XIX.—Collections relative to Vitrified Sites.

[Continued from page 291 of the present Volume of the Society's Transactions.]

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[Read to the Society December 15, 1831.]

My reason for preferring the use of the term VITRIFIED SITES to the more popular one of VITRIFIED FORTS, has been explained in a former dissertation. It was one of the conclusions to which I arrived, that it would be as easy to show from various examples, that most of the oldest defences, or Duns, of Scotland exhibit no vitrification whatever, as that when vitrification occurs, it is not restricted to the precise limits of an area characterised by rude ramparts of stone—and hence, that the term VITRIFIED FORT is too often the language of error, which might with considerable advantage be exchanged for the more comprehensive and untheoretical one of VITRIFIED SITE.

It was also pointed out that some of the sites where vitrification is found were ancient places of rendezvous for tribes or clans upon any public occasion whatever of peace or warfare—that many vitrified sites might, from historical and internal evidence, be shown to have resulted from beacon-fires formed by piles of wood, after the manner described by Olaus Magnus, Snorre, and other northern writers—and that other public occasions, festive or religious, might have given rise to the same effect of vitrification.1

1 I am convinced that it can only arise from inadvertence that I have been lately represented by my friend Mr J. D. Forbes, in a paper published by him in Dr Brewster's Journal, upon one of the vitrified forts of the Western Highlands of Scotland, as advocating exclusively a beacon theory. If he had read my dissertation with any degree of attention, many of the remarks which he has gratuitously made might have been spared, and he would have found that he was only repeating the observation which I had previously advanced, that other occasions (which I particularly specified) might have given rise to the same effect of vitrification; and "that if we are entitled to suppose that more than one ancient observance might have induced the vitrification in question, we are authorized in the expectation that the character of the sites in which vitrification occurs will be found as diversified as the multifarious national customs to which the effect may be possibly ascribed. (See the 181st page of the present Volume.) In fact, I cannot find that I am actually opposed in this paper upon any conclusion whatever which I have advanced, and am therefore happily spared the necessity of a controversy with a gentleman for whom I have every esteem, on account of the talents and zeal which have so early signalized his scientific career.

2 To me, says Mr Cordiner, with much quaintness, "it would seem highly improbable that ever an application of fire had been made to cement buildings, however others may have been amused with the theory. But should any body be disposed in future to make such an experiment, I adjure the most approved receipt. The method is simple:—Take a mountain, whose summit contains a moderate area, bounded as much as possible with precipices, except at the place you are to enter. On the brink of these precipices place large stones, the drier the better, damp, such; and let the interiors be filled with vitreous iron ore: to this heap make a backing of loose stones, piled carelessly behind the said brick; then build a stack of wood round the whole outside of the wall, kindle a fire, and the business is done. Should any dull fellow object to the foundation for the backing and fuel, he may be told it is among the artes desperatæ, unless preserved by the academy at Lapte, who have the secret of condensing air, and building houses from the roof down to the foundation."
The Vitrified Cairns of Elness, in Orkney.

The solution of this question I have not yet obtained; but during the summer of 1831, I arrived at the knowledge that vitrified sites exist in the ancient Norwegian colony of Orkney, which is quite as satisfactory.

During my visit to these islands, I must confess that I had but little expectation to find in them such a confirmed vitrified site as I have now to describe. Having many years since explored Shetland, the sister province of Orkney, and examined most of its ward or watch-hills, without detecting any marks of vitrification upon them whatever; having also found in every topographical account of Orkney which I have consulted, a perfect silence regarding the existence of vitrified remains, I came to the conclusion (certainly a precipitate one) that it was in vain to look for vitrified sites where luxuriant woods had not subsisted; that although we read in the Orkneyinga Saga, of numerous beacon signals having been lighted up in Orkney and Shetland, yet that, as these islands, from remote historic times, had been destitute of forests, no fire had been raised of sufficient intensity to leave any marks of vitrification whatever upon the mounds of stone on which the inflammable materials had rested.

