

the Northern Hemisphere, and of autumn in the Southern Hemisphere. The solstice, when the sun is farthest north and summer begins for us, will come June 21 at 10:56 a.m., EDT. Autumn will start Sept. 23, at 2:06 a.m., EDT, when the sun will again be over the equator. On Dec. 21, at 8:41 p.m. EST, it will be farthest south. Then winter will start here—and summer in southern lands.

There will be four eclipses in 1965, the most important a total eclipse of the sun on May 30. The path of visibility, about 150 miles wide, starts west of Auckland, New Zealand, then passes over the Pacific Ocean in a northeasterly direction toward the equator. It ends at the coast of Peru. At the middle of the path, the moon will obscure the sun for the unusually long time of 5 minutes 15.9 seconds. The islands along the path will be well populated with astronomers on that date. In Mexico, Central America and the northwestern part of South America, a partial eclipse will be visible.

A partial eclipse of the moon, on the night of June 13, will be visible in South America and the eastern part of North America. Nov. 23 will bring an annular eclipse of the sun, visible from southeastern Asia and many Pacific islands. Although the moon will pass in front of the sun, it will not entirely cover it. A ring of the solar surface will be visible around the dark lunar disc.

The year's last eclipse will come Dec. 8 but even where it will be visible, in Europe and Asia, you would hardly be able to see anything unusual. This will be a "penumbral" eclipse. That is, the full moon will enter the outer part of the earth's shadow—the penumbra—where our planet partially hides the sun. The moon will be a little dimmer than usual when full, but so much sunlight will still shine on it that the effect will hardly be noticeable.

Celestial Timetable for January

JAN.	EST	
2		Earth nearest sun, distance 91,350,000 miles
	9:00 a.m.	Moon farthest, distance 252,600 miles
	4:07 p.m.	New moon
4	11:20 p.m.	Algol (variable star in Perseus) at minimum brightness
6	5:00 p.m.	Saturn passes north of moon
7	2:00 a.m.	Mercury passes north of Venus
	8:10 p.m.	Algol at minimum
10	4:00 p.m.	Moon in first quarter
12	noon	Jupiter passes north of moon
16	8:00 p.m.	moon nearest, distance 221,900 miles
17	8:38 a.m.	Full moon
21	10:00 a.m.	Mars passes south of moon
24	6:07 a.m.	Moon in last quarter
25	1:00 a.m.	Algol at minimum
27	9:50 p.m.	Algol at minimum
29	1:00 p.m.	Moon farthest, distance 252,400 miles
30	6:40 p.m.	Algol at minimum
	8:00 p.m.	Venus passes north of moon

Subtract one hour for CST, two hours for MST, and three hours for PST.

• Science News Letter, 86:406 December 26, 1964

Books of the Week

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ALKYLATION WITH OLEFINS—A. V. Topchiev, S. V. Zaygorodnii and V. G. Kryuchkova, transl. from Russian—Elsevier Pub. Co. (N.Y.), 306 p., illus., \$16. Monograph on Soviet petrochemical research addressed to specialists in organic synthesis.

THE AMBIDEXTROUS UNIVERSE—Martin Gardner—Basic Bks., 294 p., illus. by John MacKey, \$5.95. An exploration of symmetry and asymmetry in the human, animal and plant kingdoms, in the biological and physical sciences, and the "fall of parity."

ANCIENT SCIENCE AND MODERN CIVILIZATION—George Sarton—Univ. of Neb. Press, 111 p., paper, \$1. Reprint (1954).

ANIMAL COMMUNICATION—Hubert and Mabel Frings—Blaisdell Pub. Co., 218 p., illus., paper, \$2.50. Presents some of the concepts that are emerging from the scientific study of animals communicating with the aid of chemical, acoustical, tactile and optical signals.

ANIMAL LANGUAGE—Julian Huxley and Ludwig Koch—Grosset, 64 p., photographs by Ylla, 33 1/2 rpm record by Ludwig Koch, \$5.95. About the uses of animal sound, methods and evolution of sound production with record of actual sounds, and a description of their meaning.

ANTHROPOLOGICAL PAPERS: Numbers 68-74—Leo P. Biese and others—Smithsonian Inst., Bur. of Am. Ethnol. (GPO), 425 p., illus., 104 plates, \$2.25. Monographs range from prehistory of Panama Viejo to Iroquois mask making at Onondaga.

