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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.

THE AMERICAN TEENAGER—H. H. Remmers and D. H. Radler—*Bobbs-Merrill*, 267 p., \$3.75. The first general report of a nationwide study of the opinions of teenagers.

THE DEMAND AND SUPPLY OF SCIENTIFIC PERSONNEL—David M. Blank and George J. Stigler—*National Bureau of Economic Research*, 200 p., graphs, \$4.00. Demand for engineers has grown rapidly, it was found, but the supply has grown even more rapidly. Consequently, salaries are drifting downward.

DEVELOPMENT OF SCIENTIFIC, ENGINEERING, AND OTHER PROFESSIONAL MANPOWER (WITH EMPHASIS ON THE ROLE OF THE FEDERAL GOVERNMENT)—Charles A. Quattlebaum and others—*Govt. Printing Office*, 172 p., paper, free upon request direct to the Joint Committee on Atomic Energy, Capitol, Washington 25, D. C. Prepared especially for use by the joint committee, it brings together, digests and summarizes statistical studies and published opinions.

A FRONTAL SECTION ANATOMY OF THE HEAD AND NECK—Otto Frederic Kampmeier, Arthur R. Cooper and Thomas S. Jones—*University of Illinois Press*, 20 plates, \$15.00. Sections in the frontal plane are seldom shown in anatomy textbooks.

HIGHWAY MAINTENANCE STUDIES—H. A. Radzikowski and E. S. Ward—*Highway Research Board*, Bulletin 155, 17 p., graphs, paper, 50 cents. Reports of studies of the upward trend of maintenance costs.

NEW ANSWERS TO THE FATIGUE PROBLEM—Adelaide K. Bullen—*University of Florida Press*, 176 p., diagrams, \$4.50. Discussing in a readable way both the various body builds and personality make-ups and their relation to fatigue and boredom on the job, and the measures, such as music and food, taken to combat these.

NON-STABLE STARS—George H. Herbig, Ed.—*Cambridge University Press*, 200 p., diagrams, \$5.50. Discussing instability among the hot stars of both low and high luminosity, in the very cool stars, in close binary systems and in stars whose peculiarities are believed to be a consequence of their relative youth.

OPALS—Chester B. Slawson and others—*Cranbrook Institute of Science*, 15 p., illus., paper, 40 cents. It is not generally realized that the importance of opals is not in the occasional rare jewel but in the cruder form sold in carload lots to industry.

ORGANIC CHEMISTRY—Louise Kelley—*McGraw-Hill*, 2d ed., 757 p., diagrams, \$7.50. Text for a first-year course.

PAPERS ON REDUCTION METHODS FOR PHOTOGRAPHIC METEORS—Fred L. Whipple and Luigi G. Jachia and others—*Govt. Printing Office*, Smithsonian Institution Contributions to Astrophysics, 61 p., illus., paper, 70 cents. Describing methods for determining the trajectories of meteors.

PRACTICAL YACHT CONSTRUCTION: The Construction, Rigging, and Equipment of Wood Sailing and Auxiliary Yachts—C. J. Watts—*Adlard Coles (John de Graff)*, 149 p., illus., \$6.95. Of practical assistance to yacht owners, builders and designers and sailing hobbyists.

PRINCIPLES OF IMMUNOLOGY—John E. Cushing and Dan H. Campbell—*McGraw-Hill*, 344 p., illus., \$6.50. A text intended especially for college seniors and graduate students majoring in biology.

PRINCIPLES OF STRATIGRAPHY—Carl O. Dunbar and John Rodgers—*Wiley*, 356 p., illus.,

\$10.00. Stratigraphy, the authors state, is a rapidly growing science in which there is still much to learn. This is a text for a graduate course.

PSYCHIATRIC RESEARCH REPORTS OF THE AMERICAN PSYCHIATRIC ASSOCIATION: 7, Stress; Experimental Psychology; Child Psychiatry—Robert A. Cleghorn, Consultant Editor—*American Psychiatric Association*, 88 p., diagrams, paper, \$2.00. Papers presented at a regional research conference in Montreal.

REPORT OF IMPORTANT DUST EXPLOSIONS: A Record of Dust Explosions in the United States and Canada Since 1860—Fire Record Department of the National Fire Protection Association—*National Fire Protection Association*, 79 p., illus., \$3.00. It is not just coal that can explode dangerously, but such innocent sounding materials as peanut hulls, soap, sponge iron and oat bran.

ROCKETS, MISSILES, AND SPACE TRAVEL—Willy Ley—*Viking*, rev. ed., 528 p., illus., \$6.75. In the new revision 40% of the material relates to the past, 40% to the present and only 20% to the relatively near future.

UNDERSTANDING HI-FI CIRCUITS—Norman H. Crowhurst—*Gernsback*, 224 p., diagrams, paper \$2.90, cloth \$5.00. Telling what can happen in a circuit that is not described in technical specifications.

UNDERSTANDING MAPS: Charting the Land, Sea, and Sky—Beulah Tannenbaum and Myra Stillman—*McGraw-Hill*, 144 p., illus., \$2.75. Telling how to find your way by use of a map and how to gather all the information a map gives.

X-RAY DIFFRACTION DATA FOR SILICATES, ALUMINATES, AND ALUMINO-SILICATES OF STRONTIUM—Paul S. Dear—*Virginia Polytechnic Institute*, Engineering Experiment Station Series No. 117, 16 p., paper, 25 cents.

Science News Letter, July 6, 1957

RADIO ASTRONOMY

Largest Radio Telescope Nearing Completion

See Front Cover

► THE WORLD'S largest radio telescope, a 250-foot dish-shaped bowl, is now nearing completion at Jodrell Bank, England, after five years of construction.

Built for the University of Manchester, the steerable antenna is shown in the photograph on the cover of this week's SCIENCE NEWS LETTER. Building the sensitive short-wave radio receiver is an outstanding example of engineering skill, because the enormous steel bowl has to keep its shape within close limits during rotation and while under the effects of strong winds and temperature changes.

The radio telescope will automatically follow any desire point in space, catching the faint radio waves broadcast by many kinds of heavenly objects. With it, radio astronomers will seek out the secrets of outer space beyond the limits of visual observation.

Science News Letter, July 6, 1957