
BOOK REVIEWS

The Principles of Heredity. By LAURENCE H. SNYDER. D. C. Heath and Company, Boston. 3rd edition. Pp. 450. \$3.75.

Of the many books on genetics, this text by Snyder may be highly recommended to physicians. The author has been actively interested for many years in all aspects of human heredity. Although the first part of the book deals with the theoretical principles of genetics, numerous illustrative cases are presented from human material. In the first half of the book such fundamental principles as Mendelian laws, determination of sex, lethal factors, linkage groups and sex-linked factors, multiple alleles, and selection and inbreeding, are presented concisely and yet sufficiently comprehensively for both students of genetics and for physicians. The genetic story of the blood groups, the M N, and Rh factors are presented in the chapter on multiple alleles. It is probable that in the future the British theory of closely linked genes for the heredity of the Rh-Hr system will be accepted. This will necessitate a change in the present terminology which does not take into account the three Hr factors. Fortunately, only passing reference is made to the role of the Rh factor and feeble-mindedness since the correlation is a loose one.

Of particular interest to physicians and research workers is the chapter "How Genes Act" which deals with the fundamental work on the genetic basis of enzymes in determination of color differences in flowers and disturbances in metabolism in man and animals. A brief description is given of the important work of Beadle on *Neurospora* with its implications in growth promoting substances and more specifically in such errors of metabolism as cystinuria and alkaptonuria.

Other chapters, such as "The Mutant Gene in Man," "Eugenics," and "Analysis of Human Histories," will appeal to the physician because they deal mainly with clinical material. Here he will find maps of human chromosomes, a listing of many genetic properties, normal and pathologic, and an authoritative statement concerning their mode of heredity so far as it is known at present. Another attractive feature of this excellent book is the inclusion of problems and questions at the end of each of the twenty-nine chapters.

Stitt's Diagnosis, Prevention, and Treatment of Tropical Disease. By RICHARD P. STRONG. The Blakiston Company, Philadelphia. 7th ed. (1944, reprinted) 1945. Pp. 1750. \$15.

The importance of the tropical diseases was at its peak during the war years, as attested by the six editions or printings of this standard work from January 1942 to February 1945. Admiral Stitt published the first edition in 1914 and in 1941 turned it over to Dr. Richard P. Strong for revision. The resulting work is a handsome volume of some 1750 pages replete with illustrations and with an excellent bibliography at the end of each chapter. There are excellent descriptions of the various diseases with full discussions of pathogenesis, pathology, prophylaxis, and treatment. The various concepts relating to the mechanisms involved in the sudden hemolysis of blackwater fever are discussed at length. The anemias of tropical countries are authoritatively discussed in the section on problems of medical practice in the tropics. The appendix has large sections dealing with an index of clinical diagnosis, laboratory diagnosis, and tropical hygiene. It is easy to see that with this large volume alone, an intelligent physician could practice medicine in the tropics almost unassisted. Since the tropical diseases have, in some measure, come to us in this country with the return of the veterans, it behooves all practicing physicians to keep in touch with this important subject, and there is no better way to do it than with this book.

Contribución de la Citología en el Diagnóstico de las Afecciones de la Sangre y de los Órganos Hematopoyéticos. By PEDRO PASBYRO. Thesis, Montevideo. Editorial Medico-Quirurgica, Montevideo, 1946.

The author describes his experiences with puncture of lymph nodes, spleen, bone marrow, and liver and lists several hundred cases in which "adenograms, splenograms, myelograms, and hepatograms" were performed.

Punctures of the lymph nodes, spleen, and liver are still done only occasionally in this country although the sternal puncture has steadily gained in popularity. Lymph node punctures in particular are readily performed and often yield interesting and at times important information. Paseyro presents good photomicrographs, for example, of neoplastic metastasis, tuberculosis, and Hodgkin's disease, and cites the ease and importance of studying the progressive phases in a lymphomatous process. As obtained with the puncture technic, the cells are larger and more subject to intimate histologic study. Punctures of the spleen and liver are becoming more frequent, but are preferably performed in or close to an operating room in case of a possible accident or hemorrhage. The author cites numerous cases in which these tests were important in settling a diagnosis.

The book is well set up and written and contains many good photomicrographs and other illustrations. The Latin Americans and the French have devoted much attention to this field, and we in this country might profit by their teachings.

Moderne Eisentherapie. By RUDOLF STODTMEISTER AND PETER BÜCHMANN. Pp. 120, \$3.75. Published and distributed by authority of the Alien Property Custodian, J. W. Edwards, Publisher, 1944. Litho-printed from original publication of Wissenschaftliche Verlagsgesellschaft, M.b.H Stuttgart, Germany, 1943.

This little volume, which was published in Germany during the war, has been litho-printed in this country by authority of the Alien Property Custodian. It is an excellent review of the whole status of iron in medicine, with an historical account of iron therapy, the iron content of various organs, the serum iron, iron absorption, and the use of various types of iron compounds in therapy with their indications in various conditions. Particular attention is paid to iron therapy, especially in the iron deficiency states. The book contains most of the available material on iron and can be recommended for review purposes. Only a few citations of the literature are made. The authors admit their indebtedness to Professor Ludwig Heilmeyer of Jena.

