He will always be remembered by his professional friends and pupils, by his fellow-neurologists, and especially by that group of physicians with hobbies, known as the Charaka Club, of which he was one of the founders and in which lifelong friendships are begotten and ties made that are only severable by death.

In the published volumes of the Charaka Club, the following contributions by Dr. Dana will give an idea of his activities outside of his special field of neurology and so fix in the minds of his friends the catholicity of his interests: Vol. I, "The Cult of Aesculapius" and "The Evil Spoken of Physicians"; II, "The Medicine of Horace"; III, "When Apollo Strikes the Lyre"; IV, "The Costume of the Ancient Greek Physician"; V, "Military and Civil Surgery Among the Ancient Romans" and "Eminent Physicians: a Statistical Study"; VI, "Ursinus, the Father of Opotherapy" and "Sonnet to Clio (as Muse of Historical Medicine)."

FREDERICK PETERSON

RECENT DEATHS

PROFESSOR ALBERT SPEAR HITCHCOCK, principal botanist in charge of agrostology in the Bureau of Plant Industry, died suddenly of heart failure on December 16. He was returning from Europe, where he had spent four months in studying grass collections. He was seventy years old.

DR. E. HERSHEY SNEATH, for thirty-four years a member of the faculty of Yale University and since 1912 until his retirement in 1923 professor of the philosophy of religion and religious education, died on December 20 at the age of seventy-eight years.

PETER Z. CAVERHILL, chief forester of British Columbia for the past fifteen years and connected with forestry work in Canada since 1912, died suddenly on December 8 at the age of fifty-one years.

SIR RICHARD GLAZEBROOK, director of the National Physical Laboratory at Teddington, England, from 1899 to 1919, and chairman of the Aeronautic Research Committee from 1908 to 1933, died on December 16. He was eighty-one years old.

Nature reports the death on November 30 of J. D. Cormack, regius professor of civil and mechanical engineering in the University of Glasgow, aged sixty-five years, and of Professor J. E. A. Steggall, emeritus professor of mathematics at University College, Dundee, in the University of St. Andrews, on November 26, aged eighty years.

MEMORIALS

ACCORDING to *Nature*, a representative Oxford gathering met in the Divinity School on November 20 to do honor to the memory of Robert Hooke, of Christ Church, who was born three hundred years ago. Dr. R. T. Gunther, reader in the history of science, presided. The warden of New College gave an address on the earliest "Oxford Movement," that resulted in the formation of the Royal Society and, in particular, on the activities in science and art of Hooke and Christopher Wren in London during the reign of Charles II. Accounts were read of Hooke's activities in geology and other subjects. The dean of Christ Church recalled some of the admirable qualities which Hooke showed as a man. He afterwards opened an exhibition devoted to Hooke's work, arranged by Dr. Gunther in one of the rooms of the Old Ashmolean Building. Professor F. Soddy had had prepared many models to illustrate different modern applications of Hooke's joint.

THE *Journal* of the American Medical Association reports that physicians from nineteen countries met recently at Poppi (Arezzo province) to honor the memory of Dr. Francesco Folli, who was the first to employ blood transfusion. Born at Poppi in 1624, this physician, in his publications "Recreatio physica" (1665) and "Dialogo sulla cultura delle vite" (1670) explained his idea of transfusing the blood of young and healthy persons to old or sick persons and described the instruments needed for the intervention. The commemorative address was delivered by Professor Pazzini, of the University of Rome.

SCIENTIFIC EVENTS

SYMBOLS AND ABBREVIATIONS USED IN ENGINEERING AND SCIENCE

A NEW dictionary of letter symbols and abbreviations, the "language" of engineers and scientists, will be undertaken by a committee of the American Standards Association, it has just been announced.

Rapid coinage of new words and terms, and the adoption of many foreign words and phrases in the various fields of engineering and the sciences, demands a new compilation of standard usage, according to the committee.

In spite of their great ramification, engineering and science are becoming more and more integrated and those working in one field find that lack of abbreviations or confusion in their use restricts and hampers their work.

