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J. WILLARD GIBBS AND HIS CONTRIBUTION TO CHEMISTRY[1]

THOMAS CARLYLE expressed the thought that "great men are the inspired texts of that divine Book of Revelations whereof a chapter is completed from epoch to epoch, and by some named History." These words acquire singular significance when applied to him of whom it is my privilege to speak to-day. In a very real sense Josiah Willard Gibbs was one of the most "inspired texts" which adorn the pages of the history of science in America. Unfortunately the process of exegesis has proved both difficult and slow, so that Gibbs did not live to see himself fully understood nor the practical value of his discoveries appreciated.

Josiah Willard Gibbs was born in New Haven, Connecticut, February 11, 1839. He was the fourth child and only son of Josiah Willard Gibbs, professor of sacred literature in Yale Divinity School, and of his wife, Mary Anna, daughter of Dr. Van Cleve, of Princeton, New Jersey. He was descended from Robert Gibbs, the fourth son of Sir Henry Gibbs, of Honington, Warwickshire, who came to this country and settled in Boston in 1658. Henry Gibbs, one of the grandsons of Robert Gibbs, married, in 1747, Katharine, the daughter of Hon. Josiah Willard, secretary of the province of Massachusetts. No fewer than six of the descendants of this couple have borne the name Josiah Willard Gibbs. The father of the subject of this sketch was regarded by his contemporaries as a man of unusual erudition. He was remarkable for his extreme modesty and for the conscientious and painstaking accuracy which characterized all of his published work. One of his colleagues in commenting on his uncompleted translation of Gesenius's Hebrew Lexicon wrote, "But with his unwonted thoroughness he could not leave a word until he had made the article upon it perfect, sifting what the author had written by independent investigations of his own." Thus, not only through inheritance but also by precept and example, the son acquired those habits of thoroughness which marked all of his life-work.

Willard Gibbs was prepared for college at the Hopkins Grammar School, New Haven, and entered Yale in 1854. His brilliance as a student is attested

[1] Presented before the historical section of the American Chemical Society at the New Haven meeting, April 6, 1923.