REVIEW OF THE EVIDENCE FOR THE ANIMAL NATURE OF EOZOGN CANADENSE.

(Concluded.)

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II. PETROLOGICAL AND CHEMICAL.

Bearing in mind the statements made in the previous note, respecting the stratigraphical relations of the Grenville Series, and referring to the excellent account by my friend Dr. Bonney of his observations at Côte St. Pierre, and to some difficulties stated by him which merit attention, we may sum up the evidence so far, under the following statements:—

1. The limestones included in the Grenville Series and their associated quartzites and schists bear so strong a resemblance in mineral character to metamorphosed Palæozoic calcareous beds of organic origin and their associates, as to warrant at least the careful consideration of any forms apparently organic contained in these limestones.

2. The occurrence in these limestones of nodular silicates, of graphite, of pyrite, and of apatite, affords additional reason to suspect their organic origin.

3. The presence of large beds as well as of veins of graphite and of thick deposits of iron ore in the Grenville Series constitutes an additional analogy with Palæozoic formations holding organic remains.²

These facts were adduced by Dr. Sterry Hunt and Dr. J. D. Dana in evidence of the probability of life in the Laurentian period, even before the discovery of Eozoön. Certain particulars connected with them, however, now demand somewhat more detailed attention, in

¹ [Reprinted from the Geological Magazine, Decade 1V., Vol. II., October, November, December, 1895.

⁹ See papers by the author on the Graphite and Phosphates of the Laurentian Rocks, Quart. Jour. Geol. Soc. London, 1869 and 1876.