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 Ecole 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