

# Books of the Week

Listing is for readers' information, not advertising. For convenient purchase of any book listed or any U.S. book in print, remit retail price (we pay postage) plus 25¢ handling charge if price is less than \$2 to Book Department, Science Service, 1719 N St., N.W., Washington, D. C. 20036.

**THE ACTUAL CONTACT AREA BETWEEN TOUCHING SURFACES**—P. E. D'yachenko and others, transl. from Russian—Consultants, 68 p., diagrams, paper, \$17.50. Discusses theoretical, engineering design and experimental methods for the determination of actual contact area, and experimental results with methods applied.

**ADVANCES IN INSECT PHYSIOLOGY**, Vol. 2—J. W. L. Beament, J. E. Treherne and V. B. Wigglesworth, Eds.—Academic Press, 364 p., illus., \$11. Contributions deal with resilin, with the active transport and passive movement of water in insects, color discrimination, control of visceral muscles, and hormonal regulation of growth and reproduction in insects.

**CATALYZED CRYSTALLIZATION OF GLASS**—E. A. Poraï-Koshits, Ed.-in-Chief, transl. from Russian by E. B. Uvarov—Consultants, 208 p., illus., \$20. This Vol. 3 of **THE STRUCTURE OF GLASS** deals with general aspects of crystallization of glass, two-component systems, the lithium aluminosilicate system, and other three-component and multicomponent systems.

**COMPUTERS IN MEDICINE AND BIOLOGY**—Walter E. Tolles, Ed.—N.Y. Acad. of Sciences, Vol. 115, Art. 2, 597 p., illus., paper, \$9. Series of papers dealing with computer methods and systems, technological foundations, aspects of physiology, neurophysiology and psychophysiology, biological applications and cardiology.

**CRYOGENICS**—Michael McClintock—Reinhold, 270 p., illus., \$10.75. Compact and readable description of the nature, techniques and applications in modern science of low temperature physics, with a minimum of mathematical treatment.

**ELEPHANT**—L. Sprague de Camp—Pyramid Publications, 179 p., photographs, paper, 75¢. Designed for the general reader and student, about the various aspects of the world's largest land animal, from fossils to captive elephants.

**ENCYCLOPEDIA OF ASSOCIATIONS**, Vol. I: National Organizations of the United States—Frederick G. Ruffner Jr., Ed.—Gale Research Co., 4th ed.,

1,231 p., \$25. Information about 12,910 organizations grouped in 18 subject-interest classifications, alphabetical listing by title and by key words, includes date and place of annual meetings up to 1966.

**ESSAYS OF A HUMANIST**—Sir Julian Huxley—Harper, 288 p., \$4.95. Essays on a variety of manifestations of evolution, such as the emergence of Darwinism, reflections on higher and lower organisms, the role of the mind as an operative factor in the evolutionary process, and eugenics in evolutionary perspective.

**HEART ATTACK: Are You a Candidate?**—Arthur Blumenfeld, introd. by Paul Dudley White—Eriksson, Paul S. Inc., 374 p., diagrams, \$5.95. A carefully documented, simply written book on the findings of medical research in the area of pre-senile coronary atherosclerosis.

**HOW HIGH IS UP: Modern Law for Modern Man**—David Loth and Morris L. Ernst—Bobbs-Merrill, 275 p., \$4.50. Describes for the layman how law changes and new laws develop to meet the revolutionary inventions, techniques and problems of our time, such as the sonic boom, vaccines, test tube babies and lie detectors.

**LIFE SCIENCES AND SPACE RESEARCH II: A Session of the Fourth International Space Science Symposium, Warsaw, 1963**—M. Florin and A. Dollfus, Eds.—Interscience (Wiley), 440 p., illus., \$16.50. Papers and discussion of COSPAR-meeting concerned with the study of the possible existence of life on other planets and the chemical nature of the surface layers of these planets, as well as conditions for terrestrial life in space.

**MAN'S REACH INTO SPACE**—Roy A. Gallant—Doubleday, rev. ed., 152 p., illus. by Lee J. Ames, \$3.95. Presents the problems of space flight in popular form for younger readers.

**MARINE GEOLOGY OF THE PACIFIC**—H. W. Menard—McGraw-Hill, 271 p., illus., maps, \$12.50. Analyzes new data of the marine geology of the Pacific Basin, discusses great faults, vulcanism, trenches and island arcs, pelagic sediments, oceanic rises and turbidity currents.

