tive order and continues in the service. Three other employees, including Timothy W. Stanton, the present chief geologist, were exempted for a period of one month to permit further study of their cases and determination as to further exemption or retirement.

- (6) Maximum allowances for subsistence while in a travel status have been reduced.
- (7) Annual leave with pay has been heretofore possible up to 30 days a year; hereafter it may not exceed 15 days a year but unused parts may be cumulative for any succeeding year. (As already stated, annual leave is entirely suspended during the present year.)
- (8) In order to keep within the appropriations during 1933 and yet to avoid dismissing employees, the secretary is authorized and directed to furlough employees without pay for such time as necessary, the higher salaried to be furloughed first wherever possible without injury to the service. Regulations by the president governing such furloughs have not yet been promulgated. The survey's appropriations have been sharply reduced, but as discussed hereafter, under (10), the amount of

such furloughs that may be necessary this year can not now be determined.

- (9) The secretary, with the approval of the director of the bureau of the budget, may transfer not to exceed 12 per cent. of any appropriation for the department to any other appropriation for the department; but no appropriation may thus be increased by more than 15 per cent. It is not yet known whether any of the survey appropriations will be thus augmented.
- (10) In view of the considerable reductions in the several survey appropriations (ranging from 12.1 to 60 per cent. below the funds for the past fiscal year), projects and field work must be correspondingly curtailed and the payroll reduced. However, until it is known whether the survey will receive any transferred funds as discussed under (9) and whether it can use any of the money saved by vacancies caused by retirements, resignations and deaths, as discussed under (4), it will not be possible to determine how much additional furloughs need be enforced to avoid dismissing employees, as discussed under (8).

SCIENTIFIC NOTES AND NEWS

Dr. Edmund B. Wilson, Da Costa professor of zoology at Columbia University, has been elected a corresponding member of the Vienna Academy of Sciences.

Dr. Carl Correns, director of the Kaiser Wilhelm Institute for Biology, Berlin, has been elected a foreign member of the Physiological Society at Lund.

Dr. Peter Debye, professor of physics at Leipzig, has been elected a member of the Royal Society in Upsala and of the Academy of Sciences (dei Lincei) at Rome.

AT a recent meeting of the Linnean Society, London, the following were elected foreign members: Professor Klas Robert Fries, director of the Botanic Garden, Stockholm; Professor Eduard Fischer, professor of botany at the University of Bern and director of the Botanical Institute; Professor Ludwig Jost, director of the Botanical Institute and Gardens, University of Heidelberg, and Professor Emile Topsent, profesor of zoology and comparative anatomy, University of Strasbourg. At the anniversary meeting of the society on May 24 the following officers were elected: Professor Frederick Ernest Weiss, president; Mr. Francis Druce, treasurer; Mr. John Ramsbottom, botanical secretary, and Lieutenant-Colonel John Stephenson, F.R.S., zoological secretary. The Linnean Gold Medal was awarded to Dr. Edwin Stephen Goodrich, Linacre professor of zoology and comparative anatomy at the University of Oxford.

ARTHUR NEWELL TALBOT, professor emeritus of municipal and sanitary engineering at the University of Illinois, was awarded the Lamme Medal at the fortieth annual meeting of the Society for the Promotion of Engineering Education held at the Oregon State College.

The first National Achievement Award of the Chi Omega Sorority was conferred on June 27 on Dr. Florence R. Sabin, member of the Rockefeller Institute for Medical Research. The award, in the form of a medal executed by Miss Frances Grimes, was made "in recognition of notable achievement by a woman by other women."

According to the *Journal* of the American Medical Association, Dr. Ugo Lombroso, Tunis, and Dr. J. Taboriski, Palestine, have been awarded the International Trachoma Prize of 2,000 Swiss francs, offered by the royal Hungarian minister of public welfare and labor for an essay on the etiology of trachoma. Honorable mention was given to Drs. Cattaneo, Sassari; P. Olitsky, New York; Rotth and Kanyo, Budapest, and C. Trapezontzewa, Moscow.

Dr. WILLIAM P. BROOKS, who has been connected with the Massachusetts State College at Amherst since 1889, from 1906 to 1918 as director of the agricultural experiment station, received at the commencement of Amherst College the degree of doctor of agriculture.

