

neers, American Society of Mechanical Engineers and American Institute of Electrical Engineers) held a joint meeting in the Engineering Societies Building in New York City devoted to the conservation of our natural resources. In the absence (due to illness) of Onward Bates, president of the senior society, Dr. James Douglas, president of the Institute of Mining Engineers, presided. Addresses were delivered on behalf of the four organizations on "The Conservation of Water," by John R. Freeman; on "The Conservation of our Natural Resources by Legislation," by Dr. R. W. Raymond; on "The Waste of our Natural Resources by Fire," by Charles Whiting Baker, and on "Electricity and the Conservation of Energy," by Lewis B. Stillwell. In addition to the set addresses, Dr. Douglas outlined in general terms the development of the conservation idea and the important part played by the engineering societies in directing attention to the nature and extent of resources and to the enormous wastes in utilizing them; while John Hays Hammond read a communication addressed to the meeting by President Taft commending its purposes and reiterating his deep interest in the natural resources and their conservation. The meeting was especially notable as marking a definite policy of cooperation on the part of the engineering interests of the country and of the four great national organizations in which these interests find expression. The attendance was large, including a number of engineers and guests from other cities.

W J MCGEE

SCIENCE BY CABLE

WE reproduce the following cablegrams to the daily papers which, in so far as they are correct, are certainly of interest:

London, March 26.—Addressing the Chemical Society yesterday afternoon, Sir William Ramsey announced that he had succeeded in transmuting four different substances into carbon; namely, zirconium, thorium, hydro-lutorsilicic acid and bismuth. Experiments with silver nitrate, with the object of transforming silver in the same manner as copper is transformed into lithium, gave negative results.

Paris, March 23.—The astronomer Gaillot announced before the Academy of Sciences last night that he had discovered two new planets situated beyond Neptune, which is the outermost known planet of the solar system. M. Gaillot stated that he had used the methods which had enabled Leverrier by mathematical calculation to assign to Neptune a position within the boundaries of a certain region, which permitted of its discovery in 1846. M. Gaillot estimated that one of the planets was forty-five times and the other sixty times the distance of the earth from the sun, or 4,185,000,000 and 5,580,000,000 miles respectively. The planet Neptune it is estimated is 2,800,000,000 miles from the sun.

Berlin, March 26.—Professor Richard Greeff, of the Berlin University Eye Hospital, announced the discovery of the germ of trachoma. The finding of this germ resulted from experiments with apes conducted with funds supplied by the German government.

SCIENTIFIC NOTES AND NEWS

THE return of Lieutenant Ernest H. Shackleton, of the British navy, from his Antarctic explorations and his remarkable results in reaching a point within a hundred miles of the South Pole, in reaching the magnetic pole, in ascending Mt. Erebus and in making discoveries of importance in many directions, were announced in the daily papers of March 24.

DR. E. PFLÜGER, professor of physiology at Bonn, has been awarded the gold medal for art and science by the German emperor, on the occasion of the celebration of the fiftieth anniversary of his appointment to the full professorship.

DR. ALBRECHT PENCK, professor of geography at Berlin, has been elected an honorary member of the Geographical Society at Rome.

MR. B. E. DAHLGREN, formerly modeler at the American Museum of Natural History, New York, has been appointed modeler to the botanical department of the Field Museum of Natural History, Chicago. Mr. Dahlgren is now in Jamaica making studies for the reproduction of a series of tropical plants representative of structural characteristics as well as economic use.

THE *Naturwissenschaftliche Rundschau* announces that Dr. J. Königsberger, associate professor of theoretical physics at Freiberg, has accepted a position in the Geophysical Laboratory of the Carnegie Institution of Washington.

DR. P. RENNER has been appointed curator of the cryptogamic herbarium at Munich.

RECENT foreign visitors at the Bureau of Plant Industry, Washington, have been Professor Vittorio Peglion, of the University of Bologna, Italy; Sr. Don Romulo Escobar, president of the Agricultural College of Chihuahua, Mexico; Mr. Joseph A. Rosen, chief of the Agricultural Bureau of the Governmental Zemstvo of Ekaterinoslov, Russia.

PROFESSOR PAUL HANUS, of Harvard University, was elected president of the National Society of College Teachers of Education, at the recent annual meeting in Chicago.

DR. JAN BOSSCHA, professor of physics at the Delft Technical School and secretary of the Dutch Academy of Sciences, has retired from active service.

DR. HAVEN METCALF, of the Bureau of Plant Industry, returned recently from an extensive trip in northern Italy, where he was engaged in collecting varieties of rice resistant to the disease *brusone*, which he demonstrated to be identical with the blast of rice in America.

DR. FREDERIK VAN EEDEN, of Amsterdam, gave two lectures on March 24 at the University of Wisconsin, on "The Mission of the Poet" and "The Mind in Health and Disease."

