

investigator whose work was carried on largely in the State of Ohio.

4. The committee of award shall consist of the following persons:

Professor William McPherson, Professor William Lloyd Evans, and one active member selected by the Lambda chapter of Alpha Chi Sigma.

The Lambda chapter respectfully submits the foregoing and trusts that the suggestions will meet with your approval.

Very truly yours,

The Committee on a scholarship award of Alpha Chi Sigma.

FREDERICK H. MACLAREN, *chairman*,
RAYMOND S. CARTER, *president*,
GEORGE W. RUHL,
CHARLES C. CLARK.

THE NOBEL PRIZE IN PHYSICS

As was announced recently the Nobel Prize in physics for 1923 has been awarded to Dr. R. A. Millikan of the California Institute of Technology. Previous awards of the prize in physics have been as follows:

In 1901: to Professor W. C. Röntgen, Munich, for the discovery of the rays subsequently named after him.

In 1902: in two equal shares to Professor H. A. Lorentz, Leiden, and Professor P. Zeeman, Amsterdam, for researches upon the influence of magnetism on the phenomenon of radiation.

In 1903: one half to H. A. Becquerel, professor at École Polytechnique, Paris, for the discovery of spontaneous radio-activity and the other half to Professor P. Curie and Mme. Marie Curie, Paris, for their united work of investigation respecting the phenomena of radiation discovered by Professor Becquerel.

In 1904: to Lord Rayleigh, London, for his researches respecting the density of the most important gases and his discovery of argon made in connection therewith.

In 1905: to Professor P. Lenard, Kiel, for his investigations of cathode rays.

In 1906: to Professor J. J. Thomson, Cambridge, England, for his investigations, theoretical and experimental, concerning the passage of electricity through gases.

In 1907: to Professor A. A. Michelson, Chicago, for his optical instruments of precision and his spectroscopic and metrological investigations carried out therewith.

In 1908: to Professor G. Lippmann, Paris, for his method, based upon the phenomenon of interference, of photographically reproducing colors.

In 1909: one half each to G. Marconi, Engineer, London, and Professor F. Braun, Strassburg, for their contributions to the development of wireless telegraphy.

In 1910: to J. D. van der Waals, Professor Emeritus, Amsterdam, for his labors respecting the equation of state for gases and liquids.

In 1911: to Professor W. Wien, Würzburg, for his discoveries relative to the laws of heat radiation.

In 1912: to G. Dalén, Superintendent Engineer, Stockholm, for his inventions of self-acting regulators for use in conjunction with gas accumulators in providing illuminants for lighthouses and lighting-buoys.

In 1913: to Professor H. Kamerlingh Onnes, Leiden, for his researches upon the properties of matter at low temperatures, which among other results led to the production of liquid helium.

In 1914: to Professor M. von Laue, Frankfort-on-Main, for his discovery of the diffraction of Röntgen rays in crystals.

In 1915: in two equal shares to Professor W. H. Bragg, London, and W. L. Bragg, Cambridge, England, for the results of their labors in investigating crystal structures by means of Röntgen rays.

In 1916: the prize was not awarded.

The prize for 1917: was awarded in 1918 to Professor Ch. G. Barkla, Edinburgh, for his discovery of the characteristic Röntgen radiation of the chemical elements.

The prize for 1918: was awarded in 1919 to Professor M. Planck, Berlin, for the services rendered to the development of physics by his discovery of the elementary quanta.

In 1919: to Professor J. Stark, Greifswald, for his discovery of the Doppler effect with canal rays and of the decomposition of spectrum lines by electric fields.

In 1920: to Director Ch. E. Guillaume, Sèvres, in recognition of the services he has rendered to the attainment of exact measurements in physics through his discovery of anomalies in nickel steel alloys.

In 1921: to Professor Albert Einstein, of the University of Berlin, for his work in relativity.

In 1922: to Professor Niels Bohr, of the University of Copenhagen, for his work on problems of atomic structure.

THE CENTENARY OF JOSEPH LEIDY

THERE was held on Thursday, December 6, a meeting in Philadelphia to commemorate the centenary of the birth of Joseph Leidy. The following program was arranged:

(At the Academy of Natural Sciences)

Opening remarks: By the honorary chairman, DR. R. A. F. PENROSE, Jr., president of the Academy of Natural Sciences of Philadelphia.

Presentation of delegates.

General estimate of Leidy's influence upon scientific thought and development: DR. EDWARD S. MORSE, Peabody Academy of Science, Salem, Massachusetts.

Zoological work: DR. HERBERT S. JENNINGS, Johns Hopkins University.

1:30 P. M. Luncheon

Exhibition of Leidyana

2:30 P. M.

Paleontological and geological work: DR. WILLIAM B. SCOTT, Princeton University.

Botanical work: DR. WITMER STONE, The Academy of Natural Sciences of Philadelphia.

