

in the same paper to appear in the calciferous of Philipsburgh on the Canadian frontier. Prof. Seely informs me in a private letter that he has since recognized in the Champlain Valley what appear to be two additional species of *Cryptozoon*.

*Cryptozoon Boreale*, Dawson (Fig. 1).—A quite distinct and very interesting species was obtained in 1888 by Mr. E. F. Chambers, of Montreal, at Lake St. John, P.Q., associated with fossils of Trenton age. It consists of a mass of cylindrical or turbinate branches, proceeding from a centre and also budding laterally from each other. Each branch shows a series of laminae concave upward. The spaces between the thin laminae are filled with a very fine granular material, in which are canals, less frequent straighter and more nearly parallel to the laminae than in the typical species. This species is remarkable for the slender and coral-like shape of its branches, for its resemblance in general form to the disputed specimens resembling *Eozoon* from the Hastings (probably Huronian) of Tudor, Ontario, and on account of its being the latest known occurrence of *Cryptozoon*. It was very shortly described and commented on in the "Canadian Record of Science" for 1889.

*Cryptozoon Occidentale*, s.n.—So far our specimens of *Cryptozoon* have been Upper Cambrian or Ordovician, but Dr. C. D. Walcott, in his memoir on the Fauna of the Lower Cambrian, mentions at p. 550 that in the Grand Cañon section in Arizona, there are unconformably underlying the Lower Cambrian "12,000 feet of unaltered sandstone, shale and limestone," which may be regarded as Pre-cambrian, and probably in whole or in part representing the Kewenian of Lake Superior and the Etcheminian of Southern New Brunswick. In these beds, 3,500 feet below the summit of the section, he found "a small Patelloid or Discinoid shell," a fragment probably of a Trilobite, and a small *Hyalithes*, in a bed of bituminous limestone.