

*7th, Description of the Ord Hill of Kessock. By George Anderson, Esq. F. R. S. Edin. &c. In a Letter to Dr Hibbert.*

MY DEAR SIR,—I beg leave to add another to your list of vitrified stations, though, from certain circumstances, my examination was less perfect than I could wish.

The Ord Hill of Kessock, and the well-known vitrified fort of Craig Phadrick, constitute the great pillars to the entrance of that part of the Moray Firth called Loch Beaul; the distance between the summits of the two hills is about six miles, their bases being disjoined by a stretch of nearly three miles of sea. Craig Phadrick has been computed at a height of 540 feet, while the other may be about 50 feet higher; and the view from the one is nearly the same, or is at least equally extensive, as that from the other.

The area on the summit of the Ord Hill, or that within those heaps or walls of stones which are its most interesting features, is nearly as extensive as any I have seen among our northern vitrifications or British hill forts. Both the south and north fronts of this hill are steep and rocky, and the former, in fact, may be described as consisting of a succession of rough overhanging cliffs, composed of the old red sandstone and its associated conglomerate, extending from the top down to the very edge of the sea.

Corresponding to the (W. S. W. and E. N. E.) bearing of the principal sandstone ridges, the only accessible points are from the eastern and western extremities; and, properly speaking, the approach by the latter is the only one not interrupted by large rocks and precipices. The part, therefore, facing the west and south-west are crossed with the strongest walls, while the cliffs at the opposite end seem to have been left entirely unprotected. Unlike most of the hill enclosures in this quarter, the area on the top of the Ord of Kessock is not smooth or covered with grass: it is exceedingly rough and rocky, rising in the shape of a small cone for at least 140 paces above the exterior wall. Like all of these stations, however, it has something singular in its form when viewed from a distance, and, like most of them, it raises itself superior to and

somewhat detached in its upper parts from the sandstone ridges with which its base is united.

The rocky character of the hill is a good deal concealed by the thick pine woods, which completely encircle it; but on our advancing towards the top, we find it is almost naturally impregnable, the form, as already hinted, being that of a cone or rocky dome, springing abruptly from the gentle slopes.

Our only, or at least the easiest, access being from the west, the first symptom of human labour we encounter is a low semicircular wall of rounded loose stones, stretching across, and forming a perfect barrier between the northern and southern precipices. Within this, 10 or 12 paces, we meet a second wall, of a much stronger and bolder aspect. The stones have fallen greatly in front, but its thickness is 14 feet; and, where its extremities rest on the native rock, it is there joined and strengthened by the outer wall. We have thus two very formidable walls, formed at their junctions, or at the south and north corners, into kinds of bastions; and it is curious to remark that the entrance on this side appears to have been at the south corner, quite close to the naked precipice.

The fragments of rock thus piled into dry loose walls, from their abundance and size, and from their being exposed to the fury of the western storms, are not in the least overgrown with grass or heather. They therefore attract the notice of every visitor; but it seems most extraordinary that no suspicion was ever entertained by scientific travellers, or by the inhabitants of Inverness and the neighbourhood, of vitrified matter occurring among these stones, or on other parts of the hill. So slight have been all the examinations of this spot, that the walls in question have been described in several works as *perhaps* the foundations of a fort, intended to be vitrified, but abandoned before the igneous operation had commenced or was required. They were thus not put on the footing of ordinary British hill-forts, and the fact has been misrepresented of their not containing vitrified substances. Very small portions of these certainly do occur in the body of both walls, but in such small quantities that it is easy to conceive how they have hitherto escaped notice. Such is not the case, however, in the walls or mounds I have now to describe. The first is situated on the south-eastern side, and proceeds from the vicinity of the two western walls, or the point where they unite, along the top of the cliff, terminating at a little more than half way towards the eastern corner. What was the necessity for this mound at all it is difficult to conceive, for the rocks below and along the whole of this side appear sufficiently inaccessible, and little is added to their defence by this mound, which is not more than *three* feet high, scarcely double that breadth, and which, besides, is not placed on the very verge of the precipice, but several paces within, allowing plenty of room between it and the edge for taking up a position or acquiring a firm footing. Yet this is the mound (I call it so to distinguish it from the western walls, and from its being mostly covered with grass) which not only abounds with, but is actually

arched over with matter most completely vitrified. The ridge or mound terminates, or rather gradually falls in height, and thereby ceases, on the rocks towards the eastern angle, where it would be of as much service as on the parts it is actually found upon. Perhaps, however, the height to which the rocks rise in that direction may have shown the total uselessness of walls there, while it might be proper to have one at the other end, in order to increase the security of the western entrance.

The vitrified matter on the mound now described does not appear to be connected or arched in one unbroken line; for in a long rent or fissure similar to the great one on the south side of the lower mound in Craig Phadrick, I could remove large rounded portions of it with my hand, which would have been impossible had the whole been cemented into one overlying mass. We therefore cannot say that the vitrified substances covering the loose stones and earth which form the body of this mound are *IN SITU*, although, for determining this point satisfactorily, all the heath and grass should be removed from the surface.

The rock acted upon by fire, as elsewhere, is generally gneiss, with occasional portions of hornblende and granite; and, contrary to Williams and almost all his followers, I observed here, but only for the second or third time in the Highlands, some undoubted specimens of vitrified *conglomerate*. In one or two cases I further remarked a tendency in the parts which suffered the greatest heat to assume a prismatic form, and in many, strings and surfaces of a pure white glass, like melted felspar or porcelain.

Having examined this side of the hill, I shall now beg your attention to the northern, beginning on the west from the junction of the two great outer walls. The joint wall continues in the same line, but decreases in size as it approaches and rises over the northern rocks. Yet though at last it can be but faintly traced, and though the quantity of herbage exceeds even that on the opposite division of the hill, portions of vitrified matter now and then appear jutting above the surface, which are perhaps connected with larger masses below.

From the east to the north-east corner, as might be guessed from the above, no walls or mounds occur; and I have therefore only further to remark, that a cap or dome, similar to the summit whose defences I have now described, and nearly as high as it, starts up on the north, also covered with pine trees, and not known as separated from the true summit till we come close upon them. A deep natural ravine, however, intervenes between the two, cutting off all connection; and the only access from this gully is by a slanting fissure running down the northern side of the true summit.

This might have been used as a pathway, easily defended or easily shut up; and we might thus have a second entrance to the fortification, similar to that already noticed at the south-west corner.

Below the walls altogether, and just at the spot where the conical summit shoots

off from the upper acclivities of the hill, a line of stones occurs, which might either have formed a separate and base wall, or which (with greater probability) are only fallen portions from the walls above. Even here, however, I picked up three or four fragments of burnt matter.

I cannot say whether these details may be of any use in discussing the general question as to the origin of vitrified forts;—they will at least serve to prove that the hill in question ought to be ranked among the vitrified stations; and from the few facts stated having never been recorded before, we may be led to suspect that many hills with similar appearances have not yet been properly noticed.—I remain, &c.

GEO. ANDERSON.

*Plan of Castle Spynie.*

- a*, Outer wall.
- b*, Second or main wall.
- c*, Vitrified mound.
- d, d*, Supposed pathways.
- e*, Summit.
- f*, Fallen stones, &c. at the base of the cap.
- g*, Second or lower summit.

