

siderations suggested by the probable origin of animal life in the seas of the Laurentian period.

Looking down from the elevation of our physiological and mental superiority, it is difficult to realize the exact conditions in which life exists in creatures so simple as the Protozoa. There may perhaps be higher intelligences, that find it equally difficult to realize how life and reason can manifest themselves in such poor houses of clay as those we inhabit. But placing ourselves near to these creatures, and entering, as it were, into sympathy with them, we can understand something of their powers and feelings. In the first place it is plain that they can vigorously, if roughly, exercise those mechanical, chemical, and vegetative powers of life which are characteristic of the animal. They can seize, swallow, digest, and assimilate food; and, employing its albuminous parts in nourishing their tissues, can burn away the rest in processes akin to our respiration, or reject it from their system. Like us, they can subsist only on food which the plant has previously produced; for in this world, from the beginning of time, the plant has been the only organism which could use the solar light and heat as forces to enable it to turn the dead elements of matter into living, growing tissues, and into organic compounds capable of nourishing the animal. Like us, the Protozoa expend the food which they have assimilated in the production of animal force, and in doing so cause it to be oxidized, or burnt away, and resolved again into dead matter. It is true that we have much more complicated apparatus for performing these functions, but it does not follow that these give us much real superiority, except relatively to the more difficult conditions of our existence. The gourmand who enjoys his dinner may have no more pleasure in the act than the *Amœba* which swallows a *Diatom*; and for all that the man knows of the subsequent processes to which the food is subjected, his interior might be a mass of jelly, with extemporised vacuoles,