RECENT DEATHS

PROFESSOR HECTOR J. HUGHES, dean since 1920 of the Harvard University School of Engineering, died on March 1, at the age of fifty-nine years.

MARY WHITON CALKINS, professor of philosophy and psychology at Wellesley College, past president of the American Psychological Association and of the American Philosophical Association, died on February 27, in her sixty-seventh year. Dr. Calkins had been associated since 1888 with Wellesley College, where she established one of the first laboratories of psychology.

DR. JOSEPH M. HIRSH, formerly teacher of chemistry at Cooper Union, New York City, who is said to have discovered the process for the recovery of sugar from beet-roots, died on February 13 at the age of eighty-seven years.

DR. JOHANNES GOVERTUS DE MAN, of Yerseke, Holland, died at Middelburg on January 19, at the age of seventy-nine years. He was a foremost carcinologist and had published several hundred valuable contributions on Crustacea. He was formerly conservator of the Rijks Museum of Natural History of Leyden, officer of the Order of Oranje-Nassau and officer of the Order of Cambodje.

MEMORIALS

MRS. PRINCE has given $15,000 for the building and endowment fund of the Boston Medical Library as a memorial to the late Dr. Morton Prince.

A MEMORIAL plaque to the late Sir William Glyn-Jones, formerly secretary of the Pharmaceutical Society of Great Britain, who died on September 9, 1927, was unveiled in the society's examination hall by the Right Honorable Christopher Addison on February 5.

TRIBUTE to the memory of the French mathematician, Pierre de Fermat, is to be paid by the French Academy of Sciences, whose members have ordered his bust to be placed between two other great mathematicians of his period, Descartes and Pascal.

SCIENTIFIC EVENTS

AGRICULTURE IN ENGLAND

AN investigation into the present state of English agriculture has been completed by the Institute of Agricultural Economics of the University of Oxford.

The London *Times* states that the report of the investigation, which has just been issued, points out that

over a large part of the country considerable difficulty will be experienced in finding any farm to be let, and, moreover, when one is to become vacant, there are perhaps dozens of applications for it. Even the moderately intelligent observer can scarcely fail to ask himself the reason. Is it probable that only the best farms come into the market? That is scarcely credible, because the good farms are too rare to be lightly vacated. Is it only the poorer and more inconvenient, in fact the marginal farms, which are changing hands, and, if so, is it to be supposed that there are so many men, men who have been born to the land and know of its present difficulties, who are anxious to plunge themselves and their families into financial perdition?

What is true beyond all question, is that in some parts of England there is not a farm to be let, and only by offering him a figure in excess of market prices can the tenant be persuaded to give up his holding—he credits a large amount of his assets to good-will. It is equally true that in other parts of England there are farms being carried on by the owners for want of any tenant, farms which have been offered rent free for two and three years without success, and still no working farmers will come forward to invest their capital in them. In other words, although our national agriculture can not be considered prosperous, yet, at the same time, to affirm its general depression is both unwise and untrue. The problem is essentially one of districts, of types of farm and types of farming. For the purposes of the inquiry it was deemed that the course of farm rents, combined with a consideration of the demand for farms or the difficulty of obtaining tenants, in this district or that, would show for England what the rural land market might show in another country.

From the information thus obtained it is declared by the report that depression can not be said to exist in the west, and, conversely, the returns from the eastern parts of the country show the hardships under which the farming community is laboring. English agriculture is not suffering from one simple disease, and there is no one simple remedy which can be applied. The report concludes that:

(1) Some commodities, such as milk and market garden stuffs, are produced, owing to their highly perishable nature, under naturally protected conditions. Where advantage is taken of this natural protection farmers find themselves on a substantial basis of prosperity. Further, where immediate proximity to a consuming center makes it possible to combine production with direct retailing the farmer is peculiarly fortunate, and the complaint is less of depressed agriculture than of depressed industry and the consequent contracted purchasing power of the consumer.

(2) Other commodities, such as corn and meat, enjoy no such natural protection or marketing advantages, but

are produced in direct competition with oversea farmers. This competition is being met successfully: (*a*) by those who tend to conform to the practice of the farmers in the New World, by an extensification of methods, taking little more from the land than nature gives, and in no way seeking to force production; (*b*) by those who occupy land "good enough to eat," which can be relied upon under almost any conditions to give a full return on the capital and labor expended upon it. It is being met with less success by those on certain types of soil, who are seeking to carry on established systems of farming under economic conditions which to-day leave them no margin on their expenditure.

