grants of money may be made to enable members of their staffs to attend meetings of standard societies held east of the Rocky Mountains, *initial action* to be taken in each case, on its merits, by a suitable advisory committee of the institution concerned.

- II. RELATING TO GRANTING OF SABBATICAL LEAVE ON FULL PAY FOR RESEARCH DUTY
- (a) Research by a university professor is a function not less important than teaching.
- (b) It frequently happens that a professor's time and energy are so completely absorbed by the work of teaching that research becomes impracticable.
- (c) It occasionally happens that a teacher, imbued with the spirit of research, spends his sabbatical vacation at a reduced salary in the pursuit of his researches.

This committee therefore urges upon the governing bodies of the universities and colleges of the Pacific region the inauguration of the practise of granting sabbatical leave on full pay in approved cases, based upon the presentation of a definite program of work leading to a printed report upon its completion, initial action to be taken in each case, on its merits, by a suitable advisory committee of the institution concerned.

Among the subjects which have given this committee concern is the responsibility of scientists in the United States for the progress of research during and immediately following the European war. Will the impoverishment of governments curtail the support of science in Europe, or will the demonstrated efficiency of scientific methods induce the governments to maintain scientific research at a sacrifice of something else? Whatever the outcome may be, the obligations of American men and women of science to push forward the boundaries of knowledge are certain to be increased.

(Signed) D. H. CAMPBELL,
W. W. CAMPBELL,
F. G. COTTRELL,
E. C. FRANKLIN,
J. C. MERRIAM,
Chairman of the Subcommittee

SCIENTIFIC NOTES AND NEWS

At the annual meeting of the Washington Academy of Sciences, the following officers for the year 1916 were elected: President, L. O. Howard; Vice-presidents, J. W. Fewkes, Anthropological Society; M. Carroll, Archeological Society; W. P. Hay, Biological Society; R. H. True, Botanical Society; R. B. Sosman, Chemical Society; J. C. Hoyt, Engineers Society; C. B. Mirick, Electrical Engineers Society; W. D. Hunter, Entomological Society: G. B. Sudworth, Foresters Society: O. H. Tittmann, Geographic Society; T. W. Vaughan, Geological Society; J. D. Morgan, Historical Society; E. Y. Davidson, Medical Society; L. J. Briggs, Philosophical Society; Non-resident Vice-presidents, E. C. Pickering, A. G. Mayer; Corresponding Secretary, F. E. Wright; Recording Secretary, W. J. Humphreys; Treasurer, W. Bowie; Managers, Class of 1919, G. K. Burgess and C. L. Alsberg.

Officers of the Royal Astronomical Society have been elected as follows: President, R. A. Sampson, astronomer royal for Scotland. Vice-presidents, Sir F. W. Dyson, astronomer royal; Colonel E. H. Hills, W. H. Maw, H. F. Newall, professor of astrophysics, Cambridge. Treasurer, E. B. Knobel. Secretaries, A. S. Eddington, Plumian professor of astronomy, Cambridge; Alfred Fowler, professor of astrophysics, Imperial College of Science and Technology. Foreign Secretary, Arthur Schuster. Council, Sydney Chapman; A. L. Cortie; A. C. D. Crommelin; J. W. L. Glashier; Walter Heath; J. H. Jeans; H. S. Jones; E. W. Maunder; J. W. Nicholson, professor of mathematics, King's College; T. E. Phillips; A. A. Rambaut, Radcliffe observer; H. H. Turner, Savilian professor of astronomy, Oxford.

The following officers of the Geological Society of London have been elected for the ensuing year: President, Dr. A. Harker; Vicepresidents, Sir T. H. Holland, Mr. E. T. Newton, the Rev. H. H. Winwood, and Dr. A. Smith Woodward; Secretaries, Mr. H. H. Thomas and Dr. H. Lapworth; Foreign Secretary, Sir Archibald Geikie; Treas-

urer, Mr. Bedford McNeill. In addition to these officers the members of the new council are: Mr. H. Bury, Professor J. Cadman, Professor C. G. Cullis, Mr. R. M. Deeley, Professor W. G. Fearnsides, Dr. W. Gibson, Dr. F. L. Kitchin, Dr. J. E. Marr, Mr. R. D. Oldham, Mr. R. H. Rastall, Professor T. F. Sibly, Professor W. J. Sollas, Dr. J. J. H. Teall and Mr. W. Whitaker.

The Vienna School of Technology has conferred its honorary doctorate of engineering on Professor Alexander Bauer, formerly professor of chemistry there, who recently celebrated his eightieth birthday.

Dr. R. WILLSTÄTTER, professor of chemistry at Berlin, has been elected a foreign member of the Swedish Academy of Sciences.

At the conclusion of the present semester Dr. Hasse, professor of anatomy in Breslau since 1873, will retire from active service.

Dr. Alonzo E. Taylor, Rush professor of physiological chemistry at the University of Pennsylvania, sailed on March 11 for Germany where he will engage in Red Cross work as an attaché of the American embassy at Berlin.

