

2. Relative emphasis on projects and men.
3. To what extent should administration endeavor to seek out promising projects and men?
4. How best may reliable information be secured as to the merits of projects and the competence of applicants?
5. For what specific purposes should grants be made? *e.g.*, salary of applicant; travel and maintenance; assistance, technical and clerical; exhaustible supplies; equipment of lasting value, *e.g.*—apparatus, books, MSS, etc., and their ultimate disposal.
6. Desirable size limits of grants-in-aid. Should they be generous or limited to necessities?
7. Under what circumstances should grants be renewed, and should renewal be so frequent as to constitute continuous assistance?
8. What oversight or control should be exercised over the use of grants, the expenditure of money, the progress of research?
9. What have proved to be the most effective administrative devices for bringing systems of grants-in-aid to the attention of scholars, for handling applications, for assuring careful study of applications by experts and committees, and for making awards?
10. Is it desirable to promote large projects by relatively small grants from many sources?
11. Are prizes, whether competitive or honorary, an important means of promoting research?
12. Is it desirable to effect a better coordination among the various agencies that offer grants-in-aid, either as to the size of grants, the fields in which they are offered, or the overlapping of applications? What has been their distribution among fields of study and among grades of scholars?

Luncheon for members and invited guests will be served at 1 o'clock. At an open session on Friday evening at 8:15, Dr. Frederiek P. Keppel, president of the Carnegie Corporation, New York, will speak on "The Responsibility of Endowments in the Promotion of Knowledge."

On Saturday morning an open session will be held at 10 o'clock on "The Most Important Methods of Promoting Research," as viewed by representatives of

1. Research Foundations and Institutions.
2. Learned Societies, Academies and Councils.
3. Universities, Professional and Technical Schools.
4. Research Workers and Recipient Institutions.

Roland S. Morris, president of the society, will preside over this session, and Dr. John C. Merriam, president of the Carnegie Institution of Washington, will make the opening address. A luncheon for members and invited guests has been arranged for 1 o'clock.

#### THE TWENTY-FIFTH ANNIVERSARY OF THE JOHNS HOPKINS SCHOOL OF ENGINEERING

THE Johns Hopkins School of Engineering will celebrate its twenty-fifth anniversary with a series of

events beginning on Friday evening, February 19, with a diversified modern engineering exhibit. An address by Dr. Karl T. Compton, president of the Massachusetts Institute of Technology, will be given on the morning of the twenty-second at the sixty-first commemoration day exercises of the university. On this occasion honorary degrees will be awarded to several distinguished engineers.

On the morning of the twentieth, alumni, officials of the city and state and faculty members from other colleges will hear and discuss papers read by senior professors of the School of Engineering. These discussions will center about current research projects in which the members of the faculty have been actively engaged and concerning which numerous publications have appeared. The subjects will include high voltage insulation, electrical accidents, power development, water purification, gas engineering research and scientific motor vehicle taxation.

At four o'clock, on February 22, Professor Niels Bohr, director of the Institute for Theoretical Physics at the University of Copenhagen, will speak on "The Problem of Causality in Atomic Theory." Professor Bohr, who was awarded the Nobel Prize in 1922, will be a guest of the winner of the prize in 1925, Professor James Franck, now professor at the Johns Hopkins University. The lecture will be in the A. R. L. Dohme series. The concluding event of the program will be the alumni dinner at 6:30 in the evening. Abel Wolman, a member of the first graduating class, now the chief engineer of the Maryland State Department of Health, will be the principal speaker. His topic will be "The Engineer and Society."

Portions of the public exhibit will be devoted to the main branches of research and industrial engineering. Laboratory technique and facilities as well as instruction methods may be observed by visitors to the show. Many commercial appliances and processes will be brought in for the duration of the anniversary events and students will operate equipment and models reflecting recent discoveries. Several methods and pieces of apparatus developed at the Homewood laboratories will be demonstrated.

Early in the university's history President Daniel C. Gilman indicated his hope that the development of facilities at Johns Hopkins would witness the establishment of a school of engineering. That hope was realized in 1912 when the present dean of the school, Professor J. B. Whitehead, joined with Dr. Carl Clapp Thomas and Dr. Charles J. Tilden to form the department heads of the first faculty. On its twenty-fifth anniversary the school has three departments of civil, electrical and mechanical engineering accredited by the

Engineering Council for Professional Development. A department of chemical engineering has been recently established.

