Amphibolite.
Ophite
Crystalline Limestone,
Ophicalcite.
Quartzites.
Felsites.

Quartz
Hornblende or [Amphibolite.
Muscovite
Albite (Soda Feldspar.)
Microcline (Green Feldspar.)
Orthoclase. (Potash Feldspar.)

OBSERVATIONS ON ROCKS.

GRANITES.

Several varieties of Granite occur in the Cobequid Mountains. Boulders in the drift at Thrum Cap show that one of these is hornblende granite. Its constituent minerals are quartz, reddish feldspar, black mica, and hornblende. Its feldspar sometimes makes it porphyrite being disposed in seperate crystals. Granite boulders occurring with other Cobequid mountain boulders near West River Station of Pictou Railway are not distinguishable from Halifax Granites. In the northern "Archæan" series of Cape Breton the Granites are coarse, and have been characterized as Gneisses.

SYENITES.

Those having *two* constituent minerals, Feldspar and Hornblende, occur in the Cobequid Mountains.

Quartz syenites, having quartz as a third constituent, occur plentifully in Arisaig and the Cobequid Mountains and in the Halifax Harbor drift as well as in Cape Breton. In some of these the feldspar is red, often bright red, the quartz brown and the hornblende only enough to make it a syenite. Boulders of the Cobequid syenites are plentifully associated with the Blomidon and Partridge Island amygdaloids and basalts, beside the fossiliferous limestones above the old Avon Bridge and in the Halifax Harbor drift.

GNEISSES.

The archæan gneisses of Nova Scotia are syenitic or hornblendic. Their constituents are feldspar and hornblende in irregular banded form. Grains of magnetite often form bands instead of or along with hornblende.

DIORITES are composed of a triclinic feldspar and hornblende.

The feldspar of the archæan diorites is albite (soda feldspar) These are generally granitoid and contain magnetite. The Arisaig diorites found *in situ* have this mineral. Boulders from the Cobequid Mountains found in the Halifax Harbor drift are still more magnetitic.

AMPHIBOLITE.

This rock is found at Arisaig. It is composed chiefly of the mineral hornblende or amphibolite. I distinguish the rocks from the minerals of the same name, according to Dana's mode, e. g. Amphibolyte the rock, Amphibolite the mineral. In the same way, Magnetyte and Magnetite.