FERDINAND N. MENEFEE, professor of engineering mechanics at the University of Michigan, was given the honorary degree of civil engineer at the annual commencement exercises of the University of Nebraska.

Dr. MARTIN H. FISCHER, professor of physiology at the University of Cincinnati, received the honorary

degree of doctor of science at the annual commencement of Wittenberg College, at which he delivered the principal address.

At the University of Birmingham retirements from the faculty with the title of professor emeritus include Professor F. W. Burstall, formerly dean of the faculty of science, subsequently vice-principal, retired from the chair of mechanical engineering; Professor L. P. Gamgee, retired from the chair of surgery; Professor A. R. Ling, retired from the chair of brewing and the biochemistry of fermentation.

Professor Alfred Vivian, dean of the College of Agriculture of the Ohio State University, has retired from active service with the title of dean emeritus of agriculture.

Dr. OSCAR M. SCHLOSS, professor of pediatrics at Cornell University Medical College and director of the pediatric service at the Nursery and Child's Hospital, has been appointed pediatrician-in-chief of the New York Hospital. Dr. Schloss will be at the head of the Children's Hospital at the new medical center which opens on September 1. He will give all his time to the work of the hospital and to research and teaching conducted in association with the Cornell University Medical College.

Dr. Albert Carl Furstenberg, associate professor of otolaryngology, has been named successor to the late Dr. Roy Bishop Canfield as professor of otolaryngology in the Medical School of the University of Michigan.

The directorship of the department of neurology of the New York Post-Graduate Medical School, made vacant by the death of Dr. Michael Osnato, will be filled by Dr. James Louis Joughin, professor of clinical neurology. Pursuant to the terms of the agreement between Columbia University and the Post-Graduate Medical School, at a meeting of the trustees, Dr. Joughin was appointed as acting executive officer of the department of neurology at the Post-Graduate Medical School. Dr. Joughin has been on the staff since 1910.

Dr. John Reginald Bates has been appointed assistant professor in the department of chemistry of the University of Michigan for the year 1932–1933, to succeed Dr. David M. Lichty, who retired on June 30.

Dr. A. C. Menzies, formerly professor of physics at University College, Leicester, has been appointed professor of physics at University College, Southampton.

M. NICOLLE, director of the Pasteur Institute at Tunis, has been appointed to the chair of medicine at the Collège de France.

M. CATHALA has been named professor of chemistry at the University of Toulouse to succeed M. Sabatier.

Dr. H. J. Deuel, Jr., professor of biochemistry in the University of Southern California, has been awarded a research grant by the Committee on Scientific Research of the American Medical Association, for a study of the difference in carbohydrate metabolism between the sexes.

The department of chemistry of Brown University has awarded its annual prize, a year's membership in the American Chemical Society, to Charles F. Fisk, of Pawtucket, Rhode Island. This prize is given each year to the member of the junior class who has shown by his past record and general ability the greatest promise of future success in the field of chemistry.

Professor Arthur E. Wood and Professor George E. Uhlenbeck, of the University of Michigan, have been granted leave of absence for the first half of the academic year 1932–1933.

Professor Warren D. Smith and Mr. Louis Henderson, of the University of Oregon, will conduct a cruise along the Yukon River as a summer extension course, devoting especial attention to the geology, geography and botany of the regions visited. The cruise will last from July 19 to August 27.

VICTOR H. CAHALANE, director of the Cranbrook Institute of Science, Bloomfield Hills, Michigan, left on June 13 for the Chiricahua Mountains of southwestern Arizona, where he will spend the summer investigating the correlation of small mammals to vegetation in that area. Mrs. D. T. Ries, botanist of the institute, is engaged in making a botanical survey of Beaver Island, Michigan.

CHESTER W. WASHBURNE, consulting geologist of New York City, recently completed a lecture tour of the following universities: Princeton, Cincinnati, Louisiana, Texas, Stanford, California and Oregon. At the University of Oregon the honorary degree of doctor of science was conferred upon Mr. Washburne in recognition of his special contributions to the geology of Oregon, and for his general contributions to the geology of petroleum.

THE autumn meeting of the National Academy of Sciences will be held in Ann Arbor, Michigan, on November 14, 15 and 16.