This conclusion I must now very materially qualify. It was in the museum of Mr Traill of Woodwick, a scientific gentleman, who has formed a very interesting collection of the natural products of Orkney, as well as of its relics of antiquity, that I observed some very large specimens of vitrified stone matter precisely like that which is obtained from vitrified forts. These, Mr Traill informed me, had been sent to him by Mr Urquhart of Elness, in Sanday, who had obtained them from the ness or promontory which imparts the name to his estate.

After these prefatory remarks, I shall proceed to describe the vitrified site of Elness, which I visited without delay.

The Vitrified Cairns of Elness, in the Island of Sanday, Orkney.

For three or four centuries, that is, from the 10th to the 14th, the Scandinavian province of Orkney, always impatient of the control of the mother country, had no enemies so formidable as the kings of Norway, who frequently paid them hostile visits, to reduce them to submission. Against these incessant invasions the Orkadians were generally well prepared, by keeping up a careful watch. The means by which this was accomplished has been explained in my former Dissertation (see page 182, &c.). It was stated that the Northmen instituted every country where their arms prevailed, perfect systems of beacon-fires; that the wardenship of them was enforced by the most rigorous laws; that edicts to this effect appear in many early codes of the North of Europe, particularly in the Leges Gula-thingenses of King Magnus of Norway, where we find that the floods were plighted during the time of war to be prepared with watch-fires in places where the same had been lighted up from old time; and that, according to Snorre, King Haco the Good caused large trees to be formed into piles, and to be so placed as to be visible from mountain to mountain, with the view that the intelligence of a hostile invasion might in the short term of seven days travel from one end of his kingdom to the other.

An important quotation in illustration of this practice was given from Olaus Magnus; in addition to which I have now to observe, that still further information upon the subject is to be found in a commentary of Olaus Verelius, printed at Upsal A. D. 1664, in Historiam Gotrici et Hrolfi Westrogothorum quondam Regnum, where, in animadverting upon the expression of "Habuit helia luidam vitam," he observes, "Vitar sunt aridorum lignorum struen, quo in maritimis scopulis incenditur, ad significandum hostium adventum. Vocalitus esto boetar et vardboetar. Vide L. L. Kongb. 19. fl. udi et triplex vigium custodia notatur: byns. vord, stranvoidard, boetward, allicet publica vigilia in praedixi, in litore, in montibus. Hec. L. L. Kongb. 9. fl. bergvord ok nusia vord. custodia in montibus et litteror exterritudibus. De publicis his ignibus ita Darel. Argyn. lib. 1. Collocuit in camporum tumulis publici ignis, quos nefas accendit, nisi regio juvam, et eum gerendis robus celebrantes salus publica ipse posset: hos ignes aemperus nocens. Vide litem Sver. Sturl. in via Haquina Adalsteini fustur.

The origin of this system of beacon-fires having been explained, I shall next remark, that, in the Northey Isles of Orkney, signals of alarm were particularly required, where they were so distributed that, upon the first approach of an enemy from the shores of Norway, instant intelligence might be conveyed to a fleet anchored in a convenient port, and ready to put to sea, there to contend with its foes long before they could possibly land.

These simple historical circumstances are abundantly unfolded to us in the Orkneyinga Saga. Our inquiry, therefore, becomes comprised in the following questions: First, In what part of Orkney were its ancient gallies most commonly moored? And, secondly, In what manner were timely signals conveyed to the fleet thus moored, to arm and put to sea?

The first of these questions is soon resolved. It is evident that, as hostile attacks were chiefly to be dreaded from the north, the most westerly harbour which could
afford good shelter and depth of water for ships, provided also that it was situated on the east coast of Orkney, would be preferred; as these two circumstances of situation united would be requisite for readily clearing out to oppose a hostile fleet advancing in its proper course from Norway. Now, the most northerly island, lying also to the east of the Orkney group, is North Ronaldsay;—but here there is no harbour whatever. Nor is the island of Sunday, the next in succession, much more fortunate; its navigation being greatly obstructed by surrounding shoals of sand, whence the island has derived its name. In short, there is no port whatever which could have afforded any conveniences to early war-ships, required upon the approach of an invading fleet to instantly put to sea, more north than the sound of Papa Stronsay. This harbour, then, which lies due south of Elness in Sunday, being divided from it by a channel a league and a half across, must, from necessity, have been selected as the ancient Portsmouth of Orkney. No other situation could have been so eligible for instant embarkation into the Northern Ocean;—which superior advantage is even acknowledged at the present day, by its being the only harbour in the Isles of Orkney which is deemed a convenient one for the prosecution of the North Sea fishery of the herrings.

