Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.
and of all other cells, from which the reader can almost reconstruct the eggs for himself.

Only a few points more can be noted in the later history. The mouth invagination occurs on a line between the bases of the antennular buds; the history of the eye is followed, the author agreeing well in most points with Parker, but affording little support to Watase's theoretical views. The antennal gland (green gland) is regarded as mesodermal, but its opening was not found even in the larval stages; the alimentary canal proper is almost wholly made up from stomodeal and proctodeal invaginations, the true entoderm, which arises by the migration of yolk cells to the posterior end of the yolk being chiefly confined to the hepato-pancreatic diverticula and their ducts.

The greatest fault which one can find with the paper is that which is due to its composite nature, the result being an apparent lack of arrangement, so that it is difficult to follow in detail certain structures. This possibly was unavoidable where two authors were each contributing their parts and also where the composition of the text was done at different times. The volume is filled with valuable facts and cannot be ignored by the student of Crustacean ontogeny. It is by far the most valuable zoological memoir yet published by the National Academy.

**Campbell's Biology.**—It is rarely that such a veritable hodge podge as this comes to our table. It is an example of absorption without assimilation on the part of the author. The plan of the work is fairly good but it is a misfortune for any student to have it as a guide in his studies. It is worse than the notorious works by the late Dr. Steele, for their faults were largely negative; they taught absolutely nothing good or bad, but this is "filled with lots of things that are not so." The work intends to be a companion to the laboratory work, and gives much space to protoplasm, the cell and the like, and then takes up without any apparent order the structures and classification of animals and plants. A few passages out of over a hundred which we have marked will illustrate the chief shortcomings of the work.

P. 137. The lungs "develop as an outgrowth of the alimentary canal. This outgrowth becomes completely separated off from the oesophagus, and at its lower end divides into two or more tubes, which communicate with the pharynx by a single tube, the trachea."—Pp. 145-6. The statement is made without a single qualification that the ureter of ver-

---

tebrates is developed from the ectoderm and in the development of the nephridia "as a rule the ciliated funnel which was present during development, becomes completely closed." P. 85. Between the ectoderm and the entoderm of the sponges "is a gelatinous-layer, the mesogloea, amongst the cells of which crystals of lime salts occur," which we suppose to be the spicules, silicious as well as calcareous, of these organisms. P. 88. The animal kingdom is divided into Protozoa, and Invertebrate and Vertebrate Mesozoa. The Invertebrates are defined as follows: "They possess no backbone, the nerve cord or nerve cords are never dorsal, . . . and the heart is always placed in the dorsal region." The Invertebrata are subdivided into Coelenterata and Coelomata, but never a word that the Plathelminthes are not Coelomata and that the vertebrates are. But enough. The work is well illustrated, mostly by cuts from Claus, Sachs, Prantl and other recent textbooks.

Correlation Papers of the U. S. Geological Survey Neocene. 4—This memoir is the fifth of a series, having been preceded by essays on the Carboniferous and Devonian by Mr. Williams, on the Cambrian by Mr. Walcott, on the Cretaceous by Mr. White, and on the Eocene by Mr. Clark. To an excellent summary of published material on the subject discussed the authors have added important original matter based on personal investigations by Mr. Dall in the field and laboratory. The following is an outline of the memoir as given in the introduction:

"This paper, after discussing general principles connected with the study and description of the Tertiary or Cenozoic rocks and fossils contained in them, takes up the Neocene deposits of the United States in particular.

"A chapter is devoted to a summary of what is known in regard to the Neocene of the eastern coast of the United States, each State in geographical order being separately considered, beginning at the north. The State of Florida, in regard to which much unpublished information was available, being entirely composed of Cenozoic rocks, and therefore as a type of such structure peculiarly interesting, is treated of in greater detail and at more length than in other cases. The part of this essay relating to the State of Florida is really a preliminary geological report on that State, of which the structure has hitherto been very little known. The important fact that until the Pliocene