

another question that will be discussed by western men. They will declare that the placer mining industry of California has been nearly wiped out through drastic rules and regulations, some of them imposed by the U. S. government. At the present time the debris question is in charge of a commission of the United States army engineers and it is claimed that while they zealously watch the interests of the farmers, they know nothing about the mining problem. A demand may be made for the inclusion of a mining engineer on this board to see that the interests of the mines are protected.

The coal men of the east will be mostly interested in two problems, the "safety first" movement and the conservation of the coal lands adjacent to the great eastern industrial centers. This latter, it is said, has become a question of most serious moment. It is fully realized by the eastern men that their coal fields are being used up at a tremendous rate and that when these coals are gone, it will be useless to think of getting coal from the west, for the commercial prosperity of the east depends upon a supply of coal at reasonable price and transportation charges from the west would be too great.

The proposed system of leasing mineral lands will also come up for extended discussion. The fact that the federal government some time ago leased coal lands in Wyoming to a coal company, thus making the entering wedge in this system of disposing of the government's mineral lands, will undoubtedly call for comment. Then there is the proposal for the revision of all the mining laws of the country. A great many mining men are of the opinion that the laws are antiquated and cumbersome, imposing hardship upon every one who has to deal with them.

MEMORIAL TO SIR WILLIAM LOGAN

ON July 16, in the little fishing village of Percé, on the Quebec shore of the Gulf of St. Lawrence, a memorial was unveiled to Sir William Edmond Logan, Kt., LL.D., F.R.S., founder and first director of the Geological Survey of Canada. The day selected for this

interesting event was the occasion of the visit of seventy members of the International Geological Congress to the Gaspé country and the memorial was erected by the Congress to commemorate the important official services of Sir William Logan which began in Gaspé in 1842. Though the day had been set apart for the exploration of the picturesque and involved geology of Percé, a half hour was appropriately devoted to the ceremony of effectively reminding the visitors who it was that first lifted the veil from the geological problems of Gaspé. The memorial is a bronze slab bearing a strong and effective medallion portrait of Sir William accompanied by a suitable inscription and is the highly artistic work of Mr. Henri Hébert, of Montreal. It has been attached to the face of a natural rock wall in the heart of Percé village. At the unveiling ceremony suitable addresses were made by Dr. A. E. Barlow, chairman of the Logan Memorial Committee, and by Dr. John M. Clarke. As a further expression of their desire to establish the memory of Logan and his work in Gaspé, and to acknowledge their appreciation of the extraordinary attractions of Percé, the committee contemplates acquiring the land about the present memorial in order to present it to the town as a public park.

SCIENTIFIC NOTES AND NEWS

THE Kelvin Memorial window in Westminster Abbey was dedicated on July 15. The dean of Westminster made the address and the ceremonies were attended by many distinguished scientific men. The window, which was designed by Mr. J. N. Comper, is in the east bay of the nave on the north side. The light from it falls upon the graves of Kelvin and Isaac Newton, and immediately beneath it are the graves of Darwin and Herschel.

A COMMITTEE has been formed to erect a memorial in honor of the late Sir William White, the distinguished naval architect, at the time of his death president of the British Association for the Advancement of Science.

FORMER students of Ralph S. Tarr, of Cornell University, wish to place on the campus

a permanent memorial of his work. They have thought that a suitable memorial would be a boulder carved so as to form a seat and bearing an inscription. If a boulder is found that can be brought to the campus it will probably be placed on the brow of the hill near McGraw Hall, where Professor Tarr taught physical geology for twenty years.

LORD AVEBURY has bequeathed one thousand pounds to the University of London to found a prize in mathematics or astronomy in memory of his father, Sir John William Lubbock, first vice-chancellor of the university.

A NUMBER of the friends of the late Samuel Franklin Emmons have presented to Columbia University a memorial fund for the endowment of the "Emmons Geological Fellowship," the purpose being to continue, through investigations and publications, the scientific research carried on by Mr. Emmons during his lifetime, more particularly in the field of economic geology. The fellowship will be awarded from time to time to graduates of any college or university who show exceptional capacity, by a committee consisting of Professor James F. Kemp, professor of geology in Columbia University; Professor John D. Irving, of the Sheffield Scientific School, Yale University, and Professor Waldemar Lindgren, of the Massachusetts Institute of Technology. The recipient will be at liberty to travel and to conduct his investigations either in this country or abroad.

