

of this system are seen to be very exactly divided by joints and fissures, some of which seem frequently to coincide with the axis of elevation of the country (in Wales this is frequently N. E.), and others to be rectangulated thereto. In this respect, however, variations occur, so that Mr. Murchison has often found two sets of joints, both forming oblique angles with the strike of the strata. In the Wren's Nest at Dudley the long joints *in the limestone*, observed with care, July, 1837, appeared to me to be nearly parallel to the axis of elevation, which is N. and S., or, on the east side of the hill, N.  $10^{\circ}$  E. The *joints* in other directions were few and irregular; and though *cracks* were not unfrequent in the thinner layers of "Baven" (argillo-calcareous and fossiliferous), the most general direction of the long *joints* in this also was N.  $10^{\circ}$  E. The planes of these joints are not always even nearly rectangled to the stratification—they are sometimes waving in their outline, and present other circumstances of interest, particularly *striations* and associated strings of calcareous spar. The *faults* in this hill obey the law of displacement, which is given in the 'Geology of Yorkshire,' and illustrated p. 40. *sup.*

The planes of the joints and fissures are stated by Mr. Murchison to be nearly rectangled to the planes of the strata.\* In the country near Llandovery the lower Silurian rocks are metamorphic slates; the slaty cleavage, induced since their aggregation, predominating over the yet traceable surfaces of deposition. This is sometimes expressed by the convenient though somewhat unlearned word, "slatified."

The nodular uneven surface of the limestones of this system is so remarkable, as to be of great importance in reasoning on the circumstances concerned in their production. It is extremely difficult to resist the notion that in many instances the limestone has been collected by molecular attraction from a mingled mass of argil-

\* See Guide to Geology, 3d edit., for an example of joints reduced by calculation to the plane of stratification, from observations made with Mr. Murchison on the ridge of Corn y Vaen, near Brecon.