\$175 to E. B. Frost, director of Yerkes Observatory, for the purchase of a Hess-Ives tint photometer for use in the Yerkes Observatory, to supplement the Hartmann micrometer in the measurement of various illuminants, of the transmission of filters for various wave-lengths, of the absorption of photometric gratings, and of other phenomena and subjects.

\$500 to Dr. Antonio Abetti, director of the Arcetri Observatory, Florence, Italy, to apply on the cost of a combined spectrograph and spectroheliograph for use in combination with a 60-foot tower telescope now under construction. It is planned that this instrument shall be used by the son of the director, Dr. Giorgio Abetti, well known to many American astronomers, recently transferred from the Observatory in Rome to the Arcetri Observatory.

\$200 to Major William Bowie, chief of the Division of Geodesy, U. S. Coast and Geodetic Survey, in temporary support of the International Latitude Observatory at Ukiah, California, to assist in meeting an emergency due to the failure of the Observatory's regular source of funds.

ASSOCIATION OF SCIENTIFIC APPARATUS MA-KERS OF THE UNITED STATES OF AMERICA

THE second annual meeting of the Association of Scientific Apparatus Makers of the United States as reported in the *Journal of Industrial and Engineering Chemistry*, was held at Washington, D. C., Thursday and Friday, April 22 and 23, 1920, and was attended by thirty of the leading manufacturers of scientific instruments, analytical balances, chemical glassware, optical instruments and pyrometers.

The purpose of this association is to improve the construction and design of the scientific apparatus of this country and to standardize the same so as to get uniform quality and sizes; also, the most important object is to build up in the United States a precision instrument industry that will be of aid to the national government in time of emergency. Prior to 1914, practically all instruments of precision were imported and when our government declared war in 1917, it was found that there were not enough instrument makers and manufacturers to provide adequate supplies of precision instruments for the laboratory control of essential factories and to build fire control instruments for the Army and Navy. The association is now working to perpetuate this industry and to make the nation independent of any foreign country. In carrying out their program they are working in conjunction with the National Research Council, the American Chemical Society, Bureau of Standards and the various scientific bureaus of the National government.

One of the most important addresses of the occasion was given by Dr. S. W. Stratton, director of the Bureau of Standards, in which he set forth the various activities of the Bureau and stated how it would be possible to cooperate with this association. On Friday afternoon, at the invitation of Dr. Stratton, the association was shown through the various departments of the Bureau of Standards.

Committees were appointed on standardization in the various departments to work in conjunction with the above-mentioned agencies and also, if possible to correlate their work with the committee of the Society of Chemical Industry of Great Britain, which is working along similar lines. There was also a committee appointed on publication which will report later. The officers for the coming year are as follows: *President*, M. E. Leeds, of the Leeds & Northrup Company; *Vice-president*, H. N. Ott, of the Spencer Lens Company; *Secretary-treasurer*, J. M. Roberts, of the Central Scientific Company.

THE GRADUATE SCHOOL OF MEDICINE OF THE UNIVERSITY OF PENNSYLVANIA

At the last meeting of the board of trustees steps were taken to further equip and advance the work of the university's graduate school of medicine. A budget of \$158,079.37 was approved to meet such expenses as are not provided in the regular income of the school. Provost Smith appointed John C. Bell chairman of the joint committee on the graduate school of medicine.

A committee from the graduate school, consisting of Dean George H. Meeker, Dr. George E. de Schweinitz, Dr. Alfred Stengel and Dr. P. S. Stout, attended the meeting and explained the new plans of the school. What these men said concerning the work of the school is now doing and its recognition throughout the medical world greatly impressed the trustees. The following resolutions concerning the school were unanimously adopted:

Resolved, That in the judgment of the board of trustees the maintenance and development of the graduate school of medicine is essential alike to the cause of medical education in this commonwealth and to the leadership of the university in this field.

Resolved, That the budget of the graduate school of medicine for the year 1920-21, involving an estimated deficit of \$158,079.37, be approved.

Resolved, That a committee consisting of all the members of this board and such others as may be appointed by the provost be empowered to cooperate with the managers of the hospitals of the graduate school of medicine in raising the necessary funds for the support of that school.

Resolved, That pending the receipt of the necessary contributions for the support of the graduate school of medicine the credit of the university be pledged and the treasurer be authorized to pay out of unrestricted funds not otherwise appropriated such sums as may be necessary, not exceeding the amount of the estimated deficit, \$157,079.37.

OFFICERS OF THE NATIONAL RESEARCH COUNCIL

THE National Research Council has elected the following officers for the year beginning July 1, 1920: Chairman, H. A. Bumstead, professor of physics and director of the Sloane physical laboratory, Yale University; First Vice-Chairman, C. D. Walcott, president of the National Academy of Sciences and Secretary of the Smithsonian Institution; Second Vice-Chairman, Gano Dunn, president of the J. G. White Engineering Corporation, New York; Third Vice-Chairman, R. A. Millikan, professor of physics, University of Chicago; Permanent Secretary, Vernon Kellogg, professor of entomology, Stanford University; Treasurer, F. L. Ransome, treasurer of the National Academy of Sciences. The chairman of the various Divisions of the Council have not yet been all selected but will be announced later. As the general officers and the division chairmen of the council are elected annually, with the consequent possibility of an almost complete change of administrative officers at the end of any annual period, the council instituted the office of permanent secretary for the sake of effecting some degree of administrative continuity. Professor Kellogg, who has for the past year been serving as secretary of the council and chairman of its division of educational relations, will fill this office, and will resign from Stanford University on July 1 of this year.

SCIENTIFIC NOTES AND NEWS

ON the recommendation of the National Academy of Sciences the Barnard medal for meritorious service to science has been conferred by Columbia University on Professor Albert Einstein, of Berlin, in recognition "of his highly original and fruitful development of the fundamental concepts of physics through application of mathematics."

DR. ERNEST SOLVAY, Belgium, has been elected to honorary membership in the American Chemical Society.

THE honorary degree of doctor of science was conferred on Edward William Nelson, chief of the U. S. Biological Survey, at the recent commencement exercises of George Washington University.

On the evening of May 22, a dinner was given at New Haven to Professor Russell H. Chittenden in honor of the fortieth anniversary of his receiving the degree of doctor of philosophy from Yale University. Sixty-five former graduate students and friends were present. The dinner followed the one hundred and eighth meeting of the Society for Experimental Biology and Medicine.

DR. EDGAR FAHS SMITH, retiring provost of the University of Pennsylvania, was a guest of honor at a dinner given by nearly 500 members of the faculty of the University of Pennsylvania at Weightman Hall, May 26.

DR. SIMON FLEXNER, of the Rockefeller Institute for Medical Research, has been appointed to represent the United States at the first formal meeting of the Medical Advisory