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PETROGRAPHICAL NOTES ON SOME ARCHÆAN ROCKS FROM CHELSEA, QUE.

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NO. 1. SERPENTINE LIMESTONE.*

By the aid of the microscope this rock is seen to consist essentially of the minerals calcite and serpentine, and to have muscovite and a few grains of iron ore as accessory constituents.

The calcite is wholly crystalline and shows rhombohedral cleavage throughout. It is more or less turbid in some parts, evidently from the presence of small inclusions of graphite-like matter, which are elsewhere absent. Such inclusions, when they occur in well-defined areas, are indicative of fossil origin, and even their presence in irregular aggregations may be so interpreted.

In this specimen, however, the inclusions appear in gradually varying quantities in a part of the section, but nowhere in areas having any definite boundaries. They are in fact, only more or less freely disseminated through parts of the rock, but not in such a way as to give any satisfactory evidence of an organic origin of the calcite, which may therefore be considered a secondary constituent.

The serpentine is colorless, except in polarized light, when it shows dull colors and aggregate polarization. It occupies somewhat rounded areas, which have rather uniform boundary lines.

*Nos. 1 and 3 are from "the Ravine," Old Chelsea, Que. No. 3 rock is from a 4 to 7-inch dyke cutting No. 1. No. 2 is from the first railway cutting north of Chelsea Station, Gatineau Valley Railway. These specimens were all collected by Dr. Ami. The microsections were prepared by Mr. McNamee, of Buffalo, N.Y.