

One finds the problems somewhat lacking in variety, but that may be unavoidable within the prescribed scope. Possibly a wider choice from the field of geometry might have provided a dash of something different with which to flavor the algebraic diet.

Although the book is in no sense a textbook, it could well be used by mathematics clubs or for outside reading in connection with high-school mathematics courses. In addition to illustrating many applications of algebra, the book could introduce a student to indeterminate and Diophantine equations, which are often slighted in standard courses. It also gives a glimpse of the fact that many problems cannot be solved without considerable trial and error. If algebra students are unaware of this, it is high time they were told; mathematics is like that!

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The Handbook of Feedstuffs. Production, formulation, medication. Rudolph Seiden and W. H. Pfander. Springer, New York, 1957. xii + 591 pp. \$8.

Animal feeding has become an ever more complicated and competitive business that requires a sound foundation in agronomy, animal husbandry, biochemistry, botany, nutrition, pharmacology, physiology, and economics. It is obvious that no agricultural agent, farmer, feeder, or feedstuff manufacturer can have the up-to-date knowledge in all these fields of basic and applied science necessary for taking advantage of recent advances and discoveries; and even the scientific worker specializing in any one field related to animal feeding needs to have good background information about the present status of the other fields. All such readers will welcome this first encyclopedic collection of facts and figures about feedstuffs, written by an eminent agricultural chemist, who is a consultant on veterinary pharmaceuticals, and by an outstanding animal nutritionist, who is professor of animal husbandry at the University of Missouri.

The *Handbook* lists all feeds produced on ranches and farms or in factories, data on consumption by various kinds of farm animals, and the ratios applied, and discusses the economic significance of these feeds. Since about 25 percent of manufactured feedstuffs contain natural or synthetic supplements, drugs, and growth stimulants, the many substances that recently have come into use as feedstuff additives, such as antibiotics, sulfonamides, arsenicals, vitamins, hormones, and amino acids, are described and discussed from a physiological and

nutritional viewpoint. Although the work is based upon the investigations of hundreds of experts, the authors have succeeded in presenting even involved scientific matters in simple and understandable language, thus making the information accessible also to the farmer and student of agriculture, who, like the other users of the work, will find its comprehensiveness and the alphabetical arrangement of its extensive subject matter most convenient.

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New Books

Mental Deficiency. In relation to problems of genesis, social and occupational consequences, utilization, control and prevention. J. E. Wallace Wallin. Journal of Clinical Psychology, Brandon, Vt., 1956. 200 pp. \$5.

Georgia Birds. Thomas D. Burleigh. University of Oklahoma Press, Norman, 1958. 775 pp. \$12.50.

Clinical Enzymology. Gustav J. Martin, Ed. Little, Brown, Boston; Churchill, London, 1958. 248 pp. \$6.

Lumber. Nelson Courtlandt Brown and James Samuel Bethel. Wiley, New York; Chapman & Hall, London, ed. 2, 1958. 393 pp. \$9.

Annual Review of Medicine. vol. 9. David A. Ryland and William P. Creger, Eds. Annual Reviews, Stanford, Calif., 1958. 530 pp. \$7.

Protides in the Biological Fluids. Proceedings of the fifth colloquium, Bruges, Belgium, 1957. H. Peeters, Ed. Elsevier, Amsterdam, 1958. 260 pp. \$8.50.

A Short Introduction to Archaeology. V. G. Childe. Macmillan, New York, 1958. 142 pp. \$2.50.

A Sourcebook for the Biological Sciences. Evelyn Morholt, Paul F. Brandwein, Alexander Joseph. Harcourt, Brace, New York, 1958. 521 pp.

Nerves Explained. A straightforward guide to nervous illnesses. Richard Asher. Thomas, Springfield, Ill., 1958. 157 pp. \$2.75.

Studies in the Mathematical Theory of Inventory and Production. Kenneth J. Arrow, Samuel Karlin, Herbert Scarf; contributions by Martin J. Beckmann, John Gessford, Richard F. Muth. Stanford Univ. Press, Stanford, Calif., 1958. 350 pp. \$8.75.

