

ments occur in alternate layers, like the broken corals in some Silurian limestones.

Finally, on this part of the subject, careful observation of many specimens of Laurentian limestone which present no trace of Eozoon when viewed by the naked eye, and no evidence of structure when acted on with acids, are nevertheless organic, and consist of fragments of Eozoon, and possibly of other organisms, not infiltrated with silicates, but only with carbonate of lime, and consequently revealing only obscure indications of their minute structure. I have satisfied myself of this by long and patient investigations, which scarcely admit of any adequate representation, either by words or figures.

Every worker in those applications of the microscope to geological specimens which have been termed micro-geology, is familiar with the fact that crystalline forces and mechanical movements of material often play the most fantastic tricks with fossilized organic matter. In fossil woods, for example, we often have the tissues disorganized, with radiating crystallizations of calcite and little spherical concretions of quartz, or disseminated cubes and grains of pyrite, or little veins filled with sulphate of barium or other minerals. We need not, therefore, be surprised to find that in the venerable rocks containing Eozoon, such things occur in the highly crystalline Laurentian limestones, and even in some still showing the traces of Eozoon. We find many disseminated crystals of magnetite, pyrite, spinel, mica and other minerals, curiously curved prisms of vermicular mica, bundles of aciculi of tremolite and similar substances, veins of calcite and crysotile or fibrous serpentine, which often traverse the best specimens. Where these occur abundantly, we usually find no organic structures remaining, or if they exist, they are in a very defective state of preservation. Even in specimens presenting the lamination of Eozoon to the naked eye, these crystalline actions have often destroyed the minute structure; and I fear that some microscopists have