ATOMIC MIGRATION IN CRYSTALS—L. A. Girifalco—Blaisdell Pub. Co., 162 p., diagrams, \$3.75. Gives a descriptive account of diffusion processes in simple solids, in elementary terms.

BENEFICIAL INSECTS: Nature's Alternatives to Chemical Insecticides—Lester A. Swan—Harper, 429 p., photographs, illus., \$7.95. Describes how animal predators, parasites and insect diseases can be manipulated to give man control of civilization's pests.

BENJAMIN RUSH: Physician, Patriot, Founding Father—Sarah R. Riedman and Clarence C. Green—Abelard-Schuman, 253 p., photographs, \$4.50. Biography for young adults.

BEYOND AUTOMATION: Managerial Problem of the Exploding Technology—John Diebold—McGraw, 220 p., \$7.50. An analysis of the far-reaching implications of automation for the U.S. economy as a whole and for business managers in particular. Author projects advances in automation for the next decade and views social change as its most important by-product.

BIBLIOGRAPHY ON COMPRESSION IGNITION ENGINE LOW TEMPERATURE PROBLEMS—W. E. Meyer—Pa. State Univ., College of Engineering, 109 p., paper, \$3. Citations with abstracts.

BIOLOGICAL EFFECTS OF MAGNETIC FIELDS—Madeleine F. Barnothy, Ed.—Plenum Press, 324 p., illus., \$16. Brings together in one volume present-day knowledge gained in all the active fields of biomagnetic research.

BIOLOGY OF TERMITES: BSCS Pamphlet No. 17—E. Norton Miller—AIBS (Heath), 36 p., illus., paper, one of eight pamphlets per school year, \$4 annually. Curriculum enrichment reading in high school biology.

BIRDS OF PREY OF THE WORLD—Mary Louise Grossman and John Hamlet—Potter, Clarkson N., 496 p., 70 color photographs, 283 halftones, 646 drawings, 425 range maps, \$25. Authoritative text on hawklike birds and owls, both historical and scientific, with beautiful photography by Shelly Grossman.

BRAIN-THYROID RELATIONSHIPS with Special Reference to Thyroid Disorders—Margaret P. Cameron and Maeve O'Connor, Eds.—Little, 117 p., illus., \$1.95. A Ciba Foundation summary and discussion of recent research.

CAN PSYCHOPATHOLOGY BE MEASURED?—Joseph Zubin and others—N.Y. Acad. of Sciences, Annals, Vol. 105, Art. 15, 110 p., paper, \$4. Symposium papers focus attention on areas where measurement has been attempted, and discuss the problems and prospects of the biometric method.

CANADA: A Studio Book—Photographed by Peter Varley, introd. by Kildare Dobbs—Viking Press, 60 p., 176 photogravure plates, 8 color plates, \$12.50. Handsome portrait of contemporary Canada.

CHEMICAL TECHNOLOGY: A Suggested 2-Year Post High School Curriculum—Walter J. Brooking, Ed.—OE (GPO), 119 p., illus., paper, 70¢. Curriculum guide with course outlines, laboratory layouts and lists of textbooks and references.

THE CHEMISTRY OF COMPLEX CYANIDES: A Literature Survey—M. H. Ford-Smith—HMSO (Brit. Information Services, N.Y.), 93 p., \$5.50. A concise account of both less recent and the new work in this field, including chemical and physico-

chemical properties of complex cyanides and mixed complex cyanides, each element being treated separately.

A CHEYENNE SKETCHBOOK—by Cohoe with Commentary by E. Adamson Hoebel and Karen Daniel Peterson—Univ. of Okla. Press, 96 p., 12 color plates, photographs, \$5.95. Monograph printed on special paper, gives historical background to Cheyenne warrior's sketches unusually rich in detail.

CHILD GUIDANCE: Lawson G. Lowrey Memorial Volume—Simon H. Tulehain, Ed.—Am. Orthopsychiatric Assn., 380 p., illus., \$8.50. Collection of representative articles devoted to children's problems, delinquency, reading disability, and treatment of behavior problems.

CITIES AND SPACE: The Future Use of Urban Land—Lowdon Wingo Jr., Ed.—Johns Hopkins Press, 261 p., illus., \$5.50. Essays from the 1962 Resources for the Future Forum on ways to foster policies to guide the growth and organization of cities.

THE COMMUNICATION SYSTEMS OF THE BODY—David F. Horrobin—Basic Bks., 214 p., diagrams, \$4.95. A specialist in neurophysiology presents in nontechnical language the principles behind the intricate network of nerves and hormones that feed perceptions to the brain which directs the body's activities.

