X.

EXCAVATION OF A BOWL BARROW AT PITYOULISH, STRATHSPEY, IN 1953.

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Summary.—Four bowl barrows were found in a group, each having a ditch without bank (two share part of a ditch), a diameter of 24 ft. from the bottom of the ditch, a height of 1 ft. 3 ins. to 1 ft. 6 ins. above surrounding turf, a flattened top with dimple, and a rectangular stone projecting from Total excavation was made of one. The barrow covered an inhumation at full length in a pit (robbed) and two small empty pits. grave goods, pottery or domestic implements were found, but evidence showed that the burial was not earlier than Iron Age. The barrow had not covered a hut or any representation of a hut. Five fires had purified the site. A large stone had been erected beside the burial and projected from the top of the barrow, with no carving or inscription. It was possible to trace the sequence of events in construction. Fig. 1 shows the ground plan at basic, with base of the large stone and the chief chock stone projected; fig. 2 shows cross-sections.

Situation.—The Pityoulish estate lies along the east side of the River Spey in Inverness-shire, 2 miles NE. of Avienore and the same distance N. of Coylumbridge. Rev. William Forsyth, In the Shadow of the Cairngorms (1900), states that "stones and hut circles" had been cleared from a field "to the side of the road." The field lies immediately to the SW. of the junction of the road Coylumbridge-Nethy Bridge with the road over the Slugan Pass to Loch Morlich (Nat. Grid ref. 28/931152). A few large stones lie by the road and in a gravel pit; one standing-stone 4 ft. 6 ins. high and 1 ft. 6 ins. square at the base remains erect in the field. cultivable land, an alluvial gravel, here forms a wide terrace about 30 ft. above the River Spey, with a scarp of 20 ft. to a low field along the bank. This scarp has a bluff curve, covered with silver birch and broom, just west of the field with the standing-stone, and on the bluff but hidden by the wood stand the four bowl barrows described above. the necessary permission and made a total excavation of the one nearest the road during the summer of 1953 (Pl. XVII, 1).

Construction.—Soil on the bluff consists of turf and dark loam to a depth of 8 ins. resting on hard brown gravel, which in turn rests on yellow sand; near the edge the gravel is only an inch or two thick; on the slope there is no gravel, turf and loam resting on the sand.

In making this barrow the builders scraped off most of the topsoil down to gravel; although fig. 2a (left) shows that it was not thoroughly removed, a clear black line remaining on top of the gravel there, and being occasionally visible elsewhere. Either the centre of their site had a natural dip, with

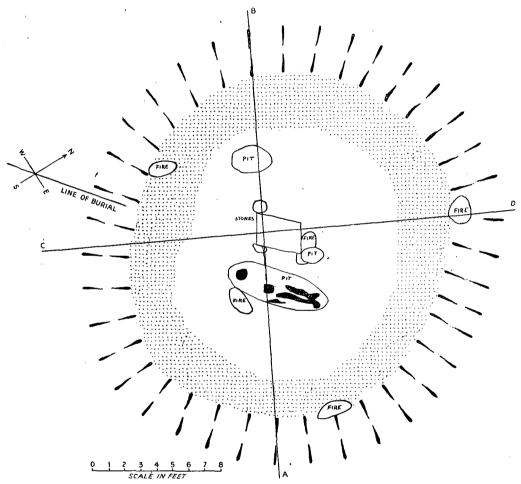
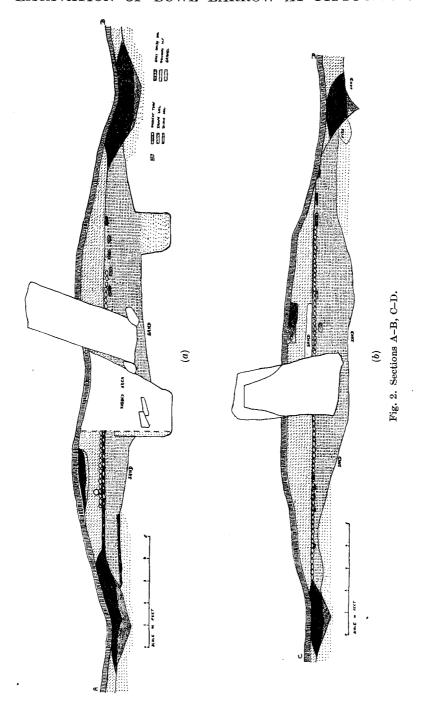


