

on the Palo Alto estate for the preservation of the native vegetation. These plant reserves embrace several hundred acres and contain a variety of plant formation, such as stream-bank, redwood cañon, oak-madroña forest, serpentine outcrops and chaparral. In a preliminary survey of the reserves 64 species of native lignescent plants were catalogued.

SCIENTIFIC NOTES AND NEWS

SIR WILLIAM RAMSAY, the distinguished British chemist, died on July 23, in his sixty-fifth year.

At the annual meeting of the Royal Society of Arts on June 29, two weeks before the death of Elie Metchnikoff, it was announced that the Albert medal of the society for the current year had been awarded to him "in recognition of the value of his investigations into the causes of immunity in infective diseases, which have led to important changes in medical practise, and to the establishment of principles certain to have a most beneficial influence on the improvement of public health."

THE Royal Society of Edinburgh at its meeting of July 3, elected foreign honorary fellows as follows: Professor C. Barrois, professor of geology and mineralogy, Lille; Professor D. H. Campbell, professor of botany, Leland Stanford University; Professor M. E. Gley, professor of physiology, Paris; Professor C. Golgi, professor of anatomy, Rome; General W. C. Gorgas, U. S. Army; Professor G. B. Grassi, professor of comparative anatomy, Rome; Professor E. C. Pickering, director of Harvard College Observatory; Professor E. Warming, emeritus professor of botany and keeper of the Royal Botanic Gardens, Copenhagen.

SIR GEORGE T. BEILBY, F.R.S., the chemist and metallurgist, Mr. Edward Dent, Sir Robert Hadfield, F.R.S., the metallurgist, and Sir H. Capel Holden, F.R.S., the electrical engineer, have been elected to the council of the Royal Society of Arts.

THE Earl of Selborne has resigned the office of president of the British Board of Agriculture and Fisheries.

THE prize fellowship, offered by the English Federation of University Women to encourage research, has been awarded to Dr. Alice Lee, fellow of University College, London, who proposes to undertake an investigation into the birth-rate as affected by present conditions.

DR. VICTOR V. ANDERSON has been placed in charge of a medical department and psychological laboratory in the Boston police court established by the city council on June 23.

DR. WILLIAM S. O'NEILL SHERMAN, Pittsburgh, has started for Europe, where he will do research work in war hospitals for the Rockefeller Institute. He is to make a special study of gangrene, tetanus and amputation.

THE Department of Botanical Research of the Carnegie Institution of Washington will be represented at the sixty-eighth meeting of the American Association by Drs. Forrest Shreve and H. A. Spoehr.

ZOOLOGICAL investigations are being conducted this summer by the department of forest zoology of the New York State College of Forestry at Syracuse, on the following lines: The fish survey of Oneida Lake is being continued by Dr. C. C. Adams and Professor T. L. Hankinson, assisted by Mr. A. G. Whitney. Mr. Frank C. Baker is continuing his study of the relation of molluscs to fish. Professor H. N. Jones, bacteriologist of Syracuse University, is studying the diseases of fish. Professor P. S. Welch, of the Kansas State College, is working in cooperation on the annelid worm fauna of the lake and on the fish food in the water lily zone. Through a grant by Hon. R. M. Barnes, of Lacon, Ill., also cooperating with the college, P. M. Silloway is making a survey of the bird life in the forests about the Summer Forest Camp at Cranberry Lake, Wanakena, N. Y.

THE Board of Scientific Directors of the Rockefeller Institute for Medical Research announce the following promotions and appointments: Dr. Alphonse R. Dochez, hitherto an associate in medicine, has been made an associate member. Dr. Henry T. Chickering

has been appointed resident physician in the hospital to succeed Dr. Dochez. The following have been made associates: Dr. Louise Pearce, pathology and bacteriology; Dr. Frederick L. Gates, pathology and bacteriology. The following have been made assistants: Dr. Oswald Robertson, pathology and bacteriology; Ernest Wildman, chemistry. The following new appointments have been made: Dr. Rhoda Erdmann, associate in the department of animal pathology; Dr. Rufus A. Morrison, assistant in medicine and assistant resident physician; Dr. John Northrop, assistant in the department of experimental biology; Dr. Jean Oliver, assistant in the department of pathology and bacteriology; Dr. Ernest W. Smillie, fellow in the department of animal pathology; Dr. William D. Witherbee, assistant. Dr. Hardolph Wasteney, hitherto an associate in the department of experimental biology, has, as has already been noted in *SCIENCE*, accepted an appointment as associate professor of pharmacology in the University of California.

UNDER the auspices of the Botanical Seminar of the Michigan Agricultural College, Dr. William Crocker, of the University of Chicago, gave a public address recently on the "History of Our Present Knowledge of Plant Nutrition."

At the sixty-fourth annual meeting of the Maine Medical Association, held in Portland, an illustrated lecture on "Experiences of the Layman on a Journey of Three Months in Japan, Korea and China with Three Prominent Medical Men" was delivered by Dr. Wallace Butterick, secretary of the General Education Board of the Rockefeller Foundation.

MR. LEONARD DARWIN gave the presidential address at the annual meeting of the Eugenics Education Society held in London on July 6.

