second-year students gastric function and joint movement via fluoroscopy. A number of papers on the gastro-intestinal tract were published over a period of years. As a distinctly anatomical contribution Dr. Todd edited the chapter on the respiratory system in "Cunningham's Anatomy." At the time of his death he was preparing a volume on clinical anatomy.

With the establishment of the Brush Foundation, in 1928, Dr. Todd, as chairman, began an intensive and extensive study of growth in children. He was concerned not only with the anthropometry of growth, but with maturation—not alone growing, but growing up was the theme of his study. Thus it was that his research program embraced the range of physical and psychological investigation: progress in physical maturity and the analysis of increase in size and change in proportion; gain in weight and its relation to the maturation pattern; dento-facial development; brain potentials and muscle action currents; psychomotor development and the unfolding skills; steadiness, dexterity and eye-hand coordination; mental expansion and intellectual and social adjustment; interests, talents and vocational aptitudes; the development of emotional stability and personality traits. Reports treating of these many phases may be found in the Conference on Physical and Mental Growth in the Adolescent, Cleveland, 1930; Part II of the White House Conference on Growth and Development of the Child, 1933; "Atlas of Skeletal Maturation," 1937; and numerous shorter publications.

In recognition of his multifarious interests Dr. Todd served American science in many capacities: associate editor, American Journal of Physical Anthropology, Child Development, Growth; vice-president, American Association of Anatomists, 1920-21, 1938-39; vicepresident and chairman of Section H, American Association for the Advancement of Science, 1922, 1933: president, American Association of Physical Anthropologists, 1938-39; member, White House Conference on Child Growth and Development, 1929-31. He was honored by membership in the leading anatomical and anthropological societies in the United States, as well as in honorary and scientific fraternities; he held membership in the Société d'Anthropologie de Paris, the Académie Royale de Médecine, Belgium, the Royal Anthropological Institute of Great Britain and the Zoological Society of London. As a civic leader in Cleveland he maintained active membership in many organizations for the promotion of community culture and welfare.

On December 15, 1937, Dr. Todd celebrated his silver anniversary as Henry Willson Payne professor of anatomy at Western Reserve University. It was destined that only one more year was to be added to this quarter-century of achievement, but so productive was he that to him scarcely applied the lines of Keats:

"When I have fears that I shall cease to be ere my pen has plucked my teeming brain." Over 250 publications attest to his industry. He was a clear, forceful writer, given to almost lyrical passages; he wrote so that without sacrifice of scientific accuracy he might explain and interpret to the layman. His public addresses were punctuated with humor and adorned with apt phraseology. Seldom have scientist and layman enjoyed a more complete meeting of minds.

American anatomy and physical anthropology have lost a dynamic and far-thinking leader, but they have gained a vision of *living* man as the proper study of man. Generations to come will have life more abundantly for his work. Those of us who knew him and loved him have lost a teacher, colleague and friend.

WILTON MARION KROGMAN

UNIVERSITY OF CHICAGO

## RECENT DEATHS AND MEMORIALS

Dr. J. Playfair McMurrich, professor emeritus of anatomy at the University of Toronto, died on February 9 at the age of seventy-nine years.

Dr. William C. Kendall, who retired in 1932 as aquatic biologist in the laboratory of the U. S. Bureau of Fisheries, died on January 28 at the age of seventy-eight years.

Dr. Chester Dale Christie, assistant professor of chemical medicine at Western Reserve University, died on January 27 at the age of fifty-two years.

Dr. A. W. Porter, since 1928 emeritus professor of physics in the University of London, died on January 11. He was a founder member of the Faraday Society and was president of the society from 1920 to 1922.

DR. CHARLES JOSEPH GAHAN, from 1913 to 1927 keeper of the department of entomology of the British Museum (Natural History), died on January 21. He was seventy-seven years old.

Professor Henry Balfour, curator since 1891 of Pitt Rivers Museum of the University of Oxford, died on February 9 at the age of seventy-five years. Dr. Balfour was a former president of the Royal Geographical Society. He had been a member of the Council of the Anthropological Institute of Great Britain since 1891 and was president of the institute in 1903–04. In 1904 and again in 1929 Dr. Balfour was president of the anthropological section of the British Association for the Advancement of Science.

Dr. H. H. Woollard, professor of anatomy in University College, London, died on January 18 at the age of forty-nine years.