The site of the ancient Portsmouth of Orkney being thus established, the next object which I have is to show through what medium telegraphic signals, which consisted of beacon-fires, were conveyed to the fleet thus anchored in the sound of Papa Stronsay.

Shetland, which yielded a more willing obedience to Norway, was frequently in league with this power against Orkney; and as hostile fleets were often reinforced in the more loyal province, the intermediate island, named Fair Isle, of difficult access except to boats, was firmly retained by the Orcadians, and converted into their most northerly signal station. From this site, an alarm fire, which would be first hailed in North Ronaldsay, would be answered by its inhabitants kindling a fresh flame, in order that the intelligence might spread to Papa Westray and Westray on the west, and to Sunday on the south. Sunday would propagate the alarm to the fleet which was anchored in Papa Stronsay, with a signal of the number of hostile vessels approaching the Orkadian shores. These particular, as we are assured by divers writers so late even as the commencement of the last century, were usually signified by the number of fires which were lighted up. In order also to complete the efficiency of this telegraphic system, every Scandinavian province had its laws, whereby watchmen were placed at the various war hills of the country as

The Vitrified Cairns of Elness, in Orkney.

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the Ward or Vord Hills of Orkney were named, who were required, under severe penalties, to be constantly on the alert to transmit a signal of alarm to a fleet, or to the chain of beacons of which it might form a link. Thus it is stated by Martin, in his description of the Isle of Harris, which the Norwegians had colonized, that "there are several heaps of stones, commonly named Karos, on the tops of hills and rising grounds, upon which [the inhabitants] used to burn heath as a signal of an approaching enemy. There was always a sentinel at each Karo, to observe the sea-coast; the steward of the Isle made frequent rounds to take notice of the sentinels, and if he found any of them asleep, he stripped them of their clothes, and referred their personal punishment to the proprietor of the place."

After having thus glanced at the origin of the ancient watch-fires of Orkney, I shall now describe the vitrified cairns which are observable in the island of Sunday, at Elness.

Elness, lying to the south of the Island of Sunday, is a promontory rather more than a mile long from north to south, and about half a mile broad. It was evidently the stronghold of a Scandinavian chief, one of the ancient sea-kings, being dignified by the presence upon it of the remains of a barrow, or circular fort, as well as of a large sepulchral tumulus, which bears the name of Egmond's How, and of a number of smaller cairns ranged near it in a semicircular form, which, perhaps, were likewise the ancient resting-places of the brave. Another conspicuous site, which, by means of a low continuous mound of earth, is made to take the form of a large crescent, indicated by this particular structure the place of a camp, or the site where a tribe was accustomed upon any hostile alarm to repair fully armed. Again, about three quarters of a mile to the north of Elness, close to the ancient church named Mary Kirk, may be traced the limits of an ancient ting, where, in Pagan times, the functions of the priest and the judge were combined.

But the most interesting remains of which Elness can boast are the large cairns with which it is studded over,—many of these exhibiting unquestionable testimony of a vitrification quite as intense as is to be traced in any vitrified fort of Scotland.

These round cairns, of which I counted more than twenty, are from three to five yards in diameter, and elevated from two to three feet above the surface of the ground. The stony fragments of which they are composed, which had evidently been collected from the beach, consist of what geologists would name an argillaceous schist; being, in this instance, an equivalent of the Mansfield slate. Their fusibility they have chiefly derived from the felspar, or rather the alkalie, which they contain.
The Vitrified Cairns of Elness, in Orkney.

