
XXXII.—*On the Mineralogy of the Faroe Islands.* By W. C.
TREVELYAN, Esq. F. R. S. E.

(*Read Nov. 18. 1822.*)

MY DEAR SIR,

Wallington, July 22. 1822.

IN compliance with your request, I send you a few notes of some of the principal geological facts I observed in Faroe, which may serve as a supplement to Sir GEORGE MACKENZIE'S and Mr ALLAN'S accounts of these islands, which, as far as they extend, I found perfectly correct.

THE Coal in Suderoe, which was not visited by them, is situated between two thick beds of hard clay, resembling the Clunch-clay of this country ; to which succeed beds of trap. In some parts, pieces of petrified wood are very abundant in the superincumbent clay, and also nodules of ironstone ; and in the coal, pieces of wood resembling charcoal. The coal has the same degree of inclination as the other beds, dipping towards the south-east, at an angle of about 4° or 5° ; being the same as the dip in the other islands, excepting in part of Myggenæas, where it is much greater, being near 45°. The thickness of the coal varies from a few inches to 5 or 6 feet, and in quality
much

much resembles the Scotch coal generally consumed in Edinburgh. It is but little worked, owing to the want of time, and peat being abundant, and more easily obtained. Scarcely any is taken to the other islands, as they have no vessels of sufficient size for that purpose. A few cargoes were carried some years since to Copenhagen, but not being found to answer, the exportations were discontinued.

In the map of Suderoe, Plate XXIX. Fig. 8. copied from Captain Born's chart, the spots where coal has been observed are marked with a double line, and where it is worked, with a broad black line. The section below the map shews the situation of the coal from the level of the sea to the summit of a hill south of Famoye, where it is stated to occur, though we could not perceive it, which might perhaps be owing to the superincumbent rubbish.

The coal on Myggenæs appears to be in the same position, but not of sufficient thickness to be worked. On Tindholt are also appearances of it and the clay, apparently enclosed in the trap.

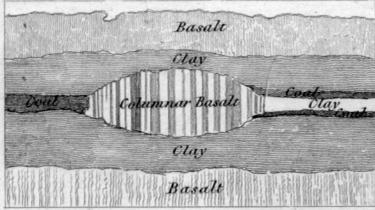
At Tiodnenæs, near Qualboe, a mass of columnar Basalt is intruded into the place of the coal, which disappears near it, as shewn in Fig. 1.

The best instance of columnar basalt which we saw, is near Frodboe in Suderoe; it is well described in LANDT'S History of Faroe.

The marks of fusion, mentioned by Sir GEORGE MACKENZIE, are very frequent, and also another appearance which may perhaps be connected with it. The upper part of many of the beds (more particularly of the amygdaloidal), is filled with small insular perpendicular cavities, as if caused by the escape of a gaseous fluid, when the rock was in a soft state. They are sometimes empty, but frequently contain zeolite.

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Fig. 1.



South side of Leinum fiall facing Skellinge fiall

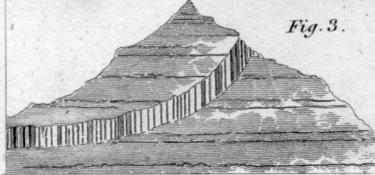


Fig. 3.

Fig. 6.

Appearance near Rideviig

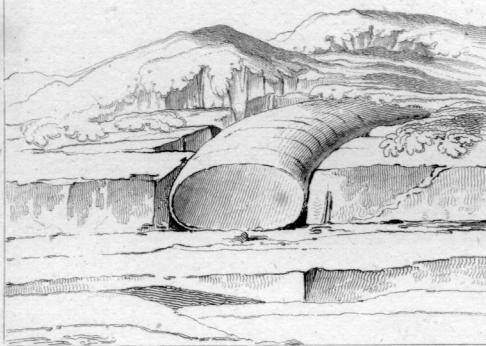
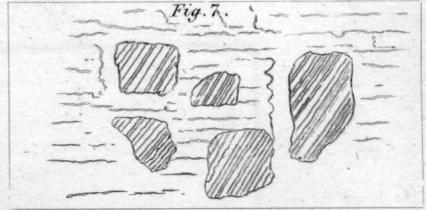


Fig. 7.



