

Tertiary fossil woods retaining perfectly their most minute structures, yet entirely replaced by silica, so that not a particle of the original wood remains.

The above considerations as to mode of preservation of Eozoon concur with those in the previous chapter in showing its oceanic character, if really a fossil; but the ocean of the Eozoic period may not have been so deep as at present, and its waters were probably warm and well stocked with mineral matters derived from the newly formed land, or from hot springs in its own bottom. On this point the interesting investigations of Dr. Hunt with reference to the chemical conditions of the Silurian seas allow us to suppose that the Laurentian ocean may have been much more richly stored, more especially with salts of lime and magnesia, than that of subsequent times. Hence the conditions of warmth, light, and nutriment required by such gigantic Protozoans would all be present, and hence, also, no doubt, some of the peculiarities of their mineralization.

I desire by the above statement of facts to show, on the one hand, that the study of Eozoon, regarded as probably an ancient form of marine life, aids us in understanding other ancient fossils, and their manner of preservation; and on the other hand, that those who deny the organic origin of Eozoon place us in the position of being unable, in any rational manner, to account for these forms, so characteristic of the Laurentian limestones, and set at naught the fair conclusions deducible from the mode of preservation of fossils in the later formations. The evidence of organic origin is perhaps not conclusive, and in the present state of knowledge it is certain to be met with much scepticism, more especially by certain classes of specialists, whose grasp of knowledge is not sufficiently wide to cover, on the one hand, fossilization and metamorphism, and on the other, to understand the lower forms of life. It may, however, be sufficient to qualify us in turning our thoughts for a few moments to con-