By the will of the Rev. L. C. Chamberlain, who died at Pasadena, Cal., on May 9, \$25,000 is bequeathed to the Smithsonian Institution for its mineralogical collections, and \$10,000 for its collection of mollusks. There was also bequeathed \$5,000 to the Academy of Natural Sciences in Philadelphia for increasing and maintaining the Isaac Lea collection of Eocene fossils. These bequests were made for the benefit of the scientific work in which Isaac Lea was interested, Mrs. Chamberlain having been the daughter of Isaac Lea and having inherited the money from him. Mr. Chamberlain also bequeathed \$100,000 and his

residual estate to the Thessalonica Agricultural and Industrial Institute, Turkey.

AMONG the degrees conferred by the University of Michigan at its recent commencement was the degree of doctor of laws on Dr. John Dewey, professor of philosophy at Columbia University, and the degree of doctor of science on Dr. Ludwig Hektoen, professor of pathology at the University of Chicago; on Dr. Lafayette B. Mendel, professor of physiological chemistry in the Sheffield Scientific School of Yale University, and on Dr. Armin O. Leuschner, professor of astronomy and dean of the graduate school of the University of California.

ST. ANDREWS UNIVERSITY has conferred its doctorate of laws on Dr. G. A. Boulenger, of the natural history department of the British Museum.

DR. HARRY C. JONES, professor of physical chemistry at the Johns Hopkins University, has been awarded the Edward Longstreth medal of the Franklin Institute of Philadelphia for his work on the nature of solutions.

PROFESSOR VON WASSERMANN has been appointed head of the newly-established Kaiser Wilhelm Institute for Experimental Therapeutics, one of the laboratories founded by the Kaiser Wilhelm Society for Scientific Research.

MR. C. W. MASON, of Wye, England, and Mr. Donald McGregor, of Oxford, have been appointed Carnegie scholars in entomology under the Imperial Bureau of Entomology. Mr. Mason arrived in the United States early in July and is now studying at the laboratory of parasitology of the Bureau of Entomology of the U. S. Department of Agriculture at Melrose Highlands, Mass. He will study in this country for one year. Mr. McGregor will arrive in New York soon and will probably join Mr. Mason at Melrose Highlands.

IN accordance with the decision of the council of the American Association for the Advancement of Science, Dr. Robert M. Ogden, of the University of Tennessee, has been appointed by the committee in charge of making the selection of the temporary asso-

ciate secretary of the American Association to further the interests of the association in the south and to promote the meeting to be held next winter at Atlanta, Georgia. Dr. Ogden will enter upon his duties the first of next October.

MR. F. P. GULLIVER, as geographer of the Chestnut Tree Blight Commission of Pennsylvania, is studying the relation of soil and climate to the growth of chestnut trees and the spread of the blight.

MR. O. E. JENNINGS, of the Carnegie Museum, Pittsburgh, is engaged in a botanical expedition to the north of Lake Superior to study the ecological distribution of plants.

PROFESSOR W. M. DAVIS, of Harvard University, delivered two lectures before the students in geology and geography at the summer session of Columbia University, on "The Mountains of the Great Basin" and "Principles of Geographical Descriptions." Professor G. A. J. Cole, director of the Geological Survey of Ireland, addressed them on "Ireland, the Outpost of Europe."

DIRECTOR CHARLES E. THORNE, of the Ohio Agricultural Experiment Station, gave an address on July 15, at the University of Illinois, on "The Relation of Cattle Feeding to Soil Fertility." The occasion was the attendance of 250 cattlemen to inspect the baby beeves that had just completed a 210-day feeding experiment.

DR. ROBERT VON LENDERFELD, professor of zoology and director of the Zoological Institute in Prague, has died at the age of fifty-six years. Dr. von Lenderfeld's numerous and valuable publications in zoology, especially those on the morphology and classification of sponges, are well known. At the time of his death he was rector of the German University in Prague.

CIVIL service examinations are announced as follows: chief in the Office of Information, Department of Agriculture, Washington, at \$2,500 a year; bacteriologist at a salary ranging from \$1,800 to \$2,000 a year in the New York food and drug inspection labora-

tory, Bureau of Chemistry, Department of Agriculture.

THE minister of public instruction of Argentina has authorized the preparation of an expedition from the National Observatory at Córdoba to observe the total solar eclipse which will occur on August 20-21, 1914. The expedition will be composed of three members of the observatory staff, with an extensive equipment of instruments and will proceed to a point (as near to the central line as possible) in southern Russia, not far from the Black Sea. It is expected that the expedition will be joined by astronomers from the Berlin, Potsdam and Koenigsberg observatories.

