

The original sponsors for the laboratory which have again given financial support include the Buhl Foundation, the Carnegie Institute of Technology, the U. S. Steel Corporation and the General Electric Company. Contributions now have been made by twenty organizations that did not originally support the laboratory. The members of the fund-raising committee are also members of the technical committee which arranges the scientific program of the laboratory.

SEISMOLOGICAL OBSERVATORY AT WILLIAMS COLLEGE

A SEISMOGRAPH has recently been placed in operation at Williams College. The installation is a gift of Mr. and Mrs. John S. Palmer, 2nd, of Providence, R. I., in memory of their son, Julius Palmer, who, with two of his classmates and Professor Herdman F. Cleland, was lost in the sinking of the steamship *Mohawk* on January 24, 1935.

The station has been placed in the sub-basement of the geological museum at Lat. $42^{\circ} 42.85' N.$, Long. $73^{\circ} 12.66' W.$, elevation 219 meters, and rests on solid Cambrian dolomite a few inches below the floor level. The instruments consist of a Benioff vertical-component seismometer connected with long and short period

Miller galvanometers. Time control is obtained from a Seth Thomas regulator clock, registering minute and hour marks on the records and checked daily by U. S. Naval Observatory time signals. The separate rooms for seismometer, recording units, photographic work and radio time control are all constructed of hollow tile and effectively insulate the equipment from the remainder of the building. Very little interference by vibrations from street traffic, trains or disturbances originating in the building is evident on the records.

Dr. N. H. Heck, president of the Seismological Society of America and chief of the Section of Terrestrial Magnetism and Seismology of the U. S. Coast and Geodetic Survey, delivered a brief address at the dedication of the observatory on February 22, outlining the several contributions which may be expected from an installation of this type. Arrangements have been made to cooperate with Science Service and the U. S. Coast and Geodetic Survey in the study of teleseismic activity, while a study of local earthquakes will be made in cooperation with the other Benioff-equipped stations of New England located at Harvard, Weston and Burlington.

ELWYN L. PERRY

SCIENTIFIC NOTES AND NEWS

THE French decoration of Commander of the Legion of Honor was on March 16 conferred on Dr. Robert A. Millikan, of the California Institute of Technology, for his work "in the fields of science and international relations." M. Pascal Bonetti, delegate of the French Ministry of Public Instruction, traveled to the United States especially to bring the award. M. Jean Viala, French consul at Los Angeles, made the presentation.

DR. NIELS BOHR, Hitchcock lecturer at the University of California, was awarded the degree of LL.D. at the Charter Day exercises of the university on March 23. In conferring the degree, President Robert G. Sproul said: "Clear and penetrating thinker concerning the most abstruse problems of the physical world; herald of the concept which is the basis of modern study of the structure of matter; specialist endowed with the highest form of scientific imagination; blessed and blessing with kindness and true humanity."

It is announced by the senate of the University of Edinburgh that an honorary degree will be conferred by the university on Dr. L. H. Baekeland, honorary professor of chemical engineering at Columbia University.

A COMMITTEE representing the departments of philosophy of Amherst College, the University of Minne-

sota and Columbia University honored Dr. Frederick J. E. Woodbridge, Johnsonian professor of philosophy at Columbia University, on the anniversary of his seventieth birthday. The ceremony was held in the Harkness Pavilion of the Columbia-Presbyterian Medical Center, where he is convalescing after an operation. The committee presented to Dr. Woodbridge a volume of his own essays and addresses collected by his former students and associates and published in recognition of the anniversary.

THE New York University College of Engineering will dedicate a new building and power plant in honor of Dr. Collins P. Bliss, dean emeritus, on April 3 at 11:30 A. M. Dr. Bliss retired as administrative head of the college last July after serving for forty years as a member of the faculty. He was succeeded by Dean Thorndike Saville. Dr. W. R. Gregg, chief of the U. S. Weather Bureau; Arthur S. Tuttle, New York state director of the Federal Emergency Administration of Public Works and project engineer of the PWA Queens Midtown Tunnel, who is chairman of the Committee on Engineering of the New York University Council; Dr. Frank B. Jewett, president of the Bell Telephone Laboratories, and Dr. Harvey N. Davis, president of the Stevens Institute of Technology, are among the speakers who will participate in the ceremonies.

