or in a direction nearly at right angles while the scales and plates of sericite have a similar development.

The specific gravity, ascertained by Mr. R. A. A, Johnston, of these porphyritic crystals was 2·758.

The matrix of these crystals is a rather fresh diabase with pronounced ophitic structure and composed chiefly of plagioclase and augite. The plagioclase is idiomorphic and forms an interlacing network of lath-shaped crystals. Occasional crystals are rather fresh and glassy, but usually they exhibit the same alteration as the larger porphyritic individuals, and apparently belong to the same species of felspar (labradorite). The decomposition products aggregate themselves toward the centre of the crystal leaving a somewhat fresh periphery. The augite is in general quite fresh, but occasionally an individual was seen partially altered into green, strongly trichroic hornblende. Twins are common. A considerable quantity of biotite is present which is always more or less altered to chlorite. Ilmenite, an abundant constituent, occurs in irregular grains and only shows incipient alteration to leucoxene. Occasional prisms of apatite were noticed, chiefly developed in the chloritized biotite. The more unaltered portions of the plagioclase show the undulatory extinction due to pressure. Pyrite is also an abundant constituent.

6. *Locality.*—Algoma Mills, north shore of Lake Huron, district of Algoma, Ontario. (1)

The thin section exhibits a rock very similar to the one just described and must be regarded as being derived from a dyke almost analagous in character and composition to that exposed near Murphy Lake.

The phenocrysts of labradorite show the usual alteration into an aggregate composed chiefly of muscovite, epidote and zoisite although considerable portions of some of the crystals are free from these decomposition products. The augite has a light yellowish colour and is only slightly pleochroic. Twins are common, the twinning plane and composition face being the orthopinacoid.

Curved or distorted individuals were often noticed exhibiting the

*From a boulder No. 1605, Geological Survey of Minnesota, series of rocks, 18th Annual report, page 58.