# The Excavation of Gorsey Bigbury

Section I

# METHOD OF EXCAVATION AND MAIN FEATURES OF THE SITE

Gorsey Bigbury is on the land of Lower Farm, in the hamlet of Charterhouse-on-Mendip. It is situated on a spur, reaching a height of 800 feet, separating a small tributary valley from the valley occupied by Long Wood, which is linked by Velvet Bottom to



Fig. 1.

Cheddar Gorge (Fig. 1). It consisted essentially of a circular earth rampart, or ring, enclosing a central area, mainly flat but with a tendency to rise a few inches towards the centre. Between the ring and the area thus enclosed there was a slight depression, running sympathetically with the ring and suggesting the possibility of a ditch beneath. To the north, the continuity of the ring was broken by a gap, later proved to be a causeway. Ploughing and weathering made it difficult to determine the boundaries of the various features before excavation commenced. This was particularly true of the outer limit of the ring. The total north to south diameter (to the

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outside edges of the ring) is 200 feet, and the east to west diameter is 190 feet. In this, however, one is to some extent estimating the total results of deterioration rather than the true dimensions of a structural feature. The exact nature of the rampart will be dealt with later. The north to south diameter of the central flat area (within the inner side of the ditch) is 63 feet, the east to west diameter 72 feet. Its maximum diameter is 78 feet. The width of the ditch varies between 12 feet and 21 feet. These figures differ to some degree from Tratman's field estimates obtained by pacing.<sup>1</sup> The fault which interrupts the ditch in the north-west segment is a slot averaging 4 feet in width. The contours on the plan (facing p. 56) give a good indication of the poor state of preservation of the ring. It is best preserved on the west side (not on the south side, as stated by Tratman), where it rises 5 feet above the level of the inner margin of the ditch. Finally, it should be noted that whilst the surface features certainly do suggest "a very large tumulus of the disc type" (Tratman<sup>1</sup>), the excavation indicates clearly that it can no longer be classified as such.

The site has previously been noted by Scarth,<sup>2</sup> Phelps,<sup>3</sup> Skinner,<sup>4</sup> and Allcroft.<sup>5</sup> Various spellings of the name are Gorbebury, Gorse-Bigbury, and Gorsey-Bigbury. The writer feels that Phelps is probably correct in suggesting that the name is "derived from two terms implying the same thing, the one Celtic, the other Saxon. 'Gor' or 'cor,' being the British word for a religious circle; and 'bigbury' an enclosure of earth in a circular form.''<sup>6</sup> Whilst the beaker occupation dwarfs all else, it cannot be proved conclusively that the ditch was excavated primarily for this purpose, and the matter must be left open.

Scarth and Phelps note the resemblance between this site and the so-called amphitheatre at Charterhouse (see Sketch-map, Fig. 1), and suggest that it is a second amphitheatre. To argue analogies with an unproved site is dangerous, and the writer is of the opinion that the position is now reversed and that the "amphitheatre" must be investigated in the light of the evidence obtained at Gorsey

<sup>1</sup> Proceedings of Bristol University Spelæological Society, Vol. 3, No. 1, p. 34. <sup>2</sup> Archæological Journal, Vol. XVI, p. 153.

<sup>3</sup> The History and Antiquities of Somersetshire, Vol. II, Part II, "Historical Introduction to the History of Somersetshire," p. 135.

<sup>4</sup> Skinner, MSS. in the British Museum.

<sup>&</sup>lt;sup>5</sup> Earthwork of England, p. 589, footnote 3; p. 591, footnote 2.

<sup>&</sup>lt;sup>8</sup> The History and Antiquities of Somersetshire, Vol. II, Part II, "Historical Introduction to the History of Somersetshire," p. 135.

Bigbury. Recently Clark<sup>7</sup> has described the site as having "occasional causeways." This is incorrect; there is only one causeway. A narrow trial ditch was put through the site by this Society in 1928, but the work was not continued and no report was published. Excavation of the site was commenced in July, 1931, and continued in September of the same year. It was then continued regularly at the Easter and Summer Camps of the Society, and was completed in 1934. To avoid repetition and confusion in the literature, no interim reports were published. A brief summary of the work appeared in a previous number of this journal,<sup>8</sup> and the appearance of this report has been delayed by the writer's prolonged absence from England.

## MAIN FEATURES OF THE SITE

# THE FLAT CENTRAL AREA

As work was commenced on the theory that the site was possibly a disc barrow, this was the first feature investigated, a face being advanced across it from east to west and the whole area scraped to rock. Only natural formations were encountered. Across the east edge there was a natural fissure, approximately 2 feet wide. This was tested to a depth of 6 feet, the top 2 feet 6 inches being brown clay and the lower parts yellow clay. Two small natural depressions were cleaned out. One was I foot 8 inches deep, the other ended in a small natural fissure at a depth of 2 feet 6 inches; both were filled with brown clay and neither gave evidence of any disturbance. Apart from these irregularities, the soil (brown clay) varied from 6 inches to 9 inches in thickness, a tendency for the rock to slope outwards around the periphery suggesting the presence of a ditch. Apart from a few surface flints of no special significance, nothing was found.

## THE DITCH

A trial trench to locate and define the limits of the ditch was commenced 15 feet west of the causeway. This face was carried forwards to the causeway and then a similar trench was advanced from the other side. When the ditch on both sides of the causeway had been cleared, the excavation continued on two faces working away from the causeway. All horizontal measurements were made

<sup>7</sup> The Mesolithic Age in Britain, p. 109.

<sup>\*</sup> Proceedings of Bristol University Spelæological Society, Vol. 4, No. 3, pp. 174-178.

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from a Reference Point (R.P.) established at the junction of the east side of the causeway with the inner side of the ditch. The whole ditch was completely cleared, the greater part of the spoil being dumped on the central area, previously excavated (Plate Ia). For a portion of the western segment of the ditch, the spoil was thrown behind, a space of at least 10 feet being kept clear behind the face (Plate Ib). The stepping of the faces where signs of occupation occurred will be discussed later.

The ditch was obviously intended to be roughly circular, but, as can be seen from the plan, the changes in direction are usually rather angular and abrupt. It was undoubtedly formed by peeling off thin lavers of limestone along the natural cleavage planes; possibly wooden poles were used as crude wedges and levers. The relation of the ditch to the local geological structure is obvious. The limestone here has a dip of approximately 30 degrees towards the south. Where the ditch is running with the strike, as it is in portions of the eastern segment, one side slopes in gradually, whilst the other is relatively straight (Plate IIa, and several of the sections). Where the direction of the ditch corresponds generally with that of the dip, both sides tend to be straight and the floor is very irregular (Plate IIb). The ditch is best developed to the north-west and northeast (on either side of the causeway), where the depth ranges in the main from 6 to 8 feet below turf-level and the width varies from 15 to 21 feet. To the south-west, south, and south-east, it is shallower and narrower. In places the bottom is here barely 4 feet below turf-level and the width varies from 12 to 15 feet. (See Plate Ib).

#### THE RIFT (OR FAULT)

This runs from north-north-east to south-south-west for a distance of 46 feet, across the north-west section of the ditch (see Plan, Sections 7A and B and Plate IIb), and is approximately 4 feet wide. As will be seen later, the rift was incorporated in the ditch and must have been cleared at one point to a depth of 9 feet below turf level. It was not, however, completely cleared, as reference to Sections 7A and B will show that the native yellow clay was left undisturbed against the outer wall.

## THE CAUSEWAY

The causeway is a portion of undisturbed rock interrupting the ditch on the north and varies very little in width—between 12 feet 6 inches and 13 feet. The east and west sides are not symmetrical,

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PLATE 1

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a Gorsey Bigbury. General View of Excavation. Photo by Dr. S. B. Adams.



b Gorsey Bigbury. Ditch on West Side and Method of Excavation.

Photo by S. J. Jones.

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PLATE II



a Gorsey Bigbury. Causeway and Ditch to East of Causeway. Photo by Dr. H. Taylor



h Gorsey Bigbury. Ditch West of Causeway and the Rift. Photo by Dr. S. B. Adams.

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the latter starting and ending about 3 feet 6 inches north of the former. The east side (Plate IIa) rests on the outer, sloping edge of the ditch, and is separated from the main ditch by a narrow ledge. The west side is cut along the dip slope and falls more abruptly down to the ditch (Plate III). Adjoining the causeway on the west side, there was a band of rubble, 9 to 12 inches deep and several feet wide, which may indicate a later broadening of the way. The excavation of the causeway was carried several yards beyond the outer edge of the ditch, but the ends of the ring were too denuded to render possible any correlation between them and the causeway.

SECTION 8. - North face of section through rampart on West side.



Fig. 2

THE RAMPARTS OR THE RING

Owing to the denuded nature of the ramparts, only fragmentary information concerning them could be gleaned from the remaining stumps. Skinner<sup>9</sup> mentions a man who had helped to level the vallum, and the field in which the earthwork stands has, in the past, been ploughed, although for some time it has been pasture.

Two sections were taken through the ramparts; one on the west side a few feet south of the south-south-west end of the fault, the other on the east side, approximately 15 feet from the reference point. The former was commenced by the writer and completed by Mr. C. R. Hewer, who also dug the latter. Both sections indicate that the remnants of the ramparts are mainly made of earth with a stone packing in the centre. The main features are recorded in Sections 8 and 9 (Fig. 2).

