

THE corporation of the Massachusetts Institute of Technology recently passed a resolution in tribute to the late George Eastman, who was a life member of the corporation. Mr. Eastman's gifts to the institute amounted to \$20,696,053, which includes a contribution of \$500,000 to the Technology Loan Fund, established to aid worthy students. President Compton stated that Mr. Eastman's contributions to various causes during his lifetime exceeded \$112,000,000. The resolution expressed the corporation's "profound sorrow at the loss of its admired and beloved colleague, and deep appreciation of his outstanding qualities as a pioneer in business and applied science." The resolution, which was drawn up by President Compton and Francis R. Hart, also expressed the gratitude of the corporation for Mr. Eastman's very generous assistance in the upbuilding of the institute.

#### RECENT DEATHS

FREDERICK HAYNES NEWELL, consulting engineer, formerly director of the U. S. Reclamation Service and later professor of civil engineering at the University of Illinois, died suddenly on July 5, at the age of seventy years.

DR. FRANK PELL UNDERHILL, professor of pharmacology and toxicology at Yale University School of Medicine, died on June 29, at the age of fifty-five years.

DR. JOSEPH LEIDY, physician, of Philadelphia, a nephew of Joseph Leidy, died on July 6 at the age of sixty-six years.

THE REVEREND DR. C. J. S. BETHUNE, the entomologist, died in Toronto on April 18, in his ninety-fourth year.

PROFESSOR NILS ERLAND NORDENSKIÖLD, the Swedish explorer, director of the ethnographic division of the Göteborg Museum, has died at the age of fifty-four years.

THE death is announced of Jean François Heymans, emeritus professor of therapeutics and pharmacodynamics at the University of Ghent.

DR. MITSUTARO SHIRAI, emeritus professor of plant pathology, University of Tokyo, College of Agriculture, died on May 30, aged seventy years. A correspondent writes: "Professor Shirai began his professional career as teacher of forest botany and plant pathology in this university in 1886. The earlier leadership in phytopathology began in Japan in the previous decade with the arrival from Germany of Professors Hilgendorf and his successor, Professor Ahlburg. These men were primarily lecturers on medical botany, but both included lectures on plant diseases. Following this in 1880 one of their Japanese students, S. Matsubara, gave the first regular course in plant pathology. Thus as an organized branch of botanical science, plant pathology may be considered at least as old in Japan as in the United States. Dr. Shirai in his later years had divided his attention between teratology and the history of botany in the Orient including plant pathology and plant culture in general."

### SCIENTIFIC EVENTS

#### THE BRITISH NATIONAL PHYSICAL LABORATORY

THE annual inspection of the National Physical Laboratory at Teddington by the members of the General Board was held on June 28.

According to the report in the London *Times* in the aerodynamics department there were shown models of the engines of the Flying Scotsman and the Royal Scot expresses, which are being used to assess the air resistance of trains. The object of the experiments is to reduce the resistance by modifications to the form of the locomotive and the coaches, and secure economy in the consumption of fuel. The tests are now in progress, and the forces on the model engines and the coaches are being studied separately in the attempt to discover the ideal streamlined train. In the same department is the new compressed air tunnel which has been constructed for the examination of aircraft, and will enable tests to be made under conditions corresponding to those of a full-scale machine of average size flying at 150 miles an hour.

Recent experiments in the engineering department have included tests of ventilators for public vehicles. It has been found that with the use of long-distance coach services, the problem of ventilation has increased in importance. Various types of appliances have been submitted to the laboratory for inspection, and after numerous tests improvements have been suggested for the purpose of securing efficient ventilation without draught. Visitors to the engineering department will also gain information concerning experiments connected with wind pressures on buildings. It is pointed out that in the design of structures which are to be built on exposed sites allowance has to be made for the pressure of wind, and the modern tendency towards the erection of higher and wider buildings has added to the importance of this subject. The aid of the laboratory has been sought in this matter, and it is stated that, as a result of the experiments it has been shown how economy, as well as efficiency, may be secured in the erection of buildings. The department has also produced a set of safety de-

signs of lifting gear, such as crane swivels, chains, hooks, shackles, etc.

