is a range in composition from granites through syenites and diorites to gabbros, all intermediate gradations appearing. If there be any rocks exposed in the region which are older than the Grenville rocks, they are found here. Unmixed with Grenville rocks, they extend along the Potsdam boundary on the north side of the Adirondacks for a distance of 70 miles. Nowhere else in the region is a belt of such length known, though there may prove to be one of even greater dimensions in the little studied southwestern area. Smyth has shown that a great, unbroken extent of gneisses occurs there, but these may prove in large part to belong with the later intrusions. Grenville gneisses may be also found more abundantly than yet appears, when the region is covered in more detail. Such gneisses are abundant north from Little Falls, though no limestones occur.

These gneisses present just such an igneous complex as is found in all parts of the earth's surface where these very old rocks are exposed, which are thought by many to represent the original cooled crust of the earth, or rather its downward extension. There is much to be said in favor of this view, though it can by no means be held to be fully established. The main difficulty of its adoption so far as these special rocks are concerned is that very similar, or identical, gneisses are found either interbanded with the Grenville rocks or else cutting them intrusively, as has already been noted. If the two are not identical, it should be possible to demonstrate differences between them, and the future may show this possibility. If they are identical, the only possible way in which they could represent the floor on which the Grenville rocks were laid down would be to hold that in many places, after the deposition of the Grenville rocks, these underlying rocks had been rendered plastic by heat and compression and had thus comported themselves as igneous rocks. The difficulties against this view are great, and the whole question is a most perplexing one.

To the northward in Canada there are great stretches of country occupied by similar rocks, and the name "Ottawa gneiss" is there given to the formation. Uncertainty as to the equivalency of the