The bituminous matter which may often be found to enter into their composition, and which, if constantly present, would materially add to their fusibility, is but an occasional occurrence.

Altogether, these mounds answer to the description (which I have already quoted) given of the ancient beacons of the Isle of Harris. "There are," says Martin, "several heaps of stones, commonly called Karnes, on the tops of hills and rising grounds on the coast, upon which the inhabitants used to burn heath as a signal of an approaching enemy." There can also be little doubt but that the number of cairns upon which, during any single occasion of alarm, heather or any other inflammable materials were burned, must have corresponded with the number of hostile vessels approaching the coast of Orkney. This supposition is strengthened by the evidence of Wallace, who has affirmed, that even so late as the year 1700, "the people of Orkney had in every isle a wart-hill or ward-hill, which is the most conspicuous and elevated part of the isle, on which, in time of war, they keep ward; and when they see the enemies ships approaching, they put a fire, thereby to give notice to the adjacent isles of the nearness of the enemy, and to advertise them to be on their guard, or to come to their help: this they distinguish by the number of fires."

Upon the possibility, however, of mere heather to produce an effect which I have been hitherto only disposed to attribute to the combustion of large piles of wood, I will not yet give an opinion. Wood is only found in Orkney in a fossil state, that is, buried in peat; and whether this substance was employed, or peat itself, which is by far the most abundant fuel in Orkney, or dried sea ware, or heather, or a mixture of two or more of these combustibles, I am not now prepared to discuss; but shall merely remark, that the result produced upon the loose stones, which in the form of cairns supported the fuel, is most astonishing. In some instances the vitrification has extended to the very bottom of a cairn, showing an almost entire compact mass. Nothing, in short, can display the effects exhibited more satisfactorily, than by contrasting them with the appearances induced on subjacent stones by the fires of the kelp-burners of Orkney; where, if vitrification is at all produced, it is slight in the extreme, and rarely cements stones to an extent exceeding a few inches. This difference would indicate, that a vitrification, in order to be considerable, must be a work of time;—or, in other words, it would demand that the same cairn, for perhaps a century or more, should be the unvaried site on which beacon-fires were kindled.

The cairns of Elness are not, however, all vitrified alike. On some of them I could not detect a single burnt stone, while, in other instances, a cairn would almost put on the appearance of one compact burnt mass. Too many of them also were concealed by a thick sward, so that their character for vitrification still remains indeterminate.

Lastly, to the north of the small island of Papa Stronsay, a higher cairn than common, intended as a look-out place, appears, with the evident foundations of a building.
near it, which, I have little doubt, formed the residence of the watchman whose office it was, upon the fires of Elness being kindled, to instantly warn the fleet which was anchored in the contiguous sound.

The historical view which I have thus taken was familiarly, yet beautifully, illustrated when I visited Stronsay. On the opposite shore of Sanday several distinct kelp kilns were lighted up, which were well calculated to impress the imagination with a number of beacon-fires; while the fishing-vessels then moored in the sound, like so many war ships, added a show of reality to the illusion. The number of the fires I could distinctly count, but the atmosphere was then clear. Under different circumstances, I can account for the disappointment occasionally expressed by the ancient Northmen, that the signals were not sufficiently explicit. In the year 1136, a messenger came to inform Earl Paul that war-ships had been seen, but that it was uncertain whether the number was ten or twelve.

The relative situation of the Sound of Papa Stronsay, where the ancient war-ships of the Orcadians were moored, and of the promontory of Elness in the Island of Sanday, upon which the signal-fires were lighted, is represented in the first sketch given in Plate XI., which was taken from one of the commanding ward-hills of Stronsay. In this bird's eye view, the various localities referred to are indicated by the following letters:

- a The Sound of Papa Stronsay;
- b The Island of Papa Stronsay;
- c Elness in the Island Sanday, upon which, for the sake of distinction, fires are represented as burning;
- d The Island of North Ronaldsay, which appears faintly at a distance;
- e Fair Isle, intermediate to Orkney and Shetland, which, according to the Orkneyinga Saga, was a beacon station.

