

The following Communications were read :—

I.

NOTES OF THE EXCAVATION OF TWO SHELL-MOUNDS ON THE EASTERN COAST OF ABERDEENSHIRE. BY CHARLES E. DALRYMPLE, Esq., F.S.A. SCOT. COMMUNICATED BY JOHN STUART, Esq., SEC. S.A. SCOT.

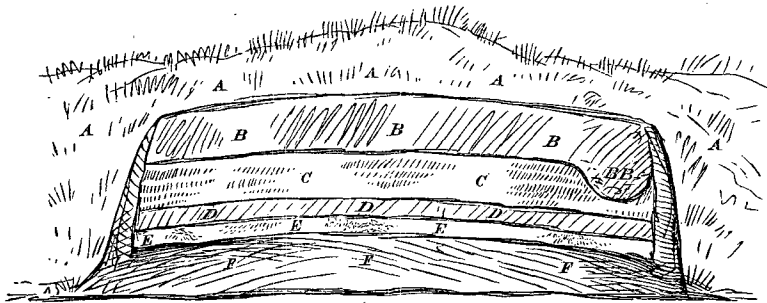
The district in which these remains are situated has some peculiar features which make it worthy of description. It is a peninsula, lying between the sea and the river Ythan, which stream, for the last three miles of its course, flows to the south-eastward, its general direction, previously, having been about east. The peninsula may be roughly described as an equilateral triangle, about $3\frac{1}{2}$ miles each way, covered for the greater part with low hummocks of sand, clothed with bent grass, but which, towards the southern extremity, attain almost the size of hills, and are totally devoid of vegetation. Standing among the long swelling slopes of pure hard sand, with a hot August sun overhead, one is struck by the strangeness of the scene, and its likeness to the deserts of hot countries, rather than a portion of a Scottish county, within a few miles of some of the most noted stock-farms in Great Britain.

That part of the course of the Ythan which skirts this peninsula of Forvie (that being its name) forms at high tide an estuary, called the "Sleek," probably derived from the Gaelic "sliach," mud, as at low water it is reduced to a dreary expanse of mud banks, through which the little river steals slowly to the sea. Along both shores of this estuary, at different distances from the water, lie many shell-mounds, some of considerable extent; but those described in the following notes lie on the eastern side, opposite to the little port of Newburgh.

The present writer was first made acquainted with their existence by Mr Thomas Jamieson, factor on the estate of Ellon, a gentleman well-known to our leading geologists, taking himself an honourable place in their ranks. Mr Jamieson had satisfied himself by a partial examination of the nature of these mounds, and willingly joined in the fuller investigation which the writer decided on making, and in which they had the

valuable aid of the Rev. Samuel W. King, Rector of Saxlingham, Norfolk, an able geologist and antiquarian.

The first mound examined lies along the bank of the Ythan, close to high-water mark, and looks like one of the numberless sand hummocks which have been described, covered with bent grass. On close examination, however, numbers of shells are seen to be mixed with the sand and the roots of the grass, which feature first drew Mr Jamieson's attention to the peculiar nature of some of these mounds. Its length is about 150 feet, by 30 in width; height from 15 to 16 feet. An excavation was made in the side facing the river, showing a perpendicular section of the mound, and laying open the whole strata, which were alternately of pure sand and of deposits of the shells of the cockle, muscle, and winkle, all of which had been exposed to the action of fire, having evidently been cooked,—the site of at least one fire-place having been plainly discovered. The accompanying sketch, No. 1, of the



No. 1. Section of Shell-Mound at Forvie.

section made in the mound will show the position of the strata and their vertical measurements:—

