

THE INTERNATIONAL SCIENTIFIC ASSOCIATION

TO THE EDITOR OF SCIENCE: Will you permit me, through the columns of SCIENCE, to call the attention of American scientists to the meeting of the International Scientific Association (*Internacia Sciencia Asocio*), which will occur in conjunction with the Sixth International Esperanto Congress, in Washington, D. C., next August. It is requested that all scientists who are interested in Esperanto, but not yet members of the *Internacia Sciencia Asocio*, and also all scientists who wish to investigate for themselves the practicability of Esperanto as an international language for scientists, attend these meetings. The Esperanto Congress opens August 14, and closes August 20. The *Internacia Sciencia Asocio* will convene not later than August 17. For information concerning tickets, program, hotel accommodation, reduced railway rates, etc., address the Secretary of the Sixth International Esperanto Congress, Washington, D. C.

EDWIN C. REED,
Secretary

SCIENTIFIC BOOKS

History of the Human Body. By HARRIS HAWTHORNE WILDER, Professor of Zoology in Smith College. New York, Henry Holt and Company. 1909. Pp. 573, 150 figs., 8 pls.

The author states in the preface that

This book has a twofold purpose: *first*, to present the results of modern anatomical and embryological research relative to the human structure in a form accessible to the general student, and, *secondly*, to furnish students of technical human anatomy with a basis upon which to rest their knowledge of details.

The volume can be read with interest and profit by persons who have no special training in biology and consequently it meets most excellently the requirements of the first part of the author's purpose. It is perhaps not so well adapted to the needs of the human anatomist. The plan of the book is somewhat unique. The first three and last chapters are of a very general nature and contain an exposition of the general principles of evolution, phylogenesis and embryology. Its main part,

consisting of eight chapters, contains a detailed discussion of the several organ systems from the standpoint of the comparative anatomist.

After discussing the continuity of life and distinguishing between ontogeny and phylogeny, the author presents, in the first chapter, a series of twelve "laws," six of which describe "the characteristics of the phylogenetic record," the remainder being devoted to "an exposition of developmental history or ontogenesis." These so-called laws are merely short statements of certain biological facts or deductions, as will be seen from one example (p. 24).

In studying an embryological record one must constantly distinguish between paligenetic characters, or those which are true repetitions of the past history, and cenogenetic characters, or those which have been more recently acquired as the result of some special adaptation. One of the most universal among these latter is the presence of yolk, a food supply for the embryo, which lies between or within the cells and, when excessive, causes misleading distortions in the proportion of parts and effects the obliteration of many important features.

These statements, owing to their brevity, are necessarily inaccurate and incomplete, but, as a whole, they give the reader a general conception of evolution.

In the second chapter, The Phylogenesis of Vertebrates, the author traces the ancestry of man from *Amphioxus* upward through the vertebrates and mammals. The last chapter, which really belongs with the second, contains a discussion of various theories of the origin of vertebrates. These chapters probably form, for the general reader, the most interesting part of the book, but, owing to the indefiniteness of our knowledge of animal descent, are of less value to the student of anatomy.

The third chapter is entitled The Ontogenesis of Vertebrates. It gives as accurate an account of so large a subject as can well be condensed into so short a space, but it may be questioned whether the limitation of the treatment to human development would not have given a better knowledge of the history of the human body.