CONCISE DICTIONARY OF ATOMICS—Alfred del Vecchio, introd. by Werner von Braun—Philosophical Lib., 262 p., \$6. Intended as a simplified ready-reference for the practising engineer, student and teacher.

THE CONQUEST OF THE MATERIAL WORLD—John Nef—Univ. of Chicago Press, 408 p., \$8.95. Essays portraying the historical process which led the Western civilization into industrialism, focusing upon the two centuries of European history from 1450 to 1640.

CONSERVING AMERICAN RESOURCES—Ruben L. Parson—Prentice-Hall, 2nd ed., 521 p., illus., \$8.95. About the state of American natural resources and what the citizen can do to ensure their beneficial use.

THE CRANBROOK ATOMARIUM—Cranbrook Institute of Science, 29 p., photographs, paper, \$1. Following the pattern of the atomarium in Stockholm, Sweden, this booklet describes the demonstrations of the new museum displays at Cranbrook which explain some of the phenomena of atomic and nuclear physics.

CRYOGENICS—Richard J. Allen—Lippincott, 160 p., illus., \$3.95. An introduction to the new science and technology of very low temperatures, for the general reader.

DANGEROUS TO MAN: Wild Animals. A Definitive Study of Their Reputed Dangers to Man—Roger A. Caras—Chilton Bks., 433 p., photographs, \$10. Includes technical appendixes on treatment of injuries, rabies, rattle snakes, shark attacks, bibliography.

DIET AS A FACTOR IN LENGTH OF LIFE AND IN STRUCTURE AND COMPOSITION OF TISSUES OF THE RAT WITH AGING—Mildred Adams—GPO, 108 p., paper, 70¢. Report on results of extensive investigations.

DIFFERENTIAL EQUATIONS—Shepley L. Ross—Blaisdell Pub. Co., 594 p., diagrams, \$10. An introduction to the basic methods, theory and application of differential equations.

DOG PSYCHOLOGY: The Basis of Dog Training—Leon F. Whitney—Thomas, C. C., 327 p., photographs, \$10.50. Explains to dog owners what psychologists have learned and how to apply these findings in training dogs.

THE EARTH BENEATH US—Kirtley F. Mather—Random House, 320 p., 240 photographs (116 in color) by Josef Muench and others, \$15. A geologist's fascinating view of the earth, dealing with the external and internal forces that constantly change the surface, illustrated with superb photographs from the far parts of the globe.

EFFECTIVE USE OF THE SCIENCE CITATION INDEX: A Programmed Text—Institute for Science Information, 52 p., paper, single copies free upon request direct to publisher, 325 Chestnut St., Philadelphia, Pa. 19106. Specifically designed to facilitate maximal use of the quarterly cumulative SCIENCE CITATION INDEX.

ELECTROMAGNETIC FIELDS AND INTERACTIONS, Vol. I: Electromagnetic Theory and Relativity. Vol. II: Quantum Theory of Atoms and Radiation—Richard Becker; Fritz Sauter, Ed., transl. from German by Ivor de Teissier—Blaisdell Pub. Co., 439 p., 403 p., diagrams, \$9.50 each. Expanded revision of eighth edition published in 1930.

ELECTRONIC PROCESSES IN IONIC CRYSTALS—N. F. Mott and R. W. Gurney—Dover, 2nd ed., 275 p., diagrams, paper, \$2. Reprint (1948).

ELECTRONIC STRUCTURE AND CHEMICAL BONDING—Donald K. Sebera—Blaisdell Pub. Co., 298 p., illus., paper, \$3.50. Collection of elementary principles of atomic and molecular structure useful in describing, interpreting and correlating the structure, reactivity and energetics of chemical systems.

ELECTRONICS IN THE MEDICAL SPECIALTIES—Walter E. Tolles, Ed.—N.Y. Acad. of Sciences, Annals, Vol. 118, Art. 1, 133 p., illus., paper, \$4. Papers are the result of a series of meetings held by the Academy's Division of Instrumentation.

ELECTRONS AND WAVES—John R. Pierce—Doubleday, 226 p., diagrams, paper, \$1.25. An introduction to the science of electronics and communications, at secondary school level.

ELEMENTARY TEACHER'S CLASSROOM SCIENCE DEMONSTRATIONS AND ACTIVITIES—David E. Hennessy; Elaine V. Walworth, Ed.—Prentice-Hall, 308 p., illus., by David Thomas Moon, \$7.95. Describes hundreds of simple science demonstrations illustrated with diagrams.

