

and in the second place upon the energy of the metamorphic agents. Certain rocks resist alteration. Pure siliceous sandstones, for example, become quartzites, but advance no further, though occasionally, under intense strain, their particles are drawn out into a somewhat schistose arrangement. But where felspathic elements are present, particularly where they are the chief constituents, some form of mica almost invariably appears, while new minerals and structures may be developed in progressively increasing abundance, till the rock assumes the character of a true crystalline schist.

Possessing characters which link them, on the one hand, with stratified, on the other, with eruptive rocks, the Crystalline Schists present a peculiar type of structure with which are connected some of the most perplexing problems of geology. These rocks cover extensive areas of the surface of the continents, occurring usually wherever the oldest formations have been brought to light. But they everywhere pass under younger formations, so that their visible superficies is probably but a very small part of their total extent. In the northern regions of Europe and of North America, they spread over thousands of square miles, forming the table-land of Scandinavia, the Highlands of Scotland, and a great part of Eastern Canada and Labrador. They likewise commonly rise to the surface along the axes of great mountain-chains in all quarters of the globe. So persistent are they, that the belief has arisen that they everywhere underlie the stratified formations as a general foundation or platform. Some details of their structure will be given in the description of Pre-Cambrian Rocks in Book VI.

The most distinctive character of the schists is undoubt-