

II.

ANCIENT GRAVES RECENTLY DISCOVERED ON THE SHORES OF THE FIRTH OF FORTH, NEAR HOPETOUN, LINLITHGOWSHIRE; WITH NOTES AND PLANS EXHIBITED BY MR C. DAWSON, PUBLIC SCHOOL, ABERCORN. BY JOHN ALEXANDER SMITH, M.D., V.P.S.A. Scot.

In the month of August last, a special messenger was politely sent by the Countess of Hopetoun to inform the Society that several ancient graves had been discovered near Hopetoun House, and requesting some of the officials or fellows of the Society to come out and inspect them. Dr Stuart was out of town, and Mr Anderson was also away enjoying his vacation. Accordingly the Treasurer, Mr Carfrae, and myself went out to Hopetoun on Saturday the 26th August, and met the Countess and some of her friends, with Mr C. Dawson, Abercorn, at the place where the ancient graves were found. There were labourers at work, and several long stone cists were uncovered and waiting for our arrival, before allowing them to be opened up. The cists were dug in a sandy mound covered with trees, over a rocky point on the sea-shore, immediately to the east of the village of Society. We found the cists generally lying east and west, covered with several square or irregularly-shaped undressed slabs, and on removing these, found them filled with sand, the sides being also formed of several undressed slabs, and one at the head and foot of the graves. On removing carefully part of the sand, the skeletons were found extended at full length,—the skull at the western extremity of the cist, turned a little to one side, from the natural progress of the decay of the soft parts, and the arms extended along the sides of the body. We removed the skulls and some of the more perfect bones, from some of the three or four cists which we examined, and these are now exhibited.

One of the cists exposed was of a peculiarly rounded shape, and somewhat irregular in its outline, suggesting the idea of a rude cairn; but, on opening it, there seemed no doubt it had been disturbed at some previous time, and put together in this more careless and irregular manner, and that it had been simply a long-shaped stone cist like the others.

Mr Dawson, at my request, took charge of some of the bones, and has forwarded them for our examination. Our fellow and distinguished

anatomist, Professor Turner, has kindly looked over them with me, and we have drawn up the following notes on their state and character :—

Human Bones found in long Cists, near Hopetoun, August 1876.

The collection of bones from Hopetoun consisted of portions of four adult human skeletons, which were all earth-stained, very fragile, and deprived to a large extent of their animal matter, so that almost all the bones were fragments, and the skulls, with one exception, were much injured.¹

The skulls, &c. were marked 1, 2, A and B.

No. 1 was obviously part of an adult male skeleton.

No. 2, an adult female. While A and B were more doubtful.

No. 1. This skull is that of an *aged male*, the teeth in the upper jaw have to a great extent disappeared, and those in the lower jaw are worn flat on the crowns. This male skull was much heavier and coarser in its character than No. 2; somewhat flattened in the parieto-occipital region, and with a tendency to flatness on the vertex. Sagittal and coronal sutures obliterated.

No. 2. Is the skull and skeleton of a *woman in the prime of life*, with the teeth nearly perfect and somewhat worn on the surfaces of their crowns, none having been shed. This skull, which is the only one perfectly preserved, is an elegant well-proportioned cranium.

The lower jaw is well formed and well proportioned, with the chin projecting somewhat forwards. The sutures of the skull are all open; the basi-cranial synchondrosis being quite united. Upper wisdom teeth are protruded, but not the lower.

The femora and one humerus are entire, and are slender and well-shaped bones. Femora 16 inches in length, and distinguished by having deep hollows on each side of the linea aspera, so that the linea stood out in a very well marked ridge.

A, is the skull, *probably of a woman*, evidently of an *aged person*, as the sockets of the upper teeth have almost disappeared. This skull was so much injured that nothing definite can be said as to its form; but what

¹ The bones were, at the special desire of the Countess, sent back to Hopetoun for reinterment.

remained of it in the sagittal and coronal regions showed the corresponding sutures to be ossified.

B. The sex of this skull is more doubtful, as the face had been entirely broken off. It is that, however, of an *aged person*. The lambdoidal and sagittal sutures are ossified, so that there can be no doubt this was an aged cranium. It also was flattened in the parieto-occipital region, and there was a slight depression parallel to and close behind the region of the coronal suture.