ELEMENTS OF ABSTRACT HARMONIC ANALYSIS—George Bachman with Lawrence Narici—Academic Press, 256 p., paper, \$3.45. Presents the subject in compact form at an introductory level.

ELEMENTS OF GENERAL LINGUISTICS—Andre Martinet, transl. from French by Elisabeth Palmer, foreword by L. R. Palmer—Univ. of Chicago Press, 205 p., \$6.50. Defines the meaning of language, primarily spoken language, and deals with the concepts of descriptive and structural linguistics.

ENROLLMENT FOR ADVANCED DEGREES: First Term, 1962-63 Final Report—Wayne E. Tolliver—OE (GPO), 180 p., \$1.25. National data by field of study, State and institution, level, full- and part-time status.

EXPERIMENTAL CARTOGRAPHY: Report on the Oxford Symposium, 1963—L. Dudley Stamp and others, introd. by M. A. Shaw—93 p., paper, \$4. Conference considered the implications of cartography as a means of communication for specialists in economics, history and the sciences.

FAMILY AND KINSHIP IN EAST LONDON—Michael Young and Peter Willmott—Penguin Bks., 222 p., paper, \$1.25. A sociological study of British working-class relationships.

THE FIRST BOOK OF DESERTS: An Introduction to the Earth's Arid Lands—David C. Knight—Watts, Franklin, 88 p., photographs, maps, \$2.65. For boys and girls.

THE FIRST BOOK OF THE SEASHORE—Wyatt Blasingame—Watts, Franklin, 60 p., illus., by Fred Sweney, \$2.65. About the animal life inhabiting rocky, sandy and coral seashores.

FISHES OF THE GREAT LAKES REGION with New Preface—Carl L. Hubbs and Karl F. Lagler—Univ. of Mich. Press, 213 p., illus., 44 color plates, map, \$6.95. Reprint (1958) includes revision of certain technical names of the fishes.

THE FLYING TRAPEZE: Three Crises for Physicists—J. Robert Oppenheimer—Oxford Univ. Press, 65 p., \$2.75. The Whidden Lectures for 1962, edited from the verbal transcript, discussing Space and Time, Atom and Field, and War and the Nations.

FOREIGN CORRESPONDENCE: The Great Reporters and Their Times—John Hohenberg—Columbia Univ. Press, 502 p., \$8.95. An account of the rise of the independent foreign correspondent in the Western world.

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THE GALACTIC NOVAE—Cecilia Payne-Gaposchkin—Dover, 336 p., illus., paper, \$2.45. Unabridged reprint (1957).

GEOMETRY AND ANALYSIS OF PROJECTIVE SPACES—C. E. Springer—Freeman, 299 p., \$7.50. Provides an elementary introduction to analytic projective geometry, designed for teachers in high school mathematics.

GREAT ADVENTURES IN ARCHAEOLOGY—Robert Silverberg, Ed.—Dial Press, 402 p., photographs, drawings, \$7.50. An anthology of ten first-hand accounts by archaeologists, ranging in locale from the pyramids in the Valley of the Nile to the temple ruins at Copan, Honduras.

GREAT ASPIRATIONS: The Graduate School Plans of America's College Seniors—James A. Davis—Aldine Pub. Co., 319 p., \$8.95. A National Opinion Research Center study of the postgraduate training preferences of college graduates, who plans to go, the personal and social factors involved.

GROUND-BASED ASTRONOMY: A Ten-Year Program—Panel on Astronomical Facilities, A. E. Whitford, Chmn., introd. by G. B. Kistiakowsky—Nat. Acad. of Sciences, 105 p., paper, \$4. A report prepared for the Committee on Science and Public Policy of the National Academy of Sciences, with recommendations for new ground-based astronomical facilities in the next decade.

GUIDE TO GAS CHROMATOGRAPHY LITERATURE—Austin V. Signeur—Plenum Press, 351 p., \$12.50. Consists of more than 7,500 references to the published literature and papers presented at scientific meetings, through late 1963.

HANDBOOK OF ANALYTICAL DESIGN FOR WEAR—C. W. MacGregor, Ed.—Plenum Press, 97 p., diagrams, \$12.50. This revised version of **HANDBOOK OF METAL WEAR PROPERTIES** includes data about plastics, sintered metals and platings.