<sup>9</sup> Skinner, MSS. in the British Museum.

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A trial trench was dug by Mr. Hewer at right angles to the south side of the eastern section. A line of placed stones, not quite parallel to the outer edge of the ditch, was found along the 8 feet uncovered. The stones were, on an average, 8 to 12 inches wide, two or three being placed on edge and the rest being flat. A test trench, 9 feet long and 4 inches wide, was dug 30 feet south of the section, but gave no evidence of a continuation of a possible line of kerb-stones. Further similar tests gave the same negative evidence.

Only a few unworked flint flakes were found in the rampart sections.



#### Fig. 3

THE OCCUPATION OF THE DITCH

The only section of the ditch which yielded no evidence of ???? occupation was the segment between the west side of the causeway and the south-south-east end of the fault, or rift. This segment Burden falls into two subdivisions :--

I. The ditch proper, filled with rock interspersed with animal and human bones, and yielding one burial which will be discussed later.

2. The fault, or rift. The evidence relating to this is best seen in Sections 7A and 7B (Fig. 4; for position, *see* Plan). In Section 7A one should notice the charcoal band, about 2 inches thick, resting on compact yellow clay with grit, 9 feet below the surface level. As seen in Section 7B, this band has, in a horizontal distance of 8 feet, risen 2 feet, being now only 7 feet below surface level. Excavation in the rift was difficult, and it would seem as if the early diggers of this section of the ditch found their enthusiasm damped and became a little less ambitious. Between these two sections, the charcoal band slopes consistently upwards, and 2 feet 6 inches beyond Section 7A there was evidence of two bands, the upper one 2 inches thick and

# PLATE III



Gorsey Bigbury. Rift, Ditch, and Causeway from the West Side. Photo by Prof. E. K. Tratman.



PLATE IV

the lower, 9 inches deeper, approximately I to  $1\frac{1}{2}$  inches thick. Here one worked flint was found in the lower band, but apart from this no finds were made in the actual rift. In the wider part of the ditch immediately above the rift, two beaker sherds were found, one at a depth of 2 feet 6 inches, the other at 3 feet.

The occupied portion of the ditch has next to be considered. The north-east, east, south, and south-west portions of the ditch contained concentrated charcoal deposits yielding animal bones, worked flints and pottery (mainly beaker). The evidence leaves no doubt that these sections must have been used as a living site, and the occupation seems to have been most intensive in the north-east section, immediately adjoining the causeway. This is where the



ditch is best developed, and here the ring would provide most protection from cold north-east winds. No remnants of decayed roof material were obtained, and the sides of the ditch gave no evidence of post holes or other means of supporting a roof.

The nature of the deposit and the method of working it in steps can be seen in Plate IV. Here the steps, starting from the top one, are as follows :---

I. Sub-soil, with some stone.

2. Occasional beaker and post-beaker finds.

3. Top of beaker deposit, with some stones in centre of ditch.

4. Main occupation level (beaker). Considerable rubble in outer half. Marked concentration of finds at bottom of this level with sufficient charcoal to make a dense "black band" several inches thick.

5. Clay silt. Step 4 was usually subdivided into two further steps, and these broad divisions were found useful for excavation purposes. It was soon clear, however, that portions of the same pots had considerable vertical and horizontal distribution, and so no absolute stratification could be followed. The distribution of the deposit within the ditch varies in different parts and some of these variations are best shown by the series of sections (Sections I to 6, Figs. 5–10), concerning which a few notes are necessary.

Section I (Fig. 5).—Taken IO feet from R.P., previously defined. Here the lower section of the outer half of the ditch was built up with rubble, fairly tightly packed, to form a flat floor for settlement. The rubble sloped gradually towards the inner wall which it met at the bottom of the ditch. Resting on the rubble floor, approximately 4 feet below the turf level, was a charcoal band about 3 inches thick. This band was continued in three complete and one discontinuous

# SECTION 1. - 10 FEET FROM R.P.

#### Fig. 5

band, none more than an inch thick, across the inner side of the ditch. Below the bottom one there was a line of flat stones which may represent a crude attempt at flooring on the yellow clay beneath. The hearth was concentrated above the main charcoal band and was here about 18 inches thick. It thinned out gradually towards the top and towards the outer wall, from which it was separated by a narrow band (I to 2 inches) of yellow clay. Towards the inner half of the ditch it petered out much more abruptly, and here only occasional finds were made. The letter P indicates the position of a microlithic flint just on the upper side of the lower charcoal band; S indicates human skull fragments; B a beaker sherd.

Section 2 (Fig. 6).—Taken 14 feet from R.P. Here the rubble platform disappeared and the charcoal band (*circa* 2 inches thick) rested on yellow clay, which yielded occasional finds. The band, which did not quite reach the outer side, continued across the ditch,

tapering towards the inner side. The greatest concentration of the hearth was again in the centre and outer half of the ditch.

Section 3 (Fig. 7) .- Taken 40 feet from R.P. At this point the section of the ditch changed. The bottom was narrower and there was a broad shelf adjoining the inner side. The rubble platform







SECTION 3. - 40 FEET FROM R.P.



Fig. 7

reappeared, less compact, and on a smaller scale. There was no charcoal band, but the hearth was thickest, but not noticeably more concentrated, over the rubble platform, and then tapered over the edge of the inner ledge. On the inner side of the ditch it rested on yellow clay yielding no finds. The ditch above the hearth was filled with brown clay, interspersed with large stones fairly evenly distributed.

Section 4 (Fig. 8).-Taken at 50 feet from R.P. The bottom of the ditch was more shelving and broader, the ledge on the inner side

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having narrowed considerably. There was a loose stone packing in yellow clay in the centre and towards the outer half of the bottom of the ditch. The hearth was "cradle-shaped," being thickest over the rubble. It tapered towards both sides: on the inner side it rested on the ledge; on the outer side it was separated from a ledge by a narrow band of yellow clay.



Fig. 8



Fig. 9

Section 5 (Fig. 9).—Taken 59 feet from R.P. Here the ditch was poorly developed, with a narrow slot in the centre and a broad ledge on the inner side. Evidence of occupation was limited to a poor hearth development on the inner ledge. This is typical of this segment and should be contrasted with the earlier sections from the north-east segment.

Section 6 (Fig. 10).—Taken 130 feet from R.P. This is typical of the hearth development in the south-west segment. The ditch section is similar to that in the north-east segment, with the steeper wall now on the outside, but the ditch itself is poorly made. A charcoal band, *circa* 3 inches thick, stretched across the ditch, resting on a thin

PLATE V



a Gorsey Bigbury. Grave at Bottom of Ditch.



b Gorsey Bigbury. Burial at Bottom of Ditch.

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# PLATE VI



Gorsey Bigbury. Objects associated with Burial.

layer of yellow clay. Above and resting on the charcoal band, was an even development of hearth, with a maximum thickness of *circa* 6 inches. The top half of the ditch was filled with brown clay with a fairly even distribution of medium-sized stones.



Fig. 10

THE BURIAL

It has been stated that there was no evidence of occupation in the north-west segment of the ditch, adjoining the causeway. Plate III shows clearly that the ditch is here essentially a deep pit. This pit was filled with large stones and a good deal of bone, partly human but mainly animal. In a niche in the floor bottom, against the inner wall of the ditch, about 10 feet from the causeway, was found the burial of parts of a human skeleton. The niche had been filled with tightly packed rubble on which had been placed two flat stones to form an even surface. The inner wall of the ditch formed one end of the burial place; the outer end was marked by some crude walling consisting simply of two layers of single stones. A sloping boulder, one end of which rested against the inner wall, formed one side (the causeway side) and also functioned as a roof covering for about half the burial place, the other half being completely uncovered and having no side structure. A thin stone, set on edge, marked off the inner portion of the alcove formed by the boulder from the main portion of the grave. The total length of the grave was 3 feet 6 inches, and the breadth 2 feet. The depth below the turf level was 6 feet 9 inches. These details can be seen in Plate Va.

The burial itself was very fragmentary (Plate Vb), consisting of the skull and lower jaw, portions of the arm bones of the right side, the lower extremity of the left femur, and 2 inches of the middle portion of the shaft of the left fibula. The femur and the fibula fragment were in the correct relative positions, assuming that the leg was bent at the knee, and they were crammed against the inner 14

wall of the ditch. In this connection, one should note that the total length occupied by these skeletal fragments was 2 feet 6 inches, the skull partly protected by the boulder being placed about a foot in from the end of the grave. The orientation of the burial was northnorth-west to south-south-east. The rest of the bones were thrown indiscriminately into the pit, from which portions of at least two human skeletons were recovered. The bones are discussed later in the report by Professor Fawcett. It should be noted that this is undoubtedly a burial of bones and not of a complete body.

Four bone needles, a bone scoop, a well-worked flint knife, and a beaker sherd were found immediately to the left of the skull. Near the inner wall of the ditch, to the right of the probable position of the knee, was a small barbed and tanged arrow-head. These are illustrated in Plate VI.

It remains to say that this work has been rendered possible by generous grants from the Colston Research Society; to whom we are again deeply indebted.

The writer also wishes to thank his colleague, Mr. O. D. Kendall, and members of the Geography Department for help in preparing the contoured plan of the site.

