

III.

SOME CIST-BURIALS IN ORKNEY. BY HUGH MARWICK, D.LITT.,
F.S.A.SCOT. WITH A REPORT ON THE HUMAN REMAINS FOUND BY
PROFESSOR ALEX. LOW, F.S.A.SCOT.

I. CIST WITH URN AT BLOWS, DEERNESS.

In the beginning of March this year I had a call from Mr Aim, farmer, Blows, Deerness, who informed me that he had, a few days previously, discovered a stone-lined cist containing an urn and a mass of burnt bones. Realising the interest of his discovery, he had, very prudently, covered it up again and decided to report the find to me as Secretary of the Orkney Antiquarian Society. It was arranged that I should go out to inspect it, and on Saturday, 9th March, Mr T. S. Peace, F.S.A.Scot., and I went out, taking Mr Thomas Kent along with us to photograph the structure.

The field in which the cist was found lies immediately to the south of the U.F. Church of Deerness. In this field there is a large natural mound which goes by the name of Howan Blo, from which the farm

¹ *Proceedings*, vol. 1. p. 217.

doubtless derives its name. It was when ploughing this field, and when near the top of the mound, that Mr Aim came on the cist through the happy accident of his ploughshare lifting the cover-stone.

Fig. 1 is a photograph of what met our eyes when the cover-stone was lifted off. The cist was quite small, measuring only about 20 inches long by 16 inches wide. Each side and end consisted of a single slab of bluish Orkney sandstone, about $1\frac{1}{2}$ inch thick and 18 inches deep.



Fig. 1. Stone Cist at Blows, Deerness, Orkney.

In the bottom lay a mass of calcined bones to a depth of 5 or 6 inches, while resting on these, and slightly embedded in them, lay a small stone urn on its side. The urn was empty; but, even if it had been full, it could not have held a third part of the heap of bones beneath.

When the bones had been carefully removed, the bottom of the cist showed evidence of very careful construction. It had been hollowed down into the clay subsoil so as to form a saucer-like depression—4 or 5 inches deep in the middle (*i.e.* below the bases of the side-slabs). This "saucer" had then been floored over with thin stone flakes, varying in size and shape, but roughly about 5 inches square by $\frac{1}{4}$ inch thick. Such a feature, so far as I know, has not been hitherto recorded.

The contents of the cist were carefully riddled, but (apart from the urn) no article of human workmanship was discovered. After examination, the bones were restored to their former resting-place, and covered up once more.

The urn (fig. 2) was in a very friable condition, and part of the lip had come away in Mr Aim's hand when he first tried to lift it out. A fragment was sent to G. Victor Wilson, Esq., F.S.A.Scot., an officer of H.M. Geological Survey, and he has kindly identified the material for me. "It consists," he writes, "mainly of dolomite rich in magnesia (that is, approaching $MgCO_3$ in composition), together with a mineral

which seems to be talc. The rock is best described as a dolomitic steatite, and is a highly altered sandy dolomite, the silica having all gone into combination to give talc. The rock is a schist, and, I should say, comes from Shetland."

The urn is of somewhat crude workmanship, and exceedingly unsymmetrical. At the mouth, instead of being circular, it is rather triangular, with the angles much rounded off. The lip is rounded and $\frac{7}{16}$ inch thick. Immediately below, a shallow indentation, about $\frac{1}{2}$ inch wide, runs round the vessel so as to form a sort of collar. The urn measures $8\frac{1}{4}$ inches in height, 6 inches in greatest width at the lip (outside measurement), $18\frac{1}{2}$ inches in circumference at the lip (outside measurement), and $20\frac{1}{2}$ inches at the shoulder, at the widest part. The bottom outside is roughly oval, and measures $5\frac{1}{4}$ inches by $4\frac{1}{4}$ inches, and the average thickness of the body is $\frac{9}{16}$ inch. Round the bottom the thickness is somewhat greater. On the outside the urn shows blackening, as if by fire, and, probably from the same cause, part of the outer surface tends to scale off very easily when touched. As far as I am aware, this vessel is taller for its width than any hitherto recorded from Scotland.

In this country these stone urns seem to occur only in Caithness, Orkney, and Shetland. Somewhat similar urns are found, however, in Norway, and from these facts Dr Joseph Anderson regarded them as of Norse origin. If that argument be valid, the present cist is to be ascribed to the pre-Christian stage of the Norse occupation of Orkney, *i.e.* roughly to the period between A.D. 700 and 1000.

