1952-09

Book Notices

The Ohio Journal of Science. v52 n5 (September, 1952), 285
http://hdl.handle.net/1811/3966

Downloaded from the Knowledge Bank, The Ohio State University's institutional repository

Dr. Shull has arranged the diversified phases of evolution in a terse and appealing manner. The philosophies and scientific findings of centuries, contributing to a meaningful synthesis of ideas, are presented in logical résumé.

Chapters II and III show that orderliness in diversities as well as similarities in divergent organisms imply kinship among organisms. Time and place of origins of species related to geographical conditions of their continents show that organisms evolved not merely on, but with planet Earth and its topography. Direct fossil evidence, including hominids, is discussed in an effective survey. Chapters IV, V and VI thus review the varying life on earth from precambrian Proterozoic to modern living man.

Both organic permanence and organic change conform to the dictates of mechanisms of heredity. Gradual variations through mutation, recombination and ploidy are basic factors of evolution. Their causes are listed. Their directives are observed in phenomena, such as the flexible adaptations to needs in geographical isolation, in animal societies, and in subtle human relationships (Chapters VII-XIV). The final chapter discusses the origin of life. Progress in bridging chemistry and biology of Evolution is being made.

This second edition is a terse expression of the essential points fundamental to Organic Evolution. Dr. Shull has placed proper emphasis on the genetic character of organisms for without this it would be difficult to understand the nature of the process of evolution.

G. J. Siemens


Doctors Taylor and Weber have succeeded in making a direct approach to mammalian anatomy. Their emphasis on the functional aspects tends to vitalize the subject. The introduction includes a clear explanation of the cellular nature of tissues. Mammalian organs and organ systems are simply yet fully discussed in essential scientific language. Illustrations by Thomas Courtney Lee are mostly realistic, often in color. Generally, they are true and accurate representations of cat anatomy. Some are schematic, illustrative of mammals in general.

All organs and systems, such as the integumentary, skeletal, muscular, nervous, circulatory, respiratory, digestive, urinary, and reproductive, as well as the special sense organs, are systematically, vividly and boldly described. The lymphatic and the endocrine systems are presented likewise from the viewpoint of functional anatomy. Terminology, as found in earlier books on anatomy, appears to have undergone research eliminating the obsolete, retaining and introducing pertinent, effective, scientific terms, easy to understand yet scholarly, and stimulating the study of languages which has become indispensable in this field.

The cat is the representative organism used throughout. All interpretations are with reference to this mammal, which, due to its homology with man, closely approaches human anatomy and bodily functions. A forty page manual for the regional dissection of the cat makes this book highly commendable as a text and also as a laboratory guide for cat dissection.

G. J. Siemens