S. J. JONES

\* almost the only bore implements

# Section II

## THE FLINTS

After examination of all the flint from the site, 2200 specimens have been catalogued, and probably an almost equal number of unworked flakes and chips have been placed in the Society's storeroom. The large number of small chips suggests that many of the implements were made on the site. The observations made here are based on the catalogued specimens. Of these, only 100 are illustrated, but care has been taken to make them reasonably representative. The flint is, on the whole, of poor quality and shows great variation in degree of patination. There is a wide range in technical skill, from crude steep secondary chipping to excellent low-angle flaking. The deposit, as seen in the introductory section, falls as a whole within the beaker horizon, and there was no real stratification which would throw light on the evolution or modification of types.

#### SCRAPERS

The form which occurs most frequently is the round scraper. Variations in size may be seen from the series 35 to 44 and No. 50 in Plate VIII. In these, the edges not worked retain portions of the original crust and there is no continuation into an elongated flake. A variation is introduced in Nos. 45, 46, 48, 49, and 55 on Plate VIII, when the flints tend to be pear-shaped rather than round, and the chipping of the rounded end is continued down one side, the other side retaining original crust. No. 47, Plate VIII, may belong to this series, but is more mutilated and retains no original crust. A further variant in round scrapers is illustrated in Nos. 76 to 80 on Plate IX. The main feature is the presence of a definite rim marking the inner limit of secondary flaking. In No. 78 this may be emphasized by a thermal fracture. This probably gave in practice a firmer hold for the thumb.

The series 28 to 34 on Plate VIII are of special interest. The blade is notched below the rounded, worked end, giving the latter a distinctive, button-like character. This is best seen in Nos. 30, 31, and 33. In No. 28 the notch occurs on one side only, but the effect is emphasized by a fracture along one-half of the upper face of the flake. A similar fracture can be seen in No. 81, Plate IX

PLATE VIII. Nos. 28 to 57



In No. 29, Plate VIII, there is a fracture right across the upper face, and the patination of the flake is continued along the base of the rounded end. This suggests that this specimen may illustrate nothing more than the temporary use of a crude flake, and its significance in the series is open to doubt. No. 34 is comparable with No. 28, in that there is only one notch; No. 32 has no secondary flaking and may represent a stage in the manufacture of such types. One notch of No. 30 and the notch of No. 34 are associated with percussion rings, and, in fact, only one notch (of No. 31) has any secondary chipping. It may be noted that in Burkitt's "Prehistory," implement No. 21 on Plate VIII—a double-end scraper from Masnaigre (Upper Aurignacean level)—seems to have at one end the fundamental features of this series. It is larger, more massive, but the general similarity in this one respect is worthy of note.

Convex scrapers are represented by Nos. 51 to 54 and 57 on Plate VIII. The long flakes of No. 52, struck off in a fan-shaped manner, may enable one to class it as a keel-scraper. The same technique has been employed in No. 53, where the flint has fractured and the result is comparatively crude, and No. 54, where the worked end is almost perpendicular to the base. No. 51 shows a poor attempt to remove long flakes towards one end, and has some very minute secondary chipping along both edges. Similar chipping is found on one edge of No. 54. The worked side of No. 57 is almost as steep as the end of No. 54, but its end is battered and retains no flaking. The crust is continuous to a lower level than it is on the side, and the flakes must consequently have been shorter.

Nos. 88 and 89, Plate X, and No. 56, Plate VIII (a cruder specimen) are notable for their plano-convex form and the careful flaking on the convex side. They probably functioned as scrapers rather than as knives. The straight break across No. 89, however, shows the same degree of patination as the rest of the implement and shows some evidence of percussion rings of small diameter. Whether it is accidental or purposeful must remain at present unanswered. It certainly could have functioned as an oblique finger platform and consequently the implement could have been used as a knife.

The majority of the flake implements with secondary chipping along their edges probably functioned as side-scrapers rather than as knives. Blunted backs are very rare. In No. 81, Plate IX, and No. 90, Plate X, one edge could function as a scraper. In both cases, the other, sharper edge, shows fine secondary chipping and such implements could have played a dual rôle as scrapers and as knives.

## KNIVES

No. 82, Plate IX, is a finger of flint which at first glance suggests a fabricator. The sharp, unblunted edge, however, shows the main evidence of use, and it has probably functioned as a knife. Chipped blunted backs are, as stated, rare on this site, but there are large numbers of unworked flints with blunted backs, which may have been used as knives.

## ARROW HEADS

The various types of arrow-heads are illustrated in Plate VII Nos. 1 to 19, and 22 and 23.

The barbed and tanged arrow-heads show some variation in form. No. 18 is long in relation to its basal breadth; the unbroken barb is short and continues the straight line of the edge. No. 11 is much the same type, with a slight splaying of the barbs, which makes the sides appear slightly concave. It is excellently made of brown flint, with low-angle flaking giving very sharp edges. The point has been slightly blunted by use. No. 13 is short in comparison with its basal breadth, and the barbs are slightly in-turned, giving a convex form to the edges. It also is well made with low-angle flaking, giving sharp edges and a sharp point.

Nos. 16 and 23, both broken, are barbed but have no tang. They were long in relation to their basal breadth and the barbs are in-turned.

Nos. 9 and 19 have convex bases. Both have been re-chipped. No. 8 appears to have a slightly convex base, but the corners have been broken and it may originally have had a straight base.

In Nos. 1 and 3 the base is straight and the sides slightly convex.

An interesting feature of Nos. 6 and 22 is the long flaking towards the base. In No. 22 there is some very minute secondary chipping along the base on the reverse face.

Nos. 10 and 15 are unfinished and are a further indication of the making of implements on the site.

No. 12 is the only leaf-shaped arrow-head found on the site. The lower half is less patinated than the upper half.

#### POINTS

The standard of workmanship varies considerably. Particular attention is drawn to Nos. 20, 24, and 25, Plate VII. All three show excellent long, low-angle flaking running across one face to one edge. On the other face, the flaking is shorter. With the exception of a little secondary flaking towards the point of No. 24, the other

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PLATE X.-Nos. 88 to 101



edge shows no signs of flaking, and in Nos. 20 and 24 is very irregular and frayed. All have only one barb, continuing the unflaked edge, but it is possible that in No. 25 the other barb has been broken off. These implements remind one, in the quality of their flaking, of Solutrean work.

No. 85, Plate IX, also has excellent low-angle flaking. Both the point and sides show signs of use and of retouching. Nos. 21, 26, and 27, Plate VII, are included here, although they might be classified as very large arrow-heads. No. 27, Plate VII, shows some good long, low-angle flaking, handicapped by the poor quality of the flint. Nos. 21 and 26, Plate VII, are comparatively crude; No. 21 has the steep flaking towards the base noted in Nos. 6 and 21, Plate VII.

## POINTED KNIVES

Nos. 92 to 98, Plate X, are more accurately described as pointed knives (or pointed scrapers), rather than as true points. The asymmetry of these points should be noted. No. 97 is suggestive of a modified form of the beaked scraper which in origin goes back as far as Mousterian times.

#### FABRICATORS

No. 87, Plate IX, is best classified as a fabricator, the end showing some signs of use. Fabricators are rare on this site.

#### AWLS

The elongated point of No. 99, Plate X, may enable it to qualify as an awl. It must have had some such function.

## SAWS OR SERRATED FLAKES

These are rare on this site, but No. 91, Plate X, is a good example. The teeth are very fine and show signs of use.

#### AXES

No. 100, Plate X, is a portion of a flint axe. The butt-end is missing, and so the original shape can only be surmised. It is fire-crackled, and the cutting edge is badly damaged, presumably during its later history rather than directly by use. The flaking is crude, the removal of some flakes serving only to leave some shallow depressions on the faces.

#### FIRE-CRACKLE

Nos. 83 and 84, Plate IX, show two fire-crackled flints noteworthy for their perpendicular, unchipped edges. Fire-crackle seems to establish curved lines of weakness, and it seems probable that breaks along such lines account for the curved, perpendicular edges on some flints from this site, particularly as the edges run sympathetically with similar lines of weakness on the faces of the flints.

#### MICROLITHS

Some of the main variations in microliths and in flints showing microlithic flaking, are shown in Nos. 58 to 75, Plate IX. Whilst some were found in the top sub-soil, many were found in the main deposit and their association with their beaker context can leave no adequate room for doubt. As stated at the beginning of this report, there is no stratification which would assist in determining the evolution of types.

Nos. 58 to 63, Plate IX, indicate a series of sub-triangular microlithic points. Continuing the flaking of the blunted edge at an angle across the end of the flake, gives an asymmetrical point. In some cases, as in Nos. 61 and 62, some rough chipping on the sharp edge helps to form the point. In No. 62 a further small flake has been removed between the two edges, giving a bevelled end, 1 mm. in width, rather than a true point. A similar bevelled end occurs in No. 65. An interesting feature of No. 58 is the removal of a narrow longitudinal flake between one face and the blunted edge. This is also seen in the flakes numbered 65, 66, and 69.

Other geometric forms do not occur as frequently as flakes. No. 73 might qualify as a crescent with blunted chord, as also might No. 70, a larger specimen, were it not for a break across a percussion bulb at one end. In No. 67, the blunted edge is slightly angled, but the removal of a small flake on the top face at one end results in an asymmetrical point.

