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-

mained five semesters, at a time and in a company since famous in the history of chemistry. He took up again the question of the gases held by the blood, and in a long investigation, published in 1857, he showed for the first time the real nature of the oxygen absorption. Magnus had shown at an earlier date that the oxygen absorbed by blood did not follow the Dalton-Henry law, but he attempted no explanation for this fact. It remained for Meyer to determine the quantity of oxygen, carbon dioxide, and nitrogen absorbed under different conditions, and to show that the absorption of the first must depend on chemical combination. This investigation attracted immediate attention.

Meyer's tastes now led him away from medicine and in the direction of pure chemistry, and especially toward physical chemistry. Leaving Bunsen, he went to the old university of Königsberg, attracted by the courses of lectures given by Franz Neumann on the subject of mathematical physics. He remained with Neumann three semesters. In the Spring of 1858 Meyer went to Breslau, where he was given the degree of Doctor of Philosophy for a dissertation on the absorption of carbon monoxide by the blood. In this dissertation it was shown, for the first time, that CO displaces O, volume for volume. The author soon afterwards became a *Privatdocent* for physics and chemistry, and, in 1859, was given the position of Director of the Chemical Laboratory of the Physiological Institute. Here he remained until 1866. In this interval he published a number of valuable papers, and the first edition of his famous work, "Die modernen Theorien der Chemie."

In 1866 he was called to the Forestry Academy of Eberswalde, in 1868 to the Polytechnicum of Karlsruhe, and in 1876 to the University of Tübingen, where he had just completed his nineteenth year of labor at the time of his death.

Lothar Meyer was the author of numerous valuable scientific papers, most of which appeared in *Liebig's Annalen* and in the *Berichte*. They handle mainly questions from the field of physical chemistry. In some of his earlier papers Meyer began the study of the relations existing between the atomic weights and physical and chemical properties of the elements. Their relations were soon formulated in his Periodic System of the Elements.

That Mendelejeff arrived independently at almost the same conclusions does not, in any measure, detract from the originality or value of Meyer's work. It is this work which has made his name best known among scientific men, but without it his purely experimental investigations would be sufficient to give him a high position among the great chemists of the time.

In recognition of his services to science, Meyer received the Davy medal of the Royal Society in 1882, was made a Foreign Honorary Member of the London Chemical Society, in 1883, Corresponding Member of the Prussian Academy of Sciences, in 1888, and in 1891 a Corresponding Member of the Russian Academy. In 1892 he was given a title of nobility by decree of the Würtemberg crown.

He was the author of the following works: "Die modernen Theorien der Chemie," first edition 1864, fifth edition 1884, a sixth edition the author had in preparation; "Die Atomgewichte der Elemente" (with Karl Seubert), 1883; "Grundzüge der theoretischen Chemie," first edition 1890, second edition 1893. The first and last of these books are well known in English translations.

It is not necessary, in this place, to speak of the high scientific value of Meyer's work, as that is a subject on which the literature itself speaks most plainly. He possessed great manual dexterity, and in glass-blowing and the construction of apparatus he had unusual skill. His style, as a lecturer, was simple and exceedingly clear, and in his everyday intercourse with students he displayed a kindliness of disposition and patience in explanation not often found with men whose time is as closely occupied as was his. Few investigators are willing to give from their private work the time which he freely gave to interested students.

Among his colleagues Meyer was cordially respected and beloved. Last summer he was appointed Rector of the University for the present year, and by other distinctions, as well, his popularity was shown. All who knew him mourn his loss as a man; chemists alone are able to recognize the loss to science.

J. H. LONG.