NOTES ON THE EXCAVATION OF A KITCHEN-MIDDEN, AND ON A CUP-MARKED STONE, AT DEN OF DUN, FORFARSHIRE. By LIEUT.-COLONEL H. W. LUMSDEN, F.S.A. SCOT.

This kitchen-midden was found on the right bank of the wooded ravine called the Den of Dun, about 200 yards above the bridge on the Edzell road. Its existence was first suspected by Mr Black, gamekeeper at Dun, who was struck by the quantity of shells ejected from a rabbit-burrow, and by the occurrence of a layer of shells on the side of an old and long disused quarry, about 25 feet from the rabbit-hole, and on the same level.

When Mr Black showed me the place, in October last, I had little doubt that his surmise was correct, and, permission to dig having been readily given by the proprietor, Mr Kennedy-Erskine, work was begun on the 27th November. It proved a heavier job than we expected, for, after removing some four or five feet of solidified old quarry rubbish, we had still to dig through an equal depth of earth before the deposit of shells was reached. The Earl of Southesk and Captain Stansfeld of Duninald were present; and the men who were working were very intelligent, and much interested in the excavations. Every spadeful of soil, therefore, was closely scrutinised, but nothing of value was found,—only a vast quantity of shells—cockle, periwinkle, mussel, &c.—broken pottery, and bones,—the usual contents, in short, of a kitchen-midden.

In the short winter days, it was only possible to make a preliminary exploration; but on the 24th March, again with Captain Stansfeld's assistance (Lord Southesk was unfortunately absent from home), a more thorough examination of the midden was made: the whole of it was uncovered, and we dug down to a depth of about fifteen feet below the

surface of the bank. But the result was disappointing. Except a spindle whorl, shaped like a small pulley-wheel, of stone, 13 inch in diameter, we found nothing new; only, as before, a prodigious quantity of shells—cartloads of them—mostly cockle; bones, some of which were apparently those of a small horse or pony; and bits of broken pottery, of the same kind as were found in the first digging in November. The fragments of pottery are chiefly portions of jars of a coarse reddish or greyish ware, with a mottled brown glaze. One shows part of the mouth of a jar $3\frac{1}{2}$ inches in diameter, having a spout protruding $1\frac{1}{2}$ inches beyond the rim, and communicating with the interior by an opening under the rim of \(\frac{3}{4}\) inch in diameter. On either side of the spout are two loop-handles 4 inches in length from the insertion at the rim to that at the shoulder of the vessel, the opening of the loop being $2\frac{1}{2}$ inches in length and $1\frac{1}{2}$ inches in greatest breadth at the neck of These loop-handles were evidently intended to be used to tilt the vessel in drinking from the spout.

From an examination of these, Dr Anderson is of opinion that they belong to some period probably not earlier than the 12th century, and we must bow to his authority, and say with him that the interest in this case lies in the fact that the midden is *not* old,—that it is mediæval, and not prehistoric.

But if it is so, we are confronted with some difficulties. If there was ever any village or collection of dwellings in the immediate neighbourhood, the very tradition of it has passed away. The midden is a mile and a half from the nearest point of the Montrose basin, and more than 100 feet above the level of the sea. Here the quantity of animal bones is insignificant compared with the enormous mass of shells; and the midden-makers, who lived so largely on shellfish, always established themselves, as was most natural, near the source of supply. they to select a site at such a distance from it? Mussels are still plentiful in the basin, but the nearest spot to the midden at which cockles are found (and that only, as I am informed, in very small quantities) is at Rossie Mill, on the south side, five miles from the Den of Dun. Of course, they may have been, and probably were, in former times more plentiful in all parts of the basin.

In Denmark, kjökken möddings have been found far from the sea, one no less than ten miles from it, but in all cases the explanation is to be found in changes in the conformation of the land (see Dr Munro's paper in *Proceedings*, vol. xviii. p. 219). In none is the change anything approaching to what we have here; and if the midden is as recent as even Dr Anderson's earliest limit, we are bound to admit that the habits of the prehistoric midden-makers must have differed very widely from those of their mediæval successors.

It must be apparent to everyone who looks on the Montrose basin and surrounding country from any high point in the neighbourhood, that long ago the sea covered the whole plain up to and beyond Kin-But it is only when we study the geological map that we see how great the change has been, and that the whole of this district was a wide fiord, running up to Farnell on one side, and up the valley of the South Esk on the other, to within two miles of Brechin, having a few islets near its mouth, and here and there a sheltered creek. these is undoubtedly the Den of Dun, the lower end of which is marine alluvium of the '2nd terrace.' But by the twelfth century all this was changed. The tongue of land on which Montrose stands had been silted and blown up; the town of Montrose itself was in existence; the wide open fiord had shrunk into the basin; and the Den of Dun, from end to end, had been long left high and dry, except for the burn tumbling through it. Great as these changes are, I think there is reason to believe that they are of comparatively recent date; and if the midden had been prehistoric, its position on the bank of a salt-water creek would be quite intelligible.

Cup-marked Stone at Den of Dun.—This stone stands at the edge of the wood, on the left bank of the 'Den' of Dun, a little beyond the bridge on the Edzell road. It is a block of whinstone—one of those which the stonebreakers call 'heathens'—and must have been brought from some distance, for here we are on the Old Red Sandstone.

Mr Young, the tenant of the farm of Fordhouse, informs me that when he first came to the farm, forty-six years ago, this stone and two others near it (without marks of any kind) were in the ruins of a small

croft at this spot, called Somes Hill, and that he himself carted away everything except these stones, which, being very heavy and not worth

moving, were rolled aside to the place

they now occupy.

An unopened burial-mound—possibly the origin of the name Somes Hillis close by, and on the opposite side of the Den is the kitchen-midden which has been previously described, so that we have here a little group of archæological monuments of three distinct ages.

After several minute examinations of the stone, I can have little doubt that the cups are artificial; but it must be noted that the photographer who executed the accompanying picture unfortunately, though with the best intentions, rubbed a little moist earth into the cup-marks to make them come out



Cup-marked Stone at Den of Dun.

more clearly in the photograph, and this gives the cups apparently a ragged outline, which is untrue. They are really circular, as shown in my rough sketch.