growing districts of Morocco, Algeria and Tunisia, in order to return to Spain for the first portion of his collection trip. He will return later to these countries to collect the seeds from the harvest which is not yet ready. He made a similar exploration in southwestern Asia, the heart of the alfalfa district, last year, and brought back many varieties of alfalfa now being tested by the department for wilt resistance.

Mr. Ryerson, head of the Office of Foreign Plant Introduction, is looking for varieties of peaches and other fruits that will be of value in this country. He seeks particularly to recover some American varieties of peaches that have disappeared from production in this country after having become established abroad. He originally planned to join Dr. Frederic T. Bioletti, professor of viticulture at the University of California, who has been conducting an exploration for grapes and apricots for the department and the university in North Africa.

Professor Bioletti's illness has caused some alteration of these plans, so that Mr. Ryerson will have to take charge of the completion of his work. The preliminary work in connection with apricots has been completed, and there remains only the harvest of the seeds and scions. The grape work has not reached so advanced a stage but it is well under way.

Four or five years ago bacterial wilt appeared in the heart of the alfalfa belt and threatened to exterminate this crop. The San Joaquin Valley of California has suffered heavy losses from wilt. Losses in Kansas in 1927–28 amounted to about 15 per cent. and for the last three years in Iowa and Missouri to about 25 per cent. In Minnesota, Nebraska and Missouri wilt has worked hand in hand with crown rot, combining to bring losses up to 50 per cent. of the crop. In Colorado it is the most destructive disease of alfalfa, one field suffering loss of 80 per cent. of the plants. Wherever prevalent, wilt has done its greatest damage in humid climates and on irrigated lands.

THE NATIONAL INSTITUTE OF HEALTH

THE National Institute of Health has issued the following statement:

By the act of Congress approved May 26, 1930, entitled "An act to establish and operate a national institute of health, to create a system of fellowships in said institute, and to authorize the government to accept donations for use in ascertaining the cause, prevention and cure of disease affecting human beings, and for other purposes," the Hygienic Laboratory will hereafter be known as the National Institute of Health of the United States Public Health Service. The author of this measure was Senator Joseph E. Ransdell, of Louisiana.

The general purposes of the act are to provide large facilities for investigations of diseases of man and matters pertaining to the public health, to encourage research and the training of individuals engaged therein, to enable the government to accept bequests in aid thereof, and to bring about cooperation with scientific institutions in the prosecution of research work.

Public health investigations by the Public Health Service were first authorized in 1901. Since then substantial progress has been made and many new facts have been discovered which have had an important bearing on the prevention and control of disease. The necessity for this work far outstripped the facilities for its conduct. Under the above-mentioned authority, these facilities may be greatly enlarged.

In its development the new institute will have the advantage of the traditions of the Hygienic Laboratory. In reality the Hygienic Laboratory becomes the National Institute of Health which, with enlarged facilities, will be devoted to investigations of the underlying problems not only of communicable diseases but of degenerative diseases and environmental conditions affecting health.

In aid of this work the Secretary of the Treasury may hereafter accept gifts to be held in trust and used for the purposes mentioned; the expenditures to be safeguarded in all respects as are other governmental funds. These gifts may also be used for the establishment of fellowships to encourage individual scientists.

Appointments and services under these fellowships will be governed by laws and regulations affecting the United States Public Health Service. Individual ability is the most valuable asset of a people of a country. The object is to encourage postgraduates of extraordinary ability and to aid them to follow permanently their scientific bent in the interests of humanity.

In order that those who make gifts may have a living part in the development of the institute, provision is made whereby donations of $500,000 or over will be acknowledged permanently by the establishment within the institute of suitable memorials.

The Secretary of the Treasury has recently accepted a gift of $100,000 offered by the Chemical Foundation, Inc., through its president, Francis P. Garvan, under the provisions of the act of May 26, 1930, which authorizes the government to accept donations and to create a system of fellowships, etc., in the National Institute of Health. The condition is made that the income from this fund be used for one or more fellowships in basic chemical research in matters pertaining to public health, the details of which are left to the Surgeon-General and his advisory committee. The act provides that conditional

gifts such as this may be accepted by the Secretary of the Treasury if recommended by the Surgeon-General and the National Advisory Health Council.

