

burgh, will be associate editors of *Chemical Reviews* for a term of three years. Dr. William A. Noyes, of the University of Illinois, was reelected editor of the scientific monographs for three years. The following associate editors were named: Dr. William Mansfield Clark, of the Johns Hopkins University; Dr. Louis F. Fieser, of Harvard University; Dr. Samuel C. Lind, of the University of Minnesota, president of the society; Dr. Linus Pauling, of the California Institute of Technology.

Dr. Harrison E. Howe, of Washington, D. C., continues as editor of "Technological Monographs" for

three years. Associate editors will include Dr. C. H. Mathewson, of Yale University; Dr. W. G. Whitman, of the Massachusetts Institute of Technology, and Dr. F. W. Willard, of the Nassau Smelting and Refining Company, New York City.

Dr. Lundell and Professor H. H. Willard, of the University of Michigan, will serve on the advisory board of the analytical edition of "Industrial and Engineering Chemistry."

Dr. Gustavus J. Esselen, of Boston, was reelected to the Council Policy Committee for three years beginning on January 1, 1940.

## SCIENTIFIC NOTES AND NEWS

DR. E. B. FORBES, director of the Institute of Animal Nutrition at the Pennsylvania State College, has been elected a foreign member of the Royal Swedish Academy of Agriculture.

DR. EDWARD W. BERRY, professor of paleontology and provost of the Johns Hopkins University, has been elected a corresponding member of the Academia Nacional de Ciencias, Cordoba, Argentina.

THE Sir Henry S. Wellcome Gold Medal for 1940 and a cash prize of \$500 were presented to Captain Lucius W. Johnson, medical corps, U. S. Navy, by the Association of Military Surgeons at the annual meeting held at Cleveland on October 10, 11 and 12. The award was offered for essays on "Medical and Sanitary Care of the Civilian Population Necessitated by Attacks from Hostile Aircraft." Captain Johnson's paper will be published in *The Military Surgeon*.

THE Paris Academy of Sciences has awarded the Montyon Prize to Dr. Constantin Levaditi, of the Institut Pasteur.

AN international prize on the subject of encephalitis has been awarded by the University of Berne to Dr. Beppino Disertori, the Italian neurologist.

THE American Society for the Control of Cancer and its Women's Field Army have cited the following American women "for their significant contributions to cancer control": Dr. Maynie R. Curtis and Dr. Wilhelmina F. Dunning, of the Crocker Laboratory for Cancer Research, Columbia University; Dr. Elsie L'Esperance, founder of the Strang Clinic of the New York Infirmary for Women and Children; Elizabeth Fekete, Jackson Memorial Laboratory, Bar Harbor; Dr. Clara J. Lynch, Rockefeller Institute for Medical Research; Dr. Catherine Marfarlane, of the Women's Medical College of Philadelphia; Mrs. Robert G. Mead, New York City Cancer Committee; Dr. Anna Palmer, founder of the Cured-of-Cancer

Club; Dr. Edith Quimby, Memorial Hospital, New York City; Dr. Mildred W. S. Schram, International Cancer Research Foundation, Philadelphia, and Dr. Maude Slye, of the University of Chicago.

At the recent meeting in Cleveland of the American Congress of Physical Therapy, annual awards of merit were presented to Dr. Abraham R. Hollender, of Miami Beach, Fla.; Dr. George W. Crile, emeritus professor of clinical surgery of the Medical School of Western Reserve University; Dr. Disraeli W. Kobak, of Chicago; Dr. Malcolm T. MacEachern, of DePaul University; Dr. William F. Petersen, professor of pathology at the University of Illinois; Dr. Horatio B. Williams, Dalton professor of physiology and director of the department at Columbia University, and Dr. Charles F. Kettering, Dayton, Ohio, general manager of the research laboratories of the General Motors Corporation and founder of the Kettering Department of Medical Research at the Miami Valley Hospital, Dayton.

GUY EMERSON, of New York City, has been elected president of the National Audubon Society (formerly the National Association of Audubon Societies). Dr. Robert Cushman Murphy, who had been president for three preceding terms and a director for twenty years, was elected honorary president.

PROFESSOR ARTHUR W. HIXSON, professor of chemical engineering at Columbia University in charge of courses in process development and plant design, has been appointed head of the department of chemical engineering.

DR. F. F. LININGER, head of the department of agricultural economics of the Pennsylvania State College and Agricultural Experiment Station, was recently appointed vice-dean of the School of Agriculture and vice-director of the station. Dr. M. A. Farrell, associate professor of bacteriology, has been named professor of bacteriology and head of the new department of bacteriology.

