

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 THE SEXES: A Study of Masculinity and Femininity—George W. Henry with foreword by David E. Roberts—*Rinehart*, 599 p., \$7.50. Each individual, the author states, is an incalculable complex of masculinity and femininity. The title is intended to convey the idea of gradation from masculinity to femininity rather than any rigid division into two sexes.

THE ADVANCED PART OF A TREATISE ON THE DYNAMICS OF A SYSTEM OF RIGID BODIES: Being Part II of a Treatise on the Whole Subject With Numerous Examples—Edward John Routh—*Dover*, 6th ed., 484 p., paper \$1.95, cloth \$3.95. Re-issue of a famous work first published in 1860.

THE AIRCRAFT YEARBOOK 1954: Official Publication of the Aircraft Industries Association of America—Fred Hamlin, Eleanor Thayer and Lynn Black, Eds.—*Lincoln Press*, 472 p., illus., \$6.00. Complete directory of aircraft, executives and agencies in the U. S. with a review of outstanding aviation events of the year.

ALMOST PERIODIC FUNCTIONS—A. S. Besicovitch—*Dover*, 180 p., paper \$1.75, cloth \$3.50. Student's edition of an important mathematical work.

APPLIED SOLAR ENERGY RESEARCH: A Directory of World Activity and Bibliography of Significant Literature—E. J. Burda, Ed.—*Stanford Research Institute for Association for Applied Solar Energy*, 298 p., paper \$4.00, cloth \$5.00. Listing name and address of research groups, names of principal researchers and description of research program. Covers 27 countries.

BIRD RECOGNITION: III, Rails, Game-Birds and Larger Perching and Singing Birds—James Fisher—*Penguin*, 158 p., illus., paper, 85 cents. To help bird watchers to know the birds they are likely to see in the British Isles.

THE BIRTH AND DEVELOPMENT OF THE GEOLOGICAL SCIENCES—Frank Dawson Adams—*Dover*, 506 p., illus., paper \$1.95, cloth \$3.95. An unabridged republication of this work published in 1938 which draws on the works of 500 early writers including Aristotle and Humboldt.

BORDERLAND OF THE UNKNOWN: The Life Story of Gilbert Newton Lewis, One of the World's Great Scientists—Arthur Lachman—*Pageant Press*, 184 p., \$3.00. Biography of the man who first isolated heavy water.

CANADIAN CANCER CONFERENCE: Vol. I, Proceedings of the First Canadian Cancer Research Conference, Honey Harbour, Ontario, June 16-19, 1954—R. W. Begg, Ed.—*Academic*, 443 p., illus., \$8.80. Because researchers in this field in Canada are widely separated, it was deemed wise to bring them together for this national conference.

THE CHEMICAL INDUSTRY FACTS BOOK—Manufacturing Chemists' Association, 2d ed., 148 p., illus., paper, \$1.00. Chemistry has emerged during the first half of this century as a major industry.

THE CHEMISTRY OF PETROLEUM HYDROCARBONS—Benjamin T. Brooks and others, Eds.—*Reinhold*, Volume II, 448 p., illus., \$13.50, Volume III, 690 p., illus., \$18.00. A reference work for petroleum engineers and organic chemists.

THE CHEMISTRY OF SYNTHETIC DYES AND PIGMENTS—H. A. Lubs—*Reinhold*, American Chemical Society Monograph Series, 734 p., \$18.50. An authoritative reference work covering developments since the discovery of mauve, the first man-made dye.

COMMUTING PATTERNS OF INDUSTRIAL WORKERS: A Study of Experience Since 1940 in the Northeast Region—Leonard P. Adams and Thomas W. Mackesey—*Cornell University Housing Research Center*, Research Publication No. 1, 135 p., illus., paper, \$2.00. Evidence indicates that workers now live farther from their work than they used to.

CONGENITAL MALFORMATIONS AND BIRTH INJURIES: A Handbook on Nursing—Jessie Stevenson West—*Association for the Aid of Crippled Children*, 178 p., illus., paper, \$1.00. Because more infants are born alive than ever before, more babies with congenital malformations are living who previously would have died. This provides a new challenge to nurses.

THE CONTINUUM AND OTHER TYPES OF SERIAL ORDER: With an Introduction to Cantor's Transfinite Numbers—Edward V. Huntington—*Dover*, 2d ed., 82 p., paper \$1.00, cloth \$2.75. Student's edition.

DELINQUENT BOYS: The Culture of the Gang—Albert K. Cohen—*Free Press*, 202 p., \$3.50. Delinquency is seen by the author as a subculture which continues to exist because it provides its child members with the prestige of status that otherwise they would lack.

