

Adirondack rocks closely approach the monzonite type. They also closely approach Brögger's akerite type (quartz augite syenite) from near Christiania, and seem to occupy a position intermediate between the two. Smyth's rock from Natural Bridge, column 1 of the above table, would certainly fall within the monzonite group, notwithstanding its high lime percentage; and the rock from north of Tupper lake, column 9 of the original table, belongs also in that group lying on the border land between monzonite and banatite.¹ Because of this, it is perhaps more logical to refer all the Adirondack syenite to that group, though as a somewhat aberrant type.

It would therefore appear that in each district a very similar magma has given rise to a very similar rock series, and, it is likely, through a similar differentiation process. The order of succession of the different types can not be compared, since the Adirondack succession is uncertain in one respect. The syenite followed the anorthosite, and then came the granite, but the position of the gabbro is uncertain. It is certainly later than the anorthosite, and certain gabbroic dikes which have been found cutting the syenite lead to the impression that it is later than that, but there is some question as to the correctness of their reference to the main gabbro of the region. There may have been two periods of gabbro outflow, one earlier and the other later than the syenite.

A few dikes, and a few small eruptive masses, of three or four different types, have been noted which are not referable to any of the great masses apparently. But as yet their relationships are obscure. All are younger than the anorthosite, and all are metamorphosed.

General metamorphosed condition of the intrusives. All these igneous rocks have undergone severe metamorphism, as shown by the partial or complete granulation of the original minerals, the large amount of recrystallization, and the production of

¹The monzonite group was established by Brögger to contain rocks intermediate between the granite syenite group (orthoclase rocks) on the one hand, and the diorite gabbro group (plagioclase rocks) on the other; hence characterized by both orthoclase and plagioclase. Monzonite has a silica percentage between 50% and 60%, banatite between 60% and 66%, and adamellite over 66%.