends and the skull was badly smashed. There was no grave associated with the burial which appeared to rest directly on the subsoil. Its stratigraphic relationship to the chalky spread could not be ascertained.

Cremation 6. Cremation of a young adult female, located just below the base of the ploughsoil at a depth of 30-35 cms where the bones formed a thin scatter *c.* 30 cms across and 5 cms thick. There were no signs of a pit or traces of dark earth or burnt flints associated with these bones to suggest they constituted a burial still *in-situ*. They were located well south of the vestiges of the chalk cappings.

DISCUSSION

It would seem that the Pin Farm burials can be divided into two main series, one primary to the construction of the barrow, the other secondary to this event, each series comprising both cremated and inhumed interments. The evidence for the first of these phases is admittedly exiguous: of the minimum of seven burials (four inhumations and three cremations) possibly attributable to the phase, only one, cremation 1, was definitely primary to any part of the barrow, all the others being either from a disturbed context or, in the case of cremation 7, so situated that its original stratigraphic position was dubious for other reasons.

The arrangement of the interments definitely or probably assignable to phase 2 in an arc around the skirts of the mound is of interest in that it suggests a small organised cemetery probably used by a single community for a comparatively limited period of time rather than a miscellaneous collection of burials inserted into the barrow by unrelated population groups at widely different dates. If this is so, and if the admittedly inconclusive evidence is accepted for a similar cemetery during phase 1, the barrow itself can be seen not as a 'memorial' to one or more of the primaries but as marking a stage in the continuous use of the area for funerary purposes. It is noteworthy in this connection that various ages and both sexes are represented in each series indicating perhaps that the burials were drawn from an extended family or other small kinship group.

Locally, parallels to the particular funerary traditions exemplified at Pin Farm are exhibited by a group of 10 barrows located about 7 kms to the S.S.W in Snailwell Parish just across the Cambridgeshire border.⁹ The number of burials per barrow in this group ranged from 1 to 19, most barrows producing both inhumed and cremated interments, either deposited on or below the pre-barrow surface or inserted into the partly or wholly completed barrow. In one case (barrow B) a total of 18 cremations occupied shallow scoops cut into the chalk 'revetment' where they formed an arc-like arrangement recalling the somewhat smaller but similarly positioned series of secondaries at Pin Farm, though the latter, of course, included inhumed as well as cremated burials. As far as the deficiencies of the published account permit us to judge, the burial routine at many of the Snailwell barrows, as at Pin Farm, seems to have involved successive burial probably in unbroken sequence commencing with one or (more usually) several 'primary' interments buried before the erection of the barrow or during early stages in its construction and ending with additional burials deposited after its completion, inhumed and cremated interments occurring

⁹ T. C. Lethbridge, 'Excavation of the Snailwell Down Group of Bronze Age Barrows', *Proc. Cambridge Antiq. Soc.*, XLIII (1949), pp. 29-49.

indifferently in both the pre-barrow and post-barrow phases. Structurally also Pin Farm and many of the Snailwell barrows display much the same combination of features: a mound of turf or earth capped (or 'revetted') by chalk and separated by a narrow berm from the inner lip of a substantial ditch.

Barrows excavated by Leaf,¹⁰ particularly his barrows 'B' and '5' in Chippenham parish, which adjoins Snailwell to the north-east, also provide parallels to some of the structural and other features at Pin Farm, though exhibiting as well peculiarities unrepresented at the latter or in the Snailwell group. Somewhat further afield, but also comparable, is the Beacon Hill barrow, Barton Mills, with its mixed series of 3 inhumations and 11 cremations placed in pits dug into the surface of the completed barrow, the sides of the cremation pits being burnt red as in several examples at Pin Farm.¹¹

The existence of mixed inhumation/cremation cemeteries of the Pin Farm type at some of these sites is worth stressing, if only as an antidote to certain lingering misconceptions about the nature of Early Bronze Age funerary practice. One of these is that there was a brief transitional phase sometime during the period with cremation being virtually unknown before the transition and inhumation after it; another that contemporary use of the two rites by the same Early Bronze Age community was a rare deviation requiring, when it occurred, special causes such as the recent fusion of formerly separate population elements of differing cultural background.¹² There is little doubt that these ideas underestimate the complexity of Early Bronze Age burial customs as followed by a single community at any given time, and that mixed inhumation/cremation cemeteries were both a widespread and persistent feature of the period. Outside East Anglia such cemeteries, often with a wide variety of ceramic associations both within and between individual sites, are represented by a number of examples.¹³ At the recently published Wiltshire barrow, Amesbury 71,¹⁴ there were at least two cemeteries of this type stratigraphically separated from one another and thus paralleling the situation inferred for Pin Farm and Snailwell.

