

Garnet occurs only sporadically and then always corrosion zone fashion, between the magnetite and feldspar. But little hornblende is found in the Loon lake rock.

In the type rock quartz occurs only sparingly, though quite quartzose varieties occur in the immediate vicinity. It is mainly in rather coarse, elongated spindles or lenses. It is also found as small inclusions in the feldspar, sometimes rather numerous and with a tendency to the production of micrographic growths.

The rock has a cataclastic structure, ranging from rather coarse varieties to those which are thoroughly gneissoid, and the granulation pretty complete. In other words, it shows the same variations in texture which the anorthosites exhibit, except for the lack of the very coarse varieties.<sup>1</sup>

*Variability of the syenite.* While this description will answer for the usual rock in many places, it shows great variability. On the one hand, the amount of quartz varies widely, rocks which contain as much as 20% of it being not at all uncommon. Increase in quartz is commonly accompanied by decrease in the amount of pyroxene and hornblende present, and hence by disappearance of well marked foliation, it being replaced by a linear structure due to the spindle form of the quartzes and their parallel alinement. This structure is quite characteristic of some of the igneous rocks of the region. This quartzose variety is usually coarsely granular and seems to weather even more rapidly than the ordinary rock, so that it is very difficult to obtain in fresh condition, and usually only the rusty brown rock can be found. It is the great similarity of this variety, which can be traced into the normal rock through all gradations, to the brown, quartzose gneiss north of Franklin Falls which Kemp regards as a possible Grenville conglomerate and which has already been referred to, that causes the writer's hesitation in accepting that origin for the rock. It may be also added that, whereas this Franklin Falls rock is adjoined by Grenville sediments on one side, it is also adjoined by augite syenite on the other, so that areally the connection with one sort of rock is no closer than with the other.

Another common variation in the rock is brought about by changes in the relative amounts of pyroxene and hornblende. In

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<sup>1</sup>For a more detailed description of these rocks, see Geol. Soc. Am. Bul. 10:177-82.