

been distilled to produce a single volume that admirably covers the broad and still-expanding field of thoracic surgery. Necessarily, a considerable degree of simplification that occasionally approaches unwise abbreviation has ensued. The road to surgical success in the performance of thoracic operations has been clearly outlined, but the surrounding landscape has been eliminated or blurred to the point of being almost absent. This need not be a shortcoming of the book if the reader always keeps in mind his own experience and judgment.

The numerous illustrations, most of which have been done by Rodriguez Arroyo, are of variable quality, but in general are rather lacking in the lucidity that is apparent in the text.

One can certainly recommend this book for the careful reading of anyone interested in the techniques of thoracic surgery. It should also prove profitable reading for the general practitioner or medical chest specialist who could gain a greater understanding of disorders of the chest that are amenable to surgical treatment. Dr. Sweet's purpose in writing the book has been admirably fulfilled, and disappointments are extremely few.

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Elements of Human Physiology. 2nd ed. Miriam Scott Lucas. Philadelphia, Pa.: Lea & Febiger, 1950. 357 pp. \$4.75.

This new text in human physiology represents a revision of an earlier one of 1940. Based on long experience in the teaching of undergraduate students, many of the chapters have been quite thoroughly revised and others completely rewritten. The general format of the book remains the same as before.

A number of features stand out in the revision. One is the completely rewritten accounts of the nervous system, where the author has tried to unite more closely than ever its somatic and visceral portions by treating them together, rather than giving the autonomic system its usual chapter by itself. Other features are an expansion of the blood groups to include the Rh factor(s), inclusion of a brief account of aviation physiology in the chapter on respiration, a rewritten account of water balance and body fluids, increased emphasis on the role of absorption as a preliminary to metabolism, a greatly improved account of vitamins, and considerable improvement in the final section on reproduction and endocrines. Last, but not least, are the inclusion of a number of new illustrations and tables, and the appearance of special references at the end of each chapter.

It is the reviewer's opinion that the text has considerable merit as an undergraduate account of human physiology. It is neither too condensed nor too elaborate. The author has kept both the student

and the teacher in mind throughout in writing the book. The physiological material has not been over-diluted with anatomy, as often happens in a book of this type, yet there are anatomical accounts where needed. The style of writing is generally clear. As in all revised texts, some errors in typography still remain, and new ones creep in during revision. The discerning reader will also note several mistakes in fact or impression, again not unusual for a textbook. For example, 10^{-7} is not the negative logarithm of pure water at 22° C (p. 125); the "neosensibilities" of Brouwer include certain exteroceptive pathways as well as proprioceptive (p. 79); not all enzymes (with the exception of rennin) are hydrolytic enzymes; this should have been qualified with the word "digestive" (p. 206). As far as the reviewer is aware, uric acid is not formed in the intestine from nucleic acids (p. 273); it is questionable whether bile salts aid pancreatic enzymes in protein digestion, unless the author means indirectly through the facilitation of fat digestion (p. 221).

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Scientific Book Register

Stress. Hans Selye. Montreal, Canada: Acta Endocrinologica, 1950. 1,025 pp. \$14.00.

Handbook of South American Indians: Physical Anthropology, Linguistics and Cultural Geography of South American Indians. Vol. 6. Smithsonian Institution, Bureau of American Ethnology, Bull. 143. Julian H. Steward, Ed. Washington, D. C.: U. S. Government Printing Office, 1950. 715 pp. \$5.00.

The Enzymes: Chemistry and Mechanism of Action, Vol. I, Part 1. James B. Sumner and Karl Myrbäck, Eds. New York: Academic Press, 1950. 724 pp. \$13.50.

Contributions to the Theory of Games. Annals of Mathematics Studies, No. 24. H. W. Kuhn and A. W. Tucker, Eds. Princeton, N. J.: Princeton Univ. Press, 1950. 201 pp. \$3.00.

Gmelins Handbuch der Anorganischen Chemie: Antimon, Teil A. Weinheim-Bergstrasse, Germany: Verlag Chemie, 1950. Pp. 303-351. DM 16.50.

The Neural Crest: Its Properties and Derivatives in the Light of Experimental Research. Sven Hörstadius. New York: Oxford Univ. Press, 1950. 111 pp. \$3.00.

Plant Pathology. John Charles Walker. New York: McGraw-Hill, 1950. 699 pp. \$7.50.

Classical Mechanics. H. C. Corben and Philip Stehle. New York: Wiley; London: Chapman & Hall, 1950. 388 pp. \$6.50.

Elements of Fractional Distillation. 4th ed. Clark Shove Robinson and Edwin Richard Gilliland. New York: McGraw-Hill, 1950. 492 pp. \$7.00.

The Chemistry of the Nonbenzenoid Hydrocarbons. 2nd ed. Benjamin T. Brooks. New York: Reinhold, 1950. 615 pp. \$12.00.

Handbook of Antibiotics. A. L. Baron. New York: Reinhold, 1950. 303 pp. \$6.50.