

of insanity, a puckered type which will be helped by sodium rhodanate and a mushy type which will be helped by an anesthetic such as sodium amytal. These two types

exist and can be helped in this way. Manic depressives and epileptics are of the puckered type; dementia praecox catatonics are of the mushy type."

SCIENTIFIC NOTES AND NEWS

DR. ALBERT EINSTEIN, who sails for Europe on March 15, will be the guest of honor at a dinner, given by friends of the Hebrew University in Jerusalem, at the Hotel Commodore, New York City. It is expected that a thousand men of science and letters will attend. It is planned to present to Dr. Einstein at the dinner a fund for the Hebrew University and for other organizations in which he is interested. The fund, it is hoped, will reach \$100,000.

THE Edison Medal for 1932, awarded to Bancroft Gherardi, vice-president and chief engineer of the American Telephone and Telegraph Company, in recognition of his "contributions to the art of telephone engineering and the development of electrical communication," was presented to him by the president, H. P. Charlesworth, at the recent annual convention in New York City of the American Institute of Electrical Engineers. The principal speakers were Dr. Gano Dunn, of New York City, and Dr. Dugald C. Jackson, head of the electrical department of engineering of the Massachusetts Institute of Technology and chairman of the Edison Medal committee.

THE presentation of the Alfred Noble Prize to Frank M. Starr, of the General Electric Company, was made on January 23 at the opening meeting of the American Society of Civil Engineers. The prize, an award of \$500, was presented by Arthur S. Tuttle, vice-president of the American Society of Civil Engineers, which is trustee for the memorial fund created in 1929 by friends of Mr. Noble. The award was made for a published paper, "Equivalent Circuits—II."

DR. WILLIAM BOWIE, of the U. S. Coast and Geodetic Survey, has been awarded, by the Royal Academy of Belgium, the Charles Lagrange Prize in recognition of his having effected the complete unification of the triangulation systems of Canada, the United States and Mexico. North America is the only continent having a single triangulation system.

MERLE RANDALL, professor of chemistry at the University of California, has been awarded a medal of merit by Charles University of Prague, in recognition of his contributions in research and the training of young men for careers in chemistry.

DR. GLADYS A. REICHARD, Barnard College, Columbia University, has been awarded the A. Cressy Morrison Prize by the New York Academy of Science for her monograph entitled "Melanesian Design: a Study of Style in Wood and Tortoise Shell Carving."

DR. EMIL ABDERHALDEN, professor of physiology at Halle, has been elected an honorary member of the Italian Society for Experimental Biology.

F. E. MATTHES, of the United States Geological Survey, has been elected president for 1933 of the Association of American Geographers, and S. S. Visser, of Indiana University, vice-president. The secretary, F. E. Williams, of the University of Pennsylvania, and the treasurer, R. S. Platt, of the University of Chicago, were reelected.

PROFESSOR GEORGE C. HUMPHREY, of the University of Wisconsin College of Agriculture, was recently elected president of the American Society of Animal Production.

At the annual general meeting in London of the Royal Meteorological Society on January 18, Professor S. Chapman was reelected president. The Buchan Prize, awarded biennially for the most important original papers contributed to the society during the previous five years, was presented to D. Brunt.

DR. HARRY WOODBURN CHASE, president of the University of Illinois, previously professor of psychology and president of the University of North Carolina, has been elected chancellor of New York University to succeed Dr. Elmer Ellsworth Brown.

DR. WALTER H. EVANS, chief of the Division of Insular Stations of the Office of Experiment Stations, U. S. Department of Agriculture, reached the compulsory retirement age on February 1. During his forty-one years' service in the department, first as botanist and botanical editor of the *Experiment Station Record*, then as chief of the Division of Insular Stations of the Office of Experiment Stations, and for a time as acting chief of the office, Dr. Evans was responsible for establishing and developing agricultural experiment stations in Alaska, Hawaii, Puerto Rico, Guam and the Virgin Islands, and in promoting research, particularly in plant physiology and pathology, by the state experiment stations.

DR. CHARLES WEISS, formerly associate professor of applied bacteriology and immunology at Washington University School of Medicine, has been appointed director of the Clinical and Research Laboratories of the Mount Zion Hospital, San Francisco, California. He has also been appointed associate professor of research medicine in the Hooper Foundation of the University of California, and consulting immunologist to the University of California Hospital.

