

interest had been roused throughout Europe by the results of Von Humboldt's brilliant volcanic studies in Central and South America, and Von Buch determined to make a special study of some volcanic district.

Accompanied by the English botanist, Charles Smith, he visited the Canary Isles, and in 1815 convinced himself that they had been the centre of intense volcanic activity. In his famous monograph, *A Physical Description of the Canary Islands*, published in 1825, he enunciated his hypothesis of upheaval craters, and distinguished between "centres" and "bands" of volcanic action. In 1817 he travelled to Scotland and visited Staffa and the Giant's Causeway. When he again returned to the Alps, he renounced the Wernerian doctrines of the origin of basalt and other volcanic rocks, and ascribed the upheaval of the Alps to the intrusion of igneous rocks. About this time he went to Fassa Valley in South Tyrol, and there he formed a curious volcanic theory in explanation of the dolomitisation of the rocks in that district.

In 1832 Von Buch edited a geological map of Germany, and this magnificent work had already run through five editions in 1843. The last twenty years of his life were for the most part devoted to palæontological studies, and we owe to this period a valuable series of papers on Cephalopods, Brachiopods, and Cystoids; also a comprehensive treatise on the Jurassic formation in Germany, which has been the basis for all future work on this subject. Some part of every year, however, was spent by Von Buch in travelling. He often went to the Alps, and he regularly attended the Scientific Congresses. Most of his Alpine journeys were accomplished on foot. Clad in short breeches, black stockings, and buckled shoes, the pockets of his black coat stuffed with note-books, maps, and geological tools, his tall, imposing figure was bound to command attention. His travelling luggage was limited to a fresh shirt and a pair of silk stockings. His physical endurance was only surpassed by his iron determination, which could overcome all difficulties and discomforts. Socially, he was everywhere beloved; his aristocratic bearing, his mastery of foreign languages, his wide knowledge of science and literature,—all combined to make him one of the most agreeable companions. His independent means placed him in a position of unusual influence. On the one side he enjoyed the friendship and intimacy of his scientific colleagues, and on