

were engaged in the early development of the New York Botanical Garden, but it was not until the summer of 1901 that he was appointed to a position on the Garden staff, and relinquished his curatorship at the university. During that summer, accompanied by his brother, Clifton D. Howe, and another assistant, he spent some time in the botanical exploration of Nova Scotia and Newfoundland; collecting trips for marine algae in subsequent seasons took him to Florida, various parts of the West Indies and Panama.

He became assistant director of the New York Botanical Garden in 1923, and so continued until 1935. His directorship was from October 1, 1935, until his death less than fifteen months later; ill health for much of this period interfered with his duties in this office, yet his appointment as director was a fitting climax to his thirty-five years of faithful service in building up this great institution. In spite of his failing health the end came suddenly and unexpectedly.

He was a member of various scientific societies. Perhaps the earliest was the Chamisso Botanical Club, organized at the University of California early in 1891, a few months before his arrival there; of this society he was the third president. In the summer of 1895, while on a vacation in his home state, he was one of the six botanists who planned the Vermont Botanical Club, of which he became an original member when organization was effected. On January 12, 1897, soon after his arrival in New York, he was elected to active membership in the Torrey Botanical Club; the following year he was chosen an associate editor and was reelected annually thereafter, with the exception of the years 1908-10, when he was editor-in-chief of the *Bulletin* and *Memoirs* of the club. When the Torrey Club in 1901 added a smaller monthly, called *Torreya*, to its other publications, he was chosen editor of the new journal and so continued for seven years. At other times he was secretary and vice-president and he had been president for nearly a year at the time of his death.

In 1897, too, he became a member of the New York Academy of Sciences, and was soon thereafter elected a fellow of the academy. He was almost or quite continuously a member of the council from 1914, and was president in 1934 and 1935. His membership in the Botanical Society of America dated from 1899, and he was vice-president in 1913. The ballots for office in this society are cast by mail, and it was announced at the meeting a few weeks ago in Atlantic City that he had been duly elected president for the year 1937. This final honor, alas, came too late.

He was elected to membership in the American Association for the Advancement of Science in 1900, and became a fellow of the association in 1903. In 1907 he joined the Sullivant Moss Society, in 1911 the

American Fern Society, in 1914 the American Society of Naturalists and within the few following years the Connecticut Botanical Society. In 1919 his alma mater, the University of Vermont, conferred upon him the honorary degree of Sc.D. And in 1923 he was chosen as a member of the National Academy of Sciences, an honor highly esteemed by most American scientists.

As a worker and as a writer he was extremely painstaking and conscientious. His contributions to botanical literature were numerous, and a few of them were sufficiently bulky to be regarded as books, although they all formed parts of serial publications. The earlier ones related chiefly to hepatics, the later ones to marine algae, but his interest in both groups was continuous throughout his career.

This brief outline of the life of Marshall Avery Howe furnishes unequivocal evidence of the high esteem of his fellow-workers. Those who knew him best respected him most, and his passing leaves his associates with a sense of profound loss.

J. H. BARNHART

RECENT DEATHS AND MEMORIALS

CYRUS R. CROSBY, professor of entomology at Cornell University, died on January 11 on his arrival in Rochester for the annual meeting of the New York State Horticultural Society. He was fifty-eight years old.

DR. ELIAS HUDSON BARTLEY, professor of chemistry and pediatrics at Long Island College Hospital until his retirement with the title emeritus in 1931, died on January 12. He was eighty-seven years old.

DR. MICHAEL H. CORRIGAN, president of the Rhode Island College of Pharmacy and Allied Sciences, died on January 16 at the age of sixty-eight years.

DR. CHARLES V. NOBACK, since 1926 veterinarian at the New York Zoological Park, died on January 16 at the age of forty-eight years.

DR. WILLIAM HENRY COLLINS, consultant to the branch of mines and geology of the Department of Mines and Resources of Canada and acting director of the National Museum, formerly director of the Canadian Geological Survey, died on January 14 at the age of fifty-eight years.

PROFESSOR ROBIN TILLYARD, an honorary fellow of Queen's College, Cambridge, chief entomologist of the Australian Commonwealth from 1928 to 1934, was killed in an automobile accident on January 13. He was fifty-five years old.

DR. BINDO DE VECCHI, professor of pathological anatomy and rector of the University of Florence, died on December 28 at the age of fifty-nine years.

