# DERBYSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY SOCIETY.

### THE EXCAVATION OF BARROW 4 AT SWARKESTON, DERBYSHIRE.

By Ernest Greenfield.

THE POTTERY AND FLINTS. By A. M. APSIMON (See Page 19).

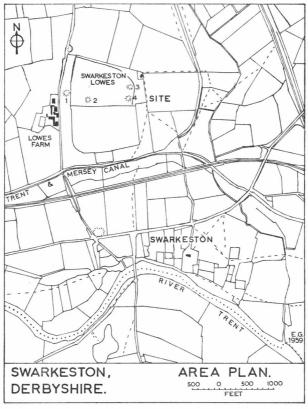
#### SUMMARY.

THE excavation revealed a primary barrow without ditch of the Early Bronze Age, with a Yorkshire Food Vessel Culture burial, represented by the remains of a decomposed "coffin" and a flint knife. A secondary barrow of the bell variety, with a surrounding berm and ditch, of Middle Bronze Age date, was superimposed. The burial, inserted into the surface of the primary barrow, was represented by a small pit containing charred logs and fragments of an Overhanging Rim Urn. Sealed by the barrows was an occupation level of the Beaker period. This contained Western Neolithic pottery and quantities of Beaker sherds, and flint artifacts. Stakeholes and post-holes indicative of structures possibly for human and animal use were widespread over the area examined.

### INTRODUCTION (Fig. 1).

The barrow is one of a group known as the Swarkeston Lowes. The group is situated on a gravel terrace 60 ft. above the flood plain of the River Trent. The site (Grid Ref. 1-inch O.S. Map 121: SK 365293) is about half a mile north of the village of Swarkeston on the main road between Derby and Melbourne.

The barrows were surveyed in 1955 by Merrick Posnansky and Barrow 2 was excavated by him during the same year. Barrow 42 (the subject of this report) is the most southerly one of the group on the east side. Before excavation the barrow was under plough, and showed as a well



Based on the Ordnance Survey with permission of the Controller of H.M. Stationery Office.

Fig. 1. Swarkeston — area plan.

spread mound about 200 ft. in diameter and 4 ft. in height. The centre of the barrow was at 191 O.D. A surrounding ditch was not visible on the surface but one was indicated on Air Ministry aerial photographs.

 $<sup>^1</sup>$  D.A.J., LXXVI (1956), 10-19.  $^2$  An interim report was published in D.A.J., LXXVI (1956) in which some of the barrow features were wrongly interpreted.

The excavation was carried out in two phases, 2 to 28 July and 22 October to 17 November 1956, on behalf of the Inspectorate of Ancient Monuments of the Ministry of Works, with paid labour and volunteers.

### ACKNOWLEDGEMENTS.

Thanks are due to Mr. Winstanley the owner and to Mr. J. E. Prince his tenant for permission to excavate and for site facilities; to Miss V. Russell and Mrs. E. M. Minter who helped in every way during both excavations and who were especially responsible for the very careful excavation of the Beaker stake-hole complex; to Miss V. H. Foulkes who acted as assistant supervisor during the first excavation; to Miss Elizabeth Meikle who drew the pottery, and to Mr. P. F. Ewence who drew the flints and stone; to Dr. M. W. Thompson (Assistant Inspector of Ancient Monuments) who arranged the excavations and for his advice and help on the site, and to Mr. L. Biek (Ancient Monuments Laboratory) for his report on the scientific evidence; to Merrick Posnansky for his advice and help in every way; to Mr. R. G. Hughes (Derby Museum) for his advice and help; to Dr. G. W. Dimbleby (Department of Forestry, University of Oxford) for his reports on the pollen and charcoals; to Miss R. Powers (British Museum (Natural History)) for examining the cremated bone; to Mr. W. E. Lee for carrying out the soil ignition tests; to Mr. G. Lees for identifying the stone; to Messrs. G. Richardson, H. Nicholls, J. Fossey, J. Noyalis, A. McGuire and Misses J. Sidebottom, P. Stevens, R. A. Coulson and B. Grieve who worked as volunteers.

### THE EXCAVATION (Fig. 2, Plan, and Fig. 3, Sections).

The first phase of the excavation consisted of transverse sections across the barrow on a north-south, east-west alignment, with the partial clearance of the north-east quadrant, and small exploratory squares in the north-west and south-east quadrants. The main east-west section in the north-east quadrant was extended eastwards to include the cutting of a suspected ditch, indicated on the

air photographs. The second phase comprised an examina-

tion of the pre-barrow ground surface.

The barrow was covered by a plough soil about 7 in. in thickness and plough furrows were seen over the whole of the top of the barrow. The slopes had been penetrated by rabbits; their bones were found in many of the burrows encountered. A large robbing trench on a north-west to south-east alignment had destroyed the centres of the barrows and had been dug down to the natural sand and gravel.

### THE PRIMARY BARROW (Fig. 2(1); Fig. 3, Layer 6).

This consisted of a small low spread mound of irregular shape, nowhere higher than 2 ft. and composed of turves, mostly laid horizontally, grass downwards. The individual turves showed as buff-light grey sandy patches of roughly rectangular shape with an occasional one of dark grey interspersed among them. The grass surface was represented by a thin black line about  $\frac{1}{8}$  in. in thickness, at the base of some of the turves.

From the make-up of the barrow were found two fitting sherds of sandy ware with coarse angular quartz grits; one has a finger-tip impression. This ware could be Neolithic. Flints include a steep scraper (Fig. 8, no. 19), a button scraper, a core and a core fragment and a few waste flakes.

### THE PRIMARY BURIAL

(Fig. 2(3); Fig. 4, Section A-A; Fig. 5(3) and Pl. I).

This was found intact, covered by the barrow. It had been eccentrically placed on the north-west side of the barrow. A large pit of roughly oval-shape II ft. in length east-west, by 5 ft. in width at the west end and 5 ft. 6 in. at the east end, by 4 ft. in depth, had been dug from the pre-barrow ground surface. The sides were vertical to halfway down, but sloped inwards from that point to the base, which was roughly flat. Part of the out-cast was found around the edge of the grave and was sealed under the barrow. Erosion of the sides before filling had left the edges overhanging in places. During excavation,

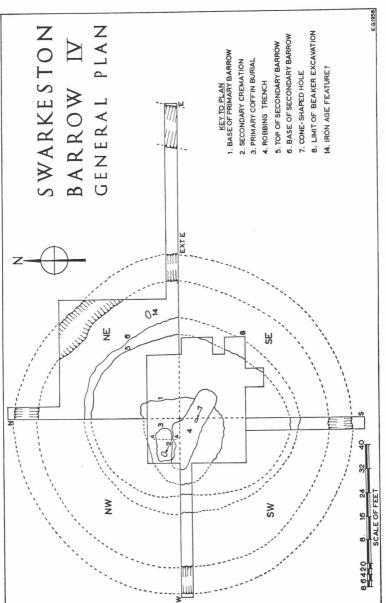


Fig. 2. Barrow IV, general plan.

a dark-brown "stain" of broad U-shaped section (Fig. 4, Layer 18 and p. 43 (a) no. 5679) was found all over the centre of the base of the pit. The shape of the "stain" in plan resembled a small boat and was wider at the west end (3 ft.) than at the east end (2 ft. 4 in.), Fig. 5(3). The height of the sides was 1 ft. 5 in. above the base. Its total length was 7 ft. 6 in. The sides and ends sloped to a rounded base. A flint knife (Fig. 8, no. 18, p. 21) was found resting on the "stain" and partly covered by it, in the centre of the grave. No trace of a skeleton remained and this was probably due to prevailing soil conditions. The decomposition of the burial had caused the filling of the grave and the barrow make-up to collapse into the pit. (Fig. 4, Section A-A, Layers 6, 8, 12 and 15). A small piece of buff-yellow wood (see p. 43, no. 5680, Pl. VIII) was found on the base of the grave.

### THE SECONDARY BARROW

(Fig. 2(5 and 6); Fig. 3, Layer 3; Pl. II).

This was considerably larger than the primary barrow and was of oval-shape, with its long axis north-south. It completely covered the primary barrow and was composed of turves mostly laid grass downwards in a similar manner, though more haphazardly than those in the primary barrow. Nine layers of turves were observed at its highest point and the average thickness of the individual turves varied from 2 in. to 5 in. Some had apparently been cut from an occupied surface as they contained charcoal flecks and an occasional flint flake. A berm varying in width from 8 ft. to 18 ft. had been left between the mound and an encircling ditch of wide V-shape. The ditch had an average width at the top of 8 ft. and a diameter of 106 ft. from centre to centre. Its average depth was 6 ft.

From the make-up of the barrow were seven sherds and scraps of pottery, including a beaker sherd, an urn sherd and possible Iron Age scraps. From the base of the mound were fifteen flints, two end scrapers (Fig. 8, nos. 23 and 24), two other scrapers, a possible petit-tranchet derivative (Fig. 8, no. 20), five blades (21),

three bladelets, one perhaps a microlithic point (22) and two flakes. From the centre of the mound make-up there were five flints, a double end scraper (25), a fragment

of a round scraper, a core and two bladelets.

One possible urn sherd and two sherds of Middle Bronze Age urn, all similar ware, were found in the east ditch cutting in Layers 8 and 10. The urn sherds appear to belong to an urn not otherwise represented. The presence of these urn sherds in the ditch filling helps to suggest that the ditch is associated with the secondary barrow as Overhanging Rim Urn burials are quite often associated with Bell barrows. An end scraper on a small blade (Fig. 8, no. 26) was found in Layer 8, in the west ditch filling.

Two small stake-holes were found in the south-west and south-east quadrants and are contemporary with, or later than, the erection of the secondary barrow (Fig. 2).

### THE SECONDARY BURIAL (Fig. 2(2) and Pl. I).

This had been eccentrically placed on the north-west side of the barrow,3 inserted into the surface of the primary barrow, and consisted of a small oval-shaped pit, 2 ft. I in. by I ft. 8 in., long axis north-south. It was first seen as an irregularly shaped patch of heavily charcoal-flecked dirty silt (Fig. 4, Section A-A, Layer 5), with an inner patch of unburnt silt and salmon-pink burnt sand, with pieces of oak charcoal (no. 18, p. 48) half embedded in the surface. The outside limits of the outer patch were 10 ft. 6 in. north-south by 10 ft. 9 in. eastwest. Beneath the unburnt patch was found a small pit with vertical sides and concave base; the rim, walls and base had been burnt salmon-pink-brown and whitishgreen as much as half an inch in depth. The filling of the pit was mainly of unburnt buff-grey charcoal flecked silt with burnt and unburnt pebbles and small flints. Some pieces of charcoal were I in. in diameter. Eighteen fragments of an Overhanging Rim Urn (Fig. 10, no. 44 and p. 37), occurred from the top to mid-way down in the filling above three charred hollow logs (Pl. III, see p. 48, no. 41) and parts of several others that lay north-

<sup>&</sup>lt;sup>3</sup> It may be just coincidence that both burials were eccentrically placed.