The thanks of all antiquarians are due to Mr Aim for the trouble he took in preserving this valuable relic and the interest and care he has shown. The Orkney Antiquarian Society are especially indebted to him for his kindness in presenting the urn for preservation in their museum in Kirkwall. My best thanks are also due to Mr Thomas Kent for kind permission to use his excellent photographs of the cist and urn.



Fig. 2. Steatite Urn from Cist at Blows, Deerness.

II. GROUP OF CISTS IN GROUNDWATER HILL, ORPHIR.

In January 1928, I was taken by Mr J. Storer Clouston, F.S.A.Scot., to see a cist which had been discovered by a tenant of his, Mr Slater of Groundwater. The site was on the brow of the hill, about half a mile to the north-east of the farm buildings and a considerable way up beyond the cultivated lands of the farm. Though there was a slight elevation at the spot, the surroundings were so undulating and irregular that one could not really say that the site was in any way different in appearance from the rest of the heather-clad moor around.

Cist No. 1 was very small, measuring only about 18 inches each way, and was lined with stone flags in the normal manner. It was about half-full of earth and fragments of bone, but no artefact was found, and, owing to the storminess of the day, we left it after making only a rather cursory examination.

This spring Mr Slater came on three other cists in close proximity, and, on 16th March, Mr Clouston and I again visited the spot and made a more careful inspection.

Cist No. 2 was 22 inches long by 18 inches wide and about 18 inches deep. Its orientation was approximately NW. and SE. In the bottom lay a flat stone which was not large enough, however, to fill the entire space. This cist was also partly filled with ashes and earth which had probably filtered in through the course of ages, but, apart from the skull of a tiny animal (probably a hill mouse), there was scarcely a fragment of bone to be found at all.

Cist No. 3 lay about 5 yards distant to the SE. This was 19 inches long by 14 inches wide by about 16 inches deep. Like the previous two, this also was about half-full of earth and ash, but here there were found, as well, many small fragments of incinerated bones. This cist lay roughly E. and W.

Cist No. 4 lay about 5 yards from No. 3, in a north-easterly direction. It was much deeper down, and considerably larger than any of the others. It measured 30 inches long by 17 inches wide by 15 inches deep. One of the side slabs was too short, and the space left was spanned by a smaller slab set in somewhat obliquely across one corner. To cover it over, the builders had had to have recourse to three or four flat stones, and above these there was a depth of nearly 2 feet of clay, while above the clay again was a deposit of 9 or 10 inches of peat moss.

When the cover-stones were removed, it was seen that fine earth or clay had percolated into the cist and formed a deposit in the bottom to a depth of 3 or 4 inches. Protruding out of this deposit, about one

half of a skull was to be seen and a number of other bones lying in such positions as to suggest that the body had been interred on its side in a contracted posture, as was common, the head to the south-east. In lifting the bones it was found that, while the parts projecting above the earth-deposit were tolerably sound, the parts lying in the surface of the deposit were terribly soft and fragile, while the parts which had been covered by the deposit had decomposed entirely. The under half of the skull was completely gone; the upper half, oddly enough, was sufficiently sound to be lifted entire, and it still contained all the teeth on one side of the upper jaw, save the front central incisor. Of the lower jaw not a trace was left, nor of any of the teeth of the under side of the upper jaw. I looked very carefully, and found one tooth only in the debris, and that, I am of opinion, was the front incisor which was absent from the upper half. Such a marked difference in the decomposition of bones in one and the same grave I had never before observed. The deposit had reached half-way up the skull, and the consequence was that the remaining upper half, at first sight, gave one the impression that the skull had been cleft down the middle by an axe. No artefact of any kind was found in any of the four cists.

It is most unlikely that these four cists exhaust the burials at this site. In all probability it has been a kind of Bronze Age cemetery, and it is of the utmost importance to note that it dates from a period at which burnt and unburnt burials took place side by side. The bones found have been sent to Professor Low of Aberdeen, who reports that the skeleton was that of a male of 25 years of age, the skull showing Nordic characteristics.¹

REPORT ON HUMAN REMAINS FOUND.

By Professor ALEX. LOW, M.D., F.S.A.Scot.

The bones submitted for examination by Dr Hugh Marwick consist of the remains from Cist No. 4, a burial by inhumation, and those from Cist No. 3, a burial by incineration.

