NOTICE OF THE DISCOVERY OF A STONE KIST AT BROOMEND, NEAR INVERURIE, ABERDEENSHIRE. By JAMES HAY CHALMERS, Esq., F.S.A. Scot., Aberdeen.

By the kindness of Mr C. B. Davidson, advocate, I heard of the discovery of this kist the day after it took place, and at once accompanied him to inspect it.

It had been discovered on the lands of Broomend, belonging to Mr Tait, Crichie, lying in the parish of Kintore, and within about one mile of Inverurie. In the immediate neighbourhood are several objects of interest,—the well-known Bass of Inverurie, the circle containing the Sculptured Stone, and the remarkable underground cairn and kist, examined by Mr C. E. Dalrymple, and described in the first volume of "The Sculptured Stones of Scotland;" and several monoliths are all within a short distance of the spot. Within about a mile of it, in trenching some woodland on the Hill of Crichie (crowned by an old entrenchment), Mr Tait found, under a large stone, several balls of shale, about $1\frac{1}{4}$ inch in diameter, slightly flattened at one side, and with the remains of iron fastenings inserted in the centre of the flattened side, and a bronze implement, with iron fastenings inside, similar to one figured in the "Proceedings of the Society," vol. v. p. 341. These are now in my possession. About three hundred yards from the site of the kist now to be noticed, Mr Tait found, some time since, three urns in a bank of gravel. These were not in kists, but each covered by a flat stone, and went to pieces on being disturbed.

Some months since, Mr Tait, in making a new road from the Inverurie turnpike to his paper-mills, had occasion to cut through a large natural bank or mound of sand and gravel. I examined the face of the bank, and satisfied myself that it was undisturbed since deposited there, in regular layers, by the action of water. In the section of it which I saw, I was much struck by the appearance of a small vertical bore, as it were, passing from the top downwards, for 8 or 9 feet. It suggested the idea of the early people having bored with a stick of some three inches diameter, to make sure that dry sand existed to a considerable depth, before adopting the hillock for a place of interment. If such a hole were so bored, the rain-water falling in would fill the hole by degrees, by washing the sand downwards, and produce exactly the appearance it pre-I regret that I had no opportunity of ascertaining if this $\mathbf{sented}.$ was really a bore,* or was a vein extending farther into the hillock. About May or June, in making the road, Mr Tait discovered a kist. but it was empty, and so attracted little attention. It must have been of considerable size, from the dimensions of the cover which I saw lying by the roadside.

We found that the second kist had been discovered in widening the road. The slab forming one side had fallen out, as the workmen en-

^{*} Might this apparent bore have been caused by the root of a plant?

croached on the sand-bank. In this kist were deposited two skeletons laid on their sides in a flexed position; their heads at either end of the kist. Both were male skeletons, and of tall, strong-boned men. The skeletons were covered with a curious matty substance, but in which I could trace nothing to show that it had been either cloth or skin. It seemed more like the matting of roots sometimes found inside an urn containing bones, as if the roots of some strong rooting plant, such as broom, had found their way into the kist and covered the whole bones, while extracting nourishment from them. But it is to be observed that no trace remained of any leading or larger root to connect these with the surface.

Two urns were found in this kist, both nearly perfect; the ornamentation was very graceful, and differing much in style. So far as we could ascertain, they had been placed at the back of the neck of each Several pieces of what I take to be willow twigs were found; two or three flint flakes, and a few pieces of charcoal; but no personal ornaments or finished weapons. One object made of clay or bone, which was found with the urns, bones, &c., is herewith sent, and may have been an ornament of a rude nature. There was also found a small piece of oak (sent), the cross-cutting of which is worthy of examination. kist was formed of large flat granite slabs, not much over 6 or 8 inches thick at any part—one at each end (in one case backed by another), one at each side, and one as the cover. These stones were carefully cemented with finely-wrought clay, so as perfectly to keep out water coming from There was no stone in the bottom of the kist, but it was bedded with about 10 inches deep of water-worn pebbles; those at the top averaging about an inch diameter, those below rather larger. These, with the porous nature of the sand-bank, insured perfect dryness below. Several small pieces of charcoal were interspersed among the pebbles, but there were no other signs of burning. The kist was 5 feet 3 inches in length inside, 6 feet 2 inches in length including the two end stones, and measuring along the open side. It was from 2 feet 6 inches to 3 feet in depth. including the pebbles, and averaging about 2 feet 6 inches in width, at one end being a little more.

