V.

NOTES ON THE EXCAVATION OF A MOUND CALLED SHANTER KNOWE, NEAR KIRKOSWALD, AYRSHIRE. By the Marquis of AILSA, F.S.A. Scot.

Shanter Knowe is situated about $1\frac{1}{4}$ miles to the west of Kirkoswald, and about $\frac{1}{2}$ a mile from the sea. Its position is shown very distinctly on the Ordnance Survey map of Ayrshire, sheet xliv. (6 inch scale). It is a conical mound rising to a height of about 18 feet from an almost circular base measuring 83 feet in diameter from north to south, and 80 feet in diameter from east to west. The top of the mound is nearly flat, and though slightly irregular in outline is approximately circular, measuring 34 feet in diameter from north to south, and 32 feet from east to west.

On Monday, 17th April, we started to sink an 8 feet square shaft in the centre, down from the top of the knowe, with four workmen. By the evening they were down about 5 feet through a sandy gravelly soil; found nothing except a fragment of what appeared to be a double tooth, and another piece, apparently a small front tooth.

Tuesday, 18th, still digging, weather cold and wet both of these days. Wednesday, 19th, weather fine; on visiting the mound with Mr Cochran-Patrick, we found the men were down about 10 feet. The find, up to now, consisted of a few old and mouldering bones of a reddish brown colour, a couple of long teeth, apparently front ones, and a few bits of broken pottery; one, the largest piece, having a raised pattern and being glazed a light greenish colour. Soil chiefly sandy and gravelly, and easily dug, but inclined to fall in at the sides. More or less of a mouldering damp earth, in clods, coming up at intervals, and a stratum of darker coloured earth now beginning to show in the south side of shaft near the bottom.

20th April. Lining shaft with wood nearly all day. Dug down another 2 feet, making 12 feet in all. Still finding bones, damp mouldering clods as before, also three or four fragments of tusks (apparently); one a short piece of large diameter, very dark in colour, also one or two pieces of a burnt or fused substance.

After this date I was not at home for some days, but left instructions that as soon as the men had sunk the first shaft to the level of the field, they should sink a second shaft to the south of, and immediately adjoining the first shaft, as there was an appearance of a dark loamy soil in that direction, in which alone was anything found.

The men sunk the second shaft accordingly, and came on the loamy dark soil again, about 5 feet down from the top; they continued through strata of this, intervening with sandy gravelly soil, till they again reached the bottom.

In the loamy soil only did they find anything.

Their find consisted chiefly of bones and teeth as before; a piece of rusty chain, very old; a few chips of flint; a small lead disc with a hole in it; and small heaps of mouldering periwinkle shells.

The workmen described these as looking as though a basin or bucketful had been emptied down at a time, after the natives had eaten the contents. A small boar's tusk, broken in two, was also found in this shaft.

As soon as the men got to the bottom of this shaft they started to sink a third one, to the south, and immediately adjoining, as the red loamy earth was still running in this direction; thus making a hole altogether 24 feet long from north to south, by 8 feet broad.

The results of this hole were much the same as those of the two others, the loamy red soil being met with about 6 feet from the top, and continuing down to near the bottom. As a rule, anything that was found was not nearer the surface than 5 or 6 feet, or deeper down than 12 or 13 feet, the total depth from the top of the mound to the level of the field being about $16\frac{1}{2}$ feet. In this third shaft the men worked out of the loamy soil, which did not extend across it, in a southerly direction, and the whole south of the shaft consisted of gravelly sandy soil, in which they found little or nothing.

In the strata of red loamy soil, in this hole, the men continued to find bones, large teeth or tusks, also half a jaw-bone, with smallish teeth, and a large piece of another jaw with large teeth in it.

On questioning the man in charge, he gave it as his opinion, if any further digging was to be done, a couple of shafts might be put down, one on each side, east and west of the central shaft, as the red loamy soil, in which alone anything was to be found, still extended laterally both ways; whereas whilst the No. 2 or present centre shaft was full of it, the No. 1 shaft had it only in its south side, and the No. 3 or southernmost shaft only in its northern half.

I should say that a very modern-looking iron nail found amongst the rest of the relics was supposed by the workmen to have fallen in from above; also that the bones found in the No. 3 shaft differed from those from the other two shafts, in that they were more solid, darker in colour, and had nearly all been split, for getting at the marrow. Most of the fresher looking periwinkles and limpets also came out of this shaft.

After excavating the third shaft, I ordered the loose earth, which had been previously well turned over and searched, to be filled in again and work to be stopped until I should get a report on the articles already found, and an opinion as to whether it was worth while proceeding with any more digging in this mound.

Operations were resumed on 21st August and continued till the 26th. These results are summarised in the following report by Mr Andrew D. Page:—"The soil was excavated 8 feet wide from the south side of the third shaft outwards, to the outside of the mound on the south side. A few bones and pieces of flint were found, similar to those found in the shafts previously sunk. No large stones or palisading of any kind were come upon by the workmen during the operations. The soil has been put back into the pits and the mound restored to its former state."

The following notes on the objects found are communicated by Dr Anderson:—

The osseous remains found in the excavations at Shanter Knowe are chiefly those of the common domestic animals,—the ox, horse, sheep or goat, and swine. The red-deer is represented by the basal portion of an antler, which has been sawn partly through and then broken off close above the burr; it measures $5\frac{1}{2}$ inches in circumference just under the burr. The roe-deer is also represented by the basal portion of one horn, measuring $2\frac{3}{4}$ inches in circumference just above the burr. The presence of the dog is indicated by the number of bones which are obviously gnawed, and splintered by gnawing. The shafts of the long bones are

generally broken across and splintered, probably for culinary convenience, but many of them exhibit also unmistakeable evidence of having been broken into still smaller splinters by the gnawing of dogs. There are fragmentary remains of the bones of some kind of fowl, and, at least, one trace of fish. The shell-fish are the common periwinkle, the limpet, and a *Cyprina*.

The objects manufactured or manipulated by man include the following:—

Stone.—One flint scraper, very well made, and thirty-three fragments of worked flint, being either broken nodules, or splinters broken off from nodules, showing no secondary working.

Two small flint cores, each 1 inch in length, from which flakes have been struck off all round. One of these seems more of the nature of an agate than a flint.

Three small and regularly formed flakes, each about three-quarters of an inch long, which have been apparently struck off from cores like those above mentioned.

Naturally rounded and flattened pebble of quartzite, $2\frac{3}{4}$ inches diameter, and $1\frac{1}{4}$ inches in thickness, which has been used as a hammerstone, bearing marks of use on one edge, and on both of its flat faces.

Metal.—A round slender pin of bronze or brass, $2\frac{3}{4}$ inches in length. Whorl of lead, thin and flat, and unornamented, 1 inch in diameter, with a central hole nearly $\frac{1}{4}$ inch in diameter.

Portion of an iron chain, the links about an inch in length, and intertwisted like those of a curb-chain of a bridle.

Two iron nails, flat-headed, 1 inch, and $2\frac{3}{4}$ inches in length. Several pieces of slag, apparently of iron.

Pottery.—Portion of the bottom and bulging side of a vessel of thin reddish pottery, much blackened on the outside, and without any appearance of glazing.

Portion of a vessel of similar pottery, with dark-brown greenish glaze. Two fragments of a vessel of similar pottery with a light-brown glaze. Three fragments of pottery of thicker and stouter make, with a greenish glaze. One of these has a rude face just under the lip of the vessel. All the pottery is wheel-made.