Such is the interesting vitrified site of Elness, which I was as gratified in exploring, as upon finding that the rescue of its cairns from the unfortunate state of dilapidation to which too many Orcadian antiquities have been subject, has been due to the very intelligent proprietor, John Traill Urquhart, Esq. of Elness, who, desirous of ascertaining their origin, and fully aware of their importance to the archeologist, had given strict orders for their preservation. Previous to these injunctions, Mr Urquhart informed me, a number of these cairns, during the process of ploughing an adjacent corn field, had been rooted up and levelled.

With these particulars of the actual appearances presented at Elness I shall for the present content myself. Yet I am still in doubt on one subordinate question,—whether a telegraphic signal of the number of hostile vessels approaching, indicated by a corresponding number of cairns being lighted up, was communicated by this promontory from independent observations, or from signals transmitted from North Ronaldsay,—in which latter case we ought to expect as many vitrified cairns to be
The circumstance of vitrification being chiefly observable on the beacon stations which connect themselves with the mooring of an armed fleet, while a similar manifestation in the ward hills of other islands or Orkney appears scarce, is of no little interest, and strengthens the conjecture, which is not altogether unestablished by history, that, upon the numberless occasions of invasion from Norway, it was much less frequently found necessary to alarm the country at large, than to confine the signal to the fleet which was in readiness; and that ward hills were only fired when an enemy was likely to make good its landing, or when it became necessary from any other circumstances to summon the whole of the islands to take up arms.

For it is of less moment to keep another incident in view:—that while Elness was not of necessity a place of strength or defence. Nor is it of less moment to keep another incident in view:—that while Elness was not of necessity a place of strength or defence, yet there was none in which absolute vitrification was manifest. But I trust that on some future occasion, when I shall be enabled to spend more time in this island, I shall be enabled to satisfy myself upon this question.

In the mean time, I can only add, that it is highly probable that Elness often derived its information of the exact number of approaching war-ships from independent observation, as the high lands of Sanday afford nearly as good a look-out station as North Ronaldsay.

After this particular examination, I visited several of the more common ward or ward hills of Orkney, but observed the beacon cairns upon them to show little more than discoloration from fire, with the exception of one ward hill only,—namely, that of Sanday, which is situated about two miles north of Elness. Three of the cairns on this height were considerably vitrified. I may also add, that since I quitted the shores of Orkney, I have received from Mr Traill of Woodwick, vitrified specimens, which were collected from a hill in the Island of Rousay. But I have yet to learn whether or not they were derived from a regular vitrified cairn.

The circumstances of vitrification being chiefly observable on the beacon stations which connect themselves with the mooring of an armed fleet, while a similar manifestation in the ward hills of other islands of Orkney appears scarce, is of no little interest, and strengthens the conjecture, which is not altogether unestablished by history, that, upon the numberless occasions of invasion from Norway, it was much less frequently found necessary to alarm the country at large, than to confine the signal to the fleet which was in readiness; and that ward hills were only fired when an enemy was likely to make good its landing, or when it became necessary from any other circumstances to summon the whole of the islands to take up arms.

But while I state these my present views (for it is possible I may yet make some little modification in them), I would not renounce the idea, that other public occasions, as, for instance, the annual lighting up of the fire of the Nettling, might have assisted, though in a subordinate degree, towards producing the vitrified effects, which continue to be the astonishment of all who are conversant with their extent.

In the next portion of this investigation I shall attempt an illustration of these views.
Historical Sketch of the Pictish Forts of Scotland, in connection with the circumstances which may be supposed to have given rise to their vitrification.

There can be no doubt that the earliest tribes who peopled Europe were of a Celtic origin, the natural character of whom was indicated in the darkness of their hair, in their comparative low stature, and in their language, which was allied to the present Gaelic. This race was succeeded by one of a Teutonic or Gothic origin, who, in issuing from the vicinity of the Euxine and the Danube, succeeded in establishing the present Gaelic. This race was succeeded by one of a Teutonic or Gothic origin, who, according to Tacitus, were the same people. Tacitus considers the Caledonians, from their red hair and other circumstances, to be of Teutonic origin; while the ancient Roman writers affirm that the Picts, or Fechti, came into Alban over the sea of the Lychlyn, that is, according to Lluyd, from the present site of Denmark.

