

ber 24, Mrs. Bullock Workman and Dr. Hunter Workman will give an account of their most recent explorations in the eastern Karakoram. An interesting and perplexing subject will be dealt with at the meeting of December 8 by Professor J. W. Gregory, who will endeavor to answer the question, "Is the Earth Drying Up?" At the first meeting in January, 1914, on the 12th, it is probable that Mr. Griffith Taylor will give a paper on the Federal district and capital, Canberra, of the Commonwealth of Australia. Mr. Griffith Taylor was one of the geologists on Captain Scott's expedition, and made a special survey of the Federal district on behalf of the Australian government. It is also expected that either at one of the evening meetings or at an afternoon meeting Mr. Taylor will deal with the geographical aspects of two sub-expeditions in the Antarctic. At an early meeting in the New Year it is hoped that Dr. Hamilton Rice will give an account of his interesting journeys in the Upper Amazon basin, about which some information was published in a recent number of *The Times*. Other subjects which may be dealt with at subsequent meetings will be "An Expedition to Dutch New Guinea," by A. F. R. Wollaston; "Famous Maps in the British Museum," by J. A. J. de Villiers; "The Anglo-German Boundary Survey in West Africa," by Captain W. P. Nugent, R.A.; "The Gulf Stream," by Commander Campbell Hepworth, C.B.; "Journey through Arabia," by Captain G. E. Leachman; "The Red Sea and the Jordan," by Sir William Willcocks; "Fresh Discoveries in the Eket District of Southern Nigeria," by Mr. P. A. Talbot; "The Atlantic Ocean," by Professor Edward Hull, F.R.S., and "The Panama Canal," by Dr. Vaughan Cornish. The afternoon meetings are held in the map room of the society at 5 p.m., and are devoted mainly to the discussion of questions of a more scientific character than the subjects which occupy the evening meetings. The first of these will take place on November 20, when it is expected that Captain H. G. Lyons, F.R.S., will deal with the subject of "Relief in Cartography." At subsequent meetings Dr. A. Strahan, F.R.S., will

give his final report on the river investigation, which has been carried on under the society for some years past. Other subjects will be "Recent Geodetic Work," by Captain E. O. Henrici, R.E.; "The Rainfall of the World," by Professor A. J. Herbertson; "Some Central Asian Problems," by Mr. Douglas Carruthers; "Results of a Recent Journey in Turkestan and Siberia," by Dr. Mackintosh Bell; "Researches in the Natron Lake Region, East Africa," by Mr. John Parkinson, and "The Agricultural Geography of New Zealand," by Mr. F. N. Roxby. There will be two Christmas lectures to young people early in January, one on "Glaciers," by Mr. Alan G. Ogilvie, and the other on "Earthquakes and Upheavals," by Mr. Carus-Wilson. The anniversary meeting and dinner will take place on May 25.

---

#### SCIENTIFIC NOTES AND NEWS

THE autumn meeting of the National Academy of Sciences will be held at the Johns Hopkins University, Baltimore, on November 18 and 19.

PROFESSOR FELIX KLEIN, of Göttingen, has been presented by his former pupils with a portrait of himself, painted by Max Liebermann. It will be placed in the mathematical institute of the university as soon as the building is completed.

MR. ROOSEVELT is on his way to South America in response to invitations from Argentina, Brazil and Chile, to deliver addresses on subjects of international social interest. After the delivery of the addresses, Mr. Roosevelt will head a scientific expedition into the tropical interior of South America. This expedition is organized by the American Museum of Natural History, and two naturalists of that museum, Mr. George K. Cherry and Mr. Leo Miller, will accompany Mr. Roosevelt, while the Arctic explorer Mr. Anthony Fiala will have charge of the equipment and route.

SIR DAVID BRUCE will leave England on November 1 for the purpose of concluding his sleeping sickness investigations in Central Africa. He will be accompanied by Lady

Bruce, who is herself a member of the commission.

PROFESSOR PAUL S. REINSCH, who resigned the chair of political science in the University of Wisconsin to become ambassador to China, has sailed from San Francisco for Yokohama.

PROFESSOR P. E. POPE, who held the chair of general chemistry in the Massachusetts Institute of Technology, has retired under the Carnegie Foundation.

CYRIL G. HOPKINS, professor of agronomy, University of Illinois, has been granted a leave of absence for one year, beginning November 1, in order to accept the position of director of agriculture for the Southern Settlement and Development Organization. This is an organization affected chiefly by the governors of the Southern States and the presidents of railroads in those states, and supported principally by state and railway appropriations. Its primary purpose is "to make a thorough and scientific study of the resources and possibilities [of the South] and the best practical methods of developing the same."

