

gents of the Smithsonian Institution, at their annual meeting on January 17. Dr. Charles G. Abbot, the secretary, reports that while it has been necessary to curtail seriously research, explorations and publications, the year has been exceptionally fruitful. Very significant progress is believed to have been made in the study of the dependence of weather upon variations in the sun's heat and also much accurate data have resulted in the Division of Radiation and Organisms. Notable archeological progress was made by CWA projects in charge of members of the institution's staff. Otherwise field work was reduced to a minimum, owing to lack of funds.

Dr. Abbot announced one bequest, amounting to more than \$58,000, from William Herbert Rollins, of Boston, to establish a fund "for exploration beyond the boundary of knowledge." New specimens to the number of 340,780 were added to the collections of the National Museum. These included valuable anthropological materials from Africa, Honduras, Nicaragua, Australia, Alaska and various regions of the United States; large collections of mammals, birds and other forms of life from China and Siam; unusually large collections of insects, one alone numbering 69,000 specimens; and many important plant specimens from North and South America, Hawaii, Poland and French Indo-China.

Among the large number of rocks, gems, meteorites and fossils obtained, special mention was given by Dr. Abbot to the collection of 25,000 rocks assembled by the late Dr. Henry S. Washington, one of the world's leading petrologists, and to the Tellef Dahll collection of minerals from Norway. An important addition to

the Arts and Industries collection was the airplane in which Galbraith P. Rodgers completed the first flight across the United States in 1911. To the historical collections Mrs. Herbert Hoover added a costume worn by her at the White House.

The collections of the Freer Gallery of Art were increased during the year by specimens of Arabic bookbinding, Chinese bronzes, Chinese and Persian ceramics, Arabic glass, Chinese gold work, an Armenian manuscript, and Chinese, Byzantine, Indian and Persian paintings. The need was stressed for more adequate buildings for the National Zoological Park, with more than 2,000 valuable animals.

Work has continued during the year, he reported, on intensive study of the biological specimens obtained by the Johnson-Smithsonian Deep-Sea Expedition to the Puerto Rican Deep last year, and fifteen papers describing new forms have been published. The year marked the conclusion of the research of Dr. C. U. Clark in European archives for material concerning the early history and exploration of America. Some very valuable manuscripts were brought to light, which would be published if funds were available.

Chief Justice Charles Evans Hughes, chancellor of the Smithsonian Institution, presided at the annual meeting of the regents. The board is composed of the following members: Vice-president Garner; Senators Joseph T. Robinson and M. M. Logan; Representatives T. Alan Goldsborough and Charles L. Gifford, and Irwin B. Laughlin, Frederic A. Delano, John C. Merriam, R. Walton Moore, Robert W. Bingham and Augustus P. Loring.

SCIENTIFIC NOTES AND NEWS

THE council of the British Institution of Electrical Engineers have awarded the Faraday Medal to Dr. Frank B. Jewett, president of the Bell Telephone Laboratories and vice-president of the American Telephone and Telegraph Company.

THE two gold medals of the American Institute, established more than a century ago, have been awarded this year to the Rev. Julius A. Nieuwland, Notre Dame University, and to Dr. Carl D. Anderson, the California Institute of Technology, it has been announced. Presentation of the medals took place at the annual dinner of the American Institute at the Hotel Astor on February 7. The award to Father Nieuwland is for his discovery of a process for making synthetic rubber. Dr. Anderson is honored for his discovery of the positron, of the positive electron, a new fundamental unit of matter, having the mass as the electron but carrying a positive unit of electric charge.

THE 1935 gold medal of the Royal Astronomical

Society of London has been awarded to Professor E. A. Milne, Rouse Ball professor of mathematics at Oxford University, "for his work on radiative equilibrium and theory of stellar atmospheres." The gold medals for the previous two years were awarded to Professor V. M. Slipher, of the Lowell Observatory, in 1933, and Dr. Harlow Shapley, of the Harvard College Observatory, in 1934.

PROFESSOR HAROLD C. UREY, discoverer of heavy water and winner of the Nobel Prize in chemistry for 1934, was honored at a farewell dinner on the night of February 1 by the Chemists' Club in New York City. Professor Urey, accompanied by Mrs. Urey, sailed on February 2 on the *S. S. Gripsholm* for Sweden, where he will deliver the Nobel address before the Swedish Royal Academy of Science on February 14. About 125 metropolitan chemists, including the board of trustees of the Chemists' Club, attended the dinner. Professor Victor K. LaMer, of Columbia University, de-

livered the principal address, reviewing Professor Urey's work with the heavy isotope of hydrogen. Dr. George Murphy, of Columbia University, and Dr. F. G. Brickwedde, of the Cryogenic Laboratory of the U. S. Bureau of Standards, who assisted Professor Urey in his experimental work, were guests of honor and spoke briefly. Professor Marston T. Bogert, of Columbia University, was the toastmaster.