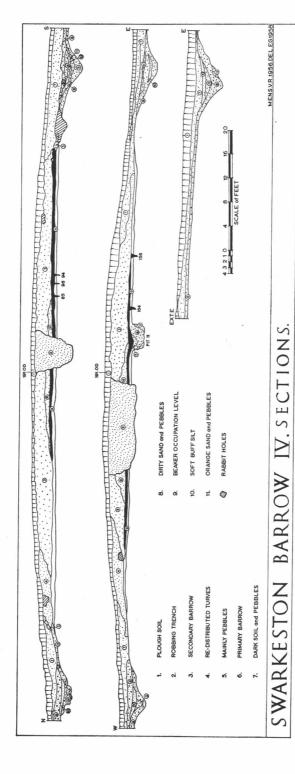


Fig. 3. Barrow IV, sections.

south, east-west and north-west to south-east across the base of the pit. On the south-east side of these, on the base of the pit, was a small quantity of (probably human) calcined bone fragments, c.  $\frac{1}{4}$  to  $\frac{1}{2}$  cu. in. average volume, mixed with charcoal. A few fragments of oak charcoal occurred on the north side at the base of the pit.

### THE ROBBING TRENCH

(Fig. 2, Plan and Fig. 3 for Sections, Layer 2; Pl. V).

The filling consisted of mixed turfy buff-brown soft sandy soil from which were obtained a few scraps of Neolithic pottery, some fragments of beaker and five urn sherds. Of these (Fig. 10) no. 45 is part of an Overhanging Rim Urn of Pennine type and no. 46 is probably from another urn, although the paste is finer than many urns and the decoration is very carefully executed. There was also a number of sherds similar to those from F.14, (Fig. 2, a feature possibly of Iron Age date), whilst a single post-medieval sherd (p. 40) suggests a date for the robbing attempt. Two arrow-heads (Fig. 8, nos. 27 and 28) were found towards the base of the filling in the south quadrant trench. About twenty flint flakes, several pieces of animal bone and three cattle teeth from the filling were discarded on the site.

The flints from the robbing trench include the two barbed-and-tanged arrow-heads (Fig. 8, nos. 27 and 28) and a small end scraper, and are doubtless derived from the Beaker occupation level.

In the base of the trench was an inverted cone-shaped hole (Figs. 2 and 5(7)). This was undoubtedly made by the trench diggers.

From the re-distributed mound material (Fig. 3, Layer 7) and the plough soil were found three prehistoric sherds, a sherd of rusticated ware and two small plain beaker sherds. Victorian and modern artifacts also occurred in the plough soil; these were discarded on the site.

A small oval-shaped shallow pit F.14 (Fig. 2), long axis 2 ft. by 1 ft. was found in the surface of the berm in the north-east quadrant. Its filling consisted of soft, sandy buff-brown soil which was lightly charcoal-flecked.

Twelve sherds of abraded dark brown fine ware with quartz grits (r/6 in.), surfaces finger smoothed, occurred 3 in. to 5 in. down in the centre of the filling. Mr. ApSimon comments, "These sherds are probably Iron Age A. Dr. Kenyon commented that the texture was right but that the surface treatment typical of Bredon ware was not present".

It is possible that this is a solitary feature of Iron Age

A date

### THE LINEAR DITCH (Fig. 1).

An examination of the air-photographs of the area before excavation began showed a dark line running from the hedgeline (south-east of Barrow 4) in a northerly direction. It passed Barrows 4 and 3 on the east side and curved north-westwards from Barrow 3 to where it went beyond the field boundary in the north-west corner of the field. Beyond this it was not traceable on the air-photograph. The east quadrant trench was extended eastwards and the dark line was proved to be a large, wide V-shaped ditch, 14 ft. in width at the top and 6 ft. in depth. The filling consisted of dirty sand and gravel and contained forty-seven flint flakes and a worn sherd of prehistoric type.

### "IRON PAN" (see p. 42).

This was found in patches on the pre-barrow ground surface, beneath the primary barrow and partly under the secondary barrow, and on the berm. It was seen in section as a thin orange-coloured line, and was traceable down the slopes (assumed) of both barrows, to where it joined the pan on the pre-barrow ground surface. In the south-east and north-east quadrants the pan had not formed so much on the pre-barrow ground surface, but had penetrated to the surface of the underlying gravel. It was seen almost everywhere horizontally as a mixed black and orange-coloured deposit that varied in thickness from  $\frac{1}{8}$  to  $\frac{1}{8}$  in .

In parts of the north-east quadrant on the berm of the secondary barrow, the pre-barrow ground surface was not found. In places, the base of the secondary barrow was in direct contact with the natural sand and gravel, suggesting that part of the area had been de-turfed before the erection of the barrow. It seems likely that some deturfing occurred in the course of the erection of the primary barrow.

### THE BEAKER OCCUPATION LEVEL

(Figs. 5 and 6, Plan, and Fig. 3, Sections, Layer 9, Pl. IV).

This was first recognized by Miss V. H. Foulkes (assistant supervisor during the first phase of the excavation). In view of its importance, the second phase excavation was arranged, and a rectangular-shaped area, 36 ft.

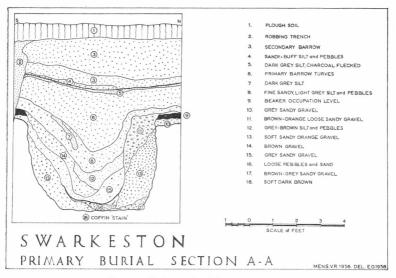


Fig. 4. Primary burial, section A-A.

north-south by 32 ft. east-west, containing a grid of 132 3 ft. squares and three extensions, was examined in detail. Squares 9, 12, 117, 118 and 121-123 were not excavated. These were considered to be outside the limits of the stakehole complex.

The level consisted of a band of dark grey sandy soil<sup>4</sup> between the base of the barrow make-ups and the underlying subsoil. The band consisted of two layers: the top 2 in. were "clean" grey sandy soil presumably representing the accumulation of humus between the abandonment of the Beaker occupation and the erection of the primary barrow (see p. 44, A.M. 5648, no. 13); overlying a layer of grey sandy soil 3 in. to 4 in. in depth, containing pebbles, small flints and Beaker artifacts. This represents the Beaker occupation level (see p. 44, A.M. 5648, no. 14). Over features 9, 10 and 11 (Fig. 5), the post-Beaker humus was considerably deeper than elsewhere; there were distinct hollows over features 10 and 11.

The level within the area under examination was removed in 3 ft. squares, and finds were recorded by (square) numbers. The number of pottery sherds found in each square is shown in Fig. 6 by symbols, together with the distribution of particular wares. Features (apart from stake-holes and post-holes) contemporary with the Beaker occupation are shown in Fig. 5 and are numbered 9 to 13. The base of the robbing trench (4) and the primary burial (3) are also shown on this plan.

### STAKE-HOLES AND POST-HOLES

(Fig. 5 and Pls. V and VI).

By far the most remarkable feature of the excavation was the number of stake-holes and post-holes. A total of 262, representing complex patterns and shapes, were found throughout the area. As holes were located and proved, they were excavated and recorded. The holes varied in shape from small circular to large oval, from  $1\frac{1}{2}$  in. to 10 in. in diameter. In depth they varied from 3 in. to 15 in. but most were over 5 in. and under 10 in. Some holes had vertical sides and concave bases; others tapered to a pointed base. Two holes (75 and 138) sloped from north at top to south at base. The fillings were from medium brown sandy soil to grey-brown, dark brown, light brown, reddish-brown to black-brown, and most

<sup>&</sup>lt;sup>4</sup> The surface when scraped with trowels had the appearance of velvet. <sup>5</sup> Details of each hole have been deposited with Derby Museum.

contained small flints and pebbles and were lightly charcoal flecked. Six holes (46, 100, 134, 168, 218 and 239) contained pottery sherds in their fillings and holes 46 and 239 produced flint flakes, 2 and 1 respectively. Hole 134 contained a small quantity of calcined gravel and 227 several small pieces of soft slate. On the north-east side, at the top of hole 246, was a small patch of sand burnt red.

### SUGGESTED STRUCTURES (Fig. 5; Pls. V and VI).

The holes may be graded into two kinds: stake-holes and post-holes. There are clearly two main structures of considerable size.

Group A. This consists of two parallel rows of stakeholes on a north-west to southeast alignment; these are shown in solid black in Fig. 5. The two rows are not in straight lines but bulge and narrow at intervals, each side matching the other. The holes in each row are spaced at roughly 12 in. intervals and each hole is vertical. There is clearly an entrance at the north-west end and each row of stakes terminates with a medium-sized post-hole, 54 and 100 respectively. There are small arcs of stake-holes on the outside of each row at this end, 98 and 99 on the south side and 125-127 on the north side. These seem to represent strengthening "wings" supporting the entrance posts. The south-east end of the structure extends beyond the limits of the excavation in Ext. 2.

Group B. This group is shown in solid black in Fig. 5, and comprises in the main medium to large post-holes supporting smaller posts and stakes. The group consists on the west side, of a row of holes from 132 on the south side to 157 on the north side. This row of stakes and medium-sized posts appears to have been supported by larger posts 168, 166 and possibly 159. On the east side of the group is a formation of holes on a rectangular plan with other holes of uncertain plan on the north side. An outer entrance is suggested between post-holes 133 and 168 and an inner entrance by post-holes 155 and 159. A way into the rectangularly-shaped formation is suggested between holes 241 and 249 on the north-east side.

The two groups are distinctive in shape and represent structures for probably totally different purposes. It is unlikely that they were in contemporary use, though both are clearly of Beaker date. The rest of the stake-holes and post-holes obviously represent structures of various kinds and for different purposes, but little can be said of their structural shape or use. There is little doubt that they are all of Beaker date.

## FEATURES CONTEMPORARY WITH THE BEAKER OCCUPATION OTHER THAN STAKE-HOLES AND POST-HOLES (Fig. 5).

SHALLOW PIT 9.

This first showed as a soft patch of fine sandy silt when the Beaker level was removed over it. Clearance revealed a shallow scoop in the subsoil, long axis 2 ft. 6 in. by 2 ft. It was 4 in. in depth from subsoil level. The sides sloped gently to a concave base. The filling was charcoal-flecked and contained a sherd of rusticated ware, six other scraps, of which one appears to be a rim with fingernail decoration, six pieces of unbaked (?) clay, and two pieces of black cindery ware, perhaps pot or clay with a large admixture of sand.