L'Anémie infectieuse. By G. HEMMELER. Benno Schwabe & Co., Basel, Switzerland. Pp. 76. 5 francs.

This little paper-covered book is concerned with the anemia of infection in which there has been relatively little interest although a few authoritative articles, notably from Wintrobe's clinic, have recently appeared. The object of the present work is to study the frequency of infectious anemia, the changes in blood and bone marrow, the pathogenetic mechanisms, and finally therapy. It was found that most febrile diseases resulted in anemia, most pronounced in cases with the greatest elevations in temperature, sedimentation rate, and leukocytosis. A series of 25 cases is presented in which careful studies of the blood morphology and the sternal bone marrow were made. These showed a normochromic hypoplastic type of anemia due to a lack of erythroblastic maturation. Serum iron studies gave low values indicating that the anemia was "toxic" in type with a direct disturbance in erythropoiesis. It was found that transfusions of blood represent the only valuable method of therapy of the anemia.

This monograph can be recommended as a clear straightforward account of most of our available knowledge of the anemia in infection and should help to fill the gap which the author says exists in the description of this common and therefore important field. The author probably did not have access to the comprehensive study by Dr. Gulli Lindh Muller of the blood in tuberculosis (The Commonwealth Fund, 1943).

Peripheral Vascular Diseases. By EDGAR V. ALLEN, B.S., M.A., M.D., M.S. in Medicine, F.A.C.P., Division of Medicine, Mayo Clinic, Assoc. Prof. Medicine, Mayo Foundation, Graduate School, Univ. Minnesota; Diplomate of the American Board of Internal Medicine; and NELSON W. BARKER, B.A., M.D., M.S. in Medicine, F.A.C.P., Division of Medicine, Mayo Clinic, Assoc. Prof. Medicine, Mayo Foundation, Graduate School, Univ. Minnesota; Diplomate of the American Board of Internal Medicine; and EDGAR A. HINES, JR., M.D., B.S., M.A., M.S. in Medicine, F.A.C.P., Division Medicine, Mayo Clinic, Assoc. Prof. Medicine, Mayo Foundation, Graduate School, Univ. Minnesota; with Associates in the Mayo Clinic and Mayo Foundation. Pp. 871, with 386 illustrations, 7 in color. Philadelphia and London: W. B. Saunders Company, 1946. \$10.00.

Peripheral Vascular Diseases by Allen, Barker, and Hines is dedicated to the late George E. Brown and

is written by his former associates and students at the Mayo Clinic. Over twenty years ago Brown began the establishment of a Section in Peripheral Vascular Diseases on the Medical Service of the Mayo Clinic, and this book, in large part, represents the clinical experiences of the group. Except for a small surgical section, the book is written by internists and embraces the large picture of peripheral vascular diseases. Omitted from consideration are arterial hypertension and vascular diseases of the central nervous system. The first six chapters are concerned with definition of terms, the anatomy of the peripheral blood vessels, and the general principles of diagnosis, including special methods of investigation. In the following chapters the principal peripheral vascular diseases are taken up sequentially. In the discussion of each disease the historical data are first considered, followed by the pathology, pathological physiology, etiology, diagnosis, clinical course, prognosis, and treatment. Four chapters are devoted to the consideration of diseases of the veins. At the end of the book one chapter is devoted to special medical technics in treatment and one to surgical treatment of certain peripheral vascular diseases.

This is an excellent book and is a great contribution to medical literature. Physicians working in the field of peripheral vascular diseases will find it very useful and, in addition, the general practitioner and general internist will find it most helpful for reference since the material is well arranged. There is an excellent bibliography with each chapter. A large amount of valuable statistical data from rather complete studies is presented for all the important diseases, and the enormousness of the careful experimental and clinical diagnostic work done on patients by these authors can best be appreciated by those who have worked in this field. For the student beginning an intensive study of peripheral vascular diseases the book offers the historical aspect of these subjects and presents him with a number of unsolved problems for investigation brought out by a presentation of the pathology and physiology as it is known today. The sections devoted to clinical diagnosis and special methods of investigation are particularly good. The book is well illustrated.

The somewhat tiresome style of writing, probably unavoidable in a book written in sections by various authors, is compensated by the completeness which makes the book valuable to medical students as well as physicians.

While the book can be used profitably by surgeons both as a reference book and for fundamental education, it is not designed for them. Only fifty-nine pages of the eight hundred seventy-one are specifically devoted to surgical technic. In these are considered amputation for occlusive arterial diseases, the surgical treatment of traumatic arteriovenous aneurysms, and the treatment of varicose veins. For the sake of completeness the reviewer would like to have seen a larger surgical section, particularly more material on the surgical treatment of aneurysms. The whole subject of arterial injuries and arterial anastomosis which has been such a problem in military surgery is not discussed. The authors' views on the treatment of thrombophlebitis and the whole question of prevention of pulmonary embolism will undoubtedly interest practicing surgeons, since they are fundamentally opposed to the operative approach.