by no means rises to the dignity of an essential constituent but
is much more abundant and attains a larger size than in the
usual igneous rock. The syenites contain quartz almost without
exception, and the amount increases toward the acid end of the
series, the calculation of the analysis of column 14 showing 14% of
that mineral.

Analysis 10 is of a green gneiss which occurs associated with
granite and granitic gneiss near Piercefield. Its field relation-
ships to the syenite are not plain, and the doubt about its pro-
perly belonging with them is not cleared away by the analysis,
which falls slightly out of the series in its magnesia-lime ratio
and in its total magnesia. The rocks nearest it in silica per-
centage, 8 and 9, have this ratio, 1:3 and 1:3.5 respectively, as
against 1:1.7 in 10. Its ratio is nearest to that of 13. On the
other hand, it can be argued that its general great similarity in
composition would seem to ally it closely with the syenites, and
that these show a great variation in the magnesia-lime ratio,
even though it approaches so near to equality in no other.

General characters of the Adirondack eruptives. The analyses in
the preceding table are thought to be sufficiently numerous to
furnish a very fair representation of the general characters of
the Adirondack eruptives, except for the lack of analyses of the
granites. The latter vary greatly, ending with very acid rocks
composed almost wholly of quartz and feldspar. It is quite safe
to say that they will reach 75% of silica and probably higher, and
that, since their feldspar is universally microperthite, the ratio
of soda to potash will remain substantially as it is in the
syenites.

The gabbros and anorthosites are quite normal representatives
of these groups. But in the transition rocks between these and
the syenites we find low magnesia, low ratio of lime and mag-
nesia to alkalis, and approximately equal amounts of soda and
potash, and these characters continue to the end of the series.
The soda-potash ratio is a slowly changing one, the potash being
at first below, but eventually overtaking and passing the soda
in the more acid rocks. In these respects the syenites, and pro-
bably the granites, depart somewhat from the corresponding
rocks of the Ekersund-Soggendal area in Norway, which also ac-