Books of the Week

TO SERVE YOU: To get books, send us a check or money order to cover retail price. Address Book Dept., SCIENCE NEWS LETTER, 1719 N St., N. W., Washington 6, D. C. Ask for free publication direct from issuing organizations.

ATOMIC PHYSICS—Wolfgang Finkelburg— McGraw-Hill, 498 p., illus., \$6.50. Covers the whole field of nuclear, atomic, molecular and solid-state physics from the atomistic point of view. Translated from the Revised German Edition by George E. Brown.

THE EARLY DEVELOPMENT OF THE CONCEPTS OF TEMPERATURE AND HEAT: The Rise and Decline of the Caloric Theory—Duane Roller —Harvard University Press, 106 p., illus., paper, §1.25. Case 3 in the Harvard Case Histories in Experimental Science, which attempt to recapture the experience of those who once participated in exciting events in scientific history and thereby impart to the social science student an understanding of science.

THE GALLINAZO GROUP VIRU VALLEY, PERU—Wendell C. Bennett—Yale University Press, 127 p., illus., paper, \$2.00. A study of one large group of ruins in the Viru Valley representing only the Gallinazo Period, recognized as one of the most distinctive cultures which existed in the Valley.

Grain—FAO Distribution Division, Cereals Section—Food and Agriculture Organization of the United Nations, Commodity Series, Bulletin No. 18, 116 p., illus., paper, 50 cents. The 1949-50 world grain situation is reviewed. World trade tables for each of the principal grains are included.

THE GROUND SUBSTANCE OF THE MESENCHYME AND HYALURINIDASE—F. Duran-Reynals and others—New York Academy of Sciences, Vol. 52, Art. 7 of the Annals, 264 p., illus., paper, \$3.00. Contributions from the fields of chemistry, enzymology, histology, physiology and clinical medicine to the same problem.

Home Nursing Textbook—Nursing Services, American Red Cross—Blakiston, 6th rev. ed., 225 p., illus, paper, 60 cents, (Cloth. \$1.00). This new revision of the best seller provides more detailed instructions for home nursing. Increased material on care of the elderly and selected additional references for those who wish to study further are included.

INORGANIC SYNTHESES, Vol. III—Ludwig F. Audrieth—McGraw-Hill, 230 p., illus., \$3.75. Detailed procedures of preparing 53 important compounds which are in many instances not obtainable readily or directly from commercial sources.

International Labor Directory 1950— Dominic DiGalbo, Ed.—Claridge, 864 p., \$25.00. A compilation of approximately 132,-000 listings covering the labor movement and organizations associated with it.

LIFE HISTORIES OF NORTH AMERICAN WAGTAILS, SHRIKES, VIREOS, AND THEIR ALLIES—Arthur Cleveland Bent—Gov't. Printing Office, Smithsonian Institution Bulletin 197, 411 p., illus., paper, \$1.50. This is the eighteenth in a series of bulletins of the U. S. National Museum on the life histories of North American birds.

Measuring Water in Irrigation Channels with Parshall Flumes and Small Weirs—R. L. Parshall—Gov't. Printing Office, U. S.

Dept. of Ag. Circular No. 843, 62 p., illus., paper, 25 cents.

Most Often Needed 1950 Radio Diagrams and Servicing Information—M. N. Beitman, Ed.,—Supreme, 192 p., illus., paper, \$2.50. Diagrams and service material on AM and FM sets prepared with the cooperation of various radio manufacturers.

The Nutritional Improvement of Life—Henry C. Sherman—Columbia University Press, 270 p., \$3.75. A presentation of the important advances made in the last half century in the four major fields of nutrition: energy foods, proteins and their amino-acids, the mineral elements and the vitamins.

A Practical Survey of Chemistry—Walter S. Dyer and Manfred E. Mueller—Holt, rev. ed., 564 p., illus., \$3.60. A nonmathematical introductory text.

Practical Television Engineering—Scott Helt
—Murray Hill, 708 p., illus., \$7.50. Tells
how television transmitters and receivers
work, and how they are combined in the
complete television system.

Public-Address Guide—Guy S. Cornish—Rad-craft, Gernback Library No. 41, 80 p., illus., paper, 75 cents. Information on operation and maintenance of public address systems for the radio service technician.

Speaking Can Be Easy for Engineers, Too—Committee on Relations With Industry—Engineers' Council for Professional Development—24 p., illus., paper, 50 cents. Presenting helpful hints.

Science News Letter, July 15, 1950

ZOOLOGY

How Octupus Learns Is Clue to How Man Learns

STUDY of how an octopus learns is providing scientists with new knowledge of what goes on in the nervous system of higher animals.

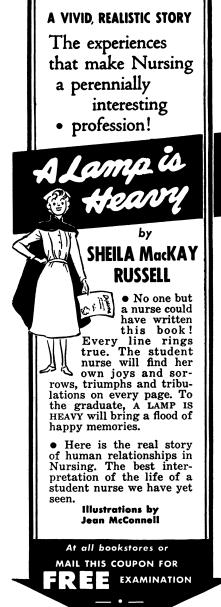
A common plan of organization can now be detected in learning systems of cephalopods and mammals, Prof. J. Z. Young of University College in London told the Royal Society in the Ferrier Lecture.

It has been difficult, Prof. Young noted, to find out just what happens in the nervous system during learning, because the process is not localized but is generalized through large masses of tissue.

Much evidence has been found to indicate that more stable learning depends on the formation of new nervous pathways by some form of growth process.

The relationships of fibers in the closely woven networks of the higher centers is constantly being changed slightly by activity. These changes alter the direction of nervous impulses.

Science News Letter, July 15, 1950



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