

appreciate his devotion to the science he loved and the fineness and strength of his character.

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CHARLES ROBERT SANGER

IN the untimely death of Professor Sanger, on February 25, 1912, the Faculty of Arts and Sciences of Harvard University lost a loyal and faithful member, the chemical laboratory of Harvard College an efficient director, and the class of 1881 a devoted secretary.

Charles Robert Sanger was born in Boston on August 31, 1860. He graduated from Harvard College in 1881, received the Harvard degree of Master of Arts in 1882, and attained that of Doctor of Philosophy in 1884. From 1881 to 1882 and again from 1884 to 1886, he was assistant in the chemical laboratory of Harvard College, but in 1886 he went to the United States Naval Academy at Annapolis, as professor of chemistry. Six years later he was called to Washington University, St. Louis, Mo., and remained there until 1899, when he came back to Harvard as assistant professor of chemistry. He was called here because his service as assistant in qualitative analysis fifteen years before had been so able that he was deemed the most suitable person to continue the instruction in this favorite course when Professor H. B. Hill was obliged by other duties to relinquish it. Professor Sanger's return to Harvard was appropriate; he had never lost interest in the varied phases of our university life even when duty called him elsewhere. No son of Harvard has ever worked, according to his opportunity, more loyally in her behalf.

When in 1903 Hill laid down his work for-

ever, Sanger was promoted to a full professorship, and on account of his marked executive ability and conscientious devotion, was the natural choice for the onerous directorship of the laboratory. Only those who have been privileged to work with him there can fully appreciate the extent to which he generously gave his time and thought in order to further the interests of all.

While first at Harvard as an assistant, he worked under Professor Hill on the constitution of pyromucic acid. In recent years he confined his work chiefly to the devising and perfecting of methods for the detection of minute quantities of arsenic, antimony and fluorine, as well as to the investigation of the chlorine derivatives of silicon and sulphur. Besides papers describing these researches, he wrote several laboratory manuals. His fine character was especially manifested in the great care he exercised in all his scientific work; he was determined that no untrue statement should ever escape his pen, and rigorous precautions and manifold repetitions of experiments doubtless prevented him from ranging over a wider field. As a teacher he tried to inculcate the same habits of methodical painstaking work which he possessed himself.

He was a Fellow of the American Academy of Arts and Sciences and a member of the American Chemical Society and the Deutsche Chemische Gesellschaft.

In 1886 he married Miss Almira Starkweather Horswell, who died in 1905, leaving three children. Five years later he married Miss Eleanor W. Davis, of Cambridge, who, with the children, survives him.

No one could watch his struggle against an insidious disease during these last years without a feeling of deep admiration for the courage with which he lectured and worked in spite of spasms of mortal pain and prostrating weakness; and the devotion and consideration of his classes was a striking testimony to the universal respect in which he was held.

T. W. RICHARDS,
B. O. PEIRCE,
G. P. BAXTER