A TESTIMONIAL dinner was given to Dr. George Hoyt Whipple, professor of pathology and dean at the University of Rochester School of Medicine, on January 15 in recognition of his work on anemia. Dr. Whipple was one of the three recipients of the Nobel Prize in physiology and medicine in 1934.

DR. CLARENCE H. KENNEDY, professor of zoology and entomology at the Ohio State University, has been elected president of the Entomological Society of America.

OFFICERS of the Pathological Society of Philadelphia have been elected as follows: *President*, Dr. Morton McCutcheon; *Vice-president*, Dr. Esmond R. Long; *Secretary-Treasurer*, Dr. Herbert L. Ratcliffe.

SIX members of the faculty at the University of North Carolina have been promoted to the rank of Kenan professors. They are: Dr. Edgar W. Knight, professor of education; Dr. John F. Dashiell, head of the department of psychology; Dr. William M. Dey, head of the department of romance languages; Dr. Gustave A. Harrer, professor in the department of Latin; George Coffin Taylor, professor in the department of engineering, and Erich W. Zimmerman, professor in the department of economics. The appointments are made possible by the Kenan Professorship Endowment, a fund which was bequeathed to the university in 1916 by the will of the late Mary Lilly Kenan Bingham.

DR. LINUS WARD KLINE, director of the department of psychology, and Mrs. Frances Littleton Kline, associate professor of chemistry, have resigned from the faculty of Skidmore College. Dr. Carl E. Smith, assistant in the department of psychology at Harvard, has been appointed to succeed Dr. Kline in September.

THE following are changes in the staff of the school of chemistry and physics at the Pennsylvania State College: Dr. J. H. Simons, secretary of Section C of the American Association for the Advancement of Science, has been appointed associate professor of physical chemistry. Dr. F. L. Carnahan will replace W. B. McCluer in charge of the Petroleum Refining Laboratory supported by the Pennsylvania Grade Crude Oil Association as part of Dr. Fenske's petroleum refining research unit. Mr. McCluer has joined the technical staff of the Kendall Refining Company.

THE Buffalo Museum of Science has appointed Dr. A. E. Alexander as research associate in mineralogy and petrography. Dr. Alexander was formerly petrographer with the Spencer Lens Company.

PROFESSOR MARTIN MEYER, of Brooklyn College, has been appointed acting head of the department of chemistry, in place of Professor Frederick E. Breithut, who has been assigned to special work in connection with the construction of the proposed new Brooklyn College buildings.

DR. EDWIN MATTHEW, honorary physician at the Edinburgh Royal Infirmary and Leith Hospital, has been appointed to the chair of clinical medicine at the University of Edinburgh. He succeeds Professor Edwin Bramwell, who resigned on January 1.

PROFESSOR JUVENAL VALERIO RODRÍGUEZ has been appointed director of the National Museum of Costa Rica. Professor Rodríguez is a botanist who has devoted much time to study of the Costa Rican flora.

PROFESSOR AUSTIN M. PATTERSON, head of the department of chemistry and vice-president of Antioch College, has been appointed to the newly constituted international committee on organic chemical nomenclature of the International Union of Chemistry. The other members of the committee are: Mario Betti, Bologna; R. Marquis, Paris; Friedrich Richter, Berlin, and P. E. Verkade, Rotterdam.

PROFESSOR W. R. LONGLEY, of Yale University, was nominated as representative of the Mathematical Association of America on the National Research Council for a three-year term from July 1, 1935, in succession to Professor H. L. Rietz.

DR. HERBERT S. JENNINGS, Henry Walters professor of zoology and director of laboratories at the Johns Hopkins University, spoke on "What is the Role of Mutations in Evolution?" at the meeting of the American Philosophical Society on February 1 in Philadelphia.

DR. ABRAHAM FLEXNER, director of the Institute for Advanced Study, Princeton University, and Dr. Morgan Ward, also of Princeton University, will be guest speakers at The Mathematics Chairmen's Association at its annual open luncheon meeting on February 16, at the Hotel Astor in New York at 10 o'clock.

PROFESSOR WM. SEIFRIZ, of the University of Pennsylvania, lectured on January 26 before the Botanical Seminar of the Johns Hopkins University on "The Forests of the Western Caucasus and Mt. Elbruz."

