

ing on any investigation I might have in hand. It was this habit which induced my old friend, Sir William Logan, in 1858 and subsequent years to ask my aid in the study of the forms believed or suspected to be organic, which had been discovered in the course of his surveys of the Laurentian rocks. In one respect this was unfortunate. It occupied much time, interfered to some extent with other researches, led to unpleasant controversies. But these evils were more than compensated by the insight which the study gave into the fact of the persistence of organic structures in highly crystalline rocks, and to the modes of ascertaining and profiting by these obscure remains, while it has guided and stimulated enquiry and thought as to the origin and history of life. These benefits entitle the researches and discussions on Eozoon to be regarded as marking a salient point in the history of geological discovery, and it is to these principally that I would attract attention in the present chapter.

Perhaps nothing excites more scepticism as to the animal nature of Eozoon than the prejudice existing among geologists that no organism can be preserved in rocks so highly crystalline as those of the Laurentian series. I call this a prejudice, because any one who makes the microscopic structure of rocks and fossils a special study, soon learns that fossils and the rocks containing them may undergo the most remarkable and complete mechanical and chemical changes without losing their minute structure, and that limestones, if once fossiliferous, are hardly ever so much altered as to lose all traces of the organisms which they contained, while it is a most common occurrence to find highly crystalline rocks of this kind abounding in fossils preserved as to their minute structure.

Let us, however, look at the precise conditions under which this takes place.

When calcareous fossils of irregular surface and porous or cellular texture, such as Eozoon may have been, or corals were