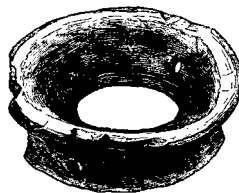


III.

NOTICE OF A LONG-SHAPED CIST, WITH SKELETON, FOUND NEAR YARROW KIRK, SELKIRKSHIRE, FROM COMMUNICATIONS BY THE REV. JAMES RUSSELL, YARROW. BY JOHN ALEX. SMITH, M.D., SEC. S.A. SCOT.

The cist, with its contained skeleton—an account of which I have now to lay before the Society—has an especial interest from the fact of its being found in the immediate neighbourhood of the two ancient unhewn standing stones near Yarrow Kirk; it is also in the very locality, where the large unhewn stone with its Romano-British inscription rudely cut on it, was discovered many years ago, and a notice of it was formerly brought by me before the Society;¹ a cast of the stone being presented to our Museum by our noble President, the Duke of Buccleuch, the proprietor of the lands around. Since that inscribed stone (which apparently formed the cover of an interment) was found, various stone cists have been at different times exposed in the same locality, and the curious ring of cannel coal formerly described, and now in our Museum (see the annexed woodcut), as well as part of a stone hammer, were also found along with them.



Ring of Cannel Coal found near Yarrow Kirk.

The discovery of this cist is detailed in a letter which I received from the Rev. James Russell of Yarrow, and I cannot do better than give his own words.

Mr Russell says:—"One of the Duke of Buccleuch's game-watchers came to me this forenoon to ask what steps should be taken with regard to a sepulchral cist that had been discovered on Saturday evening, near the spot where the others had been found some years ago, and containing a human skeleton. He told me that two servants on Whitehope Farm had seen a rabbit enter a warren, as they thought, and on digging

¹ See Proceedings, vol. ii. p. 484, and vol. iv. p. 524.

it turned out that it had taken up its quarters in the old cist. This, on the upper stones being removed, disclosed the full-length skeleton of a man, the bones mostly in their natural position, though some of the smaller ones had been disturbed by the tiny occupants. I at once went with the game-watcher to the spot, when he and one of those who had made the discovery again removed the covering. The cist is composed of undressed slab stones all round, the bottom being formed like the top, and all carefully fitted to each other. It is about 5 feet 9 inches in length, at the top about 16 inches in breadth, gradually lessening to 12 inches at the bottom. The upper stones forming the lid were only about one foot beneath the surface of the ground ; and though the air seems for some time to have had access from the aperture at the end made by the rabbits, the bones are in wonderful preservation. It is exactly similar in character to the other eight cists found here some years ago, and like them lies directly east and west ; it is about 25 yards to the south of them, and on the ground which I suggested to the Society of Antiquaries as worthy of being explored. Unfortunately, on Saturday evening, the two men had displaced the bones, and a medical man, who lives near this, and who was passing at the time, had carried off the skull. When I saw the bones, they were collected into a heap. As the story had got abroad, and in case the people in the neighbourhood might disturb them, we had them put into a box, and this deposited under ground near my manse, till they should be carefully examined by an anatomist or antiquary. The skull is very entire, with upper and under jaw ; many of the teeth, a good deal worn in the crowns, were in their places, though they soon fell out ; the thigh and arm bones, with parts of the spine, are in good preservation. The forehead is somewhat low. I have written to the Duke of Buccleuch (in London, I believe, at present) a statement of these facts, as he takes a deep interest in all antiquities found on his ground, and mentioned that I had communicated also with you."