DR. W. S. GILLAM, assistant professor at Michigan State College, has been appointed assistant professor in agricultural chemistry at Purdue University to fill the vacancy arising through the resignation of Dr. Dale H. Sieling, who was recently appointed research professor in the department of chemistry of the Massachusetts State College.

THE following changes at dental schools have been announced recently: At the University of Nebraska, Dr. Bert L. Hooper has replaced Dr. George A. Grubb. At the University of Illinois, Dr. F. B. Noyes has been succeeded by Dr. Howard M. Marjerison, previously dean of Tufts Dental College. The vacancy in the deanship at Tufts was filled by the appointment of Dr. Basil G. Bibby, of the School of Medicine and Dentistry of the University of Rochester. At the Ohio State University, Dr. H. M. Semans, one of the oldest dental deans from the point of period of service, has been succeeded by Dr. Wendell D. Postle. Dr. H. V. Cottrell, for many years secretary of the Dental College of the Ohio State University, has been succeeded by Dr. Paul C. Kitchin. Dr. Balint Orban, formerly of Vienna and recently with the Northwestern University Dental School, has been appointed a member of the staff of the Foundation for Dental Research of the Chicago College of Dental Surgery. Dr. Josef Weinmann, formerly of Columbia University, has also joined the staff.

PROFESSOR HUDSON HOAGLAND, director of the physiological laboratories of Clark University, has leave of absence for the year 1940-41, which he will spend as research associate in physiology at the Harvard Medical School.

DR. ELIOT C. WILLIAMS, JR., during the past year a university fellow at Northwestern University, has been appointed assistant to the director of the Chicago Academy of Sciences.

DR. GEORGE M. SUTTON, curator of birds at Cornell University, and Dr. O. S. Pettingill, instructor in zoology at Carleton College, plan to make an ornithological expedition into Mexico during the birds' breeding season from February to June, 1941. Headquarters will be at Rancho Rinconada, in southwestern Tamaulipas. It is also planned to work at San Luis Potosi, Vera Cruz and Hidalgo.

PROFESSOR ENRICO FERMI will speak before members of the New York branch of the American Association of Scientific Workers and their guests at the Men's Faculty Club of Columbia University at 8:15 P.M. on November 1. His subject will be "Latest Research on Cosmic Rays." A dinner for members will be held at 6:30 P.M. at the Faculty Club.

DR. W. M. STANLEY, of the Rockefeller Institute for

Medical Research, Princeton, N. J., gave during October a series of three lectures on viruses on the Hitchcock Foundation of the University of California at Berkeley.

DR. TENNEY L. DAVIS, professor of organic chemistry at the Massachusetts Institute of Technology, addressed the October meeting of the American Academy of Arts and Sciences on "The Identity of Chinese and European Alchemical Theory."

At the meeting of the Society of Medical History of Chicago on November 4, illustrated addresses will be given by Dr. Abraham Levinson on "Medical Medallions," by Dr. James E. Lebensohn on "Wolaston and Hemianopsia," and by Dr. Jerome Head on "Bretonneau, Trousseau and Velpeau."

DR. CHRISTIAN A. RUCKMICK, secretary and general sales manager of the C. H. Stoelting Company, Chicago, gave an address on October 10 before the Industrial Management Society in Chicago, entitled "Scientific Advancement of Unskilled Employees to Skilled Occupations by Application of Practical Tests."

PROFESSOR L. C. DUNN, executive officer of the department of zoology at Columbia University, writes that it has been visited by thieves and the following optical equipment has been stolen: Spencer research microscope #112538, Cat. type 7-H with binocular body, 16 m/m objective #276803, 4 m/m objective #287632; 2 m/m oil immersion lens, Spencer #17763; binocular Spencer microscope #112846; binocular Spencer microscope #112535; monocular microscope Spencer #115601, and monocular microscope Spencer #115185. The department would be grateful for a report from any one who discovers any of these numbers in other laboratories.

THE fortieth expedition of the department of tropical research of the New York Zoological Society under the directorship of Dr. William Beebe has returned from two months' field work at the society's laboratory at New Nonsuch, Bermuda. Among the staff were Miss Jocelyn Crane, Greame-Kelley and Bronson Hartley. Satisfactory progress was made in continued studies of the life histories of fish and crabs.

