OBITUARY

WILLIAM HENRY NICHOLS

DR. WILLIAM H. NICHOLS, past president of the American Chemical Society and widely known as a leader in chemical industry, died at Honolulu, Hawaii, on February 21, after a brief illness. He was born in Brooklyn, N. Y., on January 9, 1852, attended the Brooklyn Polytechnic Institute for two years and completed his college course at New York University, from which he graduated in 1870. His later collegiate degrees included the M.S. from New York University in 1870, the LL.D. from Lafayette in 1904 and from New York University in 1920, and the Sc.D. from Columbia in 1904, from Pittsburgh in 1920 and from Tufts in 1921. His choice of chemistry as a career was the result of the influence of John William Draper, under whom he studied at New York University.

Dr. Nichols's career in the field of industrial chemistry began in 1870, when he started a small manufacturing business in which because he had not yet reached his majority he was obliged to use the name of his father in the firm name. The growth of his interests is not merely a parallel to that of the chemical industry during the sixty years which followed, but is itself a significant part of the industry. The Nichols Chemical Company, the Nichols Copper Company, the Benzol Products Company, the National Aniline and Chemical Company and most recently the Allied Chemical and Dye Corporation represent progressive growth in magnitude of enterprise and in value of products, the latter company being one of the largest chemical corporations in this country. These growths were accomplished not solely by business enterprise but also by discoveries of a fundamental character in the industry, such as the first American usage of iron pyrites in the manufacture of sulphuric acid, the first production of electrolytically purified copper for commercial use and the adaptation to American conditions of the synthesis of ammonia from nitrogen and hydrogen, which his company had worked out on an experimental scale as early as January, 1914, before the outbreak of the World War.

Dr. Nichols was one of the organizers of the American Chemical Society in 1876 and was its president in 1918 and 1919. He was president of the Society of Chemical Industry in 1904–05, and chairman of the Eighth International Congress of Applied Chemistry, held in New York City in 1912. His service to collegiate education included membership on the governing boards of the Brooklyn Polytechnic Institute and of New York University for a considerable period of years; he acted as vice-chairman for the former institution and for the latter as vice-president of the council and for a period as acting chancellor. Throughout these years he was a generous contributor also to the financial needs of both colleges, his gifts including among others the Nichols Laboratory of Chemistry at New York University, completed in 1927 at a cost of \$700,000. His will included a large number of charitable bequests to various religious organizations, to the American Chemical Society, to the Brooklyn Polytechnic Institute and a residuary legacy to New York University estimated at a value of about two million dollars.

NEW YORK UNIVERSITY, MAY 5, 1930 ARTHUR E. HILL

J. ARTHUR HARRIS¹

THE real scientist must have interest in his chosen field of knowledge and a belief in the importance of that field. To this he must add a broad conception of its scope and limitations, ability to distinguish between the essential and the unessential, and diligence in examining every scrap of evidence which bears on the subjects within his field. All of these characteristics J. Arthur Harris possessed in unusual degree. His industry was untiring. He had no schedule of working hours when a problem was to be solved. Nothing was too insignificant for serious consideration and nothing too important to escape investigation. With this was a broad-minded consideration for the views of others, even though opposed to his own, and a keen scientific interest in attempting to see to what extent they would add to his own knowledge of the subjects under discussion. These qualities brought him wide recognition not only within the institutions with which he was associated, but throughout the country and far beyond.

A distinguished student of Karl Pearson, he was a pioneer in the introduction of the biometric method in the domain of botany and in biological science in general. His accomplishments in this field included both the application of quantitative methods to the study of living things and also fundamental contributions to the logic and theory of scientific method. In recognition of these attainments he received in 1921 the Weldon Medal and Memorial Prize of the University of Oxford, the highest award of merit in this field of science.

The laurels which he earned in the field of biometry would suffice for most men but not for him. In the field of ecology he blazed new trails, brought in new conceptions, new quantitative technic, and adapted the study of the newer science of physical chemistry to his pioneer field studies in plant geography. He believed in studying plants in their own environment, and he carried his paths through the morasses of the Dismal Swamp and the Everglades, through the montane rain-forests of Jamaica

¹ Resolutions adopted by the faculty of the College of Science, Literature and the Arts, the University of Minnesota, April 28, 1930.