HANDBOOK OF CHEMISTRY AND PHYSICS: A Ready-Reference Book of Chemical and Physical Data—Robert C. Weast, Samuel M. Selby and Charles D. Hodgman, Eds.—Chemical Rubber Co., 45th ed., multi-paged, \$15.50. Large format of new edition incorporates new data, greatly enlarged tables of physical constants of organic and inorganic compounds, and completely revised Table of Isotopes.

THE HEMOPHILIAS: International Symposium Washington—Kenneth M. Brinkhous, Ed.—Univ. of N.C., 412 p., illus., \$7.50. Proceedings of conference dealing with standards, assays and the biochemistry of the anthemophilic factor, with Factor IX, metabolism and clotting kinetics, and the management of hemophilia.

INSIDE THE NUCLEUS—Irving Adler, introd. by Philip Morrison—New Am. Lib., 157 p., diagrams by Ruth Adler, paper, 60¢. About the recent breakthrough into the structure of the atomic nucleus and the discovery of elementary particles and antiparticles.

INSTRUMENTATION IN THE CHEMICAL AND PETROLEUM INDUSTRIES, 1964—George H. Robinson, Ed.—Instrument Soc. of Am. (Plenum Press), 140 p., illus., \$9.50. Proceedings of the Fifth National Chemical and Petroleum Instrumentation Symposium.

AN INTELLIGENT WOMAN'S GUIDE TO ATOMIC RADIATION—Margot Bennett—Penguin Bks., 171 p., diagrams, paper, 95¢. Besides pointing out the biological effects of radiation, the book offers a readable introduction to the atomic structure, fission, fusion and other technical terms.

INTERNATIONAL YEARBOOK OF EDUCATION, Vol. XXV, 1963—UNESCO (Internat'l Doc. Serv. Columbia Univ. Press), 487 p., paper, \$6.50. Comparative study of educational developments in 1961-1962, and national reports on developments in 98 countries.

INTERPERSONAL PSYCHOANALYSIS: The Selected Papers of Clara M. Thompson—Maurice R. Green, Ed.; foreword by Erich Fromm—Basic Bks., 398 p., \$8.50. Papers giving a well-known clinician's point of view of the theory and technique of the psychosocial or interpersonal approach to psychoanalysis.

INTRODUCTION TO ASTROPHYSICS: The Stars—Jean Dufay, transl. from French by Owen Gingerich—Dover, 164 p., diagrams, paper, \$2. Translation of intermediate-level work first published in France in 1961, an excellent guide to observational astrophysics.

IRON AND STEEL IN NINETEENTH-CENTURY AMERICA: An Economic Inquiry—Peter Temin—M.I.T. Press, 304 p., \$7.50. An industry study using the methods of economic analysis.

ISLANDS IN SPACE: The Challenge of the Planetoids—Dandridge M. Cole and Donald W. Cox, foreword by Willy Ley—Chilton Bks., 276 p., illus., \$6.95. Speculations about exploring the world of the asteroids.

IT'S FUN TO MAKE THINGS FROM SCRAP MATERIALS—Evelyn Glantz Hershoff—Dover, 373 p., illus. by author, paper, \$1.50. Formerly (1944) titled **Scrap Fun for Everyone**, teaches dexterity to young children.

LABORATORY ANIMALS, Part II: Animals for Research, 1964—Inst. of Laboratory Animal Resources, Mary B. Sundborg, Ed.—Nat. Acad. of Sciences-Nat. Res. Council, 89 p., paper, \$2 direct to publisher, 2101 Constitution Ave., Washington, D.C. Directory of sources of laboratory animals, equipment and materials.

LEONARDO DA VINCI AND A MEMORY OF HIS CHILDHOOD—Sigmund Freud, transl. by Alan Tyson; (Standard Edition under the general editorship of James Strachey)—Norton, 101 p., illus., \$3.50. Freud's controversial biographical study of Leonardo da Vinci, applying the methods of clinical analysis to the life of an historical figure.

THE LIFE AND TIMES OF EMIL H. GRUBBE—Paul C. Hodges—Univ. of Chicago Press, 135 p., photographs, \$3.95. A factual biography of the pioneering Chicago radiologist.

MAMMALS OF THE WORLD, Vols. I and II—Ernest P. Walker and others—Johns Hopkins Press, 1,500 p., photographs, two vols. boxed \$25. Basic source of reference concerning all the known and present genera of mammalian life on this earth, with carefully chosen photographs illuminating points mentioned in the text. World distribution of genera charts serve as index guide to groups or regions.

