

aged about 26 degrees with 19 degrees recorded one night. Water froze every night and the rarified air offered difficulties to a party coming up abruptly from sea level. Many interesting features were encountered, including especially abundant evidences of Pleistocene glaciation, previously known but not before studied at all in detail. There were also evidences of severe modern frost action and rock fragments and soils displayed chiefly the light gray colors characteristic of cold climate weathering.

The time of the fourteen scientific members of the party was divided variously between the base and summit camps according to features studied.

#### PROPOSED NEW BUILDINGS FOR THE NATIONAL ZOOLOGICAL PARK

THE National Zoological Park at Washington, under a \$680,000 PWA grant, according to *The Museum News*, is planning to erect a series of new structures from plans prepared under the direction of Edwin H. Clarke, supervising architect. Bids have been asked for the building of a new wing for the bird house, and plans for three other buildings have been completed.

In the new bird house wing a new interior treatment is to be used. The cages will have glass fronts and direct lighting from above. A movable skylight will make it possible for the birds to have fresh air and sunlight during warm weather. At either end there will be a panorama cage—one a tropical aviary and the other an artificially chilled air-conditioned room for birds of the colder climates. This new wing will complete the bird house.

A new exhibition building will contain quarters for all the great apes and for a large number of small mammals. American and exotic rodents will be exhibited in a special room under more or less natural conditions and in full view of the public.

A modern building will be erected to house elephants, rhinoceri, hippopotami and tapirs, with a large cage at one end for giraffe. Moats will be used for the outside inclosures instead of bars.

A power plant, machine shop and carpenter shop will be erected in place of the present inadequate quarters. In addition to functioning as power plant and central heating plant, these structures will house the mechanical departments and equipment for maintenance of the park and of Rock Creek Park.

#### ADVISORY COUNCIL ON APPLIED PHYSICS OF THE INSTITUTE OF PHYSICS

THE Advisory Council on Applied Physics of the institute met at the University Club, Pittsburgh, Pa., on November 16. This was the inaugural meeting of this council, whose purpose is to stimulate the application of physics by recommending suitable actions and policies to the institute and the founder societies. According to a statement sent us by Dr. Henry A. Barton, secretary of the institute, Dr. Paul D. Foote, executive vice-president of the Gulf Research and Development Corporation, presided during the morning session and Dr. Lyman J. Briggs, director of the Bureau of Standards, during the afternoon. The meeting was devoted, for the most part, to informal discussion. This was started by Professor G. B. Pegram, of Columbia University, who described briefly the events leading up to formation of the council, including the inauguration of the institute with such aims partially in view and a preliminary conference called last December by the institute jointly with the National Research Council.

Discussion followed on the university education and training of men whose careers are to lie in industrial research. This discussion was opened with reports by Dr. Saul Dushman (presented by Dr. A. W. Hull), of the General Electric Company, and Professor George R. Harrison, of the Massachusetts Institute of Technology.

Further discussion was devoted to the services which are rendered by the founder societies and the institute to physicists employed in industrial laboratories. Reports on this topic were presented by Dr. L. O. Gron-dahl, director of research, Union Switch and Signal Company, and Professor John T. Tate, University of Minnesota. In this connection the council passed a resolution encouraging formations by such physicists of a division on applied physics of the Physical Society. It was strongly felt that, while the Optical Society, the Acoustical Society and the Society of Rheology furnish facilities for meetings and publications in their fields, other general applications of physics were neglected. The opinion of the council was opposed to the formation of new specialized societies since only through close integration with the Physical Society could the community of interest and interchange of ideas between the general applications and the basic fundamentals of physics be conserved.

### SCIENTIFIC NOTES AND NEWS

DR. G. A. YOUNG, chief geologist of the Canadian Geological Survey, has been elected president of the Royal Society of Canada. The presidency has been vacant since the death last summer in an airplane

crash of Dr. Reginald W. Brock, dean of the University of British Columbia.

THE Harrison Memorial Medal of the Pharmaceutical Society of Great Britain was presented to Pro-

fessor Arthur Smithells, director of the Salters' Institute of Industrial Chemistry, on November 12. On this occasion he delivered the Harrison Memorial Lecture, taking as his subject "The Teaching of Chemistry."

PROFESSOR PIERRE MASSON, head of the department of pathology of the University of Montreal, formerly professor of pathology at the University of Strasbourg, has been elected a member of the Academy of Medicine, Paris.

THE Rensselaer Polytechnic Institute Chapter of the Society of the Sigma Xi has elected to membership Dr. Rudolf Ruedemann, of Albany, New York State paleontologist.

