

Book Reviews

Analytical method in dynamics. H. O. Newbould. Oxford, Engl.: Clarendon Press, 1946. Pp. 81. (Illustrated.) \$2.50.

While not professing to be a systematic development of the principles of analytic dynamics, this useful booklet presents an interesting approach to a set of problems which are usually regarded as difficult by the student. It selects for consideration the motion of bodies in accelerated reference systems and derives from Newton's laws or Lagrange's equations the basic laws of motion, which are applied to specific instances. The treatment includes the general motion of a rigid body, motion relative to the rotating earth, the motion of a top, and Euler's dynamical equations. One chapter is devoted to the dynamics of an inextensible flexible chain; it excels in elegance and clarity.

Throughout the book, problems are chosen for their illustrative value and mathematical tractability, and without reference to their practical importance. The contents are meant to be supplementary to the standard treatises on dynamics.

The book should prove valuable in the hands of a teacher of graduate courses in dynamics who wishes to enliven the treatment of the subject by interesting and unorthodox examples.

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Scientific Book Register

ADAMSTONE, F. B., and SHUMWAY, WALDO. *A laboratory manual of vertebrate embryology; anatomy of selected embryos of the frog, chick and pig.* (2nd ed.) New York: John Wiley; London: Chapman & Hall, 1947. Pp. vii + 96. (Illustrated.) \$2.00.

BOWDEN, F. P., et al. *The detonation of high explosives by impact; the sensitivity and the propagation of the explosion in liquids.* (Commonwealth of Australia, Council for Scientific and Industrial Research, Bull. No. 173.) Melbourne: H. E. Daw, 1943. Pp. 75. (Illustrated.)

BOWDEN, F. P., et al. *The detonation of nitroglycerine by impact.* (Commonwealth of Australia, Council for Scientific and Industrial Research, Bull. No. 167.) Melbourne: H. E. Daw, 1943. Pp. 44. (Illustrated.)

CALLAHAM, LUDMILLA IGNATIEV. *Russian-English technical and chemical dictionary.* New York: John Wiley; London: Chapman & Hall, 1947. Pp. 794. \$10.00.

CHESTER, K. STARR. *The nature and prevention of the cereal rusts as exemplified in the leaf rust of wheat.* (*Annales Cryptogamiques et Phytopathologiques*, Vol. IV. Frans Verdoorn,

Ed.) Waltham, Mass.: Chronica Botanica; New York: Stechert-Hafner, 1946. Pp. xvi + 269. (Illustrated.) \$5.00.

CLARK, FRANCES N. *Analysis of populations of the Pacific sardine on the basis of vertebral counts.* (California Dept. of Natural Resources, Bureau of Marine Fisheries, Fish Bull. No. 65.) California State Printing Office, 1947. Pp. 28.

COLIEN, F. E. *Principles of microbiology.* (2nd ed.) St. Louis: C. V. Mosby, 1946. Pp. 530. (Illustrated.) \$3.50.

CONANT, JAMES B. *On understanding science: an historical approach.* New Haven: Yale Univ. Press, 1947. Pp. xv + 145. (Illustrated.) \$2.00.

DE LAGUNA, FEDERICA. *The prehistory of northern North America as seen from the Yukon.* (Memoirs of the Society for American Archaeology, Supplement to *American Antiquity*, Vol. XII, No. 3, Part 2, 1947.) Menasha, Wis.: Society for American Archaeology, 1947. Pp. x + 360. (Illustrated.)

DELMONTE, JOHN. *The technology of adhesives.* New York: Reinhold, 1947. Pp. viii + 516. (Illustrated.) \$8.00.

EINARSSON, HERMANN. *Euphausiacea: 1. Northern Atlantic species.* (Carlsberg Foundation, Dana-Report No. 27.) Copenhagen: C. A. Reitzels Forlag; London: Oxford Univ. Press, 1945. Pp. 185. (Illustrated.) 1£ 5 s.

HEDGPETH, JOEL W. *On the evolutionary significance of the Pycnogonida.* (Smithsonian Miscellaneous Collections, Vol. 106, No. 18.) Washington, D. C.: Smithsonian Institution, 1947. Pp. 53. (Illustrated.)

IMPERATORI, CHARLES J., and BURMAN, HERMAN J. *Diseases of the nose and throat.* (3rd ed.) Philadelphia: J. B. Lippincott, 1947. Pp. xxvi + 575. (Illustrated.) \$12.00.

JONES, W. PAUL. *Writing scientific papers and reports.* Dubuque, Ia.: Wm. C. Brown, 1946. Pp. ix + 115. \$2.50.

KELLY, ISABEL. *Excavations at Apatzingan, Michoacan.* (Viking Fund, Publications in Anthropology, No. 7.) New York: Viking Fund, 1947. Pp. 227. (Illustrated.) \$3.00.

MESSER, HAROLD M. *An introduction to vertebrate anatomy.* (Rev. ed.) New York: Macmillan, 1947. Pp. xx + 475. (Illustrated.) \$4.75.

MORRILL, WILLIAM KELSO. *Plane trigonometry.* (Rev. ed.) New York: Rinehart, 1946. Pp. x + 245. \$2.50.

ROGICK, MARY D. *General zoology laboratory manual.* St. Louis: C. V. Mosby, 1947. Pp. 322. (Illustrated.) \$3.25.

SAMUELS, J. *Die hormonalen Aspekte des Fortpflanzungsprozesses.* Amsterdam, Holland: Holdert, 1946. Pp. 152.

SAMUELS, J. *Die Hormonversorgung des Foetus.* Leiden, Holland: E. J. Brill, 1947. Pp. 320.

SPIES, TOM D. *Experiences with folic acid.* Chicago: Year Book Publishers, 1947. Pp. 110. (Illustrated.) \$3.75.