VII.—AN EARLY BRONZE AGE CIST AT KELLOE LAW, Co. DURHAM.

By T. Wake and R. P. Wright.

(Read on 24th November, 1948)

The cist which forms the subject of this report lies about quarter of a mile south-south-west of Kelloe Law farm, and two miles north of Trimdon. The site[1] is somewhat below the 500 foot contour, lying on an exposed ridge which rises from south-west to north-east, where it reaches a height of 509 feet just north of the farm. The presence of a large stone at this point had long been known to the tenant, Mr. John Nicholson, because his plough had often struck it. But its real nature was only discovered on 16th March, 1948, when a tractor crushed the large cover-slab and revealed the cist. Mr. Nicholson promptly sent in an excellent sketch and details of the discovery, and as a result the Rev. Thomas Romans and the second-named writer examined and photographed the find and took charge of the remains. A visit was paid on April 14th by the first-named writer who, with Mr. Romans and Mr. T. C. Hebdon, supervised the removal of the cover-slab, took further photographs, and made a detailed examination of the whole structure.

[1] The site is in the tongue of land which projects from the south-east corner of the third field (no. 82 on O.S. 25-inch map, Durham xxviii, 13) west of Kelloe Law farm. It is 120 feet south-west of the north-east angle of the projection, and 140 feet north-west of the south-east angle, and thus 450 yards south-south-west of the west end of the farm. O.S. one-inch map (New Popular edn), sheet 85, Durham, grid ref. 362373.

The structure of the cist.

The inside measurements of the cist were 56 inches in length at the top, 32 inches in breadth, and from 18 to 20 inches in depth. It lay east to west and was formed of close-grained sandstone slabs. The ends had single slabs but that at the east end had been split vertically either while being placed in position or afterwards. The north side had two slabs, one 43 inches long, and the short one 13 inches long. The large south slab was 46 inches long and had, at the west end, part of a slab 4 inches thick placed endways to fill the space between it and the end slab. This was sealed by soft brown clay which may have been washed in from the surface. At the east end the space between the side slab and the end slab had been filled with magnesian limestone rubble and clay which had fallen into the cist. The same had happened at the opposite corner with the consequence that the end slab had tilted forward at the top (see plate XXIV, fig. 2).

The slabs varied in thickness from 5 inches to 7 inches, and their tops had a rounded chamfer. The cover slab was of irregular shape with a greatest length of 73 inches, breadth 53 inches, and thickness 7 inches. This was of a very coarse-grained and friable Permian sandstone, of purplish colour, which crumbled under comparatively light pressure.

To accommodate the cist, an oblong pit had been dug down to the top of the limestone. The slabs were next set upright in position. The large slab on the north side had an uneven lower edge and a small trench about six inches deep and a foot wide at the centre tapering towards the ends had been cut to allow the slab to rest level at the top with the other slabs. When the slab was set in position the trench had been packed with brown clay. On the east side the weight of the cover slab had been taken by packing stones. Had they not been used, the end slab would have been held in position by the cover slab and kept from falling forward.

The interior of the cist contained an accumulation of

coarse sand and fragments of sandstone from the cover slab. The bodies had been laid on the floor of magnesian limestone, which was decomposed and of a yellow colour. Pieces of charcoal, burnt limestone, and also slight signs of burning in some of the bones found, showed that fire had played a part in the funeral ceremony, and that the ashes had been placed with the bodies in the cist.

The contents of the cist.

The cist was occupied by the remains of no less than five skeletons lying lengthwise, with the skulls at the east end (see plate XXIV, fig. 1). The collapse of the cover slab had covered the bones with a layer of granular fragments about six inches thick, and it was not possible in the circumstances to plot the exact position of each skeleton, or attempt to keep the remains separate. The vertebrae, in at least one case, were lying in position. The bones of the thighs and legs were not seen in their original position, but the shortness of the cist, only 4 ft. 8 in., proves that the bodies must have been laid with knees drawn up towards the chin, in accordance with the practice of the Bronze Age.

The appended report on the skeletons shows that, in addition to a male skeleton, aged about forty years, for which nearly all the bones have been preserved, there had been a female skeleton over thirty years in age, and the skeletons of three children, for whose sex the evidence has not been preserved, who belonged to the age-groups of 12 to 15, 7 to 10, and 4 years.