A MEETING in commemoration of the late Dr. W. McKim Marriott was held at the Washington University School of Medicine, St. Louis, on January 3. The speakers included: Chancellor George R. Throop; Dr. Edwards A. Park, professor of medicine of the Johns

Hopkins University School of Medicine; Dr. Alexis F. Hartmann, professor of pediatrics at Washington University, and Dr. Philip A. Shaffer, professor of biological chemistry and head of the department, Washington University School of Medicine.

SCIENTIFIC EVENTS

THE ANNUAL REPORT OF THE BRITISH MINISTRY OF HEALTH

THE annual report of the British Ministry of Health has been recently issued. The year 1935-36 was a period of outstanding health records. The death rate for infants under one year, at 57 per 1,000 births, and deaths from tuberculosis—fewer than 30,000—were the lowest on record. The maternal mortality rate, at 3.93 per 1,000 births, was the lowest since 1924.

According to a summary in the London *Times*, Sir Kingsley Wood, minister of health, said that:

Perhaps the important development in public health was that more and more they were not only seeking to prevent ill-health and disease, but were taking many measures to build up actively good health in the citizens, and adopting a positive policy which promoted directly healthy lives and living. In other words, they were concerned not only with prevention but with building. It was a policy of building up the citizen himself.

During the year over 250,000 expectant mothers had attended ante-natal clinics, and increased use had been made of infant welfare centers. But more must be done in regard to children between one and five years of age. Food was another factor of great importance. Nearly 150,000 samples of food and drugs were analyzed by public analysts during the year. It could be said that adulteration was disappearing, that the food supply was generally free from harmful ingredients, and that the customer was getting what he was entitled to get—good and wholesome food. As well as this, scientific investigation into the nourishment of the population was being carried on by the Advisory Committee on Nutrition.

The collection of family budgets, which is part of the Ministry of Labor's investigations into the cost of living, will provide much useful information about dietaries, but the Advisory Committee desired also that a number of quantitative dietary surveys should be carried out. I have asked local authorities to make these surveys, though the cost will, of course, be borne by the ministry.

A wonderful transformation had been worked in the water position by the £1,000,000 grant, and so far as our great industrial areas were concerned everything was perfectly satisfactory. There was now no danger of drought. Much more provision had been made for open spaces, parks, recreation grounds, playing fields and swimming pools. Loans sanctioned for these purposes during the last 12 months were some £2,300,000, and in addition nearly 250 acres of land for purposes of this kind were presented to the local authorities or to the National Playing Fields Association.

The work of preventing bad health must also be continuously pursued. This was particularly true in connection with housing. Already some 500,000 slum dwellers had gone to better, more decent homes. And every month now between 20,000 and 25,000 other slum dwellers were following them into these better conditions.

Smallpox has now been stamped out in this country. The one case in 1935 was the lowest recorded figure since 1918. They hoped to see more progress made against cancer, which was not yet defeated. Another "weak point in the armor" was maternal mortality, but there had been wonderful improvement in the last few years and steady improvement in the last 12 months.

THE NEW YORK BOTANICAL GARDEN

A REPORT of the past year's work of the New York Botanical Garden was presented on January 11 at the annual meeting of the board of managers by Dr. H. A. Gleason, deputy director, who is at present carrying on the work of Dr. Marshall A. Howe, who died on December 24.

According to his report, extensive reconstruction of Conservatory Range No. 1 on the west side of Bronx Park, commenced early this year, covering approximately two acres of ground, where thousands of exotic plants of decorative, botanical and economic interest are kept for public display, makes this conservatory one of the largest public greenhouses in the world. Its reconstruction—which will be carried out in such a way that at no time will the exhibits be sacrificed—will result in more effective showing of the collections.

The beauty of the grounds of the Botanical Garden will also be enhanced by more than a thousand trees and shrubs which were set out during the fall and by 800 young hemlocks which were added to the forest along the Bronx River. In the Thompson Memorial Rock Garden, one of the most frequently visited portions of the grounds, a bog area will be planted with special subjects this year and 7,000 heathers will be added to the heath planting. The new iris garden on the west side of the grounds will bloom for the first time this coming spring. Six thousand plants in 181 varieties comprise the collection.

Each member of the garden will receive, beginning this year, a subscription to *Addisonia*, which contains colored plates and descriptions of unusual plants. This will be in addition to the monthly *Journal* and the other privileges of membership.