

general sense, to fractures of the earth's crust, is a circumstance well proved ; and if so, whether the sublimation of carbonate of magnesia would be chemically probable. On this latter subject, Dr. Daubeny and Dr. Dalton stated facts in confirmation of the view of Von Buch (*Reports of the British Association, for 1835*), and on the former question, we have related, in describing the geology of Yorkshire, the dolomitisation of common limestone by the sides of faults and mineral veins, far away from igneous rocks of any kind. It seems, therefore, unsafe to reject Von Buch's remarkable hypothesis, without a patient investigation of many collateral points ; and, on the other hand, the dolomitic masses of Franconia, which form a part of the Jura kalk, and the magnesian limestones of England (extensive deposits which are unconnected with pyrogenous rocks), appear to show that subterranean heat is not the only nor the principal means of introducing magnesia as an ingredient of limestone. We may, indeed, choose further to suppose that the submarine springs, which probably gave origin to the magnesian limestones of Durham, were a consequence of that great disturbance of the earth's crust which is so manifest in the coal districts of England ; and this easy and probable explanation for these cases, while it recognises the general principle which connects magnesian limestones with dislocations of the strata, may possibly be found applicable to other examples.

One of the points favourable to investigation of the relation of dolomitic limestones to volcanic forces, is Gerolstein in the Eifel, where, round a particular vent, for a considerable space, the "transition" limestone (corresponding exactly to the "Wenlock" limestone in the silurian system of England) is converted to dolomite, and appears in the usual unstratified, fissured, and antiquated forms of that rock, while further off it is a thin-bedded rock ; organic remains occur in both the common and dolomitic limestone (observed 1829). To the facts which appear in this volcanic region, Von Buch appealed in proof of his hypothesis ; but Dr. Daubeny