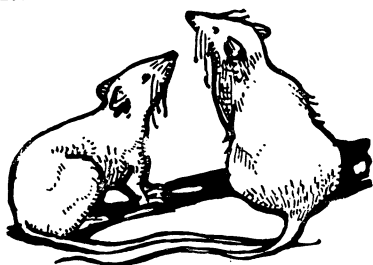




ZOOLOGY



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 sea-ports, 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.

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• 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.

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