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"

only. In addition, of the 29,080 deaths from automobile accidents in 1930 shown in the supplemental tabulation; 280 burns, 227 drownings and 934 falls contribute to the total deaths from accidental and unspecified external causes and are also shown under their respective titles in the regular table.

ITHACA MEETING OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

THE American Psychological Association will meet at Cornell University, Ithaca, New York, on September 8, 9 and 10, under the presidency of Professor Walter R. Miles.

Reservations of rooms can be made in the dormitories. The sessions will be held in Goldwin Smith Hall and there will be an exhibit of apparatus in the Library of Psychology in Morrill Hall. In addition to the presidential address on Friday evening and the round table on radio education on Friday afternoon, with Dr. Paul S. Achilles as chairman, the scientific program will be given in seventeen sections.

The chairmen of the sections and the number of papers are as follows:

General Papers, Walter R. Miles, seven papers.
Personality and Character, H. L. Hollingworth, eight papers.
Work and Efficiency, Walter Dill Scott, five papers.
Sensory Phenomena, Madison Bentley, seven papers.
Animal Psychology, Robert M. Yerkes, seven papers.
Clinical Psychology, James Burt Miner, five papers.
Child Psychology, John F. Dashiell, nine papers.
Sensory Phenomena, J. McKeen Cattell, eight papers.
Abnormal Psychology, Knight Dunlap, seven papers.
Animal Psychology, Harvey A. Carr, eight papers.
Clinical Psychology, Fred Kuhlmann, six papers.
Applied Psychology, Clark L. Hull, five papers.
Physiological Psychology, K. S. Lashley, eight papers.
Learning, Raymond Dodge, eight papers.
Mental Tests, Joseph Jastrow, four papers.
Memory, Arnold Gesell, nine papers.
Animal Psychology, Walter S. Hunter, seven papers.

THE JOHN SCOTT AWARDS

THE John Scott awards, for inventions or discoveries of industry which "may add to the comfort, welfare and happiness of mankind," presented annually by the Board of City Trusts, Philadelphia, were presented recently, according to *The Christian Science Monitor,* to Dr. Joseph Slepian, Mr. George H. Emerson, Mr. Edward G. Budd and Mr. William Le Roy.

Dr. Slepian, consulting engineer of the Westinghouse Electric and Manufacturing Company, was cited for his work in connection with gases and fundamental inventions involving these discoveries, the application of which has resulted in the production of an apparatus for arresting lightning charges and other electrical discharges of extremely high voltage.

Mr. Emerson, of Baltimore, was honored for his invention of the water tube fire box, which makes for greater efficiency and longer useful existence of the engine. Engines equipped with this type of fire box are capable of much longer runs than those with the ordinary type. Runs of 300,000 miles without substantial fire box repairs are frequent, and there is also less tendency to explosion with this box.

Mr. Budd, of the Budd Manufacturing Company, of Philadelphia, received the award for his process of shot-welding stainless steel which makes possible the use of this material for railroad cars and airplanes. This material gives the necessary stiffness, with far less weight per passenger than has been realized in any railroad car heretofore built. Lighter trains result in a reduction in cost of construction and operation of the cars. A greater speed is also attained.

Mr. William Le Roy, of the General Electric Company, Schenectady, New York, was named for his development of the mercury boiler, which is capable of higher ranges of temperature than are practicable with steam in turbines.

Established in 1816, through a bequest by John Scott, a chemist of Edinburgh, Scotland, these awards consist of a bronze medal, a certificate and $1,000 each. The original fund amounted to only $4,000, and the cash awards were each $20. Increasing to what amounted to $100,000 in 1910, the fund now permits the increase in the awards.

SCIENTIFIC NOTES AND NEWS

THE honorary degree of doctor of science has been conferred by the University of Cambridge on Sir William Bragg, director of the Royal Institution.

THE honorary degree of doctor of science was conferred by the University of Oxford, on June 22, on Sir John Russell, director of the Rothamsted Experimental Station, and on Dr. Willem de Sitter, professor of astronomy at the University of Leiden.

THE University of Rochester conferred at commencement the doctorate of science on Dr. Willis R. Whitney, vice-president of the General Electric Company, and on Dr. James Ewing, professor of pathology in the Cornell Medical School.

DR. CHARLES V. CHAPIN, superintendent of health at Providence from 1884 until his recent retirement, received the degree of doctor of science at the commencement exercises of Rhode Island State College.

MRS. ANNA JOHNSON PELL-WHEELER, of Prince-