

# Books of the Week

For the editorial information of our readers, books received for review since last week's issue are listed. For convenient purchase of any U. S. book in print, send a remittance to cover retail price (postage will be paid) to Book Department, Science Service, 1719 N Street, N.W., Washington 6, D. C. Request free publications direct from publisher, not from Science Service.

**ALL ABOUT AQUARIUMS**—Earl Schneider—*Practical Science Publishing Co. (Garden City)*, 128 p., illus., \$1.75. Telling student and hobbyist about the housing of his tropical fish.

**ALL ABOUT BREEDING TROPICAL FISHES**—Earl Schneider—*Practical Science Pub. Co. (Garden City)*, 128 p., illus., \$1.75. The author is a hobbyist and dealer.

**AN ADVENTURE IN EDUCATION: Connecticut Points the Way**—Fred M. Hechinger with a commentary by Norman Cousins—*Macmillan*, 266 p., \$3.75. The education editor of a New York newspaper has prepared this "report about a report," which tells what the citizens of Connecticut found out about their schools when they decided to do something about this important responsibility.

**APPLIED AUTOMATION: A Group of Significant Articles From the Pages of "Automotive Industries"** Showing the Application of Modern Automation Techniques—James R. Custer, Ed.—*Chilton for Automotive Industries*, 236 p., illus., \$7.50. Describing steps being taken to bring nearer the push-button factory.

**BIBLIOGRAPHICAL ABSTRACTS ON REDEPOSITION OF SOIL ON COTTON FABRIC**—ASTM Committee D-12—*American Society for Testing Materials*, Special Technical Publication No. 173, 30 p.,

paper, \$1.00. Synthetic detergents were unable to compete with soap until a way was found to prevent the dirt from getting back on the clothes.

**THE BIOCHEMISTRY AND PHYSIOLOGY OF BONE**—Geoffrey H. Bourne, Ed.—*Academic*, 875 p., illus., \$20.00. Papers dealing with the various aspects of bone have recently appeared in an astonishingly wide range of journals throughout the world. This volume brings them together.

**BIOGRAPHICAL MEMOIRS, Volume XXIX**—Gilbert M. Smith and others—*Columbia University Press for National Academy of Sciences*, 359 p., illus., \$4.00. The lives of notable scientists, all of whom were members of the National Academy of Sciences written by colleagues and personal friends.

**BIRD LIFE**—Niko Tinbergen—*Oxford University Press*, 64 p., illus., \$2.75. An account of bird behavior together with practical hints on bird watching.

**BRAINWASHING: The Story of Men Who Defied It**—Edward Hunter—*Farrar, Straus and Cudahy*, 310 p., \$3.75. Describing the techniques of the Communists, based on interviews with survivors, with suggestions for protecting fighting men against this form of mental and emotional destruction.

**THE CHANGING UNIVERSE: The Story of the New Astronomy**—John Pfeiffer with a foreword by Bart J. Bok—*Random House*, 243 p., illus., \$4.75. The author, a science writer, wrote this book on radio astronomy under a fellowship from the Guggenheim Foundation.

**CHEMICAL MARKET RESEARCH IN PRACTICE**—Richard E. Chaddock, Ed.—*Reinhold*, 196 p., \$3.00. Based on a series of lectures presented at Case Institute of Technology and in Wilmington, Del.

**THE COMPLETE BOOK OF LOW CALORIE COOKING**—Leonard Louis Levinson—*Hawthorn*, 319 p., \$4.95. A practical book of hints and recipes for all sorts of dishes that you can eat and lose weight, from snacks to desserts.

**THE CRISIS IN WORLD POPULATION: A Sociological Examination With Special Reference to the Underdeveloped Areas**—J. O. Hertzler—*University of Nebraska Press*, 279 p., \$5.00. Addressed to college students, giving special attention to the underlying factors and processes involved.

**DEVELOPMENT, GROWTH, AND STATE OF THE ATOMIC ENERGY INDUSTRY: Hearings before the Joint Committee on Atomic Energy, Congress of the United States: Part 2**—Govt. Printing Office, 273 p., paper, 65 cents. Comments on report of the panel on the impact of the peaceful uses of atomic energy.

**ELECTRONIC ENGINEERING**—Samuel Seely—*McGraw-Hill*, 525 p., illus., \$8.00. Detailed discussion of a large variety of electronic circuits important in diverse fields.

**GEOMETRICAL OPTICS**—L. C. Martin—*Philosophical Library*, 215 p., \$7.50. Requires only a "modest mathematical equipment in analytical geometry and elementary calculus."

