

I passed, contains much more granite\* than gneiss, and other rocks distinctly stratified, the direction of the layers could be observed in this group only on a small number of points; but I was often struck in this region with the continuity of the phenomenon of loxodromism. The amphibolic slates of Angostura run N.  $45^{\circ}$  E., like the gneiss of Guapasoso which forms the bed of the Atabapo, and like the mica-slate of the peninsula of Araya, though there is a distance of 160 leagues between the limits of those rocks.

The direction of the strata, of which we have just noticed the wonderful uniformity, is not entirely parallel with the longitudinal axes of the two coast chains, and the chain of Parime. The strata generally cut the former of those chains at an angle of  $35^{\circ}$ , and their inclination towards the north-west becomes one of the most powerful causes of the aridity which prevails on the southern declivity† of the mountains of the coast. May we conclude that the direction of the eastern Cordillera of New Grenada, which is nearly N.  $45^{\circ}$  E. from Santa Fe de Bogotà, to beyond the Sierra Nevada de Merida, and of which the littoral chain is but a continuation, has had an influence on the direction (hor. 3-4) of the strata in Venezuela? That region presents a very remarkable loxodromism with the strata of mica-slate, grauwacke, and the orthoceratite limestone of the Alleghanies, and that vast extent of country (lat.  $56^{\circ}$   $68^{\circ}$ ) lately visited by Captain Franklin. The direction N. E. — S. W. prevails in every part of North America, as in Europe in the Fichtelgebirge of Franconia, in Taunus, Westerwald, and Eifel; in the Ardennes, the Vosges, in Cotentin, in Scotland, and in the Tarentaise, at the southwest extremity of the Alps. If the strata of rocks in Venezuela do not exactly follow the direction of the nearest Cordillera, that of the shore, the parallelism between the axis of one chain, and the strata of the formations that compose it, are manifest in the Brazil group.‡

\* Only the granite of the Baragon is stratified, as well as crossed by veins of granite: the direction of the beds is N.  $20^{\circ}$  W.

† This southern declivity is however less rapid than the northern.

‡ The strata of the primitive and intermediary rocks of Brazil run very regularly, like the Cordillera of Villarica (Serra do Espinhaço) hor. 1-4 or hor. 2 of the compass of Freiberg (N.  $28^{\circ}$  E.)