Fig. 1. Plan at basic, with three stones projected.

no gravel between topsoil and sand, or they scraped away the gravel in this part, and in doing so produced a saucer-like hollow in the sand. All pits were dug within this hollow. A ditch was dug in a rough circle, of which the diameter (from bottom of ditch) varied from 23 ft. to 24 ft. 4 ins.; the ditch being 9 ins. deep in basic gravel—deeper where gravel gave place to sand (fig. 2b, right)—and of irregular width. Part of the gravel from the ditch was put along its inner lip, while the rest seems to have been used



during the last stage of erection; possibly the ditch was deepened in the last stages to provide material for the top of the barrow.

Five fires were now lit on the exposed basic soil: one exactly in the centre, a second near the place where the head of the burial pit was to be dug, the others marking an almost equilateral triangle on the gravel upcast on the inner lip of the ditch. The ground at each of these places was burnt a deep red, to a depth of 6 ins. under the heart of the fire and over an elliptical area with a greater diameter in each case of nearly a foot. The heat must have been intense rather than protracted. Charcoal was plentiful on and around the fireplaces, but no bones were found.

Then two small oval pits seem to have been dug: one NE. of the central fire and cutting through its burnt earth, therefore dug after the fire was out; the other, to the W., six feet away from the centre. The former had diameters of 1 ft. and 1 ft. 6 ins., depth 1 ft. 4 ins.; the latter had diameters 2 ft. 3 ins. and 1 ft. 9 ins., depth 1 ft. 6 ins. Neither of these held any indication of their purpose. Although the former had, scattered in its filling, a good deal of burnt earth and charcoal, these could well have come from the fire debris through which it had been cut.

The saucer-shaped hollow was next filled with a grey sandy soil, so as to level the area; a depth of just over one foot being needed in the middle. As part of this operation the small pits were filled, receiving basic sand which had come from them and some of the grey soil.

A burial pit was then dug, 6 ft. 6 ins. by 2 ft. 4 ins., to a depth of 2 ft. 7 ins., with its axis at an angle of 50° from true N.: placed to lie between the two fireplaces in the middle of the hollow. After the corpse had been installed, the pit was filled with a mixture of the sand which had been taken out, and the grey sandy soil.

The order of most events up to this point is probably as stated: because the outer fires were on upcast from the ditch, one of the small pits cut through the debris of one of the fires, the small pits were dug when the exposed surface was basic sand, and the burial pit was dug when a foot of grey soil had been laid on the basic.

A block of erratic gneiss was erected on the W. side of the grave, the nearest edge of its base being one foot away; its size, 2 ft. by 2 ft. 6 ins. by 5 ft. 6 ins. Chock stones were wedged at each corner, the one nearest to the head of the grave being much larger than the others (fig. 2). These, and the base of the standing-stone, were sunk in the grey soil, but at no point came nearer than $2\frac{1}{2}$ ins. to basic sand. The stone was leaning away from the grave at an angle of 70° (Pl. XVII, 2). It is likely that this was erected after the grave was dug—and perhaps filled in—rather than earlier, because the stone must have been insecure until the barrow had been raised further, and would not have been left standing for long with inadequate support. We looked for indications that the stone had been originally vertical; but

there was no sign that the base had thrust the chock stones forward on the side towards the grave and moved away from the others, or that the upper part of the stone had shifted the upper levels of construction. It resembles the standing-stone which remains in an adjacent field.