### SHALLOW PIT 10.

This showed in the surface of the post-Beaker humus as a shallow hollow and clearance showed a slight depression in the subsoil. It was 3 ft. north-west to southeast by 2 ft. 6 in. and 4 in. in depth in the centre. The filling was dirty grey-brown sand and gravel and was lightly charcoal-flecked.

### LARGE PIT II.

This showed in the post-Beaker humus as a hollow under the main east-west section in the north-east quadrant trench, and clearance showed a large oval-shaped pit, 5 ft. 6 in. north-east to south-west by 4 ft. 2 in. with a depth in the centre of I ft. IO in. from subsoil level. The sides were practically vertical and the base roughly flat. The filling was medium grey-brown sandy

gravel in the centre, changing to reddish-brown at the sides. The centre of the filling was charcoal-flecked and contained a fragment of a beaker base, a sherd decorated with bird bone impressions, and an indeterminate sherd. Two pieces of flint and two pieces of calcined flint pebble were discarded on the site.

### BURNT PATCH 12.

The removal of the Beaker level revealed an oval-shaped patch of gravel and sand burnt salmon-pink in colour. It measured I ft. 6 in. by I ft. and was about  $\frac{1}{2}$  an inch in depth.

### HEARTH 13.

This showed in the Beaker level as a roughly circular patch of sand burnt red-salmon-pink in colour, containing burnt flints and charcoal-flecked. Its width was I ft. 6 in. and depth 5 in. Stake-hole 253 was sealed by the burnt material.

### BARROW CONCLUSIONS

The occurrence of a secondary barrow erected over an earlier one is not unusual. The barrows were distinct. the primary being a small bowl barrow without ditch and the secondary, a large bell barrow with surrounding berm and ditch. The lapse of time between the two erections need not have been of long duration. It was not possible from the examination of the stratification of the two barrows, to separate the two mounds, except by the line of the "pan", and this has only been accepted tentatively as the line of demarcation. There was no line of humus between the barrows to represent a lengthy time interval. The thin layer of dirty silt around the secondary cremation pit can certainly be accepted as the surface of the primary barrow. This had the appearance of having been trampled and probably represents, in part, not only the disturbed surface of the primary barrow but the outcast from the insertion of the cremation pit. This surface was unburnt and should not be accepted as the site of the pyre of the secondary interment. As the rim, sides and base of the pit were severely burnt it seems that either part of the pyre was brought to the pit and placed in it, where it continued to burn for a considerable time, or that a separate fire was made in the pit. The pit was filled with unburnt silt, except for patches of burnt sand, and had no doubt been filled when the fire was extinguished. The filling was derived from the trampled surface around the pit. The fragments of the Collared Urn were placed in the pit during the filling and represent, most probably, parts of a vessel used for ritual purposes at the pyre site or elsewhere.

The Middle Bronze Age urn sherds from the robbing trench filling appear to indicate that the trench found and destroyed one and possibly two burials with Collared or Overhanging Rim Urns. These burials were also presumably secondary and were probably contemporary with the intact burial, if not, then not appreciably later than it. The sherds occurred in the robbing trench at the

approximate centre of the secondary barrow.

### BEAKER OCCUPATION LEVEL — CONCLUSIONS.

Deposits of occupation soil of Beaker and Middle Bronze Age date are not a unique feature beneath round barrows. The writer's excavation of the Codicote barrow (publication forthcoming in St. Albans and Herts. Architectural and Archaeological Society Journal) revealed a circular hut of the Middle Bronze Age, sealed beneath a round barrow. This was evidenced by post-holes, a central hearth and pit, and by fragments of collared urns and flint tools, with a corn rubber, scattered on the hut floor. Other barrows, for example Reffley Wood, Norfolk, and Chippenham, Cambs. (Piggott, S., 1954, p. 113), revealed occupation soil of Beaker date but it was not proved whether it was brought to the sites from settlement elsewhere or the barrows built on the sites of destroyed huts. In Holland Dr. Glasbergen (Glasbergen, W., 1954) has found rows of stakes under barrows, appearing at one side, running right under the barrows and disappearing at the other side, sometimes traceable under the next barrow. The date of the barrows is such that these stake-holes are probably of Beaker date. In

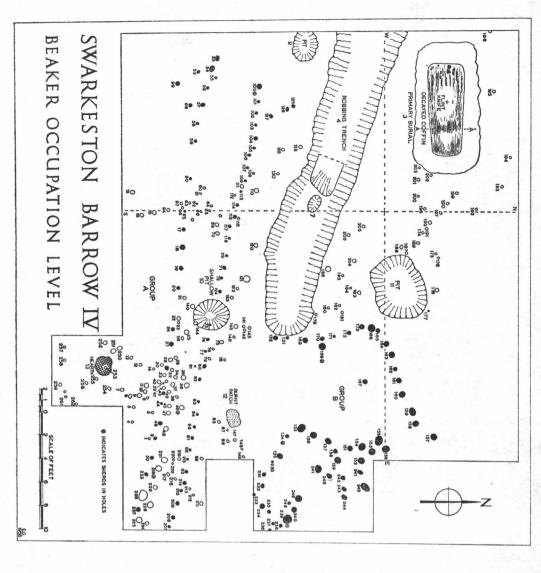


Fig. 5. Barrow IV, Beaker occupation level

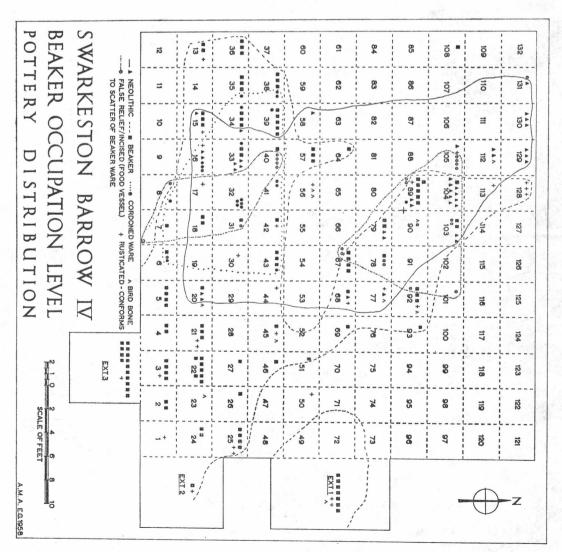


Fig. 6. Barrow IV, Beaker occupation level, pottery distribution.

Northern Ireland a Neolithic chambered barrow (Collins, A. E. P. and Waterman, D. M., 1955)<sup>6</sup> was found to be built on top of a dry stone field wall, which traversed it from end to end, disappearing at either extremity.

The Beaker level at Swarkeston is probably the best example of its kind yet to be found in the British Isles and is, as far as the writer knows, without parallel.

The structures Group A and B suggested by the formations of stake-holes and post-holes will be discussed at some length.

GROUP A. Providing that the two rows of stakes are contemporary, and there seems little doubt that they are. they appear to form a structure for animal use. In plan they form the shape of a long tapering tunnel which suggests a bird trap, or if it had been on the seashore, a fish trap. It seems likely that if the structure was for use with domestic animals then the only animals that need be considered are sheep, goats or pigs. The narrow width (2 ft. 6 in. at its narrowest) and the apparent flimsy nature of the structure rule out the possibility of cattle use. Considering that the structure was for the use of small animals, it seems obvious that at least one intention was for the users to be encouraged to walk or run in single file. This is assuming that the structure leads to an enclosure and that it was for animal use. Was it in fact used annually for the segregation of sheep, for treatment, for marking or for slaughter? The possibility that it was a trap for wild animals cannot be ruled out. The final suggestion that occurs to the writer is that there is the slight possibility that the structure was intended for human use. In its humble way it resembles an avenue, comparable in miniature to the West Kennet Avenue, linking the Avebury Circles with the Sanctuary.

GROUP B. In considering the complex of holes that form this suggested structure, one fact that is very apparent is that within the limits of the formation, the area is completely free of miscellaneous holes; so unlike the rest of the site. This fact is important if this structure can be accepted as a human habitation. It also helps to suggest

<sup>&</sup>lt;sup>6</sup> I am grateful to Mr. ApSimon for bringing these references to my notice.

that Group B is earlier than Group A, though many of the miscellaneous holes are probably contemporary with either. Features 10 to 13, being outside the limits of the structure, vet close at hand, are the kind of domestic feature that can be expected to surround a dwelling, and it can be suggested that they are contemporary. Another fact that is important is that the scatter of pottery sherds and stone rubber fragments is, with the exception of the sherds found in Ext. I. outside the confines of the structure. This evidence clearly indicates that the interior was kept in a clean condition. It is possible that so far only the entrance to this suspected habitation has been found: the suggested entrance between holes 133 and 168 seems to indicate a way in from the exterior, and the enclosed space may be an outer porch shielding the inner entrance (between holes 155 and 159) from the south-west, if this was then the prevailing weather.

It would appear that the site was first visited by Neolithic people who left no trace of their occupations, but who, at least, left a scatter of pottery sherds. Shortly afterwards the area was occupied by an agricultural community of Beaker date who were probably also sheep breeders. Their stay seems to have been of considerable duration. With their abandonment of the site sufficient time elapsed for clean humus to accumulate before a small barrow was erected over an inhumation grave. Subsequently, at a short interval, one or more cremation burials were inserted into the primary mound and a large bell barrow erected over them. The primary barrow can be ascribed to the Early Bronze Age; the secondary barrow to the Middle Bronze Age.

It is hoped that facilities will be granted to the writer to examine the rest of the site that is still preserved on the east and south-east sides of the area already examined. There is the possibility that future excavation would greatly aid the complete understanding of both Group A and B structures and thus add considerably to our knowledge of a Beaker community.

## REPORT ON FLINTS AND NEOLITHIC AND BRONZE AGE POTTERY FROM BARROW 4 AT SWARKESTON.

By A. M. ApSimon.