THE British Medical Association will hold its centenary dinner at Albert Hall, London, July 28, during the annual meeting. Lord Dawson of Penn, president-elect of the association, will preside and the Prince of Wales will be the principal guest.

THE cornerstone of the new Public Health Service Building, now under construction in Washington, D. C., has been laid by Secretary of the Treasury Ogden Mills. According to a note in the Journal of the American Medical Association it is expected that the building, which will house all the administrative activities of the public health service, will be completed early in 1933. The structure will occupy an entire square on Constitution Avenue between Nineteenth and Twentieth Streets, N.W., facing the grounds of the Lincoln Memorial. It will be four stories high and will have cost, when completed, \$900,000, exclusive of the cost of the site. The exterior of the building is to be of white Georgia marble with limestone facing in the courts; the architecture is of a modified classical type, with window frames, spandrels and other exposed metal work of satin finish aluminum and the roof of slate colored tile, with slight variation of shade. A small auditorium will be available on the first floor for conferences, lectures and display of health exhibits, and a comprehensive public-health library will be installed in modern quarters in the center wing on the second floor.

The Journal of the American Medical Association reports that in order to carry out a program of research on plague, the establishment of a Plague Research Institute in Yulin, China, was recommended in a report in the Chinese Medical Journal of the investigation of an outbreak of plague late in 1931. Yulin was considered the best location for this institute, because it is practically in the center of the plague focus. It was recommended that the institute have its own power station, stables, water supply, bath, dwelling houses, laboratory and library. The recent outbreak of bubonic and pneumonic plague in Shansi and Shensi was unusually extensive and advanced into districts heretofore unaffected. sulted in a special investigation by a mission sent by Dr. J. Heng Liu, director of the national health administration. In Lin Hsien County alone, it was said, eighty-five villages were infected, with more than 1,000 deaths. One of the most severe outbreaks occurred near Muton Ui. The first report of Dr. Percy T. Watson, director of the hospital at Fenchow, Shansi, showed that 100 villages were infected.

The Geographical Journal notes that the seventy-fifth anniversary of the Geographical Society of Vienna was celebrated at an evening session, the program of which is described in the Mitteilungen of the society. The president, Professor Eugen Oberhummer, in an address reviewing its activities, dwelt upon its influence in promoting geographical education, in cooperation with the university, and through organized excursions. He also referred to the sup-

port given to expeditions, notably those of the Novara and of Weyprecht and Payer. To mark the occasion, the society had appointed four honorary members, one of whom was Sir Francis Younghusband. Professor H. Hassinger then spoke upon the progress and future of geographical studies in Austria. He emphasized the value of up-to-date topographical maps for all branches of the study, and described the present position: one twelfth of the country has been re-surveyed for the new 1:50,000 map, but the fraction of published sheets is naturally considerably less. The cadastral map is further in arrears, though the new survey of the Burgenland communities is in progress. As Austria possesses a survey on the scale of 1:28,800 dating from the second half of the eighteenth century, and on the scale 1:2,880 from the early nineteenth century, a new survey, for historical reasons alone, would be of great value. Professor Hassinger then described the work which was still to be done in investigating the geology, geomorphology and economic and human geography of Austria.

THE annual inspection of the experimental plots and laboratories at Rothamsted, according to Nature, was made the occasion of the official opening of a new block of buildings at the farm and the inauguration of an extensive electrical installation in the farm buildings. The Right Hon. Sir John Gilmore, Minister of Agriculture, declared the buildings open, in the presence of a large gathering of guests representing all branches of agriculture and the allied industries, and many of the visitors came from distant parts of the Empire. The new block of buildings will serve both the field experimental and demonstration sides of the farm. It contains an artificial manure store, working and office accommodation for the field experimental staff, and equipment to deal with the drying and preparation of the numerous samples taken in the course of the modern experiments. The purpose of the demonstration room is to facilitate the presentation of the field results which have direct practical interest in a way which is easily grasped by visitors. Diagrams and models take the place of tables of figures. Good types of machinery are illustrated, successful rations fed on the farm are on record, and exhibits of plant disease are set up as they become available. The electrical installation, designed by the General Electric Company, Ltd., will be of the most modern and complete kind, and will provide very valuable information as to the cost and general efficiency of motor-driven farm machinery in comparison with the older oil-driven type.