MAMMALS OF THE WORLD, Vol. III: A Classified Bibliography—Ernest P. Walker and others—Johns Hopkins Press, 769 p., \$12.50. Separate volume of bibliographic citations regarding the genera of recent mammals, arranged in four main groups, by orders, geographical regions, general headings, and list of periodicals.

MARS—Robert S. Richardson and Chesley Bonestell—Harcourt, 151 p., paintings by C. Bonestell, photographs, maps, diagrams, \$8.50. Popularly written speculations on the prospect of man's landing on the planet, with astronomer's background information.

MATHEMATICS: Its Content, Methods and Meaning, Vols. I, II and III—A. D. Aleksandrov, A. N. Kolmogorov and M. A. Lavrent'ev, Eds., transl. from Russian by S. H. Gould and T. Bartha—Am. Mathem. Soc. (M.I.T. Press), 359 p., 376 p., 355 p., illus., boxed three-vol. set \$30. Assuming a thorough grounding in high school mathematics the authors present an exposition of the elements of higher mathematics for the nonspecialist.

THE MORNING OF THE MAGICIANS—Louis Pauwels and Jacques Bergier, transl. from French by Rollo Myers—Stein and Day, 300 p., \$5.95. A book widely read in Europe, in which the authors, one of them a nuclear scientist, roam through the history of para-scientific and occult literature and movements, and add their own speculations.

MYCENAEANS AND MINOANS: Aegean Prehistory in the Light of the Linear B Tablets—Leonard R. Palmer—Knopf, 264 p., illus., \$6. Summarizes for the general reader the reexamination and interpretation of Mycenaean Greek texts.

IDEA LANGUAGE AND AREA CENTERS: A Report on the First Five Years—Donald N. Bigelow and Lyman H. Legters—OE (GPO), 131 p., map, paper, 55¢. Reports on the expansion in non-Western studies and scholarly activity at 55 language and area centers which received funds under the National Defense Education Act.

THE NEW SOVIET MAN: His Upbringing and Character Development—Herschel and Edith Alt—Bookman Associates, 304 p., \$6. An analysis of the Soviet system and its impact on children and on family life.

NOW TRY THIS, Books 7 and 8: Problems Projects and Tests to Accompany Health Science Series—Herman and Nina Schneider, Clara W. Elkind and Aaron Goff—Heath, 172 p., each illus., paper, \$1.24 each. Teachers' evaluation-activity books for "Science in the Space Age" and "Science and Your Future."

NUCLEI AND PARTICLES: An Introduction to Nuclear and Subnuclear Physics—Emilio Segre—Benjamin, W. A., 741 p., illus., \$15. A textbook addressed to physics students, chemists and engineers, provides sufficiently broad and quantitative introduction to enable the student to begin basic research.

THE OBSERVER'S HANDBOOK 1965—Ruth J. Northcott, Ed.—Royal Astronomical Soc. of Canada, 57th ed., 97 p., illus., paper, \$1. Describes astronomical phenomena month by month, one of the new features is table of strongest radio sources.

THE OXFORD BOOK OF BIRDS—Bruce Campbell—Oxford Univ. Press, 207 p., illus. in color by Donald Watson, \$8. Birds of the British Isles, arranged by order, family and genus, illustrated in their natural setting, with detailed descriptions.

PERCENTAGE BASEBALL—Earnshaw Cook with Wendell R. Garner—Waverly Press, 345 p., \$10.50. Authoritative statistical analysis of baseball as a game and as a practical example of an application of elementary probability theory.

PLANETARY THEORY—Ernest W. Brown and Clarence A. Shook—Dover, 302 p., paper, \$2.25. Reprint (1933).

THE POPULAR MECHANICS HOME BOOK OF ELECTRICAL WIRING AND REPAIR—Harold P. Strand with Garry Winter—Hawthorn Bks., 173 p., photographs, diagrams, \$4.95. For the hobbyist and do-it-yourself repair man.

POWER: Prime Mover of Technology—Joseph W. Duffy—McKnight & McKnight (Taplinger), 369 p., illus., \$6.80. Written to provide the student with the basis for a broad study of power sources, from muscle of animal and man, wind, water, steam and atom, to the newer exotic generators.

PRECONSCIOUS FOUNDATIONS OF HUMAN EXPERIENCE—Trigant Burrow; William E. Galt, Ed., foreword by Nathan W. Ackerman—Basic Bks., 164 p., \$5.50. This posthumous work by psychoanalyst stresses the persistence in human relations of a powerful integrative and cohesive principle.