PROFESSOR W. S. NELMS, of the department of physics of Emory University, has been granted leave of absence for the coming spring quarter. He will spend the time at the University of Cambridge and the University of Berlin.

OTTO DEGENER, who is writing a comprehensive illustrated Flora of the Hawaiian Islands, has shipped a large collection of herbarium specimens to New York preparatory to its critical study at the New York Botanical Garden. This collection is the result of extensive botanizing on all the major islands of the Hawaiian Archipelago during the last ten years.

DR. J. DUFRENOY, director of the Station for Plant Pathology, near Bordeaux, is spending six months at Riverside, California, in the laboratory of plant physiology at the Citrus Experiment Station, investigating the cytological conditions associated with mottle leaf of citrus and other trees. He has been granted a fellowship by the Rockefeller Foundation for this investigation.

DR. OTTO HAHN, director of the Kaiser Wilhelm Institute of Chemistry at Dahlem and lecturer in chemistry (radioactivity) at the University of Berlin, will reach Ithaca in February, where he is this year non-resident Baker lecturer in chemistry. He will lecture for three months on his work on the chemistry of radium.

PROFESSOR J. J. R. MACLEOD, professor of physiology at the University of Aberdeen, and previously at the University of Toronto, is visiting professor at the Johns Hopkins University, where he is giving the Herter Lectures.

DR. ERNEST W. BROWN, professor of mathematics at Yale University, gave the second Arthur Lecture at the Smithsonian Institution on January 25. His subject was "Gravitation in the Solar System."

DR. HARVEY CUSHING, who last year retired as Moseley professor of surgery, Harvard University Medical School, delivered the fourth Harvey Lecture at the New York Academy of Medicine on January 19, on "Dyspituitarism: Twenty Years Later."

DR. IRVING LANGMUIR, of the General Electric Company, lectured on the adsorption theory at the Charlottenburg Institute of Technology on January 27. He was introduced by Professor Walther Nernst, with whom he was formerly a student.

CAPTAIN SIR HUBERT WILKINS, explorer of the Arctic and Antarctic, will lecture in the James Simpson Theater of the Field Museum, Chicago, at 3 p. m. on March 4. His subject will be "What I Have Discovered in the Arctic and Antarctic." He will relate his experiences on expeditions made by dog team, by

airplane and by submarine. The lecture will be illustrated with motion pictures.

DR. F. G. DONNAN, professor of inorganic and physical chemistry at University College, London, gave the Ostwald Memorial Lecture of the British Chemical Society at the University of Liverpool on January 27.

PROFESSOR S. L. BOOTHROYD, of Cornell University, lectured at Lehigh University on January 11 under the auspices of Lehigh Chapter of Sigma Xi on "Meteors or Shooting Stars," describing some aspects of the work of the Harvard-Cornell Meteor Expedition to Flagstaff, Arizona.

THE Sigma Xi Club of the University of Florida held its annual banquet on January 18. Mr. H. H. Hume, director of the University Experiment Station, spoke on "The University of Florida in its Relation to the State as a Research Institution." He outlined many of the problems which are awaiting study and emphasized the university as constituting a disinterested agency for investigating these problems.

THE Sigma Xi Club of Montana State College held a public meeting on January 26, at which Dr. O. E. Sheppard, head of the department of chemistry, delivered a lecture concerning "Recent Developments in Chemistry," with a detailed discussion on the physics and chemistry of color production. This lecture was one of a series of three public lectures on "The Frontiers of Science" being given under the auspices of the club.

DR. D. B. JUDD, of the section of colorimetry of the Bureau of Standards, delivered three lectures on color vision at Bryn Mawr College on January 16, 17 and 18. A fourth meeting was devoted to a demonstration which included the blue arc phenomenon, the Purkinje after-image and examples of color transformation.

DR. JOHN H. PARKER, professor of plant breeding at the Kansas State College, Manhattan, gave the fourth series of annual lectures under the Frank Azor Spragg Memorial Fund, from January 24 to 27, at the Michigan State College. This memorial is in honor of Professor F. A. Spragg, who was in charge of plant breeding work at the Michigan Agricultural Experiment Station from 1906 to 1924.

DR. GEORGE SARTON, current Hitchcock professor at the University of California, was speaker on January 15 at the first meeting of the Singer History of Science Club, organized as a result of Dr. Charles Singer's recent visit of a year to the university and composed of faculty members and students interested in the history of science and its promotion as a field of scholarship. Dr. Sarton's address was on Simon

Stevin, sixteenth and seventeenth century Dutch mathematician, the first advocate of the decimal system for common use.

