

of the major contributors to this field are appropriately placed in the monograph.

The author reveals, from the introduction onwards, a strong inclination toward the view that malignant tumors, regardless of the species in which they occur, are caused by viruses, and he raises, as a working hypothesis, the possibility that such agents may be their most common cause. The volume provides a broad cross section of presently available knowledge of viruses associated with tumors, and it emphasizes the need for more knowledge.

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A Wanderer Through Nature

The Collected Letters of Antoni van Leeuwenhoek. vol. 6. Edited, illustrated, and annotated by A. Schierbeek and J. J. Swart and a commission of Dutch scientists. Swets and Zeitlinger, Amsterdam, Netherlands, 1961. 425 pp. Illus. + plates. \$24.

This volume, the sixth of a series (the first volume of which appeared in 1939) comprising a definitive edition of van Leeuwenhoek's letters, includes letters 90 to 101 (numbers 49 to 56 in van Leeuwenhoek's own numbering), written between 2 April 1686 and 11 July 1687. Letters 91 and 95 are merely listed, since the manuscripts have not been located and the two letters have not been previously published.

The main contents of the volume are given in Dutch and English on facing pages; however, some footnotes dealing with Dutch linguistic matters are not translated into English. Each letter is accompanied by a list of other places of publication and is collated, in footnotes, with other readings; most of the letters are briefly summarized, and they are fully annotated with respect to scientific content. The volume contains a frontispiece, 32 halftone plates, several appendixes, a discussion of galls and their economic importance in van Leeuwenhoek's time, an essay on van Leeuwenhoek as surveyor and wine-gauger, and some brief excerpts from contemporary treatises on tobacco, coffee, and tea. A biographical register, a list of references quoted, and name and subject indexes are included.

The letters in the volume deal with such diverse subjects as skin glands, fish scales, attempts at disproving spontaneous generation, galls, structure of plant embryos, seeds and their germination, eggs of crustaceans, development of silkworms, structure of wood, coffee beans, structure of teeth of elephants as well of pigs, oxen, and men, and squinting and prenatal influence. The weight of all the extensive apparatus that makes the book so valuable as a work of reference can suppress neither the freshness of van Leeuwenhoek's observations nor the vividness with which he described them. The letters merit the attention given them in this great compendium, and, as important, they are in themselves wonderful to read.

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New Books

Mathematics, Physical Sciences, and Engineering

Advances in Spectroscopy. vol. 2. H. W. Thompson, Ed. Interscience, New York, 1961. 494 pp. Illus. \$13.

Arches, Tables for Static Analyses. Jan Szymczyk. Pergamon, New York, 1961. 536 pp. Illus. \$20.

Charles Babbage and His Calculating Engines. Selected writings by Charles Babbage and others. P. Morrison and E. Morrison, Eds. Dover, New York, 1961. 438 pp. Illus. Paper, \$2.

Determination of Organic Structures by Physical Methods. vol. 2. F. C. Nachod and W. D. Phillips, Eds. Academic Press, New York, 1962. 784 pp. Illus. \$16.

Discrete Variable Methods in Ordinary Differential Equations. Peter Henrici. Wiley, New York, 1962. 418 pp. Illus. \$11.50.

Les Eclipses. Paul Couderc. Presses Universitaires de France, Paris, 1961. 132 pp. Illus.

Electromagnetic Waves. R. E. Langer, Ed. Univ. of Wisconsin Press, Madison, 1962. 408 pp. Illus. \$6.

Elementary Theory of Numbers. W. J. LeVeque. Addison-Wesley, Reading, Mass., 1962. 140 pp. \$5.

Experiments in Sound. Nelson F. Bee-ler. Crowell, New York, 1961. 130 pp. Illus. (juvenile).

Fundamental Data Obtained from Shock-Tube Experiments. A. Ferri, Ed. Pergamon, New York, 1961. 426 pp. Illus. \$12.

Gravity. G. Gamow. Doubleday, Garden City, N.Y., 1962. 158 pp. Illus. Paper, \$0.95.

Introduction to Chemical Instrumentation. Edward J. Bair. McGraw-Hill, New York, 1962. 356 pp. Illus. \$10.75.

An Introduction to Elementary Particles. W. S. C. Williams. Academic Press, New York, 1961. 415 pp. Illus. \$11.

Life in the Universe. A scientific discussion. M. W. Ovenden. Doubleday, Garden City, N.Y., 1962. 160 pp. Illus. Paper, \$0.95.

Linear Programming. G. Hadley. Addison-Wesley, Reading, Mass., 1962. 532 pp. Illus. \$9.75.

Magnetic Amplifier Analysis. David L. Lafuze. Wiley, New York, 1962. 261 pp. Illus. \$9.75.

Mathematical Recreations and Essays. W. W. Rouse Ball. Macmillan, New York, 1962. 434 pp. Illus. Paper, \$1.95.

Mathematics, a Cultural Approach. Morris Kline. Addison-Wesley, Reading, Mass., 1962. 716 pp. Illus. \$7.75.

Mathematics for Practical Use. Kaj L. Nielsen. Barnes and Noble, New York, 1962. 248 pp. Illus. Paper, \$1.25.

Methods Engineering. Design and measurement of work methods. Edward V. Krick. Wiley, New York, 1962. 548 pp. Illus. \$10.75.

Methods of Experimental Physics. vol. 3, *Molecular Physics.* Dudley Williams, Ed. Academic Press, New York, 1961. 774 pp. Illus. \$19.

Minerals for the Chemical and Allied Industries. S. J. Johnstone and M. G. Johnstone. Wiley, New York, ed. 2, 1961. 799 pp. \$25.

Modern Physics. F. W. VanName, Jr. Prentice-Hall, Englewood Cliffs, N.J., ed. 2, 1962. 239 pp. Illus. \$8.25.

Nonlinear Differential Equations. Raymond A. Struble. McGraw-Hill, New York, 1962. 277 pp. \$7.50.

Organic Chemical Crystallography. A. I. Kitaigorodskii (translated from the 1955 Russian edition). Consultants Bureau, New York, 1961. 551 pp. Illus. \$17.50.

The Plasma Dispersion Function. The Hilbert transform of the Gaussian. Burton D. Fried and Samuel D. Conte. Academic Press, New York, 1961. 15 pp. + 404 pp. of tables. \$12.

Quantum Mechanics for Mathematicians and Physicists. Ernest Ikenberry. Oxford Univ. Press, New York, 1962. 281 pp. Illus. \$8.

Radar Observes the Weather. L. J. Battan. Doubleday, Garden City, N.Y., 1962. 159 pp. Illus. Paper, \$0.95.

Radio Astronomy. J. H. Piddington. Harper, New York, 1961. 128 pp. Illus. \$2.50.

Scientific Foundations of Vacuum Technique. Saul Dushman. J. M. Lafferty, Ed. Wiley, New York, ed. 2, 1962. 823 pp. Illus. \$19.50.

A Second Course in Number Theory. Harvey Cohn. Wiley, New York, 1962. 289 pp. Illus. \$8.

Structural Design of Missiles and Spacecraft. Lewis H. Abraham. McGraw-Hill, New York, 1962. 348 pp. Illus. \$12.50.

Surface Phenomena in Metals and Alloys. V. K. Semenchenko. Translated by N. G. Anderson. R. Kennedy, Ed. Pergamon, New York, 1961. 486 pp. Illus. \$17.50.

Systems Engineering for the Process Industries. Theodore J. Williams. McGraw-Hill, New York, 1961. 92 pp. Illus. \$4.95.