**THE GROWING SHORTAGE OF SCIENTISTS AND ENGINEERS: Proceedings of the Sixth Thomas Alva Edison Foundation Institute, November 21-22, 1955**—Foreword by Charles F. Kettering—*New York University Press*, 132 p., paper, \$4.00. A group of interested people try to

foresee the needs of the future and what can be done to meet them.

**HOW TO FIND A BUYER FOR YOUR INVENTION: When, How, and Where to Sell Your Invention**—V. D. Angerman—*Science and Mechanics Publishing Co.*, 186 p., illus., \$2.95. This book of advice for the inventor includes a directory of business concerns likely to want to buy.

**JUVENILE DELINQUENCY**—Grant S. McClellan, Ed.—*Wilson*, 183 p., \$2.00. Includes articles by such authorities as J. Edgar Hoover, Robert Lindner and Fredric Wertham.

**MAN AND THE UNDERWATER WORLD**—Pierre de Latil and Jean Rivoire, translated from the French by Edward Fitzgerald—*Putnam's*, 400 p., illus., \$5.00. The history is followed from Greek and Roman myth to the 20th century reality of Beebe and Cousteau.

**MAN, HIS LIFE, HIS EDUCATION, HIS HAPPINESS**—A. Da Silva Mello—*Philosophical Library*, 729 p., \$6.00. By a distinguished Brazilian physician and psychiatrist trained in Germany and Austria as well as in his native Brazil.

**MEN AGAINST EVEREST**—Eric Shipton—*Prentice-Hall*, 161 p., illus., \$2.75. An account of various attempts at one of man's greatest adventures.

**METHODS IN PERSONALITY ASSESSMENT: Human Behavior in Complex Social Situations**—George G. Stern, Morris I. Stein and Benjamin S. Bloom—with foreword by Henry A. Murray—*Free Press*, 271 p., illus., \$6.00. Psychologists have come a long way from the early days of the first intelligence test to the point where attempts are being made to assess the total personality in terms of ability to meet a particular situation.

**MYSTERIES OF THE NORTH POLE**—Robert de la Croix, translated from the French by Edward Fitzgerald—*John Day*, 251 p., illus., \$3.50. Telling of four expeditions to the far north that disappeared.

**THE PHYSICS OF MUSIC**—Alexander Wood—*Dover*, 255 p., illus., \$4.00. An introduction to the interesting borderland between physics and music.

**PLANTS THAT FEED US: The Story of Grains and Vegetables**—Carroll Lane Fenton and Her-

## RAPID CALCULATIONS

by A. H. Russell

### CAN YOU

- Name the day of the week on which May 1st, 1485, fell . . .
- Give the cube root of 42508549 . . .
- Tell how long it takes for money to double itself at 5% compounded annually . . .

### IN 5 SECONDS?

- or, Multiply 56837 by 2467
- Divide 385623874169 by 89 . . .

### in 20 Seconds?

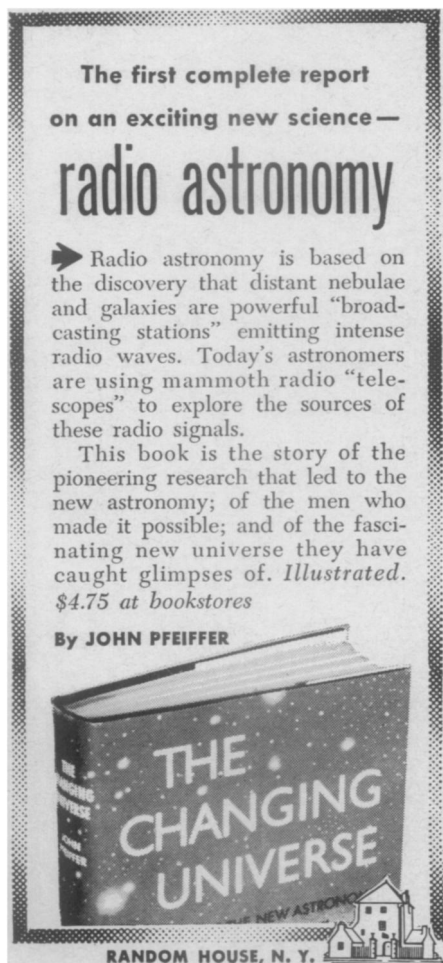
### YOU CAN

perform these and many other feats **MENTALLY** after studying this book!