### THE FLINT INDUSTRY.

	Beaker occupation.	Total examined.
Tools	26	39
Retouched	3	7
Utilised	I	5
Cores	3	6
Core trimmings	_	I
Waste flakes	12	26
Total	45	84

Tools from Beaker occupation layer:

	-	
Button scrapers	5	Include Fig. 7, 3-7
Convex scrapers	9	Include Fig. 7, 8-13
Nosed scrapers	2	Include Fig. 7, 14
End scrapers	I	Include Fig. 7, 15
Miscellaneous scrapers	3	
_		
Total scrapers	20	
Knife	I	Include Fig. 8, 18
Arrowheads	2	leaf shaped (I), petit
		tranchet (2)
Cores	3	, ,

This series of implements is too small for the proportionate number of tools present to be significant or for much weight to be placed on the absence of particular types. However, convex and small "button" scrapers seem to be the main product of the industry. There is nothing among the scrapers that is out of place in a Beaker context. The scarcity of knives might suggest that by this period the bronze knife was, like the metal axe, generally available to Beaker societies at not too prohibitive a price. The two arrow-heads reflect different tradi-

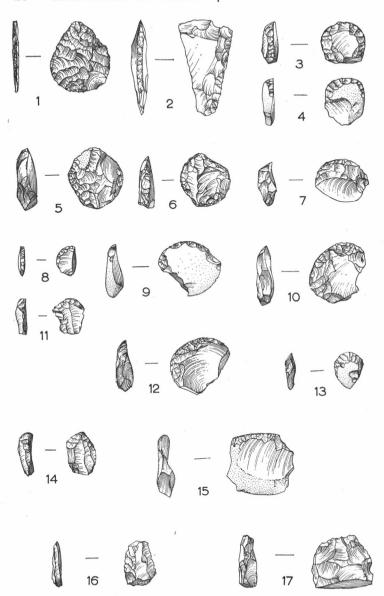


Fig. 7. Flints from Beaker level. 1-7, 9, 10, 12, 15, 17 (2/3). 8, 11, 13, 14, 16 (1/3).

tions, the leaf shaped arrow-head that of the fragmentary Western Neolithic pottery, and the petit tranchet arrowhead that of Mesolithic societies.

The small amount of burnt flint (10%) comes almost entirely from the Beaker occupation level where its presence requires no comment.

The flints from the secondary barrow suggest the possibility of a pre-Beaker scatter of flint on the site.

Note: The total number of flints found on the site (including pieces of flint and split pebbles) was 1,267, of these, 955 were discarded on the site.—E.G.

#### Fig. 7. Flint Implements.

1-17. From the Beaker occupation level.

Leaf shaped arrow-head, complete bifacial working, the tip broken. SQ.73.

Petit tranchet arrow-head. SQ.101.

Button scrapers, 4 is burnt. 3-7. 3, SQ.41; 4, SQ.43; 5, SQ.43; 6, primary barrow make-up.

8-13. Convex scrapers: 8 is made on a flake struck from a tool with a ground surface; 9 is made from a pebble; 13 is burnt to a dead white colour. 8, SQ.32; 9, SQ.31; 10, SQ.114; 11, SQs.91, 92; 12. Extn. III; 13, SQ.91.

Nosed scraper, made on a thick flake, much used. 14. SQ.130.

End scraper, finely retouched, made on a flake. 15.

Knife, made from a flake, scale flaked along the т6. left-hand edge, has been burnt, showing heat fracture, SO.68.

Possible core fragment, battered. SQ.41. 17.

### Fig. 8.

18. Knife made on a blade of dark grey flint, the left-hand edge formed by a hinge fracture surface, the right-hand edge has very good planoconvex retouch, cortex left on the back; from the primary "coffin" grave.

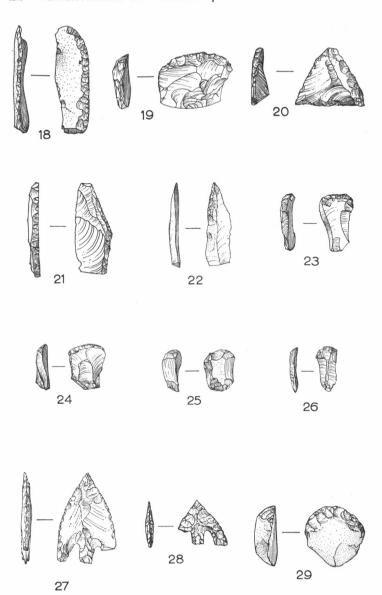


Fig. 8. Flint implements from the barrows and robbing trench. 18, 23-26 (1/3). 19-22, 27-29 (2/3).

19. Transverse scraper, steeply flaked working edge; from base of primary barrow over the primary grave.

20-24. From the base of the secondary barrow.

20. Triangular flake with the left-hand edge steeply retouched. This might be regarded as a petit tranchet derivative.

21. Blade with retouch along the right-hand side.

Bladelet, perhaps a true microlithic point with retouch on the left-hand side of the point, grey flint with a bluish patina.

23-24. End scrapers on flakes; 23 is steeply retouched.

25. Double end scraper on a thick blade or flake; from middle foot of the primary barrow.

26. End scraper on a small blade. Barrow ditch, west

cutting, top of filling.

27. Large barbed-and-tanged arrowhead, worked only on tang, barbs and point, one barb broken. From the filling of the robbing trench in the south-west quadrant trench.

28. Barbed-and-tanged arrow-head of ogival form, complete bifacial working, one barb broken; as

27.

29. Small convex or "button" scraper; unstratified.

### POTTERY FROM THE BEAKER OCCUPATION LEVEL (Fig. 9(1-29); Fig. 10(30-43)).

There are about 131 sherds and some 225 scraps of pottery from the Beaker occupation level. Of these twenty to twenty-five sherds and a few scraps are Neolithic. None of the sherds is larger than 2 in. across; many are abraded and their fractures rounded off; a few are reasonably fresh. The ware is dark brown or black with numerous fine quartz grits. Some sherds show a zone fired to a brick red beneath the outer surface which is usually black and which was probably burnished originally. Three rim sherds have been figured (Fig. 9(1-3)); they suggest pots of simple Western Neolithic type with gently flared necks. There is no certain evidence of carination and there are no decorated sherds. Considering the worn

condition of these sherds they suggest a good standard of potting. Mr. G. F. Willmot has remarked to me on the similarity between this pottery and the Western Neolithic pottery from the Yorkshire barrows (cf. Newbigin, 1937), and the fabric resembles Western Neolithic pottery from Ulster.

The Neolithic pottery occurs in the occupation level equally with Beaker pottery. It does seem, however, to be almost entirely restricted to the western half of the area (Fig. 6). It is thus possible that it represents a use of the site distinct from that by the Beaker community. My impression is that the Neolithic sherds are, allowing for differences in fabric, more worn than the general run of Beaker sherds.

### BEAKER POTTERY.

This may be divided into two groups; firstly what may be called standard Beakers decorated with comb or incision, and secondly, vessels decorated in other techniques.

All the material is extremely fragmentary and the biggest Beaker sherd (excepting the cordoned pot) is no more than 3 in. across, while most are much smaller. Of standard Beaker ware there are some seventy-six sherds, including eleven rims and six bases, and more than eighty-five scraps. There are also two sherds, one a rim, from stake-holes beneath the occupation layer. All the material, insofar as it is characteristic, indicates that we are dealing with A Beakers and there is no evidence of the presence of type B or C. Cord decoration is entirely absent.

Comb-decorated Beaker sherds include a range of fairly normal A Beaker fabrics, usually with a dark core, although some sherds are fired fairly evenly right through to a reddish-brown-buff colour. The surfaces are generally reddish, brown or even buff-brown. Some sherds are of a peculiar olive-grey and these are perhaps the most carefully decorated, for example no. 5. The surfaces, where freshly preserved, are generally smoothed and burnished. A few sherds seem to have been re-burnt, probably by accidental exposure in a hearth. The condition of these sherds varies from absolutely fresh to very

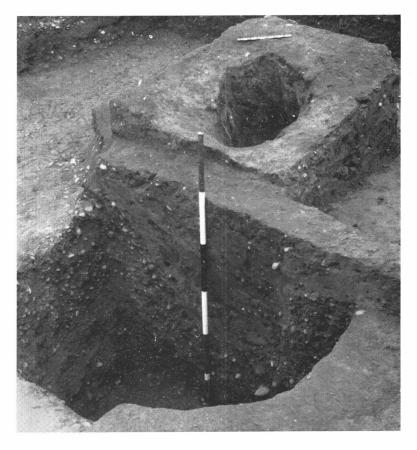


PLATE I. Section across primary grave with secondary cremation pit above.



PLATE II. Section through secondary barrow. Six-inch string grid.



PLATE V. Stake holes of Group A, looking east.



PLATE VI. General view of the Beaker occupation level.



PLATE VII. "Pennine Urn" from Stanton Moor.

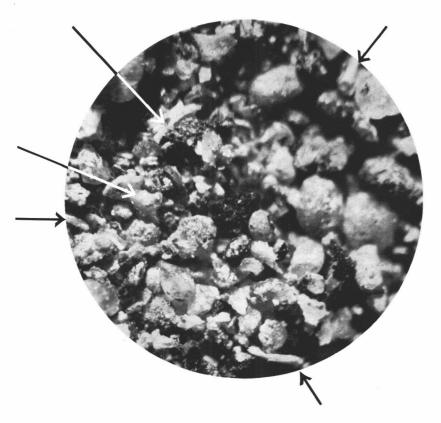


Plate VIII. "Raw wood" particles (arrowed) among sand grains and dark "crumbs". (cf. 5679.)

abraded but on the average is better than that of the

Neolithic pottery.

Probably at least ten comb decorated Beakers are represented, mostly by not more than a couple of sherds. Rims (Fig. 9 (6 and 7)), bases (nos. 8 and 9); as far as these fragments go they are quite normal and require no comment. There are two sherds (no. 10) from the lower body of an A Beaker of rather slack profile. Decoration: Zones of ladder pattern forming the margin to more ambitious motives can be seen on a number of sherds (5, 7, II, I2). One sherd (not figured) shows the "rungs" executed with a finger-nail instead of with a comb. The doubling and tripling of the horizontal lines of comb impressions which outline the ladder is characteristic of "good" Beakers, which will often show this feature in a consistent way. Fig. 9(10) shows the most complete scheme of decoration, a row of hanging triangles horizontally hatched. There was probably another row immediately below and a similar double row on the neck of the Beaker. On this pot the simplification of the orthodox limiting zone of ladder pattern may be regarded as a sign of slackness or forgetfulness of traditional schemes of decoration, a sign reinforced by the careless execution of the decoration.

Several sherds (13, 14, 15, 19) suggest the common A Beaker motive of horizontal running chevrons, alternately hatched and plain. No. 12 is interesting in that it suggests a design with a zone of hatched lozenges or triangles broken up into panels by vertical ladder patterns or plain bands. This is one of the motifs that unambiguously connect A Beakers with Central European Bell Beakers rather than with any other group and which indicate that A Beakers can hardly be derived from any of the other distinctive types of Beaker found in Britain (Compare Abercromby, 1912, Vol. I, pl. ii, 28\*, 29\*, 31\*, with his Pl. v, 4, 10, Pl. viii, 48, 50 — both these last from Derbyshire). Other interesting motives appear on 16, 17 and 18 although it is difficult to reconstruct the patterns intended.

