
Evolution

Some excellent books on organic evolution have appeared in recent years. Each of these has considered the subject from the viewpoint of new advances in some one field of biological science. Huxley's book is unique in that he has made a synthesis of ". . . new facts or new tools of research" from many disciplines. The subject is so broad and the material so abundant that it is impossible for the author to present more than the broad principles in a book of this size. From numerous citations many of the details are left for the individual reader to work out for himself. There is a very complete bibliography and three indices, "Subjects," "Organisms" and "Authorities." The book is superbly written. Professional biologists, interested in problems of evolution, should find it on their list of books which must be read.

In the first two chapters the broad principles are stated and the plan of the book sketched. Genetics' contribution to evolution is discussed in the third and fourth chapters. This section is much reduced and assumes the readers' knowledge of the principles of heredity. The next three chapters, consisting of three hundred and sixty pages, are devoted to a discussion of geographical, ecological and genetic speciation. The inclusion of maps would have made this section more readable. In the eighth chapter Huxley maintains that adaptations are a fact and can be explained upon good "mechanistic principles." His explanation for their origin is by natural selection. In general this difficult subject is skillfully handled. However, several of his examples of adaptations imply teleology. On page 422 he states, ". . . Thus various desert butterflies spend most of their active life flying about inside quite small bushes, in order to avoid being blown away." Upon the same page we find ". . . In Equidae the subcutaneous muscle sheet is highly developed so as to be capable of strong twitching." These are peculiarities of expression and in no sense meant to be teleological.

The ninth chapter is devoted to a discussion of evolutionary trends leading to specializations. In the last chapter, the tenth, Huxley looks into the future of man. He predicts that, in the near future, man is not destined to break up into a number of separate radiating lines. Changes leading to his evolutionary progress will be concerned with the attributes of the mind. He leaves the reader with the thought that man is the trustee of his own evolution and if rapid progress is to be made he must work and plan for it.—*W. M. Tidd.*

Evolution: The Modern Synthesis, by Julian Huxley, xi and 645 pages; no text figures. Harper and Brothers, publishers, New York and London. Price $5.00.