Mr Russell concludes his letter by kindly inviting the officials of the Society, and any friends who might take an interest in such matters, to come out and make a careful examination of the cist and the whole locality, offering to obtain assistance, and give us the hospitality of his picturesque and comfortable manse. Unfortunately advantage could not

at the time be taken of his kindness, and I wrote to him for more information, and begged he would be good enough to send us the cranium for examination, after steeping it in thin glue to prevent its being broken in its transit. I had a letter in reply, from which I shall also quote :—

“ I duly received both your letters, and was sorry to learn from them that neither yourself nor friends could come and examine the cist or its contents. I inclose the answer of the Duke of Buccleuch to my communication mentioning the discovery, and asking what he would wish done with the bones. In accordance with his Grace's desire, I wrote Dr Anderson to come here, and on his arrival had them taken up from their place of concealment in my garden. He could not make out the sex from the remains that are in preservation, but the skull has all the appearance of being that of a male, and (judging from the thigh bones and size of the cist) one about $5\frac{1}{2}$ feet in height. He thought it best that I should send them in *bodily* to you, with the Duke's letter, and accordingly painted the head and principal bones with a solution of glue and water. On opening the cist anew, we found nothing save two of the teeth that had dropped out. The bones, after a thorough examination, should be sent back for re-interment, according to the Duke's desire. Though lying in a closet here, exposed to the action of the air for a week past, till I had the opportunity of sending them safely to Selkirk, they have shown no symptom of decomposition. How are we to explain this? It seems all the more strange, considering that in the adjacent cists previously laid bare, which were in ground equally dry, and were more completely covered up, few remains were found, and these on exposure immediately crumbled into dust. In the present instance, could any process of embalming have been adopted, or has the interment been simply of more recent date than the others? When did the custom of burying in cists cease? Such are some of the inquiries which naturally suggest themselves, and on which, I trust, you will be able to throw some light.”

As the letter of our President has been sent to me, and shows the interest His Grace takes in these matters, as well as gives an opinion on the proper respect to be shown to all such remains, which Antiquaries, I fear, are too often apt to overlook, I shall take the liberty of reading it :—

LONDON, *July 21, 1864.*

“MY DEAR SIR,—On my return to London last night I found your letter of the 18th, giving an account of the discovery of an ancient sepulchral cist to the west of your manse. From the circumstance that it lies directly east and west, it is probably the grave of some Christian, whose friends would little dream that his remains would be disturbed by rabbits or by man. You have done quite right in at once informing the Secretary of the Antiquarian Society of this discovery, in case he should wish to visit the spot and examine the remains. Should he wish to have a cast of the skull he is most welcome, and if he wishes very particularly to place the skull in the Museum, I do not object; but I think in most such cases it is as well to rebury the bones, for I have as much reverence for the ashes of those buried 1300 years as I have for those that have been buried at a recent period, and have as much regret in disturbing their remains. This instance is curious as to the bones remaining sound instead of crumbling into dust, and information may be derived from it. Dr Anderson would be interested, and it would be well that he should have an opportunity of examining the bones. A correct drawing and measurement should be made of the cist and of the various stones comprising it, as well as a record kept of the circumstances under which it was discovered.—I remain, my dear Sir, yours very sincerely,

“BUCCLEUCH.

“The Rev. James Russell.”

The cranium and some of the bones are now on the table, and with the valuable assistance of my friend Mr William Turner, M.B., Demonstrator of Anatomy in the University, the whole have been subjected to a careful examination.

The cranium, though rather small, is well formed, and the various regions are fairly proportioned to each other; the parietal bones are flattened in the posterior half of the region, but the supra-spinous portion of the occipital bone is well rounded.

The skull has an extreme length of 7·2 in., an extreme parietal breadth of 5·2 in., and a height of 4·7 in.—the ratio of length to breadth being 100 to 72, and of length to height 100 to 65. It belongs therefore to the class of long-shaped or dolicocephalic skulls.

Its longitudinal arc, measured from the root of the nose to the posterior edge of the foramen magnum, consists of a frontal arc 4·7 in., a parietal arc of 5 in., and an occipital arc of 4·6 = 14·3 in.. Extreme frontal breadth 4·4 in., occipital breadth 4·3 in. Its horizontal circumference is 20·4 in.