Advances in Chemical Engineering. vol. II. Thomas B. Drew and John W. Hoopes, Jr. Academic Press, New York, 1958. 348 pp. \$9.50.

Phenolic Resin Chemistry. N. J. L. Megson. Academic Press, New York; Butterworths, London, 1958. 230 pp. \$10.80.

Physical Optics. R. A. Houstoun. Interscience, New York, 1958. 306 pp. \$6.25.

Professional Ethics and Civic Morals. Emile Durkheim. Translated by Cornelia Brookfield. Free Press, Glencoe, Ill., 1958. 272 pp. \$5.

The City. Max Weber. Translated and edited by Don Martindale and Gertrud Neuwirth. Free Press, Glencoe, Ill., 1958. 242 pp. \$4.

La Souche du BCG. Monographie de l'Institut de Microbiologie et d'Hygiène de l'Université de Montréal (en collaboration avec le Département de Bactériologie de la Faculté de Médecine et avec l'École d'Hygiène). A. Frappier and M. Panisset. Institut de Microbiologie et d'Hygiène de l'Université de Montréal, Montreal, Canada, 1957. 120 pp.

Textbook of Dendrology. Covering the important forest trees of the United States and Canada. William M. Harlow and Ellwood S. Harrar. McGraw-Hill, New York, ed. 4, 1958. 572 pp. \$8.75.

Applied Physiology of the Eye. H. Willoughby Lyle and T. Keith Lyle. Bailliere, Tindall and Cox, London, 1958 (order from Williams & Wilkins, Baltimore). 349 pp. \$9.

Traité de Zoologie. vol. XIII, *Agnathes et Poissons.* Anatomie, ethologie, systématique. Pierre P. Grassé, Ed. Masson, Paris, 1958. 924 pp. Paper, F. 12,000; cloth, F. 13,000.

Traité de Paléontologie. L'origine des mammifères et les aspects fondamentaux de leur évolution. vol. VI, *Mammifères, Evolution.* Jean Piveteau, Ed. Masson, Paris, 1958. 962 pp. Paper, F. 15,500; cloth, F. 16,500.

Matière et Antimatière. Maurice Duquesne. Presses Universitaires de France, Paris, 1958. 126 pp.

The Teaching of Geography. Zoe A. Thralls. Appleton-Century-Crofts, New York, 1958. 347 pp. \$3.75.

Variation in Tracheid Length and Wood Density in Geographic Races of Scotch Pine. School of Forestry, Bull. No. 64. Robert M. Echols. Yale Univ. Press, New Haven, Conn., 1958. 52 pp. \$1.50.

Proceedings of the International Symposium on Isotope Separation. Held in Amsterdam, 23-27 Apr. 1957. J. Kistemaker, J. Bigeleisen, A. O. C. Nier. North-Holland, Amsterdam; Interscience, New York, 1958. 724 pp. \$15.

Skin Grafting. James Barrett Brown and Frank McDowell. Lippincott, Philadelphia, ed. 3, 1958. 426 pp. \$15.

Yearbook of the International Council of Scientific Unions. 1958. Secretary General, ICSU, Paleis Noordeinde, The Hague, Netherlands, 1958. 74 pp. 5s.

Castilla's Spanish and English Technical Dictionary. vol. I, *English-Spanish*, 1611 pp.; vol. II, *Spanish-English*, 1137 pp. Philosophical Library, New York, 1958. \$45.

Soviet Pharmaceutical Research. Consultants Bureau Chemistry Collection No. 4. vol. 1, *Pharmaceutical Chemistry*, 447 pp.; vol. 2, *Pharmacognosy*, 401 pp.; vol. 3, *Medicinal Chemistry*, 556 pp. Consultants Bureau, New York, 1958 (volumes may be ordered separately). \$200.

De l'Actin à l'Homme. vol. 1, *Anticipation et Mémoire. Bases de l'Évolution Psychique.* Henri Pieron. Presses Universitaires de France, Paris, 1958. 306 pp. F. 1600.

Research and Education in Rheumatic Diseases. Transactions of the Second National Conference at National Institutes of Health, Bethesda, Md., 1 Dec. 1956. Joseph J. Bunim, Ed. National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Bethesda, 1958. 156 pp.