MEETINGS of the American Chemical Society are planned as follows: Washington, D. C., week of March 26, 1933; Chicago, Ill., week of September 11, 1933; St. Petersburg, Fla., March, 1934; Cleveland, Ohio, autumn of 1934; Eleventh Colloid Symposium, Madison, Wis., June 15 to 17, 1933; Fifth National Organic Chemistry Symposium, Cornell University, Ithaca, N. Y., December 28 to 30, 1933.

THE American Society of Mammalogists will hold its fifteenth annual meeting at the new Biological Institute, Harvard University, from May 10 to 13. Titles of papers must be filed before April 28 with the corresponding secretary, Dr. Robert T. Hatt, the American Museum of Natural History, New York.

A UNION OF GERMAN BIOLOGISTS has recently been formed, with Professor Lehmann, of Tübingen, as president.

MRS. FRANCES KINSLEY HUTCHINSON has given an estate of seventy-three acres at Lake Geneva, including a house on the property, with an endowment, to the University of Chicago for botanical work.

COLUMBIA UNIVERSITY and the Metropolitan Museum of Art will ultimately share in a trust fund of \$150,000, bequeathed by the late William Fitz Randolph, of Glenbrook, Connecticut. The gross estate is valued at \$601,073. After smaller bequests are paid, the two institutions are named as the residuary legatees.

THE new Royal Society Mond Laboratory of the University of Cambridge was opened on February 3 by Stanley Baldwin, as chancellor, who accepted the building for the university. The principal speakers were Sir Ernest Rutherford and Sir Robert Mond. The laboratory is an adjunct of the Cavendish Laboratory and will be directed by Professor Peter Kapitza, of Russia. It is reported that it will provide facilities for research into the magnetic properties of matter in the highest fields yet attained and for the study of properties of matter at lowest possible temperatures. Last year, when the need for greater accommodations became urgent, the council of the Royal Society offered the university a fund to build and equip the new laboratory. At the same time, through reorganization, accommodation of the scientific departments was made possible by a Rockefeller gift, which freed a site near the Cavendish Laboratory for the new building.

WITH appropriate exercises on the afternoon of January 14, the new museum building of the San Diego Society of Natural History, Balboa Park, San Diego, California, was opened to the public. The

same occasion marked the fifty-eighth annual meeting of the society, which is the oldest scientific organization in southern California. The building is of concrete construction, with a frontage 220 feet long, and a wing 100 feet deep, and forms the first unit of what may eventually be a much larger museum plant. Provision has been made in the present structure for exhibition halls on three floors, a lecture hall, children's museum, administrative offices, workrooms and laboratories for all departments. The building represents an investment of about \$175,000, which was raised by public contributions, largest of which was the gift of \$125,000 by the late Miss Ellen B. Scripps, of La Jolla. William Templeton Johnson, of San Diego, was the architect. For the past sixteen years the museum collections have been housed in temporary exposition structures in Balboa Park.

PURDUE UNIVERSITY announces the completion, during the summer of 1932, of new laboratories for plant physiology and plant pathology in the School of Science. These laboratories are built around greenhouse units. The physiology laboratories are three in number, including elementary, advanced and private research laboratories. The pathology laboratory is in addition to those already in use in plant pathology and provides space for elementary study with rooms adjoining for research. Basements extend under most of the construction and will be equipped for controlled light, temperature and humidity research. New advanced courses will be offered both in plant pathology and plant physiology.

WALTER MERRITT SEWARD, who died on December 20, 1932, at the age of seventy-two years, formerly practiced medicine in New York, but for the past twenty years had been looking after a country practice in Brunswick County, Virginia, mostly on a charity basis. He had also been managing his timber lands in that county. A correspondent writes: "At the time Dr. Seward attended the Medical School of the University of Virginia, class of 1886, that school lacked proper clinical and hospital equipment. The lack of clinical and hospital equipment has since been supplied to the School of Medicine. But for some years, indeed since its inception in 1910, the School of Forestry at the University of Virginia has lacked an experimental and practise forest, which in a general way corresponds to clinical and hospital equipment in medical instruction. Dr. Seward's will leaves his forest of more than three thousand acres and more than two hundred thousand dollars in securities to the University of Virginia for the benefit of the School of Forestry. His bequest supplies the needed experimental and practise forest and greatly strengthens and enlarges the usefulness of the School of Forestry."