South side of Negwa



Fig. 4.

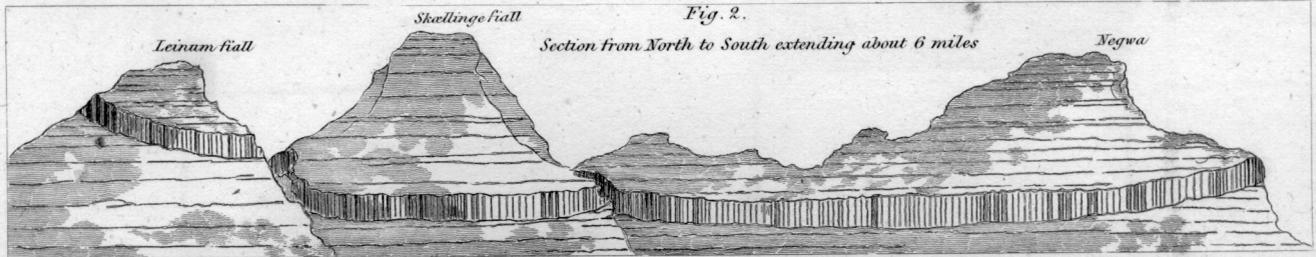


Fig. 2.

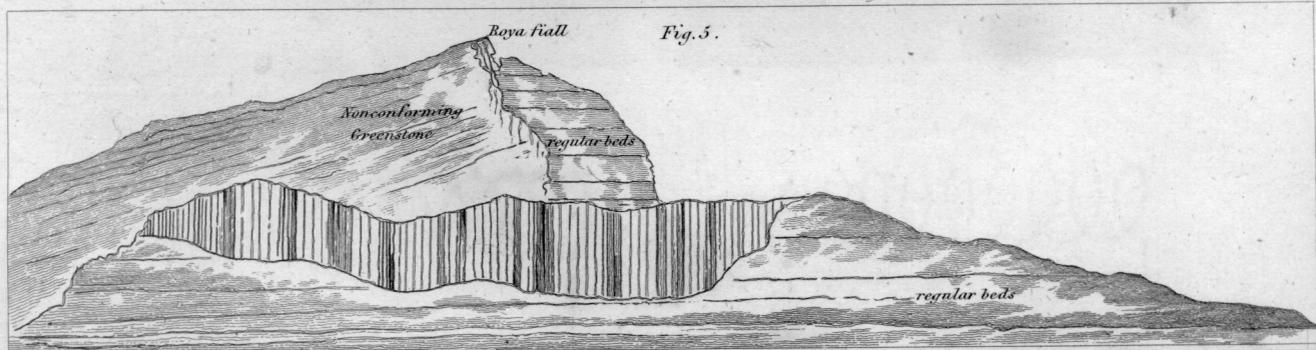


Fig. 5.