Dr. Joseph A. Blake, formerly professor of surgery in Columbia University, has been made chief of the surgical center in the Department of the Seine and Oise, placing him in direct control of six military hospitals.

Professor Arthur G. McCall, of the Ohio State University department of agronomy, has resigned to take charge of the soil investigation work at the Maryland Agricultural Experiment Station, effective at the close of the academic year.

Dr. H. E. EHLERS, professor of experimental engineering, in the University of Pennsylvania, has been appointed assistant chief of the bureau of engineering of the Pennsylvania Public Service Commission. During the remainder of this semester Dr. Ehlers will spend two days of each week at the university.

Dr. Leonard T. Troland, who received appointment at Harvard University to the Sheldon (non-resident) fellowship for the

year 1915-16, is spending the year in Nela Research Laboratory. Mr. George P. Luckey, who has spent the past two years in graduate work at Göttingen University, has been appointed Charles F. Brush fellow in physics in Nela Research Laboratory for the year 1915-1916.

Dr. J. D. Falconer, lecturer in geography in Glasgow University and Swiney lecturer in geology at the British Museum, has been appointed temporary assistant district officer in the northern provinces of Nigeria.

PRESIDENT CHARLES R. VAN HISE, of the University of Wisconsin, lectured under the auspices of the Sigma Xi Society at the University of Minnesota on March 17. The subject of the lecture was "The Panama Canal, with Especial Reference to the Slides." President Van Hise is chairman of the commission appointed at the request of President Wilson by the National Academy of Arts and Sciences to investigate the slides, and has recently returned from a trip to Panama.

A MEETING of the Washington Academy of Sciences was held in the auditorium of the New National Museum on March 23, when Dr. L. H. Baekeland delivered an illustrated address entitled "Chemistry in Relation to the War."

At the meeting of the Michigan Academy of Sciences this week, Professor Ernst A. Bessey, professor of botany at the Michigan Agricultural College, and president of the academy, gives an address on "The Sexual Cycle in Plants." Dr. Charles D. Davenport, director of the Station for Experimental Evolution of the Carnegie Institution, lectures on "The Relation of Juvenile Promise to Adult Performance."

A COURSE of eight lectures on "Problems and Methods in Dynamic Psychology," by Professor Raymond Dodge, is being given at Columbia University on Mondays and Tuesdays from March 27 to April 18.

Before the department of geology of Columbia University a series of lectures on the "Nature and Bearings of Isostasy" is being de-

livered by Dr. Joseph Barrell, professor of structural geology in Yale University.

DEAN SHENEHAN, of the College of Engineering of the University of Minnesota, lectured on March 20 and 21 to the engineering students of Purdue University.

Dr. Charles P. Steinmetz has completed arrangements with Provost Smith for the lecture course by professional engineers under the joint auspices of the Illuminating Engineering Society and of the university, to be held at the University of Pennsylvania in September, 1916.

The alumni of the Michigan College of Mines are raising an endowment fund for the college, to be known as the "George A. Koenig Memorial Fund." Dr. Koenig was from 1892 to 1914 professor of chemistry at the college.

Foreign papers announce the death of E. W. Pawlow, the Russian surgeon. It may be that the death of Ivan Pawlow, the physiologist of the St. Petersburg Academy of Sciences, cabled to this country and printed in Science, was an error due to confusion with E. W. Pawlow.

CHARLES JEPTHA HILL WOODBURY, a widely known engineer of Boston, died on March 20, aged sixty-four years.

John Wesley Judd, F.R.S., professor of geology from 1876 to 1905 and dean of the Royal College of Science, London, for the last ten years of that period, died on March 3, at the age of seventy-six years.

DR. ERNST MACH, emeritus professor of the history and theory of inductive science at Vienna, has died at the age of seventy-eight years.

The deaths are also announced of Professor E. Heckel, professor of botany in the University of Marseilles; Professor Vladimir A. Tichomirov, professor of pharmacy and materia medica at Moscow University and Russian Councillor of State; and Dr. Fritz Schmid, since 1889 director of the Swiss Bureau of Health.

THE Naples Table Association for Promoting Laboratory Research by Women announces an eighth prize of one thousand dollars for the best thesis written by a woman on

a scientific subject. This thesis must embody new observations and new conclusions based on independent laboratory research in biological (including psychological), chemical, or physical science. The theses offered in competition must be in the hands of Dr. Lilian Welsh, Goucher College, Baltimore, Md., before February 25, 1917. The examiners are Dr. William H. Howell, Dr. Elmer P. Kohler and Dr. Henry Crew.

PROFESSOR HERBERT OSBORN, of Ohio State University, director of the Lake Laboratory, Cedar Point, Ohio, will be absent on leave next summer. The acting director will be Dr. F. H. Krecker, of the Ohio State University. Others on the staff will be Professor J. H. Schaffner, Ohio State; Professor S. R. Williams, Miami University; Professor Fullmer, Baldwin-Wallace, and Professor Z. P. Metcalf, of the North Carolina College. The laboratory will open on June 19. The course of instruction will continue until July 28 but the laboratory will be at the disposal of independent workers at least until the middle of August. The laboratory is well situated for the study of the fauna and flora of the Lake Erie region and any biologists interested will be welcomed.