DR. W. S. BLATCHLEY, from 1894 to 1911 state geologist of Indiana, was elected to honorary fellowship in the Indiana Academy of Science at its recent annual meeting.

SIR D'ARCY POWER, of London, the distinguished surgeon and medical historian, celebrated his eightieth birthday on November 11. Sir D'Arcy was visiting professor at the Johns Hopkins University in 1930-1931.

DR. HAROLD C. UREY, professor of chemistry at Columbia University and winner of the Nobel Prize in chemistry for his discovery of heavy water, has been awarded the first bronze Columbia lion by the affiliated Columbia University Alumni Clubs of Northern New Jersey. The prize, which was instituted last year, is awarded to "an outstanding citizen of New Jersey who has brought honor to Columbia University through conspicuous world service and noteworthy achievement." The medal will be presented at a reunion to be held on December 4 at the Newark Athletic Club.

THE Associate Alumni of the College of the City of New York, at their annual dinner in New York City on November 16, presented five Townsend Harris medals to alumni in honor of their achievements and services to the college. The medals included an award to Dr. Lorande Loss Woodruff, professor of zoology at Yale University. The citation was: "Lorande Loss Woodruff, '00—Teacher in the venerable University of Yale, zoologist of national eminence, painstaking scholar in a basic field of biology, contributor to the learned periodicals in your own and allied subjects, member of the National Academy of Sciences, you have manifested that disinterested love of learning toward the attainment of which all true centers of advanced study constantly strive. You have taken to another campus the tradition that has given vitality to the academic life of your college. In you Alma Mater finds particular reason to rejoice."

A DINNER in honor of Dr. Isaiah Bowman, president of the Johns Hopkins University, was given in Baltimore on November 16, by the Hopkins Chapters of Phi Delta Kappa and Pi Lambda Theta. The guests included Dr. John W. Studebaker, U. S. Commissioner of Education; Raymond S. Williams, president of the Baltimore School Board; Miss Bess Goodykoontz, assistant commissioner of education and president of Pi Lambda Theta, and Mrs. William Bauernschmidt, executive secretary of the Public School Association. Dr. Florence E. Bamberger, professor of education in the Johns Hopkins University, presided, and Dr. David E. Weglein, superintendent of the Baltimore schools, acted as toastmaster.

THE Iowa State College Chapter of Sigma Xi on October 31 entertained at dinner Dr. E. C. Kendall, head of the chemical section of the Mayo Foundation, Rochester, Minn. On this occasion he delivered an address entitled "Chemical and Physiologic Studies of the Suprarenal Cortex."

A PRIZE of \$3,000 offered in 1933 by the Eugenics Research Association for original research on the "probability of commitment for a mental disorder of any kind, based on the individual's family history" has been awarded to Dr. Serge Androp, of the staff of the Ohio Hospital for Epileptics at Gallipolis.

OFFICERS of the Chemical Society of Washington were elected at the annual meeting on November 14 as follows: *President*, J. H. Hibben, Geophysical Laboratory, Carnegie Institution of Washington; *Secretary*, K. S. Markley, Food Research Division, the Bureau of Chemistry and Soils; *Treasurer*, H. L. Haller, Bureau of Entomology and Plant Quarantine, and Dr. James F. Couch, the retiring president, was elected a member of the council. After the election Dr. Hugh S. Taylor, professor of chemistry and chairman of the department of chemistry at Princeton University, addressed the society on "Modern Developments in Surface Catalysis."

THE annual meeting of the Indiana Academy of Science was held on November 8 and 9 at Wabash College, Crawfordsville, Ind., under the presidency of Dr. Will Scott. New officers elected at this meeting are: *President*, R. C. Friesner, Butler University; *Vice-president*, Edward Kintner, North Manchester College; *Secretary*, L. A. Test, Purdue University; *Treasurer*, Will Morgan, Indiana Central College; *Editor*, Paul Weatherwax, Indiana University, and *Press Secretary*, T. R. Johnston, Purdue University.

CHARLES K. GRAEBER, of the Pennsylvania Topographic and Geologic Survey, has been elected permanent secretary-treasurer of the Field Conference of Pennsylvania Geologists. Mr. Graeber succeeds Dr.

Bradford Willard, who recently resigned after holding the office since the organization of the conference in 1931.

DR. N. M. JOSEPHUS JITTA has succeeded Sir George Seaton Buchanan as president of the International Office of Public Hygiene.

