

III.

NOTES ON THE FORTIFIED SITE ON KAIMES HILL. BY FRED R. COLES, COR. MEM. SOC. ANTIQ. SCOT.

Kaimes Hill and Dalmahoy Hill, or "the Dalmahoy's" as they are commonly called, are very prominent natural features as one journeys from Edinburgh to Mid-Calder, from which station the first-named hill is easily reached in a walk of forty minutes. But though this fine hill is itself a noble object, and from its summit a magnificent panorama may be seen, its interest to the archæologist lies in the fact of its having once been a fortified site (fig. 1).

In the *New Statistical Account*, Edinburgh, 1845, there is a good general description of the Kaimes Hill quoted in a paper by J. A. Smith, M.D. (contributed to the *Proceedings*, x. 141), in which the number of the hut circles is roughly computed to be thirty-four, and their interiors supposed to be "flagged or roughly paved with thin stones." The Museum Catalogue also records that in 1882 Sir W. F. Douglas presented "fragments of red and grey pottery, portion of silver coin, and fragment of small bronze ring, from Kaimes" (*Cat.*, p. 221).

The geological character of the hill is described by Geikie as consisting of columnar greenstone, the chief eruptive rock in the locality, belonging to the Secondary formation. Vast numbers of stones, however, are scattered all over the southern slopes, and many of these are not the disintegrated fragments of the rock *in situ*, but ice-carried masses of various kinds. The greenstone itself disintegrates into very remarkable pieces; and more than once during our survey, Mr Cunningham and I were in great doubt whether to class certain of them in the same group with the remains of the hut-circles, or not.

