

*En route* to Samoa, Dr. Lincke stopped at Washington, November 17-21, and compared a set of portable magnetic instruments with the Coast and Geodetic Survey standards at Cheltenham, Maryland, he having previously compared the same set with the Potsdam magnetic observatory standards. Upon his arrival at Apia, he will compare this set with the observatory instruments used there and thus secure the necessary data for correlating the various observatory standards. Arrangements are thus being perfected for effective cooperation between the magnetic observatories of the German government and those of this country.

#### A MONUMENT TO J. W. POWELL.

DURING the recent excursion of the Eighth International Geographic Congress to the Grand Canyon of the Colorado in Arizona, a meeting was held in memory of Major J. W. Powell, in which his exploration of the canyon, his western surveys and his work as director of the United States Geological Survey and as organizer of the Bureau of Ethnology were briefly described. At the close of the meeting the following vote was passed:—

The members of the Eighth International Geographic Congress who visited the Grand Canyon of the Colorado River on September 26 and 27, 1904, express the hope that a suitable monument may be erected on the edge of the plateau overlooking the Grand Canyon to commemorate the labors of John Wesley Powell as explorer, geologist and ethnologist; and they request that committee, consisting of Messrs. Davis (temporary chairman), Bryant, Day, Gilbert, Hill, Libbey, McGee, Salisbury and Walcott, with power to add to their number, take steps to carry the above suggestion into effect.

The record of the vote was signed by fifty-four members of the congress excursion. A meeting of the committee will be held in Philadelphia, on Friday, December 30, for the purpose of organizing and taking such action as may seem appropriate.

#### SCIENTIFIC NOTES AND NEWS.

DR. R. S. WOODWARD, professor of mechanics and mathematical physics and dean of the

faculty of pure science, Columbia University, was elected president of the Carnegie Institution at the meeting of the trustees held at Washington, on December 13.

AT the meeting of the trustees of Princeton University on December 8 the resignation of Professor Charles A. Young from the chair of astronomy was accepted to take effect at the close of the present academic year, when he will become professor emeritus. Professor Young has held the chair of astronomy at Princeton since 1877. He celebrated his seventieth birthday on December 15.

THE council of the Edinburgh Royal Society at its recent meeting, decided to award to Professor Sir J. Dewar, F.R.S., the Gunning Victoria jubilee prize for 1900-1904, for his researches on the liquefaction of gases extending over the last quarter of a century, and on the chemical and physical properties of substances at low temperatures.

M. DASTRE, professor of medicine at Paris, has been elected a member of the Paris Academy of Sciences.

DR. J. MACKINTOSH BELL, instructor in geology at Harvard University, a nephew of Dr. Robert Bell, F.R.S., acting director of the Geological Survey of Canada, has been appointed government geologist of New Zealand to succeed Sir James Hector.

THE next autumn meeting of the Iron and Steel Institute of Great Britain will be held at Sheffield under the presidency of Mr. R. A. Hadfield.

DR. VICTOR C. VAUGHAN, of the University of Michigan, addressed the Philadelphia Pathological Society on December 8, at the College of Physicians, on the 'Relation of Food Adulteration to the Public Health.' A reception was tendered to Dr. Vaughan after the meeting.

DR. E. O. HOVEY, of the American Museum of Natural History, lectured at the Massachusetts Institute of Technology on December 8, under the auspices of the Society of Arts, on 'Mont Pelé: the Eruptions of 1902 and the Growth and Destruction of the Great Spine, or Obelisk.'

DR. SVEN HEDIN, the Swedish explorer, is now in St. Petersburg, and will shortly deliver a lecture on the scientific results of his travels in Central Asia.

MR. ALEXANDER SIEMENS gave his inaugural address before the British Institution of Electrical Engineers on December 10.

THE Massachusetts Institute of Technology celebrated on December 7 the one hundredth anniversary of the birth of its founder and first president, William Barton Rogers.

A SUBSCRIPTION, headed by M. Albert Gaudry, has been started for a monument to M. Bernard Renault, well known for his valuable researches into the microorganisms of the coal measures, and especially of the bogheads and of the cannel coal of the United States, who died from overwork and in limited circumstances on October 14 last. The monument will be erected at his native place, Autun, where he is buried, and subscriptions should be sent to M. Berthier, secretaire de la Société d'histoire naturelle, 2, rue de l'Arbalète, Autun, France.

DR. GEORGE VIVIAN POORE, formerly professor of medicine in University College, London, died on November 23.

A DONOR, who desires to remain anonymous, has placed £1,000 in the hands of the treasurer of the Royal Society, £500 to be placed to the credit of the 'Catalogue of Scientific Papers Account' of the Royal Society, and the remainder to the credit of the 'National Physico-Chemical Laboratory Account.'

THE Physico-Chemical Club of Boston and Cambridge has begun the third year of its membership with over sixty members. At the first meeting of the year, in November, Professor T. W. Richards, of Harvard, was elected president, in place of Professor A. A. Noyes, of the Massachusetts Institute of Technology, who has held the post for two years. Professor Noyes was made vice-president, and his colleague, Professor W. D. Coolidge, was made secretary and treasurer. Dr. G. P. Baxter described his important work on the atomic weights of iodine, and Mr. E. C. Kraus spoke of his interesting work on the

remarkable properties of solutions in liquid ammonia.