The physics department contains a section devoted to acoustics, and the building industry is taking increased advantage of the laboratory in regard to this subject. The designs of the new League of Nations Assembly Hall at Geneva were submitted for advice in respect of acoustical properties, and the laboratory has also been consulted regarding the acoustical features of the hall of the Permanent Court of International Justice at The Hague. A new building is now being added to the laboratory to increase the facilities for experiments. The uses of x-rays in the sphere of industry are explained in the department, where also examinations are made of radium for hospitals. It is stated that since the laboratory began this work radium of the value of £750,000 has been tested.

#### LABORATORY FOR TROPICAL RESEARCH

THE *Bulletin* of the New York Zoological Society reports that the department of tropical research, under the direction of Dr. William Beebe, now has a substantial working laboratory, library and adequate storage facilities in the Zoological Park.

The collection of specimens obtained by Dr. Beebe and his staff during various expeditions has now reached such importance that in order to make this material readily accessible for careful study purposes a building in the Zoological Park has been remodeled and the department's collections installed. The laboratory, which is situated immediately south of the Aquatic Bird House, affords the necessary isolation essential to the carrying on of research work without interruption by visitors.

The building is a substantial one-story brick building with adequate daylight provisions and fully equipped with electric lights throughout. The main laboratory room is thirty-six feet long and twenty-six feet wide and is fitted with metal shelves and glass containers which make the specimens readily accessible for gross examination. The library and record room is twenty-five feet by sixteen feet and affords ample room for expansion. Two rooms about ten feet square are also available for laboratory and storage facilities.

The collections already installed in the new laboratory include all the specimens taken during the British Guiana, the *Noma*, *Arcturus*, Haitian and Bermuda Expeditions, as well as the paintings and drawings made during these expeditions.

During the past winter the staff has been engaged in the identification and study of the deep-sea specimens taken on the Bermuda and *Arcturus* Expeditions, and in the study of the shore fishes of Bermuda

with a view to the preparation for publication of a "Handbook of the Shore Fishes of Bermuda" as well as other papers on the same group of fishes. Miss Hollister is continuing her research on the skeletal features of fishes by means of chemical clearing methods. Much of the work now being done in the laboratory consists of sorting and preparing for shipment to experts in other institutions many of the invertebrate specimens which have not as yet been described.

#### MORTALITY STATISTICS IN THE UNITED STATES

THE Department of Commerce announces that in the United States death registration area in 1930 there were 1,343,356 deaths, with a rate of 1,133.1 per 100,000 population. Deaths and rate for 1929 were 1,386,363 and 1,191.9, respectively. These rates are based on estimated populations of 118,560,800 in 1930 and 116,317,515 in 1929.

The decrease in the mortality for the whole registration area of the United States is caused almost entirely by the great reduction in the number of deaths from influenza, from 64,853 in 1929 to 23,066 in 1930, for which respective rates were 55.5 and 19.5 per 100,000 population, and pneumonia (all forms) from 106,597 to 98,657 and rates from 91.6 to 83.2. Whooping-cough and diphtheria also decreased quite markedly, the former from 7,310 to 5,707 deaths and rates from 6.3 to 4.8, and the latter from 7,685 to 5,822 deaths, and rates from 6.6 to 4.9.

The only marked increases were caused by diseases of the heart, the number of deaths having increased from 245,244 in 1929 to 253,084 in 1930 and the death rate from 210.8 to 213.5 per 100,000 population, and cancer and other malignant tumors, deaths from 111,569 in 1929 to 115,265 in 1930 and the rate from 95.9 to 97.2.

Although the increase in the number of deaths from all accidental and external causes is not significant, these causes attract attention. Beginning with 1930, a dual method of classifying external causes of death has been employed, so that the number of deaths classified under burns, accidental drownings and accidental falls in the regular table are also included in the supplemental tabulation. The supplemental tabulation is made in order that comparable statistics may be had with the classification of earlier years. In the United States death registration area there were 625 burns, 809 drownings and 2,640 accidental falls, classified under certain kinds of accidents in the supplemental tabulation, which are also included in the regular table. The title "water transportation" is a new one, and 544 of the deaths classified under this title as due to drowning, in prior years were included under the title "accidental drowning"