DR. CHARLES W. HUGHES, assistant in anatomy at Loyola University School of Medicine, Chicago, has been appointed associate professor of anatomy, succeeding Dr. Simon B. Chandler.

DR. REUBEN E. TRIPPENSEE has been appointed to the newly established chair of wildlife management at the Massachusetts State College at Amherst.

R. L. GARNER has resigned his position as chemist for the biological division of the Johns Hopkins Hospital and has become instructor in the department of biological chemistry of the Medical School of the University of Michigan.

THE council of the University of Liverpool, on the recommendation of the senate, has conferred the title of "professor emeritus" on Professor L. R. Wilberforce and Professor W. H. Gilmour, who retired at the end of last session. Professor Wilberforce was appointed to the Lyon Jones chair of physics in 1900, and Professor Gilmour to the Louis Cohen chair of dental surgery on its foundation in 1920.

*Nature* states that the Mackinnon research studentship of the Royal Society has been awarded to Dr. G. W. Brindley, assistant lecturer in physics in the University of Leeds, for his research on x-ray reflections from metals in relation to atomic vibrations.

DR. MAX PINNER has recently resigned his position as associate director, in charge of the laboratories of the Desert Sanatorium, Tucson, Ariz., in order to accept an appointment by the New York State Department of Health as principal diagnostic pathologist in charge of the laboratories of the three New York State Tuberculosis Hospitals in Mount Morris, Ithaca and Oneonta. From November 1 on Dr. Pinner's headquarters will be at Oneonta until the Herman Biggs Memorial Hospital at Ithaca is completed.

DR. C. N. MCBRYDE, director of the field station of the U. S. Bureau of Animal Industry of the U. S. Department of Agriculture at Ames, Iowa, has declined an offer to become chief of the Biochemic Division of the bureau at Washington, D. C., to succeed the late Dr. Marion Dorset, who died in July.

PROFESSOR A. O. LEUSCHNER, of the University of California at Berkeley, has accepted the chairmanship of Committee R of the American Association of University Professors on Encouragement of University Research.

*The Museum News* reports that Edward C. Blum, president of the Brooklyn Institute of Arts and Sciences; George Blumenthal, president of the Metropolitan Museum of Art, and F. Trubee Davison, president of the American Museum of Natural History, were among the signers of the articles of incorporation of the "New York World's Fair, 1939," filed at Albany on October 23.

PROFESSOR BJORN HELLAND-HANSEN, director of the Geophysical Institute at Bergen, Norway, was a recent visitor to the Scripps Institution of Oceanography. While there he gave a public lecture on "Nansen, the Explorer and Oceanographer." He also conducted two seminars in oceanography and held conferences with members of the staff engaged in the study of physical and chemical oceanography.

PROFESSOR HARLOW SHAPLEY, director of the Harvard College Observatory, spoke on November 16 before the Royal Canadian Institute.

THE third Harvey Society lecture will be given at the New York Academy of Medicine, New York City, on December 5 at 8:30 p. m., by Dr. Peyton Rous, member of the Rockefeller Institute for Medical Research, on "The Virus Tumors and the Tumor Problem."

DR. BERT CUNNINGHAM, professor of biology at Duke University, will speak on December 4 on phases of "The Endocrine System" to students of Winthrop College. He will also be the guest speaker before the college chapter of Beta Beta Beta.

A PUBLIC meeting of the Columbia University Chapter of Sigma Xi will be held in Schermerhorn Hall at 8 p. m. on December 9. Major Edwin H. Armstrong, professor of electrical engineering, will discuss "New Vistas in Radio Signaling." The speaker will demonstrate experimentally his latest discoveries of the use of a new system of frequency modulation which makes possible broadcasting without static or other forms of disturbance.

THE International Union of Geodesy and Geophysics will meet at the University of Edinburgh from September 15 to 26, 1936.

THE date of the third International Congress on Malaria has been postponed until the spring of 1936. Further information can be obtained from the president, Professor G. Pittaluga, director of the National Institute of Health, Calle de Recoletos 20, Madrid.

THE annual meeting and dinner of the New York Academy of Sciences and Affiliated Societies will be held on Monday, December 16, at 7 p. m. at the American Museum of Natural History. The program will include an address by Dr. Marshall A. Howe, retiring

president of the academy, entitled "Plants That Form Reefs and Islands," with a series of botanical motion pictures.