At the 103rd annual general meeting of the Harveian Society of London, held on January 10, Dr. A. Hope Gosse delivered the presidential address on "The Diagnosis of Diseases of the Chest by Means of

X-rays." Dr. Gosse then inducted his successor, L. E. C. Norbury, in the presidential chair. The following officers were elected for the ensuing year: *Vice-presidents*, Dr. G. Macdonald Critchley, Professor Tom Hare, Dr. N. Gray Hill, Professor C. A. Pannett; *Hon. treasurer*, Cecil P. G. Wakeley; *Hon. secretaries*, Dr. A. D. Morris and John Hunter; *Council*, Dr. D. H. Brinton, Dr. F. S. Cooksey, Dr. A. Hope Gosse, Dr. Norman Hill, Dr. F. Hobday, Dr. T. C. Hunt, Dr. A. F. Morcom, Dr. A. D. Munro, W. E. Tanner, Dr. G. de Bec Turtle, Dr. R. R. Watts and A. Dickson-Wright.

DR. ELLIOTT C. CUTLER, Moseley professor of surgery at Harvard University Medical School, will give the second lecture in the annual Judd Lectureship in surgery on the evening of Tuesday, February 19, in the auditorium of the chemistry building at the University of Minnesota. The subject of Dr. Cutler's lecture will be "Total Thyroidectomy for Heart Disease."

A LECTURE series, made possible by the Kellogg Foundation, will be given at Rutgers University beginning on February 27. The first lecture will be given by Dr. William Beebe, curator and director of the department of tropical research of the New York Zoological Society. Subsequent lectures on March 27 and April 17 will be given, respectively, by Donald R. Richberg, executive director of the United States Emergency Council, and Dr. Robert A. Millikan, of the California Institute of Technology.

SIR FREDERICK GOWLAND HOPKINS, president of the Royal Society, delivered the Sir Henry Trueman Wood Memorial Lecture on "The Study of Human Nutrition; the Outlook To-day," at the Royal Society of Arts in London on February 5.

SIR WILLIAM BRAGG, Fullerian professor of chemistry at the Royal Institution and director of the Davy-Faraday research laboratory, lectured before the Royal Institution on January 18 on "The Theoretical Strength and Practical Weakness of Materials."

AN Association of Southern California Botanists was organized at a meeting held on November 3, 1934, at the University of California at Los Angeles, Professor G. J. Peirce, professor of botany at Stanford University, presiding. The group is to include teachers in high schools, junior colleges, colleges and universities, members of experiment stations and research laboratories, state and federal services, and individuals interested in botanical subjects. The activities of the organization will be arranged by a governing board. The board members chosen on November 3 are: Dr. O. L. Sponsler, professor of botany at the University of California at Los Angeles; Dr. Howard de Forest, head of the department of botany at the University of Southern California; Dr. E. M.

Harvey, plant physiologist, bureau of plant industry, U. S. Department of Agriculture; Dr. James V. Harvey, professor of botany, San Bernardino Junior College; Dr. Robert Emerson, assistant professor of biophysics, California Institute of Technology.

A MEETING of the New England section of the American Physical Society was held at the George Eastman laboratory of the Massachusetts Institute of Technology on February 2.

THE second annual convention of Maryland Teachers of Biology will be held on April 13, at the Maryland Academy of Sciences building, Baltimore, beginning at 10 o'clock, A. M. There will be a morning, an afternoon and an evening session, with a dinner at 6:15.

A NEW quarterly publication entitled *Farm Research* will be issued by the New York State Agricultural Experiment Station at Geneva. The chief aim of the new publication is to present the results of the research work of the station to the farmers of the state by means of brief popular articles prepared by members of the research staff.

THE Field Museum of Natural History has come into possession of an addition to its library of some 5,000 volumes, including much material of extreme rarity and value, left to it by the late Dr. Berthold Laufer, curator of the department of anthropology, who died in September, 1934. Simultaneously the American Friends of China, Chicago, as a memorial to Dr. Laufer, made a gift of \$500 to the museum to be used for expenses in connection with the cataloguing and arrangement of the Laufer Library in a manner that will increase its usefulness.

A GRANT of \$1,000 has been made by the National Research Council to the department of chemical engineering of the Massachusetts Institute of Technology for research on gel structures in cement. The work will be under the direction of Dr. L. S. Brown.

INCOME from the \$450,000 Bowman bequest will, for the time being, be used by the University of Wisconsin to establish a series of special cancer research fellowships. The board voted also to continue the special committee which it set up several months ago to decide in what ways the income from the fund could be put to the best use in cancer research work. Those on the committee are President Glenn Frank, Dean Charles R. Bardeen, of the medical school, and Dean E. B. Fred, of the graduate school. Establishment of the series of special cancer research fellowships is expected to permit the university to push forward its efforts to determine the causes and cure of cancer. The fellowships will bring to the university those who are specializing in that field of medical research, and

will add impetus to the work which is already being carried on by other institutions. Income from the Bowman fund, which was left to the university in the will of the late Jennie Bowman, Wisconsin Dells, who died early in 1934, will amount to about \$12,000 yearly at present, but is expected to become larger in future years.