COMMONWEALTH FUND reports that after many years of consecutive effort, Dr. Frederick Tilney and his associates at the Neurological Institute of New

York seem to have reached the stage of definitive results in their study of multiple sclerosis. During the eleven years in which the fund has shared the cost of this research, existing knowledge of the disease and of its treatment has been greatly clarified. Dr. Tilney is now trying to develop a blood test by which it can be detected in an early phase. At their June meeting, the directors of the fund voted to reserve funds for three further annual appropriations of \$5,000 each to continue and presumably to complete this project. Two years ago the Child Research Council of Denver, associated with the University of Colorado Medical School, reshaped its program and employed Dr. Alfred H. Washburn as full-time director of research. Under Dr. Washburn's leadership, and with promised fund assistance, the council has entered upon the systematic study of growth and development from early infancy through adolescence. A research group has been assembled. The fund will provide \$32,-250 this year and next to meet the major part of the council's budget. A reservation of \$12,500, the fourth of five annual subsidies, was made available to the Committee on Effects of Radiation, headed by Dr. W. C. Curtis of the University of Missouri. This committee is conducting a group of studies, of biological, physiological and medical significance in the field of radiation. At Washington University, St. Louis, the study of trachoma in which the fund has been participating has been reorganized, and an appropriation of \$20,887.23 has been made to carry it through the coming year on a somewhat reduced scale.

EXCEPT for some curtailment of the work of the Institute for Child Guidance, the mental hygiene program of the Commonwealth Fund for the coming year, approved by the Board of Directors on June 14, shows no important change. A total net appropriation of \$227,358 provides for the operation of the institute with a professional staff of thirteen persons; for the consultant and research service of the Division on Community Clinics of the National Committee for Mental Hygiene; for the continuance of fellowships in psychiatry at the Institute and the University of Colorado, and in psychiatric social work at the New York School of Social Work and the Smith College School for Social Work (four each this year), the School of Applied Social Sciences at Western Reserve, and the School of Social Service Administration at the University of Chicago; for further aid to the study of psychiatric education by the National Committee for Mental Hygiene; and for limited psychiatric service at Union Theological Seminary. The Division of Psychiatric Education of the National Committee has taken steps this year toward the evaluation and strengthening of psychiatric education in American medical schools. Dr. Noble and Dr. Ebaugh have visited fifty schools. Fifteen schools have definitely asked advice and assistance in bettering their teaching of psychiatry; ten have provided for increased psychiatric training next year; two have planned to include psychiatric training in the education of pediatricians. Five of the best mental disease hospitals in the country are enlarging their facilities for intern training. The fund will continue in the coming year to pay half the cost of this division's work.

There is being printed in Nature each week a "Calendar of Geographical Exploration." In the issue of February 13 one of the entries reads: "Feb. 22, 1844. -Between the Mississippi and the Pacific. J. C. Frémont, one of the greatest of American explorers, reached the summit of the snow-covered Sierra Nevada mountains. He had started out in 1842 to explore the route beyond the Mississippi as far as South Pass in Wyoming. He ascended the second highest peak of the Wind River mountains which now bears his name and in the following year reached the Oregon settlements. Thence he turned south and east via the Klamath lakes to north-western Nevada and the Truckee and Carson rivers, covering much previously unexplored country. After crossing the Sierra Nevada he spent the rest of the winter on the Sacramento River, and returned round the southern end of the range to the Great Salt Lake, following the old Spanish trail from Santa Fé to California. Frémont had accompanied J. N. Nicollet, the French explorer, in his survey (1835-40) of the country between the upper waters of the Missouri and Mississippi rivers. In 1841, Frémont headed an expedition to the Des Moines River and thus completed Nicollet's map. His explorations opened up a great part of the country between the Mississippi valley and the Pacific Ocean. Frémont had a varied career, afterwards becoming soldier, politician and multi-millionaire."

DISCUSSION

DOODLE-BUGS AND LAW-MAKERS

In the language of the naturalist we might say that there has been much controversy among law-makers over the study of doodle-bugs. A doodle-bug is defined in the Century Dictionary as the "ant

lion." I happen to have lived in the section of the United States where the law-makers have waged the greatest battles over the question whether it is legal to study the doodle-bug (and have listened to such voices as the late free-silver-tongued orator) and