mologists and Plant Pathologists (Don C. Mote, reporting) will hold sessions on Thursday to Saturday, June 20-22. The society will hold joint sessions with the American Association of Economic Entomologists, Pacific Slope Branch; the American Society for Horticultural Science, Western Section; and the American Phytopathological Society, Pacific Division. Among the speakers on these programs will be Henry Hartman, Joseph C. Chamberlin, H. E. Morrison, and K. Esau. On Saturday the society will hold a business meeting and a demonstration program of spraying and dusting and exhibits at the Western Washington Experiment Station, Puyallup, Washington. The Section on Education and the Section on Psychology (John E. Corbally, reporting) will meet on Friday, June 21. The morning program will consist of papers by Leonard Carmichael, E. R. Guthrie, H. H. Remmers, C. T. Williams, Doncaster G. Humm, C. W. Stone and O. W. Freeman. The afternoon session, under the chairmanship of Edward G. Olsen, will consist of a panel discussion on "The Utilization of Community Resources for Educational Purposes," the participants in the discussion being Helen Strong, Theodore Siedle, C. W. Stone, O. W. Freeman, E. M. Draper, George E. Griffith, Hugo Winkenwerder, George Yantis, and Worth McClure.

OBITUARY

DR. GLENN E. CULLEN

IT is with a feeling of deep sadness, mingled with pleasant memories that we pause to review the career of Glenn E. Cullen. His death occurred in Cincinnati on April 11, following a short illness, the cause of death being a coronary occlusion. Born on the Isle Saint George, Ohio, he attended high school at Sandusky, and later entered the University of Michigan, receiving the degree of A.B. in 1912 and of B. Chem. Eng. the next year. Between 1913 and 1922 he was research chemist at the Rockefeller Institute for Medical Research. Here, while working with Donald D. Van Slyke and O. T. Avery, his interest for biochemistry and medical science was aroused. During this period he was actively engaged in many problems. With Van Slyke and O. T. Avery, his interest in biochemistry of the blood plasma under constant carbon dioxide tension and also the details of the method for the determination of urea in urine and blood using the enzyme urease were developed. With a number of colleagues he worked on the technique for the collection and analysis of blood and for its saturation with gas mixtures of known composition. He received the degree of Ph.D. from Columbia in 1917. His method for the colorimetric determination of the hydrogen ion concentration in blood plasma and his modification of the Clark hydrogen electrode vessel are well known to all workers in this field of investigation. During the World War, he was a captain in the Sanitary Corps, War Demonstration Hospital, New York City.

Dr. Cullen became associate professor of research medicine at the University of Pennsylvania in 1922. While there he investigated the changes in acid-base condition of the blood during and following ether anesthesia, in diabetic coma and in gastro-enteritis. With Dr. J. Harold Austin, he published the monograph on "Hydrogen-ion Concentration of the Blood in Health and Disease."

In 1924, Dr. Cullen was appointed professor of bio-

chemistry at the School of Medicine of Vanderbilt University. Before proceeding to Nashville he spent a year at the Riggs Hospital, Copenhagen, as a traveling fellow of the Rockefeller Foundation. During this visit, researches were begun on the quinhydrone electrode which were later continued in Nashville.

Dr. Cullen was greatly interested in medical education and also in the graduate schools of America. As a member of the executive faculty of the Medical School at Vanderbilt he gave much of his time and energy to problems outside of the department he guided. He was instrumental in the reorganization of the Graduate School of Vanderbilt.

From this post he came to Cincinnati to be associated with Dr. A. Graeme Mitchell in the Children's Hospital Research Foundation and in the department of pediatrics, College of Medicine, University of Cincinnati, where he was professor of research pediatrics and director of laboratories. He was also professor of biochemistry and a fellow of the Graduate School. His energies overflowed into all things pediatric and also into those activities of the medical school campus in which he was always concerned. It is a significant fact that Dr. Cullen was the first member of the Pediatric Society who did not hold a Doctor of Medicine degree. In spite of being a doctor of philosophy, those of his colleagues with whom he made rounds would hardly be aware of the fact that he had not been trained for many years as a pediatrist. His thinking through of the problems of the laboratory as they relate to the clinic made a tremendous contribution to his own department and pediatrics in general.