THE American-Scandinavian Foundation will this year award a special fellowship of \$1,000 for research in electrical engineering in Sweden. This fellowship is named for Irving Langmuir, winner of the Nobel Prize in 1932, and the recipient will be expected to visit Dr. Langmuir and his associates at the General Electric Company before leaving for Sweden. We learn from the *Journal of Industrial and Engineering Chemistry* that in April the foundation will award to students of American birth a number of traveling fellowships for study in various fields of science in the Scandinavian countries during the academic year 1935-36. The fellowships will carry stipends of \$1,000 each. Graduate students and younger instructors and professors are especially invited to become candidates. Wherever possible the papers of all applicants from one institution should be considered first by a committee of professors in that institution and forwarded to the jury with an indication of preference. Application papers, including letters of recommendation and photograph, must be filed at the office of the foundation before March 15, 1935. The jury which makes the final selection is composed of college professors and technical experts and has as chairman Professor William Hovgaard, of the Massachusetts Institute of Technology.

THE Committee on Scientific Research of the American Medical Association has made a grant to Professor Edward S. West, of the University of Oregon Medical School, for studies on hydroxylated fatty acids.

UNDER the national fellowship plan of the chemistry department of the Johns Hopkins University four fellowships for graduate study in chemistry are open to qualified students in colleges and universities. The four are the American Can Company Fellowship for California, the Mary Carroll Garvan Fellowship for Connecticut, the G. A. Pfeiffer Fellowship for Iowa and the Chemical Foundation Fellowship for the states of Arizona, Idaho, Nevada, New Mexico, South Dakota and Wyoming. The purpose of the National Fellowship Plan is described as "the selection and training of chemists who are especially fitted to contribute to fundamental chemical research." The fellowships are held for a period of four years, contingent upon the satisfactory progress of the student. They give the recipients an opportunity for basic training and original research in chemistry and related subjects.

In addition to the essential curriculum, the students are given an opportunity for personal contact with leading European and American chemists, through a visiting lectureship which has been provided by Dr. A. R. L. Dohme, of Baltimore. The selection of the successful candidate is accomplished through state committees which evaluate the student's complete previous scholastic record and his personal qualities as rated by his instructors. Students in the sophomore, junior and senior year of the colleges and universities of the designated state are eligible for the fellowships, or students anywhere in the United States provided they hold their residence in one of the respective states. The successful candidates will be notified on or before April 15, and will begin their work at the Johns Hopkins University in October. Applications should be made to Professor Neil E. Gordon, the Johns Hopkins University, by February 15.

THE fifth annual series of free public health lectures presented jointly by the Cleveland Academy of Medicine and the Albert Fairchild Holden Foundation will begin on January 13 with an address by Dr. Gerald S. Shibley, associate professor of medicine, Western Reserve University School of Medicine, on "The Common Cold." Succeeding lectures will be given by Drs. Russell L. Haden, on "Anemias and Diet"; Marion A. Blankenhorn, "The Art and Science of Diagnosis," and John A. Toomey, "Stopping the Spread of Contagions."

A SERIES of twelve public lectures on medical subjects will be given by members of the teaching staff of Harvard University at the Medical School on successive Sunday afternoons. The series began on January 6 and will end on March 26. The lecturers and their subjects are: Dr. R. G. Hoskins, research associate in physiology, "Gland Factors in Personality"; Dr. H. B. Sprague, assistant in medicine, "What Causes Heart Disease?"; Dr. Alice Hamilton, assistant professor of industrial medicine, "Dangerous Trades"; Dr. J. O. Pinkston, teaching fellow in physiology, "The Body Temperature"; Dr. H. D. Chadwick, lecturer on public health administration, "Tuberculosis as a Children's Disease"; Dr. H. C. Trimble, assistant professor of biological chemistry, "Minerals in our Bodies and our Foods"; Dr. H. F. Root, assistant in medicine, "Diabetes"; Dr. D. B. Dill, assistant professor of biological chemistry, "External Influences on Physical Activity"; Dr. E. C. Cutler, Moseley professor of surgery, "Cancer"; Dr. G. H. Parker, professor of zoology and director of the Zoological Laboratory, "Twins and Social Biology"; Dr. C. B. Vaughan, assistant professor of clinical dentistry, "Facts regarding the Control of Diseases of the Gums"; Dr. F. C. Irving, professor of obstetrics, "Inheritance."