

Here, in their mother's heart the young marsupials are nourished for some time, when they are expelled from the mother fully developed and ready to begin life."

C. C. NUTTING

SCIENTIFIC BOOKS

Infection and Resistance. By PROFESSOR HANS ZINSSER, Professor of Bacteriology at the College of Physicians and Surgeons, Columbia University, New York City. The Macmillan Company, 1914. Pp. 546. Illustrated. \$3.50.

This work is conspicuously the most thorough and modern original treatment of the subject of infection and immunity that we have in the English language. The author's own work in the field of immunology, citations to which are frequently made in the text, makes the book authoritative.

We find in the book an exhaustive and impartial analysis of the enormous accumulation of recent work in this field with a wealth of references to original sources given at the bottom of the pages. The survey of the subject is complete, and yet each chapter is a unit in itself, making the book a convenient reference in which to gain a knowledge of any one phase of immunity. This unit arrangement of the chapters has necessitated some repetition, but not to an extent to become boresome.

The text is not intended to be elementary or summary and can not be recommended for the average reader or undergraduate student. It can be most cordially recommended to practitioners, teachers, laboratory workers and especially as a text for medical students for whom it is primarily intended.

Starting with the general problem of Virulence, the author discusses successively the Bacterial Poisons, Natural and Acquired Immunity, Antitoxins, Cytolysis, Complement and Diagnosis, Agglutination, Precipitation, Phagocytosis (four chapters), Anaphylaxis (three chapters), Therapeutic Immunization, and a chapter on Abderhalden's Work on Protective Ferments. Dr. Stewart W. Young has been invited to write a concluding chapter on Colloids, which gives a comprehensive idea

of the nature of this state of matter, and the relation of colloids to biological problems.

The chapter on Therapeutic Immunization in Man might be criticized on account of its brevity in contrast to the rest of the book. It seems to the reviewer as though it could be made more effective even in the space allotted by the introduction of more data to show the efficacy of our marvelous advances in immunology.

C. M. HILLIARD

The Differentiation and Specificity of Starches in relation to Genera, Species, etc. Stereochemistry applied to Protoplasmic Processes and Products, and as a Strictly Scientific Basis for the Classification of Plants and Animals. By EDWARD TYSON REICHERT, M.D., Professor of Physiology in the University of Pennsylvania, Research Associate of the Carnegie Institution of Washington. In two parts. Published by the Carnegie Institution of Washington, Washington, D. C. 1913. Pp. 900, plates 102.

The author intends that the present memoir on starches shall have a relation to the memoir on hemoglobins worked out by Reichert and Brown and reviewed in SCIENCE (January 27, 1911). If there is a relationship between these two memoirs it is rather in what Dr. Reichert has attempted to perform than in what he has succeeded in accomplishing. The two memoirs are so different that a comparison of them is well-nigh impossible. In the one, we almost see the master and in the other the novice. The memoir on hemoglobins represents a painstaking research and is an important contribution to biology. The memoir on starches, in its present form, is hardly worthy to be classed as research, particularly in view of the splendid monograph of Naegeli which has been reputed to be among the greatest investigations of the last century. In the work on hemoglobins, through the cooperation of Dr. Brown, the exact methods of physical crystallography have been employed and it is to be expected that in the hands of different investigators confirmatory results will be obtained in the examination of the crystals of the various hemoglobins. In the present memoir on