M. LUCIEN BULL, sub-director of the Marey Institute, Boulogne Sur Seine, has been commissioned by the Société d'Hygiène Alimentaire et d'Alimentation Rationnelle de l'Homme to spend several months in Boston at the nutrition laboratory of the Carnegie Institution of Washington, studying the construction and methods of testing and use of the various respiration calorimeters there installed.

WE learn from *Nature* that in connection with the work on animal nutrition which is being conducted at the University of Leeds under a grant from the development commissioners, Dr. H. W. Dudley, of the Herter Research Laboratory, New York, has been appointed lecturer in biochemistry. The experimental station in flax growing, which is also supported by the development commissioners, has been placed under the direction of Mr. F. K. Jackson, formerly of the agricultural departments of the Universities of Leeds and Cambridge.

DR. E. B. PHELPS, of the Massachusetts Institute of Technology, known for his work

in sanitary engineering, has accepted a position in the U. S. Public Health Service, Washington.

DR. JOSEPH A. BLAKE has resigned from the chair of surgery at the College of Physicians and Surgeons of Columbia University.

PROFESSOR ARCHIBALD BARR has resigned from the chair of civil engineering and mechanics at the University of Glasgow.

THE officers of the British Mycological Society elected for 1914 are: President, Professor A. H. R. Buller; vice-president, Miss G. Lister; honorary secretary and treasurer, Mr. Carleton Rea. The localities for the spring and autumn meetings are the Forest of Dean and Doncaster.

DR. LEWIS M. TERMAN, associate professor of education, Stanford University, has been elected a member of the permanent International Committee on School Hygiene and has also been made the vice-president of the Council of Thirty of the American School Hygiene Association.

MR. JAMES BIRCH RORER, mycologist and pathologist to the board of agriculture of Trinidad, British West Indies, is on a visit to the United States. His address while in this country is care of Dr. Erwin F. Smith, Bureau of Plant Industry, Washington, D. C.

BEFORE the Geographic Society of Chicago on October 10 a lecture was given by Professor Walter S. Tower, of the University of Chicago, the title being "A Journey through Northern and Central Chile."

THE twenty-first James Forrest lecture of the Institution of Civil Engineers, London, will be delivered in the lecture theater of the new building of the institution, on October 23, by Mr. Alexander Gracie, on "Progress of Marine Construction."

WE learn from the *Bulletin* of the American Mathematical Society that owing to the mass of new material which has been found at St. Petersburg and at other places, the Euler commission realizes that it must face a deficit in the publication of Euler's works, unless further funds are provided. The publication of this new matter will necessitate several addi-

tional volumes and involve an unforeseen expense of at least \$40,000. To defray this expense it is proposed to form a Euler society, with dues of ten francs per year, the receipts of which are to be devoted entirely to this purpose.

PLANS have been completed for publishing the complete works of the late Henri Poincaré. The publication will be undertaken at once by Gauthier-Villars under the direction of the French minister of public instruction and the academy of sciences of Paris.

PROFESSOR LOUIS KUTTNER, of Berlin, known for his work on intestinal diseases, died on October 5, aged forty-seven years.

THE French toxicologist, Dr. Jules Ogier, has died at sixty years of age.

THERE are several important places in metallurgy under the Bureau of Mines, to be filled by civil service examination on November 10. The salaries of these positions range from \$2,000 to \$4,800. Several of the vacancies are in Denver, San Francisco and Pittsburgh.

It is reported that steps are being taken, under the auspices of the Resident-General of France and of his Highness the Bey of Tunis, to establish in Tunisia a reserve in which the disappearing fauna of the country may find immunity from persecution. For this purpose some 4,000 acres of wild mountainous country, with an adjoining marsh of 5,000 acres, have been secured.

THE Russian government will establish a physical observatory at Vladivostok and experimental stations on the Pacific coast with the view of cooperating with the authorities of meteorological stations in China and Japan. Mr. S. D. Griboyedov has been commissioned to investigate suitable sites for the proposed stations.

THE general reorganization and rearrangement of the Rocky Mountains Park Museum maintained by the park department of the Canadian government at Banff, Alberta, has been carried out by Harlan I. Smith, of the Geological Survey, Canada. The museum has been limited in scope to the Rocky Mountain region of Alberta and British Co-

lumbia. Only the collections on hand, local park employees and local supplies were used with the exception of a few labels, maps and books given for the purpose by the Geological Survey, the Milwaukee Public Museum, the American Museum of Natural History of New York, the Conservation Commission of Canada and the Central Experimental Farm at Ottawa. The museum has been divided into the following sections: Mammals, birds, fish, reptiles, insects, plants, minerals, rocks, fossils, weather and Indians, of the Rocky Mountains Park, respectively. Professor Allen, of the University of Alberta and the Geological Survey, assisted in the work of the geological sections. The chief features of the museum are the initiation of large sectional labels, case labels and a few general labels to species, in addition to the individual labels—all interpreting the truths of science in simple words for the tourists who visit the park. The cases and labels have been painted to harmonize with the natural finish of the building and the letters on the labels have been made in the color of the knots and grain of the wood.

