

in Europe and some representation of foreign types has been effected in the United States), hence the naturalistic reproduction in relief of Kilauea should mark two significant steps; first, representation in the new way of an American land-form type, and second, the entry of American geologists into this field, so useful in the promotion of their science.

GEO. CARROLL CURTIS

HAWAIIAN VOLCANO OBSERVATORY,
KILAUEA CRATER,
July, 1913

SCIENTIFIC NOTES AND NEWS

A TABLET, recording the place of birth of Sir William Turner, the distinguished anatomist, principal of the University of Edinburgh, has been unveiled in his native town of Lancaster.

At the meeting of the section of tropical medicine and hygiene of the recent International Medical Congress, Sir Patrick Manson was presented with a gold plaque. It bears his portrait and on the other side an allegorical group representing science triumphing over disease in a tropical landscape.

COL. WILLIAM C. GORGAS has applied for four months' leave of absence in order to accept the invitation to advise on the sanitary conditions in Johannesburg, South Africa.

DR. ADOLF HURWITZ, professor of mathematics at the Zurich Polytechnic School, has been elected a member of the Accademia dei Lincei, Rome.

DR. THEODOR NEUBÜRGER, of Frankfort, known for his contributions to hygiene and anthropology, has celebrated the sixtieth anniversary of his doctorate.

COLORADO COLLEGE at its last commencement conferred the honorary degree of Sc.D. on Professor Theodore D. A. Cockerell, who holds the chair of zoology in the University of Colorado.

SIR JAMES GRANT, of Ottawa, was made an honorary life member of the Canadian Medical Association at its recent meeting.

DR. W. L. TOWER, associate professor of embryology in the University of Chicago, has

gone to South America to gather material for the new bionomic laboratory just completed at the university. Professor Tower has been made curator of the laboratory, which will be equipped for the study of genetics and the problems of experimental evolution.

DR. GEORGE H. SHULL, of the Station for Experimental Evolution of the Carnegie Institution, has been granted a year's leave of absence, and will spend the greater part of the year in Berlin, in study and writing. He sailed on September 12 and will participate in the Generalversammlung der Deutschen Botanischen Gesellschaft which meets in Berlin on October 5. His paper will be on "Chlorophyllfaktoren und Buntblätterigkeit bei *Lychnis dioica*."

DR. FREDERICK A. SAUNDERS, professor of physics at Syracuse University, is spending abroad a year's leave of absence. He will visit foreign laboratories and carry forward spectroscopic research in Professor Kayser's new laboratory at Bonn.

SAUL EPSTEIN, professor of engineering mathematics at the University of Colorado, has resigned to accept the position of insurance commissioner of Colorado.

THE Permanent International Eugenics Committee, which met in Paris on August 4, decided to hold the next International Congress in New York during September, 1915. Major Leonard Darwin presided, Mrs. Gotto acted as secretary, and the following countries were represented: England (Dr. Edgar Schuster), America (Dr. F. A. Woods), France (M. Lucien March), Germany (Professor A. Ploetz), Italy (Professor C. Gini), Denmark (Dr. S. Hansen), Norway (Dr. J. A. Mjöen).

DR. M. P. RAVENEL, head of the State Hygienic Laboratory, Wisconsin, presided over a session of the Fourth International Congress on School Hygiene devoted to university health. He also made an address on bovine tuberculosis at the fiftieth anniversary meeting of the American Veterinarians' Association in session in New York City, September 1-5.

DR. TEMPEST ANDERSON, an ophthalmic surgeon of York, known for his publications on earthquakes and volcanoes, died on August 20, aged sixty-nine years, while returning from the Philippine Islands.

MR. J. R. SHELDON, formerly professor of agriculture at the Royal Agricultural College, Cirencester, has died, aged seventy-three years.

ROBERT RIEDER PASHA, formerly professor of surgery at Bonn and afterwards inspector-general of medical schools in Turkey, has died at the age of fifty-one years.

THE death is announced, as the result of an accident, of Professor C. Bourlet, professor of mechanics at the Conservatoire des Arts et Métiers in Paris.

WE learn from *Nature* that by the will of Professor Emil Chr. Hansen and his wife a fund bearing his name has been established. At intervals of two or three years, beginning in 1914, a gold medal bearing his effigy and accompanied by a sum of at least 2,000 kroner is to be awarded on May 8 to the author of a meritorious publication on some microbiological subject, and recently published in Denmark or elsewhere. In 1914 the medal will be awarded to a worker in the field of medical microbiology. The president of the board of trustees is Professor S. P. L. Sorensen, the chemical department of Carlsberg Laboratory, Copenhagen, from whom all information may be obtained.