PRESENTATION of the Mendel Medal of Villanova College was made by the Very Rev. Edward V. Stanford, president of the college, at a faculty dinner on March 22, to Père Pierre Teilhard de Chardin, S.J., discoverer of the Peking man. M. de Chardin came to the United States to attend the International Symposium on Early Man at the Academy of Natural Sciences of Philadelphia.

DR. ROBERT BROOM, paleontologist of the Transvaal Museum, Pretoria, South Africa, will be the guest of honor at a dinner to be given on April 7 by the Friends of Barnard College. He will speak on "South Africa's Contribution to the Origin of Man." Dean Virginia C. Gildersleeve will preside, and Professor Henry E. Crampton, head of the department of zoology, will be among the speakers.

DR. HAROLD SAFT OLCOTT, research associate at the State University of Iowa, has been chosen by a committee of the American Chemical Society to receive the second Eli Lilly and Company award in biological chemistry, carrying \$1,000 and a bronze medal. Dr. Olcott will receive the prize at the opening session of the ninety-third meeting of the society at the University of North Carolina on April 12.

OFFICERS of the Academy of Science of St. Louis elected for the year 1937 are: The Rev. Jas. B. Macelwane, S.J., *president*; Dr. W. H. Roever, *first vice-president*; Professor W. F. Shay, *second vice-president*; Professor W. D. Shipton, *secretary*; Professor C. H. Philpott, *treasurer*; Dr. E. P. Meiners, *librarian*; Professor Paul E. Kretzmann, Dr. Alphonse McMahon, J. H. Porter and Dr. Harold A. Bulger, *councillors-at-large*.

DR. ALBERT JOHANNSEN, professor of geology at the University of Chicago, has retired after more than twenty-seven years in the service of the university. The department of geology is planning to issue in his honor a special volume of *The Journal of Geology*, made up of papers and photographs contributed, for the most part, by his former students.

DR. J. H. JAMES, head of the department of chemical engineering and a member of the original faculty of the Carnegie Institute of Technology, has been granted a year's leave of absence, following which he will retire from teaching.

DR. HERBERT EUGENE WALTER, professor of biology at Brown University and a member of the faculty since 1906, will retire in June to become professor emeritus after forty-one years of active service in the fields of genetics and comparative anatomy. He will be seventy years old on April 19.

PROFESSOR RALPH T. KING, of the department of economic zoology of the University of Minnesota, has

been appointed head of the department of zoology and of the Roosevelt Wild Life Forest Experiment Station of the New York State College of Forestry, Syracuse University. He will fill the vacancy caused by the death of Dr. Charles E. Johnson.

DR. ROBERT M. MOORE, assistant professor of pathology of the School of Medicine of the University of Missouri, has been appointed professor of pathology and director of clinical laboratory diagnosis in the School of Medicine of the University of Mississippi.

KNOWLES A. RYERSON, until recently chief of the Bureau of Plant Industry of the U. S. Department of Agriculture, has been appointed to succeed Dr. W. L. Howard as director of the branch of the College of Agriculture of the University of California at Davis. Dr. Howard, who has served as director since 1924, will continue as professor of pomology.

DR. WALTER T. HARRISON, senior surgeon in the National Institute of Health, has been placed in charge of the Division of Biological Control of the U. S. Public Health Service.

EDMUND SECREST, state forester, has been appointed director of the Ohio Agricultural Experiment Station at Wooster. He succeeds Dr. C. G. Williams, who will retire on July 1, after having been on the staff continuously for thirty-four years.

THE Committee on Scientific Research of the American Medical Association has made a grant to Dr. Samuel Soskin, director of metabolic and endocrine research at the Michael Reese Hospital, Chicago, to aid his work on the hormone assay of blood and urine in endocrine dysfunction.

DR. H. K. HAYES, chief of the Division of Agronomy and Plant Genetics, University of Minnesota, has returned after spending the past year directing research activities and graduate study at the University of Nanking.

PROFESSOR GEORGE MIKSCH SUTTON, artist, curator of birds at Cornell University, will spend the coming spring in the southwestern United States, centering his attention upon a state-wide survey of the bird-life of Oklahoma. He will leave Ithaca about April 10.

DR. J. NEYMAN, reader in statistics at University College, London, arrived in New York on April 1 for a stay of six weeks. He will deliver lectures and hold conferences at Princeton, the Graduate School of the U. S. Department of Agriculture, Columbia, Brown, Chicago, Michigan, Illinois, Iowa and Iowa State College. Dr. Neyman founded the Statistical Laboratory of the Central Agricultural Institute at Warsaw, and has done pioneer work in the interpretation of experiments in bacteriology, crop yield and social censuses.

