

this change from their original character was effected. But the character of the change brought about by compression varies with the depth of the rocks beneath the surface because of heightened temperature and pressure, and rocks may become so greatly modified as to lose all trace of their original character.

Precambrian history

Old sediments. The oldest rocks which have with certainty been recognized in the Adirondack region consist of certain well banded gneisses and schists, with bands of varying thickness of coarsely crystalline limestone. They are believed to be old water-deposited rocks, ancient sheets of sand, mud and calcareous mud, deposited on the floor of some large body of shallow water, in all probability the sea. They are now so greatly changed from their original condition that the structures and textures characteristic of rocks so formed have been almost wholly destroyed, being replaced by others which are not characteristic, since they may be produced in igneous rocks as well. The inference as to their original condition is based partly on their composition, and partly on the fact that they show frequent and rather abrupt alternations in character, as if they had originally consisted of beds and layers of varying composition, as water-deposited rocks do. There is apparently a great thickness of these beds, but their base has never been made out with certainty nor is their summit known, so that our ideas concerning their thickness are of the vaguest. They must have been laid down on a surface of older rocks; but we are at present wholly in the dark as to whether or not these older rocks are anywhere exposed in the district at the present time. Rocks which may not improbably represent them, are present and will be shortly described, but no exposures which will enable a decision in the matter have been discovered, nor are they likely to be in the immediate district, though perhaps such may be found to the west or south.

Though unknown, the thickness of these deposits is great, with repeated changes in character, so that it is beyond question that the submergence endured for a long, a very long time, during