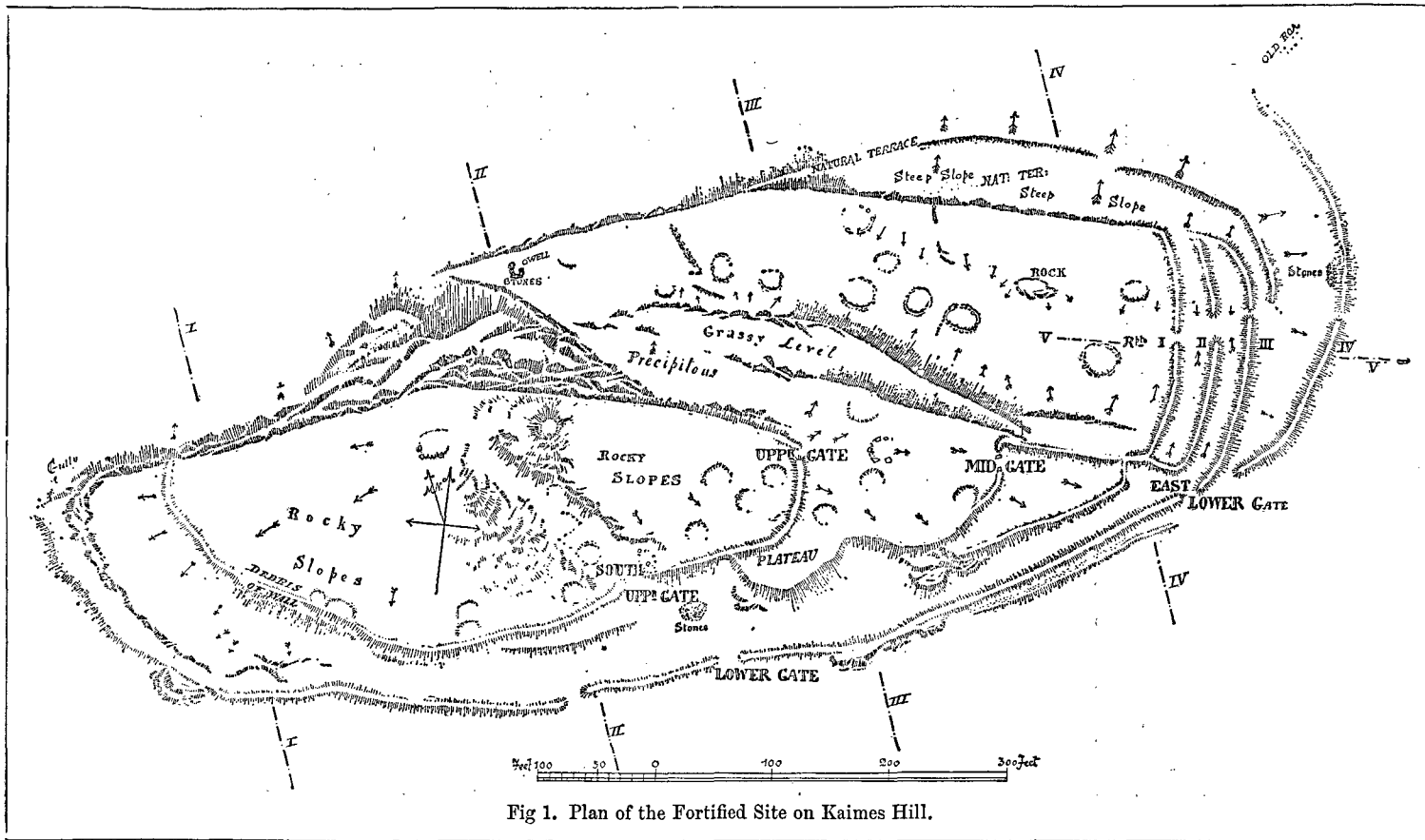
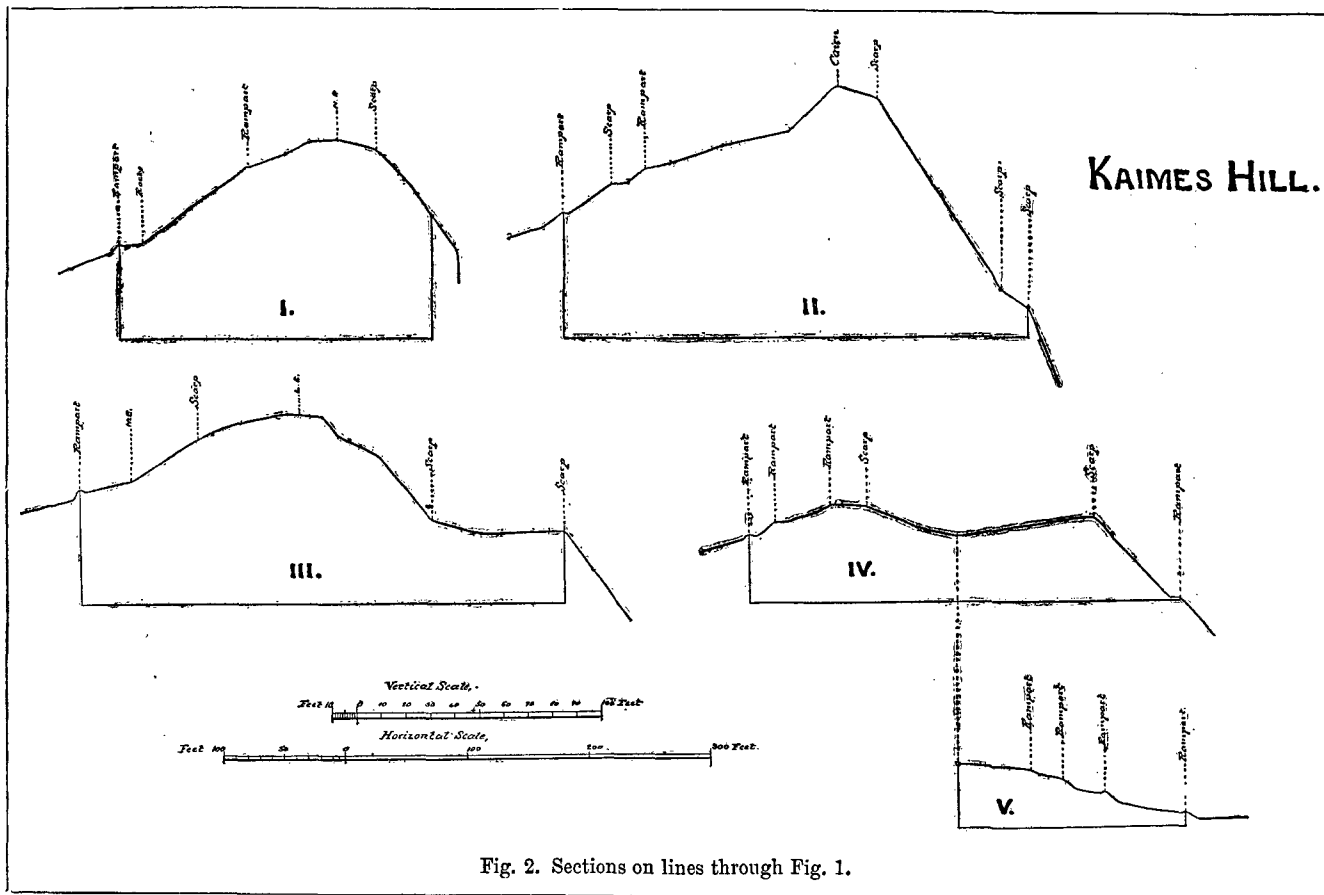


Fig 1. Plan of the Fortified Site on Kaines Hill.