We may safely assume that this group formed a family, and that they were buried simultaneously. Multiple burials are well attested on Bronze Age sites, and need cause no surprise as parish registers of three or four centuries ago sometimes cite the burial of a family group within a few days. The spacing of the ages of the children supports this suggestion that it comprised a family, and not a household formed by slaves.

It is a pity that more of the bones of the woman and

three children were not preserved, but we are fortunate in having received expert analysis of the extant remains for establishing the approximate age of each skeleton.

On our first visit two small fragments from the base and side of a Bronze Age beaker were recovered (see fig. 1), and it was hoped that more of it would be found when the material in the cist could be examined in detail. But, before the second visit could be paid, the site was subjected to souvenir-hunters who had seen a report in the local press. So, despite a careful sifting of the material which was left, the only objects recovered were further small bones, a number of the teeth, and a small flint flake.

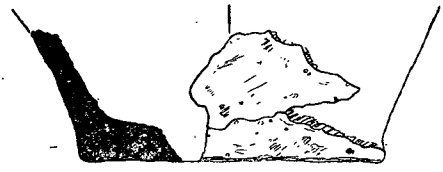

FIG. 1. KELLOE LAW BEAKER.

Comparable sites.

This discovery is an addition to the list[2] of Bronze Age burial sites which in County Durham occur mainly in exposed positions on the limestone plateau in the east part. It accords well with the three instances in the county of an Early Bronze Age cist-burial with an accompanying beaker which occur at Brandon, Ryton and Sacriston. In two of these instances there was apparently no covering barrow, or, if it had once existed, it had been small and subsequently obliterated. At Kelloe Law there was no trace of any barrow.

The two nearest sites are imperfectly recorded. The Greenwell Collection in the British Museum has, without accompanying details, a fragment of a cinerary urn from a barrow[3] at Trimdon Grange, which lies about a mile and

[2] *VCH* Durham 1,199; Trechmann, *AA*[3] xi (1914), 119.
[3] Greenwell, *British Barrows* 442; *VCH* Durham 1,207.

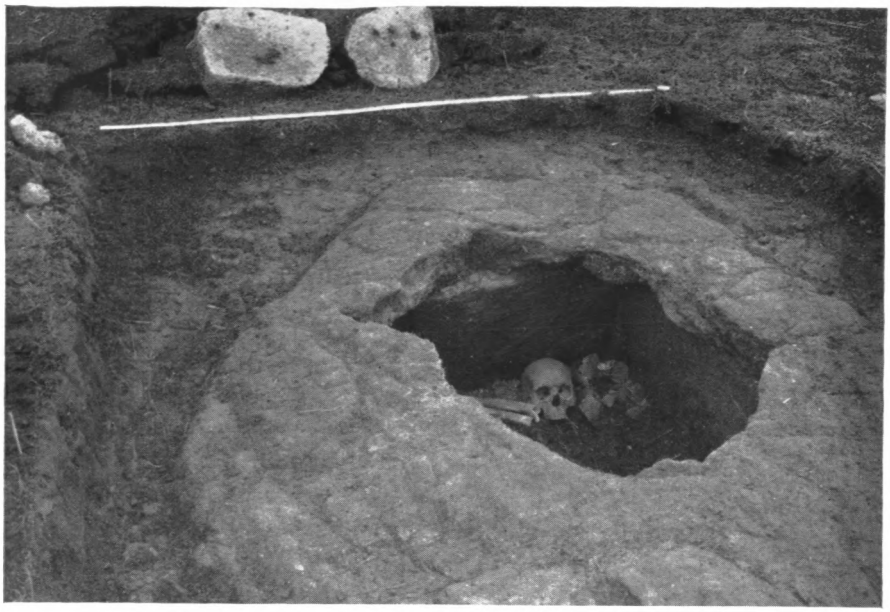

FIG. 1. KELLOE LAW CIST.

FIG. 2. KELLOE LAW CIST, COVER REMOVED.

a half south of Kelloe Law. Greenwell[4] mentions the discovery of a short cist with an unburnt body at Sherburn, but gives no further information.