¹⁰ C. S. Leaf, 'Two Bronze Age Barrows at Chippenham, Cambridgeshire', *Ibid.*, xxxvi (1934-5), pp. 134-155; 'Further Excavations in Bronze Age Barrows at Chippenham', *Ibid.*, xxxix (1938-9), pp. 29-68.

¹¹ Earl Cawdor and C. Fox, 'The Beacon Hill Barrow, Barton Mills, Suffolk', *Camb. Antiq. Soc. Comm.*, xxvi (1923-4), pp. 19-65.

¹² See e.g. I. F. Smith and D. D. A. Simpson, 'Excavation of a Round Barrow on Overton Hill, North Wiltshire', *Proc. Prehist. Soc.*, xxxii (1966), p. 134.

¹³ For two Wiltshire barrows of this type see Smith and Simpson, *op. cit.* and P. M. Christie, 'A Barrow Cemetery of the Second Millennium B.C. in Wiltshire', *Proc. Prehist. Soc.*, xxxiii (1967), pp. 336-66. General discussion in Petersen, *op. cit.*, pp. 25-7, 34-7.

¹⁴ Christie, *op. cit.*

The 'berm' at Pin Farm makes it technically a 'bell' rather than a 'bowl' barrow. The significance of this fact is doubtful however in its case and that of similar sites where the berm may not have been a deliberate feature but simply residual ground still left unencumbered when the active constructional phase of the cemetery came to an end. At Pin Farm the material for each enlargement was derived from deepening the original ditch with the berm, of course, necessarily shrinking in width in step with this process. The constructional routine at Amesbury 71 was more complicated and differed from that at Pin Farm in that successive additions to the mound as more burials were deposited eventually led to the berm's complete disappearance and the transformation of the site into a 'bowl barrow'. Many other 'bowl barrows' doubtless had analogous histories and it may be that the narrow berm remaining at Pin Farm also would have disappeared in time had not unknown circumstances terminated the burial sequence when they did.

THE FINDS

'Group' and 'SF' (small find) nos. refer to nos. marked on individual finds or their labels. All the finds except the human bones are in Moyse's Hall Museum, Bury St. Edmunds.

Flints

A total of 401 flints were found, mostly unworked and unutilized flakes and fragments. The majority of the remaining flints were core fragments or struck flakes with light secondary retouch or use marks along part of their edges but including a few more elaborately-worked pieces. Flint flakes also occurred with some of the burial deposits.

(a) Ploughsoil. 71 struck or worked flints came from the ploughsoil where they were uniformly distributed over the whole of the excavated area (SF 1-12, 16-9, 22, 25, 32-3; groups 11, 13-4, 16-8, 20, 23, 25-6, 29, 31, 36, 38, 41-2, 53-5, 58). Struck flakes ranging from tiny featureless scraps, 10 x 10 mm, to large heavy flakes, 40 x 90 mm. Mostly with worn edges and heavily lusted surfaces but a few fresh pieces comparable to the series from the ditch (c. below). Two worked pieces: a scaper fragment (SF 5) and a flake scraper with its spoon-shaped end finely finished by shallow retouch (SF 3: Fig. 14, 1).

(b) Mound material/pre-barrow soil. 28 flints. 12 flints (SF 13-5, 20, 23-4, 26-31) found at depths of 7.5 - 20 cms below the base of the ploughsoil in the area of the large N/S cutting in the N.W. quadrant. 10 flakes, 3 with heavily lusted surfaces; the others relatively unworn; a small bladelet (SF 28), 30 x 9 mm, retouched

