the Air Reduction Co. for his contribution to the field of rare atmosphere gases which make possible varicolored advertising signs. The Joseph Leidy medal was presented by

The Joseph Leidy medal was presented by the Academy of Natural Sciences in Philadelphia to Gerrit Smith Miller, Jr., U. S. National Museum, for his distinguished research on mammals.

The Wetherill medal of the Franklin Institute was awarded to Dr. Johann B. Oster-

meier of Augsburg, Germany.

In honor of his 85th birthday, Dr. Ivan P. Pavlov was awarded by the Soviet government an annual pension of 20,000 rubles (\$17,600), and 1,000,000 rubles (\$880,000) for the enlargement of the physiological laboratories.

The Franklin Medal of the Franklin Institute, Philadelphia, was awarded to Prof. Henry Norris Russell, Princeton astronomer. The Mary Clark Thompson Medal of the

The Mary Clark Thompson Medal of the National Academy of Sciences was awarded to Dr. Charles Schuchert, Yale University, for his important work in the classification and distribution of paleozoic invertebrates and for his contributions to historical geology and paleogeography.

The gold medal of the Royal Astronomical Society, London, was awarded to Dr. Harlow Shapley, Director of Harvard College Observatory, for his work on the structure and dimensions of the galactic system.

and dimensions of the galactic system.

Dr. Henry C. Sherman, Columbia University, was honored with the William H. Nichols Medal of the New York Section of the American Chemical Society for investigations showing that chemistry, through nutrition, may raise the health level and lengthen life.

Frank Julian Sprague, "The Father of Electric Trolleys," was awarded the John Fritz Medal by a group of engineering societies, but died before its presentation.

Capt. Albert W. Stevens, Army Air Corps, was awarded the Franklin L. Burr \$1,000 prize by the National Geographic Society for his aerial photography, especially his photograph of the moon's shadow from 26,000 feet altitude during the 1932 total solar eclipse.

Dr. Lewis B. Stillwell, electrical engineer and inventor, was awarded the 1933 Lamme Medal of the American Institute of Electrical Engineers.

Dr. Edward L. Thorndike, psychologist and educator, Columbia University, was elected president of the American Association for the Advancement of Science for

The Willard Gibbs Medal, of the American Chemical Society's Chicago section, was awarded to Prof. Harold C. Urey, Columbia University, for his researches on heavy hydrogen, deuterium.

hydrogen, deuterium.

The Remington Honor Medal for 1934 was awarded to Sir Henry Wellcome, founder of the Wellcome Physiological and Chemical Research Laboratories, by the

American Pharmaceutical Association.
Dr. David White, U. S. Geological Survey, received the first award of the Charles Doolittle Walcott Medal and honorarium of \$1,350 from the National Academy of Sciences in recognition of his research on the pre-Cambrian algae of the Grand Canyon of Arizona.

Pope Yeatman, New York consulting mining engineer, received the William Lawrence Saunders Gold Medal for 1933 from the American Institute of Mining and Metallurgical Engineers.

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## • First Glances at New Books

Physics

ATOMIC STRUCTURE AND SPECTRAL LINES. New revised ed.—Arnold Sommerfeld—Dutton, 675 p., \$10.80. This book, the English translation by Dr. Henry L. Brose of the Fifth German edition, will be welcomed by American chemists and physicists who can struggle through a German text on physics by leaning on a dictionary but are not quite proficient enough to catch the intricate shades of meaning of the language without much effort. Since the familiar Bohr atom theories now appear only as a jumping-off place for the newer quantum mechanics the subject is sufficiently difficult without worrying about German translation. Hamiltonian mechanics which formerly appeared in the appendix now occupy a prominent position in the book. Professor Sommerfeld promises a second correlative volume entitled "Wave Mechanics" to go with the present fundamental one on atomic physics.

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Sociology

RACE RELATIONS—Willis D. Weatherford and Charles S. Johnson—D. C. Heath, 590 p., \$3.20. Written by two professors, one white, the other a negro, this study of the sociological problems of the Negro in America is said to be unique. Prof. Weatherford has, generally speaking, contributed chapters on the more familiar and expected topics in a sociology text book. Prof. Johnson offers an insight into the home life of the Negro, his psychological attitudes, his migrations, and economic struggles.

Science News Letter, December 22, 1934

Astronomy

THE STANDARD SCALE OF SOLAR RADIATION—C. G. Abbot and L. B. Aldrich—Smithsonian Institution, 3 p., 5c

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Economics

INTERNATIONAL ECONOMIC RELATIONS—Report of the Commission of Inquiry into National Policy in International Economic Relations—*Univ. of Minnesota*, 397 p., \$3. Robert M. Hutchins, William Tudor Gardiner, Carl

L. Alsberg, Isaiah Bowman, Guy Stan ton Ford, Beardsley Ruml and Alfred H. Stone express their opinions as to what political, economic and administrative measures should be taken by the American Government to further national and international economic recovery. Summaries of the hearings held and of briefs submitted together with explanatory reports are included.

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Arithmetic

ARITHMETIC IN AGRICULTURE AND RURAL LIFE—C. A. Willson—Edwards Brothers, Inc., Ann Arbor, Mich., 162 mimeographed leaves, \$1.80. In these days, farmers can no longer "figure everything out in their heads" or on the barn door with a piece of chalk. At present there is the necessity (temporary at any rate) for AAA crop-control arithmetic; eventually farmers may even need to figure income tax returns again. These, fertilizer figures, crop weights and measures, kitchen budgets for the wife, and a lot more besides, can be learned from this unique textbook, which winds up with a four-place logarithm table.

Science News Letter, December 22, 1934

Exploration—Biography

EARTH CONQUERORS—J. Leslie Mitchell—Simon and Schuster, 370 p., \$3.50. Nine great explorers, from Leif Ericsson to Fridtjof Nansen, rub elbows in this book. The explorers are chosen because they ventured, not for loot, fun, or fame, but drawn by an overwhelming urge to seek the "Fortunate Isles" that they dreamed of beyond the known horizon.

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Astronomy

THE TELESCOPE—Published bimonthly by the Bond Astronomical Club at Harvard University, \$1. per year; single copies 25c. New magazine on popular astronomy finely illustrated. Recent issues have offered simple descriptions of the great Dunlap Observatory of the University of Toronto and an article by Dr. John Strong on the process of evaporating aluminum on telescope mirrors.

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