WE learn from *Nature* that the third Indian Science Congress met at Lucknow on January 13–15. About seventy papers were read and more than 300 visitors attended the meetings. The presidential address was delivered by Sir S. G. Burrard, F.R.S., who took as his subject "The Plains of Northern India, and their Relationship to the Himalaya Mountains." Sir A. G. Bourne, F.R.S., has been elected president for 1916–17, and the next meeting will probably be held at Bangalore.

A CONFERENCE on Graduate Medical Education was held at the University of Minnesota on March 15, participated in by members of the graduate faculty at Minneapolis and those connected with the Mayo Foundation, Rochester, Minn. The program was as follows:

Afternoon Session

- 1. Address by President George E. Vincent.
- 2. Communication from Dean Guy Stanton Ford.

- 3. "General Requirement of the Graduate School," Dr. C. M. Jackson.
- 4. "The Thesis Requirement," Dr. J. B. Johnston; Dr. A. H. Logan.
- 5. "Methods of Graduate Instruction," Dr. E. P. Lyon.

Evening Session

- 6. Symposium on special requirements for the degree of doctor of science in various medical specialties (including desirable pre-requisites).
- (a) "Medicine," Dr. L. G. Rowntree; Dr. H. S. Plummer.
 - (b) "Pediatrics," Dr. J. P. Sedgwick.
- (c) ''Surgery,'' Dr. J. E. Moore; Dr. E. M. Beckman.
 - (d) "Obstetrics," Dr. J. C. Litzenberg.
- (e) "Eye, Ear, Nose and Throat," Dr. F. C. Todd; Dr. Carl Fisher.
- (f) "Nervous and Mental Diseases," Dr. A. S. Hamilton.
- (g) "Pathology and Bacteriology," Dr. L. B. Wilson; Dr. H. E. Robertson.

A stenographic record of the proceedings was kept and will perhaps be printed. If not, several copies will be available for the perusal of those interested in the development of graduate clinical instruction.

THE Forestry Club at the New York State College of Forestry at Syracuse University is giving for the season of 1915–16 the following lectures:

December 16—"The Story of the Forest," by Frederick E. Clements, chief, department of botany, University of Minnesota, and state botanist of Minnesota.

January 13—"The Development of a Forest Service for Minnesota," by William T. Cox, state forester of Minnesota.

January 18—"Close Utilization of the Products of the Forest," by W. R. Brown, of the Berlin Mills Co., Berlin, N. H.

January 27—"The Birth of a Forest Policy," by B. E. Fernow, dean, faculty of forest, University of Toronto, Toronto, Canada.

February 3—"Forestry and the Business Development of the Country," by Elmer E. Hole, editor, American Lumberman, Chicago, Ill.

February 17—"A Better Place to Live," by Frank A. Waugh, chief, department of horticulture, Massachusetts Agricultural College, Amherst, Mass.

February 24—"Forestry in New York," by James S. Whipple, former forest, fish and game commissioner of the state of New York, Salamanca, N. Y.

March 2—"The Vegetation of the United States as Influenced by Glacial Action," by Henry C. Cowles, of the University of Chicago.

March 9—"Modern Forest Utilization," by R. S. Kellogg, secretary, National Lumber Manufacturers Association, Chicago, Ill.

March 23—"State-wide Fire Protection for the Woodlots and Forests of New Hampshire," by E. C. Hirst, state forester of New Hampshire.

March 30—"Combating Insects of the Orchard and Forest in New York State," by George G. Atwood, chief, bureau of horticulture, New York State Department of Agriculture, Albany, N. Y.

April 6—"Shade-tree Work in Buffalo," by Harry B. Filer, city forester of Buffalo, N. Y.

THE following lectures are scheduled to be given before the Franklin Institute in Philadelphia:

March 23—''Recent Developments in Electrical Apparatus,'' by Harold Pender.

March 30—"Some Problems in Physical Metallurgy at the Bureau of Standards," by George K. Burgess.

April 6--"'Use of Powdered Coal in Metallurgical Processes," by C. J. Gadd.

April 13—"Heat Measurements as Related to the Industries," by Charles W. Waidner.

April 19—"Scientific Research in Relation to the Industries," by Charles P. Steinmetz.

A BEQUEST of \$25,000 has been made to the Cleveland Medical Library by the will of Dr. Benjamin L. Millikin, former dean and senior professor of ophthalmology of the Western Reserve Medical School.

UNIVERSITY AND EDUCATIONAL NEWS

THE wills of the late Edith and Walter Scull, niece and nephew of David Scull, for many years a manager of Haverford College, give \$100,000 to the college.

THE trustees of Columbia University, at their last meeting, decided to admit women to the medical school as soon as the equipment made the step practicable.

At Harvard University assistant professors have been appointed as follows: Grinnell