

occurs under conditions which imply its deposition from water, either cold or warm. Gümbel remarks on this :—" Hunt, in a very ingenious manner, compares this formation and deposition of serpentine, pyroxene, and loganite, with that of glauconite, whose formation has gone on uninterruptedly from the Silurian to the Tertiary period, and is even now taking place in the depths of the sea ; it being well known that Ehrenberg and others have already shown that many of the grains of glauconite are casts of the interior of foraminiferal shells. In the light of this comparison, the notion that the serpentine and such-like minerals of the primitive limestones have been formed, in a similar manner, in the chambers of Eozoic Foraminifera, loses any traces of improbability which it might at first seem to possess."

In many parts of the skeleton of Eozoon, and even in the best infiltrated serpentine specimens, there are portions of the cell wall and canal system which have been filled with calcareous spar or with dolomite, so similar to the skeleton that it can be detected only under the most favourable lights and with great care (Fig. 15, *supra*). It is further to be remarked that in all the specimens of true Eozoon, as well as in many other calcareous fossils preserved in ancient rocks, the calcareous matter, even when its minute structures are not preserved, or are obscured, presents a minutely granular or curdled appearance, arising, no doubt, from the original presence of organic matter, and not recognised in purely inorganic calcite.

Other specimens of fragmental Eozoon from the Petite Nation localities have their canals filled with dolomite, which probably penetrated them after they were broken up and imbedded in the rock. I have ascertained, with respect to these fragments of Eozoon, that they occur abundantly in certain layers of the Laurentian limestone, beds of some thickness being in great part made up of them, and coarse and fine frag-