The main front of the hill facing north consists of bristling crags of this columnar rock, from the base of which falls a long steep slope of broken rocks, varying from huge masses several tons in weight to such as could be lifted in one hand;—defence enough here, without ramparts, for the long oblong-shaped hollow within which we find the largest numbers of hut-circles. This hollow measures E. and W. 560 feet; it is 170 feet wide at its eastern extremity, and tapers off westwards to a sharp corner, in which is the well. It is at the east limit of this area that the artificial defences become most clearly defined: they consist of four fairly strong ramparts, composed in the main of stones (?). From the extreme east rampart, straight across to the point where the most westerly rampart ends at the brink of a gully, the length of the fortified enclosure is 1132 feet. Its greatest width at the east end is 355 feet on line of section IV. (see fig 2), at the middle it widens to 400 feet (section III.), and towards the west, where the rampart begins to curve well up N.W., the width is only 215 feet on section-line I. With the exception of the hollow on the north between the smaller crags and the debris-slope, there is no large space at all level, the entire area otherwise rising interruptedly and unevenly into the rocky summit, which is 800 feet above sea-level, and is, or rather was, crowned with a cairn.

The hut-circles are found very numerous also over this irregular ground, several of them near the ramparts, and three at least formed by using the rampart as a part of the construction.

The ramparts simply follow the slopes and bends of the hill in their general lines, taking advantage also of out-cropping rock wherever convenient. The higher enclosure measures 537 feet by 222, its northerly protection being the abrupt rocky ledge afore mentioned, which, when becoming attenuated towards the east, is helped by a low rampart of large stones; here there is an evident gateway, and the rampart is carried round south and then west, till a second break, 20 feet wide, indicates a second gateway, which, I think, has been made unusually strong and important by a sort of watch-tower on its east side. The rampart is then continued W. and N.W., till it terminates on the cliff-edge. There are thirteen hut-circles within this area. The space enclosed by the next rampart contains only five, all at the east end, and



on a curving natural plateau, the course of which has been taken advantage of to run a piece of the rampart eastwards to the middle gateway. Again to the east is a rudely triangular space, in which we found no trace of a hut-circle; yet it is carefully and strongly enclosed by a rampart, which in its extension becomes the innermost rampart of the north hollow. The outer south rampart, which runs into rampart III. of the east side, has two gaps in it. We came to the conclusion that the one on the east—better defined than the other—had been probably the south gateway. Between this and the upper south gateway are the remains of what was possibly a cairn—at any rate a great conglomeration of stones. The same thing occurs at the extreme east, close to rampart IV. These four ramparts are broken just in the manner and at the points shown in our survey; but why so, it does not seem easy to explain. Most of the hut-circles are very nearly round; the one highest up near the summit is, however, distinctly rectangular in part, and others approach an oval. They vary in size from 27 feet to about 15 feet in diameter, measured within the rim of stones. They all appear to have been, without exception, formed first by digging into the face of the sloping ground, so as to obtain as much of a hollow and a shelter as possible with the least trouble. They are all clearly defined by the great stones set round their rims; and though in some of them (markedly so on the southern slopes) the stones are considerably smaller than in others, and overgrown with grass, yet their circularity and their artificiality cannot, I think, be doubted. The boulders and the greenstone fragments so abundantly evident all over the hill do not in any instance fall into such circles and such unmistakably humanly-arranged forms.

The existence of a spring of water, doubtless, was the incentive to the former occupants for choosing Kaimes Hill in preference to Dalmahoy Hill as a dwelling-place. We, however, found that the summit of Dalmahoy Hill is slightly protected, in a rude and intermittent style, by a stone rampart, the traces of which are so slight that we thought them scarcely worth planning out. This, the more easterly summit of the two, might well, owing to its greater height, have served the purpose of an outpost; but, with so remarkably well adapted a shelter as the area

of Kaimes Hill supplied, it would not have been needful to carry out extensive defences on Dalmahoy.

The plans and sections accompanying this notice were prepared from a survey of the hill made by Mr J. H. Cunningham and myself during April 1893. They are reproduced here to scale, and the arrows so numerous employed indicate the downward slope of the ground. The Vth line of section (fig. 2) shows the structure of the four ramparts at the extreme east end.