Mineralogical work: DR. FRANK W. CLARKE, United States Geological Survey.

Announcement of the Leidy Medal Foundation in the Natural Sciences

8:15 P. M.

(In the Mitchell Hall of the College of Physicians, Twenty-second above Chestnut Street)

The Joseph Leidy lecture in science: PROFESSOR HENRY FAIRFIELD OSBORN, president of the American Museum

of Natural History, New York City (under the University of Pennsylvania Foundation).

Personal recollections and appreciation of his work as an anatomist: DR. GEORGE E. DE SCHWEINITZ, University of Pennsylvania.

Leidy's influence on medical science: DR. HOBART A. HARE, Jefferson Medical College.

SCIENTIFIC NOTES AND NEWS

As has been noted in SCIENCE, the University of Paris at its opening session on November 24, conferred its honorary doctorate on Dr. W. W. Keen, of Philadelphia. In medicine the degree was also conferred on Professor Camilo Golgi, of the University of Pavia. In the sciences the degree was conferred on Sir J. J. Thomson, of the University of Cambridge; Professor Svante Arrhenius, of the University of Stockholm, and Professor Torres y Quevedo, of the University of Madrid.

A BILL providing for an annual allowance of 40,000 francs for Madame Curie was presented to the French Parliament on November 23 by the minister of public instruction in connection with the coming celebration of the twenty-fifth anniversary of the discovery of radium.

THE honorary degree of doctor of laws was conferred on Dr. J. G. Adami, vice-chancellor of the University of Liverpool, on the occasion of the installation of Lord Crawford and Balcarres, as chancellor of the University of Manchester.

A BANQUET in honor of Drs. Banting, Best and Macleod was given by the University of Toronto at Hart House, on November 26.

THE Swedish Academy of Engineering Science has awarded its gold medal to the engineers, MM. Holmstrom and Malmberg, the inventors of a contrivance called a carbometer, by means of which it is claimed to be possible to tell at any moment in the manufacture of steel the exact carbon percentage in the mass of metal.

SIR FRANK DYSON has been appointed to represent the International Astronomical Union on the International Research Council.

M. J. BRETON, member of the institute and director of the national bureau of scientific and industrial research and inventions, succeeds the late M. Violle as president of the French Commission Supérieure des Inventions.

DR. CHARLES K. MILLS, of Philadelphia, has been elected president of the American Neurological Association for the ensuing year in succession to Dr. Harvey Cushing, of the Harvard Medical School.

S. H. McCrory, chief of the division of agricultural

engineering of the U. S. Department of Agriculture, has been elected president of the American Society of Agricultural Engineers.

DR. WARREN FRED FARAGHER has been appointed an assistant director of Mellon Institute of Industrial Research of the University of Pittsburgh. Dr. Faragher, who went to the institute in 1918 and is now in supervisory charge of its scientific investigations in petroleum technology, will begin his new work on December 1. Dr. W. A. Gruse will succeed him in his present position.

C. C. CONCANNON, chief of the Chemical Division of the Department of Commerce, returned on the S. S. "America" November 10, having been abroad for six months.

PROFESSOR JOHN L. WEBER, of Cornell University, has taken a position in the Department of Conservation and Development of the State of New Jersey.

E. R. ALEXANDER, at one time with the research and biological laboratory of E. R. Squibb, is the president of the Alexander Laboratories, just incorporated, in Kansas City, Mo. It expects to feature a product to prevent clouding of glass with moisture.

W. H. DINES retired last year from active supervision of the work on investigations of the upper air carried on at the observatory that he had established at Benson in Oxfordshire. It is now announced that the work will be transferred to the Kew Observatory.

DRS. R. NORRIS SHREVE, W. Schmidtman and W. P. TenEyck have organized the Ammonite Company in New York for the manufacture of ammonium salts.

DR. ASHUR SHUPP, head fellow of the National Laundrymen's Association research at the Mellon Institute, has recently assumed technical charge of all of the laundries in Joliet, Illinois, under the auspices of the American Laundrymen's Association. The city laundries will constitute an experimental laboratory for the study of the laundry problem of the average city.

THE Chemical Society of Washington has elected the following officers for the ensuing year: *President*, R. S. McBride, assistant editor of *Chemical and Metallurgical Engineering*; *secretary*, J. B. Reed, Bureau of Chemistry; *treasurer*, H. W. Houghton, Hygienic Laboratory. *Counselors*, R. B. Sossman, W. Mansfield Clark, Atherton Seidell and W. W. Skinner. The remaining members of the local executive committee will be L. H. Adams, William Blum, D. K. Chestnut, C. S. Lind, F. W. Smither and E. T. Wherry.

W. D. BIGELOW, director of the National Cannery Association Laboratory, Washington, will be general chairman of the American Chemical Society convention committee for the spring meeting April 21 to 25,