

As the rocks and minerals of this chain have been already described in former Reports, attention was directed to those situated to the northward. Each of these different classes of rocks has been laid down on the Geological Map of the Province, now in course of preparation, as accurately as the circumstances would admit of, but the difficulties attending the discovery of their true lines of contact, are frequently too great to be overcome; especially in the forest, where, besides the common detrital accumulations of the surface, there is a thick layer of decayed trees and other vegetable productions.

GREYWACKE AND SLATE.

It appears quite evident that the strata of greywacke and slate, about to be described, were deposited prior to the elevation of the granitic, sienitic and trappean masses upon which they rest. They are fractured in all directions by dikes and extensive elevations of those rocks. These dikes are most numerous upon the lines that may be said to separate the two different classes of rocks one from the other, and are less frequent at distances more remote from them; their inclining positions from each mountain mass and their fractured condition, in situations where they are observed in contact with the eruptive classes, shew the disturbance they have suffered since they were first collected. Nor are the evidences of the heat that attended the eruption of the volcanic rocks, less manifest; for, wherever the strata are found meeting the sienitic, trap, &c. the changes made upon them, and referable to heat, are very apparent. It appears that long after the strata already mentioned were formed, and probably were spread over a broad level surface, the hills of granite, sienite and trap were forced through them, and torrents of melted mineral matter overflowed the surface; and thus the bold scenery of these Alpine ridges received its peculiar features of grandeur and beauty; while the slates, &c. remained occupying the more low and level areas.

The strata forming the schistose groups differ much in their mineral characters. Some of them are very argillaceous, and resemble the shales of the coal measures, except in their greater degree of induration—others are arenaceous, and frequently pass into conglomerate. To the former the term argillaceous slate has been applied, and the latter is called greywacke. But these rocks pass insensibly into each