THE CINCINNATI MEETING OF THE AMERICAN CHEMICAL SOCIETY

THE meeting of the American Chemical Society at Cincinnati will open on September 8, continuing for the following four days.

On Monday at 2 o'clock there will be a meeting of the council and at seven in the evening there will be a subscription dinner, reception and dance at the Hotel Gibson for members and their guests.

On Tuesday there will be two symposia: Group 1 meeting under the auspices of the divisions of industrial and engineering, organic and cellulose chemistry and Group 2 meeting under the auspices of the division of physical and inorganic chemistry. The subject of the former will be "Industrial Fermentation," the speakers and subjects being: E. I. Fulmer, "The Chemical Approach to Problems of Fermentation"; A. A. Backhaus, "Ethyl Alcohol"; J. F. Garrett, "Lactic Acid"; Chas. N. Frey, "The History and Development of the Modern Yeast Industry"; C. L. Gabriel and F. M. Crawford, "The Development of the Butyl Acetonic Fermentation Industry"; F. C. Blanck, "Fermentations in the Food Industries"; A. M. Buswell, "The Production of Fuel Gas by Anaerobic Fermentations"; O. E. May and H. T. Herrick, "Some Minor Industrial Fermentations."

The subject of the second symposium will be "Non-aqueous Solutions." Those who will take part are: Charles A. Kraus, who will speak on "Reduction in Non-Aqueous Solvents"; Arthur W. Davidson, "An Introduction to the Chemistry of Acetic Acid Solutions"; F. W. Bergstrom, "Bases of the Ammonia System"; George Scatchard, "Equilibrium in Non-Electrolyte Mixtures in Relation to the Densities and the Vapor Pressures of the Component"; J. A. Wilkinson, "Liquid Hydrogen Sulfide," and J. W. Williams, "The Behavior of Electrolytes in Methyl Alcohol Solutions."

There will be divisional meetings on Wednesday and Thursday mornings, followed by luncheons at the University of Cincinnati. The president's address by Professor William McPherson, "Chemistry and Education," will be given on Wednesday at 8:30 in the Emery Auditorium, following which there will be a musical program.

On the afternoon of Thursday an inspection trip will be made to the Cincinnati Water Works and drive around the city in automobiles, starting from the university immediately after luncheon.

Friday will be devoted to visits to industrial plants, details of which will be announced at the meeting.

SCIENTIFIC NOTES AND NEWS

MRS. ANNA BOTSFORD COMSTOCK, emeritus professor of nature study at Cornell University, distinguished also as a wood engraver, died at Ithaca on August 23, aged seventy-six years. Professor John Henry Comstock, emeritus professor of entomology, survives his wife, but has been seriously ill for several years.

DR. FLORIAN CAJORI, professor emeritus of the history of mathematics at the University of California, died at Berkeley on August 14. Professor Cajori was born in Switzerland in 1859 and received the bachelor's degree from the University of Wisconsin in 1883.

DR. H. H. TURNER, Savilian professor of astronomy at the University of Oxford, died on August 20, while attending the International Congress of Geodesy at Stockholm. Dr. Turner was sixty-nine years old. He had many friends among American astronomers and was delegate from the British Association for the Advancement of Science to the American Association at the last New York meeting.

WHEN Northwestern University at the recent commencement exercises conferred the degree of doctor of science upon Dr. Gotthelf Carl Huber, dean of the graduate school of the University of Michigan, the citation, read by Professor Leslie Brainerd Arey, was as follows: "Distinguished son of the University of Michigan whose filial loyalty has been expressed in a life of unbroken devoted service; respected and loved by students as friend, teacher, and dean; a wise counselor, entrusted by his colleagues with important responsibilities in determining academic policies; fruitful contributor to the fundamental understanding of all branches of microscopical anatomy, whose researches are models of patient, thorough and accurate observation and experiment; pioneer in the application of certain precise methods to the unraveling of difficult morphological secrets; a practical but scholarly scientist occupying a unique position among American anatomists."

DRAKE UNIVERSITY at its forty-ninth commencement conferred upon Dr. Philip Fox, director of the new Adler Planetarium, Chicago, the degree of doctor of laws.

THE honorary degree of master of arts was conferred on June 23 by the University of Michigan on Harlan I. Smith, of the National Museum of Canada.