and as a helpful reference and guide for such a course of instruction. Because of its orderly and logical presentation, its completeness, and its clarity, the book will be welcomed by both student and teacher. It should serve each admirably and it should be a useful reference work in the technical laboratory as well.

The treatment throughout is modern and quantitative. The discussions are interestingly and clearly presented, and the mathematical approaches are logical and easy to follow. Numerous tabular and graphical presentations of data add to the scope of the volume and increase the general appeal that the volume has. Many of these represent new and stimulating points of view and are of particular utility in demonstrating the importance of theory as applied to laboratory practice. After an introduction to general principles and solution chemistry, the discussion proceeds to the law of mass action. These concepts are then extended to precipitation, complex-ion, acid-base, water, indicator, ion-exchange, and oxidation-reduction equilibria, and additional chapters deal with reactions in fused salts, buffer solutions, quantitative methods involving various types of equilibria, and electrolytic precipitation and separation processes. The appendix gives a comprehensive tabulation of equilibrium constants of various types and standard oxidation potential data.

In my opinion, this is an exceptionally well written book and one which anyone interested in the theoretical basis for analytical chemistry would be advised to examine. The publishers are to be complimented also upon the excellence of the printing and binding and upon the over-all attractiveness of the volume.

THERALD MOELLER

University of Illinois

Books Reviewed in The Scientific Monthly

January

The Crime of Galileo, G. de Santillana (Univ. of Chicago Press). Reviewed by R. J. Seeger.

Management of Addictions, E. Podolsky, Ed. (Philosophical Library). Reviewed by K. M. Bowman.

Practical Horticulture, J. S. Shoemaker and B. J. E. Teskey (Wiley; Chapman & Hall). Reviewed by G. V. S. Raynor.

Patent Law in the Research Laboratory, J. K. Wise (Reinhold). Reviewed by H. G. Dyke.

Island Bibliographies, M. H. Sachet and F. R. Fosberg (National Acad. of Sciences-National Research Council). Reviewed by E. H. Walker.

Hungry Generations, H. Boner (King's Crown Press). Reviewed by F. J. Weiss. Laboratory Studies in Biology: Observations and Their Implications, C. Lawson, R. Lewis, M. A. Burmester, G. Hardin (Freeman).

Introducing Sea Shells, R. T. Abbott (Van Nostrand). Reviewed by J. W. Hedgpeth.

Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, but to the publisher or agency sponsoring the publication.)

Les Corrections Barométriques dans la Nouvelle Convention Internationale. Contributions, No. 20. R. Sneyers. 11 pp. Aperçu des Circonstances Météorologiques et Climatologiques de la Tempête des 31 Janvier et 1 Fevrier 1953. No. 21. Lucien Poncelet. 43 pp. Eléments de Météorologie. No. 22. Chapitre I, Considerations Générales; P. Defrise, 23 pp. Chapitre II, Instruments et Observations; P. Defrise, J. Grandjean, L. Poncelet; 48 pp. Projet d'une Expedition Scientifique sur le Continent Antarctique. No. 23. Edmond Hoge. 6 pp. Techniques Modernes de Mesure de l'Éclairement Énergétique Solaire. Publ. Serie B., No. 16. R. Dogniaux et R. Pastiels. 49 pp. Contribution à l'Étude Théorique de la Variation Locale de la Pression Atmosphérique. No. 17. A. Vandenplas. 17 pp. Institut Royal Météorologique de Belgique, Bruxelles, 1955.

Archaeological Reconnaissance in Central Guatemala. Publ. 608. A. Ledyard Smith. Carnegie Institution of Washington, Washington, 1955. 87 pp. Paper, \$3.85; cloth, \$4.35.

Commonwealth Fund, Annual Report, 1955. Thirty-seventh annual report for the year ending 30 June 1955. Commonwealth Fund, New York, 1955. 46 pp.

University College of Khartoum, Sudan, First Annual Report of the Hydrobiological Research Unit. July 1953 to June 1954. 23 pp. Second Annual Report of the Hydrobiological Research Unit. July 1954 to June 1955. 24 pp. The University, Khartoum, Sudan, 1955.

Atomic Age—The Tenth Year. Developments since the International Conference on the Peaceful Uses of Atomic Energy, Geneva, 8 August 1955. International Review Service, New York, 1955. 21 pp.