Grateful acknowledgment is made to Mr. John Nicholson for his full co-operation, to Dr. C. H. Tonge for his report on the skeletons, and for articulating them, and to the Durham University Excavation Committee for defraying the cost of the figure and plates. The skeletons are to be presented to Sunderland Museum by Mr. T. Valentine Devey, the Coroner for the Easington Ward, to whom our best thanks are due for kindly allowing the skeletons to be submitted for examination.

REPORT ON THE SKELETONS.

By C. Howard Tonge, M.B., B.S., B.D.S.

SUMMARY.

There are the remains of five skeletons:

Skeleton 1. Almost complete; a male skeleton 5 feet 6 inches high. Skull and mandible almost complete with well-marked muscular markings indicating a male specimen. The completion of ossification and the attrition of the teeth suggest full adult life within the range 30 to 40 years, and probably nearer 40. There is some evidence of dental caries in the molar region, and marked osteo-arthritis of a generalized nature.

Skeleton 2. The parts of the skull and mandible and long bones present are of the female type, and the completion of ossification together with the state of the teeth present indicate an age of more than 30 years.

Skeleton 3. Right humerus and isolated remains of jaw-bones showing erupted 2nd molar teeth suggest a skeleton of more than 12 years, and the degree of attrition of the teeth indicates a skeleton of not more than 15 years.

Skeleton 4. Right humerus and remains of tooth-bearing areas showing a mixture of the deciduous and permanent dentitions indicate the skeleton of a child of the age-group 7 to 10 years.

Skeleton 5. Left humerus and other scanty remains and isolated

[4] *l.c.* 442; *VCH* Durham 1,208.

remnants of calcified portions of deciduous teeth suggest a skeleton of a child aged 4 years.

DETAILED REPORT.

Evidence: Four mandibles, not all complete. Two of these mandibles are from subjects of over 25 years of age. There are three Humeri in which the lower epiphyses have not united, and they are all of different size. This suggests three skeletons *under* 25 years of age. There are, therefore, the remains of five skeletons.

There is only one skeleton anywhere near being complete, here listed in Section A. An attempt has therefore been made to make one nearly complete skeleton. It is possible that in so doing bones from the other skeletons have been included. It is not possible to build up another skeleton from the remaining bones, which are listed below in Section B.

Section A.

(c)=Complete bone (i.e. most of bone is present).
(i)=Incomplete bone.

N.B. Some of the bones are in separate pieces; if all the parts of a particular bone are present, it is marked complete.

SKULL (C) and *MANDIBLE* (C). For details see the summary.

VERTEBRAE: *Cervical*: Atlas (c); Axis (c); 4th Cervical (i).

Thoracic: 1st Thoracic (i); 2nd Thoracic (c); 3rd Thoracic (c); 4th Thoracic (i); 5th Thoracic (i); 6th Thoracic (i); 7th Thoracic (i); 8th Thoracic (i); 9th Thoracic (i); 11th Thoracic (i); 12th Thoracic (c).

Lumbar: 1st Lumbar (i); 2nd Lumbar (c); 3rd Lumbar (c); 4th Lumbar (i); 5th Lumbar (c).

Sacrum: Complete with 1st piece of coccyx united.

RIBS. Many pieces of rib present, but none complete. There is a portion of R. 1st rib and the posterior end of the L. 1st rib.

STERNUM. Manubrium Sterni (c) with calcified R. 1st costal cartilage.

CLAVICES. *Right* (c); *Left* (c).

SCAPULAE. (i) Pieces of R. and L. Scapulae.

HUMERI. R. and L. present, minus the head on both sides.

RADII. R. Radius (i); L. Radius (c).

ULNAE. R. Ulnar (i); L. Ulnar (i).

HANDS. R. Scaphoid (c); L. ?.

METACARPALS. Right: 1st (c); 2nd (c); 3rd (c); 4th (c); 5th (c). *Left*: 2nd (c); 3rd (c); 4th (i); 5th (c).

Phalanges: Many present, but unsorted.

HIP BONES. L. Hip Bone (c), minus pubic symphyses; R. Hip Bone (i).