WITH the purpose of encouraging the publication of books and monographs of scientific importance by members of the Harvard Medical School and the Harvard School of Public Health, and of adding to the distinction both of the two schools and of the Harvard University Press by publishing under their auspices a noteworthy series of monographs in medicine and public health, a sum of money has been provided, to be used for an experimental period of three years, as a revolving publication fund. An editorial committee consisting of Dr. A. Baird Hastings, chairman, Dr.

Walter B. Cannon, Dr. James Howard Means, Dr. S. Burt Wolbach and Dr. Katherine R. Drinker, executive secretary, has been appointed to administer this fund and to select books and monographs to be included in a series entitled "Harvard University Monographs in Medicine and Public Health."

THE American Dental Association this year appropriated \$23,000 for investigation and research on dental problems. This is an increase of \$6,000 over last year. Of this increase, \$5,000 will go toward the establishment of a fellowship in dental research at the National Institute of Health.

THE Hooker Scientific Library, conducted as a non-profit institution by Central College, has inaugurated a new service for chemists who lack convenient access to chemical reference works. For a nominal fee the library will send data on any question which can be answered by reference to a chemical manual, dictionary or index. Inquiries taking too much time for the low fixed rate will be answered at a proportionately higher cost, for which estimates can be rendered in advance. Full details will be sent in response to requests addressed to Hooker Scientific Library, Central College, Fayette, Mo.

SIXTY professional gardeners are registered this term in the two-year Science Course offered by the New York Botanical Garden. The first session was held on October 7 and the classes will continue through December 23. These are the largest classes in the history of this course, which was inaugurated in 1932. Dr. B. O. Dodge, plant pathologist, lectures on Plant Pests and Diseases, and Dr. F. W. Kavanagh on Soils and Fertilizers. In addition to the student gardeners at the Botanical Garden, the class includes employees of the New York City Park Department, professional gardeners who were registered last year in the practical course, and several employees of florists and nurserymen, as well as gardeners on estates in and around New York. Some of the students come more than sixty miles to the class each week. In the two-year course in practical gardening which meets every Thursday evening for a study of Cultivation of Trees and Shrubs under P. J. van Melle, of Poughkeepsie, there are about ninety students in attendance. They include a number of men and women aiming to develop their home grounds, professional gardeners desiring further instruction in their field, and teachers, lawyers, lecturers, executives and other business people.

## DISCUSSION

### SOME ADDITIONAL OBSERVATIONS ON SLUMPING AND GULLY FORMATION

SINCE slipping is important to the engineer, landscape architect and soil conservationist and since it may occur under somewhat different circumstances, we are recording some additional observations of this phenomenon which have occurred under different conditions than those previously recorded for the hillside in question.<sup>1</sup> The present observations are significant because a rain gauge located about 75 feet away from the slip makes it possible to obtain exact data relative to the rainfall conditions where slipping has occurred and because the conditions of cover have changed since slipping was last observed on the hillside.

During the night of October 6, 1936, a mass of 170 cubic feet of material slumped 3 feet down the west slope of what is known as Flag Pole Hill on the campus of Muskingum College in New Concord, Ohio. For a period of 12 hours, beginning in the afternoon of October 6, 1939, a rain gauge about one mile south of New Concord indicated that 4½ inches of rain had fallen, most of it—perhaps 3 inches—fell in the space of one hour. Considerable gullying occurred on the hillside during this period.

The slope was immediately graded and sown to grass and pine trees were planted below the slipped area up to the top of the clay upon which the slipping had occurred. Until recently no further slumping or gullying was noted.

Observation of this hill was again made on April 22, 1940, after a week of almost daily rainfall, during which time the rain gauge on top of the hill registered a total of 4.7 inches. At this time a roughly triangular-shaped area had slipped down the hill from 2 to 3 feet. The slip took place along three planes, one extending in a northwest-southeast direction for a distance of 30 feet, the southeast or uphill edge of which joined another slip plane extending for 10 feet in a north-south direction. This plane was joined at the south end by a plane extending southwest for a distance of 25 feet. From the south end of the north and south trending plane a smaller plane having a displacement of a few inches extended southward for a distance of 10 feet.

The material which had slipped down hill formed a roughly triangular terrace-like area 5 feet high and 30 feet across, tapering to the southeast and southwest for a distance of 20 feet. Several of the small pine trees, 3 or 4 feet in height, had been tilted and one had been pushed over and partly covered by the slipped material.

Several small terrace-like areas whose fronts were

<sup>1</sup> Robert H. Mitchell, *SCIENCE*, 84: 2184, 420, November 6, 1936.