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minie B. Kitchen—*John Day*, 95 p., illus., \$2.75. Stories for children telling of the origins of garden plants.

THE PROBLEM OF THE PICTS—F. T. Wainwright, Ed.—*Philosophical Library*, 187 p., illus., \$6.00. Bringing together archaeological, linguistic and historical evidence on this people.

PROCEEDINGS OF THE CONFERENCE ON ATMOSPHERIC ELECTRICITY—Robert E. Holzer and Waldo E. Smith, Eds.—*Air Force Cambridge Research Center (Office of Technical Services)*, Geophysical Research Papers No. 42, 247 p., illus., paper, \$4.00. Reporting a conference designed to appraise the current status.

ROCKETS AND GUIDED MISSILES—John Humphries with a foreword by A. D. Baxter—*MacMillan*, 229 p., illus., \$6.00. An account of the situation in this field.

SCALPEL: Men Who Made Surgery—Agatha Young—*Random House*, 311 p., illus., \$5.00. The history of surgery told through the lives of the men largely responsible under four headings: control of hemorrhage, control of pain, control of infection and control of shock.

SOIL STERILIZATION—W. J. C. Lawrence—*Macmillan*, 169 p., illus., \$3.50. Presenting in non-technical words some new information on a very old practice.

SOME MILESTONES IN THE HISTORY OF SCIENCE TO 1800: Based Upon Selections of Printed Books in the Collection of the Linda Hall Library—Joseph C. Shipman, Librarian—*Linda Hall Library*, 56 p., illus., paper, \$2.50. This book had its beginnings in talks using the printed books for background and illustration.

A STUDY OF THE CRANIAL AND SKELETAL MATERIAL EXCAVATED AT NIPPUR—Doris Ray Swindler—*University Museum*, 49 p., illus., paper, 75 cents. Remains of people who lived from around 900 B.C. to 500 B.C. show that the region was occupied during that time, as it is today, by a single race. (See SNL, May 12, p. 302.)

THE THEORY OF SOUND—John William Strutt, Baron Rayleigh, with a historical introduction by Robert Bruce Lindsay—*Dover*, Two volumes of 480 p., and 504 p., paper, \$3.90 for 2-vol. set. Students' edition of a classic first published in 1877 and still of outstanding importance.

VOICES ON THE WIND: Polynesian Myths and Chants—Katharine Luomala—*Bishop Museum*, 191 p., illus., paper, \$3.00. An authentic account of the folk tales of Hawaii.

THE WEB OF LIFE: A First Book of Ecology—John H. Storer with an introduction by Fairfield Osborn—*New American Library*, 128 p., illus., paper, 35 cents. An introduction to the science that teaches how one inhabitant of this world is related to and dependent on others. Originally published by Devin-Adair.

Science News Letter, May 19, 1956

#### ENTOMOLOGY

### U. S. Mosquito List Compiled

► AT LEAST 138 SPECIES of mosquitoes inhabit North America, most of which like people for dinner, a check list made for the American Mosquito Control Association shows.

Included is a species that will not bite people. Its menu consists solely of frogs, and it is called *Culex (Neoculex) territans*.

The list was compiled by Dr. Harry D. Pratt of the Public Health Service's Communicable Disease Center, Atlanta, Ga.

Science News Letter, May 19, 1956

## SAVE ON PALLEY'S NEW & SURPLUS VALUES

NEW IMPORT

### 20 POWER X40MM SPOTTING SCOPE WITH TABLE TRIPOD

19<sup>95</sup> WITH CASE

Newly imported for us - the finest Spotting Scope for the money that we have seen. Has a full 20 POWER magnification with a field of view of 150 ft. at 1000 yards. Has precision ground and polished lenses throughout with fully coated objective lens. Prism type adjustable eyepiece. Length 8-5/8". Stands 10 1/4" on adjustable tripod. Weight only 15 ounces. Complete in a handsome leatherette carrying case with zipper closure. Made by the finest Japanese Optical Experts. Ideal for all types of Spotting. . . . .



LENGTH 8 5/8" SMALL ENOUGH TO CARRY IN YOUR GUN CASE

### 10 POWER NAVY SPYGLASS

Here's a real optical bargain. Manufactured by Wollensak for the U.S. Navy Bureau of Ships. A 10 Power Officer of the Deck Spyglass. Has top quality, fully coated, precision ground lenses. Adjustable eyepiece. Overall length is 22-3/4". Complete in handsome hardwood case with brass hinges and locks. Used but excellent - SPYGLASS - Same as above but ALL NEW . . . . .