Incised decoration: probably hardly more than five Beakers are represented by about thirty to thirty-five sherds. The ware lies within the Beaker range considered above, although wares of the highest quality are hardly represented. Much of the pottery is fired right through to a buff-brown colour; some is black internally, the outer half of the core being brick-red. The shapes do not provide much on which to comment; no. 28 is quite an ordinary Beaker rim. Decoration on these pots is not very remarkable; 28 presents a normal A Beaker pattern, done by incision instead of comb and the same is true of 29 where the triangle in shallow grooved technique forms part of a running chevron zone familiar on A Beakers.

On 30 the pattern aimed at seems to be cross-hatched lozenges although cross-hatched running bar chevrons are also a possibility. This is a coarse sherd and the decoration matches up to the quality. The second sherd may be part of the same or of a similar pot. The sherds figured as 31 are certainly part of the same pot and 31a may also be. This seems to have been a slack profiled pot with a cordon on the body. Quite probably it belongs to the class of A Beaker with inbent rim. The decoration consists of bands or rather slapdash incised cross-hatching. Other vessels are represented by 32, 33, 34 and 35. No. 33 is in over-fired buff beaker ware. No. 35 is interesting in that while its decoration and external appearance are identical with other incised Beaker sherds, its paste and inner surface are practically identical with the "Irish Food Vessel'' figured below, whereas the other incised sherds are quite normal Beaker.

There are probably at least five separate vessels in true rusticated ware style, that is where the surface of the pot is raised or roughened. There is also some fingernail decorated ware. The first rusticated pot, 36, is represented by ten sherds, none of which join and all of which are rather worn, some very much so. The ware is dark brown to black with rather shaley laminations but without obvious grit backing. The flattened rim is typical of the style. The deep finger-nail impressions appear to be arranged in obliquely set pairs. The second is probably represented by four sherds including part of a base. The surfaces are reddish and the finger-tip impressions seem to be arranged in horizontal rows. This seems to have

been a pot with a rather globular body. Two sherds are from the south-east quadrant. No. 38 is represented by five sherds, two of which are from stake-hole 46; the others come from the south side of the barrow. The outer surface of this pot has an olive-brown colour seen on ordinary A Beakers. The surface is very effectively roughened by rustication, arranged in pinched pairs of finger-nail marks. A number of other sherds have not been figured.

The finger-nail decorated ware includes a number of sherds (not figured) of reddish-brown ware with rather creamy red surfaces. The smooth outer surface bears faint finger-nail marks. Another sherd of reddish-buff beaker ware has horizontal rows of sharp finger-nail marks closely simulating incised lines. No. 40 combines finger-nail and comb technique.

The cordoned vessel (no. 4) is of Beaker type paste. The cordons are so closely set as to produce rather the effect of multiple grooves. This pot may well be one of the latest from the occupation level because there is more of it than of any other and because its sherds are among the freshest looking.

There are less than a dozen sherds of pottery with impressed "bird bone" decoration. These are mostly of dark ware without noticeable grit, the outer part of the core and the outer surface brown, or reddish, or even olivebrown. The decoration is by means of rows of impressions resembling those produced by the aid of bird or small mammal bones, although in this case their precise nature has not been determined. This style of decoration is fairly common on Neolithic pottery, but in this case the fabric resembles Beaker pottery. Unfortunately there are no rims or bases and the sherds give little idea of the shape of pot involved, although one small fragment seems to have decoration on the inner face of a concave neck as on Peterborough pottery, but the fragment is too small for certainty on this score. This ware is scattered all over the occupation level.

The "Irish Food Vessel" (Fig. 10(43)) is represented by a rim sherd and by about ten other sherds, none more than an inch across. The ware is of a reddish colour with a black core and its appearance is best described by likening it to burnt sandstone. The surfaces are smooth, brown, with a hint of red. The appearance, both in fabric and decoration, can be matched among a wide range of Bowl Food Vessels from Ireland. The resemblance between this and some incised Beaker ware has already been mentioned. The implications of this discovery are discussed below.

### DISCUSSION.

The Neolithic pottery from beneath the barrow is so fragmentary as to require little comment. It seems to be the first find of such pottery from Derbyshire, with the exception of a possible sherd of Grimston ware, now lost, from the Five Wells chambered tomb (Piggott 1954, p. 268).

The Beaker pottery is more important in that it gives us the beginning of the background of settlements against which to see the A Beaker grave groups of Derbyshire and Staffordshire. This present group is quite normal in character; the comb-decorated and rusticated wares might be compared with almost any reasonably large group of A Beaker pottery from Southern and Midland England. The best comb decorated sherds are on a par with finely decorated vessels from Derbyshire and Staffordshire burials, the earliest of which must be practically contemporary with the primary settlement in Southern England. On the other hand the presence of incised ware seems to be a sign of provinciality, of a slackness or of a forgetfulness of tradition, that appears everywhere in Western Europe where a Beaker group settles in a backwater. The contrast with a site such as Gorsey Bigbury in Somerset (Jones 1938) is most marked. There with about ten times as much A Beaker material as at Swarkeston, and including much rusticated ware, incised decoration is almost entirely absent. The rather shoddy incised style is however common on Beaker material from the Thames valley and the Midlands, notably on handled and inbent rim beakers.

It seems worthwhile remarking the lack of any B Beaker element. A-B Beaker hybrids are not infrequently

claimed; the writer has however yet to see any material acceptable as such. The most usual source of confusion seem to be B Beakers with less zonal decoration than usual, harking back to the archetypal panelled styles of Central European Bell Beaker decoration which in fact are better represented on English A Beakers.

The cordoned vessel may be compared on one hand with ribbed vessels from Risby Warren, Lincolnshire (Riley 1958, p. 54, Fig. 9, I and 6) and parallels there cited; and on the other hand with a pot from the primary cist of the Lyles Hill cairn in Co. Antrim (Evans 1953, p. 46, Fig. 18(90)). The Lyles Hill pot, for which Beaker affinities were suggested by Evans, is almost exactly like the Swarkeston pot in its fabric, but differs in having alternately broad and narrow ribs with vertical comb impressions on the broad ribs. This ribbed or cordoned ware seems to be part of the A Beaker repertoire although it is perhaps uncertain how far it should be classified with Somersham ware bowls like that from Moordown, Hants. (Calkin 1935) on which horizontal cordons have been worked up with finger and thumb.

The rusticated ware, in this case strictly of Holdenhurst style, is also a remarkably constant component of A Beaker pottery. Here again the Risby Warren material appears to be closely comparable. The presence of pottery decorated with "bird bone" impressions is interesting, for this technique derives from Neolithic traditions. In this case, despite a single fragment which might just possibly be Neolithic, the pottery seems to be affiliated to the Beaker group. Professor Piggott has already suggested a Woodhenge-Clacton source for much of the rusticated ware styles and has cited the occurrence of these wares at Gorsey Bigbury together with petit tranchet derivative arrow-heads of a type abundant at Woodhenge (Piggott 1954, p. 341). That "bird bone" decoration may be derived from the same source is indicated by the presence at Gorsey Bigbury of sherds of such ware almost indistinguishable from similar sherds from Woodhenge itself (ApSimon 1951, p. 195).

By far the most surprising discovery is the Bowl Food Vessel of Irish type. There can be no doubt that this is

what it is, the writer's opinion being supported by that of persons well qualified to judge. Its occurrence in an A Beaker occupation level, sealed by a barrow whose primary burial belonged to the Early Bronze Age, raised several questions. The more general questions and those relating to the Irish evidence I have endeavoured to answer with the aid of a number of hypotheses published elsewhere (ApSimon 1959). These boil down to the proposition that the Irish Bowl is basically a transmutation of the A Beaker and that its development in Ireland must be nearly contemporaneous with the floruit of A Beakers in England. The present example might be compared to one from Halverstown, Co. Kildare (Raftery 1940). The use of incised decoration suggests that it is a mature example of the type, since what I take to be the earliest examples have comb decoration and fabric indistinguishable from that of many A Beakers.

Miss Kitson Clark (1937) published a degenerate Irish Bowl from Yorkshire as well as a small number of Yorkshire Vases with false relief decoration, to which may be added two from Lincolnshire (Chitty 1938) and one from Northants. (Leeds 1915, Fig. 5). The Swarkeston example falls naturally into this pattern of scattered Irish influence in Northern England, suggesting perhaps a route via Anglesey and North Wales. Traffic in the reverse direction might be indicated by the Lyles Hill vessel cited, a suggestion now vindicated by recent discoveries of Beaker and Food Vessel pottery at Dalkey Island, near Dublin.<sup>7</sup>

The false relief technique does indeed occur on Central European Bell Beakers and at least once on a group of English A Beakers, but since the present example is an Irish type Food Vessel, these occurrences are only relevant insofar as they indicate the ultimate sources of the technique.

This discovery accords well with the degree of mobility with which Early Bronze Age societies should be credited if the implications of Case and Coghlan's work (1958) on early copper metallurgy in the British Isles are accepted. This discovery also indicated that the generally accepted

<sup>&</sup>lt;sup>7</sup> I am indebted to G. D. Liversage for showing me this material which now (1961) includes a transitional series between A Beaker and Food Vessel, as might have done Swarkeston, given more material.

short chronology for the Boyne Passage Graves (e.g. Piggott 1954, opp. p. 380), in which such Food Vessels have been found as presumably intrusive burials, will

require revision.

The varied quality and styles of the pottery from the Beaker occupation level allow us to suggest that the occupation need not necessarily have been a very brief one. At the same time the fragmentary nature of the pottery and the incomplete state of even the best preserved pots suggest the possibility that even at this early stage domestic refuse was being carried out, together with animal manure from the pens implied by the post and stake-holes, to enrich the soil of corn plots.

The flint knife from the primary grave may be compared to knives found by Mortimer in Yorkshire barrows. Two such are: from Huggate Wold, Barrow 224, a similar knife except that both edges are worked, found with an adult skeleton of large stature, this inhumation contemporary with a cremation (Mortimer 1905, Fig. 901); and from Life Hill, Barrow 294, from a Food Vessel burial (with contemporary inhumation and cremations) (Mortimer, Fig. 500c). This knife is clearly related to the plano-convex type of knife, although in this case the particular form of the flint has made for economy of effort in producing the finished tool.

This flint knife and its apparent associations, an inhumation burial in a (probably) wooden coffin, would be quite at home in a Yorkshire Food Vessel context. The stratigraphical position, intermediate between A Beaker and an Overhanging Rim Urn burial, is approp-

riate to such an attribution.