A few slightly larger specimens show microlithic flaking. No. 63 has steep secondary chipping of microlithic character on both edges and terminates in a point blunted by use. No. 74 shows the same features, with a very blunt point; No. 58a, a broken specimen, has two short points on its blunted edge; No. 71 is a well made point, with a break across the base. No. 72 has microlithic flaking on two sides. One unworked side is a clean break, the other was shattered when this flake was originally struck off a larger piece. Finally, No. 75 is a core from which microlithic flakes have been struck.

CONCLUSIONS

Apart from the variations in types, three points seem worthy of final emphasis :---

1. The wide range in technical skill. Considering the comparatively poor quality of the flint which reached this site, the high degree of workmanship shown in some instances is probably more significant than the cruder work. Low-angle flaking seems typical of the best-made implements.

2. The indisputable presence of microliths in a beaker horizon.

3. Apart from the question of microliths, so ably discussed by Clark<sup>1</sup>, the possible survival of older flint types and techniques into the beaker period deserves more careful study. The writer has been impressed by possible survivals from the Upper Palæolithic, as indicated in the previous discussion. Continuity of survival cannot be proved in this district, but such need not occur in an area constantly receiving intrusive cultures. The problem must, therefore, be left open until other long series of "beaker" flints are available.

I should like to express my thanks to Mr. E. J. Manton for drawing the plates for this report, and to members of the Society for help in compiling the catalogue.

S. J. JONES

1 Op. cit.

# Section III

# THE POTTERY

About 1300 sherds (many of them very small) were found in the course of the excavation. Two, possibly three, distinct cultures are represented : Neolithic B, Beaker, and Late Bronze Age.

The evidence for the first of these is doubtful. It consists of a few sherds of comparatively coarse thick ware with "all-over" impressed ornament in the Peterborough manner. But the forms are quite uncertain: there are no round bottoms, and no characteristic rims. The only distinctive piece is No. I (Fig. II), which has an outwardly convex wall and externally bevelled rim. This is certainly not a normal beaker type.

The Late Bronze Age group consists of a few sherds of bucket urn described below.

The overwhelming numerical superiority of the beaker sherds is in itself evidence that the site was used primarily and mainly by the beaker people. Owing to the small size of the fragments and their consequently indeterminate decoration, it is impossible to say how many distinct pots are represented. In the drawings accompanying this report, forty-seven are illustrated whose individual character can be recognized; it is likely from the number of separate bases that the total number may have been in the neighbourhood of roo.

The excavation report makes it clear that the beaker pottery is the product of a single unbroken occupation. From the purely ceramic point of view such an extensive series should be of great importance because of the correlations of style and form which it makes possible. It must, however, be insisted that the individual pots are contemporary only in the broadest sense. Many of the sherds are worn in a way which suggests that they were probably lying about on the surface of the occupied area for some time; others, on the other hand, are comparatively fresh. Some allowance must obviously be made for such differences. In themselves they imply an occupation which may have been prolonged, but there is no very reliable means of determining the period involved.

To consider general questions first, all the beakers belong to the A group. In such an extensive series there is naturally considerable variation in ware and workmanship. As a whole, however, the ware is of normal beaker character, sometimes comparatively soft, thick, and crudely modelled, but at its best hard-fired, well-finished, with well-shaped rims, and smooth red or buff surface. In some instances there is a greater admixture than usual of large grains of calcite, and this is particularly marked in No. 24 (Fig. 14). The light brown ware



Fig. II (i)

of this beaker, thickly powdered with white flecks of backing material, closely resembles that of Neolithic A pottery. But the resemblance may be entirely accidental: there is no sign otherwise of contact with Neolithic A folk, and the beaker itself, though somewhat crude, is not in any way abnormal.

There is also considerable variation in size. Apart from the finger-nail encrusted group, which is dealt with separately below, the

# GORSEY BIGBURY-THE POTTERY

largest (Fig. 10 and No. 10, Plate XI) has a height of 284 and a diameter at the mouth of 199 mm. At the opposite end of the scale there is no single complete pot, but Nos. 12 and 13 (Fig. 13) have diameters at the mouth of only 92 and 108 mm. respectively. Between these two extremes are many beakers of a size which would be regarded as more normal.

Abercromby's well-known classification of the forms of A beakers defined three phases. In Phase I the body is globular and demarcated from a straight-sided, though normally splayed, neck by a well-marked constriction. Neck and body are usually of approximately equal length. Phases II and III mark successive stages in the degradation of this form, in which its various features become blurred, and its proportions also tend to alter. The evidence which Abercromby adduced in support of this typology may be open to question, but the scheme itself has sound reasoning to justify it, even if at present no satisfactory independent dating for the various phases is forthcoming.

If, however, Abercromby's classification has chronological as well as typological significance, the occupation of Gorsey Bigbury must have been prolonged. Such more or less complete beakers as Nos. 2, 5, and 8 (Fig. 12) display the outline and proportions characteristic of Phase I, and good form is accompanied by well-ordered, carefully executed ornament, by careful attention to details (such as shaping of rims), and by good thin ware, well-fired, with smoothed surface. In addition to these pots there are fragments representing others (Nos. 4, 5, Fig. 12), whose various characters suggest that they belong to the same series. These beakers are all of medium or small size. There are also a few fragments of larger beakers (Nos. 16, 17, Fig. 13), whose size and comparative coarseness are offset by attention to detail and well-ordered decoration, suggesting that they cannot justifiably be separated from the first group.

The stages in the degradation of Phase I beakers are not always capable of exact definition. The original proportions are often preserved, and debasement presents itself in the flattening of the profile, so that the division between the neck and body is not clearly marked. This process, continued indefinitely, produces finally bucket-like pots whose beaker ancestry can only be recognized when they are considered in relation to other pots of the same culture. Pots of this last type are in any case rare, and do not occur at Gorsey Bigbury, but such incomplete examples as Nos. 19, 27, and 21 (Figs. 13 and 14), in that order, theoretically illustrate some of the earlier stages through which they may have been produced, the culmination



Fig. 12.-Nos. 2 to 9 (1)



Fig. 13.—Nos. 10 to 21 (3)

at Gorsey Bigbury being such pots as No. 4 (Fig. 12), whose fragmentary state scarcely conceals the fact that its irregular outline is no longer related to the scheme of its ornament.

Another process of debasement produced the form which Abercromby labelled Type C.<sup>1</sup> This primarily is a change in proportion : the body becomes ovoid, and takes up more of the height of the vessel ; the neck, from being straight-sided, becomes convex, tending to turn inwards in its upper part. An early stage in this development, not readily to be distinguished from beakers of Phase I, is No. 10 (Fig. 13), and other rim-fragments (as No. 13, Fig. 13) show the same profile ; No. 24 (Fig. 14) is more advanced, and No. 28 (Fig. 15) has taken matters still further in the same direction. This, like the other process represented by Nos. 19, 27, and 21, probably tends to converge upon the same bucket-like form which marks the typological end of the beaker series.

The more debased forms are often produced in ware which is of comparatively poor quality, and their decoration is often weakly conceived and poorly carried out. I have already said that the transition from the "best" to the "poorest" in the present series should involve a period of some years, if there is anything in the typological argument, and I had hoped that the evidence at the present site might at least establish the sequence by stratigraphy, whatever the uncertainty over the period of occupation of Gorsey Bigbury in terms of years.

Unfortunately, however, conditions in the site seem to preclude this. Sherds from the same pot may be distributed vertically as well as horizontally through the occupation deposit. All of the more complete pots seem to have suffered dispersal to a greater or less extent, and it is perhaps dangerous to assume, therefore, that stratigraphy has even the vaguest significance on this site.

The findspots of the beakers illustrated are set out in the schedule given below. From them it will be seen that many beakers incorporating typologically early features were represented in the lower part of the occupation deposit. On the usual principles such beakers should be chronologically the earlier, even when—as usually happens —fragments of them are found at higher levels.

But this, unfortunately, is almost as far as we can go : since there appears to be no clearly defined division in the stratigraphy and pots have become widely dispersed, we cannot argue matters of date on the evidence of one or two fragments from the upper part of the

<sup>1</sup> But it is likely that not all the C Beakers so labelled by Abercromby are the product of debasement of the A form.





deposit. In spite of their high level, such fragments may not necessarily be late: their absence in the lower levels may be entirely accidental. And there is the further complication that the lowest levels have also produced sherds which cannot be regarded as even typologically early on the basis of Abercromby's classification referred to above. Nos. 19, 21, and 27 are fragmentary, and their complete



Fig. 15.-Nos. 28 to 32 (4)

form is therefore problematical; but it must be said that their outlines as far as they go are not normal to the earliest A beakers. Either, therefore, typological differences on this site have no chronological significance, or that significance is masked by the mixed character of the deposit. In any case, we have no alternative but to admit that Gorsey Bigbury has disappointed us in our hope of any extensive clean-cut correlations.



Fig. 16.—Nos. 33 and 34 (1)

# GORSEY BIGBURY-THE POTTERY

Turning to decoration, far and away the dominant technique is that of the notched line of varying types, sometimes associated with short incisions or dashes (as on No. 10, Fig. 13, and other fragments not illustrated) which may have been done with the finger-nail. Finger-nail ornament alone also occurs on one or two other pieces (as No. 31, Fig. 15, and perhaps No. 33, Fig. 16) which do not belong to the specifically rusticated group described separately below; and there are other fragments in which a variety of impressed or stabbed motifs is used to form a more or less haphazard "all-over" pattern. The possibility that some of these may have been derived from Neolithic B bowls has already been mentioned, but in the absence of other more definite characters such as rims and rounded bottoms, it seems useless to try to be more definite on this point. The fragments in question may quite well have belonged to large comparatively coarse beakers, and the base of one such, with an irregular all-over pattern of roughly triangular stabs, is illustrated as No. 32 (Fig. 15).

