DR. GIDEON E. MOORE.

Received May 31, 1895.

THE death of Dr. Moore happened on Saturday, April 13, 1895. On the following day the death of Prof. James D. Dana was announced. The occurrence so closely together of these sad events was a striking one, for it was under the guidance of Prof. Dana that Dr. Moore entered upon a field of study which he cultivated with so much ardor that his reputation for deep scientific work was increased; and we may well believe that, had not the accidents of fate and fortune turned Dr. Moore's steps from academic halls he, also, would have left the impress of his good and strong personality upon the mind and life of many a youthful student of science.

Gideon Emmet Moore, son of George H. and E. L. Moore, was born in New York City, August 21, 1842. His maternal grandfather, after whom he was named, was Dr. Gideon Humphrey, one of the leading physicians of Philadelphia in the beginning of this century, who distinguished himself as a surgeon in the war of 1812, and took part with remarkable adventures in the filibustering expeditions of the period. His father, whose family belonged in Maine, early went to California, in fact was one of the first settlers of San Francisco, as he was there eleven years before the Argonauts of '49. He embarked in the business of shipping and warehousing, and his firm was the foremost one of the time.

Young Gideon Moore's early days were spent, some in New York and some in Burlington, N. J., and, before entering Yale College, at Dr. Bartlett's Academy in Poughkeepsie. In his boyhood he was passionately fond of music and an accomplished performer on the violin. His class at Yale was '61. Prof. S. W. Johnson has kindly sent me the following tribute to his pupil:

"Our friend, Gideon E. Moore, entered the Yale Scientific School in the Autumn of 1859, graduated as Bachelor of Philosophy in the Summer of 1861, and remained as a postgraduate student until the Spring of 1862.

"During the first year of his attendance I knew him slightly, but from September 1860 until he finished his studies I had immediate charge of the Laboratory of Analytical Chemistry and was constantly familiar with his progress in chemical study. I was from the outset attracted by the gentle and courteous manners of the somewhat delicate appearing youth whose invariable cheerfulness, promptitude, and steady attention to work, no less than the ease with which he performed and exceeded the tasks assigned him, made the duty of his teacher a pleasure and a privilege.

"Having gone through an extended course of inorganic analysis with unusual rapidity and success he was well prepared to take up organic chemistry, and the proposal was made to him (I think in Sept. 1861) to undertake an investigation of Bayberry Wax.

"This research was foreseen to require a long time and to involve much tedious labor, but he entered upon it without hesitation, pursued it steadily for four months, and evidently enjoyed it heartily to the end.

"The results are embodied in his paper—'On the Chemical Constitution of the Wax of the Myrica Cerifera'—which appeared in the American Journal of Science, May, 1862. This short paper, of seven pages, presents a concise history of the chemical work previously done on the bayberry wax and established its nature as a mixture of about one-fifth part of tripalmitin and four-fifths nearly of palmitic acid with a little laurin or lauric acid. It illustrates the thoroughness which characterized his work and which made him so immediately successful when, soon after completing his studies at New Haven he engaged in the practice of analytical chemistry at San Francisco, and later when he became assayer to the Gould and Currie mine at Virginia City.

"As I write these lines there stands near by a series of twenty little bottles containing specimens of the fruit, foliage and wax of the bayberry and the preparations obtained during the research in question illustrating the method followed and showing the results arrived at. This instructive collection has done duty regularly for thirty-two years in my lectures and recalls vividly to my remembrance the busy days when our friend was diligently disciplining to extraordinary skill the hand that but a few hours ago suddenly forgot its cunning."

Yours very truly,

S. W. JOHNSON.

Dr. Moore's life in the West was hard enough to daunt the most courageous but he viewed it as a necessary step in his

progress. The rough life of the mining camp and the hardships of that primitive era had no terrors for him. The very task itself of keeping a foothold in such a community only spurred him to accomplish what he had set out to perform, just as in his college and professional career to suggest that a matter was difficult, was sufficient to fire his ambition to attack it and his confidence that he would overcome it.

After four years spent in this field, enjoying in the highest degree the confidence of the owners of the millions which passed through his hands, he resigned to embrace with enthusiasm the opportunity to secure what he had so long coveted—a thorough course at the German universities.

In 1867 he sailed for Europe and studied one year at Wiesbaden under Fresenius. He next went to Heidelberg and under Bunsen, Kirchoff, Helmholtz, Blum, Vonderden, and Kopp he passed some of the happiest days of his life and was graduated *summa cum laude*. At Leipzig he studied under Kolbe one semester, and at Berlin in the laboratory of Wichelhaus.

In September, 1871, he married in Buda Pest, Marie Louise Von Hildebrandt, the daughter of Field Marshal Von Hildebrandt, of the Austrian army, and in the following month returned to America.

In 1872 he became chemist to the Passaic Zinc Co., and continued in that capacity to the close of his life. The remainder of his time was devoted to study and private practice, a field in which he rose to eminence and left a record marked with many triumphs.

Depth, care, thoroughness, and method characterized his work. His intellectual endowment was generous, his mental faculties keen, his memory good, his power of concentration wonderful. He possessed a logical and well-balanced mind not easily led to hasty conclusions. The virtue of strict, unwavering conscientiousness and fidelity to truth was a shining one in Dr. Moore, and his professional honor was not a mantle to be put on and off or to be distinguished from his personal honor. All his early training as well as the promptings of his heart fortified him in the practice of making diligent search for the truth, and having found it, of fighting bravely for his convictions.