PLATE III

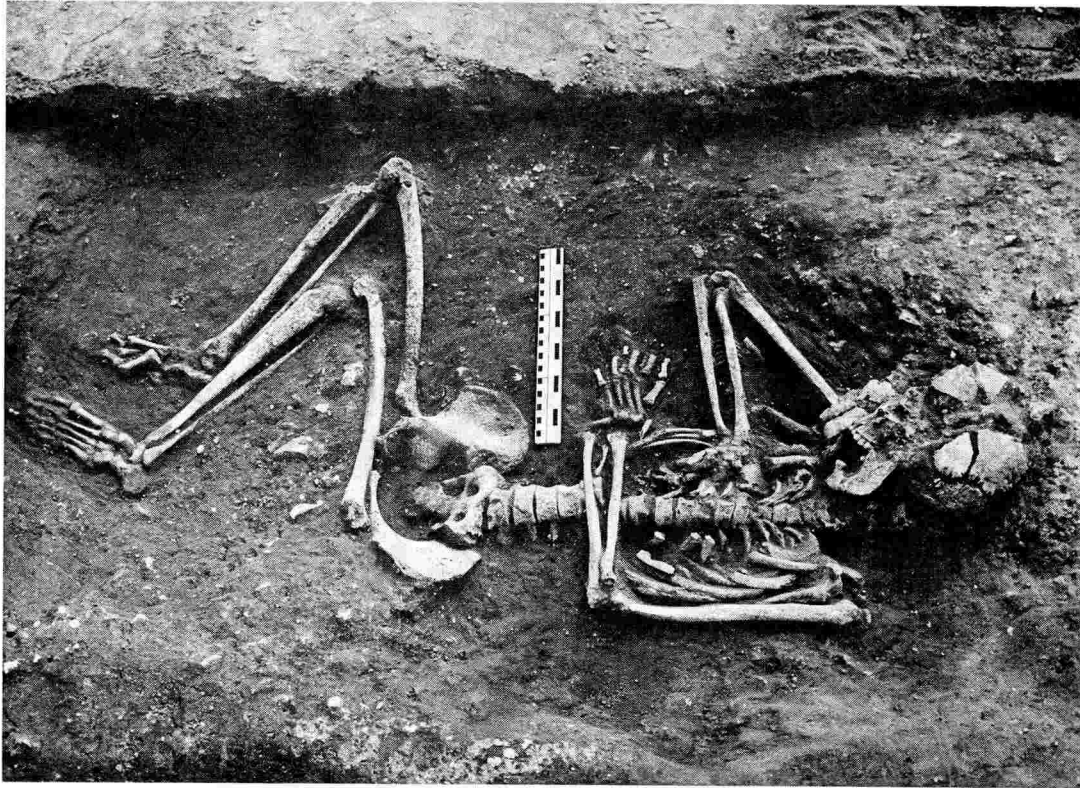


Inhumation 1 and cremation 1 from north. Scale in ins. and cms.



Collared urn (cremation 5/5a) in box-section from south-west. Pieces of cremated bone (5) can be seen in section just below left edge of urn. The chalky material on either edge of the photograph is the remains of the capping through which the pit can be seen to cut. Scale in ins. and cms.

PLATE V



Inhumations 6 (adult) and 7 (infant). The adult skull faces S.E. The ribcage of the infant can be seen between the bones of the right forearm of the adult skeleton, about midway along its length. Scale in ins. and cms.

at proximal end from dorsal side only (distal end snapped short): Mesolithic?; and a large fragment of a blade core (SF 13). 16 other flints, all struck flakes, mostly smallish and featureless with lusted surfaces, none with secondary retouch, found similar contexts elsewhere on site: group 39 (base of robber pit, S.E. quadrant); group 59 (S.W. quadrant); group 63 (N.E. quadrant); groups 65-6, 71 (N.W. quadrant); and groups 67, 70 (S.E. quadrant).

(c) Ditch. (1) West Ditch Segment. 34 flints. Distributed by layer as follows: Layers 4 (10 examples: group 3); 4/5 (8: group 7); 5/6a (9: group 10); 6 (7: groups 12, 45). All unworked except 3 or 4 with a little retouch along edges: 1 large flake (group 45) with invasive retouch one edge suggesting struck from fragment of axe or other large chipped tool.

(2) North Ditch Segment. 100 flints. Distributed by layer as follows: Layers 4/5 (24 examples: groups 1, 2); 5/6a (5: group 37); 6a (11: groups 4, 5, 9); 6a/b (19: groups 8, 47); unstratified (41: groups 30, 32, 43, 46, 56, 60). 3 or 4 with signs of use or light retouch but otherwise none worked except single large flake (group 60) with an awl-like point at the distal end slightly retouched.

(3) South Ditch Segment. 156 flints. Distributed by layer as follows: Layers 4/5 (1 example: group 15); 5 (23: groups 19, 21, 24); 5/6a (18: group 27); 6a/b (29: groups 33, 62); unstratified (9: SF 40, group 44). Feature 1 (33: groups 28, 34, 52, 57). Feature 2 (43: groups 35, 58). Mostly unworked but many with traces of light retouch or use marks along edges found all layers (including features 1 and 2). 2 more elaborately-worked pieces: a flake with one end carefully chipped to an awl point (unstratified: SF 40); and a flake with a steep scraper edge from layer 6a/b (group 33).

Apart from a few worn pieces of obviously older date most of the flints from the ditch were relatively fresh and unabraded and presumably represented the debris of flint knapping carried on in the near vicinity just prior to or subsequent to the digging of the ditch. The majority were struck flakes, some quite large (up to 50 x 65 mm), and shatter fragments, mostly unpatinated or only lightly so but with the occasional blue-grey or creamy white surfaced piece occurring at all levels. There were many mint or near mint pieces but most had a smooth dull lusted surface developed to varying degrees and presumably indicative of exposure on the surface for a greater or lesser period before incorporation into the ditch fill.