At a special meeting held on November 16 the Division of Medical Sciences of the National Research Council made the following grants: Alvan L. Barach, associate in medicine, Columbia College of Physicians and Surgeons, "the therapeutic use of helium"; E. V. Cowdry, professor of cytology, Washington University School of Medicine, "the effect of treatment with activated ergosterol on the kidneys, parathyroids and other tissues"; Magnus I. Gregersen, professor of physiology, University of Maryland School of Medicine, "plasma volume changes"; Orthello R. Langworthy, associate professor of neurology, the Johns Hopkins University Medical School, "studies of the urinary bladder." The next regular meeting of the Committee on Grants-in-Aid for the consideration of applications for grants in all the natural sciences will be held in March. Applications must be on file with the secretary of the committee, Dr. Clarence J. West, not later than February 15, 1936. Further information and application blanks will be furnished on request.

PREVIOUS awards from the Elizabeth Thompson Science Fund were reported in *SCIENCE* on November 2, 1934, and earlier. Since the last report the following awards have been made. At the meeting of December 5, \$125 was awarded to Christianna Smith, Mount Holyoke College, for the investigation of rat blood at time of birth; \$150 to Phineas W. Whiting, Carnegie Institution of Washington, for an investigation of the difference between the x and y chromosomes; and \$250 to Dorothy Wolff, Washington University School of Medicine, for the study of neurone patterns in the human spinal ganglion of cochlea. At the meeting of April 17, the loan of a grinding machine and \$60 for its repair and alteration were awarded to Alfred S. Romer, Harvard University, to be used in making serial sections of fossil fish and reptile skulls. The trustees of the fund are as follows: Walter B. Cannon, *president*; Jeffries Wyman, Jr., *secretary*; Charles B. Curtis, Jr., *treasurer*; G. P. Baxter, J. C. Slater, A. C. Redfield, *trustees*. The next meeting will be held in April, 1936, and applications for grants should be made to the secretary, Biological Laboratories, Harvard University, Cambridge, Mass.

THE Drexel Institute at Philadelphia has received the residuary estate of the late Lillie Bell Randell, amounting with principal and interest to a little more than \$425,000. The will has been delayed for several years in distribution by the difficulty of determining the legal residence of the testatrix.

A NEW plant hormone laboratory and greenhouse

have been completed for the department of botany at Connecticut College, at a cost of \$22,000. The hormone laboratory and two research compartments of the greenhouse are the gift of the Rockefeller Foundation; the compartments for teaching and exhibition purposes are the joint gift of A. C. Ernst, of Cleveland, E. J. Block, of Chicago, Charles E. White and George Whittlesey, of New London. The plant hormone laboratories are underground, and completely air conditioned; special provision has been made for quantitative studies on the influence of monochromatic light on phytohormones and the structural phases of the development of organisms.

At a luncheon in Washington on November 19, President Roosevelt entertained members of the Commission for Infantile Paralysis Research. Receipts of \$1,071,000 from the series of balls held on President Roosevelt's birthday anniversary last January were announced. Seventy per cent. of the total receipts had been turned back to the communities where the funds were raised for the support of local work. The remaining 30 per cent. brought the committee's share of the money to \$326,062, of which \$19,180 additional was returned to communities. No receipts were given to the Warm Springs Foundation. After all expenses were paid \$241,000 was turned over to the research commission, which has allocated \$110,000 in grants as follows: Harvard University, Dr. W. Lloyd Aycock; Long Island College of Medicine, Dr. Sidney D. Kramer; New York University, Dr. William H. Park; University of Chicago, Dr. Paul H. Harmon; University of Pennsylvania, Dr. Joseph Stokes, Jr.; Stanford University, Professor E. W. Schultz; University of California, George Williams Hooper Foundation, Dr. Karl F. Meyer; University of Southern California, Dr. John F. Kessel; Western Reserve University, Dr. John A. Toomey, and Yale University, Dr. John R. Paul and Dr. James D. Trask.

It is stated in *Nature* that a scheme has been prepared for the establishment in Colombo, Ceylon, of a fisheries research station combined with an aquarium which is under consideration. This provides in the first instance for a small biological research station capable of being enlarged as funds are available. It will be equipped with research laboratories and fresh-water and marine aquaria essential for fisheries investigation work. An aquarium will be attached to which the public will be admitted. The field of research will include investigations into life-histories and general bionomics of all aquatic animals of importance in Ceylon, into the culture of pearl and edible oysters, into the farming of estuaries and fresh-water fishes and turtle, and into the importance of various indigenous larvivorous fishes in relation to the suppression of tropical fevers and the breeding and distributing of the most active forms throughout Ceylon.