feature will constitute a striking and representative demonstration of recent progress in the main scientific fields. Each section of the association is asked to make suggestions and recommendations as to the most important recent achievements in its field and invitations to individuals or laboratories will be issued from the permanent secretary's office after the suggestions have been examined and selections have been made by the committee on the Philadelphia exhibition. From the viewpoint of individual workers in scientific research this feature of formally invited demonstrations will be of paramount importance and it is specially necessary that well-considered section recommendations for the use of the exhibition committee be made just as promptly as may be. Each section secretary is asked to take up this very important matter with his section committee and to send the recommendations of the section to the permanent secretary's office before October 1. Suggestions as to possible invitations are requested from members of the association or of associated organizations; they should be sent to the proper section secretary or to the permanent secretary, who will forward them to the proper section secretary in each case. With adequate cooperation by men and women of science and by the section officers it will be possible for the invitations to be restricted to research workers or laboratories that have previously received recommendations from the sections. Of course the aim is to consider as possible exhibitors by formal invitation those who have recently made the most outstanding contributions to scientific progress.

Voluntary exhibits, of non-commercial character, will be accommodated as far as possible and no fees will be charged for their entry. Research institutions and individual scientific workers who are members of the association are asked, if they wish to take part, to make application for needed space just as soon as possible, addressing these applications to the permanent secretary. A concise and informing account of the proposed exhibit should accompany each application, stating the kind and nature of the objects to be displayed and the sort and amount of space required. The use of charts, diagrams and ordinary photographs, which require wall space and are not generally very attractive in an exhibition of this kind, should be avoided or restricted as far as possible, excepting in special cases. General attractiveness and scientific importance are both to be considered. Assignments of space for voluntary exhibits will be made by the exhibition committee about October 1 and all applications for space should be in the permanent secretary's hands considerably before that date. It is hoped that one or more exhibition prizes may be awarded to voluntary individual exhibitors whose contributions are of special merit.

The helpful cooperation of all association members and all members of other American scientific organizations, as well as others who are interested in the advancement of science and scientific education, will be needed in order that the Philadelphia science exhibition may be properly successful. The exhibition feature has gained remarkably in importance and value and attractiveness at recent annual meetings of the association and this development of association activity promises to continue. With the excellent and cordial publicity now given to the association meetings by the daily press throughout the country, the annual science exhibition bids fair to become very farreaching in its influence.

> BURTON E. LIVINGSTON, Permanent Secretary

FIFTIETH ANNIVERSARY CELEBRATION OF THE FOUNDING OF THE JOHNS HOPKINS UNIVERSITY

PLANS for the celebration of the fiftieth anniversary of the founding of the Johns Hopkins University on October 22 and 23 have been announced. The main events of the celebration will be the dedication of the new \$1,000,000 building of the School of Hygiene and Public Health, a series of conferences to be addressed by leaders in the social and natural sciences, exercises commemorating the fiftieth anniversary and an alumni banquet.

Representatives of England, France and Germany will take part in the celebration. Dr. Andrew Balfour, director of the London School of Hygiene and Tropical Medicine, will speak at the dedication of the School of Hygiene and Public Health Building. Professor F. Neufeld, of Berlin, director of the Institute for Infectious Diseases, will deliver the De Lamar memorial lecture. M. L. Levy-Bruhl, professor of the history of modern philosophy at the Sorbonne, is to make the principal address at the exercises commemorating the foundation of the philosophical faculty in 1876.

Newton D. Baker, former secretary of war; Edwin G. Conklin, professor of biology at Princeton University; Gordon J. Laing, dean of the graduate school of arts and literature at the University of Chicago, and Charles R. Bardeen, dean of the medical school of the University of Wisconsin, will be the speakers at the alumni banquet.

Dr. Ira Remsen, the only survivor of the seven professors who were members of the faculty when the university was opened in 1876, will attend the celebration. He was the first professor of chemistry and the second president of the university. William M. Burton, president of the Standard Oil Company of Indiana, one of Dr. Remsen's students in the early JUNE 4, 1926]

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days of the university, will deliver the address of welcome in his honor.