The bones of the burial by *inhumation* from Cist No. 4 are those of a male about 25 years of age and 5 feet 3½ inches in height. The bones are in a very fragmentary and fragile condition. The skeleton is represented by one half of the skull (fig. 3); pieces of the two clavicles; the

¹ On reading Prof. Low's *Report* I notice that, while it is the *left* side of the skull that has survived, the surviving humerus and femur are from the *right* side of the body. For that surprising incongruity I can suggest no explanation.

remains of the long bones of both extremities, including a complete right humerus and a fairly complete right femur; as well as fragments of several vertebræ, of the ribs, of the scapulæ, and innominate bones.

The *humerus* measures 315 mm. in length, and is a stout bone with markings indicating a muscular individual. The *femur* has a maximum length of 426 mm. The transverse diameter of the shaft below the trochanters is 36 mm., the antero-posterior is 24 mm., giving a *platymeric* index of 66.6, showing flattening of the bone.

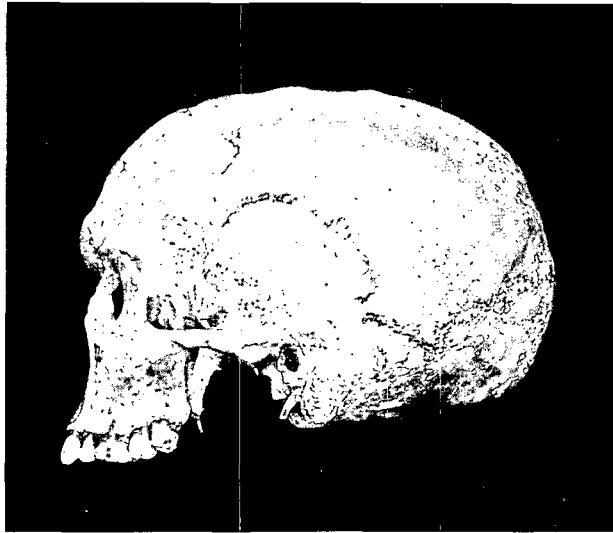


Fig. 3. Skull from Stone Cist at Groundwater Hill, Orphir, Orkney.

The stature, as calculated from the lengths of the humerus and femur, is 5 feet 3½ inches.

The left half of the skull is intact, the right half having decayed away. The measurements of the skull are detailed in the accompanying table, the transverse diameters are approximate, being arrived at by doubling the measurements taken from the mesial plane. The skull is small, moderately thick-walled, and has well-developed superciliary ridges and mastoid processes. The cranial sutures show commencing closure, while the teeth which are present in the upper jaw show very little sign of attrition. The cubic capacity of the skull would have been approximately 1420 c.c.

As viewed from the side, the vault is moderately high, with a fairly full frontal region and well-developed occipital pole. It is a dolicho-

cephalic cranium, with an index of 72·3. The face is relatively narrow, with an upper facial index of 53·2, while the gnathic index places it in the orthognathous class. The orbit is practically square. Unfortunately the nasal width cannot be taken, but in all probability the nasal aperture would place it in the leptorhine group. The skull as a whole presents Nordic characteristics.

The burial by *incineration* from Cist No. 3 is represented by ten pieces of very thoroughly calcined bone varying from 2½ inches to ¾ of an inch in length. They can be identified as human, and include a piece of the lower end of a left humerus, several fragments of leg bones, and a fragment of a rib. On the lower end of the humerus can be seen small greenish-glazed deposits—on examination found to be of the nature of a slag, due to the fusion of sand grains.

MEASUREMENTS IN MM. OF SKULL FROM SHORT CIST AT ORPHIR, ORKNEY.

Sex	Male	Dental length	40
Glabello-occipital length	188	Sagittal arc, 1	128
Ophyro-occipital length	183 2	130
Nasio-inional length	171 3	112
Minimum frontal breadth	100		370
Parietal breadth	136	Length foramen magnum	42
Basibregmatic height	124	Transverse arc	292
Auricular height	104	Circumference	524
Basinasal length	93		
Basialveolar length	89		
Nasialveolar height	65	<i>Indices.</i>	
Bizygomatic breadth	122	Length-breadth	72·3
Nasal height	50	Length-height	66·0
Nasal breadth	Gnathic	95·7
Orbital height, L.	35	Upper facial	53·2
.. breadth, L.	35	Orbital, L.	100·0
Alveolar length	52	Dental	43·0
Alveolar breadth		