The following table gives the dimensions of these skulls :—

Skulls.	1.	2.	A.	B.
Extreme length, . . .	7·4	6·9	7	6·7
Extreme breadth, . . .	5·2 Opposite squamosal parietal suture.	5·1 Opposite parietal eminences.	5·1	5·3
Height,	4·7	4·8		

The character of these skulls is therefore as follows :—

- No. 1, 7·4 : 5·2 :: 100 = 70, dolicocephalic.
 No. 2, 6·9 : 5·1 :: 100 = 74, not so dolicocephalic
 A, 7 : 5·1 :: 100 = 72, not so dolicocephalic as No. 1.
 B, 6·7 : 5·3 :: 100 = 79, almost brachycephalic.

The Society is also indebted to Mr Charles Dawson, Abercorn, for a detailed account of the discovery of these cists, with carefully-prepared plans of the cists and the ground. An abridgment of these notes is here given, and the plans are exhibited.

Mr Dawson says :—“ About the middle of June some labourers from Queensferry were employed to obtain sand for building purposes at Society, near Hopetoun. During their operations they came upon several stone cists containing skeletons. On the return from England of the Earl and Countess of Hopetoun, they took an interest in the matter, and resolved to have the spot properly examined. Her ladyship, having

kindly asked me to meet her at Society on the 21st August for that purpose, I did so, and during that day and the remaining days of that week, the facts which constitute the basis of the following notice were obtained.

“The mound where the coffins were found consists of a sandy knoll 132 yards long, formed on red sandstone rock projecting about 66 yards into the sea, and at its greatest height not more than 20 feet above high-water mark. The sand is of a very light colour, and very dry.

“The graves consisted generally of three or four flat stones, set as side slabs, from 18 to 22 inches long, 16 to 20 inches broad, and 3 inches thick, with a suitable stone for head and foot, the top being covered with stones about the same thickness, stretching over the sides of the coffin. They measured from 5 feet 10 inches to 6 feet 1 inch in length, and from 16 to 18 inches in breadth. One coffin gradually contracted towards the foot, and terminated without a foot-stone.

“In every case the bones were much decayed, and of most only the more solid parts of the skeleton remained. The skulls were, however, usually complete, though in some cases the side on which they rested was quite decayed.

“No traces of chisel marks were found on the stones. They were simply rude slabs gathered from the rocks on the neighbouring shore. No implements, weapons, or coins were discovered. From the regular manner of sepulture, the absence of weapons, ornaments, &c., and the skeletons being apparently those of men, women, and children, the idea of a place of interment, perhaps for some centuries, of a simple, poor, unlettered people presses itself almost to conviction upon the mind.”

On Mr Joseph Anderson's return to Edinburgh he, along with Mr Carfrae, paid a visit to the locality, but they have, I believe, nothing particular to tell us of what they saw beyond what has been already mentioned.

The cists lay principally east and west, and pretty close together; they seem to have been an ancient burying-place, as, in addition to the bones exhibited, I saw those of a very aged person, and also of a child or a youth, which had been found in some of the cists previously opened; the remains were therefore of persons of both sexes and of all ages.

Similar groups of long cists have been discovered in various parts of the country around Edinburgh, as well as in this same county of Linlithgow, as those now described; as at Queensferry, Kirkliston, &c. several of these are detailed and published in the "Archæologia Scotica" and in the "Proceedings of the Society."

The principal peculiarity in this instance seems to be, that the cists had no slabs arranged in the usual way as a pavement or bottom to the different graves, which apparently was present in most of the other instances described.

From the entire absence of any vestiges of clothing, or remains of any kind, although these were carefully sought for by myself, Mr Dawson, and the others who examined these cists, we are quite at a loss as to their supposed date or antiquity. Still, from the undressed character of the slabs, and the style of the interment, we believe they must belong to an early period.

We are, of course, aware that interments in these long-shaped cists have continued in some localities down to quite a recent period, especially near the sea-shore; but I believe no tradition even remains to tell of any ancient burying-ground in that locality at Hopetoun.

The special thanks of the Society are due to the Right Honourable the Countess of Hopetoun for her courtesy in giving the Society early information of this discovery of these ancient remains on her property, and her kindness in providing for their careful examination under the superintendence of some of the officials and fellows of the Society.