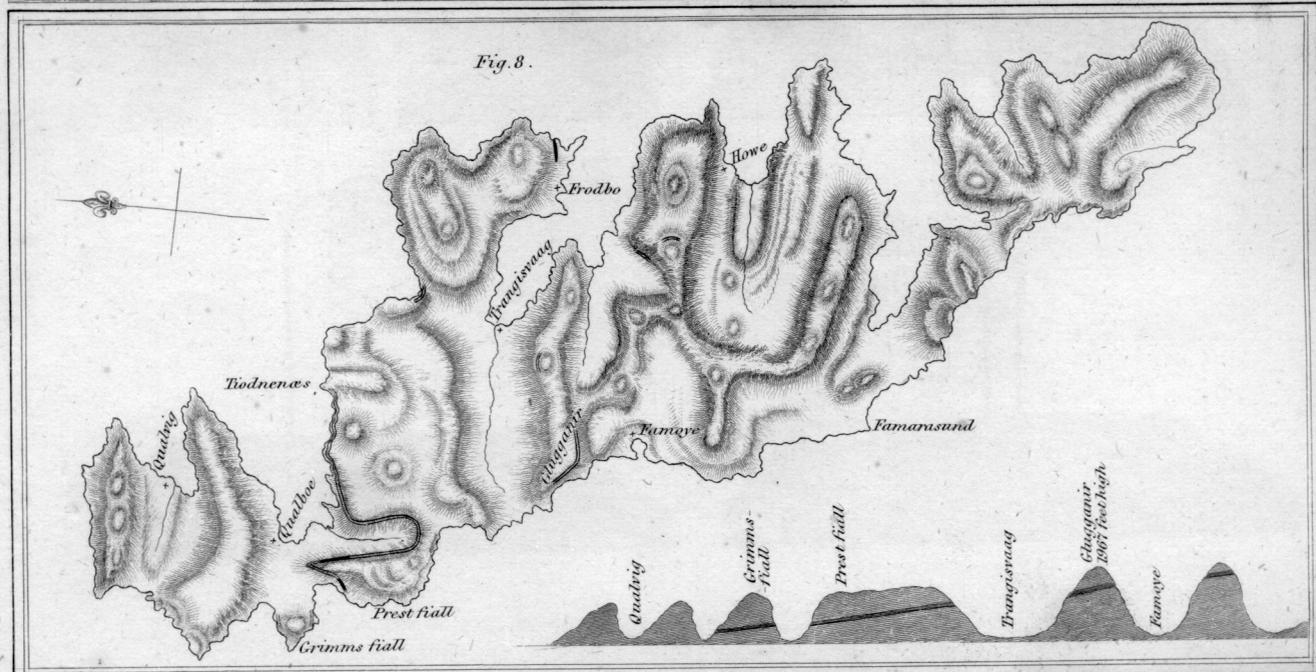


Fig. 8.

One of the most remarkable beds we observed, is the Green stone mentioned by Mr ALLAN (p. 255. vol. vii. *Royal Society Transactions*), which does not conform with the general position of the trap. The annexed sections, Figs. 2, 3, 4. will give a better idea of its position than can be done in words.

Another bed of the same nature appears in Osteroe, near Zellaetræ, part of which is represented in the sketch Fig. 5. Royafiall is a mountain above 2000 feet high, nearly equidistant from Ore and Zellaetræ. This bed, at the outcrop, is broken into columns; but, a few yards from it, the surface seems quite compact.

Near Rideviig is a curious mass or vein of basalt, Fig. 6. reposing on an amygdaloidal rock, which gave me the idea of a stream of lava. It may be traced for about 30 yards, when it is concealed by rubbish and earth. Its breadth is three yards and one-half, and thickness one yard.

Figure 7. represents a basalt lying on an amygdaloid, (the shaded part), which also appears to be intersected by numerous veins of the former, as if a number of fissures in it had been filled up by the basalt flowing over it, when in a fused state; or perhaps it is a conglomerate, or trap-tuff. I am sorry I neglected examining it more particularly.

Near Leinum Lake we obtained specimens of noble, fire and pearl Opal, in a bed of felspar-porphyry, through which they are disseminated in small nodules. They were discovered by Mr HOLM of Quivig since Sir GEORGE MACKENZIE'S visit.

Native Copper is very frequent, though not abundant. It occurs generally in amygdaloidal rocks. In Suderoe, near Famarasund, we found it in thin plates in a bed of claystone. Some of it contains gold, also (but rarely) found separate.

I may remark, that we found compact zeolite in a stalactitic form, evidently of recent formation, and deposited from water, in the same way as stalactites of lime.

We observed some hair zeolite, which, when pressed, gave out a milky fluid.

Believe me, dear Sir, very truly yours,

W. C. TREVELYAN.

To Dr BREWSTER.

XXXIII.