

ART. XXIII.—*Some Birkrigg Barrows.* By the REV. CHARLES GELDERD, D.Sc., JAMES RANDALL and JOHN DOBSON.

Partly read at Seascale, June 19th, 1913.

BIRKRIGG is a moory height of carboniferous limestone, common to the parishes of Urswick and Aldingham, and lying $2\frac{1}{4}$ miles due south of Ulverston. Its highest point, where in bygone times the beacon fire was lighted, is nearly 450 feet above the sea level. Ancient enclosures, hut circles, barrows and burial circles are scattered over its surface.

By permission of the Department of Woods and Forests, obtained through the kindness of Mr. James Martin, Deputy Steward of the Manor of Muchland and vice-president of the North Lonsdale Field Club, the archaeological examination of Birkrigg by the members of that club, commenced in 1911 with the "Druids' Circles" and reported in these *Transactions*, N.S., xii., Art. XXII., was continued in the summer of 1912. A fortnight in August was spent on the moor by the compilers of this report. The weather was wet and heavy rains interfered considerably with the operations.

The first work undertaken was the examination of three small barrows situated on the eastern slope of the main mass of the moor, about midway between the cairn marking the highest point and the bottom of the hollow marked Appleby Slack on the Ordnance Map (Lancashire Sheet xvi.). These barrows lie in a line running N.N.E. and S.S.W., and the largest and most promising-looking, the middle one, was examined first. It was nearly circular in plan, measuring 26 feet across from N.W. to S.E. and 24 feet from S.W. to N.E. It lay on ground

sloping to the east, was apparently composed of stones and earth, and was turfed over with a tough sod of moorland grasses plentifully intermingled with the black rhizomes of the bracken. When unturfed, the mound had every appearance of a typical round barrow. It was found to be composed largely of stones—erratics—generally of no great size, with little or no limestone among them, but mixed with a large proportion of soil, not dark as from organic intermixture, but the ordinary soil of the moor. The stones were nowhere found to any depth, never more than from 18 to 24 inches, nor did the earth underneath seem ever to have been disturbed. The whole heap was carefully turned over and thoroughly examined as well as the ground underneath, but neither bone, charcoal, earthenware, nor the semblance of a tool was met with. In one place not far from the centre a small quantity of dark-coloured fibrous matter like decayed grassy sods was found, but, if a body had been laid above or among this matter, every trace of it had disappeared. The under-soil below and around this dark stuff was thoroughly examined down to the underlying limestone rock, but no sign of previous disturbance was found, and though the whole mass of the barrow was gone over in the most careful manner, the result was entirely negative. That this mound is an ancient barrow and not a modern heap of stones gathered from the bracken beds to facilitate cutting is pretty well proved by its composition: such a modern heap would have been made up almost entirely of loose stones with many empty snail shells in the interstices, whereas the mound in question was found to contain quite as much earth as stones with very few snail shells, and was altogether overgrown with a tough sod.

The two smaller hillocks, one to the north and the other to the south of that first examined, though evidently artificial, proved equally barren, though in the northern

one under a large central boulder of green slate a small quantity of dark clay-like earth was met with which subsequent experience led the excavators to think might have some connection with an interment all other traces of which had entirely disappeared.

Situated towards the northern end of the ridge, called Appleby Hill, on the eastern side of Birkrigg, 400 yards E.N.E. from the line of mounds last dealt with, 610 yards W.N.W. from the "Druids' Circles," about 350 feet above the sea level, and commanding a magnificent view of Morecambe Bay, another barrow was next examined. Its dimensions were some 42 feet from E.S.E. to W.N.W. and 36 feet from N.N.E. to S.S.W., with a present height of 18 inches to 2 feet. This barrow, although it contained but few bones and only one bronze implement, presents certain peculiarities that are worthy of notice. It was covered with a thin layer of tough turf which was first removed over a large area, after which a trench, $2\frac{1}{2}$ to 3 feet wide and running east and west, was dug across the mound. It was found to be constructed of large pieces of limestone, the underlying rock of the moor, of varying size, some pieces being large weathered "rockery stones." The summit of the barrow was slightly depressed, but there were no signs of any previous disturbance in that part when it came to be excavated. As the trench advanced towards the centre, a few fragments of pot containing pyrites, and a few scattered human teeth were found lying on the original surface of the moor.