FEMORA. L. Femur (i); R. Femur (i) with only part of lower end present as a separate piece.

PATELLAE. R. Patella (c).

TIBIAE. L. Tibia (i); R. Tibia (i).

FIBULAE. L. Fibula (c); R. Fibula (i).

FEET. L. Foot: Tarsal Bones: Calcaneum (c); Talus (c); Navicular (c); Cuboid (c); Lateral Cuneiform (i).

Metatarsals. 1st (c); 2nd (i); 3rd (c); 4th (c); 5th (c).

R. Foot: Tarsal Bones: Calcaneum (c); Talus (c); Navicular (c); Cuboid (c); Medial Cuneiform (c); Lateral Cuneiform (c).

Metatarsals. 1st (c); 2nd (c); 3rd (i); 4th (i).

The skeleton is that of a male—the hip bones and sacrum showing several male characteristics. There is also additional evidence of age gained from examination of the skull (see the summary). General examination of the whole skeleton also suggests that the skeleton is that of a male by weight and muscular workings.

As far as can be ascertained from measurement of the long bones which are complete, the subject was about 5 feet 6 inches in height. Measurement of the right femur gives the figure of about 5 feet 6 inches. Measurement of the left radius, however, suggests a higher figure. It may be that this bone is from another skeleton.

Age. All epiphyses have united. The left 1st costal cartilage is ossified. The manubrio-sternal joint is not ossified. There is quite well-marked and generalized osteo-arthritis. From this evidence it is suggested that the subject was well into adult life—certainly about the age of forty.

Section B: Remaining Bones.

Only those that can be definitely identified are listed. The rest form a miscellaneous group.

Skulls and Mandibles. See the summary.

VERTEBRAE. Cervical: Pieces of two Axes.

Thoracic: Pieces of several thoracic vertebrae.

It is difficult to estimate the age of the axes, but the union between the centrum and odontoid process is incomplete in both cases.

However, particularly in one of the specimens, this may be a persistence into adult life of the original cartilaginous junction.

These vertebrae are obviously from more than one skeleton as they are of different age, some being adult and others from children. On the child's thoracic vertebrae the neuro-central articulation is just beginning to ossify, which puts the age at between 3 and 6 years.

HUMERI. Right: Pieces of 3 present; *Left*: Pieces of 4 present.

Details. R. Humerus (marked I). Age is probably about 12 years; none of the lower epiphyses united with the shaft.

R. Humerus (marked II)—lower epiphyses have not united with the shaft, smaller bones than I, therefore probably about 7-8 years of age.

L. Humerus (marked III). Small with un-united lower epiphyses —probable age about 3 years.

RADII. 1 Right Radius; 2 Left Radii; one right and one left are adult as epiphyses have united.

Remaining L. Radius: upper epiphysis has not united, therefore age is definitely under 17-18 years.

ULNAE. Piece of R. Ulnar, piece of L. Ulnar.

No evidence as to age as upper and lower ends are missing in each specimen. They appear from weight and size to be adult.

HANDS. Metacarpals: 2nd R. Metacarpal; 3rd R. Metacarpal; 2nd L. Metacarpal; 3rd L. Metacarpal.

FEMORA. Pieces of 3 R. Femora; pieces of 2 L. Femora.

One L. Femur is probably adult. The other L. Femur is under 18-20 years as the lower epiphysis has not united.

Of the 3 R. Femora, one appears to be adult (though no ends present for confirmation). The other two appear to be under 18-20 years; in one (the larger of the two) the lower epiphysis has not united, only the middle of the shaft is present in the other one.

TIBIAE. Pieces of 3 R. Tibiae present; pieces of 2 L. Tibiae present.

In only one of these specimens is there an end present. One of the L. Tibiae is under 20 years of age as upper epiphysis has not united with the shaft.

FIBULAE. Pieces from 3 Fibulae, of which all appear to be right. No evidence as to age.

FEET. 1 R. Navicular; piece of R. Lateral Cuneiform; 1st R. Metatarsal; 3rd R. Metatarsal; two 4th R. Metatarsals.

In addition there is a miscellaneous collection of broken bones which are not identifiable.