## II.

NOTICE OF A BARROW CONTAINING CISTS, ON THE FARM OF NEW-BIGGING, NEAR KIRKWALL; AND AT ISBISTER, IN THE PARISH OF RENDALL, ORKNEY. BY GEORGE PETRIE, Esq., Kirkwall, F.R.S.N.A., Cobr. Mem. S.A. Scot., &c. (Plate XXIV.)

In May 1855, Mr William Fotheringham, the proprietor of the farm of Newbigging, near Kirkwall, informed me that he had accidentally discovered on his farm a cist containing a small stone urn, which, having an unpleasant smell, was left exposed in the open air, and was smashed by some boys. When found, the urn had a quantity of fragments of burnt bones and ashes in it. It was of an oval shape—its greatest diameter at the mouth about 9 inches, and its depth the same. It was narrower at the bottom, which was flat, and perforated by three or four small holes. The fragments of the urn are in my possession.

Having observed some barrows near the spot where the urn was found, and knowing also that another cist containing a human skeleton had been discovered in the same neighbourhood some years previously, I requested the farmer to open some of the barrows, and, if he came to a cist, to send me notice. A few days afterwards I was informed that some graves had been found, and I lost no time in revisiting the place.

The barrow about to be described was situated on the south-eastern declivity of the hill, which forms the west side of the valley between the bays of Kirkwall and Scapa, and commanded a view of both bays. It was about 30 feet in diameter at the base, and 5 to 6 feet high. It was a bowl-shaped barrow, chiefly composed of clay, and contained three cists arranged as shown in section fig. 1, Plate XXIV.

On clearing away the clay from the centre of the upper part of the barrow a heap of stones appeared in view, which was also removed. Beneath the heap were two large flagstones—one nearly 7 feet long, slightly overlapping the other, which was a shorter but much heavier stone. The latter had a piece chipped out of the middle of each end (see sketch D), apparently for the purpose of more convenient handling. On raising the flagstones two cists were found beneath them, each about

4 feet 8 inches long, 1 foot 6 inches wide, and about 13 inches deep. The cists lay about east and west by compass, and were separated by a flagstone placed between them, about 5 feet 4 inches long, having its ends extending into the building at each end (see fig. 3). A flagstone, 6 feet 6 inches long, formed the south side of the south cist, but the north side of the other cist, and the ends of both, were formed by stones rudely built in the shape of a wall, while a large flagstone served as a mutual bottom to both cists. They were entirely empty, and showed no trace of ever having been occupied. On their removal it was discovered that they had been constructed on the top of another cist, whose covering-stone —the large flagstone just referred to—had thus been made to do double service, as bottom to the upper cists and cover to the lower one. The latter cist measured 4 feet 8 inches in length, 3 feet 1 inch in width, and 2 feet 2 inches deep, and was formed by four large flagstones set on edge for the sides and ends, and a fifth for the bottom. Two human skeletons lay in this cist—one at each end—in a flexed or contracted posture.

The largest skeleton (marked 1) lay on its right side—its head about the centre of, and close to, the west end of the cist. The right hand appeared to have been placed under the right cheek, and the left hand within the fold of the right arm, clasping it just above the elbow. The back of the skeleton lay close to the north side, and the knees were drawn up in front of the breast, so that the heels almost touched the thigh bones. In short, the body was completely doubled up, so as to occupy as small a space as possible in the cist. The other skeleton (No. 2) was at the east end, lay on its left side, and apparently had also been deposited in the cist in the flexed posture, for the thigh and leg bones lay across the body, and one, at least, of the hands appeared to have rested on the breast. The whole of this skeleton was so much decomposed that its outline could with difficulty be traced; but the skull was tolerably perfect, although so friable that it could not bear removal. The skeleton was so huddled together that it readily conveyed the impression either of having been previously interred and afterwards reburied in the cist, or of having been dismembered before interment, that it might occupy no more space than the corner allotted to it. Its thigh and leg bones lay above and across those of the other skeleton, showing that the latter had been first placed in the cist.

A quantity of ashes, intermingled with small fragments of calcined bones, lay in a small heap in the space marked C on the ground plan fig. 2; and some of the bones of the skeleton No. 2 lay on the heap of ashes, which had therefore in all probability been placed in the cist before the skeleton No. 2 was laid in it. It is interesting thus to find traces of burning within a cist in which skeletons were found. Possibly the ashes may not have been those of a human body; but I am strongly inclined to think they were, as in numerous instances of cremation in which I carefully examined the bones and ashes, I found undoubted fragments of human skulls generally adhering to, or embedded in, the vitrified substance ("cramp"), which is almost invariably in Orkney found in the graves or barrows in which cremation can be traced.