To this last-named stock, namely, that which is Teutonic or Gothic, many able antiquaries have referred the ancient Caledonians and Picts, who, according to certain Roman writers, were the same people. Tacitus considers the Caledonians, from their red hair and other circumstances, to be of Teutonic origin; while the ancient Roman writers affirm that the Picts, or Fechti, came into Alban over the sea of the Lychlyn, that is, according to Lluyd, from the present site of Denmark.

These are striking evidences, independently of a crowd of collateral circumstances, which induce me to suspect, that the Picts who, in the occupation of a portion of the North of Scotland, succeeded to a people of Celtic origin, were of a Teutonic or Gothic race.

I am much inclined to think, for various reasons, that, in the first place, the Picts landed in Orkney, which, along with Shetland, they colonized; that emigrations from these islands were very gradually extended southward; that Càithness was thinly occupied by them, and Sutherland much less,—very few patches in this last-named destitute country offering for them an invitation of settlement; and that it was only when the Picts reached more southerly regions that the displacement followed of the aboriginal Celtic settlers, who sought a refuge among inaccessible mountains. The Picts then became the formidable people who even struck terror among the Roman arms.

When the Picts or ancient Caledonians began to occupy the more cultivated plains which are found in the vicinity of the Murray Frith or on the east of Scotland north of the Tay, they appear to have passed from the hunting into the pastoral state, which is a circumstance most important to keep in view, as it has given a peculiar character, that we shall soon describe, to all their places of defence.

Their camps are recognised under the name of Duns,—an appellation borrowed from the Celtic language,—the Picts having for convenience adopted the Celtic phono-paleology whenever it was applied to the distinction of topographical objects.
Accordingly many Pictish forts appear near to ancient roads, one example of which, among others, is afforded in the fort near Fetternear, named Finella's Castle.

The Scandinavians who are said to have supplanted the Picts in the North of Scotland were the Vikingr or Sea Kings, whose ravages were for centuries the common occurrence. They were for the most part incidental to the lighting up of signal-fires, which in a subsequent period took place in the districts of the north and west of Scotland which the Vikingr occupied, namely, from the Frith of Dornoch to Duncansbay Head, as well as in Orkney, Shetland, and the Hebrides. These forts differed widely from those of the Picts, inasmuch as they did not contemplate the defence of cattle. They were intended to protect the plunder which had been acquired among the rich civilized countries of Europe against other marauders, for which purpose nothing more was demanded than a circular tower with hollow concentric walls capable of containing a hundred of warriors, with their effects, their wives, and their children. One of the best illustrations of this kind of fortress is the burgh of Messan in Shetland.

The history of Pictavia during the long-continued descents of the Scandinavians has, by fabulous monkish writers, been rendered sufficiently perplexing; but among the ancient Sagas of the North we find a deep veil of mystery removed. It is certain that numerous conquests of the lands of Pictavia were made by the Scandinavian invaders, and that these pirates were gradually induced to exchange their precarious sub-
The Vitrified Site of the Top-o-Noth.

As this is perhaps one of the best and most perfect specimens of a vitrified site which is to be found in Scotland, I have wished that a description of it should precede every other. It is to be found on the fortified summit of an insulated ridge of hill, composed of gneiss, near the village of Rhynie in Aberdeenshire, stretching from north-west by west to south-east by east. The height of this hill I did not take. It has been estimated by Dr Macculloch at 1800 feet above the level of the sea, which may perhaps be near the truth. I did not ascertain its height above the level of the adjoining plain at Rhynie, which must be considerable, perhaps not less than 1200 feet. The form of this hill is expressed in the second sketch of Plate XI.

