

construction of roads, trails and bridges, in forest reconnaissance and mapping, and in other phases of national forest activities.

Seven of the juniors are working with lumber and wood-preserving companies, eight are engaged in landscape forestry and five others in consulting forestry work. In addition two are engaged in city forestry work in New York and the other eleven men are in the state forestry work, in forestry work for themselves or in attending the sophomore forest camp in the Adirondacks. Most of the men are working in New York state in some phase of practical forestry work, although the school has become national in its activities inasmuch as it draws students from practically all of the states of the union. Its graduates and the juniors who are seeking temporary work only have so far had opportunities to engage in work all over the country, although it is probable that the largest number will remain in this state.

This season the boys who have gone out from the college of forestry for work have secured positions paying from \$40 to \$100 per month and expenses. Many of the temporary positions lead to permanent work upon graduation from the college. Many calls have come to the college for men and it has been impossible to send them out owing to not having men with a sufficient amount of training. This situation is evidence of a growing interest in forestry and proves that more men will be needed in the future for the protection of our great forest areas and in the development of the industries dependent upon the forests.

STANFORD UNIVERSITY ARBORETUM

THE Stanford Arboretum, comprising approximately 200 acres, and established by Senator Stanford in 1882, has been placed under the control of the department of botany with a view of more fully utilizing it for scientific purposes. An annual appropriation is to be made for the acquisition of specimens, that for the current year being \$1,000.

The original collections, which will form the nucleus of the new plantings, contain several hundred species, representing about sixty families. The collection of conifers is espe-

cially rich in genera. Including both the Taxaceæ and Pinaceæ, this group of plants is represented by nineteen genera.

As the climate at Stanford is warm enough in winter for orange and lemon trees and cool enough in summer to successfully grow the white pine and Norway spruce, it should be possible to grow almost any species of the temperate and subtropical zones. Plants from Australia, New Zealand, Chili, South Africa and the Mediterranean region are well adapted and will thrive without being watered during the dry season. With such excellent natural conditions the Arboretum should become eventually one of the most extensive collections of arboreal plants. A feature that is to be given especial attention is the West American section. In a tract, set aside for this purpose, it is planned to bring together as complete a collection as possible of the native trees and shrubs of the Pacific coast, Great Britain, Rocky Mountains and the arid southwest.

The development of the Stanford Arboretum along broad scientific lines is meeting with enthusiastic approval and support. Among those who have taken interest in its establishment and offered to contribute toward the building up of the collections are: Dr. C. S. Sargent, director of the Arnold Arboretum of Harvard University; Dr. N. L. Britton, director of the New York Botanical Garden, and Dr. David Fairchild, in charge of foreign seed and plant introduction, United States Department of Agriculture. Mr. H. A. Greene, president of the Monterey Tree Growing Club, has presented already nearly 200 species, many of which are rare and impossible to obtain through ordinary trade channels.

Mr. John McLaren, superintendent of Golden Gate Park, has taken an active interest and has consented to assist in the general planning, especially along the principal avenues. Mr. McLaren's success with the landscape gardening in Golden Gate Park and at the Panama-Pacific Exposition assures the Arboretum the very best advice for its landscape architecture.

Coincident with the new policy of the Arboretum the university has set aside several tracts

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