The radii of the skull—which give the size or greatest length of its different regions, are measured from the external meatus of the ear to the greatest projection of each region, and are therefore interesting, as showing the relative extent of each—are as follows:—Maxillary radius, 3·8 in.; fronto-nasal radius, 3·6 in.; frontal radius, 4·3 in.; parietal radius, 4·5 in.; occipital radius, 4·1 in.

The length of the face is 4 in., and the breadth at the zygoma 5 in. There are alveolar sockets for the 32 permanent teeth.

The lower jaw is well formed, though rather slender, with square-shaped projection in the middle of the base, and the depth from condyle to angle of jaw is 2·2 in.

The internal capacity of the skull was taken by carefully filling it with glassmaker's sand, having previously stuffed the orbits with wool; the sand was then poured into a glass measure, graduated to inches and parts of an inch, and the cubic capacity was in this way found to amount to 83 cubic inches. The average capacity of modern British crania has not yet been determined on a large scale with very great precision, but Mr Turner informs me that "the mean of 30 normal male German crania measured by Welcker was 88·4 cubic inches; mean of 30 female, 79·3 cubic inches. The mean of 20 male German crania, measured by Huschke, was 88·17 cubic inches; of 17 female German crania, 79·3 cubic inches." This skull, therefore, gives a capacity somewhat below that of average modern male German crania, but still considerably above that of the females, and it falls below the mean capacity of the crania from the long barrows recorded by the authors of the "*Crania Britannica*."

The skeleton is of moderate size, the femur measuring 17 inches in length; the humerus 12·5, the radius 9, and the ulna $9\frac{1}{4}$ inches. The extreme length of the body of the scapula being 5·8, and the breadth opposite the attachment of the spine 3·8 inches. I need not enter into any other details, but shall only state that the bones seem to be those

of an adult male of rather moderate stature and of fairly developed muscular power.

In looking over the various bones, I was struck by the appearance of a peculiar tubercle-like process projecting upwards and inwards from the upper surface of the first rib of the right side, the left being quite natural. This is of very rare occurrence, and is believed by anatomists, from a careful study and comparison of the several and varying cases which have been observed, to be an indication of a cervical rib,—a rib arising from the seventh or last cervical vertebra. The Museum of Anatomy in the University here possesses no less than three or four specimens of this rare variety in different degrees of development—one shows the free head of the rib, and the attachment of its body to the first true rib of the chest; and others show varieties, in size and shape, of this tubercle-like process. Its occasional presence is curious and suggestive, in an anatomical point of view, of the relation or analogy of the transverse processes of the vertebræ to the ribs; and it is also interesting to find such a rare peculiarity occurring in the occupant of one of our early cists. From the rarity of the occurrence of this peculiarity and its anatomical interest, I have added the specimen to the Anatomical Museum of the University.

With regard to the queries in the Rev. Mr Russell's letter as to the cause of the excellent preservation of the bones, and the period when burial in cists of this kind was given up, I shall be glad to hear the remarks of the members.

The former I suppose to be due perhaps to their more recent date, and they would therefore show the long-continued use of the ground beside the old standing stones, as a place of burial; or simply to their higher position in the dry bed, in which the bones were laid—the animal matter of the bones has, however, been all, or almost all, removed. I am not able to answer the latter query in a definite manner, as it apparently has extended over a very lengthened period of time, from the days of the earliest inhabitants of the country with their short stone cists, down to comparatively recent times. It appears to be very difficult to judge whether any of these early interments are Christian in their character, simply because the cists happen to lie east and west, as many exactly similar ones are laid in very varying relations to the cardinal

points; indeed, this rule would not even agree with our modern interments, at least in the neighbourhood of Edinburgh, as we find in our newer cemeteries the graves are laid indiscriminately in every different position, from east and west to north and south, according to the slope of the ground, or the plan upon which the mere subdivisions of the burying-ground are laid out.

