Research is also being carried out on the detection of small quantities of toxic gases in the atmosphere, and on respirators to prevent the breathing of such gases.

The improvement of materials used in dentistry is also a subject of research under the department, while x-ray examinations have been carried out in cooperation with the Medical Research Council on the structure of teeth.

THE JOHN B. PIERCE LABORATORY OF HYGIENE AT NEW HAVEN, CONN.

UNIQUE facilities for the study of the effect of a wide variety of atmospheric conditions on the health and comfort of human beings and animals have been provided through the completion of the John B. Pierce Laboratory of Hygiene at New Haven, Conn., according to an announcement made by Professor C.-E. A. Winslow, of the Yale University School of Medicine, before the recent meeting of the American Society of Heating and Ventilating Engineers.

Although the laboratory is an independent institution, it is conducted in affiliation with the Yale University School of Medicine, with Professor Winslow as director, and its advisory staff is comprised of experts in medicine, physiology, psychology, engineering and physics.

Two years have been spent by the John B. Pierce Foundation in designing and constructing the Laboratory of Hygiene. The object of the foundation, by the terms of the will of the late John B. Pierce, is "the promotion of research, educational, technical or scientific work in the general field of heating, ventilation and sanitation . . . to the end that the general hygiene and comfort of human beings and their habitations may be advanced." Hitherto, facilities for thorough-going research in this field have been lacking.

The central feature of the laboratory is a two-room frame house completely surrounded, above and below and on all four sides, by "shell" spaces. In these six spaces any desired conditions of temperature and humidity can be produced, against which the two experimental rooms can be heated and ventilated by various methods. The test rooms are 15 feet by 12 feet by 9 feet high. Each room has three windows opening on the shell spaces. The rooms are electrically lighted and comfortably furnished with rugs, hangings and household furniture, so that subjects can live in them comfortably for extended periods. There is a control room on the same floor as the test rooms. The first floor of the building, which is on Congress Avenue, opposite the Yale University School of Medicine, contains the entrance lobby and offices and a workshop with lathes and benches for making the necessary equipment. The basement contains the conditioning machinery, constructed especially to meet the requirements of the experiments to be conducted in the laboratory and animal rooms in which atmospheric conditions can be controlled as they are in the test rooms.

Professor Winslow, who is head of the department of public health in the School of Medicine, has as associate directors in the Hygiene Laboratory Dr. Leonard Greenburg and Dr. L. P. Herrington, both of whom hold appointments on the staff of the medical school. The laboratory is now in full operation.

THE EIGHTY-SEVENTH MEETING OF THE AMERICAN CHEMICAL SOCIETY

THE eighty-seventh meeting of the American Chemical Society will be held in St. Petersburg, Fla., from March 25 to 30.

A symposium, the general subject of which will be "The Physical and Chemical Properties of the Isotopes of Hydrogen," will be held on March 27 under the auspices of the Division of Physical and Inorganic Chemistry. Professor Donald H. Andrews, of the Johns Hopkins University, chairman of the division, will preside. Morning and afternoon sessions will be held.

The opening address will be delivered by Professor Harold C. Urey, of Columbia University, who was recently awarded the Willard Gibbs Medal of the Chicago section of the society for his discovery of heavy water. Professor Urey's topic will be "The Isotopes of Hydrogen." Dr. F. G. Brickwedde, of the U. S. Bureau of Standards, associated with Professor Urey in the discovery, will speak on "Vapor Pressure of Deuterium."

Professor Hugh S. Taylor, chairman of the department of chemistry at Princeton University, will discuss "The Hydrogen Isotope as a Research Tool in Chemical Kinetics." In the Frick Chemical Laboratory of Princeton University quantity production of heavy water through a specially constructed machine is under way, and biological experimentation to ascertain the effect of the new liquid upon animals is in progress.

Dr. E. R. Smith, research chemist of the U. S. Bureau of Standards, will present a paper on "The Isotopic Fractionation of Water by Physiological Processes," which he prepared in collaboration with Dr. E. W. Washburn, of the bureau, who died recently. Quantity production of heavy water was achieved by electrolytic methods devised by Dr. Washburn, who was to have been a leading figure in the symposium.

Other speakers and their topics will be: Professor F. Allison, of the Alabama Polytechnic Institute, "The Isotopes of Hydrogen by the Magneto-Optic Method of Analysis"; Professor L. C. Anderson, J. R. Bates and J. O. Halford, all of the University of Michigan,