DR. LEO LOEB, professor emeritus of pathology of the Washington University School of Medicine, St. Louis, gave on March 30 the fourth Arno B. Luckhardt lecture, under the auspices of the Delta chapter of Phi Beta Pi. His subject was "The Biological Basis of Individuality."

DR. W. F. G. SWANN, director of the Bartol Foundation of the Franklin Institute, will deliver at New York University on April 9 at 8:30 P. M. a James Arthur lecture, entitled "What is Time?" Dr. R. W. Gerard, of the University of Chicago, will give on April 15 a James Arthur lecture at the American Museum of Natural History at 8:15 P. M. He will speak on "Dynamic Neural Patterns."

DR. EARLE RAYMOND HEDRICK, professor of mathematics, vice-president and provost of the University of California at Los Angeles, gave the Charter-day address on the occasion of the sixty-ninth anniversary of the founding of the University of California on March 19.

DR. ARTHUR H. COMPTON, professor of physics at the University of Chicago, delivered on Easter Sunday under the auspices of the National Broadcasting Company a radio address entitled "We Must Shape Our New World."

DR. THEOPHILUS S. PAINTER, professor of zoology at the University of Texas, delivered an address on "Recent Developments in our Knowledge of Chromosome Structure" before the Brown University Chapter of Sigma Xi on March 19.

THE REV. V. C. STECHSCHULTE, S.J., director of the Xavier Seismological Observatory, on March 18 addressed the University of Cincinnati chapter of Sigma Xi on "Earthquakes and Seismographs."

THE Federation of American Societies of Experimental Biology, which includes the American Physiological Society, the American Society of Biological Chemists, the American Society for Pharmacology and Experimental Therapeutics and the American Society for Experimental Pathology, will hold its annual meeting under the presidency of Dr. Arno B. Luckhardt, of the University of Chicago, at Memphis, Tenn., from April 20 to 24.

THE two hundred and thirteenth regular meeting of the American Physical Society will be held in Washington, D. C., on Thursday, Friday and Saturday, April 29, 30 and May 1. The Thursday and Friday sessions will be held at the National Bureau of Standards and the Saturday sessions at the George Washington University. Other meetings for the current season are as follows: June 21 to 25, Denver, Colo., the Pacific Coast Section in affiliation with the American Association for the Advancement of Science; June 22

and 23, Madison, Wis.; November 26 and 27, Chicago, Ill.; Pacific Coast meeting, December, 1937; annual meeting, in affiliation with the American Association for the Advancement of Science, December 27, 1937, to January 1, 1938, Indianapolis, Ind.

THE eighth spring meeting of the Eastern Branch of the American Psychological Association will be held on Saturday, April 3, at Vassar College, Poughkeepsie, N. Y. Morning sessions will be devoted to conditioned responses, sensory processes, abnormal psychology and attitudes. At a luncheon the honorary president, Dr. Samuel W. Fernberger, of the University of Pennsylvania, will deliver an address on "A Psychological Cycle." The afternoon sessions will be divided into five groups—learning and memory, brain processes, comparative psychology, psychometrics and applied psychology. A tea will conclude the meeting.

THE annual meetings of the Pacific Coast Branches of the Paleontological Society, the Seismological Society of America and the Cordilleran Section of the Geological Society of America will be held at the University of California on April 9 and 10.

A MATHEMATICAL symposium on "The Calculus of Variations" will be held at the University of Notre Dame on Wednesday and Thursday, April 7 and 8. Leading authorities in the field have accepted invitations to present papers and to engage in the discussion. The last session will be devoted to applications of the calculus of variations in the fields of economics and physics. The program includes a general lecture on "What is Topology?" by Dr. Solomon Lefschetz, of Princeton University, president of the American Mathematical Society.

THE California Institute of Technology has received an anonymous gift of \$750,000 to be used in the Division of the Humanities.

THE will of Dr. Edward S. Robinson, professor of psychology at Yale University, leaves his estate in trust to his mother, Mrs. Carrie S. Robinson, of Wheeling, W. Va., for life, and after her death the trust passes to Yale University.