DUST IS DANGEROUS—C. N. Davies with a foreword by Sir George Barnett—*Faber and Faber (John de Graff)*, 116 p., illus., \$4.50. A research scientist writes on a serious industrial problem.

THE DYNAMICAL THEORY OF GASES—Sir James H. Jeans—*Dover*, 4th ed., 444 p., paper \$2.00, cloth \$3.95. Republication in an inexpensive student's edition of a well-known work.

FEEDING YOUR CHILD—Samuel M. Wishik with foreword by Leona Baumgartner—*Double-day*, 223 p., illus., \$3.50. A practical guide that answers the everyday questions related to feeding from infancy through the school years.

FRONTIER TO SPACE—Eric Burgess with a

foreword by the Astronomer Royal, Sir Harold Spencer Jones—*Macmillan*, 174 p., illus., \$4.50. Telling how modern rockets are being used to obtain for us information about the upper atmosphere.

FUNDAMENTALS OF PLANT SCIENCE: A Laboratory Manual—G. W. Prescott and J. C. Elliott—*Burgess*, 271 p., illus., paper, \$4.00. Intended for a year's course in general botany.

HOUSEHOLD PHYSICS: A Textbook for College Students in Home Economics—Madalyn Avery—*Macmillan*, 3d ed., 472 p., illus., \$5.50.

INDIAN VILLAGE—S. C. Dube with foreword by Morris Edward Opler—*Cornell University Press*, 248 p., illus., \$3.00. From 70% to 80% of India's population live in such villages as the one described in this book by an Indian social anthropologist.

THE LONELY SKY—William Bridgeman and Jacqueline Hazard—*Holt*, 316 p., illus., \$3.95. The autobiography of a test pilot and the experimental planes he has flown, particularly the needle-nosed Skyrocket.

MOTO-KINESTHETIC SPEECH TRAINING—Edna Hill Young and Sara Stinchfield Hawk—*Stanford University Press*, 176 p., illus., \$5.00. Describing a method of speech correction developed by the senior author to correct a defect in her own speech.

THE NATIONAL RESEARCH COUNCIL REVIEW 1954—C. D. Howe, Chairman—*National Research Council (Canada)*, 262 p., illus., paper, 75 cents. Reporting research conducted during the year and containing a directory of scientific personnel.

OUR WONDERFUL EYES—John Perry with foreword by George Wald—*Whittlesey House*, 158 p., illus., \$2.75. A simple description of how we see, with many experiments you can perform without expensive equipment.

PET HAMSTERS—*All-Pets Books*, 28 p., illus., paper, 35 cents. How to select and care for a popular pet.

PICTORIAL AMERICANA: A Select List of Photographic Negatives in the Prints and Photographs Division of the Library of Congress—Charles G. LaHood Jr., Ed.—*Library of Congress*, 2d ed., 68 p., paper, 25 cents. Covering various phases of American life and history. Photoprints listed can be obtained at from 25 cents up.

PICTURE BOOK OF TV TROUBLES: Vol. 3, Video I-F & Video Amplifier Circuits—John F. Rider Laboratories Staff—*Rider*, 90 p., illus., paper, \$1.80. How to tell what is wrong inside the set from the image appearing on the picture tube.


PLASTICS TOOLING—Malcolm W. Riley—*Reinhold*, 123 p., illus., \$2.50. A status report on an infant production method.

POMP AND PESTILENCE: Infectious Disease, Its Origins and Conquest—Ronald Hare—*Philosophical Library*, 224 p., \$5.75. Considering the infections that must have plagued prehistoric man and affected his evolution, and looking forward to what may be the fate of man's diseases in the future.

THE PROTECTION OF STRUCTURAL STEEL: Current Good Painting Practice for Steel Structures in the United States—Joseph Bigos—*Mellon Institute*, 8 p., paper, free upon request direct to publisher, 4400 Fifth Ave., Pittsburgh 13, Pa.

PSYCHOTHERAPEUTIC INTERVENTION IN SCHIZOPHRENIA—Lewis B. Hill—*University of Chicago Press*, 216 p., \$5.00. Addressed to young psychiatrists.

RELIGIOUS FACTORS IN MENTAL ILLNESS—Wayne E. Oates—*Association Press*, 239 p., \$3.50. Intended to aid the pastor and psychiatrist in understanding each other and helping the mental patient.



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SELECTIVE CHECKLIST OF PRINTS AND PHOTOGRAPHS: Recently Cataloged and Made Available for Reference, Lots 4121-4801—*Library of Congress*, 87 p., paper, 70 cents.

SHOULD THE PATIENT KNOW THE TRUTH! A Response of Physicians, Nurses, Clergymen, and Lawyers—Samuel Standard and Helmuth Nathan, Eds.—*Springer Publishing Co.*, 160 p., paper \$2.00, cloth \$3.00. Experts discuss a question which must be faced sooner or later in most families.