The skull belonging to the skeleton No. 1, which lay at the west end (F) of the cist (see Plate XXIV. fig. 2), was sent by me to Dr J. Barnard Davis, by whom it has been described in the "Crania Britannica." (See description, and plate iii.) The following is a copy of the description sent to me by Dr Davis, after he had carefully examined the skull:—

"The cranial relic recovered from this cist, probably the most distinctive and faithful representative of an ancient Orcadian known, may be regarded as the capacious skull of a man of more than sixty years of age. Its facial aspect is that of the ancient Briton, in all those features we have so frequently described as characteristic of the race. It is large in every direction. The forehead, of medium height and expansion, is balanced by a deep and wide occipital region. A perpendicular line, rising through the centre of the auditory orifice, divides the receptaculum cerebri into two halves of very nearly equal length, but of greatly unequal capacity. The mass of brain in the hind-half would much exceed that in the fore-half, probably not far from double it. This short but capacious hind-head gives the skull a brachycephalic form, which is typical. Regarding the cranium from behind there is an obvious irregularity in the sides of the occiput, the right bulging out more than the left.

"We may regard our Newbigging specimen as a noble representative of the ancient Orcadian race. In point of size, as is marked by its holding  $83\frac{1}{4}$  ounces of sand, it is above the average. Its stern facial features receive force from this capacious calvarium, but doubtless would also derive from it a modification of power likewise, mental and moral. The evenness and equal bulging out of the calvarium at all points impart a mildness to the skull which is at variance with the angularity and wildness witnessed in some skulls of other races. That this appertained to a man of consequence in his tribe is very probable, from the mode of interment in a cist so carefully built, and encompassed by a barrow of such magnitude.

## " MEASUREMENTS.

	Inches:		Inches.
"Horizontal circumference,	21.0	Occipital region—Length,	4.9
Longitudinal diameter,	7.1	Breadth,	5.3
Frontal region—Length,	5.0	Height,	4.2
Breadth,	5.1	Intermastoid arch,	15.6
Height,	4.9	Internal capacity—834 ounce	s.
Parietal region—Length,	5.5	Face—Length,	5.0
Breadth,	5.7	Breadth,	5.4."
Height,	5.1		

A tracing of the skull, from a sketch sent to me by Dr Davis, accompanies this paper. (See Plate XXIV. fig. 4.)

The skeleton No. 2 was shorter, and more squat in form than No. 1. The skull was also of a lower type, more square in its outline than No. 1, and remarkably thick. I was only enabled to send a few of its fragments, chiefly of the lower jaw, and some teeth and two metatarsal bones, to Dr Davis, who wrote me that "the robust appearance of these parts, and the worn state of the teeth, render it probable that they belonged to a man who had passed the middle period of life."

In 1858 I received notice from Mr James Muir, the intelligent tenant of the farm and mill of Isbister, in the parish of Rendall, that a group of ancient graves had been accidentally discovered close to his house. I visited the place as soon as possible, and found that the largest cist was unmolested, the lid, which had been merely started, having been replaced till my arrival. The turf having at my request been removed from the covering stone, the latter was then carefully lifted, and a cist exposed to view 5 feet 8 inches long on the south-west side, 4 feet

8 inches long on the north-east side, and 2 feet 3 inches wide. depth was 2 feet 10 inches at the longest side, and only 2 feet 7 inches on the other or shorter. This gave the cover a considerable inclination towards one side, apparently to throw off the water which might reach the cover from the surface of the ground. As a further means to prevent water lodging in the grave, the bottom was covered to the depth of about an inch with gravel. It is a very common occurrence in Orkney cists to find a quantity of gravel both within and around the graves; and the Rendall cist was not the only instance of the cover of the cist having been placed with a slope or inclination, with a view to throw off any water that might penetrate to it from above. In fact, the greatest care seems sometimes to have been taken to have the cists kept as dry as possible, and I have on more than one occasion, where a barrow contained three or more cists in a group, found a small drain leading from the centre of the group to the outer edge of the barrow. The long passage in Maes-how probably was used as a doorway or entrance, but I have little or no doubt that its main object originally was to serve as a drain to carry off any water which might get into the interior of the structure, for the outer extremity of the passage was of so limited dimensions that no human being could have got through it.

But to return to the cist at Isbister. At the north-west end of the cist a human skeleton lay on its right side in the flexed posture. The right hand had apparently been placed under the right cheek, and the left arm crossed the breast, and the left hand rested on the right arm. The knees were so far drawn up that the thigh bones touched the right elbow, while the feet were well up under the thigh bones. The skull preserved its form when discovered, but shortly afterwards fell to pieces.