**THE MEASUREMENT OF DELINQUENCY**—Thorsten Sellin and Marvin E. Wolfgang—Wiley, 423 p., \$8.95. Report on research done by the authors on the problem of devising a classification and a differential weighting of the seriousness of offenses, independent of the specific labels given to crimes by the law.

**PHASE DIAGRAMS FOR CERAMISTS, 1964**—Ernest M. Levin, Carl R. Robbins and Howard F. McMurdie, Margie K. Reser, Ed.—Am. Ceramic Soc., 601 p., diagrams, \$18. Valuable reference of 2,066 compilations of phase diagrams of importance to ceramic science and related fields, compiled at the National Bureau of Standards.

**PLANT SCIENTISTS and What They Do**—Jack R. Harlan—Watts, F., 181 p., \$3.95. Describes botany as a rewarding career field.

**POLYURETHANES: Chemistry and Technology**, Part II, Technology—J. H. Saunders and K. C. Frisch—Interscience (Wiley), 881 p., illus., \$27.50. This is Volume XVI, Part 2 of **HIGH POLYMERS**, a series of monographs on the chemistry, physics and technology of high polymer substances.

**PRODUCTIVE CAPACITY OF LOCALITY AS A FUNCTION OF SOIL AND CLIMATE WITH PARTICULAR REFERENCE TO FOREST LAND**—M. S. Czarnowski—La. State Univ. Press, 174 p., diagrams, \$4. Investigates the general principle of plant production as a function of soil and climate from the point of view of today's forester.

**PROJECT APOLLO: Manned Flight to the Moon**—Nat. Aerospace Educ. Council, folded poster, illus., paper, \$1. Depicts step-by-step how U.S. astronauts are planning to reach the moon and return to earth.

**SEVEN-PLACE TABLES OF THE PLANCK FUNCTION FOR THE VISIBLE SPECTRUM**—Dietrich Hahn and others—Academic Press, 135 p., \$5.50. Text in German and English.

**STRUCTURAL GEOLOGY**—L. U. De Sitter—McGraw, 2nd ed., 551 p., illus., \$12.75. For advanced students and professional geologist, tries to

cover the subject from outcrop size to a global point of view, from metamorphic rocks to symsedimentary deformation.

**TAXONOMIC BIOCHEMISTRY AND SEROLOGY**—Charles A. Leone, Ed.—Ronald, 728 p., illus., \$16.50. Papers presented at 1962 International Conference deal with principles of systematics, molecular taxonomy, taxonomic biochemistry of plants, comparative biochemistry of animals, and taxonomic electrophoresis of animals.

**THEORY OF SUPERCONDUCTIVITY**—John M. Blatt—Academic Press, 486 p., \$12.50. Emphasis is on the fundamental properties of superconductors, the nearly complete expulsion of magnetic fields from superconducting materials, and the persistent currents in superconducting rings, with special attention given to thermodynamic properties.

**U.S. GOVERNMENT FILMS FOR PUBLIC EDUCATIONAL USE, 1963**—Seerley Reid and Eloyse Grubbs with Katherine W. Clugston—OE (GPO), 532 p., paper, \$3. Information about the motion pictures and filmstrips of all U.S. Government agencies with source of availability indicated.

**VERTEBRATE EMBRYOLOGY: A Laboratory Manual**—Richard M. Eakin—Univ. of Calif. Press, 242 p., illus., paper, \$2.75. Sections deal with gametogenesis and the estrous cycle, and development in frog larva, chick and pig embryo.

**WEST VIRGINIA GEOLOGY, ARCHAEOLOGY AND PEDOLOGY: A Bibliography and Index**—William H. Gillespie and John A. Clendening—W. Va. Univ. Lib., 241 p., \$5. Reference to all published pertinent literature dealing directly and specifically with West Virginia.

**WHAT IS LINEAR PROGRAMMING?**—A. S. Barsov, transl. and adapted from Russian by Michael B. P. Slater and Daniel A. Levine—Heath, 110 p., paper, \$1.40. Presents an elementary exposition of the general problem dealt with by linear programming and discusses the simplex method and the combinatorial method for solving it.