More of the grey sandy soil was added all over the barrow, producing a flat surface 6 ins. above the top of the burial pit. This soil was homogeneous throughout. It does not occur naturally on the part of the bluff investigated, but is a river-deposited type so probably to be found nearby. It was impregnated throughout with specks of charcoal, so thoroughly that the fillings of the pits—which were mainly of replaced basic sand, with only a little of the grey soil—also contained plentiful specks.

Most of the flat surface was then covered with a layer of small boulders, trodden into the grey soil (fig. 2b), with a dozen larger flat stones lying on top of them in no particular arrangement. This layer, which was over the burial part of the barrow, was in plan a closed U: the closing side, 16 ft. long, lay along a line which, if inserted on fig. 1, would be parallel to the base of the drawing, its centre just below the upper small pit, the curve lying over the lower part of the drawing, its farthest point being 12 ft. 6 ins. from the centre of the closing line. Fig. 2b shows it clearly; fig. 2a shows it broken by the robbing of the barrow. The layer contained a number of patches of black soil, which suggests that turves were mingled with the stones: fig. 2a (left) shows a place where this proved a continuous strip. The turf could have come from the original deturfing of the area of the barrow.

The top of the barrow is 2 ft. 9 ins. above the original bottom of the ditch, and was probably a flat oval (diameters 7 ft. and 5 ft.) above which the standing-stone projected 2 ft., until robbery of the grave produced the dimple which appears on fig. 3. The upper part, 1 ft. 6 ins. in depth from the remains of the flat top, was made of brown soil interspersed with small tips of gravel, sand and decayed vegetation. The heterogeneity of the soil at this level was in marked contrast with the homogeneity of the soil below the layer of stones, the former suggesting baskets of topsoil brought from different places. The upper half of this level was more stony than the lower half, as though mixed with gravel; and we suspect that most of the soil excavated from the ditch was used to cover the top of the barrow as a hard coating. Fig. 2 shows four examples of this heterogeneity—the other tips were too small to reproduce on a diagram—and the sand shown on fig. 2b may have come from the nearest part of the ditch, which goes into sand.

Earlier Excavation.—Reference has already been made to the fact that the grave had been robbed. Excavators had sunk a vertical shaft, guided by the projecting stone, and had removed whatever was in the middle of the burial pit, including the central part of the skeleton. They were not curious to examine the ends of the pit, and their action does not seem to have masked any features of the structure. Efforts have been made to trace this excavation in estate papers of the last two centuries—family tradition of previous owners, and local tradition—but without success.

Finds.—Five fragments of heavily vitrified sandstone were found, one in primary silt of the ditch, the others widely scattered in the grey sandy soil of the lower part of the barrow. We are indebted to Dr F. W. Anderson for the suggestion that these came from an oven, or something resembling it, which had been subjected to fierce heat over a long period of years.

Two small lumps of fused iron were found, widely separated, in the same soil. The same authority is of the opinion that these could not have been produced by such agency as accidental heath fires.

A knob of iron resembling the head of a large nail was found in the upper part of the filling of the burial pit, and is certainly an artifact.

On the floor of the burial pit was an outline in rust on the basic sand which looked very like the surviving traces of a knife, the handle of which had disappeared; but although this was the only sign of iron in the pit, there is much natural iron in the gravel of the site, and one cannot be certain that this outline represented the remains of an artifact.

In the burial pit were remains, in a very fragile condition, of parts of a skeleton (Pl. XVII, 3). The middle had been removed when the grave was robbed, but the extremities had not been disturbed and their position showed that the height had been about 5 ft. 6 ins. Dr L. H. Wells, of the Edinburgh University Department of Anatomy, has been so good as to make the following report:—

"These remains comprise (1) portions of the skull, mandible and uppermost three cervical vertebræ; and (2) the lower ends of both femora, remains of both tibiæ and fibulæ, and some of the bones of both feet.

The ossification of the limb bones and of the base of the skull shows this individual to have been fully adult. At the same time the short length of the lambdoidal suture which is preserved shows little evidence of closure and indicates an age probably less than 35 years. Although the skull bones are thin the muscle markings are strongly developed and the mastoid processes large, suggesting that the skeleton is most probably male.

