

connection with that discovery, and with recent objections to the organic nature of Eozoön.

Dolomite or magnesian limestone is a not infrequent associate of Palaeozoic fossiliferous limestones; and I have remarked in previous papers on the similarity of the mode of occurrence of silicified Stromatopora in the great dolomite of the Niagara formation with that of Eozoön in the Grenville Limestone, in which dolomite occurs in beds, in thin layers, and in disseminated crystals, in a manner to show that it was an original constituent of the deposit. Dolomite is also one of the most common minerals filling the cavities of Eozoön, and especially the finer tubuli. The mode of its occurrence on the small scale may be seen in the following description of a section of a portion of a bed of limestone from Côte St. Pierre, examined under a lens, after being treated with dilute acid. The specimen comprised about six inches of the thickness of the bed:—

Crystalline limestone with crystals of dolomite, constituting about one half (fragments of Eozoön in calcite portion).¹

More finely crystalline limestone, with rounded granules of serpentine, some of them apparently moulded in cavities of Archaeospherinae, or of chamberlets of Eozoön.

Limestone with dolomite as above, but including a thin layer of limestone with granules of serpentine.

Limestone and dolomite, with a few grains of serpentine and fragments of Eozoön.

Crystalline dolomite with a few fragments of Eozoön, as limestone, with canals in dolomite.

Limestone with fragments of Eozoön, granules of serpentine, and groups of chamberlets filled with serpentine.

We have thus a bed of limestone in which dolomitic

¹ Distinguished by their fine granular texture and canal-systems.