PROFESSOR W. E. CASTLE, of Harvard University, delivered a lecture on "Heredity," at the New Hampshire College of Agriculture and Mechanic Arts on March 1.

THE Colorado Chapter of the Society of the Sigma Xi held a banquet on the evening of March 19, after which Professor F. W. Trap-hagen, of Columbia Chapter, now professor of metallurgy and assaying in the Colorado School of Mines at Golden, read a paper on "Expert Testimony."

PROFESSOR JOHN M. COULTER, of the University of Chicago, addressed the Botanical

Society of Washington on Friday evening, February 12, on "Evolution in Gymnosperms." On March 25 Professor Herbert J. Webber, of Cornell University, read a paper before the society entitled, "Is There a Cumulative Action of Selection?"

THE first course of lectures on the Hitchcock Foundation, which provides for a series of scientific lectures to be delivered annually at the University of California, has just been finished by Professor Julius Stieglitz, of the University of Chicago, on the general subjects of ionization and catalysis. The titles of the lectures were: (1) "The Theories of Solution"; (2) "The Theory of Ionization and Electric Phenomena"; (3), (4) and (5) "Theory of Ionization and Chemical Phenomena," including salt formation, etc.; (6) "Complex Ions"; (7) and (8) "The Electric Theory of Oxidation and Reduction"; (9) and (10) "Catalysis." Professor Stieglitz's lectures were attended by 200 to 300 people, including a number of chemists from the surrounding cities.

THE centenary of the birth of Oliver Wendell Holmes will be celebrated at Harvard University, where he was professor of anatomy and physiology from 1847 to 1882, in Sanders Theater on April 27. President Eliot will preside, and brief addresses will be made by Dr. Edward Waldo Emerson, of Concord, by Col. Thomas Wentworth Higginson, by Dr. David Williams Cheever, and by Rev. Samuel M. Crothers, D.D.

THE committee in charge of a fund for a memorial to the late Dr. Andrew J. McCosh announces that more than \$100,000 has been subscribed. The fund will be devoted to some portion of the new buildings of the Presbyterian Hospital, with the surgical service of which Dr. McCosh was identified.

WE learn from the *Bulletin* of the American Mathematical Society that at the Vienna meeting of the *Astronomische Gesellschaft* it was voted to solicit funds for the erection of a Gauss tower on Hohenhagen, the highest mountain near Göttingen, at the vertex of the Brocken-Göttingen-Hohenhagen triangle with which Gauss experimented con-

cerning non-Euclidean geometry. Ten thousand Marks have already been received. It is desired that this sum may be sufficiently increased to warrant the laying of the corner stone on April 30, 1909, the birthday of Gauss. Contributions may be sent to Professor F. Klein, Göttingen.

WILLIAM HENRY WAHL, author of various contributions to technical science and for twenty-five years secretary of the Franklin Institute, Philadelphia, died on March 23, at the age of sixty years.

DR. GEORGE LORIMER BAKER, of Dorchester, Mass., died on March 19, at East Bridgewater, from tuberculosis which he contracted three years ago while experimenting with its bacilli.

CAPTAIN F. H. HARDY died at Aden on March 8 of sleeping sickness, on the voyage home from Nyasaland, where he had been engaged in scientific research into the causes of tropical diseases.

DR. JAMES HUTCHINSON STIRLING, the veteran Scottish philosopher, died on March 19, in his eighty-eighth year.

THE death is announced of Mr. Thomas Wakley, editor of the *Lancet*, at the age of fifty-eight years. He was the only son of Mr. Thomas Henry Wakley, the late editor of the journal, and a grandson of Thomas Wakley, who founded the *Lancet* in 1823.

DR. EMIL ASCHKINASS, docent for physics at Berlin, died on March 1 at the age of thirty-six years.

PROFESSOR H. MCE. KNOWER, librarian of the Marine Biological Laboratory at Woods Hole, requests us to state that the collection of reprints in the library of the laboratory is very much in need of additions. Publications on the various aspects of biology are in constant demand there. Authors are, therefore, requested to send copies of their publications to this library, where they will be particularly useful.

AMONG numerous charitable bequests in the will of the late Mrs. Emma D. Cummings, of New York, is one of \$25,000 to the pathological laboratory of St. Luke's Hospital.

A COLLECTION of mosses and hepatics has been received by the department of biology of

Princeton University from Dr. Per Dusen and Dr. Hj. Mällér, of Falun, Sweden. The collection consists of about ten thousand specimens, one half of which are Scandinavian.

