

believed that some of the rocks now known to be of the age of the secondary and tertiary groups, were of primary origin, these distinctions are still found very useful. The primary rocks, such as granite, gneiss, &c. possess more of a crystalline structure; and may be distinguished by the purity of their minerals, and a greater degree of hardness. Siliceous and argillaceous earths form the chief parts of their constituents, and in them neither the remains of animals nor organized bodies have been discovered. The transition rocks frequently have a resemblance to the primary; but the minerals entering into their composition are far less perfect in crystallization, and appear to have been acted upon by mechanical operations, such as attrition in water, previous to their consolidation. In these the remains of animals and plants first begin to appear.

In the secondary formations the mechanical operations of water upon the fragments of the rocks, and in the production of strata, become more manifest. In their structure they are earthy. They are less compact than any of the older deposits, and in them the relics of organized beings are abundant.

The tertiary deposits are remarkable in their near approach to beds of clay, marl, and sand, now collecting upon the earth; and the animals and plants found in their strata begin to approximate to living species.

Beds of clay, sand, pebbles, &c. are called diluvial, from having been supposed to be the results of floods of water, which swept over the earth, and the effects of glaciers, the former existence of which has been made to appear, by Professor Agassiz, Mr. Lyell, Dr. Buckland, and others, who are now engaged in this interesting inquiry.

Alluvial deposits are those now forming by operations ever active upon the earth, through the agency of seas, rivers, and floods of water.

In New-Brunswick, each of these classes of rocks is extensively developed; and although some of the members of them, such as the chalk, and other deposits bearing local names in Europe, are absent; still the general order of superposition is preserved.

Of the primary rocks of the Province, there is an extensive, elevated, and somewhat broken district, extending from the Schoodic, in a north-east direction, to Shepody Mountain in Westmorland. Another tract of primary country, embraces the Chiputnecticook Lakes, and, crossing the Saint John, extends towards the sources of the Miramichi.