The Overhanging Rim Urn from the secondary burial may be compared to an urn from Lincolnshire which has similar decoration and which is about the same size (Abercromby 1912, ii, Pl. lxvii, 72). Another very similar urn is from New Park Quarry, Stanton Moor, Derbyshire (Storrs Fox 1927, Fig. 1, no. 3). The fragmentary "Pennine Urn" from the barrow robbing trench is almost exactly paralleled by another urn from Stanton Moor figured here (Pl. VII).

<sup>&</sup>lt;sup>8</sup> Thanks are due to Mr. A. L. Thorpe, Curator of Derby Museum, for the photograph of this urn.

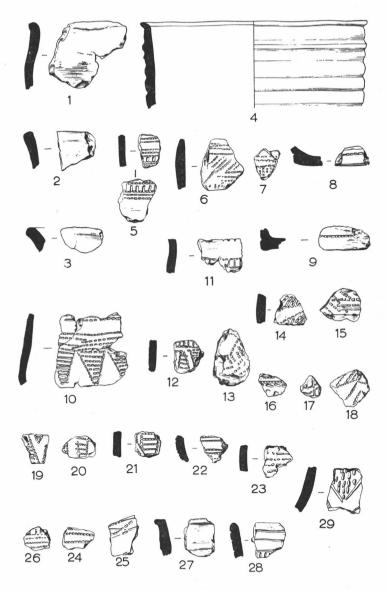


Fig. 9. Pottery from Beaker level: 1-3 Neolithic, 4-29 "A" Beaker (1/3).

These urns give the limiting date for the finds beneath. In the present state of our knowledge it is not possible to be more precise than to say that these urns are likely to belong to the earlier part of the Middle Bronze Age, perhaps to somewhere around 1400 B.C. If the primary burial really is a Yorkshire Food Vessel culture burial, then it is likely to be contemporary with the graves containing daggers of Wessex Bronze Age type which have been found in Derbyshire, and more probably with the earlier examples, dating perhaps within the period 1600-1500 B.C.

The Beaker occupation and the Irish Food Vessel would then be still older. In view of the character of the Beaker material, a date within the 17th century B.C. might be suggested, although the early or proto-Aunjetitz culture connections of the metal types associated with A Beakers should indicate that the earliest examples probably date back to the 18th century B.C.

Figs. 9 and 10. Neolithic and Early Bronze Age pottery.

1-3. Western Neolithic pottery.

I. Upright rim sherds with slight external bead, black ware with some quartz grits. SQ.129, 130.

2. Gently everted rim sherd, brown ware with reddish-brown surfaces, numerous fine quartz grits. SQ.33.

3. Rim sherd, reddish — dark ware with quartz and sandy grits. SQ.104.

4-43. "A" Beaker and allied wares.

4. Rim and wall sherds of cordoned beaker, rim diameter  $7^1/_{10}$  in. The inner surface is red-brown, the core black with occasional grits; the cordons on the outer surface are reddish-brown, burnished. They were presumably applied to the surface of the pot but have been so worked over as to make this uncertain. The rim is flat-topped or has a slight internal bevel. This was originally a fairly large pot and only a small part was recovered; there are no base fragments although one or two sherds may belong to the lower wall.

15.

SQ.31, two sherds; SQ.139, do., rim; SQ.32; SQ.6; SQ.15; SQ.33; SQ.34; SQ.35; SQ.38; SQ.39; SO.89.

5Q.39; SQ.89.

The sherds of this pot are generally among the freshest from the occupation level. Except for some strays they all occurred in the south-west quadrant. The cordons have been finished by running a finger-nail along each side of the cordon and these marks are clearly visible in places.

5. Two body sherds of olive-brown Beaker ware with smooth surfaces, neat comb decoration. SQ.26; SQ.93.

6. Rim sherd of brown Beaker ware, comb decoration, two horizontal bands of ladder pattern between horizontal lines.

Ext. I, P.H.239,  $7\frac{1}{2}$  in. down in filling.

7. Rim sherd, ware much like 13, but finer, decoration less deeply impressed and with a smaller comb. SQ.41.

8. Base sherd of brownish-black ware, burnished surface, comb decoration. SQ.79.

9. Base sherd, ware brown, interior light brown, outside red, comb decoration. Ext. I.

Fitting sherds from the body of an A Beaker, redbrown ware, inside brown, outside light brown, comb decoration. SO.38.

Sherd from the neck of an A Beaker, red-brown ware with white grits, smooth surfaces, comb decoration.

Ext. I, P.H.218, 3 in. down in filling.

12. Sherd of good olive-brown ware, with comb decoration, perhaps the same pot as 5. SQ.51.

13. Sherd, dark ware with a little quartz grit, brown surfaces, comb decoration.

This is very poor quality ware. SQ.78.

14. Sherd, paste brown-black, surfaces dark brown, coarse comb decoration, perhaps running chevrons, very like 8. SQ.89.

Sherd of brown ware, inside light, outside darker, coarse comb impressions. SQ.68.

Scrap of buff-brown Beaker ware, incised loz-16. enge-chevron pattern, sherd is abraded.

Scrap of reddish-brown Beaker ware. Ext. III. 17.

т8 Sherd of dark brown Beaker ware with brown surfaces, very deep comb impressions. SO.24.

Two sherds of reddish Beaker ware, chevron IQ. decoration in comb technique. SO.39.

Scrap of dark brown Beaker ware with reddish-

20. brown surfaces, comb decoration, parallel rows of ladder pattern. Ext. II.

2T. Sherd, even reddish-brown ware, smooth surfaces.

comb decoration. SO.46.

Sherd, reddish-brown ware, comb decoration. 22. SQ.18.

Sherd, reddish-brown Beaker ware, comb decora-23. tion. SO.60.

Scrap, comb decorated. Ext. III. 24.

Sherd, inside black, outside reddish, smooth, 25. coarse comb impressions. SQ.7.

26 Sherd, red Beaker ware with black core, surfaces

smooth, fine comb decoration. SQ.79.

Rim sherd of a cordoned Beaker, ware black in-27. side, brown to reddish-brown outside, perhaps not the same as 4. SQ.39; SQ.43.

28. Rim sherd, brown ware with grevish core, redbrown outside, deeply incised decoration, SO.25.

Sherd of brown ware with smooth outside, im-29. pressed decoration, probably a reserved running chevron,  $\frac{1}{4}$  in. thick. SQ.18.

Two sherds, probably from the same Beaker, 30. brown ware with buff-brown surfaces, incised

decoration. SQ.35; Ext. III.

Rim and body sherds of dark brown, poor quality 31. Beaker ware, inwardly bevelled(?) rim; body has a raised cordon perhaps at the shoulder. Decoration consists of rows of incised lattice pattern. SQ.57; SQ.43; SQ.89.

Sherd, reddish Beaker ware, band of incised 31a.

lattice. SQ.40.

Sherds of Beaker ware, inside brown, outside 32. reddish, with incised lattice pattern. Ext. III.

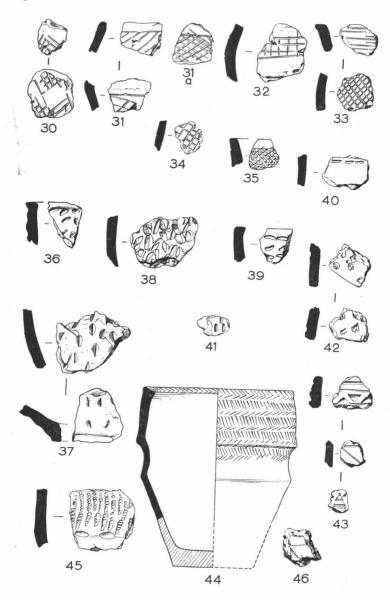


Fig. 10. Pottery from Beaker level: 30-43 "A" Beaker (1/3). Pottery from secondary level: 44-46 Middle Bronze Age (1/3).

33. Soft buff-brown Beaker ware sherd, incised lattice. SQ.3.

34. Sherd of very friable brown ware with darker

core, incised lattice decoration. SQ.68.

35. Rim sherd of gritty red ware, inside brown, incised lattice. This is the same ware as the Food Vessel (Fig. 43). SQ.89.

36. Flat topped rim sherd, laminated black ware with

deep finger-nail impressions. Ext. I.

37. Base sherd and large wall sherd of rusticated ware, brown paste with reddish-brown surfaces. SQ.68; SQ.77.

38. Sherd of rusticated ware, dark ware with reddish outside, deep finger-nail impressions arranged in pinched pairs, perhaps roughly vertical rows. SO.17.

39. Rim, black ware, brown-black surfaces, deep

finger-nail impressions. SQ.91; SQ.92.

40. Sherd of dark-brown ware, outside polished, finger-nail and comb impressions. SQ.31.

41. Scrap, reddish-brown ware, oval stabbed im-

pressions. SQ.68.

Sherd(s) of brown ware, outside light brown, surfaces smooth, decorated with "bird bone"(?) impressions more or less irregularly disposed. SO.41; SO.56.

43. Rim and body sherds of "Food Vessel", reddish ware with a sandy-gritty appearance. The rim is simple. The decoration consists of horizontal lines and at least one row of false relief chevron.

SQ.40; SQ.67; SQ.78; SQ.102; SQ.103; SQ.108.

# Fig. 10, 44-6. Middle Bronze Age pottery.

44. Collared urn, collar, much of neck, one fragment of body; the base has been restored in the drawing. Rim diameter  $4\frac{3}{4}$  in., height about  $5\frac{5}{8}$  in. Hard, fine, blackish ware with some dark grits, surfaces generally light to dark olive-brown; some sherds are abraded but majority are absolutely fresh. The decoration seems to have been done

with a flint flake with a serrated edge; it is arranged in the form of multiple herring-bone on the collar and the neck and there is a single herring-bone on the rim bevel. Found with second-

ary cremated burial.

45. Sherd, black inside, reddish-brown outer half, outside reddish, smooth. Decoration of vertical cord "maggots" with a horizontal row of oval impressions beneath. This is evidently from the lower part of the neck and shoulder of a Collared Urn of Pennine Urn type. From the filling of the robbing trench.

46. Sherd of black ware, inner part brown, outside smooth, laminated, reddish-brown surface with very fine cord "maggot" or comb impressions. Part of another Middle Bronze Age urn like 45.

From filling of robbing trench.

## REFERENCES TO LITERATURE.

Abercromby, J. 1912. A study of the Bronze Age Pottery of Great Britain and Ireland. Oxford (2 vols.)

ApŚimon, A. M. 1951. "Gorsey Bigbury, The Second Report", Proc. Univ. Bristol. Spel. Soc., Vol. 6, 186-199.

