associate member of the American Society of Mechanical Engineers in 1905, and a member in 1912.

The medal of the American Society of Mechanical Engineers was established in 1920, and is awarded for distinguished service in engineering and science. Previous recipients were Hjalmar Gotfried Carlson, Frederick Arthur Halsey, John Ripley Freeman, R. A. Millikan, Wilfred Lewis, Julian Kennedy, William Le Roy Emmet, Albert Kingsbury and Ambrose Swasey.

Ralph E. Flanders, of Springfield, Vt., was awarded the Worcester Reed Warner gold medal for his "contributions to a better understanding of the relationship of the engineer to economic problems and social trends." This medal was established by the will of Worcester Reed Warner, of the firm of Warner and Swasey, Cleveland, and an honorary member of the society. Mr. Flanders was recently elected president of the society for 1935. He is president of the Jones and Lamson Machine Company, and is a member of the Business Advisory and Planning Council appointed by Secretary of Commerce Daniel C. Roper. For many years he has been a leader in the public service activities of the engineering profession, and has been actively identified with the Federal recovery program. Mr. Flanders is the second Warner medalist, the first award having been made to Dean Dexter S. Kimball, of Cornell University, in 1933.

AWARD OF THE JOSEPH LEIDY MEDAL BY THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA

THE fourth award of the Joseph Leidy medal "for the best publication, exploration, discovery or research in the natural sciences" has been made to Gerrit Smith Miller, Jr., curator of mammals in the United States National Museum at Washington. Mr. Miller was selected by the committee for "his extensive and fundamental studies on the structure, classification, distribution and evolution of the Mammalia, particularly of the Chiroptera (bats), the mammal faunas of North America, Western Europe, Southeastern Asia and the East Indies, and the Pleistocene and subfossil West Indian members of the group, as well as his comprehensive classification of the voles and lemmings of the entire world."

The medal and honorarium accompanying it will be presented to him at a special meeting to be held in the academy on Wednesday afternoon, December 5, at 4 o'clock. The committee on this award consisted of Dr. E. G. Conklin, professor of biology, Princeton University, and vice-president of the academy, *chairman*; Dr. Robert A. Harper, emeritus professor of botany, Columbia University; Dr. Henry A. Pilsbry, curator of mollusca of the academy; Dr. Joseph Grinnell, director of the Museum of Vertebrate Zoology at the University of California, and James A. G. Rehn, secretary and curator of entomology of the academy.

Mr. Miller, who was born in Peterboro, New York, was graduated from Harvard University in 1894, and four years later was appointed assistant curator of mammals in the U. S. National Museum. In 1909 he became curator of the same department, which post he still holds. At one time he was assigned to the British Museum (Natural History) for the preparation of his Western European monograph. His contributions number more than three hundred titles, of which the best known volumes are "The Families and Genera of Bats"; "Catalogue of the Land Mammals of Western Europe" and several catalogues (1902 and 1911) of the mammals of North America.

The first award of the Leidy Medal was made in 1925 to Dr. Herbert Spencer Jennings, of the Johns Hopkins University, for his researches upon the Protozoa and the Rotatoria. The second award, in 1928, was made to Dr. Henry A. Pilsbry, curator of mollusca of the Academy of Natural Sciences of Philadelphia, in recognition of his researches upon the phylogeny of the terrestrial mollusca, and his work on the elassification of the Cirripedis. The third award of the Leidy Medal was made in 1931 to Dr. William Morton Wheeler, professor of entomology at Harvard University, in recognition of his researches and studies on the ants of the world and his contributions to animal evolution and psychology.

AWARDS AND OFFICERS OF THE ROYAL SOCIETY

THE following is a list of those to whom the Royal Society has this year awarded medals:

The Copley Medal to Professor J. S. Haldane in recognition of his discoveries in human physiology and of their application to medicine, mining, diving and engineering.

The Rumford Medal to Professor W. J. de Haas for his researches on the properties of bodies at low temperatures and, in particular, for his recent work on cooling by the use of adiabatic demagnetization.

A Royal Medal to Professor S. Chapman for his researches in the kinetic theory of gases, in terrestrial magnetism and in the phenomena of the upper atmosphere.

A Royal Medal to Professor E. D. Adrian for his work on the physiology of nerve and its application to the problems of sensation.

The Davy Medal to Professor W. N. Haworth for his researches on the molecular structure of carbohydrates.

The Darwin Medal to Professor A. C. Seward in recognition of his work as a paleobotanist.