PROVISION has been made for the establishment of a national museum by the Dominican government in the city of Santo Domingo for the purpose of retaining and preserving in the country objects and relics of historical character connected with the discovery and development of the country. The museum is to be established in the old palace known as the house of Don Diego Colon. The sum of \$20,000 has been appropriated by the National Congress for repairing the building.

THE Field Museum of Natural History has arranged its thirty-ninth free lecture course

on science and travel for Saturday afternoons, at three o'clock, as follows:

October 4—"Korea," Mr. Homer B. Hulbert, Springfield, Mass.

October 11—"The Scenery and Resources of Alaska," Professor Lawrence Martin, University of Wisconsin.

October 18—"The Physical Basis and Determination of Sex," Dr. Horatio H. Newman, the University of Chicago.

October 25—"Our Forests," Mr. Huron H. Smith, assistant curator of dendrology.

November 1—"Zoological Collecting in South America," Mr. Wilfred H. Osgood, assistant curator of mammalogy and ornithology.

November 8—"The Inhabitants of Fresh Water," Dr. Victor E. Shelford, the University of Chicago.

November 15—"Migration of Plants," Professor L. H. Pammel, Iowa State College.

November 22—"The Joseph N. Field South Pacific Expedition," Dr. A. B. Lewis, assistant curator of African and Melanesian ethnology.

November 29—"New Zealand," Dr. Carlos E. Cummings, Buffalo Society of Natural Sciences.

THE Macbride Lakeside Laboratory, located on West Lake Okoboji, Iowa, has just closed its most successful session, under the direction of Professor Thomas H. Macbride. Courses were offered in botany, zoology and geology, special emphasis being placed on field work. The laboratory was established in 1909 by the alumni of the State University of Iowa, and was named in honor of its director. It is affiliated with the colleges of the state through the state university, and is devoted to research by special students and teachers of the natural sciences. The work was in charge of the following staff: Professor Thomas H. Macbride, University of Iowa, and Mr. A. F. Ewers, McKinley High School, St. Louis, botany; Dr. T. C. Stephens, Morningside College, general zoology and ornithology; Professor J. C. Carman, University of Cincinnati, geology; Professor C. E. Bartholomew, Ames, entomology. Special series of lectures were given by Dr. Lynds Jones, of Oberlin, on ornithology, and by Professor L. H. Pammel, of Ames, on plant diseases.

It is stated in *Nature* that the Institut International de Physique Solvay has a sum of 20,000 francs available for the encouragement of experimental work in physics and physical chemistry, particularly for investigations on radiation phenomena and for studies of the theory of energy quanta and of molecular theories. Grants from the fund will be awarded, without distinction of nationality, by the administrative commission of the institute on the recommendation of the international scientific committee. The administrative commission is composed of Professors P. Heger, E. Tassel and J. E. Verschaffelt, Brussels, and the scientific committee of M. H. A. Lorentz, president, Haarlem; Mme. M. Curie, Paris; M. Brillouin, Paris; R. B. Goldschmidt, Brussels; H. Kamerlingh-Onnes, Leyden; W. Nernst, Berlin; E. Rutherford, Manchester; E. Warburg, Berlin, and M. Knudsen, secretary, Copenhagen. Applications for grants should be made before September 15 to Professor H. A. Lorentz, Zijlweg 76, Haarlem, Holland.

Six million acres of withdrawn public lands were restored to entry during the months of May and June upon approval by the Secretary of the Interior of the recommendations of the U. S. Geological Survey. This action was the result of examination and classification of the lands by the survey, those restored either having been found not to be valuable for power sites, reservoirs, coal, phosphate or potash deposits, or having been definitely valued as coal lands, and rendered available for purchase under the coal-land law. Of these lands relieved from coal withdrawal nearly two and a half million acres were in the state of Colorado. Five and a half thousand acres were also withdrawn in Colorado as water-power sites. In Idaho 1,100,000 acres of coal and phosphate withdrawals were classified and restored, and for water-power sites approximately 10,000 acres were withdrawn and about the same acreage restored. In Montana 250,000 acres were restored as being noncoal-bearing and about 1,000 acres as not valuable for water-power sites, while about 150 acres were

