

ductive buds or germs to establish new colonies of the species. Such was the general mode of growth of Eozoon, and we may now consider more in detail some questions as to its gigantic size, its precise mode of nutrition, the arrangement of its parts, its relations to more modern forms, and the effects of its growth in the Laurentian seas.

With respect to the size of Eozoon, this was rivalled by some succeeding animals of the same humble type in later geological ages; and, as a whole, foraminiferal animals have been diminishing in size in the lapse of geological time. This is indeed a fact of so frequent occurrence that it may almost be regarded as a law of the introduction of new forms of life, that they assume in their early history gigantic dimensions, and are afterwards continued by less magnificent species. The relations of this to external conditions, in the case of higher animals, are often complex and difficult to understand; but in organisms so low as Eozoon and its allies, they lie more on the surface. Such creatures may be regarded as the simplest and most ready media for the conversion of vegetable matter into animal tissues, and their functions are almost entirely limited to those of nutrition. Hence it is likely that they will be able to appear in the most gigantic forms under such conditions as afford them the greatest amount of pabulum for the nourishment of their soft parts and for their skeletons. There is reason to believe, for example, that the occurrence, both in the chalk and the deep-sea mud, of immense quantities of the minute bodies known as Coccoliths along with Foraminifera, is not accidental. The Coccoliths appear to be grains of calcareous matter formed in minute plants adapted to a deep-sea habitat; and these, along with the vegetable and animal *débris* constantly being derived from the death of the living things at the surface, afford the material both of sarcode and shell. Now if the Laurentian graphite represents an exuberance of vegetable growth in those old seas propor-