MARCH 17, 1939

He was a member of the Bureau of Chemistry of the U. S. Department of Agriculture from 1892 to 1913, the last ten years as assistant chief. DR. FERDINAND VON LINDEMANN, professor of mathematics emeritus of the University of Munich, died on March 7 in his eighty-seventh year.

# SCIENTIFIC EVENTS

## WORK OF THE SCHOOL OF TROPICAL MEDICINE AT THE UNIVERSITY OF PUERTO RICO

THE School of Tropical Medicine of the University of Puerto Rico under the auspices of Columbia University, according to the annual report of Dr. George W. Bachman, director of the school, has completed twenty-five research projects out of fifty-eight undertaken. Current investigations include nutrition and malnutrition, parasitism, epidemiological surveys, skin and fungi studies, immunological response to infections, biological properties of various agents of disease, pathological and blood examinations and clinical work.

A survey of the health and socio-economic conditions found in the tobacco, coffee and fruit regions of Puerto Rico was carried on by the department of bacteriology in cooperation with the Puerto Rico Reconstruction Administration. The department also investigated streptococcus infection in the tropics. It has commenced a study on the incidence of pneumococcus with relation to the cultural and biological characteristics of the flora of the respiratory tract of normal Puerto Ricans.

A study of tuberculosis in tonsils was carried forward in collaboration with the Henry Phipps Institute of Philadelphia, and a study of the prevalence of abortion diseases in cattle of the Island was made in cooperation with the Bureau of Animal Industry of the U. S. Department of Agriculture. A joint investigation by the department of chemistry and the Agricultural Experiment Station was made of forage crops.

The department of medical zoology made a study of vitamin A and the part it plays in immunology to invasion by schistosomes or blood flukes. An extensive survey was conducted in several sections of the Island to find the breeding places of the sandfly.

An epidemic of black "piedra," a disease of the hair marked by small stony nodules never before reported in North America, was traced by the department of mycology and dermatology to a fungus classified as "Piedraia hortai." A parasite survey of mice, never before attempted in Puerto Rico, but facilitated during the year by quantities of rodents brought into the department of pathology, brought to light several parasites previously unrecorded in the Island, and one trematode, or fluke, hitherto considered only an Old World inhabitant. The chance finding in the laboratory of a wild brown mouse, sickly and deformed and presenting all the characteristics of the musculotaneous variety of leprosy, as seen in rats, opened a new problem of investigation on the character of spontaneous leprosy in mice. The department of pathology made a further study of the problem of internal hydrocephalus of rabbits.

Research on the medicinal properties of Puerto Rican plants is now being conducted at the University of Wisconsin by Conrado Asenjo, Jr., fellow of the Guggenheim Foundation and a member of the chemical staff of the school. Under the guidance of Professor Karl P. Link, of the University of Wisconsin, plans for a laboratory of phytochemistry are being elaborated for the continuation of this work at the school.

Reforestation of the Island of Santiago off the Eastern coast of Puerto Rico is under way in preparation for use of the island as a free range for apes. Gibbons collected for breeding purposes from the mountains near Chieng Mai, Siam, by Dr. C. R. Carpenter, of the Columbia University School of Medicine, will be transferred from the modern cages now housing them to the Island, and a field laboratory will be constructed.

Occupancy of the University Hospital in San Juan, which is being remodeled under the supervision of the Puerto Rico Reconstruction Administration, will be effected by March, 1939.

#### ADMISSION REQUIREMENTS IN THE COL-LEGE OF ENGINEERING AT CORNELL UNIVERSITY

BEGINNING next September, a more comprehensive and closely controlled plan of selective admission will be adopted in all four schools of the College of Engineering at Cornell University, according to an announcement made by Dean S. C. Hollister. The School of Chemical Engineering has had such a system since its establishment last July, when it was decided that available facilities for instruction could accommodate only about a hundred of the more than three hundred applicants for admission to the freshman class. Increased enrolment in the Sibley School of Mechanical Engineering this year has produced another serious problem, and similar conditions are foreseen in the Schools of Civil and Electrical Engineering.