N. S. H.

### RECENT DEATHS

LAWRENCE BRUNER, since 1895 professor of entomology at the University of Nebraska, died on January 30 at the age of eighty years.

JOHN H. GREGORY, since 1921 professor of civil and sanitary engineering at the Johns Hopkins University, died on January 18 at the age of sixty-two years.

JOHN ALEXANDER MACWILLIAM, until his retirement in 1927 with the title emeritus professor of physiology at the University of Aberdeen, died on January 13 at the age of seventy-nine years.

THE death is announced at the age of sixty-eight years of Percy Andrew Ellis Richards, for over twenty years professor of chemistry at Queen's College, London, and lecturer in chemistry and metallurgy at the Royal Dental Hospital.

THOMAS CROOK, since 1928 principal of the Mineral Resources Department of the Imperial Institute, London, died on January 6.

ORSO MARIO CORBINO, formerly professor of experimental physics at the University of Messina and later at the University of Rome, died on January 23 at the age of sixty years. In 1920 he was appointed a senator and in 1921 became Minister of Education in Premier Bonomi's cabinet. After the rise to power of Mussolini, he served for two years, 1923 and 1924, as Minister of National Economy.

## SCIENTIFIC NOTES AND NEWS

At the Founders' Day celebration of the University of Wisconsin on February 6, which commemorated the eighty-seventh anniversary of the opening of the first class of the university, special honor was paid to Dr. Edward Asahel Birge, president emeritus of the university, who is now eighty-five years old. Hundreds of alumni took part in the celebration by attending dinner meetings which were held in all parts of the country. At Madison a testimonial was presented to Dr. Birge by the alumni association in recognition of his long service to the university and the state. Dr. Birge went to the state university in 1875 as an instructor in natural history. He was professor of zoology from 1879 to 1911, and served as dean of the College of Letters and Science from 1891 to 1918. He was acting president of the university from 1900 to 1903, and in 1918, following the death of President Charles R. Van Hise, he was elected president. He served until 1925, when he retired as president emeritus.

THE council of the Geological Society, London, has awarded the Wollaston Medal to Professor Waldemar Lindgren, of the Massachusetts Institute of Technology, for his researches concerning the mineral structure of the earth, and especially concerning the problems of mesasomatism, contact ore-deposits and the application of physical chemistry to ore-deposition.

AN award for distinguished service to agriculture was made to Maurice Adin Blake, professor of agriculture at Rutgers University, at the opening session of the State Agricultural Convention in the Assembly Chamber at the Capitol on January 26. Professor Blake has developed some 100 new varieties of peaches.

THE Bulgarian Order of Civil Merits with Golden Crown has been conferred by King Boris III on Dr.

J. C. Th. Uphof, of Orlando, Fla., in recognition of his researches in botany. These have been published in the English, French, German, Dutch and Spanish languages.

THE British Royal Astronomical Society has awarded its Gold Medal to Dr. Harold Jeffreys, university reader in geophysics at the University of Cambridge, for his researches into the physics of the earth and other planets and for his contributions to the study of the origin and age of the solar system.

DR. VILHJALMUR STEFANSSON was elected president of the Explorers' Club, New York City, at a meeting held on February 3. Dr. Walter Granger, whom Dr. Stefansson succeeds as president, was elected *first vice-president*; Lowell Thomas was named *second vice-president*; H. R. Forbes, *third vice-president*; H. E. Winship, *treasurer*, and Joseph Robinson, *secretary*.

DR. ROGER W. TRUESDAIL, of the Truesdail Laboratories, Los Angeles, has been elected president of the Sigma Xi Club of Southern California, and J. A. Hartley, president of the Braun Corporation, Los Angeles, has been elected secretary-treasurer.

At the thirty-ninth annual meeting of the Washington Academy of Sciences, held on January 21, the following officers were announced for 1937: *President*, Charles Thom, Bureau of Plant Industry; *Corresponding secretary*, Nathan R. Smith, Bureau of Plant Industry; *Recording secretary*, Oscar S. Adams, Coast and Geodetic Survey; *Treasurer*, Henry G. Avers, Coast and Geodetic Survey; to the *Board of Managers* for three years, F. G. Brickwedde, National Bureau of Standards, and J. F. Couch, Bureau of Animal Industry; *Non-resident vice-presidents*, Thomas Barbour, Cambridge, Mass., and P. W. Bridgman, Cambridge,