THE addition to the Hygienic Laboratory of the U. S. Public Health Service, for which the congress some time ago appropriated \$75,000, has just been completed. The addition will be occupied by the divisions of zoology, pharmacology and chemistry and by the library. The original building will be devoted entirely to the division of pathology and bacteriology. Among the more important of the new lines of work recently undertaken in the laboratory is the institution of the treatment of rabies by the Pasteur method and work in connection with the United States Pharmacopœia. The latest publication from the laboratory (Bulletin 47) is from the division of pharmacology and is entitled "Studies on Thyroid. 1. The Relation of Iodine to the Physiological Activity of Thyroid Preparations," by Drs. Reid Hunt and Atherton Seidell.

THE Utah legislature has recently passed a law establishing the Utah Engineering Experiment Station in connection with the State School of Mines, the official name of the engineering college of the University of Utah. The station staff is to be made up of the professors of engineering. And the station is "authorized to carry on experiments and investigations pertaining to any and all questions and problems that admit of laboratory methods of study and the solution of which would tend to benefit the industrial interests of the state, or would be for the public good." The regents of the university will organize the station staff immediately, and the first bulletin under the authority of the station will be published in May. It will give the results of an exhaustive study of the cements on the Utah market.

THE New Zealand correspondent of the London *Times* reports that the Ngauruhoe volcano, which has been quiescent for a year, is now in violent eruption, sending a column of steam, smoke and ashes to a height of 8,000 feet above the crater. The sun for a time

was obscured, and the country is covered with a thin coating of volcanic dust. At Wanganui, some sixty miles distant, a thick haze overhangs the town, and the air is distinctly sulphurous. Violent explosions and rumblings have been heard many miles away.

UNIVERSITY AND EDUCATIONAL NEWS

A BILL now before the Pennsylvania legislature provides for the appropriation of \$950,000 to the University of Pennsylvania, \$475,000 for each of the two years beginning June 1, 1909, and June 1, 1910, the money to be used for: hospital maintenance; new hospital building; the continuation of the new veterinary building; the maintenance of the new veterinary building; maintenance of the general university; increase of the library, and a new building for the department of architecture.

THE Hall of Engineering of Northwestern University, given by Mrs. G. F. Swift and Mr. E. F. Swift, at a cost of \$100,000, was opened on March 24. It will be remembered that Mr. John F. Hayford, of the U. S. Coast and Geodetic Survey, has accepted the directorship of the new school of engineering.

MR. FREDERICK W. VANDERBILT, in addition to his recent gift of a dwelling house for the use of the Sheffield Scientific School of Yale University, has purchased an adjacent house for \$50,000 for the school. With the sale of these two houses the entire square bounded by Wall, College, Grove and Temple streets, with the exception of the building of the New Haven Colony Historical Society and the house on the corner of Grove and Temple streets, in which Noah Webster wrote his dictionary, has passed into the hands of the Sheffield Scientific School.

A HONG-KONG Chinaman residing at Saigon has offered to contribute \$4,000 to the university endowment fund, and he also undertakes to raise \$40,000 among his compatriots in Saigon.

FOR the purpose of founding a Capper Pass chair of chemistry at Britol University Mr. W. Capper Pass, son of the late Mr. Alfred Capper Pass, who was a member of the council of

Bristol University College, has increased his subscription of £4,000 to £10,000.

A CONFERENCE of the deans of the colleges of liberal arts in state universities of the middle west was held at the University of Wisconsin on March 25. Dean Olin Templin, of the college of liberal arts and sciences at the University of Kansas, who is chairman of the meeting, announced a program of four papers to be presented for discussion, as follows: "Method of Grading," by Dean John C. Jones, of the University of Missouri; "Student Organizations," by Dean L. G. Weld, of the University of Iowa; "The Relation of the College to the Other Schools of the University," by Dean Evart B. Greene, of the University of Illinois, and "Advanced Standing," by Dean J. O. Read, University of Michigan.

THE department of engineering of Colorado College will conduct a summer school of surveying at Manitou Park, elevation 7,500 feet, for four weeks beginning June 7. Professor T. B. Sears, of the department of civil engineering at the University of Nebraska, has been chosen director. Several cottages are available for the school and tents are being erected for the accommodation of the students. Manitou Park is on the reserve of the Colorado School of Forestry, twenty miles west of Colorado Springs.

DR. J. H. KASTLE, for the past three years chief of the division of chemistry, of the Hygiene Laboratory, Washington, D. C., has been elected professor of chemistry in the University of Virginia.

M. PERROT, of the Observatory at Meudon, has been appointed professor of physics in the Paris Polytechnic School to succeed M. Becquerel.

M. CAULLERY has been appointed professor of zoology at Paris to succeed the late M. Giard.

DISCUSSION AND CORRESPONDENCE

AMERICAN CHEMICAL HISTORY AND BIOGRAPHY

TO THE EDITOR OF SCIENCE: Having been appointed historian of the American Chemical Society and having arranged for the care of its documents by the Smithsonian Institution, I