I send herewith three boxes for the Museum, containing the two skulls, two flint flakes, supposed clay ornament, pieces of willow, &c.

(Unfortunately, a portion of the lower jaw of the larger skull had, notwithstanding Mr Tait's precautions, been carried off before we arrived.) The two urns; nearly the whole of the bones of the two skeletons, small pieces of the stuff which covered them, portions of the clay cement, &c.

I should like much to hear the opinion of some good judge, on an examination of the skulls and bones, as to the race to which the owners of them belonged. The extremely good preservation in which everything was found is no doubt to be ascribed to the care with which all moisture was excluded; and little, therefore, can be inferred from this. The absence of metal ornaments, or of carefully-finished flint weapons, might be held to indicate great antiquity, but the high finish of the urns (corresponding in character to that found in the same locality, and figured at page 116) would point in the contrary direction.

Since the finding of the above kist, two others have been discovered in the same sand-bank (where, indeed, there may be yet more) presenting even still more interesting features; but as I was unable to be present at the opening, I have asked Mr Davidson to send you his notes, which he has kindly agreed to do. [See Communication at p. 115.]

NOTE.

[It is with sincere regret we have to record the death of Mr Hay Chalmers, which occurred before his MS. could be revised for press.

With the kind assistance of Professor Turner, the two crania found at Broomend have been examined. They are marked A and B respectively. A is in a more perfect state of preservation than B. The skulls possessed many characters in common, both being massive, with well-marked processes and osseous ridges, and were most probably, indeed, male crania. Their breadth generally was well marked, and from the breadth of A (the only one perfect enough to be measured), compared with its length, the crania belonged to the sub-brachycephalic class. The profile outline of the crania presented a very uniform rounded curve. Face broad; and, as far as could be judged in the broken condition of the nasal region,

flattened in character. The great zygomatic breadth of A is due to the projection of the zygomata close to their roots. The lower jaws are massive, with well pronounced chins. The sutures of A are all open, and the wisdom teeth are only partly crupted.

In the skull B the coronal and sagittal sutures are partly ossified, and the wisdom teeth erupted to the outer side of the alveolar processes. The teeth generally have the surfaces of the crowns only slightly worn.

The crania probably belong to the "Ancient Caledonian" race, as it has been designated, of the northern part of our island; and the kists in which these remains were found, to the class of short kists, but larger than usual in this particular instance, from the fact of two bodies being buried in the same kist.

The following are the details of the principal measurements of these two crania:—

				Λ.	в.
Extreme length, .				7.5	$7 \cdot 2$
" breadth, .				5.9	
" height, .			•	5.5	$5\cdot 2$
Greatest frontal breadth,				4.8	4.7
" parietal "				5.9	
" occipital "				4.1	
" zygomatic,				5.6	5.0
Basicranial length, .					4.0
Longitudinal frontal arc,	(Aı	pprox.)		4:5	5.0
" parietal "				5.0	5.0
,, occipital,				4.6	4.1
Sum of the longitudinal ar	с			$14 \cdot 1$	14.1
Transverse frontal arc,	.			13.6	12.5
" vertical "				13.4	
,, parietal ,,				13.8	13.6
" occipital "				10.4	11.0
Horizontal circumference,					prox.) 20 ² 2
Proportion of length to breadth in A is 78 to height 73.					
Proportion of length to height is 72 in B.					
Cranial capacity of A, 92 cubic inches.					
oraniai capacity of A, 52 c	COTO 1				J A S 1

J. A. S.]