SOIL AND WATER CONSERVATION ENGINEERING—Richard K. Frevert, Glenn O. Schwab, Talcott W. Edminster and Kenneth K. Barnes—*Wiley*, 479 p., illus., \$8.00. A professional text for agricultural engineering students.

STEEL MILL AND COKE BY-PRODUCTS WASTES—W. W. Hodge—*Mellon Institute*, 18 p., paper, free upon request direct to publisher, 4400 Fifth Ave., Pittsburgh 13, Pa.

SYMPOSIUM ON COAL SAMPLING—W. M. Bert-hoff and others—*American Society for Testing Materials*, ASTM Special Technical Publication No. 162, 152 p., illus., paper, \$2.75. Reporting experiments designed to collect data on this problem.

TV FIELD SERVICE MANUAL WITH TUBE LOCATIONS: Vol. 4—Harold Alsberg, Ed.—*Rider*, 151 p., illus., paper, \$2.40. To help the technician locate trouble without the delay of taking the television receiver away to the shop.

TIME TO TALK ABOUT INDIA—Arthur Good-friend—*Foreign Policy Association*, 12 p., illus., paper, 50 cents. Information basic to an understanding of a complex world problem.

TWO YEARS IN THE ANTARCTIC—E. W. Kevin Walton—*Philosophical Library*, 194 p., illus., \$4.75. A personal account of a man who was a member of a British survey party.

VITAMINS IN THEORY AND PRACTICE—Leslie J. Harris—*Cambridge University Press*, 4th ed., 366 p., illus., \$6.50. The highlights of the science of "vitaminics" as presented in a series of Thursday afternoon lectures at the Royal Institution, London.

WORLD POPULATION AND WORLD FOOD SUPPLIES—Sir E. John Russell—*Allen & Unwin (Macmillan)*, 513 p., illus., \$8.50. In the past the world has been saved from threatened starvation by new scientific advances, particularly the development of a new science of plant

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genetics; now it depends upon close cooperation between the more advanced and less advanced countries together with a sound population policy.

Science News Letter, May 21, 1955

MEDICINE

Doctors Smoking Less But Expense Is Reason

► THE NUMBER of doctors who smoke cigarettes is gradually decreasing, but increasing cost, not the risk of lung cancer, seems to be the reason.

These are the conclusions of a short questionnaire study of 211 doctors working in the hospitals in Oxford, England, as reported by Dr. D. A. Pyke of the Radcliffe Infirmary, Oxford, to the *British Medical Journal* (May 7).

Less than half of this small group of doctors smoke, a smaller proportion than in the general population, Dr. Pyke found.

Of the 211, the number who smoked cigarettes eight years ago was 129. Now it is 100. The number giving up smoking since an association with lung cancer was discovered has not increased.

The proportion of those who accept the evidence of an association between cigarette smoking and lung cancer is so much higher among the non-smokers than the smokers that Dr. Pyke suspects the smokers of prejudice in favor of tobacco because of the pleasure of cigarette smoking.

Science News Letter, May 21, 1955

PUBLIC SAFETY

Cringe When You See Rear-End Crash Coming

► IF YOU hear screeching brakes behind you and see in your rear-view mirror that another car is about to crash into yours, hunch your shoulders and cringe down. It will help reduce injuries.

This is suggested in studies by the Institute of Transportation and Traffic Engineering at the University of California at Los Angeles.

A series of rear-end collisions, involving both humans and dummies was staged at speeds ranging from seven to 20 miles per hour. It was found that at impact speeds near 10 miles per hour a sudden force of as much as 150 pounds was exerted on the head of the front car occupant, causing a "whiplash" effect.

At 20 miles per hour the front-seat back flexed rearward considerably so that the application of force on the neck was not as abrupt. The collapse of the car's rear at this speed absorbed much of the shock.

Participants in the test found that after initial runs they tended to cringe involuntarily as the cars crushed together. This hunching of shoulders reduced the head whip effect considerably.

The studies were conducted by Derwyn Severy and J. H. Mathewson of U.C.L.A. and Dr. Charles Bechtol of Yale Medical College.

Science News Letter, May 21, 1955

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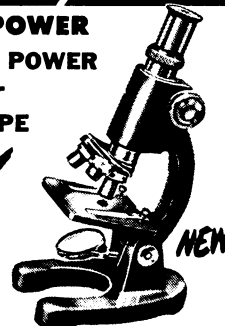
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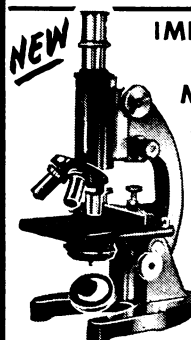
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