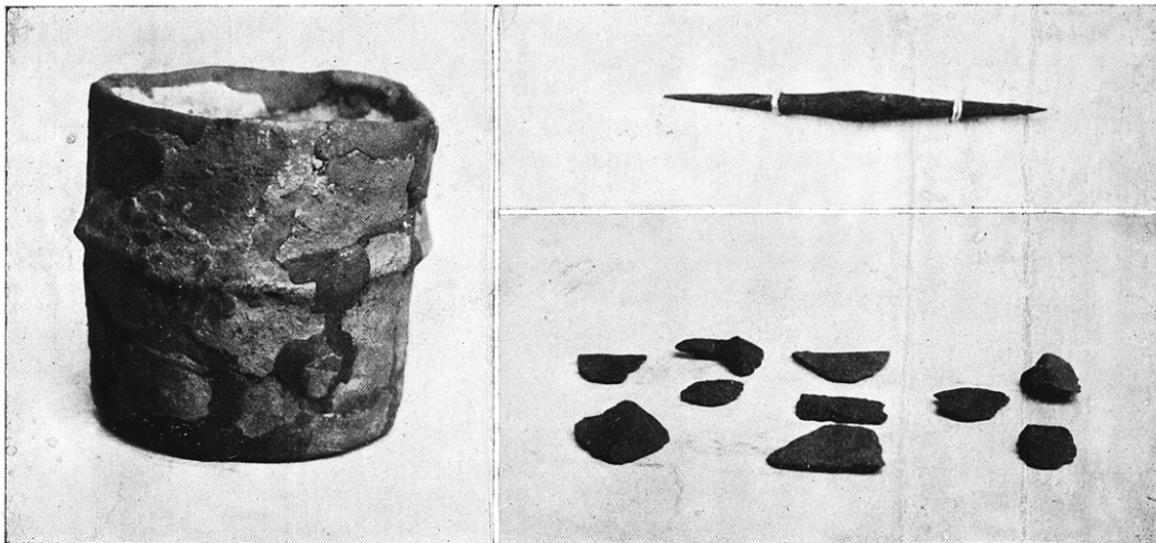
About 5 feet from the east side of the barrow at the N. side of the trench a large slab was uncovered, beneath which was a mass of black earth lying 2 feet below the level of the sod. This dark earth was found to contain a large proportion of charcoal in small pieces, but there was no trace of either bone or lime. It extended over an area of about a square foot. Another mass of very dark earth, 9 inches by 9, containing a few fragments of pot,

was found at a distance of 6 feet from the eastern edge of the barrow at a depth of $1\frac{1}{2}$ feet below the sod. A third deposit was circular in form with a diameter of 7 inches, and was composed of black clay-like matter mixed with grit. It was very similar to broken-down prehistoric pottery in constitution. A fourth deposit was also circular in form and very small. Careful measurements of the position of these deposits of black earth were taken in sixteen cases, but they became so numerous, especially towards the central portion of the barrow, that it was considered scarcely worth the trouble to measure the exact position of the rest. More than thirty deposits were met with, all similar in character, in every case covered by large stones or slabs, and differing only in the amount of black earth. In some cases finely divided charcoal was present intimately mixed with the earth, in others the charcoal seemed to be altogether wanting. The whole area of these deposits of dark earth was surrounded by a circle of stones of considerable size (say 18 inches to 2 feet by 12 inches), standing, but with a very decided inward batter, as if pressed out of the perpendicular by the materials of the barrow heaped around. This circle would have a diameter of 12 to 13 feet; its centre did not coincide with that of the barrow but lay to the east of it. No deposit of black earth was found outside this circle of stones. Occasionally the black deposit contained a small white quartz pebble and in practically every case was associated with two pieces of alien stone. One piece was red porphyry, the other a greenish stone, probably porphyry also. The latter was in some cases very hard, but in others quite powdery, as though it had been burnt, and could be crushed readily between the fingers and the thumb. The green stone was always found on the edge of the black earth. The presence of these pebbles was clearly intentional, occurring as they did in more than thirty cases.