(3) Apart from commodities, and to a lesser extent, perhaps, of soil types and farming systems, farmers who are able to operate their holdings without recourse to hired labor on any considerable scale are meeting the conditions of the times without difficulty.

THE CHARLES LATHROP PACK FELLOWSHIPS IN FORESTRY

THE Charles Lathrop Pack Forest Education Board, founded by the Charles Lathrop Pack Forestry Trust of Washington, D. C., announces a number of fellowships in forestry for the year 1930–31. The purpose of the fellowships is to encourage men who have shown unusual intellectual and personal qualities to obtain training that will best equip them for future leadership either in the general practice of forestry, in the forest industries, in the teaching of forestry, in forest research or in the development of public forest policy.

The awards will be made to gifted men who demonstrate natural powers of intellectual and personal leadership, and who intend to make forestry their life work. The sum of $10,000 is available the first year. The awards will range from $500 to $2,500, or more in exceptional cases, and will ordinarily be restricted to men of American or Canadian citizenship. No restrictions are made as to age, educational status or practical experience, but great emphasis will be placed on character, intellect, qualities of leadership and similar qualifications.

The administration of these fellowships has been placed in the hands of the Charles Lathrop Pack Forest Education Board, which is composed of the following: *Chairman,* Henry S. Graves, dean, School of Forestry, Yale University; *Secretary,* Ward Shepard, U. S. Forest Service, Washington, D. C.; Samuel T. Dana, dean, School of Forestry and Conservation, University of Michigan; John Foley, purchasing agent, Pennsylvania Railroad, Philadelphia; Arthur Newton Pack, Princeton, New Jersey, director, Charles Lathrop Pack Forestry Trust; E. O. Siecke, director, Texas Forest Service, College Station; Ellwood Wilson, chief forester, Laurentide Division, Canada Power and Paper Corporation, Grande Mere, Quebec; Hugo Winkenwerder, dean, College of Forestry, University of Washington, Seattle; Raphael Zon, director, Lake States Forest Experiment Station, St. Paul, Minnesota.

Application forms and other information can be obtained from the secretary of the Charles Lathrop Pack Forest Education Board, 1214 Sixteenth Street, N. W., Washington, D. C. For the current year the completed applications must be in the hands of the secretary not later than April 15. The awards will be made at the next meeting of the board, which will be held in New York City on May 10.

APPROPRIATIONS FOR GRANTS-IN-AID BY THE NATIONAL RESEARCH COUNCIL

AT meetings of the National Research Council's Committee on Grants-in-Aid, held in December and February, twenty-eight appropriations were made from the special fund recently placed in the hands of the Research Council for the aid of research, chiefly through allotments to individual investigators. This committee is composed of the chairmen of the seven divisions of science and technology of the council, together with the chairman of the council, the treasurer and the permanent secretary. The grants made were as follows:

Margaret Harwood, director, Maria Mitchell Observatory, for the measurement of light of variable stars and the computation of periods of variation; Leonard B. Loeb, associate professor of physics, University of California, for a study of the mechanism of the spark discharge; A. H. Pfund, professor of physics, Johns Hopkins University, for the measurement of radiant energy from Brownian movement; Frank Schlesinger, director, Yale University Observatory, for observation of parallaxes and proper motions of bright stars in the southern hemisphere; Arthur H. Warner, instructor in physics, University of California at Los Angeles, for studies of the photoelectric effect from clean tungsten surfaces.

John B. Whitehead, professor of electrical engineering, Johns Hopkins University, for investigations on the fundamental dielectric properties of insulating oils.

William Lester Gilliland, instructor in chemistry, University of Maine, for studies of the properties of carbon monoxide; Linus Pauling, associate professor of theoretical chemistry, California Institute of Technology, for the determination of the electron distribution in various crystals.

T. Addis, professor of medicine, Stanford University Medical School, for a study of hypertrophy and compensatory hypertrophy with respect to renal disease; C. Sidney Burwell, professor of medicine, and Glenn E. Cullen, professor of biochemistry, Vanderbilt University, for investigations on tissue changes in cardiac edema; L. R. Cerecedo, assistant professor of biochemistry, University of California, for investigations on the purine fraction of the nucleic acid molecule; E. A. Doisy, professor of biochemistry, St. Louis University School of