On the Norian or "Upper Laurentian" Formation. 197

1

CALCITE.—This was found only in two hand-specimens. One of these was fresh and contained a little calcite, which might possibly be a primary constituent. The other was from New Glasgow, and in this the calcite, together with zoisite, epidote, &c., appears as a decomposition product of the plagioclase in the form of a dull finely granular mixture.

EPIDOTE.—The only locality where epidote occurs is also near the village of New Glasgow. It is found in several sections of the anorthosite from this place along with chlorite and quartz as a product of decomposition of the pyroxene, and as above mentioned with calcite and zoisite as a product of decomposition of the plagioclase. In one or two places it also occurs in small bands, cutting diagonally across the anorthosite following the line of small faults. The epidote is everywhere secondary.

GARNET .- This does not occur as a constituent of the normal anorthosite, but is often found near its contact with the surrounding gneiss. It has a pinkish color, and is seen under the microscope in small irregular masses which are often mixed with or which completely surround the grains of iron ore. In the sections of the variety of anorthosite rich in iron ore from the Township of Wexford, range I. lot 7, (and from other places above mentioned), we find a pale pink garnet which forms a small zone of uniform breadth around every grain of iron ore or pyroxene where these otherwise would come in contact with the plagioclase. Between the pyroxene and the iron ore there is however no garnet. It is quite isotropic and has grown out from the iron ore or pyroxene into the feldspar, against which it is bounded by sharp crystalline outlines. These zones of garnet are analogous to the zones of actinolite and hypersthene around the olivine of the anorthosite from the Saguenay River which will be referred to later on and which have also been described in olivine gabbros of many other localities.

ZIRCON.—This mineral is not found in the normal anorthosite but it occasionally occurs in this rock near its contact with the gneiss. It is seen only in small quantity,