

of the development of the embryo the development of the various organs is described: The nervous and tracheal systems, the oenocytes, muscles, fat-body, circulatory and genital systems and alimentary canal. A useful summary is given at the end of the book; in this connection we think the value of the book would have been enhanced by the inclusion of a summary at the conclusion of each chapter.

On the whole, Dr. Nelson confirms the observations of the previous investigators who have studied the development of the bee egg, and his work does not afford any striking differences or discoveries. The account of the cleavage of the egg agrees in the essential details with the earlier work. In regard to the vexed question of the origin of the mesenteron, the importance of which has always been emphasised on account of its bearing of the broad theory of the germ layers, the results of this study are held to lend little support to the views of those who regard the mesenteron of insects as arising from the ectoderm of the stomodæum or proctodæum, and to harmonize still less with the theory of the origin of the mesenteron from cells remaining in the yolk. The author considers a final decision between these two rival interpretations premature. Certainly the honey bee is too highly a specialized member of a specialized order upon which to base generalizations. It is found that the anterior and posterior mesenteron rudiments are formed from the blastoderm of the ventral plate by an inward movement of its cells. The book is characterized by a desire on the part of the author to review the conclusions of previous investigators of the embryology of the honey bee and of other insects, to present the results of his own study and to leave the detailed discussions of rival interpretations to those who prefer the atmosphere of debate, and in a work of this character and purpose we think such an attitude is perhaps desirable.

The numerous excellent illustrations, on which the author is to be heartily congratulated, increase the value of a book which will be very useful to students of insect embryology, and to those beekeepers who may be qualified by their training or mental courage to appreciate what is undoubtedly the best account we have of the development of the egg of the honey bee.

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Mailed March 14, 1916.