The fragments of the lower extremities are very much decayed. From having been completely waterlogged, some portions have more or less disintegrated while others have been crushed and deformed by the pressure of the overlying earth. It is therefore most fortunate that a fragment comprising the whole length of the posterior aspect of the right tibia with portions of both articular surfaces has survived undistorted. This fragment measures 358 mm. in length; comparison with intact bones indicates that the corresponding condylomalleolar length would have been approximately 365 mm. Estimation from this measurement by various formulæ gives a stature between 5 ft. 5 ins. and 5 ft. 8 ins., the most probable values being 5 ft. 6·5 ins. to 5 ft. 7 ins., which agrees most reasonably with Mr Rae's estimate of the length of the skeleton as it lay on the ground. This is note-



- 1. Barrow before excavation.
- 2. Grave stone. On right, baulk shows homogeneous grey soil with heterogeneous tips over.
- 3. Burial pit, with lower part of skeleton. On left, grave stone, chock stone, and (behind it) a small oval pit.



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worthy in view of the following remarks made by Trotter and Gleser in a recent study on the estimation of stature from limb bone lengths: 'It is perhaps impossible to determine which equations are best for application to skeletal remains of older races for which there are no records of actual stature. In fact, Kurth has suggested on the basis of his recent experience in estimating stature of middle Europeans of the 8th to 10th century that measurement, when possible, of the overall length of the skeletal remains in situ is preferable to stature estimated from the long bones according to equations based on more recent populations.' This approach, unfortunately, is only possible where burial has been made in the extended position.

The skull is represented by the greater part of the occipital, right parietal and right temporal bones, portions of the sphenoid and left temporal, and a fragment of the right maxilla with the first and second molar teeth. Although the individual was fully adult, the upper wisdom tooth on this side does not appear ever to have been erupted. Of the mandible, the right ascending ramus and hinder part of the body with the three molar teeth are preserved.

A true estimate of the form of the braincase cannot be obtained from the imperfect and somewhat warped fragments. The impression created is of a relatively broad and high but not particularly long skull. Skulls of this type are not characteristic of any single period; they occur in both Bronze Age and Iron Age contexts in Scotland."

Final Comments.—From the few finds we conclude that the burial cannot be earlier than the Iron Age. The lumps of fused iron, the plentiful charcoal and the vitrified sandstone—all found in one level of soil—suggest that this soil came from a nearby habitation site, where the occupants did their own iron-working. The passage referred to from Rev. W. Forsyth invites a search of the neighbourhood for this habitation site. The field, however, was afforested in 1952 and is not available for investigations.

The most striking features of the burial are the inhumation at full length and the gravestone. Pityoulish is not too far up river from the Moray Firth for these features to have been derived from Scandinavian influence of the Migration period. With this in mind, and until further evidence is available from the other barrows, we surmise that a small community lived and buried their chiefs here by the river only a short while before Christianity became accepted in the district.

Professor Piggott has kindly suggested to us that the "barrow" is in reality two, a later one being imposed directly upon the earlier, with the secondary burial above the first. All traces of the secondary burial could have been destroyed when the mound was robbed. This suggestion explains the difference in character between the two levels of soil, and the black streaks of decayed vegetation among the stones which roofed the lower structure

Acknowledgments.—Thanks are due in particular to Colonel W. J. Scott, factor of the Pityoulish estate, who on behalf of the owner, Sir Herbert Ogilvie, Bart., gave permission for the excavation and for us to camp on the site; to Dr F. W. Anderson of H.M. Geological Survey of

Great Britain for his advice on soils, stones and metals; to Dr L. H. Wells for his report on the skeleton; to Mr R. B. K. Stevenson, Keeper of the National Museum of Antiquities; to the Inspectorate of the Ministry of Works; and to the Principal Investigator of the Royal Commission on Ancient Monuments of Scotland.