The Committee on Symbols and Abbreviations has been reorganized and will begin at once the intricate

task of coordinating existing abbreviations and symbols, and rewriting the present standards into a comprehensive manual of letter symbols and abbreviations. The scope of the work reads: "Standardization of letter symbols and signs for equations and formulas, and abbreviations for use in publications."

In line with the procedure of the American Standards Association, the committee is anxious to see that every group which has a problem in respect to abbreviations and symbols in its own field be represented on the committee. Any group which has published its own standard for symbols is urged to submit a copy for consideration by the committee.

Because of the difficulty involved in writing this universal simplified language for all phases of engineering, the committee is urging those interested to send comments on the standards which have already been approved, and suggestions for useful new symbols and abbreviations which are not now included, to Dr. J. Franklin Meyer, National Bureau of Standards, Washington, D. C., chairman of the committee.

Twelve standards for letter symbols, abbreviations and graphical symbols have been developed by the technical committee of the American Standards Association, which has been at work for many years. Recently, in order to simplify the work of the committee, it was divided into two parts, one covering the letter symbols and abbreviations, and the second covering the graphical symbols.

The committee working on letter symbols and abbreviations, which is now beginning its work, has twelve subcommittees covering the following broad subjects: mathematics, physics and mechanics, structural analysis, hydraulics, heat and thermodynamics, photometry and illumination, aeronautics, electric and magnetic quantities, radio, astronomy and surveying, and geodesy.

The committee which will prepare standards on graphical symbols will start work soon and will also request comments and suggestions on its phase of the problem.

THE NATIONAL RESOURCES COMMITTEE

THE National Resources Committee, of which Harold L. Ickes is chairman, appointed early in 1935 an advisory committee, which has now submitted a report.

Its recommendations are based on conclusions reached after a factual survey of pollution conditions and legislation existing for the control of pollution throughout the forty-eight states. The report indicates that many states are faced with increasingly serious pollution of their waters, that there is little use of uniform standards of water quality, that insufficient effort is being made to protect public health and water fowl and fish life from the effects of domestic and industrial waste and that many states are lacking in legislation properly drawn to cope with existing conditions.

The six-point program presented for consideration aims at interstate control on the basis of drainage areas where possible, the simplification and coordination of state laws, broader authorization and adequate funds for research, the institution of a cooperative program of investigation to be carried on by legally constituted state agencies acting together with an appropriate Federal agency and the holding in abeyance of changes in Federal law until experiment with a demonstration unit has indicated whether or not changes are desirable and feasible.

The demonstration unit recommended would be a Potomac River Conservancy District to be established to serve as a research unit in a special program of cooperation between the states of West Virginia, Virginia, Maryland and Pennsylvania and the Federal Government. Such a unit, according to the report, would not only aid in the solution of many serious pollution problems, but would serve as a training field for the development of scientific and administrative personnel trained for duty with other states. The report covers the problems of pollution in relation to public health, industrial waste treatment, standards of water quality, conservation of water fowl and fish life and state and federal legislation.

The committee is composed of seven technical and administrative experts with special training and experience in the field of water problems. Members appointed to work along lines recommended in the Water Resources Section of the National Resources Board report last December and the report of the Mississippi Valley Committee of October last, are as follows: W. B. Bell, biological survey, Department of Agriculture; Lieutenant-Colonel Glen E. Edgerton, Corps of Engineers, U. S. Army; A. C. Fieldner, Bureau of Mines; Elmer Higgins, Bureau of Fisheries; Thorndike Saville, Water Resources Section, National Resources Committee; R. E. Tarbett, Public Health Service, and Abel Wolman, Maryland State Department of Health. H. R. Crohurst, sanitary engineer of the Public Health Service, worked with the committee on special assignment by Surgeon General Hugh S. Cumming.

THE VALIDITY OF FEDERAL BIRD REGULATIONS

ANOTHER legal attack on federal regulations governing the shooting of migratory game birds has failed and a federal court has again upheld the restrictions on wildfowling, according to a statement issued by the Bureau of Biological Survey in commenting on the