(d) Central Grave. 7 small flint flakes scattered in various places in the fill (SF 48, group 69), one a tiny featureless chip, 20 mm long, the others struck flakes, in one case with the bulbar end snapped off, the remainder intact. Size ranged from c. 13 x 13 mm to 30 x 40 mm. 2 flakes had slightly lusted surfaces and in one case distinctly

worn edges (the other lusted flake was slightly chipped along its edges perhaps as a result of use); the rest were in fresh condition with one example showing traces of deliberate retouch along one long side. The character of the assemblage as a whole suggests material accidentally incorporated into the fill during the infilling or as a result of the activities of the robbers rather than grave goods.

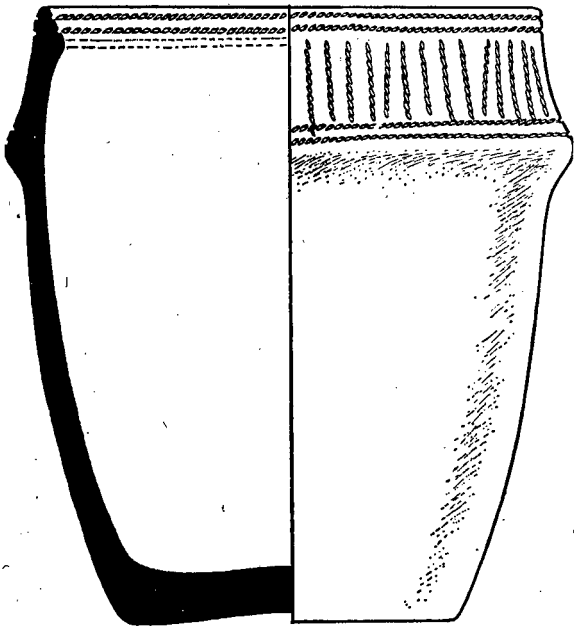


FIG. 15.—Collared urn associated with cremation 5/5a. Scale $\frac{1}{2}$.

(e) Cremation 1. 2 large struck flakes (SF 42), each 45 x 30 mm, found among the bones. One flake had been burnt, the other not. Neither showed signs of use or secondary working; the unburnt flake has a blue-white patina and is fresh and unabraded.

(f) Cremation 2, 2 struck flakes (SF 43) found in cremation deposit, one small and scrappy, *c.* 25 mm long, the other, 40 x 25 mm, thick and heavy with a triangular section. Both unburnt and unworn with no signs of retouch or use.

(g) Cremation 5. Small expended core (SF 50), *c.* 60 x 40 mm, with its surface cracked and discoloured by fire, found among the

burnt bones. Flakes had been removed all around the circumference on both sides which thus each rise to a peak or ridge where the individual flake scars meet at the centre.

Amber (Fig. 14, 2)

Amber bead (SF 48), now fragmentary but possibly intact when first encountered (the bead was only identified as such after one end had been accidentally smashed by a trowel), found in the fill of the central grave at height of 25 mm from its floor at the north end. Dimensions of the surviving end: 9 mm long; maximum diameter 7 mm. Sub-circular in section with rounded-off end and longitudinal perforation through the centre, 1 mm in diameter. Surface rough and weathered.

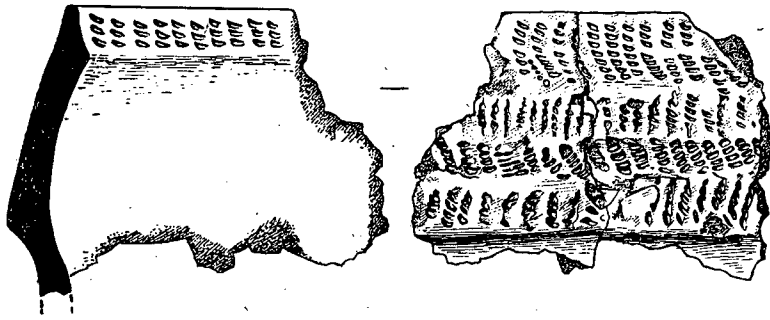


FIG. 16.—Collared urn sherds associated with cremation 7. Scale $\frac{1}{2}$.

Pottery, by I. H. Longworth

1. Collared Urn (Fig. 15). Diameter of mouth: 12·7 - 13·8 cms; height: 15·5 cms.; diameter of base: 8·7 cms. Quite well fired paste tempered with some grit including flint and grog, reddish brown externally, grey with encrustation internally. Surface well smoothed. Decoration: on the collar, twisted cord vertical lines enclosed between pairs of twisted cord horizontal lines; on the internal rim bevel, two twisted lines. Found with cremation 5.

2. Sherds of Collared ? Urn (Fig. 16). 2 joining sherds of collar and 2 joining sherds from the body of quite well fired paste tempered with grit and grog, brown externally, grey to brown internally (SF 49). Decoration: on the collar, whipped cord herring-bone; on the internal rim bevel, short vertical whipped cord impressions. With cremation 7.