In addition to these techniques, incised lines occur though rarely. Rarer still are the impressed circles of No. 30 (Fig. 15). Somewhat similar circles occur on the beakers from Stonehenge (Barrow 39), and Lambourne Downs (Abercromby, B.A.P., Figs. 3 and 7); they also occur on one or two of the handled beakers of the North (particularly on that from Aldro: Mortimer, Forty Years' Researches, Fig. 101).

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Cord-impressions are entirely absent. If the first comb-A feature of the decoration of the pottery is the wide range of styles, which covers almost the whole field of A beaker ornament as represented in southern Britain. In this respect, perhaps, the most unusual is No. 26 (Fig. 14), in which the A form is combined with a simple zonal pattern which would be regarded as normal to the Wessex B type. Wessex B beakers did, of course, reach Somerset, whether from Wessex itself or direct from Brittany—which appears to have been their original home—by sea. It is possible that No. 26 may be a hybrid due to contact between the two groups; but I must confess that I am reluctant to fall back on hybridization, particularly as this pot stands alone amongst a large number of more normal A types.

As with form, it seems useless on the evidence of this site to try to argue questions of chronology from ornament. Certainly beakers with "good" ornament are consistently represented in the bottom of the deposit and would therefore be early if the levels had any chronological significance. On the other hand, the disjointed ornament of No. 29 (Fig. 15) ought to be late, representing (presumably) a debased series of bar-chevrons or lozenges. But it too was found in part in the



Fig. 17.—Nos. 35 and 36 (1)

lower levels. This single occurrence acts as a warning that once again typology and chronology do not help one another.

Far the commonest figures used in the ornament are the triangle and chevron. This will be appreciated from the illustrations. There were in addition many fragments whose complete scheme cannot be even tentatively reconstructed.

Hatched lozenges and triangles in combination are set against a reserved ground, neck and body being separated by a narrow plain zone, with a further plain zone above and below. The pattern may be arranged horizontally (as in Nos. 3, 8, Fig. 12) or vertically (Nos. 2, 7, Fig. 12), the hatching being usually at right angles to the trend of the design. Such patterns are a feature of the AI beakers. An unusual type of lozenge is that on the incomplete pot (No. 19, Fig. 13), in which the units are run together to form a chequer pattern, with half of each lozenge (divided horizontally) filled in. The lozenge motif is also found on some of the less well-made pots, on which it is often associated with other elements; and is generally split up into narrower zones.

Triangles are also used alone. Alternately they form the familiar bar-chevron pattern (No. 12, Fig. 13, and probably others, such as Nos. 16 and 20, Fig. 13, which are less complete) which is so common on both sides of the Severn. The best example is No. 6 (Fig. 12 and Plate XIII), in which the threefold division corresponding with the form of the beaker, is maintained. The chevron is defined sometimes by a single, sometimes by a double line.

Triangles are also arranged in rows, pendent, and themselves, or the ground, filled with horizontal lines. Often this style is accompanied by bands of lattice-pattern or of alternately placed finger-nail impressions, but the only beaker on which the scheme can be fully established is the largest complete example from the site (No. 10).<sup>1</sup> Occasionally bar-chevrons and pendent triangles are combined, as in the crude beakers, Nos. 21 and 24 (Figs. 13 and 14). More inept is No. 28 (Fig. 15), in which the potter seems to have been unable to make up her mind between bar-chevrons, pendent triangles, and lozenges.

<sup>&</sup>lt;sup>1</sup> An unusual feature of this pot is the series of countersunk holes which appear to have formed a circle on the lower part of the body. Six holes remain ; if the others were equally spaced and completed the circle the total number would probably have been ten. It is likely that they were done after the pot was baked. The purpose of these holes remains a mystery : they obviously render the pot useless. It has been suggested to me that they may have been intended to convert the beaker into a small bee-hive on the analogy of pots so used in Northern India to-day ; but my friend, Mr. H. M. Hallett, tells me that their diameter (4.5 mm.) is too small to admit any species known in this country. There is a fragment from a second pot showing holes of the same type.



No. 10

Photo by Prof. C. B. Perry.

[Facing page 36





No. 28

Photo by Prof. C. B. Perry.

# PLATE XIII



No. 6

Photo by Pref. C. B. Perry



GORSEY BIGBURY-THE POTTERY



Fig. 18.—Nos. 37 (<sup>1</sup>/<sub>1</sub>) and 38

#### GORSEY BIGBURY--THE POTTERY

Multiple bar-chevrons are represented by No. 5 (Fig. 12), belonging to the AI group. There are other fragments which appear to represent at least one other beaker of the same type. Typologically No. 27 (Fig. 14) might be regarded as a development of No. 5: the opposition of the bounding lines has produced running hexagons, instead of chevrons. The variation in the first place may have been accidental—a step towards it appears in the uppermost zone on the body of No. 28 (Fig. 15)—but here it is obviously intentional. In No. 27 and No. 28 theoretically late features of form and ornament are combined and might be thought to confirm one another—until we remember that No. 27 came from the bottom of the deposit. Some fragments of No. 28 were found at the top.

Of the much rarer beakers incorporating metopic styles of ornament only two are capable of even approximate restoration. No. 25 (Fig. 14) makes use of the saltire defined on each side by narrow vertical panels containing double zig-zags. The general arrangement with minor variations occurs in various parts of the areas settled by the beaker folk, and other fragments at Gorsey Bigbury suggest one or two more beakers decorated in the same style.

I am not sure that the other beaker in the metopic style (No. 22, Fig. 14) is in every respect correctly restored in the drawing, although I have no doubt about its scheme of ornament. The notching here is bolder and heavier than usual. Once again it is paralleled in a few small fragments evidently from a different pot (or pots).

There is one handle (No. 34, Fig. 16).

Before attempting such general conclusions as are possible the group of rusticated pottery must be dealt with.

Rusticated pottery, in which the surface of the pot has been roughened more or less all over, usually with punches or stabs done with the finger-nail, was first described as a group by J. G. D. Clark.<sup>1</sup> Clark recognized three distinct varieties :—

I. Arminghall ware, in which the surface of the pot is covered without any kind of plan;

2. Holdenhurst ware, in which the rustication is in lines formed by pairs of opposed pinches, the lines being sometimes vertical, sometimes horizontal, sometimes both;

3. Somersham ware, in which the surface of the pot is rendered in a series of ridges, which are defined and decorated, if not actually formed by, finger-nail impressions.

A feature of the forms-which in some cases may belong either

<sup>1</sup> Proceedings Prehistoric Society, 1936, pp. 19-23.



Fig. 19.—Nos. 39 to 43 (1)

to the A or the B groups—is the prevalence of flat-topped rims, often with slight moulding below, forming a shallow collar.

At Gorsey Bigbury no cordoned rims survive, but the characteristic square section is preserved in No. 36 (Fig. 17) (where it is defined by deep finger-nail impressions on the underside—a feature also observed elsewhere) and in No. 38 (Fig. 18). Both of these suggest A beakers.

All three styles of decoration as defined by Clark are represented, although the third is perhaps doubtful. Of it there is only a single fragment (No. 37, Fig. 18) which preserves a horizontal raised rib defined on each side by a slightly less raised "frill." There can be no doubt in this instance that this raised ornament has actually been applied to the body of the original pot—a technique which I suspect to have been employed in other instances—and future finds of "ribbed" beakers should be examined carefully with this possibility in mind. In the case of No. 37, the applied part has broken away in places, revealing the body beneath.

No. 39 (Fig. 19) is one of several fragments showing the haphazard arrangement of the Arminghall series, and such pieces as No. 46 and No. 47 (Fig. 20) may belong to the same group.

The commonest variety at Gorsey Bigbury, however, makes use of paired finger-nail impressions. The true Holdenhurst type is represented by Nos. 35 and 36 (Fig. 17). In No. 38 (Fig. 18) the impressions are paired vertically, but arranged in roughly horizontal lines. Nos. 40 (Fig. 19) and 44 (Fig. 20) show paired finger-nail impressions of slightly different character; and in the former they are associated with kidneyshaped impressions apparently on the lower part of the body of the pot. In other small fragments the clay has been more strongly pinched up to produce definite ridges which are deeply undercut, and do not therefore resemble the smooth ridges of the Somersham beaker, in which also the impressions are not parallel but oblique to one another. The small fragment, No. 42 (Fig. 19), shows, however, that, as with the Somersham beaker, vertical and horizontal lines were often combined.

Finally, No. 45 (Fig. 20), though not strictly rusticated, may be mentioned here. The fragment illustrated is one of several showing haphazard arrangement of deep oval impressions done apparently with a finger-tip.

The evidence summarized by Clark made it clear that this rusticated pottery was closely associated with more "normal" beaker wares. At Gorsey Bigbury ware of this type was found in the occupation layer with the rest and representative pieces (Nos. 38, 35, 43)









Fig. 20.—Nos. 44 to 47 (1)

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come from the bottom of the deposit. With the reservations stated above, therefore, there is strong evidence that all the varieties found here are broadly of the same date.

