

Direction.

The direction of anticlinal lines and other great dislocations of the strata has become of importance in a theoretical point of view, ever since Humboldt, Von Buch, and De Beaumont, strove to link these features of physical geography with particular epochs of geological time. If the parallelism of the Carnarvonshire and Radnorshire axes of movement is an indication of their being contemporaneous—and this analogy and conclusion can be extended to the primary slates of Cumberland, the Lammermuir, Isle of Man, and Grampian mountains—the inferences justly drawn from one district, as to the mechanism of its elevation, become confirmed in a very exalted degree. It is, therefore, most important to inquire, not merely what foundation there may be for the particular system on this head, which is supported by the learning and talent of De Beaumont*, but further, within what limits observation or mechanical science allow us to consider it possible to determine the geographical extent of contemporaneous disturbances of the strata.

The propositions of M. De Beaumont, in their utmost extent, may be thus understood. The principal dislocations of the same geological age range in lines parallel to one and the same great circle of the sphere; those of different ages are parallel to different circles. The geological era of the elevation of mountains may be known from the direction of their axes of movement. The mode of *proof* will be understood from the following abstract relating to the system of dislocations, referred by De Beaumont to the period preceding the deposits of green sand and chalk; and the extension, by analogies, from a limited proof to a large range of probabilities, will appear in the short notice of two other systems of later date.

Three small granite eminences, in the Côte d'Or, near Sombernon, which have occasioned the disruption

* In Ann. des Sciences Naturelles for 1829—30.