

- 8 Augite syenite from the great intrusion into anorthosite, road from Tupper lake to Wawbeek,  $\frac{1}{2}$  mile east of Halfway brook, which marks the line between townships 22 and 23, Franklin co. Description by Cushing, analysis by Morley. 20th An. Rep't N. Y. State Geol. 1902. p.r69.
- 9 Augite syenite, cut by N. Y. C. & H. R. R. R.  $3\frac{1}{2}$  miles north of Tupper Lake Junction and 1 mile from the first anorthosite outcrops, the latter being of the transition type, analysis 6; Altamont, Franklin co. Description by Cushing, analysis by Morley. 20th An. Rep't N. Y. State Geol. 1902. p.r69.
- 10 Gneiss, referred somewhat doubtfully to augite syenite; occurs involved with a later granitic gneiss in the border zone of the augite syenite; from cut by N. Y. C. & H. R. R. R. between Piercefield and Childwold, and 1 mile from the latter; Hopkinton, St Lawrence co. Description by Cushing, analysis by Morley. 20th An. Rep't N. Y. State Geol. 1902. p.r70.
- 11 Augite syenite, Loon lake, Franklin co., typical. Description by H. P. Cushing, analysis by E. W. Morley. Geol. Soc. Am. Bul. 10:177-92.
- 12 Augite syenite, near Harrisville, Diana, Lewis co.; the gabbroic rock, analysis 7, is a differentiation phase of this syenite. Description and analysis by C. H. Smyth jr. Geol. Soc. Am. Bul. 6:271-74; and 17th An. Rep't N. Y. State Geol. 1899. p.471-86.
- 13 Augite syenite, Little Falls, Herkimer co. Description by Cushing, analysis by E. W. Morley. 20th An. Rep't N. Y. State Geol. 1902. p.r69.
- 14 Quartz augite syenite, from border zone and accompanied by granite, cut by N. Y. & Ottawa R. R.  $2\frac{1}{2}$  miles south of Willis pond, Altamont, Franklin co. Description by Cushing, analysis by Morley. 20th An. Rep't N. Y. State Geol. 1902. p.r69.

*Discussion.* The gabbros are the most basic rocks of the Adirondack eruptive core, except for their own local, iron-rich differentiations, which give rise to the titaniferous magnetite ore deposits. The two analyses, 1 and 2, represent well their general composition and the usual limits of their variation. They are quite ordinary gabbros and show no differences worthy of mention when compared with most rocks of the sort.

Unfortunately, with the exception of analysis 3, no analyses are available of the transition rocks between the gabbros and the anorthosites, such transition rocks occurring at the borders of the main anorthosite bodies as well as in smaller, separate masses, though the general differentiation of the gabbro and anorthosite must be regarded as having taken place below, in the parent magma of both. The smaller anorthosite bodies, such as those near Keeseville and on Rand hill in Clinton county, the latter furnishing the rock whose analyses appear in column 3, are very