

others are closed, though equally filled with nourishment. The digestion of animal matter is very rapid; the pachydermatous larva of an insect being rendered irrecongnisable in four minutes. Vegetable matter is an inappropriate food, and seemingly indigestible. See *Ann. des Sciences Nat. Part. Zool. tome viii. p. 363, &c.*—It were well that this anatomy of Corda was confirmed, for the fallacy of the microscope is almost proverbial, and powers of very high intensity must have been used in this demonstration.

4. *The nature of the Cells of the Escharidæ.* Page 238.

“ If the stony cells of the *Escharidæ* were formed by the exudation of a calcareous matter which moulded itself on the surface of the secreting membrane, it is evident that the first layer thus formed must be the external one, and that the addition of new quantities of this earthy matter could only augment the thickness of the parietes of the cell, and modify the disposition of its interior cavity, without at all changing the exterior configuration of the first formed layer; for here the solid cell completely envelopes the animal, and is not overlapped by the secreting organ, as in the *Mollusca gasteropoda*, whose shell changes its form with age, because the deposit of new matter, taking place on the border of the part already consolidated, continually lengthens it, and is moulded on the soft parts whose configuration is liable to change.

“ To throw some light on the mode of formation and on the nature of the cells of the *Eschares*, it became consequently interesting to examine these cells at different ages, and to see if their exterior form changed or remained always the same. This study, indispensable for the anatomical and physiological history of these little beings, may also lead to a knowledge useful to zoology and to geology; for the determination of the species, recent and fossil, rests principally on the characters furnished by these cells; and we are still ignorant whether or not they can be modified in the progress of age.

“ This examination can be made more easily than one might at first imagine; for neither the observation of the same individual, at different stages of its developement, nor the collection of a series of specimens so as to represent all the phases through which these little creatures pass successively, is required. Indeed, since these polypes spring from each other, and do not separate from their parents, each polypidom must present a long series of generations enchainèd to each other, and in each of these series, the relative age of living individuals must be indicated by the place which they occupy. To resolve the question which we have put, it is sufficient therefore to study comparatively the cells situated near the base of the polypidom, in its middle, in its young branches, and towards the extremity of the latter; for we are certain that it is not only in this last place that living polypes are found, as some authors affirm, but that they exist over almost the entire extent of the polypidom.

“ After examining in this manner, with a sufficient magnifying power, the cells of the *Eschara cervicornis*, I am quite convinced that the mode of developement of these stony cells is not that which is usually admitted.

“ Indeed, I have seen that not only does the general conformation of the cells change with age, but also that these changes operate in a great measure on the exterior surface,—that is to say, on that side of their parietes, which, in the hypothesis of their formation by layers, must exist from the first, and once consolidated, ought to change no more, unless from exterior and accidental frictions,