He at one time wrote much and all of it was valuable; in the early days making many contributions to mineral chemistry; Brushite, Cryptocallite and Hetaerolite being additions made by him to the list of new species. Of late years his most laborious work, that on the "Chemistry of American Tobaccos," was written for the Tenth Census. He was editor of Vol. II of this JOURNAL, and in Vol. I appeared his report on the Progress of Analytical Chemistry for 1879—a model for all of its kind. He had taken out many patents in metallurgical and fuel-gas processes.

Subjoined is a list of his published papers:

1862. On the Chemical Constitution of the Wax of the Myrica Cerifera. American Journal of Science, [2], 33, 313.

1865. On Brushite, a new mineral species. American Journal of Science, [2], 39, 43.

1866. Analysis of the Water of Borax Lake, Cal. American Journal of Science, [2], 41, 255.

1870. On the occurrence of Amorphous Mercuric Sulphide (Metacinnabarite) in Nature. J. prakt. Chem., [2], 2, 319. American Journal of Science [3] 3, 36.

1871. On the Electrolysis of the Substituted Derivatives of Acetic Acid. Ber. d. chem. Ges., 4.

1875. On Chalcophanite, a new mineral species. American Chemist, July, 1875.

1877. On Hetaerolite, a new mineral species. American Journal of Science, [3] 14, 423.

1878. Report on the Strong System of Water-gas Manufacture. Engineering and Mining Journal, January, 1878.

1879. Report on the Progress of Analytical Chemistry, from April to September. J. Am. Chem. Soc., 1.

1883. Report on the Chemistry of American Tobaccos. Special Report of the United States Census, On the Culture and Curing of Tobacco. Chap. 22.

1885. Report on the Granger Water Gas. A. O. Granger & Co., Philadelphia.

1885. Kallait, pseudomorph of Apatite from California. In collaboration with V. von Zepharovich. Ztschr. für Krystallographie, Leipzig.

Dr. Moore's manners were gentle and courteous in the extreme. He used to tell with much appreciation how, when he was working in Bunsen's laboratory, he would always have to keep his eyes averted from Bunsen, who would immediately spring to his side were he to show the slightest sign of effort over the task or

the need of anything. And listening to him telling this you could not help thinking how marked was the same kindliness in himself. How grateful is association with such men. What a privilege to have daily converse with one whose soul delights in those little amenities which the throng overlook. What a pleasure in the cheery face. What a lesson we learn from the lips that may be quivering with pain, but open only to express solicitude for our welfare and to smile that they may hide their own story.

An acquisition that was of great value to our friend was his retentive memory. Everything that he had once mastered, whether in science or in other branches of knowledge, could be recalled to mind at will and with an accuracy and fidelity to detail that made us marvel. I remember on one occasion when in a leisure hour we were discussing the poets, and Coleridge became the subject of our remarks, he recited without hesitation the lines in Kubla Khan:

> "But oh that deep romantic chasm which slanted
> Down the green hill atwart a cedarn cover!
> A savage place! as holy and enchanted
> As e'er beneath a waning moon was haunted
> By woman wailing for her demon lover!"

I said "You have been reading Coleridge lately?" "No," said he, "I don't suppose that I have read these lines in over twenty years, but I remembered them for I always admired their sonorousness and picturesque effect."

He was a poet himself of no mean order. His nature was essentially grave, retired and full of self-repression, yet it had that expanding joyousness which goes in search of the delights that we may draw from elevated themes and roseate imagery. He had translated much from Gœthe, and more recently Hamerling, in lines which show alike his skill as a linguist and his art as a poet.

His end came suddenly, for he was stricken without warning, and he laid down his work to go and face the terrors of pneumonia. He did face them, and unflinchingly, and he calmly awaited the end, that he saw must come, with the fortitude of the Christian faith that he was glad to acknowledge.

CHAS. F. MCKENNA.

I spent last Saturday with Prof. T. E. Thorpe in his steam launch on the Thames at Kingston with a party of friends. He asked me then about Dr. Moore's death and spoke of him very warmly. They were students together in Germany and the friendship then formed was cemented by meetings during Thorpe's visit to America afterwards. He detailed at length, incidents of Dr. Moore's student and family life illustrating his lovable character.

Proof of Mr. McKenna's notice came to me in London, and I have ventured to add this note to show that his and Professor Johnson's words find an echo abroad. EDWARD HART.

London, June 22, 1895.

LOTHAR VON MEYER.

BY the sudden death of Lothar von Meyer, which occurred at Tübingen, on April 11th, chemical science has lost one of its foremost exponents.

It was vacation time in Tübingen, and Professor Meyer had returned from a walk and was engaged in his favorite outdoor pastime of trimming vines in his garden when he suddenly began to feel unwell and hastened to his study. He called for help and his wife and son went to his aid. Reaching a sofa with their support he remarked, "I have received a stroke," and then was able to say no more. This was at about 5 in the afternoon, and at 11 he died, without further struggle, his face retaining the calm and noble expression not to be forgotten by his many friends.

Julius Lothar Meyer was born August 19th, 1830, at Varel in the Grand Duchy of Oldenburg, the son of a well-known physician, Dr. August Meyer. He completed his gymnasium course in Oldenburg and began the study of medicine in Zürich in the Spring of 1851. There he spent four semesters, followed by two semesters at Würzburg, where he received the degree of Doctor of Medicine, in the Spring of 1854, for a thesis on the question of the condition of gaseous combinations in the blood. In the investigation of this problem Meyer's attention was attracted to the recent work of Bunsen on gas measurements, and accordingly we find him next in Heidelberg, where he re-