lished that fall. There he was awarded the degree of master of science in forestry in 1905.

Since July 1, 1905, Mr. Hill had been with the Forest Service continuously, with the exception of three years, 1909–12, when as assistant professor of forestry at the University of Michigan, he taught forest utilization, wood technology, mensuration and dendrology. Even during this period, the Service retained him as collaborator. He served for a time as chief of the Forest Products Division of the Regional Office in Denver, as forest examiner on the Sierra National Forest in California, and subsequently in the California Regional Office in San Francisco. At various times he was occupied with land classification, was chief assistant in timber management, had charge of law enforcement in California national forests and later of forest products activities. Since 1927, he had been with the California Forest and Range Experiment Station, where his responsibilities included direction of the products and economics research, and more recently special services in forest land utilization.

Mr. Hill was the author of numerous publications ranging from semi-popular articles in trade journals to technical bulletins and covering such a wide range of topics as wood paving in the United States, law enforcement on the national forests, heptane from California pines, air seasoning of western softwood lumber, marine borers and their relation to marine construction, utilization of El Dorado County land, and many others.

He served as executive officer of the San Francisco Bay Marine Piling Committee, 1919 to 1927, and as chairman of the natural resources committee of the California Economic Research Council throughout the existence of that organization. He was a senior member of the Society of American Foresters, and served as chairman of the California section of that society from 1927 to 1929. His membership in other learned societies included the American Association for the Advancement of Science, California Academy of Sciences, California Botanical Society and the East Bay Astronomical Association. He was a fellow in the first two of these organizations.

Mr. Hill had a wide circle of friends outside his profession as well as within it, and his personal contacts reached far beyond the United States to Europe, Africa, Australia and the Orient. The forestry profession and American scientists as a group have lost a staunch and able colleague.

EDWARD C. CRAFTS

CALIFORNIA FOREST AND RANGE EXPERIMENT STATION

#### RECENT DEATHS

Dr. Samuel Bradford Stone, assistant professor of chemistry at Brooklyn College, died on May 7 in his forty-fifth year.

Dr. Willis Cohoon Campbell, professor of orthopedic surgery at the College of Medicine of the University of Tennessee, died on May 4 at the age of sixty years.

SIR ALBERT SEWARD, from 1906 to 1936 professor of botany at the University of Cambridge, died on April 11 at the age of seventy-seven years.

SIR JAMES GEORGE FRAZER, anthropologist, author of "The Golden Bough," died on May 7 at the age of eighty-seven years. Lady Frazer died a few hours later.

# SCIENTIFIC EVENTS

### THE NEW YORK ZOOLOGICAL PARK

THE official opening of the African Plains in the Bronx Zoological Park took place on May 1. This is a first step toward exhibiting animals according to their distribution by continents.

The opening ceremony was marked by short addresses by Mayor La Guardia, Sir Gerald Campbell, minister from Great Britain, Commissioner Robert Moses and the Honorable J. J. Lyons, president of the Borough of the Bronx. President Fairfield Osborn, of the New York Zoological Society, made a brief opening address which follows:

This ceremony welcomes the life of a far-away continent to New York. It marks the opening of a new vista to the wonders of nature. It spells the beauty of living things, creatures age-old, yet ever new. We are here to greet this sight, and millions of others will do likewise before the year is out, grateful for an hour of recreation,

snatched from these troubled days. We can be refreshed for a while from the spectacle of man's cruel and needless destruction of himself. We should have no patience with those unthinking persons who rant that man, in his present cruelties, is reverting to primitive nature-to the so-called law of the jungle. No greater falsehood could be spoken. Nature knows no such horrors. Through the ages, from Aristotle to Darwin, the great philosophers have interpreted the equitable principles governing all living things. Hitler, and his totalitarian system, whatever battles he may win, is bound to lose in the end. Man's age-long insistence on freedom for the individual isn't anything in the world but the straight, pure, unadulterated urge of any higher mammal. Add to that man's spirit and soul. The totalitarian system may be found among ants and bees-it is impossible for man! I wish that dictators had studied some of these things before they started this catastrophe. Let me remind you again that the world of animal life is more than a sideshow—it is related historically, psychologically, physically, to man and his background, or perhaps I should say, man is part of it. The zoo therefore becomes a vivid expression of nature. We have a vision for the zoo of the future. It will be not only a place in which to be refreshed, to find recreation, but also a place in which to learn of the principles which govern all life. I am not glorifying animals—I am merely saying we would do well to know more of their scheme of things; we in turn, will get a better understanding of our own scheme of things.