SECRETARY HOUSTON, of the Department of Agriculture, says that the state and federal governments should work together for highway improvement in order that a large proportion of the money annually spent for road construction may not be wasted. In his own department the office of public roads has been demonstrating the value of proper road-building by the construction of certain object-lesson roads, and the forest service is carrying out his idea of national and state cooperation in road building. The law requires that ten per cent. of the gross receipts from the national forests shall be spent in the states in which the forests are situated. This money is expended for road improvement under direct control of the secretary of agriculture. The amount appropriated under this act, based on the receipts of the national forests for the fiscal year ending June 30, 1913, is \$234,638.68. From the 1912 receipts for this ten-per-cent. road item, there is an additional \$134,831.10, which is still available. In ad-

ministering the ten-per-cent. road fund, forest officers charged with the actual plans and expenditures in the neighborhood of their forests have, in almost all cases, secured an equal or a larger cooperative fund from state authorities for the building of certain pieces of road. With the money thus expended many important roads are being built or put in repair. One on the Wyoming National Forest, six miles long, makes accessible to farmers a large body of timber and opens up a region of great scenic beauty. In northwestern Arizona, part of the fund will be used in connection with the LeFevre-Bright Angel road, important because it makes accessible to tourists the Grand Canyon of the Colorado. In one place, the ocean-to-ocean highway crosses the Apache National Forest, Arizona, and on this project the forest service and the local authorities cooperated enthusiastically. On the Florida national forest in western Florida steel bridges and graded roads have, under the stimulus of this fund, taken the place of corduroy, bog and sand. This federal road fund is now available in all national forest states of the west. Just as fast as returns come in, the forestry officials say, a similar fund will become available in states in which eastern national forests are being secured.

THE American Petroleum Society was organized on September 10 at the Experiment Station of the U. S. Bureau of Mines, Pittsburgh, Pa. This organization is the result of an effort of the bureau for the past seven years to bring together the men interested in the petroleum industry. Invitations were sent out in July to the secretaries of twenty-four of the national societies of the United States, inviting them to be present and cooperate in this organization. Eighteen of these societies responded at a meeting on August 1 at the Bureau of Mines. A similar invitation was sent out in August to eight additional societies, making a total of thirty-two societies that were invited to attend the September conference. A large number of these were represented at the meeting on September 10, when the final organization was completed. This society will concern itself with the study of

all phases of natural gases and petroleum, including the origin, statistics, conservation, drilling methods, production, transportation, storage, refining and specifications for refined products. At the meeting the constitution and by-laws were adopted, and officers were elected as follows: *president*, C. D. Chamberlin, of the National Petroleum Association, Cleveland, Ohio; *vice-president*, R. Galbreath, of the Independent Oil and Gas Producers' Association of Oklahoma, Tulsa, Okla.; *secretary*, Dr. Irving C. Allen, U. S. Bureau of Mines, Pittsburgh, Pa. It is anticipated that the first annual meeting will be held at some convenient place in the United States in the spring of 1914, and the second annual meeting will be held at the Panama Pacific Universal Exposition in San Francisco in 1915. At the 1915 meeting it is anticipated that all of the petroleum societies in the country will meet in one great congress. An invitation has been sent to the president of the International Petroleum Commission, which meets in January, 1914, in Bucharest, Roumania, to hold its annual meeting for 1915 in San Francisco.

#### UNIVERSITY AND EDUCATIONAL NEWS

MRS. W. BAYARD CUTTING and her children have given \$200,000 to Columbia University for a fund in memory of the late W. Bayard Cutting, of the class of '69, who served as trustee of the university from 1880 until his death, in 1912. The income of this fund is to be applied to the maintenance of traveling fellowships, open to graduate students of distinction in letters, science, law and medicine or engineering.

DR. GAVIN PATERSON TENNENT, of Glasgow, has bequeathed £25,000 to the University of Glasgow, to be applied for such objects or object in connection with the faculty of medicine as the trustees may determine. The university has also received a legacy of £4,000 from the late Mrs. Caird, widow of Principal Caird, to establish two scholarships in classics or mental philosophy, and a legacy of £5,000 by the late Mr. William Weir, ironmaster, the income of which is to pay for an additional assistant to the professor of materia medica.