this concise book unless the comparatively sparse treatment of springs and streams as compared with lakes is considered an omission, but then this is intended to be a treatment of the *fundamentals,* not the details, of limnology, with particular reference to water as an environment. The use of European examples is of course natural, but the translators might have added a few more footnotes (they have not, incidentally, clearly separated their own from those by the author in all cases) citing examples to round out the work for use on this continent. Although that might be considered the duty of the lecturer who uses this for a text, it must be remembered that such a book is also consulted and read by students unable to take a course in limnology. It is interesting to note, by the way, that European cognizance of the extensive Russian literature in this field is as incomplete as our own. The book includes a glossary of terms, as well as a list of German-English equivalents, a condensed bibliography, and a very good index.

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Cold Spring Harbor Symposia on Quantitative Biology: The Neuron, Vol. XVII. Cold Spring Harbor, L. I., N. Y.: Biological Laboratory, 1952. 323 pp. Illus. $8.00.

This is the most advanced text on a general physiology of the neuron to appear in the international literature. It covers largely physiological investigations on the neurons of vertebrates but the anatomical aspects of the problem of the synapse have not been neglected and several papers deal with experiments on invertebrates.

Bodian discusses the amazing variety in the structural basis of the synapse while Chang correlates anatomical and physiological data in cortical dendrites. Tobias shows that optical changes are associated with nerve conduction and probably related to osmosis. The classical problem of nerve conduction is analyzed by Frankenhaeuser, Gasser, and Tasaki. Hodgkin and Huxley present a summary of their outstanding work on the role of Na and K ions in the process of excitation.

Electrotonic changes in nerves and dorsal roots are studied by Therman, Lloyd, and Lorente de Nó. Brink, Bronk, and their collaborators discuss their ingenious experiments on O_2 consumption of the resting and active nerve and show that half a million impulses may be conducted without an increase in the oxygen uptake of the nerve. In addition, Larrabee and Bronk review their extensive work on the metabolism of excised sympathetic ganglia with emphasis on the role of oxygen and glucose. Hunt gives a lucid summary of his work on stretch receptors with emphasis on the role of the small diameter efferent fibers. Two outstanding papers deal with retinal processes. Hartline continues his work on *Limulus* and discusses his beautiful experiments on a single ommatidium under the influence of light. Kuffler introduces new methods for the study of single action potentials in the mammalian retina and emphasizes the organization of the receptive retinal field. Skoglund contributes to the theory of neurohumors by studying the effects of acetylcholine and adrenalin on action potentials in spinal reflexes.

The book is well printed and illustrated. Unfortunately, the discussion is very limited. This is surprising in view of the fact that a relatively large international group of experts in neurophysiology participated in this Symposium. Is this an expression of a rather unhealthy state of specialization?

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Scientific Book Register

Centennial of Engineering. History and proceedings of symposia of American Society of Civil Engineers, 1852–1952. Lenox R. Lohr, Ed. Chicago: Museum of Science and Industry, 1953. Illus. + plates.

Basic Bacteriology: Its Biological and Chemical Background. Carl Lamanna and M. Frank Mallette. Baltimore: Williams & Wilkins, 1953. 677 pp. Illus. $10.00.

Electrical Engineering: Essential Theory and Typical Applications. 2nd ed. Fred H. Pumphrey. New York: Prentice-Hall, 1953. 404 pp. Illus. $6.00.

Pituitary Chromophobe Adenomas: Neurology, Metabolism, Therapy. A clinical study of the sellar syndrome. John I. Nurnberger and Saul R. Korey. New York: Springer Pub., 1953. 282 pp. Illus. $7.00.

Railroad Engineering, Vol I. William W. Hay. New York: Wiley; London: Chapman & Hall; 1953. 483 pp. Illus. $7.50.

The Pluripotency of the Hypophyseal Hormones and the Consequences for Endocrinology and Cancerology. Jules Samuels. Amsterdam: N. V. Cycloscoop, 1953. 296 pp. 37 guilders.

Basic College Chemistry. 2nd ed. Joseph A. Babor. New York: Crowell, 1953. 766 pp. Illus. + chart. $5.00.

Laboratory Problems in General Chemistry. Howard Nechamkin. New York: Crowell, 1953. 274 pp. Illus. $2.50.

College Physics. 4th ed. Frederick A. Saunders and Paul Kirkpatrick. New York: Holt, 1953. 603 pp. Illus. + plates. $6.25.

Child Training and Personality: A Cross-Cultural Study. John W. M. Whiting and Irvin L. Child. New Haven: Yale Univ. Press; London: Geoffrey Cumberlege, Oxford Univ. Press, 1953. 353 pp. $5.00.

Sectional Radiography of the Chest. Irving J. Kane. New York: Springer Pub., 1953. 154 pp. + plates. $7.50.

The Revolution in Physics. A non-mathematical survey of quanta. Louis de Broglie; trans. by Ralph W. Niemeyer. New York: Noonday Press, 1953. 310 pp. $4.50.

Condensed Pyridazine and Pyrazine Rings (Cinnolines, Phthalazines, and Quinoxalines). Chemistry of Heterocyclic Compounds, Vol. 5. J. C. E. Simpson. New York–London: Interscience, 1953. 394 pp. $12.50.

Trigonometry. John F. Randolph. New York: Macmillan, 1953. 220 pp. Illus. $3.00.

Organic Chemistry. 2nd ed. Ray Q. Brewster. New York: Prentice-Hall, 1953. 855 pp. Illus. $7.00.