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### SEXTANT TYPE STADIMETER

An optical instrument for measuring the exact distance between two points. Originally used by the Navy. Complete set includes Stadimeter, a miniature telescope and instructions for use. Complete in polished, hardwood case. . . . .

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## NEW 60, 120, 150, 180, 300 or 450 POWER MICROSCOPE

WITH NEWLY DEVELOPED, SELF-CONTAINED SUB-STAGE LIGHT TO ELIMINATE NEED FOR EXTERNAL LIGHT SOURCE

Take advantage of our tremendous foreign purchase. Ideal for use by Amateur Scientist, Student, in Home Laboratory for study of plant or insect tissue, etc. Order Today!

- 1-Triple, revolving turret with 10X, 20X, 30X precision ground and polished lenses.
- 2-Interchangeable 6X and 15X eyepieces with precision ground and polished lenses.
- 3-SIX Magnifications for all types of work - 60, 120, 150, 180, 300 and 450 Power magnification.
- 4-NEW! Sub-stage with Self-Contained Light. No external light source needed.

- 5-Large sub-stage mirror for use with external light source.
- 6-All-metal body - built to incline.
- 7-Hardwood Case and 3 slides.

Only 12<sup>95</sup> FREE!! 8pc. DISSECTING SET in fitted wood case.

### NEW ARMY SURPLUS 178mm f:2.5 CAMERA LENS

Originally designed for use on the K-21 and K-24 Aerial Cameras. A genuine EASTMAN AERO EKTAR 178mm lens. Has speeds from f:2.5 to f:16. Focal length is 7 inches. This amazing lens is NEW - in original can. Guaranteed perfect condition. Excellent for Color or Black and White. Exceptionally fine for night work or in poor light conditions. Comes with 2 filters - 1 Polarized (for haze) and 1 yellow, plus a filter adapter, a lens heater for high altitudes and a lens dust cap. Can be adapted to 35 mm or Speed Graphic Cameras as a Telephoto lens (see below).

Only 69<sup>50</sup>



### SPEED GRAPHIC ADAPTERS for above lens - Includes Lens Board, Extension Tube and Bed Support.

2-1/4 x 3-1/4" 21<sup>75</sup> 3-1/4 x 4-1/4" 18<sup>75</sup> 4 x 5" 14<sup>75</sup>

### 35 MM ADAPTERS for ABOVE LENS - Complete - no other parts to buy. Will focus from 8 ft. to infinity - setting marked on the mount. LEICA - CONTAX S&D - EXACTA . . . . . 89<sup>50</sup> CONTAX 2A . . \$109.50 HASSALBAD . . \$139.50

### VICKERS HYDRAULIC TRANSMISSION

Gives Constant Torque at all speeds with a variable volume, reversible piston pump which supplies a piston type hydraulic motor. Has 2 H.P. automatic pressure dash pot for smooth control. Power output RPM is -0 to 1/3 input RPM in both directions. Input RPM is 1800 PSI continuous - 4000 RPM intermittently. Ideal to use for Drives, Lathes, Duplicators on Mills, Conveyors, Small Cars, etc. . . . . A War Surplus Bargain . . . Order Now

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INPUT and TAKE-OFF PLATE ASSEMBLY To adapt above transmission to a pulley drive. Has self-lubricating, high speed bearings, 1/2" keyway shaft. Price per set . . . ONLY 20<sup>00</sup>

### AN-5851-1 AIR CORPS SEXTANT

Can be used for navigation of aircraft or boats. Designed to "shoot" Sun or Stars. Unit contains a horizon indicator, an astigmatic lens, bubble level and battery case. A spring wound motor provides the drive. The exceptional optical system is internally illuminated for night use. Here's a real bargain worth many times our price.

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### 4 SPEED HOBBY MOTOR

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Top Quality Gov't Surplus Linear Actuator. Built for use on Aircraft. Has 5-1/4" stroke. Delivers an 800 pound thrust and will stand a 1750 pound static load. The motor operates on 24 V. D.C. current at 1 1/2 amps - turns at 7500 RPM with 1/6 HP. The overall length, eye-to-eye is 13 inches. . . . .

9<sup>95</sup>

### RS-38A MICROPHONE

A carbon type with a push-to-talk button. Ideal for use where background noise is high. Can be operated with 1-1/2 volt dry-cell batteries. Comes complete with 6 ft. of 3 conductor, shielded cable. 24<sup>95</sup>



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