Plans are being made along the lines similar to those of the meetings of national scientific and learned societies for a series of sixteen conferences in the main branches of learning. Among the Johns Hopkins alumni who have already consented to speak at these conferences are:

- Henry Van P. Wilson, professor of biology, University of North Carolina.
- Ross G. Harrison, professor of anatomy, Yale University.
- W. C. Coker, professor of botany, University of North Carolina.
- Joseph Jastrow, professor of psychology, University of Wisconsin.
- Edward C. Franklin, professor of organic chemistry, Leland Stanford University.
- William H. Burnham, professor of pedagogy, Clark University.
- William S. Bayley, professor of geology, University of Illinois.
- Florence Bascom, professor of geology, Bryn Mawr College (first woman to receive the degree of Ph.D. at the Johns Hopkins University).
- George Otis Smith, director of the Geological Survey.
- Benjamin Leroy Miller, professor of geology, Lehigh University.
- D. W. Ohern, formerly professor of geology in the University of Oklahoma.
- Marcus I. Goldman, of the Geological Survey.
- W. P. Woodring, of the Geological Survey.
- Luther P. Eisenhart, professor of mathematics, Princeton University.
- Arthur B. Coble, professor of mathematics, University of Illinois.
- Henry B. Brooks, chief of the electrical instruments and meter section of the United States Bureau of Standards.

A SURVEY OF FORESTRY RESEARCH UNDER THE NATIONAL ACADEMY OF SCIENCES

PROFESSOR HENRY S. GRAVES, dean of the School of Forestry and provost of Yale University, will spend the summer at various European forest schools and experiment stations making a study of the educational aspects of the problems of research in forestry, with special reference to the requirements for training men to conduct research in this field.

Dean Graves is a member of a committee of three engaged in making an intensive study of research problems in forestry, conducted under the auspices of the National Academy of Sciences and financed by the General Education Board. This is said to be the first time that American natural scientists have intensively investigated European methods of preserving the forests with a view to their application in the United States. The purpose of the study, according to Dean Graves, is to determine what are the important lines of basic research necessary to lay a sound foundation for forestry, to ascertain what is now being done in this country and abroad, and to formulate a plan for a greatly enlarged program of research.

"A certain amount of research," he said, "is now under way at the various stations of the United States Forest Service, at the forest schools and at various other agencies and institutions. There is, however, special need of investigations in the sciences underlying forestry with special reference to problems encountered in the field of forestry. The National Academy is particularly interested in these fundamental problems."

The special committee under whose direction the work will be accomplished consists of the chairman, Professor L. R. Jones, of the University of Wisconsin, Dr. John C. Merriam, president of the Carnegie Institution of Washington, who also represents the academy, and Dean Graves. The actual work of making the survey of the problems of research will be carried on by Professor I. W. Bailey, of the department of botany of Harvard University, who for a long time has been associated with the forestry work done at that institution, and by Dr. H. A. Spoehr, head of the laboratory of the Carnegie Institution at Carmel, Calif.

APPOINTMENT TO THE NON-RESIDENT LECTURESHIP IN CHEMISTRY AT CORNELL

THE non-resident lecturer in chemistry at Cornell University for the first term of the next university year will be Dr. Fritz Paneth, professor of inorganic chemistry in the University of Berlin, who will present, under the general title "Selected Topics in Inorganic Chemistry," the results of his research and study concerning the general significance of radiochemistry, isotopes, the periodic system from the viewpoint of Bohr's atomic theory, the hydrogen compounds of the chemical elements, natural and artificial transformation of the elements, and the use of the radio-elements as indicators.

A correspondent writes that although only thirtyeight years of age, Professor Paneth has already achieved international reputation as one of the most brilliant and versatile investigators in his field. He is an Austrian, and his student years were spent in his native city, Vienna. He received the degree of doctor of philosophy from the University there in 1910, and then was appointed assistant in the Vienna Radium Institute. In 1913 he went to Great Britain and studied under Soddy in Glasgow and Rutherford in Manchester. Upon his return to Vienna he received appointment as instructor (privatdozent) in