withdrawn for that purpose. In North Dakota nearly 1,400,000 acres in coal withdrawal were classified and restored. In Oregon approximately 75,000 acres were restored as non-oil-bearing lands and about 12,000 acres were withdrawn for water-power or reservoir sites. In South Dakota over 330,000 acres were relieved from the coal withdrawal. In Utah about 1,500 acres were withdrawn for water-power sites. In Wyoming over 47,000 acres of coal withdrawals were reopened to entry and purchase; approximately 87,000 acres were withdrawn for classification as to whether they are oil-bearing lands, and about 304,000 acres were restored as nonphosphate lands. For all states the total withdrawals during the months of May and June were over 116,000 acres, and the total restorations were over 6,000,000 acres. The total outstanding withdrawals on July 1 in all the public-land states amounted to 68,609,289 acres, of which more than fifty-eight million acres are in coal-land withdrawals. These lands are held pending classification by the Geological Survey, and as rapidly as they are found to be mineral bearing they are either valued and placed on sale (as in the case of coal lands), definitely reserved pending appropriate legislation by congress to provide for their disposition (as in the case of potash or phosphate lands), or held subject to development under departmental regulations (as in the case of water power or reservoir reservations); or if they are found to be nonmineral in character they are restored to public entry. This work of classification and valuation is being prosecuted by the Geological Survey as rapidly as the appropriations provided by congress will permit.

THE report of the Royal Commission on Industrial Training and Technical Education in Canada, instituted three years ago, has now been made public. According to foreign journals the report suggests that a fund of £600,000 be provided annually by the Dominion for a period of ten years, and be divided among the provinces on the basis of population for the promotion of higher technical education and industrial training, while for elementary

schools teaching manual training and domestic science a grant of £70,000 a year for ten years is recommended. The report also proposes the establishment in each province of a board qualified to carry on industrial training. It advocates the provision of suitable and adequate apparatus and equipment for teaching purposes, the foundation of scholarships for students, the engagement of experts with experience in industrial training, and the creation of central institutions to supplement the work carried on by the provincial and local authorities. Workers in factories whose main task is to attend or to operate machines should, it is suggested, receive instruction which would develop all-round skill and increase their interest beyond the routine of automatic operations. Such training should be provided as will conserve and develop occupations in which skilled handicraft is required. The interests of the rural population should be preserved so far as possible by industrial training and technical education suitable to the needs of its workers. The needs of girls and women for organized instruction and training in house-keeping and home-making under modern industrial conditions should be recognized. The report also recommends that schools for fishermen should be established, and that provision be made for instruction in packing and curing. The distinguishing characteristic of the report is the attention which it gives to the problems of the rural communities.

THE U. S. Geological Survey has just issued, as an advance chapter from "Mineral Resources of the United States," a report by Alfred H. Brooks on the mine production of precious and semi-precious metals in Alaska in 1912. Metalliferous mining in Alaska, says Mr. Brooks, made important advances last year. Although the output of gold placers was less than in 1911, the installation of large plants, notably of dredges, in many districts is encouraging for the future of this industry. More important was the progress made in lode gold mining, the output of which was greater than in previous years. Copper mining also advanced, partly because several large plants

increased their output, partly because a number of small mines were developed on account of the high price of copper. The development of the coal fields still awaits the establishment of a definite policy in regard to the disposition of the public coal lands. The delay in securing cheap fuel for the territory has now for many years caused a stagnation in many industries. Railway construction and, to a certain extent, railway operation have stopped and many mining enterprises have been hampered if not entirely abandoned on account of the uncertainty as to the fuel problem. Very few Alaskans have any direct interest in coal claims or in mining, but the entire population of the territory is desirous of seeing the coal fields developed, because it is believed that this will bring about advancement in many other industries. Above all, it will encourage the operation and the construction of railways, which are all important to the territory. The total mine production of gold, silver and copper in Alaska in 1912 was valued at \$22,285,821, against \$20,505,664 in 1911, an increase of \$1,780,158. The value of the gold production of Alaska last year is estimated at \$17,145,951, that of silver at \$316,839. The copper output of Alaska for 1912 was 29,230,491 pounds, valued at \$4,823,031, an increase from 1911 of 1,962,613 pounds.

UNIVERSITY AND EDUCATIONAL NEWS

THE Florida legislature has made the following appropriations for the support and maintenance of the state institutions for higher education for the coming biennium: For the University of Florida at Gainesville, \$173,500, which includes \$30,000 for new law building, \$23,000 for farmers' institutes and publishing bulletins, \$15,000 for laboratory equipment and farm buildings for college of agriculture, \$10,000 for equipment and machinery for college of engineering, \$7,000 for heating plant to supply five new buildings; \$5,000 for sewerage and disposal system. For the Florida State College for Women at Tallahassee, \$148,000, of which \$30,000 is for dining hall and equipment, \$5,000 for domestic