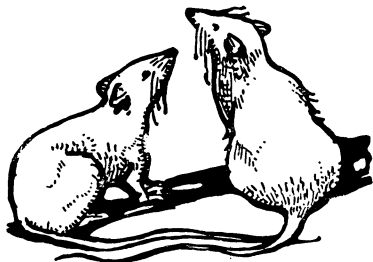


NATURE RAMBLINGS

by Frank Thone

ZOOLOGY



Not a Good Neighbor

THE ancient and honorable seafaring nation of Norway was given a totally undeserved black eye when some one called the common brown rat the "Norway" rat. It did not originate in Norway; nobody knows where it did come from, but more than likely its first home was in some Bronze Age sink of iniquity east of Suez. Because of its skill as a stowaway it has travelled on man's ships wherever they have gone. And that means that it has travelled to Norway and on Norwegian vessels—for in what seas have not the Viking prows broken water?

This unwelcome shipmate and housemate of man survives because (little as we may like it) he is so much like man. He can live in the same quarters, or in corners of them, can feed on thievings and leavings of man's food, can survive practically any climate that man, the most versatile of mammals, can himself endure. The brown rat even seems to think more or less in human terms, for he can unpuzzle almost any trap of man's invention. And he breeds so rapidly that in spite of man and his poisons and machines and his dogs and cats and ferrets, and, in the tropics, his house-snakes, the rat still holds his own.

He is not only a nuisance and a thief but a menace to our lives. For the rat carries vermin that in turn carry the germs of the most dreaded of all epidemic scourges, bubonic plague. For this reason are we put to the work and expense of deratting ships in our seaports, and of putting rat guards on all lines and hawsers. No: the brown rat is no doubt permanently our neighbor, but we can never regard him as a good neighbor.

Science News Letter, December 16, 1933

• First Glances at New Books

Additional Reviews On Page 400

Biology

SEX DETERMINATION—F. A. E. Crew—*Metbuen, London*, 138 p., 3s 6d. This monograph presents briefly and clearly the essential facts on the subject, omitting, for reasons of space, discussion of the many theories of sex control. The glossary will make it possible for the non-scientific reader to glean much sound information from the text.

Science News Letter, December 16, 1933

Nature Study

THE CORNELL RURAL SCHOOL LEAFLET, hitherto available only to rural schools in the State of New York, can now be had anywhere in the United States on a subscription basis: 50 cents for the four issues of the year, or 30 cents for the three children's numbers. This publication has a history of 26 years of successful use in classes of pre-college level. Subscriptions should be sent directly to The Cornell Rural School Leaflet, Cornell University, Ithaca, N. Y.

Science News Letter, December 16, 1933

Paleontology

AN INTRODUCTION TO THE STUDY OF FOSSILS—H. W. Shimer—*Macmillan*, xvii+496 p., \$4. This textbook for beginners in paleontology and paleobotany will fill a long-felt need; for without question many teachers of geology have wanted something of this kind to offer students for whom the partial and usually disconnected treatment of the subject in general textbooks of geology has been insufficient, and the more special treatises sometimes a bit too advanced. The one criticism that might be offered applies to paleontology books in general: a rather disproportionately small section of the book (less than a fourth) devoted to plant fossils.

Science News Letter, December 16, 1933

Geology—Physics

SEISMOLOGY—Subsidiary Committee on Seismology—*National Research Council*, 223 p., paper \$2, cloth \$2.50. Leading American seismologists join in an exhaustive treatment of various phases of this branch of geophysics. This volume is the sixth in a series of bulletins on the Physics of the Earth and it was prepared under the sponsorship of the National Research Council and the American Geophysical Union. Those contributing chapters are J. B. Macellwane, H. O. Wood, H. F. Reid, J. A. Anderson and P. Byerly.

Science News Letter, December 16, 1933

Physics

THE THEORY OF ATOMIC COLLISIONS—N. F. Mott and H. S. W. Massey—*Oxford Univ. Press*, 277 p., \$6. Classical and quantum mechanics are applied to collisions between atoms, electrons and ions, which constitute an extremely important field of modern physical theory and experiment. Special attention is paid to collisions between particles moving with relatively small velocity. Phenomena where one of the colliding particles is a light quantum and problems involving a discussion of nuclear structure are not included within the scope of the volume. This is one of the international series of monographs on physics and the authors are at Cambridge University.

Science News Letter, December 16, 1933

Astronomy

PLANETARY THEORY—E. W. Brown and C. A. Shook—*Cambridge Univ. Press*, xii+299 p., \$4.75. An exhaustive examination of mathematical methods for the calculation of the action of one planet on another.

Science News Letter, December 16, 1933

Mathematics

NUMERICAL INTEGRATION OF DIFFERENTIAL EQUATIONS—*National Research Council*, 108 p., \$1. This report consisting of chapters by Prof. Albert A. Bennett, William E. Milne and Harry Bateman is intended for the student desirous of learning the theory of numerical integration of differential equations and for the practical computer. It is the report of Committee on Numerical Integration of the National Research Council's Division of Physical Sciences.

Science News Letter, December 16, 1933

Physics—Metallurgy

CRYSTALLINE STRUCTURE IN RELATION TO FAILURE OF METALS—ESPECIALLY BY FATIGUE—Herbert John Gough—*American Society for Testing Materials*, 111 p., \$1. The 1933 Edgar Marburg lecture delivered by the Superintendent of the Engineering Department of England's National Physical Laboratory.

Science News Letter, December 16, 1933

Engineering

INDEX TO PROCEEDINGS, HIGHWAY RESEARCH BOARD: VOLUMES 1-12 (1921-1932)—Ed. by Roy W. Crum—*National Research Council*, 108 p., \$1.50.