This is a new day in zoological park planning. The distribution, on the various continents of this earth, of different types of animals—their evolution, their interdependence and social relationships—provide a miracle-story. It is up to us to tell it. In carrying out these new developments we shall be bringing the animals, to the greatest degree possible, out from behind their bars and return them to their natural surroundings.

A private citizen has made possible, for the public benefit, this first major step toward the zoo of the future. He does not want any gratitude but he can not escape it. It will come to him, whether or not he desires it, from the millions of persons who from this day on will enter here to enjoy and to learn.

## THE CHICAGO MEETING OF THE AMER-ICAN SOCIETY FOR TESTING MATERIALS

THE forty-fourth annual meeting of the American Society for Testing Materials will be held at the Palmer House, Chicago, from June 23 to June 27.

Separate sessions will be devoted to such topics as iron, ferro-alloys; water, which includes a Symposium on Problems and Practice in Determining Steam Purity by Conductivity Methods; non-ferrous metals (two sessions); cementitious and building materials; steel, effect of temperature; fatigue of metals, corrosion; plastics, and concrete and concrete aggregates. There will be a joint session with the Western Society of Engineers dealing with three topics of specific local interest, namely, water supply, sewage disposal and sanitary conditions. This may involve some discussion of materials and problems in connection with the Chicago subway. In addition there will be a large number of papers and reports including a paper on tests of glued laminated wood beams impregnated with creosote, and the effect of rate of loading on tensile strength of cord and yarn. Other papers will cover a laboratory test for the ignitibility of coal, a study of the grindability of coal and the fineness of pulverized coal, and studies on the measurement of water vapor in gases. There will be a discussion of the performance specifications for greases and two papers cover the influence of recovery temperature on the ductility of recovered asphalt and the fundamental significance of the Oliensis spot test.

Throughout the week of the meeting some two hundred technical committees of the society are expected

to meet. On Monday the whole day will be devoted to these meetings. The address of the president, Dr. William M. Barr, chief chemical and metallurgical engineer of the Union Pacific Railroad Company, will be given on Tuesday morning at the first formal session. He will speak on "Speed, Specifications, and Safety"; J. H. Van Deventer, editor of *The Iron Age*, will make an address entitled "Mobilizing Materials for Defense."

The sixth exhibit of Testing Apparatus and Related Equipment in which a number of leading companies in the instrument and related fields will take part, will be in progress throughout the five days of the meeting. In addition several committees will sponsor exhibits, including exhibits of paint, varnish, lacquer and related products; lime; radiographic testing and welding research. A number of industrial, university and government research laboratories will also participate. They will show equipment and apparatus that has been developed for special work. This exhibition is held every two years. This year it will include the fourth photographic exhibit on "Materials, Testing and Research."

Local arrangements for the meeting are in charge of a Chicago committee, headed by E. R. Young, metallurgical engineer, of the Climax Molybdenum Company. Serving with him are some fifty leading technical executives in the district.

### THE ONE HUNDRED AND TWENTIETH ANNIVERSARY OF THE PHILADEL-PHIA COLLEGE OF PHARMACY AND SCIENCE

The Philadelphia College of Pharmacy and Science will celebrate the completion of its one hundred and twentieth anniversary on June 3. An extensive program has been arranged at the College Hall, the scene of activities commemorating the establishing of the college, which was the first of its kind in the Americas. The celebration, to be held in conjunction with the annual Alumni Homecoming Day, will be marked by the first official address of the recently elected president of the college, Dr. Ivor Griffith. It will be entitled "What the Future Has in Store for the Philadelphia College of Pharmacy and Science."

The formal program begins at noon with a luncheon, to be given in honor of the Class of 1891, alumni who have successfully completed fifty years of professional and scientific service. These men become members of a group of honored graduates, the "Semi-Centennialists." They will receive certificates making special recognition of their service.

Following this will be the annual meeting of the Alumni Association at which the address of the retiring president, Charles T. Pickett, for thirteen years