knowledge concerning the various departments of science; to promote intercourse among men engaged in scientific work, especially in Pennsylvania; to assist by investigation and discussion in developing and making known the material, educational and other resources and riches of the commonwealth; to arrange and prepare for publication such reports of investigation and discussion as may further the aims and objects of the academy." Three classes of membership were provided for in this constitution: active, for those actually engaged in scientific work; associate, for those interested in science who are not qualified for active membership; and honorary, for those who have attained special prominence in science. A meeting will probably be held in November and an annual meeting next spring. Officers for the academy were elected as follows:

President: Dr. O. E. Jennings, University of Pittsburgh.

 $\it Vice-president:$ Dr. C. E. McClung, University of Pennsylvania.

Secretary: Mr. Joseph Illick, State Department of Forests and Waters.

Assistant Secretary: Dr. T. L. Guyton, State Department of Agriculture.

Treasurer: Dr. Frank D. Kern, Pennsylvania State College.

Editor: Dr. George H. Ashley, state geologist, Department of Forests and Waters.

Press Secretary: Mr. J. P. Kelly, Pennsylvania State College.

The executive committee is to consist of the officers and former presidents. Since there are no former presidents to serve, the following names were added to the executive committee: Dr. J. B. Miller, Lehigh University (4 years); Dr. W. V. Bingham, Carnegie Institute of Technology (3 years); Dr. John A. Miller, Swarthmore College (2 years), and Professor S. H. Derrickson, Lebanon Valley College (1 year).

JOHN SCOTT MEDAL AWARDS

At a special meeting of the American Philosophical Society held on Friday, May 2, the City of Philadelphia through its Board of Directors of City Trusts made the annual presentation of the John Scott Medal Awards as follows:

To Frederick G. Banting, M.D., physiologist, of London, Ontario, who in 1920 and 1921 succeeded in preparing a potent extract of the experimentally atrophied pancreas; a condition produced by ligating the pancreatic duct. The injected extract increased materially the life of depancreatized dogs by enabling them to retain larger amounts of sugar. In these researches there were associated with Dr. Banting, Drs. Macleod, Best and Callip.

TO WILLIAM W. COBLENTZ, Ph.D., physicist of the U. S. Bureau of Standards, for his unsurpassed skill in the

design and construction of thermopiles and radiometers of the highest sensitivity with which he has actually measured the radiation of the fainter stars.

To Elmer Verner McCollum, Ph.D., Sc.D., professor of biochemistry, School of Hygiene and Public Health, Johns Hopkins University, who demonstrated in 1913 a growth promoting vitamin in butter fat, the first of a long series of researches by him and his collaborators on the presence in various foods of other similar substances, promoting growth and maintaining health.

To RALPH MODJESKI, D.Eng., of New York City, for his skill in bridge designing, having designed and built the Columbia and Williamette River bridges in Oregon, the McKinley bridge at St. Louis, the Broadway bridge at Portland, Oregon, the Cherry Street bridge at Toledo. He is now chief engineer of the Delaware River bridge.

SCIENTIFIC NOTES AND NEWS

AT the meeting of the National Academy of Sciences held in Washington on April 30 new members were elected as follows: Arthur Byron Coble, University of Illinois, mathematician; Charles Edward St. John, Mt. Wilson Solar Observatory, astronomer; Harlow Shapley, Harvard College Observatory, astronomer; Karl Taylor Compton, Princeton University, physicist; Arthur Becket Lamb, Harvard University, chemist; William Crowell Bray, University of California, chemist; Frederick Belding Power, Bureau of Chemistry, chemist; Andrew Cowper Lawson, University of California, geologist; Charles Elmer Allen, University of Wisconsin, botanist; Lorande Loss Woodruff, Yale University, zoologist; Stanley Rossiter Benedict, Cornell Medical College, physiological chemist; Frederick George Novy, University of Michigan, pathologist; Hans Zinsser, Harvard Medical School, bacteriologist; George Sumner Huntington, Columbia University, anatomist; Dodge, Wesleyan University, psychologist.

Medals of the National Academy of Sciences have been presented as follows: The Agassiz medal to Otto Sven Pettersson, of Sweden; the Henry Draper medal to Arthur S. Eddington, of the University of Cambridge; the Watson medal to C. V. L. Charlier, of Sweden; the Daniel Giraud Elliot medal, for 1921, to Bashford Dean, of Columbia University; for 1922, William Morton Wheeler, of Harvard University, and for 1923, to Ferdinand Canu, of Versailles, France.

Funeral services in memory of Ernest Fox Nichols were held at St. John's Episcopal Church, Washington, on the afternoon of May 3. The pallbearers, representing the National Academy of Sciences, were: Dr. George E. Hale, Mount Wilson Observatory; Professor William Duane, Harvard University; Professor M. I. Pupin, Columbia University; Dr. David Fairchild, the Department of Agriculture; Professor