PROBLEMS OF COOLEY'S ANEMIA—Harold Fink, Ed.—N. Y. Acad. of Sciences, Vol. 119, Art. 2, 478 p., illus., paper, \$8. Symposium papers review the current status of our knowledge and indicate directions in which future study would be of value.

PROBLEMS OF FLIGHT BY JET PROPULSION: Interplanetary Flights—F. A. Tsander. L. K. Korneev, Ed., transl. from Russian—Israel Program for Scientific Translations (OTS), 2nd ed., 390 p., illus., paper, \$4. The late Soviet scientist discusses questions of long-distance rocket flight, theory of interplanetary travel, and problems dealing with preparation for such flights.

THE PROFESSOR AND THE MYSTERIOUS BOX—Richard G. Van Gelder—Harvey House, 46 p., illus. by Harriett, \$2.50. A story for very young readers, introducing them to the ways of wild creatures.

PROFILE OF AMERICAN HISTORY—May McNeer—Hammond, C.S., 126 p., illus., maps, \$3.50. The nation's story, enriched and illustrated with many specially designed maps, for young adults.

A PSYCHIATRIC GLOSSARY—Committee on Public Information—Am. Psychiatric Assn., 2nd ed., 80 p., \$2.50. Gives the meaning of words most frequently used in psychiatry.

PSYCHODRAMA EXPLAINED—Samuel Kahn, introd. by J. L. Moreno—Philosophical Lib., 77 p., \$3. Acquaints the reader with the ideas underlying the psychodramatic method and its use as a form of group psychotherapy.

PULSATION THEORY OF VARIABLE STARS—Svein Rosseland—Dover, 152 p., paper, \$1.65. Reprint (1949).

THE RANGER'S GUIDE TO USEFUL PLANTS OF EASTERN WILDS—Deganawidah—Christopher Publishing House, 142 p., illus. by Fred Oswald, \$3. A guide for campers or hunters in inaccessible places, clearly describes wild plants useful in emergencies.

REPORT OF THE WARREN COMMISSION ON THE ASSASSINATION OF PRESIDENT KENNEDY—Introd. by Harrison E. Salisbury and other material prepared by the New York Times—McGraw, 726 p., illus., \$3.95. Report on the government's exhaustive investigation of all the evidence.

THE ROCKEFELLER FOUNDATION PROGRAM IN THE AGRICULTURAL SCIENCES: Annual Report 1963-1964—Rockefeller Foundation, 285 p., photographs, paper, single copies free upon request direct to publisher, 111 W. 50th St., New York, N.Y. Report on activities emphasizing programs in developing the world's food supplies.

ROCKET AND MISSILE TECHNOLOGY—L.T. Col. Gene Gurney, Ed.—Watts, Franklin, 394 p., photographs, \$5.95. Book ranges from early history of rocket development to discussion of nuclear propulsion and future projects.

THE SCHOOL—Henry Viscardi, Jr.—Eriksson, Paul S., 237 p., \$5. Describes the author's Human Resources School, developed to help rehabilitate physically disabled children.

SCIENCE AND CANCER—Michael E. Shimkin—PHS (GPO), 137 p., illus., paper, 60¢. Addressed to the informed reader outside the scientific community, booklet deals with the entire field of cancer research, focusing on the disease in man.

SEX AND OUR SOCIETY—Lester A. Kirkendall with Elizabeth Ogg—Public Affairs Pamphlets, No. 360, 28 p., illus., paper, 25¢ direct to publisher, 381 Park Ave. S., New York 10010. Discusses sexual standards and motivations of conduct, and offers criteria against which to evaluate all conduct, not sexual conduct alone.

SHAPING EDUCATION POLICY—James Bryant Conant—McGraw, 139 p., \$3.95. A realistic analysis and evaluation of policy making for the public schools, for higher education, presents data of case studies of the New York and California school systems, and recommendations.

SMITHSONIAN INSTITUTION: Annual Report 1963—GPO, 595 p., 92 plates, illus., \$4.25. This famous annual includes over 20 articles, including cybernetics, fossil study with electromicroscope, plants in Arctic-Alpine environment, and corrosion of metal antiquities, as well as administrative reports.

SMOKING AND YOUR LIFE—Alton Ochsner—Messner, 144 p., \$3. An eminent physician examines the evidence and explains in simple, clear language what the latest government findings mean to young people.