DR. WILLIAM JOHNSON SOLLAS, professor of geology and paleontology at the University of Oxford, who died last October at the age of eighty-seven years, left his estate of the gross value of £15,937, subject to life interests, "to found a fellowship at University College, Oxford, for the advancement of knowledge in some branch of geology."

THERE has been established at Colgate University the McGregory fellowship in chemistry, to be awarded to a member of the graduating class each year for graduate study in chemistry in the United States or abroad, the McGregory Lectureship, a fund to be used

to bring guest lecturers on chemical subjects to the university each year, and a fund for the purchase of books on chemistry for the departmental library. These funds represent the annual income from the estate of the late Joseph Frank McGregory, professor and head of the department of chemistry for forty-five years, and are being used in accordance with the terms of his will.

A DAVID ANDERSON-BERRY GOLD MEDAL, together with a sum of money amounting to about £100, will be awarded in July, 1938, by the Royal Society of Edinburgh to the person, who, in the opinion of the council, has recently produced the best work on the nature of x-rays in their therapeutical effect on human diseases. A similar award will be made every three years. Applications may be based on both published and unpublished work and should be accompanied by copies of relevant papers. They must be in the hands of the General Secretary of the Royal Society of Edinburgh by June 1, 1938.

THE United States Senate passed on March 23 the amendment to the 1934 Communications Act, making it possible for the Cruft Laboratory at Harvard University to resume experiments in automatic radio devices that offer high promise for use in police protective work and in other fields. The 1934 law made it necessary for the Cruft station to shut down for lack of a licensed operator. The Cruft Laboratory had been

employing an automatic device capable of preventing improper operation of the station, and informed the Federal Communications Commission that it could not afford to keep an operator on duty throughout continuous operation. The amendment authorizes the commission to make special regulations governing the use of automatic radio devices.

It is reported in *Nature* that at the annual general meeting on March 10 of the British Institute of Metals the president of the institute announced that, as a first step in a plan of cooperation with the Iron and Steel Institute, members of each institute can become members, associates and student members of the British application. Combined annual subscriptions and entrance fees have also been arranged. The present scheme of cooperation follows one recently completed by the two institutes with the American Institute of Mining and Metallurgical Engineers, whereby members, associates and student members of the British Institutes may, if under the age of thirty-three years, become junior foreign affiliates of the American Institute of Mining and Metallurgical Engineers on specially favorable terms, the arrangement being reciprocal in the case of members of the American society. The president also announced that the council had decided to issue an appeal for the creation of an endowment fund, to be invested for the support and extension of the work of the institute.

DISCUSSION

HURRICANE PALMS IN FLORIDA, INCLUDING A NEW GENUS SIMPSONIA

THE native flora of southern Florida is truly tropical, with ten indigenous genera of palms, nearly as many as the entire continent of Africa. Five of the native genera, *Roystonea*, *Inodes*, *Paurotis*, *Serenoa* and *Simpsonia*, are specially adapted to exposed situations, together with the coconut and other resistant types that have been introduced. Some of the native Florida palms are scarcely known in collections, but have special value for open plantings where wind resistance is desired, with beauty and variety. Even against the trade-winds, gardens or orchards often need protection, and districts with many resistant palms undoubtedly would suffer less from hurricanes or from the fires and frosts that visit denuded districts in the dry winter season. Making Florida a winter paradise may appear more important than planting for production, though for either purpose groves or shelter-belts of palms would be of value.

Palms are specialized for particular environments more than has been appreciated, in three rather defi-

nite ecological series: First, the sun palms, requiring full exposure; second, the palms that live as forest trees; and third, the undergrowth palms, adapted to permanent shade conditions. The primitive palms doubtless were plants of open country, like those now confined to seacoasts, sand dunes or rocky deserts. The tree palms develop in partial shade through their seedling and juvenile stages, but eventually over-top the forest and reach the sunlight. Palms from forests usually thrive in conservatories, while sun palms languish or die. Adaptive characters often are omitted from taxonomic descriptions but need to be known before new plants can be grown and appreciated.

The resistance of the coconut palm is featured in many accounts of hurricanes in low-lying coral islands in the Pacific Ocean. All the other trees may uproot and wash away, but coconut palms hold fast and the natives take refuge aloft. Many coconut palms withstood the hurricane that visited Palm Beach, Fla., on September 16, 1928, while most of the branching "hardwood" trees were completely wrecked. The native royal palms, *Roystonea floridana*, also showed a