The ninety-second birthday on February 11 of Thomas Alva Edison was observed at the Franklin Institute, Philadelphia, by the opening of several special exhibits, and the attention of visitors was called to permanent exhibits in various sections of the museum connected with Edison's life and work.

The bi-centenary of the birth of William Herschel, who is called "the father of modern sidereal astronomy," was celebrated in London in January by the Royal Astronomical Society, of which he became the first president in 1820. At that time he was eighty-two years old.

The Draper Chemical Society of New York University will mark the one hundredth anniversary of the appointment of John William Draper to the chair of chemistry and the chair of physics at New York University by a meeting and exhibit in the Nichols Chemistry Laboratory at University Heights on Tuesday evening, February 21, at eight o'clock. The following addresses will be presented: Professor William West

on "The Scientific Accomplishments of John W. Draper," Professor Philip B. McDonald on "The Life of John W. Draper" and Miss Antonia C. Maury on "Personal Recollections of My Grandfather, John William Draper, and of Draper's Family." Miss Maury is curator of the Draper House and Museum at Hastings-on-Hudson. Apparatus used by Draper in his experiments and lectures at New York University will be exhibited together with some of his books and notes, much of it through the courtesy of his granddaughter, Mrs. Dorothy Draper Nye.

In honor of William Bartram's two hundredth anniversary on February 9, the Academy of Natural Sciences of Philadelphia placed in its library an exhibit of Bartram's books and drawings. Probably Bartram's best-known contribution was his journal, "Travels through North and South Carolina, Georgia and East and West Florida."

## SCIENTIFIC EVENTS

## SYMPOSIUM OF THE AMERICAN INSTI-TUTE OF PHYSICS ON TEMPERA-TURE AND ITS MEASUREMENT

A SYMPOSIUM on "Temperature and its Measurement in Science and Industry" will be held under the auspices of the American Institute of Physics (175 Fifth Avenue, New York, N. Y.) probably next autumn, the dates to be announced later. Consistent with the title, the symposium will cover broadly many fields, its primary purposes, according to present plans, being (1) to coordinate the treatment of the subject in the sciences and branches of engineering; (2) to review principles and bring up to date the record of recent work; (3) to accumulate contributions for a comprehensive text, to be published as soon as possible after the symposium is held; (4) to reveal the subject as an important branch of physics, and (5) to supply schools with the information required for the improvement of curricula. The institute confidently expects that a stimulating, valuable and unified program will be arranged, an aim which will require the help of many contributors.

A representative steering committee has been formed consisting of the chairman, C. O. Fairchild, director of research, C. J. Tagliabue Manufacturing Company; Dr. E. F. DuBois, medical director, Russell Sage Institute of Pathology, and professor of medicine, Cornell University Medical College; Dr. Gustav Egloff, director of research, Universal Oil Products Company; Dr. John Johnston, director of research, U. S. Steel Corporation; Dr. Walter G. Whitman, head, department of chemical engineering, Massachusetts Institute of Technology, and Dr. H. A. Barton, director, American Institute of Physics.

Those who are interested in taking part in this sym-

posium should communicate with the institute at an early date, giving information regarding their field of work and the subject of the contribution they wish to make. Such contributions will be coordinated with the subjects of a group of invited papers and assignments and divisions made. Further information for contributors will be available shortly.

## THE BALTIMORE MEETING OF THE AMER-ICAN CHEMICAL SOCIETY

The ninety-seventh meeting of the American Chemical Society, under the presidency of Professor Charles A. Kraus, of Brown University, will meet in Baltimore from April 3 to 7. Dr. J. C. W. Frazer, Baker professor of chemistry in the Johns Hopkins University, has been appointed honorary chairman of the meeting, and Dr. John C. Krantz, Jr., professor of pharmacology in the Medical School of the University of Maryland, has been named general chairman. Fifteen symposia reporting advances in scientific research and in the application of chemistry to industry, medicine, agriculture, food, engineering and public health are planned.

Seventeen of the eighteen professional divisions of the society will hold sessions. Details of the program follow:

The Division of Agricultural and Food Chemistry will sponsor a symposium on the Federal Food, Drug and Cosmetic Act, in which the Divisions of Biological Chemistry and Medicinal Chemistry will cooperate. The Division of Medicinal Chemistry will direct a symposium on "Endocrines," in which general papers within the field of medicinal chemistry will be presented.

The Division of Petroleum Chemistry is arranging a symposium on "The Rôle of Catalysis in Petroleum Chem-