SECRETARY HOUSTON has announced that hereafter the Department of Agriculture will send a weekly letter to the correspondents of the department, giving the latest agricultural information of value to the farmer. The letters will treat of crop conditions and prices, the discovery of new plant or animal pests, pure food decisions, and those which affect users of irrigated land and the national forests, and any other work of the department which can benefit the farmer. The letter is to be sent weekly, so that the news may reach the farmers promptly. The *Crop Reporter*, a monthly publication which has been issued by the department for some years past, is to be discontinued, Secretary Houston having decided that it reached the farmers too late to be of any practical use.

THE first annual meeting of editors of publications of agricultural colleges in the middle west was held at the University of Illinois on July 10. Representatives of six states met and discussed informally the problems in connection with the gathering, editing and publication of agricultural material. It was voted to hold a session in 1914, to which many other states will be invited. The association elected Dr. B. E. Powell, of Illinois, executive secretary to make necessary arrangements for the next meeting.

FOLLOWING is the New York Botanical Garden's program of late summer lectures, which will be delivered in the museum building,

Bronx Park, on Saturday afternoons, at four o'clock:

August 2, "American Desert Plants," by Dr. William Trelease.

August 9, "The Biology of Cheese," by Dr. Charles Thom.

August 16, "Wild Flowers of the Late Summer," by Dr. N. L. Britton.

August 23, "Explorations in Mexico, II.: Mexico City to Cuernavaca," by Dr. W. A. Murrill.

August 30, "The Mammoth Trees of California," by Dr. Arthur Hollick.

September 6, "Shade Trees and their Enemies," by Dr. F. J. Seaver.

September 13, "A Visit to the Panama Canal Zone," by Dr. M. A. Howe.

September 20, "Scenic and Botanical Features of Devil's Lake, Wisconsin," by Dr. A. B. Stout.

September 27, "Explorations in Mexico, III.: Colima and Manzanillo," by Dr. W. A. Murrill.

ARRANGEMENTS have been made between the New York State College of Forestry at Syracuse University and the Palisades Inter-State Park Commission whereby the College of Forestry will prepare and carry out a plan of management for the 14,000 acres of forest land controlled by the commission and lying along the Hudson River. The work of getting the forest land into shape will be started about the middle of August by four advanced students under the direction of Professor Frank F. Moon, of the College of Forestry, who was forester for the former Highlands of the Hudson Forest Reservation. The various properties will be mapped out and studied to ascertain the amount of the timber now standing and the amount to be removed. In addition, the fire problem will be studied and eventually a long term reforestation plan put into force. Centers of insect and fungus damage will be located and timber will be marked so that during the coming winter the park employees will be busy removing the dead, diseased and undesirable specimens. A forest nursery will be developed and active reforestation begun in 1914.

THE national congress of Brazil has passed and the president of that republic has approved a law fixing legal time in Brazil. Following is a translation of the bill:

Art. 1. For purposes of international and commercial contracts the meridian of Greenwich shall be considered fundamental in all Brazil.

Art. 2. So far as the legal hour is concerned Brazilian territory is divided into four distinct zones as follows:

(a) The first zone includes the archipelago of Fernando de Novorha and the island of Trinidad, and shall have Greenwich time "less two hours."

(b) The second zone includes all the coast, all the states of the interior (except Matto-Grosso and Amazonas), and the part of the state of Para east of a line starting from Mount Grevaux on the frontier of French Guyana, following down Rio Pecuary to the Javary, along this last river to the Amazonas, and southward along the Rio Xingu to the state of Matto-Grosso. This zone shall have Greenwich time "less three hours."

(c) The third zone includes all of the state of Para west of the line just mentioned, the state of Matto-Grosso, and all of the state of Amazonas east of a line drawn on a great circle starting at Tabatinga and ending at Porto Acre. This zone shall have Greenwich time "less four hours."

(d) The fourth zone includes the territory of Acre and the region west of the line just mentioned, and shall have Greenwich time "less five hours."

THE following letter from President John C. Branner was published in the *Journal do Commercio*, Rio de Janeiro, June 14, 1913:

The first volume of the "Monographs of the Geological and Mineralogical Service of Brazil" has just appeared, published by the Ministry of Agriculture, Industry and Commerce. It bears the title "Devonian Fossils of Parana, by Dr. John M. Clarke," Rio de Janeiro, 1913.