At the opposite or south-east end of the cist, another human skeleton lay in a similar posture on its left side, with the skull close to the end of the cist. The head was bent forward as if in a stooping posture. The mouth was wide open, and the arm, thigh, and leg bones lay huddled together, across and above the leg bones of the other skeleton, which had evidently been first placed in the cist. The knees were within a few inches of the chin. The whole appearance of the skeleton last described could only be accounted for on the supposition that it had either been dismembered, or had been horribly crushed into a mangled heap

before interment. While great care had evidently been taken in placing the lower body in the cist, it was equally apparent that the upper or last deposited body had been subjected to very rough treatment. There was a very marked difference between the two skulls found in this grave, just as there was between those found at Newbigging. That which lay at the north-west end of the Isbister cist was of a much longer form than the skull of the skeleton which lay huddled together at the opposite end. The latter was not only very thick and heavy, but very short from the front to the back—of a triangular shape—very low in the forehead, with deep massive jaw-bones and projecting chin, and was altogether a low type of a human skull. It was, however, in excellent preservation, and apparently belonged to a man of about fifty years of age.

It was not, however, only at Newbigging and Isbister that I have observed short squat skeletons. I have met with the same peculiarity in other graves. The bones were generally so wasted that they crumbled down when exposed to the atmosphere, but I was always able to examine them sufficiently to ascertain that while the upper part of the frame was broad and massive, the thigh and leg bones were not of corresponding size. Could anything in their habits or mode of life account for this peculiarity? They evidently were more accustomed to use their arms than their legs. Possibly they spent much of their time fishing in canoes, where the arms and chest would have almost all the exercise.

So nearly alike are the internal arrangements of the cists of Newbigging and Isbister (with the exception of the heap of ashes), that the plan of the one might serve for the other. In each case the lower skeleton was longer, the skull also of a longer shape, and the bone much thinner than in the case of the upper skeleton. It was only, however, when seen in their original position as first discovered that the difference could be fully seen and appreciated. No one, looking down into either of these open graves, could for a moment believe that the same affection and care had been manifested in consigning the upper body to the tomb as had been bestowed on the lower.

Situated in a south-west direction, and about 5 feet distant from the Isbister cist above described, another was found. It was 3 feet long, 1 foot 10 inches wide, and 3 feet deep, and contained remains of the

skeleton of a woman about sixty years of age. The skull, minus the lower jaw-bone, lay at the east-south-east end; a few bones near the centre, and a heap of burnt bones within a foot of the other end of the cist. A double tooth or grinder much burnt, but perfect in form, was found amongst the burnt bones, and on the top of them lay portions of the bones of the arms and legs. The skull had been taken out, and returned to the cist before I saw it, but I was informed by the young man who first found it, that it was then lying on its face. The covering stone of this cist slanted in the same way as the other.

Another cist, about 18 inches square, was afterwards discovered about 5 or 6 feet from the south-east end of the two cists just described, but it only contained a quantity of fragments of burnt bones lying in a heap in the centre of the cist.

The group I have just described was a very interesting one. was the principal cist with its two occupants, the one evidently of inferior rank to the other; and, at a short distance, another cist containing the remains of a female, whose body had apparently, in a sitting posture, been partially consumed by fire; and, about equidistant from these two cists, a third cist, containing burnt bones alone. Looking at the entire group, I am led to hazard a conjecture that the skeleton with the longshaped skull in the largest cist was that of a chief or warrior; that the skeleton at his feet belonged to a captive or favourite slave, who had been slain and interred along with his master; and that the heap of burned bones in the smaller cist was the remains of other servants or slaves also slain on the occasion, that they might accompany and serve their master in the spirit land. The other cist, with the partially calcined remains of a female, appeared to indicate the existence of a suttee system, which had induced or compelled the widow of the deceased chief or warrior to perish amid the flames.

The similarity between the groups of Newbigging and Isbister is very remarkable and suggestive. The principal cist in each case contained two skeletons, presenting the same distinctive characteristics of the crania, and the same peculiar postures and relative positions of the skeletons. The heap of burnt bones lay, however, at Newbigging in the same cist with the skeletons, while at Isbister they were found in a separate cist. It is not improbable that the skeleton said to have been

found at Newbigging, sometime previous to the discovery of the barrow which I have described, may have belonged to a female, but that, of course, it was impossible then to ascertain, as the whole had been covered up again, and could not be pointed out. There was no barrow visible at Rendall. The ground had been disturbed all around, and a great deal of earth had been removed, but I thought I could still trace the outline of a barrow of large size around the largest cist.

Dr Davis gives it as his opinion that the skull of the lower or most highly developed skeleton at Newbigging resembled that of an ancient Briton. Then to what race did the slave or captive which lay beside him belong? Have we in these squat skeletons, with skulls of great thickness, recovered traces of an aboriginal race of colonists akin to the Fins, Laps, or Esquimaux, whose snow-houses the so-called Picts-houses so closely resemble in form and structure, making due allowance for the difference in material? Such questions are more easily put than answered, but they may be solved at some future period. The discovery and careful examination of a few more of the interesting class of graves to which those of Newbigging and Isbister belong would probably throw some light on the subject.