Dr. Cullen was very active in the American Society of Biological Chemists. He was treasurer 1926-30, vice-president 1935-36, president 1937-38. In the absence of the president and vice-president he took the full responsibility of administration of the society at its meeting this year in New Orleans. He was chairman of the executive committee of the Federation of American Societies for Experimental Biology in 1938-39, directing the meeting in Toronto in 1939.

His wide interests in the scientific world may be judged from his many society memberships, including the American Chemical Society, the American Association for the Advancement of Science, the Society for Experimental Biology and Medicine, Harvey Society, American Academy of Pediatrics, the American Pediatric Society, the Society of Pediatric Research, the American Institute of Nutrition, Central Society for Clinical Research, Sigma Xi and his associate membership in the American Medical Association. He has served on the National Research Council, and on the committee of cooperation with chemical warfare service of the American Chemical Society.

Dr. Cullen possessed tremendous vitality and energy, which he applied to all of his interests as well as to the things he opposed. He was in the center of everything that crossed his path and always worked to make the machine run more efficiently. He gave wise and constructive counsel in a manner that was typically his own. Even when his criticism seemed harsh, the real spirit of his desire to help was always revealed. Greatly loved and admired by his colleagues and students, his life exemplified the classic line of Philip James Bailey, "He most lives—who thinks most—feels the noblest—and acts the best."

HOWARD W. ROBINSON Children's Hospital Research Foundation, Cincinnati, Ohio

RECENT DEATHS AND MEMORIALS

PROFESSOR FRANK H. PROBERT, professor of mining and dean of the College of Mining of the University of California at Berkeley, died on May 7 at the age of sixty-four years.

DR. JOHN C. HAMMOND, from 1917 to 1934 astronomer at the U. S. Naval Observatory, with which he had been connected since 1898, died on May 12 in his sixtyeighth year.

DAVID BARKER RUSHMORE, consulting engineer of New York City, from 1905 to 1925 chief engineer of the General Electric Company, died on May 5 in his sixty-seventh year.

PROFESSOR OLIVER WESLEY DYNES, head of the de-

partment of agronomy in the College of Agriculture and associate in agronomy in the Agricultural Experiment Station of the University of Tennessee, died on May 6 at the age of fifty-nine years.

DR. CALVIN B. COULTER, associate professor of pathology at the Long Island College of Medicine and bacteriologist-in-chief at Kings County Hospital, Brooklyn, N. Y., died on May 10. He was fifty-two years old.

It is reported in the daily press that Professor Lewis B. Allyn, of the Research Laboratories of Westfield, Mass., was fatally shot in his home on May 8. He was sixty-six years old.

PHILIP W. MESERVE, professor of chemistry at Bowdoin College, died, apparently by suicide, on May 10. He was in his fifty-first year.

AT a recent ceremony attended by the faculty of the College of the City of New York, a memorial plaque was dedicated to the late Professor Frederic O. X. McLoughlin, which was presented to the college by Dr. Frederick B. Robinson, former president, who sculptured the memorial himself. It was placed in the main hall of the Engineering Building. Professor McLoughlin, who died in 1936, was professor of civil engineering at the college and was among the earliest members of the engineering faculty.

THE London Times states that the one hundred and fiftieth anniversary on April 17 of the death of Benjamin Franklin, American philosopher, statesman and writer, is to be commemorated at Northampton by the establishment of a Franklin Memorial Union. An inaugural meeting will be held soon, and the speaker of the House of Commons, the president of the Royal Society and the president of the French Academy of Sciences have consented to be patrons. Franklin had several intimate associations with the town and county of Northampton, and the union's first object will be to spread, by lectures, pamphlets and so on, knowledge of his manifold achievements. Franklin scholarships may be instituted, or a Franklin memorial hall erected for the public use, or an endowed Franklin foundation established for the special study of philosophy and natural science.

SCIENTIFIC EVENTS

THE BRITISH ASSOCIATION¹

THE British Association intends, unless unforeseen events intervene, to hold a conference in the University of Reading, by kind permission of the council of the university, during July 25–27. The general reference will be to science in national and interna-

¹ From Nature.

tional aspects, and Sir Richard Gregory, president of the association, will open the conference as chairman. Thereafter there will be meetings in four groups, dealing respectively with international intellectual cooperation; natural resources and national needs; social aspects of human nutrition; and scientific discovery and progressive industry. The preliminary program