THE sixth session of the Allegany School of Natural History, in Allegany State Park, New York, will be held from July 5 to August 24, under the auspices of the Buffalo Museum of Science. Founded under favorable natural conditions in suitable location and surroundings, the Allegany School of Natural History offers courses for studies in botany, zoology and geology with emphasis on natural history. An instructor is provided for each class a full day each week and for a conference hour later in the week.

In addition each student works out of class independently or with occasional direction for nearly two days. The courses offered are field zoology and field botany, the natural history of birds and nature study. The small classes and the plan of the schedule make it possible for the faculty to continue actively in research. There is an open-air museum, a nature trail, an Indian garden, a water garden and a fernery. Elsewhere in the park are hiking trails, swimming pools, bridle paths, baseball diamonds, tennis courts and a 120-acre lake with boating.

DISCUSSION

THE NAMING OF THE SUBDIVISIONS OF THE WISCONSIN GLACIAL AGE

At the 1930 meeting of the Geological Society of America, held in Toronto, the writer presented a paper on "The Peorian Loess and the Classification of the Glacial Drift-Sheets of the Mississippi Valley," which was subsequently printed in the *Journal of Geology*.¹ In this paper he called attention to the fact that the evidence that the Peorian (Iowan) loess had been weathered before the Early Wisconsin drift had been deposited was not valid; that the only evidence of an interval was that of rapid deposition of loess. Therefore, two important conclusions were drawn; (1) the Peorian interval was not of interglacial magnitude but was intraglacial; and (2) the Iowan ice invasion was the first of the Wisconsin invasions.

Additional confirmatory evidence was found during the 1931 field season, and another paper was presented at the 1931 meeting of the Geological Society of America, held in Tulsa. This paper is to be published soon. In it the additional confirmatory evidence was presented, the importance of the "profile of weathering" as a criterion of interglacial intervals was emphasized, the post-Illinoian loesses were dated and their relationships, sources and conditions of deposition were discussed and a picture of the development and retreats and readvances of the major Wisconsin ice-fields was presented. New names for three of the subdivisions of the Wisconsin were proposed to replace those presented at the Toronto meeting and published in the *Journal of Geology*, which had been chosen with respect to the fields of ice accumulation rather than areas where the stratigraphic units may be studied, and which have since been found to be preempted. New names are, therefore, necessary.

The names which were withdrawn were Manitoban (Iowan), Quebecan (early and middle Wisconsin) and Hudsonian (late Wisconsin). The old name Iowan was retained, and the new names proposed were Tazewell, Cary and Mankato for the subdivisions shown in the following table. The name Tazewell is taken from

Tazewell County, Illinois, where the Early Wisconsin deposits are well shown in their relations to the underlying Peorian loess. The name Cary is taken from a town in McHenry County, northeastern Illinois, where the Middle Wisconsin deposits are well displayed. The name Mankato is taken from Mankato, Minnesota, where the Late Wisconsin deposits are excellently displayed.

Age	Subdivisions
Wisconsin (Fourth)glacial)	{ Mankato (Late Wisconsin) Cary (Middle Wisconsin) Tazewell (Early Wisconsin) Iowan
Sangamon (Third interglacial)	
Illinoian (Third glacial)	

M. M. LEIGHTON

ILLINOIS STATE GEOLOGICAL SURVEY

"MESCAL PITS"—A MISNOMER

SCIENTIFIC nomenclature has always been cumbered with a large number of inappropriate and inadequate terms, some due to a creeping in of temporary designations which were never intended to survive the laboratory stage and others due to a lack of understanding during early investigations in new fields. One of the newer scenes of effort in the field of Southwestern archeology has lately come to notice through the work of representatives of the U. S. National Museum, the Museum of the University of Pennsylvania and the Laboratory of Anthropology. The area in reference consists of the extreme southeastern part of New Mexico and the adjoining portion of southwestern Texas. Among the prominent features which distinguish one of the prehistoric cultures in this area, the principal habitat of which seems to be in the mountain ranges bordering the lower Pecos Valley on the west, are curious structures of open circular form, composed principally of small fragments of fire-cracked limestone. These circles occur abundantly in favorable locations from a point near Hope, New Mexico, in the foothills of the Sacramento Mountains, south throughout the Guadalupe and Davis Moun-

¹ Volume 39, No. 1, pp. 45-53, 1931.