

## CHAPTER VI.

The Lines of the Geographer rarely right Lines. — These last, however, always worth looking at when they occur. — Striking Instance in the Line of the Great Caledonian Valley. — Indicative of the Direction in which the Volcanic Agencies have operated. — Sections of the Old Red Sandstone furnished by the Granitic Eminences of the Line. — Illustration. — Lias of the Moray Frith. — Surmisings regarding its Original Extent. — These lead to an Exploratory Ramble. — Narrative. — Phenomena exhibited in the course of half an hour's Walk. — The little Bay. — Its Strata and their Organisms.

THE natural boundaries of the geographer are rarely described by right lines. Whenever these occur, however, the geologist may look for something remarkable. There is one very striking example furnished by the north of Scotland. The reader, in consulting a map of the kingdom, will find that the edge of a ruler, laid athwart the country in a direction from south-west to north-east, touches the whole northern side of the great Caledonian Valley, with its long, straight line of lakes, and onwards, beyond the valley's termination at both ends, the whole northern side of Loch Eil and Loch Linnhe, and the whole of the abrupt and precipitous northern shores of the Moray Frith, to the extreme point of Tarbat Ness—a right line of considerably more than a hundred miles. Nor does the geography of the globe furnish a line better defined by natural marks. There is both rampart and fosse. On the one hand we have the rectilinear lochs and lakes, with an average profundity of depth more than equal to that of the German Ocean, and, added to these, the rectilinear lines of frith; on the other hand, with but few inter-