The summit of the hill must have exhibited in its original state a small plain, nearly level, the area of which was about one hundred and twenty yards from north-east to south-west, by about fifty from north-west to south-east. Upon this plain a fort has been constructed which occupies the whole of its space. The area which has been fortified cannot be better described than by comparing the model of it to a filled-up or extinct volcanic crater. An incredible accumulation of loose stones has been made to rise to the greatest height around its circumference, and to gradually thin off towards the centre of the inclosed site. An exact representation of its appearance is given in the third sketch of Plate XI.

The site which is fortified and inclosed shows a faint approach to the form of a parallelogram, rounded at its angles. Its dimensions have been very differently rated. Dr Anderson states that it is 60 yards long by 25 wide, while Dr Macculloch esti-
mates it at 90 yards long by 32 wide. This confusion may be possibly explained, by
each observer having been indifferent to the circumstance that the accumulation of
stones which formed the circumference of the area gradually thinned off towards
the centre, and by each commencing his measurement from different points of the
gradually inclined wall. My own observation has been already stated; the rampart
has been raised upon an area measuring 120 by 50 yards. The height of the stony
rampart varies from nine to twelve feet. Within the area was sunk a well, which,
from the accidents it has frequently caused to the sheep which graze upon the hill, is
now in part filled up. Its original subsistence must have been important to the garri-
son, as well as to the cattle, which this fort was alike designed to protect. The well
is represented in the third sketch of Plate XI.

The entrance to the fort is on the south-east side of it, beneath which the hill is
the least steep, and is therefore protected by one or more trenches or covered ways,
which some observers; indeed, conceive they have traced round the whole compass
of the mountain. It has also been supposed that, along the gradually declining ridge
observable in a south-easterly direction, traces of a causeway may be detected extend-
ning considerably down the hill, which has been described as consisting of lid stones
joined with great care and strength, and resembling a Roman road. But, as far as
my own researches extend, I saw little more than the angles or points of a natural
ridge of rock, irregularly protruding through the green sward.

On the south-west side of the hill a considerable steepness occurs, which prevails
as far even as the village of Rhynie. But this steepness is exceeded on the north-
western flank of the hill, opposite to which a high peak obtrudes itself, three or four vitrified patches
only are observable. But on the north-west side, where an extensive tract of country
is overlooked, the vitrification is more considerable. And on the south-west side,
which commands the extensive vale in which the village of Rhynie is situated, there
is scarcely any portion of the rampart to be seen in which greater or less marks of
vitrification are not to be detected.

Numerous, however, as are the patches of vitrification in this fort, considerable
intervals are to be detected in which there are no signs of fusion whatever. The
stones acted upon by fire consist, as I have before observed, of gneiss. This sub-
stance contains much felspar, to which circumstance may be ascribed the facility
with which it has been fused.

These are all the remarks which are suggested by the vitrified site of the Top-o-
Noth. It is foreign to this description to add, that on the westerly flank of the hill may
be perceived a lofty upright stone, connected with which is a monstrous traditional
story of its having been placed there by a giant, the print of whose heel in it is still
visible. I did not visit the stone, which is affirmed to be seven or eight feet high.

In a future volume I shall continue these researches. 1

1 Since drawing up this communication, I have been favoured by the Rev. James Veitch
with a notice of a vitrified site near Jedburgh, discovered by his father, which is the more in-
teresting, as another unexpected one in this part of Scotland had been previously noticed by
Dr. Home of Cowdenknows, who traced it upon the ancient and well-known hill of that
name, situated upon his estate near Melrose. As some little time may elapse before I shall
be able to visit the vicinity of Jedburgh, I shall in the mean time beg to transcribe the oblig-
ating letter which I have received.

"Edinburgh, 26th June 1832.

DEAR SIR,—I have just received from my father the following particulars respecting the
vitrified matter found at Howden Moor. The place is about one mile to the south-east of
Jedburgh, and about 450 feet above the level of the sea. The spot had never before been
cultivated, and the matter was found by workmen who were engaged in levelling for the
plough. The quantity found amounted to about four or five bushels, and this was contained
in the space of six or eight feet, at various depths to four feet from the surface, and below
this was white sand. There were many stones, but no appearance of building, or of the ac-

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