THE trustees of the Wagner Free Institute of Science of Philadelphia announce that in view of the largely increased facilities provided within the past few years by the publication departments of the various institutions of learning, and more especially by the Carnegie Institution, for the promotion of original research with its incident publications, the Wagner Free Institute of Science has thought it wise to discontinue for the present its work in this department and to devote its energies more exclusively to other purposes indicated by its founder.

THE twenty-fifth annual report of the director of the United States Geological Survey is now ready. It contains 388 pages and is illustrated with 25 maps, which show the progress of topographic or geologic surveys made in different parts of the United States and Alaska. The general results achieved by the survey in the twenty-five years of its existence are summarized, and a *résumé* is given of the work accomplished by each of the survey's great divisions during the fiscal year from July, 1903, to July, 1904.

A PUBLIC museum has been incorporated at St. Louis. It is proposed to secure some of the objects exhibited at the St. Louis Exposition.

LADY FLOWER writes to the London *Times* that Mr. G. W. Duff-Assheton-Smith, whose death was recently recorded in *The Times*, stocked his park at Vaynol with many rare and interesting animals, including the large moose and small Japanese deer, old English white cattle, American bison, zebras, kangaroos and emus. One of the otters was so tame that when swimming in the lake it would come back when whistled to. Mr. Assheton-Smith was a courteous and kindly country gentleman, and his knowledge of animals and bird life was remarkable.

THE Bureau of Forestry has recently signed an agreement to make extensive timber seasoning tests in two western states, in cooperation with two telegraph and telephone companies. Experimental stations will be located

at Martinette, Wis., and Escanaba, Mich.; and probably a third station will be established at Ashland, Wis. The expense of the experiments will be borne jointly by the bureau and the companies. Cedar and tamarack telephone and telegraph poles will be furnished by the state of Wisconsin free of cost, and two railroad companies have agreed to haul them to the experiment stations without charge for freight.

#### UNIVERSITY AND EDUCATIONAL NEWS.

A GIFT of \$50,000 by Mr. Edward D. Adams, in memory of his son, Ernest K. Adams, has been made to Columbia University for the foundation of a research fellowship in physical science. The gift is accompanied by a valuable collection of scientific apparatus to be allotted to the electrical, physical and psychological laboratories of the university.

It was made a condition of granting a charter to the University of Leeds that an endowment fund of at least £100,000 should be collected. Of this sum over \$60,000 has been subscribed.

THE Liverpool city council has voted the sum of £10,000 towards the support of the University of Liverpool.

By the will of Mr. G. T. B. Wigan, M.A., of Trinity College, Cambridge, a sum of above £9,000 was bequeathed to the university, the annual income to be applied for the purpose of promoting and encouraging scientific education or research in the university.

THE University of Aberdeen will celebrate the four hundredth anniversary of its foundation in the summer of 1906.

THE commissioner of agriculture for the Dominion of Canada, Mr. Robertson, will resign on January 1, to take charge of the new agricultural college established by Sir William MacDonald. According to the *London Times*, this will probably be the most complete agricultural college in the world. It is to be known as the Macdonald Foundation for Rural Education, the organization of which will be in the hands solely of Sir W. Macdonald and Mr. Robertson. It is to consist of three de-

partments. The first will be for original research in bacteriology as applied to soils and products, in the biology of animals and plants, and in agricultural chemistry. The second will be a department of farms for the practical illustration of the discoveries in the research department, and the third will be a department of instruction combining a farm school and a college of agriculture. There will be residences for men and women students. The laboratories will be equipped in the most complete manner, and the best features of the principal agricultural colleges in Europe and America will be adopted. The amount of Sir W. Macdonald's benefaction is said on good authority to be not less than £1,000,000.

ON the occasion of the installation of Lord Kelvin as chancellor of the University of Glasgow, on November 29, the degree of LL.D. was conferred on Dr. James Thomson Bottomley, F.R.S., Arnott and Thomson demonstrator in experimental physics in the University for 24 years from 1875; Admiral Sir John Charles Dalrymple-Hay, F.R.S.; Mr. Guglielmo Marconi; and the Hon. Charles A. Parsons, F.R.S.

PROFESSOR WILLIAM G. RAYMOND, of the Rensselaer Polytechnic Institute, has been appointed professor of civil engineering and head of the departments of engineering in the Iowa State University at Iowa City. Professor Sherman M. Woodward, of the University of Arizona, has been called to the chair of steam engineering.

PROFESSOR HARRIS J. RYAN, of Cornell University, has been appointed professor of electrical engineering at Stanford University.

MR. ANDREW CARNEGIE has been reelected Lord Rector of the University of St. Andrews without opposition, Mr. Andrew Lang and Sir Henry Craik having declined to stand.

AUGUSTUS EDWARD HOUGH LOVE, M.A., D.C.L., F.R.S., Sedleian professor of natural philosophy at Oxford, formerly fellow of St. John's College, Cambridge, has been elected to an honorary fellowship at Queen's College.

MR. E. VERNER has been elected to a newly established chair of applied chemistry at the University of Dublin.