LAURENTIAN AREA.

development of this structure is that wherever the rock becomes granulated it becomes much lighter in colour. This can be observed even in microscopical sections, when the phenomena is seen to be due to the disappearance of the dark dust-like inclusions which give to the felspar its dark colour, wherever the mineral becomes broken up or granulated, and so uniformly are these two processes connected, that it is always possible to predict when examining a thin section under the microscope, just how much of the rock has been granulated by observing is colour, before using polarized light, by which the extent of the granulation is at once made visible. So common is the granulation throughout the area, that even in the most massive and granitoid specimens of the anorthosite, traces of it ean usually be found.

When the effects of pressure are more marked, as close to the Foliation edge of the area or anywhere in the most easterly development of the eventually anorthosite in the townships of Rawdon and Kilkenny, the granulation becomes much more pronounced and a progressively larger proportion of the rock becomes granulated. This is accompanied by the passage of the streaked structure into a distinct and often perfect foliation, which coincides with the foliation of the surrounding gneiss, and by a bleaching of the rock, until in the varieties showing an advanced stage of granulation only a few small dark remnants of the original coarsely erystalline plagioelase individuals remain, like augen in an augen-gneiss embedded in a mass of finely granulated plagioelase, often so white that at a distance the rock cannot be distinguished from marble. This variety is well seen about New Glasgow, where it has been extensively quarried for paving stones which are used in Montreal. It is also well seen along the contact near the cast end of Lake L'Achigan, gradually becoming dark in colour towards the west end of the lake about St, Hippolyte.

The anorthosite undergoes no change in chemical composition during the granulation above described-the process, as studied under the microscope, appears to be a purely mechanical one. It is thus quite different from that commonly observed and which has been described by Lehman and others in the ease of sheared gabbros. In all cases of shearing hitherto described, the pyroxenes under the influence of the pressure are altered to hornblende, while the plagioc ase is often altered to saussurite, the resulting rock being an amphibolite not a gabbro. There is reason to believe that the movements which affected these anorthosites took place when the rock was deeply buried and probably also very hot, perhaps near its fusing point.

Although, in most p. ces, the Morin anorthosite comes against the Contact rocks. gneiss without producing any perceptible alteration, at some parts of its

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