Endomorphic contact.

the importance of essential constituents, while the microscope shows larger and more numerous sphenes. Nepheline is also occasionally present around the periphery of the mass, though only in very subordinate amount. The feldspar becomes more finely laminated until the perthitic structure is all but lost, becoming discernible only in parts and under high power. This gives the mineral, which has otherwise the general aspect of orthoclase, a peculiar mottled appearance, answering apparently to the characters of kryptoperthite. A few grains of finely twinned plagioclase also appear.

Dounan's quarry.

In a mechanical separation made by Mr. LeRoy of a specimen (No. 145) from Dounan's quarry, about thirty yards from the contact, the feldspathic constituents fell at the densities 2·62, 2·583, and 2·566. The specific gravity of the specimen selected for analysis I of the feldspars, cited from the Geology of Canada, 1863, (p. 657) was 2·561. The darker colour which these rocks acquire in proximity to the contact often gives them a marked value for decorative purposes.

It is also noticeable that while the changes in the mineral constituents which characterize the endomorphic contact zone are such as to denote a more basic composition, yet certain dykes (No. 188, 135) radiating from the mass appear to be more acid than the normal rock. In them there is no increase of ferromagnesian constituents but rather an increase of quartz, a variation which has not been found in any other part approaching the contact.

Basic Segregations.

The nordmarkite also contains dark masses in which the iron-magnesia minerals are prominent. The feldspar in these becomes finely granular and sometimes shows perthitic structure under high magnifying powers. The leading dark constituent is biotite, deep brown in colour with high double refraction. It is rather distinctly idiomorpl in form. Dark green hornblende with the usual pleochroism is abundant in these masses, but usually in small crystals. No augite appears.

Basic masses.

The dark minerals together occupy rather less than half the rock, so that it is only by comparison with the light-gray, or fawn-coloured nordmarkite that these patches appear as dark-coloured rock.

In mode of occurrence they are similar to those found in the essexite already described, and are probably analogous to them in origin.