Close to the centre of the barrow on the north side, a few fragments of bone from a skull were found lying underneath a rough vaulting of large stones. The interment was above the surface of the moor. The typical black earth was not found with the bones. They consisted of a small portion of the jaw of an adult and a few very small fragments of bone which appeared to belong to the parietal region of the skull. There were also three human teeth. The bones had not been burned. Possibly the rest of the skeleton had fallen into decay, but from the appearance of the large stones which covered the bones it seemed more probable that the skull only had been buried here. Beyond the fact that it had belonged to an adult, it was impossible to determine the age or sex of the person to whom the skull had belonged.

A considerable portion of the barrow on the north side was of a looser character than the rest: the stones were less compact, and there was a large quantity among them of light earthy matter of a brownish colour. There were many indications that the original barrow had been disturbed in this part, possibly for the interment of the skull. It had certainly been disturbed for the burial with which was found the small bronze implement now to be described.

A little to the north-west of the centre of the barrow, fragments of bone, apparently human, were met with not more than 9 inches below the surface. The fragments seemed to be from the thigh-bone—femur—and the pelvis. The head of the former was found. As we worked more to the west, teeth began to turn up in numbers with pieces of jawbone, phalanges of fingers or toes, ribs, vertebræ, etc., and near the same place, in fact in the midst of the small bones from the upper part of the body, a most interesting find was made. This was a small fusiform pin of bronze, sharp at both ends. It is about 2 inches (51 m/m) long, and its greatest diameter is $\frac{5}{32}$



URN No. 1, Appleby Slack.

Phot. by Myles H. Grocock.

TATTOOING-AWL, Birkrigg East barrow.

FLAKES in Urn No. 3, Appleby Slack.

TO FACE P. 471.

of an inch (4 m/m). The tiny tool has been shown to Mr. E. Thurlow Leeds, M.A., F.S.A., of the Ashmolean Museum, who says: "it is a tattooing-awl of the Early Bronze Age, found in women's graves only: a good specimen." Montelius dates the Early Bronze Age from about 2000 B.C. to about 1600 B.C.

What was at first taken for a bone tool of the piercer kind was picked up also amid the bones of this interment; but closer examination, when the coating of earthy matter had been removed, led to the conclusion that it was a tooth. It is about $\frac{7}{8}$ of an inch long, about $\frac{1}{8}$ of an inch in diameter where thickest, and tapers slightly towards both ends, where it is, unfortunately, broken away. It has been shown to Dr. E. S. Goodrich, F.R.S., of Oxford, who says: "I suggest that it may be the lower incisor of a young pig. As it is very imperfect, I cannot identify it for certain."

Stone-flakes of various sizes and very like unfinished scrapers in that they showed no signs of "secondary working," were very numerous in those parts of the barrow which came under examination.

Judging from the human teeth picked up, it appears likely that at least three interments by inhumation had been made in this barrow, namely that of an aged person, a young person probably female, and of a child. If any primary interment in the centre of the barrow had ever existed, no traces of it were discovered. There were no signs that the old ground-surface of the moor had been broken through to form a grave. Only two or three small holes were met with, scraped out of the soil of the moor and indicated by the presence of disturbed earth. These were of the same character as the shallow pits so frequently met with in barrows, and of which no satisfactory explanation has yet been given. Though the moor-pan about the centre of the barrow bore no signs of ever having been disturbed, yet to make quite certain

that no interment lay concealed, the earth was taken out over a considerable area to a depth of about 4 feet, until the bed-rock was reached.

It is difficult to account for so many deposits of black earth in the eastern part of the barrow, whilst not the slightest trace of bone was visible. The following explanation has been suggested by Mr. Randall :—These deposits may represent partial interments, a small quantity of ashes from a body cremated at a distance. In ordinary circumstances there would be abundant traces of lime from the calcined bone. The absence of all such trace may be explained by the supposition that a layer of vegetable matter, as oak leaves, or in fact any other vegetation containing tannin, was laid down in the place destined for the ashes before the latter were deposited. The tannic acid would, in course of time, remove all trace of lime, and nothing but dark earth would remain. It has already been pointed out that a few of the deposits bore a close resemblance to disintegrated "pot." It is not impossible, therefore, that these cases may represent the remains of incompletely fired pottery reduced to this condition through the action of organic acids and moisture.

