

leukoderma. This portion of the work is especially interesting and useful, in that there has been comparatively little written on this subject up to date.

In chapter VII. we find the tumors divided into three large groups: (a) Tumors of the connective substances; (b) epithelial tumors, and (c) teratoid tumors and cysts. This division very much lessens the perplexity that surrounds the consideration of this subject. The author has been careful to keep out the infectious granulation growths from among the tumors, as their presence there would only tend to confuse the reader. Forty pages have been reserved for the consideration of inflammation. The clear description of this most important section should of itself recommend this book to all. The author's definition of inflammation, viz., that it is essentially a *local tissue degeneration combined with pathological exudations from the blood vessels* caused by some injurious agency, and with these pathological changes are associated, sometimes earlier, sometimes later, tissue-proliferations leading to regeneration or to hypertrophy, is, we think, an excellent standpoint from which one may view the different processes that form an essential part of inflammation. He first describes the phenomena of inflammation in order as they occur, then the different exudates that are met with, and lastly repair; the processes of chemotaxis and phagocytosis being well explained.

In chapter VIII. will be found an especially interesting description of the disturbances of development and the resulting malformations. The chapter is divided into two sections. The first contains a general consideration in regard to these disturbances, their causes, classification, etc. The second part deals with the special malformations.

Considerable space has been given to the different bacteria, the usual classification has been adopted, but the bacteria which assumes different forms as they advance in their development, have been grouped under the head of polymorphous bacilli, and in this way have not been separated from the group of bacilli to which they are closely related, and thus rendering these processes less difficult to comprehend. There is a full description of the bacillus of syphilis as described by Lustgarten, but the author considers the bacilli can hardly be used for differential diagnosis at the present time. There are a large number of additional cuts and illustrations, carefully prepared. This is especially noticeable in the chapter on Tumors. The colored plates of melanoma-sarcoma, osteo-sarcoma, papillary cystoma of ovary, mucous carcinoma of mammary gland, and adenocystoma of testicle, being particularly fine and true. As a result of the care taken by the translators, this work has in no way depreciated in value by the process of translation.

We can heartily congratulate the publishers, William Wood & Co., New York, on the excellent text, paper, and binding of this work. In conclusion, we sincerely recommend this the latest effort of Dr. Ernest Ziegler to both medical men and students.

W. H. P.

*General Physiology.* An outline of the Science of Life. By MAX VERWORN, of Jena, translated from the second German edition, and edited by Frederick S. Lee, Columbia University. Macmillan & Co., Ltd. 1899. Price, 15s. net.

The object of this work is explained by the author in his preface to the first edition. He says: "I wished to write something that would appeal first to my fellow physiologists, and offer them, besides certain new facts and ideas, a summary of our scattered knowledge. But at the same time I wished the work to give to any interested scientific reader, whether a student of medicine, philosophy, botany, or zoology, an outlook over the problems, facts, theories, and hypotheses of life."

The first chapter deals with "The Aims and Methods of Physiological Research." It contains a historical review of the rise and progress of physiological investigation, and includes a very interesting discussion on the relation of psychology to physiology.

The second chapter treats of "Living Substance." The simplest individual element of living substance is the cell. "All living individuals of whatever order, either are composed of cells as the elementary structural components, or