— 1959. "Food Vessels", First Annual Bull. Univ.

London Inst. of Arch.

Calkin, J. B. 1935. "The Bournemouth District in the Bronze Age", Trans. S.E. Union Scientific Soc., 1935, 21-31.

Case, H. and Coghlan, H. H. 1958. "Early Metallurgy of Copper in Ireland and Britain", Proc. Prehist. Soc.,

Vol. 23, 91-123.

Chitty, L. F. 1938. "Notes on the Irish Affinities of three Bronze Age Food Vessels of Type Ia found in Wales",

Bull. Board Celtic Studies, Vol. 12, 275-283.

Collins, A. E. P. and Waterman, D. M. 1955. "Millin Bay. A Late Neolithic Cairn in Co. Down". Arch. Res. Pubs. Northern Ireland, No. 4 (Belfast H.M.S.O. 1955).

Evans, E. E. 1953. "Lyles Hill, a Late Neolithic Site in

Co. Antrim", Arch. Res. Pubs. Northern Ireland, No.

2 (Belfast 1953).

Glasbergen, W. 1954. "Barrow Excavations in the Eight Beatitudes. The Bronze Age Cemetery between Toterfout and Halve Mijl, North Brabant. I. The Excavations", *Palaeohistoria* II, 1-134 (esp. Tumulus 14 (p. 64), 20 (p. 76), 21 (p. 78)).

Jones, S. J. 1938. "The Excavation of Gorsey Bigbury",

Proc. Univ. Bristol. Spel. Soc., Vol. 5, 3-56.

Kitson Clark, M. 1937. "The Yorkshire Food Vessel",

Arch. Journ., Vol. 94, 43-63.

Leeds, E. T. 1915. "Further Excavations in Round Barrows near Eyebury, Peterborough", Proc. Soc. Ant. Ser. 2, Vol. 27, 116-127.

Mortimer, J. R. 1905. Forty Years Researches in British and Saxon Burial Mounds of East Yorkshire. London.

Newbigin, A. J. W. 1937. "The Neolithic Pottery of Yorkshire", Proc. Prehist. Soc., Vol. 3, 189-216.

Piggott, S. 1954. The Neolithic Cultures of the British Isles. Cambridge.

Raftery, J. 1940. "Bronze Age Burials at Halverstown, Co. Kildare", Journ. Roy. Soc. Ant. Ireland, Vol. 70,

57-61.
Riley, D. N. 1958. "Neolithic and Bronze Age Pottery from Risby Warren and other Occupation Sites in North Lincolnshire", Proc. Prehist. Soc. Vol. 23, 40-56.

Storrs Fox, W. 1927. "Bronze Age Urns in Derbyshire", Ant. Journ. 7, 67-9.

IRON.

Two very corroded pieces of ironwork were found in the plough soil in the NE. quadrant. These were discarded on the site.

#### POTTERY LATER THAN PREHISTORIC.

Seven sherds of coarse red-buff ware, three with grey cores and pale green-yellow glaze, were found in the plough soil mainly over the top of the east ditch. They are all datable to the early medieval period between the 12th and 14th centuries.

A rim sherd of hard light red ware, with a purple-brown glaze, was found in the filling of the robbing trench. This is most probably Derby ware of the 17th-

18th century.

A wall sherd with the base of a handle, in hard light red ware with dark brown glaze, was found in the plough soil over the west ditch cutting. This is part of a 17th-18th century "tyg" and is probably of Derby ware.

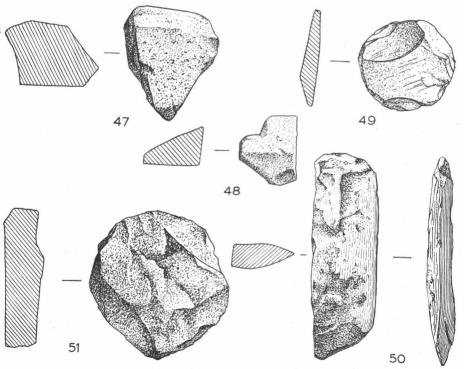


Fig. 11. Stone objects. 47-48 from Beaker level, 49-51 undated (1/3).

## STONE (Fig. 11, nos. 47-51).

(Geological identification by G. Lees).

47. Part of Rubber.  $3\frac{1}{4}$  in. by  $2\frac{1}{2}$  in. Concave ground surface, slightly pitted. Medium, grain sandstone. Probably millstone grit. From Beaker level in Square 79.

48. Part of Rubber. 2\frac{1}{8} in. by 1\frac{3}{4} in. Two ground surfaces, slightly pitted. Coarse millstone grit. From

Beaker level in Square 107.

49. DISC. 3 in. in diameter. Hard grey shale, probably Palaeozoic. From the plough soil, NE. quadrant.

50. WHETSTONE OR SCRAPER.  $6\frac{1}{2}$  in. by 2 in. One side ground to sharp edge. Fine sandstone. From the redistributed mound material in the NE. quadrant.

51. DISC.  $4\frac{1}{4}$  in. by  $4\frac{5}{8}$  in. Hard purple shale, probably Palaeozoic. From the redistributed mound material in the NE, quadrant.

Not illustrated.

PIECE OF FLAT STONE.  $4\frac{1}{4}$  in. by  $2\frac{1}{4}$  in. All edges and surfaces are natural fractures. Medium coarse flaggy sandstone. From Beaker level in Square 84.

PART OF RUBBER. 2 in. by  $1\frac{1}{2}$  in. One ground surface, slightly pitted. Millstone grit. From Beaker level in Square 128.

## APPENDIX A.

# INTERIM REPORT ON THE SCIENTIFIC EVIDENCE.

# By L. Biek.

(A) Scope of Investigations.

The geology is described briefly by Posnansky<sup>9</sup> but may have to be more closely examined in view of the findings on soil and

pollen.

Specimens and samples of stone, soil, "wood", charcoal and bone were submitted at and through the Ancient Monuments Laboratory to specialist examination. The stone identifications appear in the preceding note. Detailed reports on the other material are appended with grateful acknowledgments to all the writers.

 $<sup>^{9}</sup>$  Posnansky, Merrick, ''The Bronze Age Round Barrow at Swarkeston'',  $D.A.J.,\ LXXV$  (1955), 124.

#### (B) Examination of Soil Samples.

Thirty-four individual samples were taken by myself, or on my instructions by the excavator, covering both phases of the excavation. They were subjected to the usual ignition tests<sup>10</sup> at the Ancient Monuments Laboratory by Mr. W. E. Lee. As a result of these tests, and from a consideration of observations on the site, a suitable selection was submitted for pollen analysis (I, below). Following dicussion of results, certain other samples were so analysed and some studied in detail as described (II and (D) below).

#### (C) Interim General Conclusions.

Taken all together, and considered against results of similar work carried out for Posnansky, 11 present evidence makes it clear that no final and definite interpretation is possible without further work, involving far more intensive study on the site than was possible at the time of the excavations here described.

Some development of an iron-deficient  $A_2$  horizon had clearly taken place in the profile which existed when the turves were cut for the "primary" mound. (There is, of course, no proof that these turves came from the immediate locality.) Clear "greyish"  $A_2$  horizons are visible in many of the turves, as well as compressed dark residues of  $A_0 + A_1$  and sometimes also a thin B horizon. Where the latter was examined the turves seemed to have been deposited turf-side down.

The situation regarding the "iron pan lines", apparently defining the limits of the "primary" mound, is not sufficiently definite for firm interpretation. Various combinations of possibilities exist; they must all be taken into consideration, yet at this stage little would be gained by listing them all or attempting to decide what could only be settled by further field-work.

On balance, it seems that whether the turves came from the immediate barrow area or not, the conditions during both periods of barrow construction are likely to have been similar to those in the area where the turves were cut; at the time, a comparatively slight (recent?) enrichment of iron in the horizon some 3-5 in. below the surface. If this can be accepted, "pan" lines in the "secondary" mound and elsewhere may be regarded as a continuation of the process since erection of the barrows, the "total iron" thus deposited in 2 or even 3 lines throughout the barrow thickness being equivalent to the single pan (thicker and more crusty) outside the barrow limits.

In that case, the line under the "primary" mound would be the original pre-barrow B horizon and the line "on" the "primary" mound, due to iron movement through the looser texture of the "secondary" mound and deposition on the (compacted?) surface of the "primary". Additional vestiges following the line

<sup>&</sup>lt;sup>10</sup> Wacher, J.S., "Excavations at Calke Wood, Wattisfield, 1956", Proc. Suffolk Inst. Arch., XXVIII (1958), Part I, 27.

<sup>&</sup>lt;sup>11</sup> D.A.J., LXXVI (1956), 20-25. Both Dr. G. W. Dimbleby and L. Biek must dissociate themselves from the statement made on p. 22 to which footnote 24 refers.

of the "secondary" mound in places would be due to redeposition from the "secondary" surface, at some depth below it, similar to the original pre-barrow development (but modified according to differences in texture). This deposition would begin to take effect as the "secondary" mound surface became more consolidated and effectively became the final surface until dis-

turbed by later ploughing.

Such an interpretation would account for all the observed facts, and would then suggest also the following inferences. The period separating "primary" and "secondary" barrow building would have been relatively short. At the various places described by the excavator as (a) being devoid of "pan", or (b) having "pan" below the surface, the situation must be seen in terms of the foregoing, viz. as areas (a) where the original surface had been stripped down to and including the then existing B horizon, to produce turves with "pan-lines" in the mound; or (b) of relatively undisturbed surface (except where "pan" is postbarrow). Where the pan was found "on the pre-barrow surface", this should be seen as stripping down to, but not including the B horizon.

This would agree with the absence of pollen from "pre-barrow surface" layers. Such an absence could be due to other causes, e.g. burning, which might completely destroy any characteristic pollen deposits present; the presence of charcoal is stressed in the pollen report, but signs of burning in situ in the layers sampled are absent. If one accepts the absence of an actual surface, at least at the two places sampled, this does not contradict the archaeological interpretation of the Beaker level, but merely suggests that this "occupation layer", as found, though now containing occupation material, was at the time at least some 3 or 4 in. below the actual surface of the ground.

#### (D) Detailed Observations on Selected Samples.

No. 5679: "Stain". (Fig. 4, Section A-A, Layer 18, see p. 6). Amorphous, "bluish" grey-black, crumby aggregates of material rich in organic matter without discernible structure; "anomalous" ignition results suggesting presence of manganese (?).

Dr. Dimbleby has suggested that this may be mainly a humus

"pan".