In August, 1913, several days were spent in the examination of what at first sight appeared a very unpromising barrow situated between the two "Camps" at the north-east end of Appleby Slack and abutting on the eastern boundary of the larger and less distinct enclosure just where the latter comes in contact with the outcrop of weathered limestone rock on its northern and north-western sides. Under its thick covering of whin and bracken, this barrow appeared little more than a low flat mound containing but a few cartloads of earth and stones overgrown by a tough moorland turf; but when the overgrowth had been cleared away, and still more when the turf had been removed, a low barrow over 30 feet in diameter, composed of earth and stones, was plainly

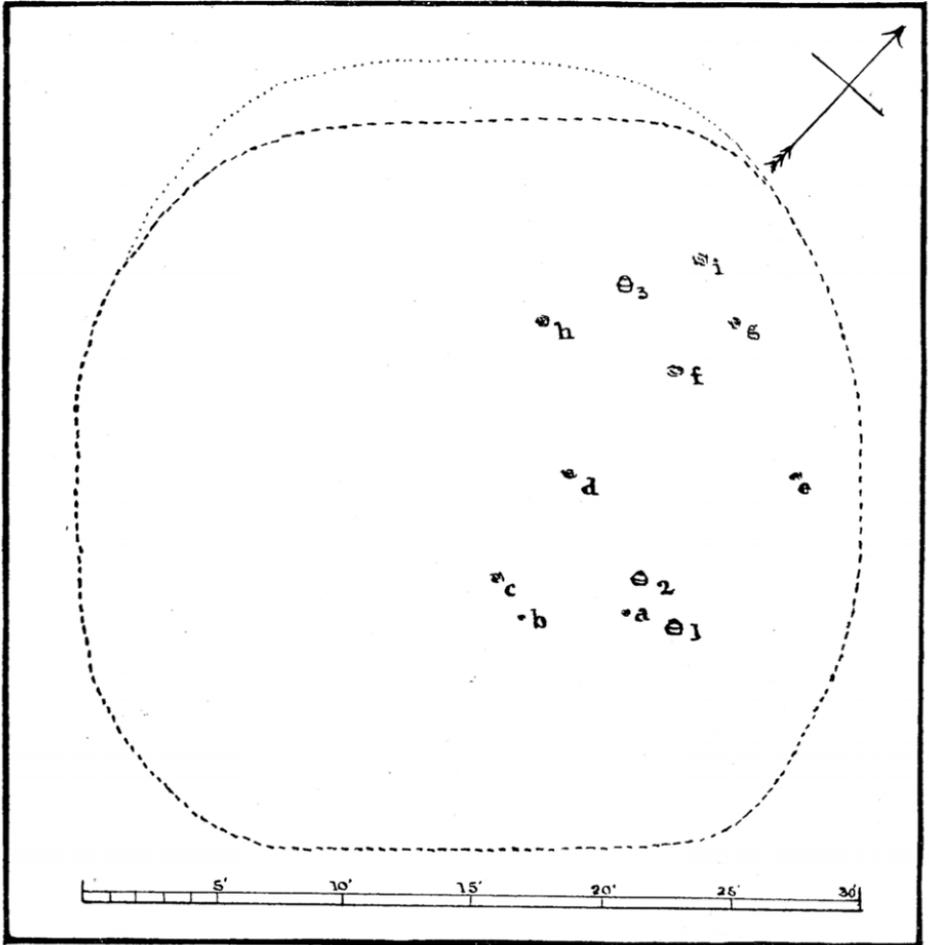
distinguishable, lying on ground sloping at a low angle from north-west to south-east

The plan of work was, by carrying trenches across from N.E. to S.W., to move the whole mass of the barrow about three feet down hill, examining the material composing it and the ground underneath, making it up again on the lower side of the trench as the work proceeded with the material examined.

On the S.E. side, where the work of examination was begun, the heaped-up material was found to be not more than 10 inches in depth, and consisted chiefly of loose earth with a fair sprinkling of stones—small worn fragments mainly—of the volcanic series from the Lakeland mountains with a few pieces of Kirkby slate and a very occasional limestone, but nothing of any great size. In the third trench across, 7 feet from the N.E. side of the barrow and 8 feet from the S.E., a small burial urn was found inverted on the original surface of the moor about 10 inches below the sod which now covers the mound. No cover-stone was found above it. It was of red earthenware, fairly well burned, but very much cracked and broken by ground pressure. It was of very simple design as may be seen by the illustration, was $4\frac{1}{2}$ inches wide at the mouth, $5\frac{1}{2}$ at the widest part $2\frac{1}{4}$ inches down, and 4 inches at the bottom. Its full height was $4\frac{1}{2}$ inches, its sides $\frac{1}{4}$ to $\frac{3}{8}$ inch thick, and its capacity about $1\frac{1}{2}$ pints. Its outer surface was altogether without ornamentation. It fell to pieces on removal, but the photograph shows it as restored by Mr. W. G. Atkinson. It contained nothing but very perfectly calcined bones and charcoal. Its position is marked No. "1" on the plan.