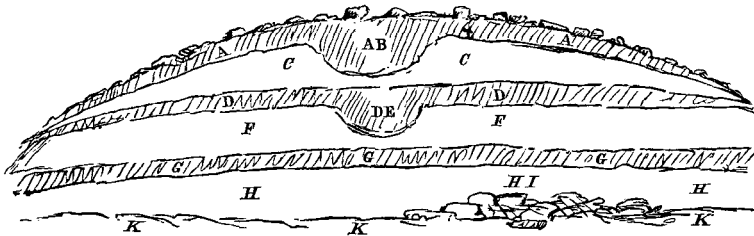
- A. Sand, clothed with bents, 4 feet.
- B. Burnt shells, 5 feet; BB, fire-place, containing burnt stones, charcoal, shells, &c.
- C. Alternate very thin strata of sand and burnt shells, 5 feet in all.
- D. Sand mixed with a little charcoal and burnt matter, 1 foot.

E. Pure blown sand, 1 foot.

F. Old beach, surface 3 feet above present high-water mark.

No weapons, implements, or remains of any kind whatever were found in this mound, excepting what have been mentioned.

The other mound examined was distant about a mile from the first, lower down the river, and lying further from the bank, at a spot where the peninsula is lower than anywhere either north or south of it, and about $\frac{1}{2}$ a mile from its southern extremity. The ground here is hard old beach, from 6 to 8 feet above the level of the sea, and with little sand on the level surface, although blown into heaps in the immediate neighbourhood. The surface of this mound was covered with shingle, but with many larger stones intermixed, and many shells, both of which evidently had been exposed to the action of fire, while most of the stones appeared as if they had been red hot at some time, being split and cracked as well as discoloured. On the bare ground, near the mound, are numberless flint chips to be found, as indeed is the case over a great part of the peninsula, where the ground has not been over-blown with sand. This mound was of an irregular horse-shoe form, about 90 yards



No. 2. Longitudinal Section of Shell-Mound at Forvie.

in length, but only from 8 to 10 yards broad, and not rising more than from 5 to 6 feet above the original surface of the ground. A section having been cut across the east end of the mound, the strata appeared as shown in sketch of mound No. 2:—

A. Shells from 1 foot, decreasing in places to a few inches of thickness; here and there a little sand over all. In the crest of the mound, at the spot *AB*, was a hollow or pocket going down into the next

stratum, which was sand, and was evidently a fire-place similar to that discovered in mound No. 1. It contained burnt stones, which had formed the hearth, bones and teeth of deer, and of a small species of ox, also shells and charcoal.

C. Pure sand, 1 foot.

D. Shells, 1 foot; *DE*, a fire-place similar to that in the upper stratum, containing the same substances, with the exception of the *bones*.

F. Blown sand, 16 inches.

G. Shells and charcoal, 2 inches only.

H. Blown sand, 16 inches, overlying the original beach. At *HI* the most interesting discovery of the day was made,—a hearth of stones marked with fire, which had been made on the original surface of the ground, which was beach *K*, and lying on and among which were bones of large animals, fragments of charcoal, and, among the bones, one which had been polished and sharpened as if for use, also a fragment of much corroded *iron* (which is exhibited). It must be mentioned that a rude stone celt (also exhibited), and which has apparently been subjected to the action of fire, was found *on the surface* of the mound, but, excepting these, no implements or other remains were found to indicate who or what the authors of these accumulations were. The conclusion, however, to those who witnessed the excavation, seemed indubitable that, at some very remote period, a fire had been made on the beach, where portions of certain large animals had been cooked and eaten—that later, though how much so it is impossible to say—but when 16 inches of sand had accumulated over these remains, the natives of the country had either encamped on the spot at different times, and lived on the shell-fish of the estuary, or that great “feasts of shells” had been successively held, with intervals between sufficient to allow of the accumulations of sand which exist between the strata of burnt matter. The discovery of *iron* in the lowest and earliest deposit of the whole, while a *stone* weapon lay among the latest, is also somewhat remarkable, although by no means conclusive of any very great antiquity in these remains, which may quite possibly have come there many centuries within the Christian era; but all must be in a great degree surmise, until further explorations in the shell-mounds of Scotland supply additional facts, on which alone any correct conclusion can be formed.