This rusticated group provokes more general problems which cannot be discussed now : as to why in its various styles it occurs in the A and in the (eastern) B groups ; and why, over a very wide area, it appears in a remarkably uniform type of ware, often quite different from, and indeed inferior to, the ordinary beaker product. Its Continental analogies are obvious enough, for both the finger-nail technique and the collared rim are common in Holland, although I do not think either is found with the B beakers of Brittany. It does not seem to occur with any of the southern beakers, a fact which suggests that its origin is to be sought in the North, where it became common to both the A and B groups as they ultimately appeared in this country. Mesolithic sources suggest themselves, but in the most tentative manner ; I am conscious that at the present time the comparatively slender Mesolithic ceramic material already has a heavy load to bear as the prototype of the British Neolithic B pottery-group.<sup>1</sup>

It now remains to consider general conclusions. As to date, I have said enough to indicate the presence on the site of typologically early and typologically late beakers at various levels, in conditions which rob them of any very definite value for chronological purposes. If, as I have already said, there is any correlation between chronology and typology, the AI beakers at Gorsey Bigbury suggest that the occupation must have started fairly early in the beaker period, and must have continued for some time.

The other question is the immediate source. Since the decorative motives which are the only clues to origins are so widely varied it is unlikely that the external relationships of the site will be very clearly defined; the various elements occur throughout the areas settled by the A beaker folk. On the whole, however, it may be said that north Wiltshire is at once the natural and most likely source. The natural because there seems to be little doubt that the A-beaker complex penetrated Wessex from the north-east, and from north Wiltshire to the Mendips is an obvious extension; the most likely because the greatest number of parallels is concentrated in and around north Wiltshire. Some parallels are the chequer pattern of No. 23, which occurs at Stonehenge (Barrow 36; Abercromby No. 2)—and also

<sup>1</sup> It should be pointed out that the finger-nail ornament of the Somersham type of beaker closely resembles that on some of the Peterborough bowls (e.g., that from Cholsey, Berks; Peake, *Berkshire*, *Fig.* 9), in which there is the same alternation of horizontal and oblique lines.

further afield, at Worlington, Suffolk-and the unusual rings on No. 30 which already have been noted at Barrow 39, Stonehenge, and at Lambourne Downs, Berks. The multiple bar-chevron of No. 8 seems to have been found no nearer than Denton, Lincs. (Abercromby No. 58), but a variant with horizontal bars occurs at Winterbourne Stoke (ibid., No. 1). The various combinations of triangles and lozenges are also common in Wiltshire.

# NOTE ON LATE BRONZE AGE POTTERY

Included in the material was a number of sherds which appeared to be Bronze Age bucket-urn. None of the fragments is large, and only three are in any way distinctive, two being part of probably the same plain rim with simple square section, while the third (No. 47, Fig. 20) is a part of the wall with traces of a row of finger-nail impressions in true bucket-urn style. Most of these sherds (numbered 855 to 871 consecutively in the schedule of finds) came from the "top layer of the hearth on the east side," which also seems to have produced at least one piece of Beaker ware. The last may of course have been an accidental intrusion, and the top layer in question may have been the squatting-place of some Late Bronze Age settler on the site. In any case I am not disposed without further evidence to treat this pottery as belonging to the Beaker occupation. Its general character is quite unlike that of Beaker pottery, and completely in keeping with that of the Late Bronze Age bucket-urns.

W. F. GRIMES.

#### SCHEDULE OF POTTERY ILLUSTRATED

In the accompanying list are set out details of the finding of the pottery selected for illustration in this report. The numbers given are those of the original excavation record-cards, from which also the various details have been copied with minor variations for the sake of uniformity.

Since a large number of the 1300 odd potsherds was too small and indeterminate for illustration, an attempt has been made to illustrate the range and variety of the Gorsey Bigbury pottery as far as possible from examples whose complete form or scheme of ornament could be reconstructed or at least readily recognized.

1.—Represented by 115, 137. 367 from hearth c. 100 ft. W.; 186 from middle of occupation layer on E. side.

middle of occupation layer on E. side.
2.—Fourteen fragments: 931, 942, 1050-57 from top of hearth, 40-45 ft.
E.; 200, 1036 middle of hearth E. side; 1216 bottom of hearth, E. side, c.
39 ft.; 1106 lower 6 in. above hearth E. side, c. 55-60 ft.
3.—Nine fragments: 811, 911, 1299 from black band at bottom of hearth;
326, 327, 664, 1314 bottom of hearth 31 ft. from causeway; 743 hearth E. of causeway; 54 hearth c. 32 ft. from causeway.
4.—Eight fragments: 262 top of occupation layer, c. 32 ft. E.; 286, 294 bottom half, c. 33 ft. E.; 612 bottom of hearth, E.; 679 bottom of occupation level, c. 36 ft. E.; 1024 top of hearth, E.; 475 black band, c. 115 ft. W. 593. hearth, W.

5.—Thirteen fragments: 361 top of hearth, c. 40 ft. E.; 530, 532 top of hearth E.; 312 occupation layer, c. 32-33 ft. from causeway; 893 middle of hearth, 10 ft. E. ; 941, 959, 960 top of hearth, 40-45 ft. E. ; 980-83 top of hearth,

c. 39 ft. E.; 1067 top of hearth, 40-45 ft. E. 6.—Sixteen fragments: 301-05, 308, 309, 574 bottom of hearth, E.; 52, 502, 814 occupation level c. 32-33 ft. E.; 264 top of occupation layer, c. 32 ft. E.; 1139 bottom of occupation layer c. 33 ft. E.; 737, hearth, E.; 1025 top of hearth, E.; 1232 bottom of hearth, E. 502 fits 302.

7.—Five fragments: 57, 61 occupation layer, c. 32 ft. E.; 320 middle of hearth, E.; 1074, 1154 top of hearth E.; 320, 1074, 1154 join. 8.—Seven fragments: 600 top of occupation layer 32 ft. E.; 632 occupa-

tion layer, E.; 669 bottom of hearth 31 ft. E.; 844, 849, 1003 middle of hearth,

E.; 1214 bottom of hearth 39 ft. E.
g.—Six fragments: 487 top of occupation layer, c. 33 ft. E.; 493 bottom of occupation layer c. 34 ft. E.; 527 bottom of occupation layer, c. 32 ft. E.; 558, 799, 804 occupation layer, c. 32 ft. E.
10.—Made up of many fragments, numbers on which have mostly been the most of the m

obliterated by reconstruction. The recognizable fragments come from the upper middle and lower parts of the occupation level between 32 and 50 ft. on the E. side.

11.-Four fragments: 547 occupation layer 32-33 ft. E.; 843 middle of hearth, E.; 1133-34 hearth (from straightening of face).

12 - Three fragments: 126 hearth, c. 100 ft. W.; 492, 673 bottom of occupation layer, c. 34 and 36 ft. E.

13.-Three fragments : 245 black band, c. 95 ft. W. ; 279 middle of occupation layer, E.; 613 bottom of hearth, E.

14.—Two fragments: 580, 581 hearth, W. 15.—Eight fragments: 891, 905, 906 middle of hearth, 40 ft. E.; 705, 970, 994, 1060, 1068 top of hearth. c. 39-50 ft. E.; 891, 970 and 1068 join.

16.—Three fragments: 659-61 (all joining) top of hearth, E.
17.-One fragment: 841 middle of hearth, E.
18.—Ten fragments: 134, 160, 164, 168 hearth, c. 100 ft. W.; 223, 225, 231, 233, black band, c. 95 ft. W.; 266A black band, c. 98 ft. W.; 932 top of hearth 45-50 ft. E.; 134, 160, 164 and 168 join, and 223 and 225 join ; it is

perhaps doubtful whether all the remaining fragments belong to the same pot. 19.—Six fragments: 220, 242, 317, 318, black band, c. 95 ft. W.; 519 top of hearth, c. 100 ft. E.; 615 bottom of hearth, E.

20.-Five fragments: 483-85 top half of occupation layer, c. 33 ft. E.;

20.—The hagheness: 453-55 top halt of occupation layer, c. 55 ft. C.,
1256, 1257 hearth, c. 33-35 ft. E.; 483-85 join.
21.—Six fragments: 251-54, 271, 274, bottom of hearth, E. All join.
22.—Seventeen fragments: 176 bottom of hearth, E.; 214 middle of occupation layer, E.; 185, 321, 322 middle of hearth, E.; 235 black band,
c. 95 ft. W.; 330 upper half of occupation layer, c. 31 ft. E.; 676 bottom of occupation layer, c. 36 ft. E.; 817 occupation layer, c. 32-33 ft. E.: 436, 642, 644, 652 bottom of occupation layer, c. 32 ft. E.; 877 top of hearth, c. 40 ft. E.; 1010 middle of hearth, E.; 1118 occupation layer, c. 32 ft. E.; 1233 bottom of hearth, E.

of hearth, E.
23.—Thirteen fragments: 130, 147, 151, 268A hearth, c. 100 ft. W.; 229, 235-38, 314 black band, c. 95 ft. W.; 465 black band, c. 115 ft. W.; 501 occupation layer, c. 32-33 ft. W.; 1163, c. 110 ft. W.
24.—Twenty-nine fragments: 104, 110, 112, 114, 116, 118, 124, 138-40, 142, 148, 152, 167, 270, 372 hearth, c. 100 ft. W.; 226 black band, c. 95 ft. W.; 446 upper half occupation layer, c. 30 ft. W.; 373, 374 top of occupation layer, c. 32 ft. W.; 457-59 black band, c. 115 ft. W.; 507 of occupation layer, c. 68 ft. W.; 117 top of hearth c. 40 ft. band, c. 115 ft. W.; 507, 508 black band, c. 98 ft. W.; 1117 top of hearth, c. 40 ft. E.; 1119, 1120, c. 110 ft. W.

