groups of crops. Cereals and potatoes include nearly one-third of the text. The life histories, 290 good illustrations, and descriptions of symptoms and causal organisms are valuable to the American entomologist and plant pathologist. But the control recommendations, based on a much lower economic scale than those of the U.S., have for the most part little value for the grower or the agricultural representatives in countries other than those of Europe. Because of the scope, ease in reading for the authors, and local adaptability of the German literature on the subject, nearly 600 of the 636 references are from German sources. The paper is of good quality, and the printing and general arrangement of the book are excellent.

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Bacterial Genetics. Werner Braun. Philadelphia–London: Saunders, 1953. 238 pp. Illus. $6.50.

Microbial genetics is advancing at a fast rate. Catcheside's *The Genetics of Micro-Organisms,* published in 1949, is already sadly out of date. Hence, Braun's *Bacterial Genetics,* as the second book in the field, is welcome. It does not replace Catcheside's book, however, because it is concerned with the genetics of bacteria alone, and because it is written at a different level. The student is likely to find Catcheside's work more demanding and, as a consequence, intellectually more stimulating. In *Bacterial Genetics* he will find clarity and pleasant reading. In this regard Braun comes close to his objective inasmuch as his book, like Catcheside's, is directed primarily to the nonmicrobial geneticist.

Braun apologizes in his preface for preoccupation with problems that he has illuminated by his own research. The reader will readily excuse him for, as a consequence, the book partakes of the flavor of those written by investigators and not mere reporters of the work of others. Despite this the coverage is good. There is an introductory chapter on some general genetic principles and one on the history of the field. Then follow chapters on bacterial cytology, mutation, mutagens, and representative types of mutants. There are also treatments of population changes brought about by mutation and selection and by other causes, of recombination, transformation, and transduction and a final chapter on the relation of bacterial genetics to general bacteriological problems. There are some omissions that might be rationalized, like the absence of a discussion of lysogenesis. In most cases where more rigorous theoretical treatments of problems are omitted, like Lea and Coulson's mathematical analysis of mutation, an illuminating reference is found in the text.

The specialist will find little in *Bacterial Genetics* with which to argue. He may, of course, have occasion to raise a point here and there but not with an unusual frequency. For example, he may regret that the word "adaptation" is not used in its broader biological context but is rather restricted to describe changes not brought about by mutation and selection. Or he might be surprised at the statement that it would be "extremely difficult" to reconstruct the selective conditions that exist where the frequency of mutants is as small as 10^{-8}—this can be done by the reciprocal use of marked stocks. He might object to the obsolete diagram of crossing over, to the confusion of the frequency of bacterial fusion with the frequency of recombinants, or to the suggestion that, for repetition of experiments, inocula should consist of single colonies. But it is likely his objections will be of a similar minor nature.

Braun's *Bacterial Genetics* is a good textbook for the student and for bacteriologists, biochemists, and geneticists who would desire a clear introductory statement about this rapidly growing field.

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New Books

Sergei N. Winogradsky: His Life and Work. Selman A. Waksman. New Brunswick, N.J.: Rutgers Univ. Press, 1953. 150 pp. + plates. $4.00.

Standard Methods of Clinical Chemistry, Vol. I. By the American Association of Clinical Chemists, Miriam Reiner, Ed. New York: Academic Press, 1953. 142 pp. Illus. $4.50.

Electrical Methods of Blood-Pressure Recording. Frank W. Noble. Springfield, Ill.: Thomas, 1953. 56 pp. Illus. $3.00.

Einführung in die Lehre vom Adaptationssyndrom. Hans Selye; ed. and trans. from *The Story of the Adaptation Syndrome* by Heinz Köbcke, assisted by Rudolf Hoene and Gunnar Heuser. Stuttgart, Germany: Georg Thieme, 1953. 164 pp. Illus. DM 16.50.

A Simple Guide to Modern Valency Theory. G. I. Brown. London–New York: Longmans, Green, 1953. 174 pp. Illus. $2.50.

The Proteins: Chemistry, Biological Activity, and Methods, Vol. I. Part B. Hans Neurath and Kenneth Bailey, Eds. New York: Academic Press, 1953. 567 pp. Illus. $13.00.

Discontinuous Automatic Control. Irmgard Flügge-Lotz. Princeton, N.J.: Princeton Univ. Press, 1953. 168 pp. Illus. $5.00.

Biologia Generale. Emanuele Pàdoa. Torino, Italy: Edizioni Scientifiche Einaudi, 1953. 707 pp. Illus. L. 8000.

An American in Europe. The Life of Benjamin Thompson, Count Rumford. Egon Larsen. New York: Philosophical Library, 1953. 224 pp. + plates. $4.75.

Silicones and Their Uses. Rob Roy McGregor. New York: McGraw-Hill, 1954. 302 pp. Illus. $6.00.

Magnetic Amplifiers. George M. Ettinger. London: Methuen; New York: Wiley, 1953. 88 pp. Illus. $1.50.

Strahlenschutz und sonstiger Arbeitsschutz bei der medizinischen Anwendung von Röntgenstrahlen. Wilhelm Ernst. Stuttgart, Germany: Georg Thieme, 1953. 97 pp. Illus. DM 7.80.

Practical Methods in Biochemistry. 6th ed. Frederick C. Koch and Martin E. Hanke. Baltimore, Md.: Williams & Wilkins, 1953. 537 pp. Illus. $5.00.