The number of applicants admitted to the several schools of the college is limited by the facilities available for adequate instruction. Since the number of applicants exceeds these limits, the Committee on Admissions in each of the schools will exercise discretionary power in selecting those to be admitted. Preference will be given to those candidates whose academic preparation and personal character would indicate fitness to pursue with success the course being undertaken and who show evidence of professional promise.

The need for additional facilities has been felt for some time, and a committee of the Board of Trustees, of which Bancroft Gherardi, retired vice-president and chief engineer of the American Telephone and Telegraph Company, is chairman and Provost H. Wallace Peters is secretary, has undertaken a program to strengthen the resources of the college. Among the first objectives are a new building for the School of Chemical Engineering and a Materials and Metallurgy Laboratory, which will allow expansion of classroom and laboratory instruction, especially mechanical engineering.

It is estimated that undergraduate enrolment in the College of Engineering, even under the improved selective admission plan, will reach 1,200 next year, a figure within 300 of the maximum to be provided for when the proposed building program is completed. A statement by Dean Hollister says: "Cornell's standards in engineering education have always been high and will not be lowered. Under present conditions, our policy must be to offer the facilities we have to those students best qualified to make advantageous use of them."

#### THE CHEMICAL ENGINEERING LABORA-TORY OF THE CASE SCHOOL OF APPLIED SCIENCE

THE Chemical Engineering Laboratory of the Case School of Applied Science, which has been completed at a cost of more than \$300,000 and which is the first unit of a group to be devoted to the department of chemical engineering, will be dedicated on Saturday, April 15. At a luncheon which will precede an inspection of the building, Dr. William Reed Veazey, of the Dow Chemical Company, of Midland, Mich., formerly professor of chemical engineering at the school, will be the principal speaker.

The new building, which is now in course of being occupied, provides facilities for teaching and research in physical and organic chemistry, chemical engineering and plant design and offices and research laboratories for the staff. The main unit comprises three floors and a basement; an annex of two stories adjoins this. The main building is 104 feet long and 61 feet wide; the annex has a frontage of 44 feet and a depth of 60 feet. Constructed of steel and concrete with a shale brick exterior, the building is of modern industrial type with a maximum of natural light, which is provided through a continuous run of windows along the full length of each floor.

Laboratories in the new building include those for unit operations, senior development, organic chemistry, physical chemistry, fuels, water and lubricants and chemical engineering. The latter will be located in the two-story annex, which will provide space for larger apparatus for use in distillation, absorption and evaporation. Also included are seven offices with private laboratories, an auxiliary research laboratory and three recitation rooms. Service rooms include a mechanics shop, mechanical store room, grinding room and drying room in the basement; furnace room, students' shop and balance room on the first floor; instrument room on the third floor, while in a pent house is an automatic distilled water system and ventilating fans to insure change of air in all laboratories and offices at intervals of from four to six minutes.

The building will care for approximately 40 per cent. of the space needs of the department. Until additional units are constructed, work in general chemistry, quantitative and qualitative analysis and graduate work in many fields must be continued in the 44-year-old building. The old building will continue to house the chemistry library.

The new building has been designed by Walker and Weeks, Cleveland architects, who have worked in close conjunction with Dr. Carl F. Prutton, professor of chemical engineering, and members of the faculty in this department. Construction has been in the hands of the Sam W. Emerson Company, of Cleveland.

### SURVEY OF MEDICAL RESEARCH FACILITIES IN CANADA

THE Associate Committee on Medical Research of the National Research Council met in Ottawa on February 27 and 28. The committee had before it the report on the survey of medical research facilities in Canada that was carried out at the instance of the committee by its chairman, Sir Frederick Banting.

Consideration was given to the fields of medical research in which work could now be organized and a conclusion was reached that immediate attention should be given to tuberculosis and rheumatic diseases. In each of these fields projects are to be initiated in a number of institutions throughout the country where the particular investigations can be carried out with economy and advantage. The projects in these fields will be correlated by the Medical Research Committee.

In the field of cancer research the committee decided to give first attention to the continuation of work on the standardization of x-ray dosage which has been undertaken in cooperation with the National Physical Laboratory in England and the National Bureau of Standards in Washington making use of the high voltage apparatus available in the National Research Council Laboratories in Ottawa. With the increase in voltage and power of the equipments becoming available for clinical treatment in Canadian hospitals, the