CHARLES WILLIAM HENRY KIRCHOFF, a past-president of the American Institute of Mining Engineers and for many years editor of *The Iron Age*, died on July 23, at the age of sixty-three years.

SIR VICTOR HORSLEY, the distinguished English surgeon, neurologist and author, died on

July 16, at the age of fifty-nine years, at Amara, in Mesopotamia, from a sun stroke.

THE death is announced of Prince Boris Galitzin, professor of physics in the Imperial Academy of Sciences, Petrograd, known especially for his work in seismology.

GASTON MASPERO, the well-known Egyptologist, permanent secretary of the Académie des Inscriptions et Belles-Lettres, Paris, died on June 30.

THE twenty-seventh annual meeting of the British Museums Association was held at Ipswich on July 11 and 12, under the presidency of Mr. E. Rimbault Dibdin, curator of the Walker Art Gallery, Liverpool.

SIR WILLIAM OSLER has sent word to a number of American surgeons that there are vacancies for 120 young American medical graduates in the military hospitals of London and its immediate neighborhood. The term of service is six months. There will be a small salary and passage will be paid both ways.

AN isolation hospital having a capacity of forty beds is being erected in connection with the State University of Iowa, College of Medicine. It is reported that \$42,000 has been set aside for the construction of the institution.

THE United States Coast and Geodetic Survey vessel *Surveyor*, was launched at Manitowoc, Wis., on July 22. It is a steel steamer of about 1,000 tons displacement, with triple expansion engines, and will use crude oil for fuel. Sixty-six officers and men can be accommodated. The vessel can carry enough fuel and stores to remain at sea for three months. The *Surveyor* is held to be the most modern type of vessel ever built for surveying purposes, and will be used for work on the Pacific coast and Alaska. It is intended that she shall be finished this fall in time to leave the Great Lakes before the close of navigation. Miss Elizabeth Brent Jones, daughter of the superintendent of the Coast and Geodetic Survey, named the vessel.

THE results of a large number of recent physical tests of road-building rock have been published by the U. S. Department of Agri-

culture as a professional paper, Bulletin 370. These tests have been made by the Office of Public Roads and Rural Engineering to give highway engineers information in regard to the various physical properties of the different rocks most frequently used in road construction. The three most important of these properties are defined in the bulletin as *hardness*, or the resistance which the rock offers to the displacement of its surface particles by abrasion; *toughness*, or the resistance which it offers to fracture under impact; and *binding power*, or the ability which the dust from the rock possesses, or develops by contact with water, of binding the large rock fragments together.

A POSTAL vote was recently taken of the members of the British Institution of Electrical Engineers on the proposed exclusion of alien enemies, and the details of the result were as follows: Cards issued, 3,244; cards returned, 1,470. In favor of (a) to expel members who are subjects of enemy-countries or states, 1,320, against, 88; in favor of (b) to expel members who, being naturalized British subjects, have retained enemy nationality, 1,307, against, 79; in favor of (c) not to expel members who are naturalized British subjects and were formerly subjects of a country or state now at war with Great Britain and Ireland, but who have under the laws of such country or state definitely lost their alien nationality, provided they are able to prove this to the complete satisfaction of the council, 1,081, against, 264; in favor of (d) that no person shall after the — of ——— 19—, be eligible for election as a member of the Institution who is a subject of any country or state with which the United Kingdom of Great Britain and Ireland is or shall have been at war on or after the date mentioned, 1,120, against, 200.

ONE of the provisions of the federal aid road bill, which was signed by the President on July 11, appropriates \$1,000,000 a year for ten years to be spent by the Secretary of Agriculture for the construction and maintenance of roads and trails within or partly within the national forests. The bill provides that, upon

request of the proper officers of the states or counties, the money shall be used for building roads and trails which are necessary for the use and development of resources upon which communities within or near the national forests are dependent. The work is to be done in cooperation with the various states and counties. Not more than 10 per cent. of the value of the timber and forage resources of the national forests within the respective county or counties in which the roads or trails will be constructed may be spent. Provision is made for the return of the money to the Treasury by applying 10 per cent. of the annual receipts of the national forests in the state or county until the amount advanced is covered. Officers in charge say that the bill will make possible the construction of many roads which are greatly needed. Since 1913 ten per cent. of the receipts of the national forests have been used in road and trail building, but the funds have been inadequate to meet the needs. Many isolated communities within the national forests are entirely dependent on the government roads and trails. In some instances these settlements are said to be almost entirely without means of communication. According to Forest Service officials the money now made available will permit the construction of many roads necessary to open up inaccessible territory, and will greatly facilitate the development of large areas. It is said that detailed plans covering the policy to be followed in building roads are now being made.

UNIVERSITY AND EDUCATIONAL NEWS

THE jury in the Surrogates' Court of New York City has declared invalid the will of Amos F. Eno, according to which Columbia University was made the residuary legatee and would receive an amount estimated at over four million dollars. It is understood that Columbia University will seek to obtain a new trial.

THE merger of the medical school of the University of Pennsylvania and the Jefferson Medical College will not be consummated this year. The following statement was made by