About 2 feet further to the S.W. a small patch of charcoal "a" was met with on the original surface of the moor, and at "b" 4 feet more to the S.W. the site of a fire, 15 to 18 inches below the sod, was found in a slight depression, the contents of which consisted of a mass of

charcoal 2 to 3 inches thick in the middle; and the fire of which this was the remains had evidently been lighted on the spot, because the earth below was slightly reddened



PLAN OF BARROW IN APPLEBY SLACK, BIRKRIGG.

by the heat. A small piece of calcined flint, which may have been a scraper, was found among the charcoal.

In the next cross trench, 10 feet from the S.E. and 8 feet 6 inches from the N.E. boundary of the barrow, a second

urn, "2," was found. It stood upright over a small deposit of charcoal and burnt bone some 10 inches across and 2 inches thick, and was in all respects so similar to No. "1" as to need no detailed description. It stood with its mouth about 12 inches below the sod, and stones were not numerous in its immediate neighbourhood.

In the same trench, 10 feet 6 inches from the S.E., and 14 feet from the N.E. side of the mound, under a large flat stone, a mass of charcoal and burnt earth, "c," about a foot across and 2 to 3 inches thick was examined, but no signs of bone, calcined or otherwise, were met with.

So far the excavation showed the thickness of the barrow to be not more than 10 to 12 inches, with but few stones in its composition, except near the surface; but as the centre was neared many more stones were met with and the depth somewhat increased, but nowhere was there more than 18 to 21 inches of material overlying the ancient surface soil of the moor.

In the trench, 14 feet from the S.E. side of the barrow, two large burial pits were discovered and examined. Only $2\frac{1}{2}$ feet from the N.E. edge a pit, "e," about 15 inches from the surface and 18 inches in diameter at the top was found. No covering stone was noticed. The pit contained much charcoal and dark earthy matter with red burnt soil round the edges, but only one very small fragment of uncharred bone was seen.

About $8\frac{1}{2}$ feet S.W. of the burial pit last described, at "d," under a large flat stone 18 by 12 inches, and at a depth of 13 inches below the turf, was found burnt earth over a mass of charcoal as at the "Druid's Circle" (these *Transactions*, N.S., xii.). The contents of the basin-shaped hollow, 8 to 10 inches deep and 15 to 18 inches in diameter at the top, were carefully examined and found to consist mainly of charcoal intermingled with much calcined bone, but with some only partly calcined though in a very fragmentary condition. Two or three pieces of

"pot" were picked out of the mass, but only isolated fragments of what had apparently been a pretty large vessel. Specimens of the partly burnt bone and of the charcoaly mass were taken. The hollow was scraped out to the bottom, from which a vole's run led out towards the higher ground on the N.W. The red burnt earth was found along the sides and bottom of the pit, thinning out towards the lowest part as might be expected in the case of a wood fire lit in a hole. This, judging from its position near the centre, was probably the primary interment of the barrow, and the evident disarrangement of the stones and the fragmentary condition of the urn would seem to point to a former disturbance of the burial, though at a very distant date. The opinion was expressed that more than one cremated body had been buried in this pit. The bulk of the material was put back and the hole covered up.

At a point marked "f" on the plan, 18 feet from the S.E. and 7 from the N.E. side of the barrow, underlying a flat stone of slaty nature, 21 inches by 18, and about 15 inches below the sod, in a pit 2 feet across and some 18 inches deep, was found a large mass of black earth and charcoal with one very small piece of unburnt bone. The usual flakes of "fired" stone were present in the mass, though not the stones from which they had shelled off. A white quartz pebble was found with this burial and another with that at "d," and here also a green porphyritic one as well. The frequent occurrence of the white pebbles, at any rate, would rather lead to the conclusion that their presence with the burials is not accidental (see *Royal Commission on Ancient Monuments in Wales and Monmouth*, Evidence, vol. i., Questions 284-288).