It is a work of the greatest importance to science, not only that of Brazil, but of the foreign world as well.

The Federal Geological Service has been in operation in Brazil for six years. In this relatively short time the director has, amongst many other achievements, succeeded in bringing together an important collection of Devonian fossils of the highest interest to science and in inducing Dr. Clarke, the official geologist of the state of New York and one of the highest authorities on this subject, to undertake their study, description and discussion. In the words of Dr. Clarke himself, "the results are of world-wide import." The interest and importance of this monograph are due, in great part, to the fact that the studies embrace,

aside from the Devonian fossils of Parana, those of Matto-Grosso, the Amazonas [Argentina] and the Falkland Islands, while the general conclusions extend to the Devonian of all the continents of the world.

The text of this monograph, in Portuguese and English, covers 353 pages, which are accompanied by 27 handsome plates printed in Germany by the most advanced processes of the lithographic art.

This fine work as a contribution to pure science does honor to the author, to the director of the Geological Service, to the Ministry of Agriculture and to the country.

THE composition and characteristics of the population of Hawaii, as reported at the Thirteenth Decennial Census, are given in a bulletin soon to be issued by Director Durand, of the Bureau of the Census, Department of Commerce. It was prepared under the supervision of Wm. C. Hunt, chief statistician for population. Statistics are presented of number of inhabitants, increase and density of population, proportions urban and rural, race, nativity, parentage, sex, age, marital condition, place of birth, males of voting and militia ages, citizenship, year of immigration of the foreign-born, school attendance, illiteracy, inability to speak English, and number of dwellings and families. A previous population bulletin for Hawaii gave the number of inhabitants by counties and minor civil divisions. That and the forthcoming bulletin cover all the principal topics of the population census except occupations and the ownership of homes. The population of Hawaii at each census from 1832 to 1910, inclusive, was as follows: 1832, 130,313; 1836, 108,579; 1850, 84,165; 1853, 73,138; 1860, 69,800; 1866, 62,959; 1872, 56,897; 1878, 57,985; 1884, 80,578; 1890, 89,990; 1896, 109,020; 1900, 154,001, and 1910, 191,909. Racially the population of the territory is extremely heterogeneous. In 1910 the pure Caucasian element numbered 44,048, constituting 23 per cent. of the total population. Of this class, which is itself composed of diverse racial elements, 22,301, or slightly more than one half, were Portuguese; 4,890 were Porto Rican; 1,990 were Spanish, and 14,867 were of other Caucasian descent. The Japanese, numbering 79,675, constituted 41.5 per

cent., or more than two fifths, of the total population, while the Japanese, Chinese and Koreans combined, numbered 105,882, or 55.2 per cent., of the total population. Persons of pure native Hawaiian stock numbered 26,041 and constituted 13.6 per cent. of the population. In the decade 1900-1910 the number of Caucasians in the population increased 15,229, or 52.8 per cent., the percentage of increase for this race being practically the same in this as in the preceding decade. The increase of the Japanese in the decade 1900-1910 was 18,564, or 30.4 per cent. In the same period the Chinese decreased 4,093, or 15.9 per cent. The number of pure Hawaiians decreased from 34,436 in 1890 to 26,041 in 1910, the decrease in the decade 1900-1910 being somewhat less than that in the preceding decade—3,758, or 12.6 per cent., as compared with 4,637, or 13.5 per cent. Slightly more than one half (98,157, or 51.1 per cent.) of the population in 1910 was native, and slightly less than one half (93,752, or 48.9 per cent.) foreign born. The native element embraces all persons born in Hawaii, or in any state or outlying possession of the United States. Persons born in Porto Rico or in the Philippine Islands, whether of Porto Rico, Filipino, or other racial origin are accordingly classified as native. For the Japanese the percentage native was 25; for the Chinese, 33.2; for the Portuguese, 61.7, and for the "other Caucasian" element, 66.7.

UNIVERSITY AND EDUCATIONAL NEWS

THE board of trustees of the University of Illinois at a recent meeting voted to reopen the college of dentistry which was closed in 1911 because of no appropriations. Doctor Frederick B. Moorehead, of Chicago, was appointed dean of the new dental college. The principal items in the new building program for the immediate future are: An addition to the chemistry laboratory, costing \$250,000; an extension on the commerce building, costing \$125,000; a school of education building, costing \$120,000; a woman's residence hall, \$100,000; another engineering building, costing \$100,000.