No. 5680: "Raw wood" from base of primary grave. Contains small fragments of yellow to orange material, rich in organic matter but without discernible structure, except for a vague "grain" of parallel tube-like bundles, some substituted and/or alternating with similar "tubes" of a seemingly different material, generally white or grey.

Dr. Dimbleby has suggested that this may have been wood, decayed by a fungus, now represented by (mineralized?) hyphae

and amorphous tissue (Pl. VIII).

No 5681: "Charcoal" from base of primary grave. Similar to 5679 but browner and blacker in hue, more "splintery" in appear-

ance, far less rich in organic material. Ignition results again "anomalous", however, the presence of (the same?) black-brown particles little changed after firing up to 1,000°C, suggesting that this may be primarily a manganese (and iron) "pan"; though some charcoal appears likely to be present even if the particles are too small to be characterized.

These examinations were carried out on unprepared specimens at about 50x magnification; more definitive interpretation must

await further specialist work.

Thanks are due to Dr. Dimbleby for valuable discussion.

#### APPENDIX B.

# POLLEN (in soil samples).

## By G. W. DIMBLEBY.

I. Vertical Series at Grid centre of barrow (A.M. 5648). Soil Sample No. Taken (by L. Biek) as:

4, 5, 8 Through two "turf" junctions in "secondary" mound (Layer 3).

13 "Buried surface — Bronze Age" (Surface of Layer o).

"Beaker level" (Layer 9).

"Natural".

Only no. 8 had countable pollen: nos. 13 and 14 were rich in organic matter and no. 14 especially in charcoal, but not in pollen. In view of the fact that no. 8 gave a countable amount of pollen, I would say that a buried surface would have been detectable under these conditions had it been sampled, so I am inclined to doubt whether there was a surface buried at the base of the profile. Moreover, the fact that under similar conditions Pearson<sup>12</sup> found that his turves were poor in pollen whereas the buried surface contained a countable amount points, I think, in the same direction. On the other hand, no. 4 should also have surface characteristics, but it was deficient in pollen. On such evidence as I have, I am inclined to regard nos. 13 and 14 as successive layers of occupational detritus overlying subsoil (no. 15), the topsoil no longer being present as a recognizable undisturbed horizon.

Even no. 8 was not rich in pollen. The frequency, about 7,000 grains per gram, is very low but even so was about ten times that of the others. The figures (see below) represent a less wooded condition than did Pearson's count, and the very high value for plantain may indicate abandoned cultivation. No cereal pollen was seen. There is no proof that this material came from the

<sup>&</sup>lt;sup>12</sup> D.A.J., LXXVI (1956), 23-25.

vicinity of the barrows, of course, so comparison may be invalidated on geographical grounds; nevertheless it seems justifiable to say that the flora revealed by this analysis shows greater influence of the hand of man than did that contained in the buried surface below barrow 2

II. Selected Samples (Taken by the supervisor for L. Biek).

Α.	M.	No.	Field	No.
41.	LVI.	TIO.	1 1010	110.

A.M. No.	Field No.	
5689	15	"Occupation layer above F.II" (cf. 5648, no. 14): Contains no pollen, but a moderate amount of charcoal probably derived from wood.
5690	16	"Black line at base of a turf in 'secondary' mound'" (cf., stratigraphically, 5648, no. 8): Contains a moderate amount of pollen, predominantly of grasses and plantain. Much less charcoal than in no. 15.
5692	18	"Black line at base of a turf in 'primary' mound": Very similar in nature to no. 16, but the pollen shows a greater predominance of grasses and relatively less weed. There is much less plantain, but the liguliflorae are better represented.

The following points seem clear:

- (a) Nos. 16 and 18 show beyond doubt that this soil can preserve pollen, which lends added significance to the absence of pollen in no. 15. The state of preservation, however, was not good.
- (b) The two pollen spectra (16 and 18) both indicate agriculture, but I think they are sufficiently different to be regarded as distinct.
- (c) The pollen of woody species is so poorly represented that no relative dating of 16 and 18 is possible.

My investigation having been confined to the laboratory analysis of samples submitted to me, I cannot offer any coherent theory embracing all the results given above. No. 8 is absolutely distinct from nos. 16 and 18 because of its much higher representation of woody species and because of its low APF. It could conceivably have come from deeper in the same profile as the others, were it not for the fact that it was an obvious turf line. No. 8 must therefore be regarded as quite distinct.

Nos. 16 and 18 differ in detail but are similar in overall pattern. They are probably from different places in the same general area, though it is possible that they are from different levels in the same profile. Their similar APFs, however, are against this.

As in no. 8, the very high *Plantago* value of no. 16 suggests abandoned cultivation, whilst no. 18 is perhaps more characteristic of grassland. There has certainly been agriculture, but whether the fields were still under cultivation or had passed over to weed and grass I cannot say for sure. We do not know how weedy the fields became before they were abandoned, but it is significant that no cereal pollen was found in any of the samples.

Unfortunately, there is no check on the heterogeneity of the material; in made-up soil this can be very considerable.

	A.M.5648, No. 8		A.M.5690(16)		A.M. 5692(18)				
,	C'nt.	%	APF	C'nt.	%	APF	C'nt.	%	APF
Alnus	13	6.4	451	5	2.2	700	IO	3.9	1120
Quercus	6	2.9	208	_		_	+	+	+
Tilia	2	1.0	69	2	0.9	280	-	_	-
Corylus	67	32.8	2324	15	6.7	2100	12	4.7	1344
Ligustrum	_	_	_	2	0.0	280	-	_	-
Gramineae	45	22.1	1561	85	37.9	11900	139	54.5	15568
Chenopodiaceae	ı	0.2	35	_	_		_	_	_
Caryophyllaceae	_	_	_	2	0.9	280	I	0.4	112
Compositae			190						
Liguliflorae	9	4.4	312	3	1.3	420	32	12.4	3584
Tubuliflorae	_	_		2	0.9	280	_	-	_
Plantago	47	23.0	1630	75	33.2	10500	43	16.9	4816
Ranunculaceae	_	_		l —	_	_	1	0.4	112
Rubiaceae	I	0.2	35	_		_	I	0.4	112
Rumex	-		_	I	0.4	140	_	_	-
Succisa	I	0.2	35	_	_	_	I	0.4	112
Urticaceae	2	1.0	69	_	_	_	-	_	_
Varia	3	1.2	104	6	2.7	840	2	0.8	224
Dryopteris	3	1.5	104	12	5.4	1680	9	3.2	1008
Polypodium	+	+	+	_			+	+	+
Pteridium	4	2.0	139	14	6.3	1960	4	1.6	448
Total	204	11	7076	224		31360	255		28560

Note: Percentages are based on total of pollen + fern spores.

APF=Absolute pollen frequency in grains/gm. dry soil.

+=Present but not recorded in count.

## APPENDIX C.

#### CHARCOALS

## By G. W. DIMBLEBY.

With the bulk samples I have examined a random sample of fragments from each bag. Hazel was the commonest species throughout; strictly speaking each piece should have been examined in longitudinal section as well as cross-section to make sure it was not alder. This was physically impossible, but again from a random sample which I did examine in this way, I found no evidence of anything except hazel. Finally, in the list I have referred to hawthorn, but as always it should be recognized that it is indistinguishable from apple or pear.

Sample	A.M. Lab	).
No.	No.	
, 1	5708	Hawthorn with small amounts hazel, birch, blackthorn and some pieces resembling cinder. North-east quadrant, layer 2.
2	5709	Hazel. North-east quadrant, pre-barrow surface.
3	5710	Hazel, with small amounts oak and conifer, probably Scots pine. North-east quadrant, layer 6.
4	5711	Mostly not charcoal, some hazel. North-east quadrant, base of layer 1.
5	5712	Oak, hazel and blackthorn. North-east quadrant, Ext. E, layer 7.
6	5713	Hazel, with some hawthorn. North-east quadrant, layer 3.
7 8	5714	Hazel. North-west quadrant, layer 6.
8	5715	Hazel. North-east quadrant, Ext. E, lower half of ditch filling.
9	5716	Oak and hazel. South-west quadrant, layer 3.
IO	5717	Oak. North-east quadrant, layer 3.
II	5718	Hazel. North-west quadrant, primary burial. F.3.
12	5719	Hazel and ash with a little hawthorn. Southeast quadrant, layer 9.
13	5720	Oak. North-east quadrant, base of barrow ditch.
14	5721	Ash. South-west quadrant, layer 3.
15	5722	Hazel. South-west quadrant, layer 9.
16	5723	Oak and one piece hazel. South-west quadrant, layer 2 in robbing trench.
17	5724	Hazel and some oak. North-west quadrant, layer 9.

## 48 EXCAVATION OF BARROW 4 AT SWARKESTON

18	5725	Oak. North-west quadrant, cremation pit: F.2.
19	5726	Hazel. Square 3, layer 9.
20	5727	Probably ivy. Square 5, layer 9.
21	5728	Hazel. Square 15, layer 9.
22	5729	Ash. Square 33, layer 9.
23	5730	Ash and hazel. Square 34, layer 9.
24	573 <sup>1</sup>	Hazel. Square 36, layer 9.
25	5732	Ash; one piece hazel. Square 58, layer 9.
26	5733	Oak and ash. Square 59, layer 9.
27	5734	Hazel. Square 62, layer 9, in F.9.
28	5735	Hazel. Square 63, layer 9.
29	5736	Hazel, Square 104, layer 9.
30	5737	Hazel. Square 107, layer 9.
31	5738	Hazel. Square 115, layer 9.
32	5739	Hazel and oak. Square 129, layer 9.
33	5740	Hazel and oak. Square 130, layer 9.
34	574 <sup>1</sup>	Hazel. Square 131, layer 9.
35	574 <sup>2</sup>	Not wood. Square 132, layer 9.
35 36	5743	Hazel. Square 108, layer 9.
	5743 5744	Hazel and hawthorn. North-east quadrant, pit,
37	3/44	F.11.
38	5745	Oak. South-east quadrant, Ext. 1, layer 9.
39	5746	Oak and hawthorn. South-east quadrant, Ext.
0,		III, layer 9.
40	5747	Oak. South-east quadrant, Ext. III, in stake-
		hole 253.
41	5748/50	Large pieces of oak and hawthorn. North-west
		quadrant, cremation pit, F.2.
	575 <sup>I</sup>	Oak. From base of cremation pit.

Note: Sample 5750 has been submitted for radiocarbon analysis.

### CALCINED BONE.

# By R. Powers.

Thirteen specimens were examined and the only identifiable one (A.M. No. 5695 — From SW. Quadrant in Layer 3) is a fragment of human skull, possibly occipital bone. The remaining material is indeterminate, although there is nothing inconsistent with its being human.