SHORT GUIDE TO THE EASTERN LAND BIRDS—George C. West—Crown Publishers, punched cards in plastic box, instructions, illus. by author, sorting needle, \$4.95. An aid to identification, written and illustrated by ornithologist, uses punched card retrieval system.

THE STUDENT AND HIS STUDIES—Esther Raushenbush—Wesleyan Univ. Press, 185 p., \$5.

Examination in depth of four "average" undergraduates and their intellectual experience during four years at four different colleges.

TERRITORY IN BIRD LIFE—Eliot Howard, new foreword by James Fisher and Julian Huxley—Athenum, 239 p., map, paper, \$1.75. Reprint of first comprehensive work (1920) stating the theory of territory as a factor in bird life, with new introduction which summarizes and evaluates recent writings on the subject.

THERMOELECTRIC REFRIGERATION—H. J. Goldsmid—Plenum Press, 240 p., diagrams, \$11.50. Covers both the physical and engineering aspects, from the basic principles through the physics of thermoelectric materials to the engineering of cooling units.

THERMOPHILIC FUNGI: An Account of Their Biology, Activities and Classification—Donald G. Cooney and Ralph Emerson—Freeman, 188 p., illus., \$5. Monograph concerned with the fungi that thrive at the unusually high temperatures of 50°C and higher, but are unable to grow at ordinary room temperature (20°C).

THE TREASURE OF OUR TONGUE: The Story of English from Its Obscure Beginnings to Its Present Eminence as the Most Widely Spoken Language—Lincoln Barnett—Knopf, 346 p., maps, \$5.95. Authoritative and entertaining, the book tells about ancient origins and gradual evolution of the English language, its conquest and its change, Shakespeare's English and American English, including speculations about the future.

THE TREASURY OF MATHEMATICS: A Collection of Source Material in Mathematics—Henrietta O. Midonick, Ed.—Philosophical Lib., 820 p., illus., \$15. A selection of 54 significant contributions to the development of mathematics with introductory biographical and historical sketches.

TREATISE ON INVERTEBRATE PALEONTOLOGY, Part C: Protista 2 (Sarcodina, Chiefly "Thecamoebians" and Foraminifera) Vols. 1 and 2—Alfred R. Loeblich, Jr. and Helen Tappan, Raymond C. Moore, Ed.—Geological Soc. of Am., 900 p., illus., \$25. Latest in the 24-volume treatise of which 13 have been published thus far.

THE TRUE STORY OF ALBERT EINSTEIN: Man of Science—Ruth L. Oldfield—Children's Press, 143 p., illus., \$3.50. Describes the importance of some of Einstein's discoveries in language young students can understand.

TURBULENT BOUNDARY LAYERS IN COMPRESSIBLE GASES—S. S. Kutateladze and A. I. Leont'ev, transl. from Russian by D. B. Spalding—Academic Press, 170 p., graphs, \$8.50. An important monograph for students of convective heat and mass transfer in gases.

THE TWINS OF SPACE: The Story of the Gemini Program—Ralph O. Shankle—Lippincott, 223 p., photographs, diagrams, \$4.95. Tells of preparations for and what is likely to happen when two astronauts take off into space with the Gemini spacecraft.

VETERINARIANS AND WHAT THEY DO—John and Jane Greverus Perry—Watts, Franklin, 214 p., \$3.95. Acquaints young people with the profession and the wide range of career possibilities in it.

VOICEWAY TO THE ORIENT: First U.S.-Japan Telephone Cable—Louis Solomon—McGraw, 64 p., photographs, \$3.25. The fully illustrated story of the submarine cable that established a 5,300 nautical-mile voice bridge over the Pacific.

WILDLIFE BIOLOGY—Raymond F. Dasmann—Wiley, 231 p., illus., \$5.95. An introduction to the principles of wildlife biology on which the art of wildlife management is based.

WOOD MACHINING PROCESSES—Peter Koch—Ronald Press, 530 p., illus., \$15. Exposition of fundamental facts that govern wood processing processes and a digest of recent research findings enhance the value of this practical reference work.

YOUNG PEOPLE AND SMOKING: The Use and Abuse of Cigarette Smoking—Arthur H. Cain—Day, 96 p., \$3.50. Tries objectively in popular language to state the case for and against smoking.

YOUR CAREER IN MEDICINE—Alan R. Bleich—Messner, 191 p., photographs, \$3.95. Tells young people about the various branches of medicine and about the necessary requirements for a career in this profession.

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