At "g," 20 feet from the S.E. and $4\frac{1}{2}$ feet from the N.E. boundary of the barrow, another burial pit was uncovered. It was, as usual, overlaid by a flattish stone; it was 12

inches across, bowl-shaped, with red burnt earth round the sides, was not more than 8 inches deep and contained one or two small fragments of unburnt bone among the charcoal and black earthy matter. In the same cross trench but 12 feet more to the S.W. at "h," under a stone 15 inches by 9, and about 15 inches below the turf, about a pint of charcoal was found, but no black earth or bone.

Through this part of the mound from "d" to "h" and right across from N.E. to S.W. stones were more numerous than in the S.E. half already examined; some were of large size and closely packed in. They were mostly erratics from the Lakeland mountains, very few being local limestone. In the next cross trench, $21\frac{1}{2}$ feet from the S.E. side of the examined part of the barrow, and $7\frac{1}{2}$ feet from the N.E. side at "3," under a limestone cover, 18 inches by 9, of very irregular shape and a layer of dark earth 4 to 5 inches thick, a third urn was found. It rested inverted on the north side of a hummock in the bed-rock which here slopes at a low angle from N.W. to S.E. In this position the axis of the vessel was tilted at an angle of about 45° N. and S. The deposit of charcoal and black earth in which the urn was embedded was 30 inches in diameter from N. to S. and about 26 inches from E. to W. The vessel was buried in the black mass and was "bedded" or packed round with seven thin flakes of stone, each from $2\frac{1}{2}$ to 3 inches long and about half as wide. The mouth of this inverted urn, which was about 6 inches across, rested, as before stated, on the bed-rock, 31 inches below the sod. In height it was not more than 6 inches, and while its exterior moulding was a little more artistic than that found at "1," and illustrated in this article, it was still very simple in shape, with curves not nearly so graceful as in the one found at the "Druids' Circle" and illustrated in these *Transactions*, N.S., xii. Its surface was quite plain. Inside were fragments of bone—most of them evidently human, though a few

appeared to be those of birds or small quadrupeds—charcoal, black earth, and ten flakes very like arrow or spear heads or very primitive knives or scrapers. They had evidently been designedly placed where they were found and were not merely accidental, any more than were the seven larger flakes placed round the urn outside. The vessel fell to pieces when the surrounding flakes and charcoal were cleared away, having been fired on the outside only, while within it was but slightly baked. All the fragments were carefully collected, and when dried were placed in the hands of Mr. W. G. Atkinson for restoration.

At a point marked "i" on the plan, $22\frac{1}{2}$ feet from the S.E and $4\frac{1}{2}$ feet from the N.E. boundary of the excavation, without any apparent covering stone, the last burial pit uncovered in the barrow was found 12 inches below the sod, 12 inches in diameter at the top, 12 inches deep, bowl-shaped and lined, bottom and sides, with thin sharp pointed flakes of stone. This pit showed no signs of red burnt earth at the bottom or round the sides, but was filled with a mass of black earth and charcoal, but contained no unburnt bone. This mass was more homogeneous than is commonly the case, and seemed to have been put into the hole after burning and probably after cooling. No tool or "pot" was found here, unless the flakes be looked upon as pseudo-tools.

The examination of the barrow was continued up to the line originally unturfed, but no further finds were made. As, however, the stones were numerous right up to the very edge of the portion already dug, it was thought advisable to uncover and examine the ground several feet more towards the N.W., but, though large stones were met with, they were not placed with any regularity and no further burials were unearthed. The mound was restored to its original shape as near as possible and the turf replaced.

An examination of the rough plan will show that all the finds were made in the N.E. portion of the mound, the three undisturbed urns being all within 9 feet of the north-eastern boundary, while even what was taken for the primary interment at "d" with its fragmentary urn was only 11 feet from the outer edge and so quite 4 feet from the N.W. to S.E. axis, though practically on that running N.E and S.W.

This aggregation of the burials in the N.E. portion of the barrow is somewhat remarkable. Had they been found so congregated on the S.E., S. or S.W. portions, it might have caused no comment, but the N. and N.E. sections of a barrow seem generally to be avoided.
