included among the bacterial diseases, while the following chapter on protozoan parasites is given over to a discussion of malaria, trypanosomiasis, and toxoplasmosis. The final chapter presents a brief discussion of immunological problems, and the book closes with a very valuable bibliography of 31 closely printed pages. The author is not historically-minded; there is no mention of Pasteur's epochal studies on silkworm diseases or of the once so fashionable syphilitic origin of congenital malformations, but the book provides a solid basis for future work.

W. LANDAUER
Department of Animal Genetics, University of Connecticut

The Molecular Basis of Evolution. Christen B. Anfinsen. Wiley, New York; Chapman and Hall, London, 1959. xiii + 228 pp. Illus. $7.

In the days of multivolume encyclopedic treatises, it is refreshing to read a short book with high specific activity. The title is more descriptive of the ultimate intellectual aim of much of the work which is described than of the actual contents of the book. However, the reader will find here a concise account of current ideas about the biochemical aspects of genetics. The material is well selected, lucidly presented, and as up-to-date as can be expected. Regrettably, the index is not as detailed as it might be.

The author appears to address himself primarily to biochemists, and as a result the book serves as a most useful introduction to those aspects of genetics which are closely linked to biochemical problems or which are susceptible to biochemical analysis. After reviewing briefly general genetic and evolutionary principles, Anfinsen devotes the remainder of the work to a discussion of the functional, structural, and chemical properties of genetic material, protein structure and biosynthesis, and nucleic acid structure and biosynthesis. Instead of limiting himself to a summary of results, he has taken pains to include a description of the principles and pertinent procedural details of the experiments on which the conclusions are based. Of particular value in this connection are the references to the original papers in which the interested reader can find further information.

While acquainting biochemists with the significance of current work in genetics, Anfinsen also clarifies for geneticists much of the biochemistry with which they must deal. Thus, for instance, methods and results of investigations of protein structure are presented in a more comprehensive and at the same time more concentrated fashion than is usually available to students of genetics. Anfinsen has not hesitated to present and discuss controversial questions; such questions will be stimulating to those who are becoming acquainted with the subject. Graduate students and other readers who wish to acquaint themselves with this rapidly expanding part of biology should be especially grateful to Anfinsen for his presentation. In his preface the author states that "the writing of this book has been stimulated by the excitement and promise of contemporary protein chemistry and genetics," and it is to his credit that this excitement has been translated into print and will in turn be transmitted to his readers.

WOLF VISHNIAC
Department of Microbiology, Yale University, and
Brookhaven National Laboratory

New Books

The Actinomycetes. Nature, occurrence, and activities. vol. 1. Selman A. Waksman. Williams & Wilkins, Baltimore, Md., 1959. 338 pp. $12.50.

Die Aktivierte Essigsäure. Das coenzyme A und seine acylderivate im stoffwechsel der zelle. Karl Decker. Enke, Stuttgart, Germany, 1959. 314 pp. DM. 74.80.

Analytical Elements of Mechanics. vol. 1. Thomas R. Kane. Academic Press, New York, 1959. 265 pp. $4.75.

Anglo-America. A regional geography. Earl B. Shaw and Jameson MacFarland. Wiley, New York; Chapman & Hall, London, 1959. 487 pp. $7.75.

Annual Review of Physical Chemistry. vol. 10. H. Eyring, Ed. Annual Reviews, Palo Alto, Calif., 1959. 545 pp. $7. Contents: "Thermochemistry and thermodynamic properties of substances," J. M. Sturtevant; "Experimental molecular structure," O. Bastiansen and E. W. Lund; "The kinetics of reactions in gases," A. F. Trotman-Dickenson; "Physical and chemical properties of surfaces," J. M. Honig; "Block and graft copolymers," G. M. Burnett; "Ion exchange," H. F. Walton; "Trapped energetic radicals," J. L. Franklin and H. P. Broida; "Physical organic chemistry," V. Gold; "Proteins and synthetic polypeptides," H. A. Scheraga; "Heterogeneous equilibria and phase diagrams," R. F. Porter; "Solutions of electrolytes," J. C. Poirier; "Solutions of nonelectrolytes," G. S. Rushbrooke; "Radiation chemistry," A. Charlesby and A. J. Swallow; "Quantum theory, theory of molecular structure and valence," J. A. Pople; "Electronic spectra of organic compounds," J. R. Platt; "Vibration-rotation spectra," R. M. Hexter; "The solid state," W. J. Moore; "Nuclear and paramagnetic resonance," G. K. Fraenkel and B. Segal; "High temperature chemistry," J. L. Margrave.

The Annual Survey of Psychoanalysis. vol. 5, *1954.* John Frosch and Nathaniel Ross, Eds. International Universities Press, New York, 1959. 622 pp. $12.

Applied pharmacology (Clark). Andrew Wilson and H. O. Schild. Little, Brown, Boston, 1959. 762 pp. $10.

Atlas of γ-Ray Spectra from Radiative Capture of Thermal Neutrons. L. V. Groshev, V. N. Lutsenko, A. M. Demidov, V. I. Pelekhov. Translated from the Russian by J. B. Sykes. Pergamon, New York, 1959. 198 pp. $20.

Basic Bacteriology. Its biological and chemical background. Carl Lamanna and M. Frank Mallette. Williams & Wilkins, Baltimore, Md., ed. 2, 1959. 866 pp. $13.50.

Black Gold at Titusville. Lavinia Dobler. Dodd, Mead, New York, 1959. 186 pp. $3.

Close Binary Systems. Zdenek Kopal. Wiley, New York, 1959. 573 pp. $16.75.

Ehrenbuch der Röntegenologen und Radiologen aller Nationen. Hermann Holthusen, Hans Meyer, Werner Molineus. Von Urban and Schwarzenberg, Berlin, 1959. 268 pp. DM. 28.

Exposure Manual. J. F. Dunn. Wiley, New York, 1959. 268 pp. $7.50.

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Handbuch der Physik. vol. 3, No. 2, *Principles of Thermodynamics and Statistics.* S. Flügge, Ed. Springer, Berlin, 1959. 685 pp. DM. 160.

Plant Pathology. Problems and progress, 1908–1958. C. S. Holton, G. W. Fischer, R. W. Fulton, Helen Hart, S. E. A. McCallan. Published for the American Phytopathological Soc. by the Univ. of Wisconsin Press, Madison, 1959. 577 pp. $8.50.

Symposium on Pulmonary Ventilation. R. P. Harbord and R. Wollmer, Eds. Sherratt, Altrincham, England; Williams & Wilkins, Baltimore, Md., 1959. 109 pp. $4. The symposium was held in Leeds under the auspices of the *British Journal of Anaesthesia.* Speakers at the symposium included R. Woolmer (chairman), P. W. Ramwell, R. P. Harbord, I. Donald, T. C. Gray, P. Hugh-Jones, E. J. Morgan Campbell. Approximately 22 people participated in the symposium.

This World of Living Things. Paul Griswold Howes. Duell, Sloan and Pearce, New York, 1959. 251 pp. $4.50.

The Viruses. Biochemical, biological, and biophysical properties. vol. 2, *Plant and Bacterial Viruses.* F. M. Burnet and W. M. Stanley, Eds. Academic Press, New York, 1959. 421 pp. $13.

The Young Inventors' Guide. Raymond F. Yates. Harper, New York, 1959. 112 pp. $2.50.