New Himalayan Species of Pedicularis with Special Reference to Those from the Eastern Himalaya. Bull. Brit. Mus. (Nat. Hist.) Botany, vol. 2, No. 1. P. C. Tsoong. The Museum, London, 1955. 34 pp. 8s.

Our Smallest Servants. The story of fermentation. Chas. Pfizer & Co., Brooklyn 6, 1955. Illus. 32 pp.

Segundo Catálogo General de Colecciónes Micológicas Latino Americanas. Centro de Cooperación Científica para América Latina de la UNESCO, Montevideo, Uruguay, 1955. 111 pp.

Metallurgy. Vocational and Professional Monogr. Ser., No. 33. Alvin S. Cohan. Bellman, Cambridge 38, Mass., 1955. 20 pp. \$1.

Amputees and Prostheses: Report of a Conference on Prosthetics. Copenhagen 23-28 August 1954. WHO Tech. Rept. Ser., No. 100. World Health Organization, Geneva, 1955. 52 pp. \$0.60.

California Institute of Technology, Annual Report, 1954-1955. Bull., vol. 64, No. 4, The Institute, Pasadena, Calif., 1955. 143 pp.

The Buhl Foundation, A Report by the Director upon Its Work to June 30, 1955. The Foundation, Pittsburgh, Pa., 1955. 145 pp.

Scientific Personnel Resources. A summary of data on supply, utilization, and training of scientists and engineers. 86 pp. \$0.50. Education and Employment Specialization in 1952 of June 1951 College Graduates. 78 pp. \$0.35. National Science Foundation, Washington 25, 1955 (Order from: Supt. of Documents, GPO, Washington 25).

New Medicines for the Mind—Their Meaning and Promise. Pamphlet No. 228. Gilbert Cant. Public Affairs Committee, New York, 1955. 26 pp. \$0.25.

John and Mary R. Markle Foundation, 1954-1955 Annual Report. The Foundation, New York, 1955. 72 pp.

Handbook of Toxicology. vol. I. WADC Tech. Rept. 55-16. William S. Spector, Ed. Wright Air Development Center, Wright-Patterson Air Force Base, Ohio, 1955. 408 pp.

Distribution and Ecology of the Marine Invertebrates of Point Barrow, Alaska. Smithsonian Misc. Collections, vol. 128, No. 9. G. E. MacGinitie. Smithsonian Institution, Washington, 1955. 201 pp.

New Zealand Society of Soil Science, Proceedings of the First Conference. Held as section M of the 8th New Zealand Science Congress, Auckland, 17-21 May 1954. 32 pp. \$0.60. The Role of Soil Science in New Zealand Problems. First presidential address, New Zealand Society of Soil Science. N. H. Taylor. 12 pp., \$0.15. New Zealand Soc. of Soil Science, Wellington, 1955.

The Species of Middle American Birds. A list of all species recorded from Mexico to Panama, with suggested English names, outlines of range, and a distributional bibliography. Transactions, vol. VII. Eugene Eisenmann. Linnaean Soc. of New York, New York 24, 1955. 128 pp.

Midwest Inter-Library Corporation and the Midwest Inter-Library Center, Sixth Annual Report. 1 July 1954 to 30 June 1955. Midwest Inter-Library Center, Chicago 37, 1955. 23 pp.

New York State Mental Health Commission, Fifth Annual Report. For the fiscal year ended 31 March 1954. Dept. of Mental Hygiene, New York State, Albany, 1955. 26 pp.

Resources for the Future, Inc., Annual Report. For the year ending 30 September 1955. Resources for the Future, Washington, 1955. 52 pp.

Biology of Poliomyelitis. Annals of the New York Acad. of Sciences, vol. 61, art. 4. 328 pp. Nutrition in Infections. vol. 63, art. 2. 174 pp. Psychotherapy and Counseling. vol. 63, art. 3. 114 pp. Ray Waldo Miner, Ed. New York Acad. of Sciences, New York, 1955.

Experimental Programs in Brazil. Bull. No. 6. J. C. Medcalf, W. L. Lott, P. B. Tetter, and L. R. Quinn. IBEC Research Inst., 30 Rockefeller Plaza, New York 20, 1955. 59 pp.