The presence among these Yarrow cists of the inscribed stone with its Romano-British inscription—and of the ring and stone hammer—would, however, seem to take us back to a comparatively early period, to times not very long posterior, shall I say, to the last Roman occupation of the country.

Some time after this paper was read to the Society, the bones were returned for re-interment to the Rev. Mr Russell of Yarrow, and in a letter received from him acknowledging their safe arrival, he refers again to the question of their state of comparative preservation, as compared with those found in the adjoining cists; and as he believes he has now got at the true causes of this difference, and the subject is one of considerable interest, I think it right to add an extract from his letter to this communication. Mr Russell states:—

“The box, with the sepulchral remains, reached me safely. They were not in the very slightest degree injured by their long carriage to and from Edinburgh, and have been carefully restored to their former resting-place.

“I have been occasionally considering the questions to which your attention was invited. My first impression was, that their hard and tangible state might perhaps be ascribed to the somewhat peaty nature of the soil. The preservative qualities of moss are well known. On Berrybush, a farm in my parish, the body of a suicide was dug up in a moss, where, according to tradition, it had been hastily buried—the person, clothing, even the hay rope with which the rash act was committed, being fresh as yesterday, after the lapse of more than a century. The circumstances have been minutely described in a letter published in “Blackwood’s Magazine” for August 1823, and furnished the groundwork of a tale by the *Ettrick Shepherd*, entitled ‘Confessions of a Fanatic.’ Now, the scene of the present disinterment was formerly a

waste undulating moor, from which feal and divot had for a long period been taken, and in certain hollow portions of which, peat three or four feet deep was cast at no distant date. Had the bones in question been imbedded in any of these low damp spots, their preservation from decay would have been at once accounted for. But seeing they were discovered on a dry and elevated slope, and were carefully protected by the slab stones that enclosed them, it cannot possibly be due to the nature of the soil; and besides, this theory fails to explain how the remains in one cist should be so numerous and entire, while in all the others alongside of it, the few bones that were met with should almost immediately have become a heap of dust.

“I am now able, as I think, satisfactorily to solve the difficulty. In recently reading ‘Rawlinson’s Ancient Monarchies,’ I was much interested by the description of the tomb-mounds formed by the early Chaldæans, the most remarkable feature of which is the system of drainage. By the effectual arrangements adopted, it is stated that ‘the piles have been kept perfectly dry; and the consequence is, the preservation, to the present day, not only of the utensils and ornaments placed in the tombs, but of the very skeletons themselves, which are seen perfect on opening a tomb, though they crumble to dust at the first touch’ (vol. i. 114). We are told, however, in a footnote, that this latter statement is qualified by Mr Taylor, who has done so much in the work of disinterment. ‘Directly on opening these covers,’ he says, ‘were I to attempt to touch the skulls or bones, they would fall into dust almost immediately; but I found, on exposing them for a few days to the air, that they became quite hard, and could be handled with impunity.’

“Here, then, we have an explanation of the comparatively perfect state of the recently discovered skeleton. The cist, as has been stated, was on dry and sloping ground, and, though near, lay sufficiently beneath the surface to have prevented any injury from rain. The widening of the public road, about thirty years ago, had left its lower end all but uncovered, and thus, it would seem, partially subjected it to atmospheric influence. Judging from the disturbance of the remains, and the comfortable lair at the other extremity, the rabbit had for some time been the occupant of the strange retreat, and the small opening among the slabs by which it entered had admitted the air still more freely. The

very circumstance, therefore, which I had fancied would have tended to decompose the bones, has been the secret of their compactness and durability, and readily accounts for a result which the exposure of only a few days produced on the greatly more ancient relics of Chaldæa."

The thanks of the Meeting were voted to the Duke of Buccleuch for his interest in the preservation of this and other early remains on his lands, and for his desire to make the discovery subservient to the purposes of the Society; also to the Rev. Mr Russell for his careful notices of the discovery.