Science News Letter, December 16, 1933

● First Glances at New Books

Additional Reviews
On Page 399

Education-Sociology

ADULT EDUCATION AND THE SOCIAL SCENE—Ruth Kotinsky—*Appleton-Century*, 208 p., \$2. The United States Government's great new project of adult education as a relief measure for the unemployed makes this volume of special timely interest. There is need for adult education, Prof. William H. Kirkpatrick emphasizes in his foreword. To quote him: "As never before in history, modern science presents us with new discoveries and inventions. The difference is epochal. Correlative changes in ways of living follow. Social life has probably changed more in a hundred years than in all historic time before put together. Social changes mean social problems."

Science News Letter, December 16, 1933

Paleontology-Biography

THE LIFE OF A FOSSIL HUNTER—Charles H. Sternberg—*Jensen Print. Co., San Diego*, xiii+286 p., \$1.75. A professional collector of fossils in the West, grown old in harness, reminisces of the days when he worked with Cope, and of many interesting things he has seen since then.

Science News Letter, December 16, 1933

Paleontology-Biography

HUNTING DINOSAURS IN THE BAD LANDS OF THE RED DEER RIVER, ALBERTA, CANADA—Charles H. Sternberg—*Author, San Diego*, xv+271 p., \$1.75. A sequel to the author's "Life of a Fossil Hunter," in which he adds to the tales of his adventures in collecting skeletal remains, mostly of dinosaurs, which have found places in many leading museums.

Science News Letter, December 16, 1933

Protozoology

STUDIES OF AMERICAN SPECIES OF FORAMINIFERA OF THE GENUS LEPIDOCYLINA—Thomas Wayland Vaughan—*Smithsonian Institution*, 53 p., 32 pl., 50c.

Science News Letter, December 16, 1933

Aesthetics—Mathematics

AESTHETIC MEASURE—George D. Birkhoff—*Harvard Univ. Press*, 226 p., \$7.50. The appreciation of works of art, of music, of poetry, depends upon an intuitive evaluation of the relation of the elements of form involved, and this relation can be expressed in mathematical formulae, the author holds. The application of these formulae in the experimental composition of music and

poetry, and tables giving the aesthetic measure of various forms as worked out mathematically, contribute to the interest of this original volume.

Science News Letter, December 16, 1933

Medical History

MYSTERY, MAGIC AND MEDICINE: THE RISE OF MEDICINE FROM SUPERSTITION TO SCIENCE—Howard W. Haggard—*Doubleday, Doran*, 192 p., \$1. The compactness, vivid and highly readable style of writing, and splendid glossary of proper names and medical terms should make this history of medicine particularly attractive to the lay reader.

Science News Letter, December 16, 1933

Child Health

HEALTHY CHILDHOOD—Harold C. Stuart—*Appleton-Century*, 393 p., \$2. Dr. Stuart has embodied in this book for parents much of the information assembled by the White House Conference on Child Health. The book is comprehensive, specific and simply written and should prove helpful to many parents and other persons without scientific training who are in charge of the care of children.

Science News Letter, December 16, 1933

Chemistry-Physics

HANDBOOK OF CHEMISTRY AND PHYSICS—Charles D. Hodgman, Ed.-in-Chief—*Chemical Rubber Pub. Co.*, 1818 p., \$6. The eighteenth edition of this standard reference work makes its appearance. Among the innovations is a very useful table of photographic plate and film speeds.

Science News Letter, December 16, 1933

Archaeology—Art

ATTIC VASE-PAINTING—Charles T. Seltman—*Harvard Univ. Press*, 97 p., 37 pl., \$1.50. In this third volume of the Martin Classical Lectures, Prof. Seltman traces the history of the vase painting art in Greece. Publication of the lectures with pictures of important vases offers the reader an opportunity to take a brief introductory course on one of the world's famous developments of the painter's art.

Science News Letter, December 16, 1933

Zoology-Exploration

THE FOREST OF ADVENTURE—Raymond Ditmars—*Macmillan*, ix+260 p., 16 pl., \$2.50. A quasi-fictional account of thrilling doings in the jungle, written by one who hardly needs to gloss over his own Odyssey with fiction, except that it gives him greater freedom to arrange his events and order his climaxes to suit his pleasure, instead of just recording them as they happened. Those who know their Ditmars will not need to be urged to buy this book.

Science News Letter, December 16, 1933

Chemistry

THE CHEMICAL FORMULARY, VOL. I—Ed. by H. Bennett—*Chemical Formulary Co., Brooklyn*, 537 p., \$6. Formulae of many chemical industries are given in a manner to be of chief interest to the chemist or chemical engineer seeking information about practices with which he may not be familiar. Laymen and those whose hobby is a home workshop will also find the book very useful. These are typical chapter headings: Beverages and Flavors; Cleaners, Soaps; Cosmetics; Explosives, Pyrotechnics, Matches; Fuels; Leather, Hides, Skins, Furs; Metals and Treatment; Plastics, Celluloid, Cellulose Esters, Compositions, Silk, Rayon, Cotton, Fibre; Water-proofing.

Science News Letter, December 16, 1933

Geology

CATALOGUE OF SMALL-SCALE GEOLOGIC MAPS (Preliminary Edition)—Walter B. Bucher—*National Research Council*, 132 p., \$1. A detailed listing of all small-scale maps now in print for the whole North American area, including Central America and the West Indies. It should be invaluable to field workers, teachers and in general to all who use maps.

Science News Letter, December 16, 1933

Oceanography

STATION RECORDS OF THE FIRST JOHNSON-SMITHSONIAN DEEP-SEA EXPEDITION—Paul Bartsch—*Smithsonian Institution*, 31p., 1 pl., 1 folded map, 15c.

Science News Letter, December 16, 1933

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