25.—Three fragments: 284 bottom half of occupation layer, c. 33 ft. E.; 816 occupation layer, c. 32-33 ft. E.; 1066 top of hearth 40-45 ft. E.

26 .- Five fragments : 208 middle of occupation layer, E. ; 255-57 bottom of hearth, E.; 1000 bottom of occupation layer, c. 31 ft. E.

27.—Seven fragments: 488 top half of occupation layer, c. 33 ft. E.; 553, 883 occupation layer, c. 32-33 ft. E.; 663 bottom of hearth, c. 31 ft. E.; 1098, 1099, top of hearth, E.; 1218 top of hearth, c. 40 ft. E.

28 .- Fourteen fragments: 106, 107, 113, 119, 146, 166, 219-21 hearth, c. 100 ft. W.; 212 middle of occupation layer, E.; 258-60 top of occupation layer, c. 32 ft. W.; 315 black band W.

29.-Five fragments: 158 hearth, c. 100 ft. W. ; 272 bottom of hearth, E. ; 277, 278, 1035 middle of occupation layer, E.; 272, 277, 278, and 1035 all ioin.

30.-Three fragments: 144, 145 hearth, c. 100 ft. W.; 1121 bottom of occupation layer, c. 33 ft. W.

31.—Six fragments: 231A, 232A, 239A, bottom of occupation layer, c. 35 ft. E.; 461 black band, c. 115 ft. W.; 405 middle of hearth, E.; 1288 bottom of occupation layer, c. 31 ft. E.; 231A, 232A, 239A, and 461 join. 32.—Numbers of some fragments obliterated in restoration. Of remainder

80-84 and 1085-88 from hearth, E.; 1040 bottom of occupation layer, c. 31 ft. E.; 1143-46 bottom of occupation layer, c. 33 ft. E.

33 .- Five fragments : 132, 135, 136, 150 hearth, c. 100 ft. W.; 618 middle of hearth, c. 40 ft. E.

34.—Three fragments joined : 917 middle of hearth, E. 35.—Two fragments : 285 bottom half of occupation layer, c. 33 ft. E. 36.-Four fragments : 67 (three) top of hearth, c. 40 ft. E. ; 1131 top of occupation layer, c. 33 ft. E.

37.—One fragment: 265 top of occupation layer c. 35 ft. E.

38.-Many fragments with same numbers : 1-5 bottom of hearth, c. 30 ft. E.; 22-48 black band, 130-32 ft. W.; 820 occupation layer 32-33 ft. E.

39.-Two fragments: 801 occupation layer 31 ft. E.; 1135 bottom of occupation layer, c. 33 ft. E.

40.-Two fragments: 131 hearth, c. 100 ft. W.; 1047 top of hearth, c. 40-45 ft. E.

41.-One fragment: 825, c. 32-33 ft. E.

42 .- Five fragments : 554, 557, 562 occupation layer 32-33 ft. E.; 1000 bottom of occupation layer, c. 31 ft. E.; 1153 top of hearth, c. 32-33 ft. E. 43.—One fragment: 607 from charcoal band at bottom of occupation laver.

44.—One fragment: 1160 occupation layer, c. 100 ft. W. 45.—Six fragments: 87, 88 occupation layer, W.; 253A black band, W.; 1093 above hearth, E.; 1273 spoil; 1276 ditch beyond rift.

46.—One fragment: 89 upper half of occupation layer, c. 31 ft. E. 47.—Three fragments: 621 middle of hearth, 40 ft. E.; 1076 top of hearth, E.; 1103 lower 6 in. above hearth, c. 55-60 ft. E.

# Section IV

# THE HUMAN SKELETAL REMAINS

The remains found may be divided into those belonging to the axial skeleton and those of the appendicular skeleton. Ford in the

To this part of the skeleton belong :--

In "grave", a. A skull, i.e., cranium and lower jaw. b. Vertebræ-

Cervical: viz., 1st and 2nd; both in almost perfect condition.

Thoracic : neural arch of 7th or 8th.

Lumbar: absent.

Sacrum : consists of six vertebræ instead of five, as the first coccygeal has been taken over by the last sacral vertebra.

Coccygeal vertebræ absent, except the first, which has become part of the sacrum.

c. Sternum and ribs : all absent.

APPENDICULAR

3

9 Tunt mg

I. Upper Limb

Right

~ a. Shoulder girdle-

Clavicle : part of outer third and a small

piece of inner end.

b. Scapula: outer angle including glenoid cavity, neck, coracoid, and

outer end of spine.

*d*. Radius : complete. *d*. Radius : complete. Shows united fracture near lower end.

e. Ulna: lower third.

f. Hand: carpals absent, also metacarpals and phalanges.

Lower third only.

Absent.

Absent.

Upper third. Second metacarpal alone present.

Left

Outer third.

- 2. Lower Limb
- a. Os innominatum, including acetabulum, ischium, and part of ilium.

Two femora.

b. (i) Femur : lacks upper extremity save small trochanter.

(ii) Femur, shaft only.

- c. Tibia: lower third, and it lacks the internal malleolus. Also upper third present.
- d. Fibula absent.
- e. Patella somewhat damaged.
- f. Tarsus-

Calcaneus in good condition, but insertion of tendo Achillis ossified.

Cuboid, in good condition.

g. Metatarsus: second right: perfect; others absent.

h. Phalanges absent.

## GENERAL OBSERVATIONS

The skull (Figs 21 and 22) has all the characters which one associates with the "Beaker Folk." Thus it is short and very wide, its breadth index being  $8_{3}$ ·4; in other words, the breadth bears that proportion to the length, the length being taken as 100. The ear-hole lies behind the centre of the greatest length line. The orbits are low in height. There are very prominent supra-orbital eminences. The temporal fossæ are large. The facial index is low; in fact, below 50. The circumference is nearly that of the known Beaker Folk; so, too, is the cranial capacity, which is great. In the comparative table on page 52 it will be seen how closely the Gorsey Bigbury skull agrees with the known and measured ones. In a few cases, there are marked differences which may possibly be attributed to faulty

- Acetabulum, ischium, and ilium, as far as the anterior third of crest and anterior inferior iliac spine.
- (i) Upper extremity :( greater part of shaft with lower → /2, "grown extremity.) Lacks another part of the shaft.

Complete.

Lower half and upper fourth.  $\mathcal{E}^{\mathcal{D}''}_{\mathcal{D}''}$  ricol. Complete.

Calcaneus has lost hind part ; rest, in good condition.

Cuboid absent.

All absent.

All absent.

reconstruction, but all are, I think, included within the range of variation. Actually these discrepancies are not of importance.

The remainder of the axial skeleton calls for no specially detailed description. The first and second cervical vertebræ seem to belong to the same body as the skull and the sacrum, which requires a little



Fig. 21

more detailed notice, and evidently belongs to the male sex. This sacrum consists of six vertebræ fused together, instead of the usual five, and it is clear that the sixth one is the first coccygeal, which has fused with the last sacral vertebra.

How do we arrive at the sex? It is generally stated that the male sacrum is more uniformly curved than that of the female; the latter being flat in the upper part as seen from the front and suddenly curved forward in the lower part. That is a statement which is in most cases readily verified. It is also stated that the auricular





surface extends over three vertebræ in the male, but over only two in the female. This is also probably true, too, and can easily be verified in young specimens in the presence of the corresponding ossa innominata. For some years it has appeared to me that the width of the upper surface of the body of the first sacral vertebra, when compared with the total width of the base of that bone, might yield useful results with regard to sexing, and I asked Prof. Wingate Todd, of the Western Reserve University, who has made a magnificent collection of skeletons whose age, sex, and stature are known, as well as the colour of the skin of the person from whom the skeletons came. He very kindly undertook the work and proved the accuracy of my surmise. He showed that in 134 males the mean proportion of the width of the body of the first sacral vertebra to that of the base of the sacrum was 45 in the male and 40 in the female. In the case of the sacrum of the Gorsey Bigbury skeleton the index is 43. And as it shows all the other sex signs very well, there can be no doubt of its sex, viz. male. Its remarkable state of preservation is of interest.

#### THE UPPER LIMB

There are several notable points. Thus the right humerus is so complete that one can get some idea as to the stature of the individual. The maximum length is 335 mm., which indicates a height of about 5 feet 6 inches. The greatest diameter of the head is 51 mm., which is great and without doubt indicative of the male sex. Then the parts of the impression for the insertions of the deltoid and the greater pectoral muscle, especially that part of the latter which is attached to the clavicle and the upper part of the sternum, are so well marked that they must indicate great power in the use of the arm; this, combined with a distinct outward bending of the shaft of the humerus at the site of these muscular insertions, and the large size of the head in the transverse-vertical diameter, makes one incline to the view that the individual may have been skilled in "slinging"; for there is no reason to think that this method of attack or defence had been given up by this time.