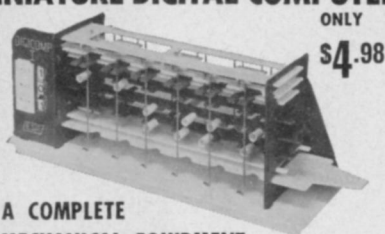
**THE WORLD OF BIRDS**—James Fisher and Roger Tory Peterson—Doubleday, 288 p., photographs, illus. by Roger Tory Peterson, 96 p. color maps, \$17.95; after Christmas \$22.95. Outlines the science of ornithology, discusses techniques, tools and tasks of international bird watching, classifies bird families with census of acceptable genera and species, shows geographical distribution of all bird families, and discusses the problems of conservation.

• Science News Letter, 86:204 Sept. 26, 1964

## Doctors Trim 2 Inches Off Flabby Waists!

German doctors at the famous Max-Planck Institute have discovered an instant-workout method that reduce waistlines in 30 days. Called "Isometric Contractions," one 60-second daily workout can reduce waistline fast. 10 simple exercises can put the whole family in shape fast. No sweat, strain or tiring repetitions. Acclaimed internationally by physiologists, coaches, athletes. Results guaranteed. Free illustrated information. Write **AWARD-WINNING ISOMETRICS**, Minute Home-Gym, Inc., Dept. B, 37 Centuck Station, Yonkers, N. Y. 10710.

## MINIATURE DIGITAL COMPUTER



ONLY \$4.98

A COMPLETE MECHANICAL EQUIPMENT OF AN ELECTRONIC BRAIN

MEMORIZES • MULTIPLIES • STORES FACTS

**DIGI-COMP I** is a working digital computer designed to demonstrate the operations hidden within the circuits of an electronic brain. It is capable of adding, subtracting and multiplying. It also shifts, complements, carries, memorizes, counts, compares and sequences. It can solve problems of missile countdown, satellite re-entry, missile checkout and more practical subjects such as bank accounts and solving logical riddles.

**DIGI-COMP** can even be trained for fun such as fortune telling, etc. Ingeniously designed in plastic, this mechanical analog of a binary counter is 12"x3 1/2"x4", and is open so its fascinating operation can be viewed. In kit form, it can be assembled in less than one hour and is complete with all parts, assembly chart, and full 28-page operations manual which shows how to check the unit out, program problems, solve riddles and try experiments. A fascinating device and a wonderful education project for school children.

Only \$4.98 plus 63¢ shipping charges. Full Money Back Guarantee.

**ROYAL ADVERTISING CORPORATION**  
DEPT. 431 LYNBROOK, NEW YORK

## YOUR HAIR

**ITS HEALTH, BEAUTY AND GROWTH**

BY HERMAN GOODMAN, M.D.

A medical specialist tells you what you can and cannot do to save and beautify your hair, stimulate healthier hair growth, and deal with many problems, as dandruff—gray hair—thinning hair—care of the scalp—baldness—abnormal types of hair—excessive oiliness—brittle dryness—hair falling out—infection—parasites—hair hygiene—glands—diet—coloring—and myriad other subjects concerning hair.

"Discusses the many problems of hair retention, regrowth and removal."—SCIENCE NEWS LETTER.

**287 PAGES—Profusely Illustrated! Price \$3.95, postfree. 10-day Money-back Guarantee. EMERSON BOOKS, INC., 251 W. 19th Street, Dept. 182-P, New York 11, N.Y.**

## Nature Note

### Deadly Nightshade

► **ATROPA BELLADONNA**, the so-called "deadly nightshade," is a tall, poisonous herb that grows to a height of four or five feet and is found growing wild in eastern United States.

A member of the Solanaceae family, it is related to the tobacco plant, the horse-nettle, and the potato, *Solanum tuberosum*, which it resembles in appearance.

A native of Central and Southern Europe, deadly nightshade was imported to this country for cultivation as a source of atropine, a poisonous crystalline alkaloid that occurs in the plant's roots and leaves and is used in medicine.

Atropine affects the nervous system, and can be fatal if taken internally in large doses. Its most common uses are as a relief for intestinal cramps and as pupil-dilating "eye drops."

At one time atropine was used by ladies of the court to dilate their pupils in order to enhance their beauty. This was the origin of the name belladonna, which literally means "fair lady" in Italian.

Deadly nightshade also contains the alkaloid hyoscyamine, which is found in all parts of the plant, especially in its roots and seeds. Deadly nightshade poisoning in humans most commonly arises from eating the berries, which are shiny and black and look like black cherries.

• Science News Letter, 86:204 Sept. 26, 1964