

neers, the American Society for Testing Materials and the Illinois Society of Engineers. He was also an honorary member of the Institution of Structural Engineers, the Western Society of Engineers, the American Water Works Association, the American Concrete Institute and the American Railway Engineering Association. He was a very active member of the Society for the Promotion of Engineering Education, and held various offices, including that of president. He was also a member of the Institution of Civil Engineers (London), the American Society of Mechanical Engineers, the American Public Health Association and the American Association for the Advancement of Science.

Among other honors, Professor Talbot received the degrees of D.Sc. from the University of Pennsylvania, 1915; D.Eng. from the University of Michigan, 1916; and LL.D. from the University of Illinois, 1931. He was also the recipient of many medals and awards, including the Washington Award, Western Society of Engineers; the Henderson Medal of the Franklin Institute; the Turner Medal, American Concrete Institute; the Lamme Medal, Society for the Promotion of Engineering Education; the Fritz Medal, United

Engineering Societies; and bronze plaques from the American Railway Engineering Association. In 1938, his work in developing a great materials research laboratory and staff was recognized by the University of Illinois by renaming the building in his honor, the Arthur Newell Talbot Laboratory.

A great engineer, teacher and director of research, Dr. Talbot was loved and respected for his quiet dignity, his broad technical interests and intellectual curiosity, his high ideals, his inspiring standards of thoroughness and precision, and for his kindly spirit of helpfulness and genuine interest toward all with whom he came in contact.

F. E. RICHART

UNIVERSITY OF ILLINOIS

RECENT DEATHS

WALTER F. REYNOLDS, chief of the section of triangulation of the Division of Geodesy of the U. S. Coast and Geodetic Survey, died on May 1. He was sixty-one years old.

EDWARD C. GROESBECK, metallurgist of the Division of Metallurgy of the National Bureau of Standards, died on May 8 in his sixty-first year.

SCIENTIFIC EVENTS

SCIENTIFIC RESEARCH IN SWEDEN¹

EXTENSIVE research activity is going on in Sweden, in order to find substitutes for products which can no longer be imported owing to the war. One of the most important centers for this research is the Physical-Chemical Institute, Uppsala, headed by Professor The Svedberg. The institute has now lost all the foreign research workers who used to study there, with the exception of one Swiss; nevertheless the staff has been doubled. Extensions have in particular been made to departments dealing with the many present supply problems, of which the chemical aspects fall within Professor Svedberg's own department, namely, the giant molecules. The work with different kinds of synthetic rosins and cellulose-derivatives is now progressing on a large scale. Among other objects of research may be mentioned bread. Experiments are being made to find a means of replacing imported hard wheat, which was formerly used to improve the baking qualities of bread made from Swedish native soft wheat. Investigations are also being carried out on synthetic rubber. The work has proceeded so far that the product has been evolved in the laboratories of the institute, although it is too early yet to say whether domestic production can be started and its probable extent.

One of the foremost technical means of research of

this institute is the Svedberg ultra-centrifuge, which has become of the utmost importance to science. The rotor of this centrifuge is given a speed of up to 70,000 revolutions per minute by a number of oil turbines. The institute also houses such instruments for research as one of the world's largest electro-magnets and a neutron generator, both of which have been made in Sweden. In the biochemical section the experiments for locating and cultivating infantile paralysis virus and tuberculin on the basis of a new method for analyzing mixtures through molecule splitting are carried on under the direction of Professor Arne Tiselius, who has devised this method. The object in the first place is to obtain a pure form of virus. The stoppage of the import of apes for these experiments for a while threatened the workers with the loss of indispensable test animals, but it is stated that their replacement with rats has now proved acceptable.

THE WARTIME SERVICE OF HARVARD UNIVERSITY

THE *Harvard Alumni Bulletin* gives the following information in regard to the wartime service of the members of the faculty.

To describe in a few words the modification of the university to the needs of wartime becomes inevitably a recital of facts and figures—a story which has been unfolding for many months. The faculty has accepted the

¹ From *Nature*.