The right radius is also remarkable, for it has been, at some period, broken, and the repair is so perfect that it is doubtful if it could have been done better in present-day times. If it be true that recently in Germany people of the Bronze Age have been found with teeth capped with bronze, it would appear that the Bronze age people were skilled surgeons as well as skilled dentists. The length of the right radius amounts to 263 mm.; probably the fracture

may have altered its true length somewhat by straightening out the lower extremity, so perhaps we may deduct I mm. and call the length 262 mm., which would give a stature of about 5 feet  $7\frac{3}{4}$  inches. Evidently the person had a somewhat longer forearm than usual. The humero-radial index is 78.6, which is higher than that of the modern European, which is 74.

Neither ulna is complete, but the parts which persist show that the individual from whom they came had his share of rheumatism. As might be expected, there is no evidence of undue pronation and supination, such as might be expected in rotating a quern, as the rotary quern is an Iron Age invention.

There are no carpal bones, and of the metacarpals the second, which is the only one of the right hand, is in almost perfect condition.

# THE LOWER LIMB

Here there is evidence of two skeletons from the fact that there are large parts of three thigh-bones and a part of a third left hip-bone.

Two of the thigh-bones are evidently a pair, and as one has a head whose greatest diameter is 51 mm., it is evidently that of a male; its fellow lacks a head. The anterior inter-trochanteric line on the more complete specimen is of large size, indicating a very strong anterior ligament to the front of the hip-joint. There is on the front of the neck of the bone a well-marked facet, the so-called "empreinte," a very common feature whose cause is a little obscure. At the upper end of the anterior-intertrochanteric line there is an enormous superior cervical tubercle. The lower extremities of the paired femora are not in a condition to measure, but they show very well marked internal supracondylar tuberosities, especially the left femur, and on the same bone there is an unusually large external one too.

The tibia of the left side is complete; that of the right side is in two separate parts—an upper and a lower—the lower lacking the internal malleolus. The left tibia can be measured; it is 383 mm. long, which yields a stature of about 5 feet  $6\frac{3}{4}$  inches.

Of the tarsal bones the astragalus is the only one of note, because the internal facet on it for the internal malleolus of the tibia turns suddenly inwards at its front end, thereby limiting the extension movement of the ankle-joint.

We may now sum up by saying that the more complete of the two skeletons is that of a man of the Beaker Age, that he was about 5 feet 6 inches in height, that at some time he had fallen forwards on his right hand and had sustained a fracture of the lower part

of the radius, and that a very skilled person had so "set" the fracture that only an expert could have recognized the condition in the dry bone; that he was a sufferer, but not to a great extent, from rheumatism; was a man of great muscular strength, especially in those muscles concerned with the movements of the shoulder-joint.

Finally, the lightness of the bones is notable.

A few fragments of human bone were found in a shallow slot in the ditch bottom, 10 feet west of the causeway, and a note on them must be appended to the above report. The following pieces were identified :—

I. Piece of upper third of shaft of right humerus. Very well marked external bicipital crest.

2. Part of lower extremity of humerus—probably the same humerus as in No. 1.

3. Fragment of left ilium and corresponding part of acetabulum; female sex.

4. Fragment of corresponding head of femur.

5. Fragment of right body of mandible containing second right lower molar tooth.

6. A few fragments of vertebræ and ribs.

#### COMPARATIVE TABLE

	Ceph. Index	L + B + AH	Proportions		
			L	В	AH
Beaker Folk Gorsey Bigbury	83.0 83.4	466-5 456-0	0·403 0·399	0·334 0·331	0·263 0·269

Parsons' Early Man gives :--

E. FAWCETT.

# Section V

# ANIMAL BONES

I have examined and identified the bones contained in over one hundred boxes, tins, etc., and in certain doubtful cases have received valuable help from Dr. J. W. Jackson, of Manchester Museum.

The remains of the following animals have been found :- Ox, pig, sheep, red deer, roe-deer, dog. Of these, by far the greater part consists of bones of the first two mentioned. The ox is a small one, and some bones submitted to Dr. Jackson have been identified by him as those of the Celtic Shorthorn—*Bos longifrons*; no doubt all the bones found belong to this species. The pig, on the other hand, is a large one, identified by Dr. Jackson as the Turf Hog—*Sus scrofa palustris.* Sheep occur in very much smaller quantities, and red deer, roe-deer, and dog in smaller still.

The examination shows that the bones are from midden-heaps of domestic animals on an occupied site, the ox and pig being apparently the two principal sources of food. The dog was doubtless used to guard the flocks. There is indication of occasional hunting in the presence of remains of red deer and roe-deer, but their bones are scarce. One molar tooth of a pig is exceptionally large, and may, Dr. Jackson says, be that of a Wild Boar, but it might also be that of an exceptionally large male domestic Turf Hog, such as might be kept for breeding. Except for this, there seems to be no evidence of hunting of the Wild Boar.

H. TETLEY.

# Section VI

# BONE, STONE, AND GLASS OBJECTS

BONE

Considering the paucity of bone implements from the occupation levels, the bone scoop and bone needles found with the burial (see Plate VI) are of interest. The lip of the scoop has been rounded; the handle and adjoining sections of the sides have been straightened and retain many shallow scratches. The bone points, or needles, are made from roe-deer metacarpals. They also show numerous scratches towards the points. Other bone objects include :—

a. Two needles, both broken at the unpointed end. One is perforated and is  $1\frac{1}{2}$  in. long; the position of the hole suggests that very little is missing. The other, not perforated, is  $3\frac{3}{4}$  in. long and it is difficult to say how much is missing.

b. Two bone fragments, with blunt points.

c. Two bone fragments, each with a worked end and worked sides. In one case the end is straight and at right angles to the sides : in the other it is slightly rounded.

Some other bones, not fashioned to any shape, show incised markings.

#### STONE

No. IOI (Plate X) is a piece of Jurassic limestone. The main feature is the bevelling of one end, on both sides, to form a cutting edge. Consequently the specimen must be listed as an axe, although this experiment with a comparatively soft stone was probably unsuccessful.

The other object to be noted is a needle-grinder of old red sandstone. One side has been deeply grooved by use and retains several long scratches.

#### GLASS

One perforated glass bead was found in the top eighteen inches, about eighteen feet west of the reference point. It has a diameter of  $\frac{3}{4}$  in., and is made of a light green glass. The perforation is  $\frac{1}{4}$  in. in diameter and is straight-sided. The bead is similar to several supposed Roman beads from Mendip in the Capper Pass collection in the Bristol Museum and Art Gallery.

S. J. JONES.

# Section VII

# GENERAL CONCLUSIONS

Gorsey Bigbury seems, in its main structural features, to be related to the "Henge" monuments. The exact relationship between it and similar monuments is, however, obscured by its incompleteness. Clark's interesting suggestion that stone uprights may have stood originally in the centre and been removed later<sup>1</sup> cannot be substantiated, as there is no evidence of holes into which they could have been fitted. The settlement in the ditch is, in fact, the outstanding feature and, though this may be an exceptional case, it does seem advisable that in future the ditches of "Henge" monuments should, wherever possible, be completely excavated. In the case of Gorsey Bigbury, one can only suggest that it may have been adapted to settlement when still left incomplete, for some at present unknown reason, and before it had acquired any marked ritual significance. In the occupied portions of the ditch there is usually, as described, a thin layer of barren yellow clay between the bottom of the ditch and the first signs of settlement (i.e., the rubble platform in some sections and a hearth horizon in others). This slight hiatus does at least render the above suggestion tenable in the absence of other evidence.

The date of the structure can only be defined in general terms. The greater part of the pottery is beaker, but there are a few sherds of what may be Neolithic B ware. The very nature of the site led to considerable contemporary disturbance of the domestic débris and consequently no absolute stratification could be established. It seems likely that the structure is contemporary in some stage of its development with the earliest material present and therefore its beginnings probably date to the Neolithic B-Beaker overlap. The main occupation covers the Beaker period, and there is evidence in the top layers of some Late Bronze Age squatting on a small scale and even of an odd visit or so in Roman times.

The immediate affinities of the site, as judged by the pottery, are mainly with the north Wiltshire area. No such specific statement can as yet be made from the flint evidence. One addition to the flint report is, however, relevant here. It has been suggested to

<sup>1</sup> Proceedings Prehistoric Society, N.S. Vol. II, Part 1, p. 49.

the writer, in conversation, that Nos. 20, 24, and 25 in Plate VII resemble the pressure-flaked, mitriform, untanged arrow-heads of the south-western area of the Iberian peninsula.<sup>1</sup> It is also possible, as Grimes mentions in the pottery report, that the Wessex B element may have reached Somerset directly by sea from Brittany. These shreds of evidence indicating possible affinities with sea routes are merely put on record and are not intended as a modification of the link with north Wiltshire.

Knowledge of the physical appearance of the occupants of the ditch is confined to the skull and remains described by Professor Fawcett. The skull shows in the main the characteristics associated with Beaker folk. Of their life it can be said that Tetley's report on the animal bones leaves little doubt that they were pastoralists, supplementing their supply of domesticated ox, pig, and sheep with occasional hunting of red deer and roe-deer. No evidence of grain was found. Finally it may be stated that it has not been possible to obtain an expert opinion on the fragmentary charcoal from the site, but it is hoped that a short statement on it may be published later.

S. J. JONES.

<sup>1</sup> C. D. Forde, "Early Cultures of Atlantic Europe," American Anthropologist, Vol. XXXII, 1930, No. 1, Jan.-Mar., pp. 40-42.

