OBITUARY.

JAMES BUCKTON MACKINTOSH.

This promising member of the American Chemical Society died April 15th, 1891, at the age of thirty-one years.

He was born at Bebington, near Birkenhead, in Cheshirc, England, on December 29th, 1859. Owing to the death of his mother while he was very young his early education was obtained under the direction of his father's niece. As the little town where he was born is on the banks of the Mersey, opposite the city of Liverpool, he attended the Institute Schools of that well-known centre and ranked at the head of his classes in mathematics, chemistry and electricity, subjects that, in after life, proved so fruitful of good results in his scientific work. In May, 1873, he passed the local examination of these schools and became "Au Associate In Arts of the University of Oxford," and he also passed the examination of the Science and Art Department of the Committee of Council of Education of the English Government, and held a certificate for the same.

In August, 1873, his family came to America and he entered the School of Mines of Columbia College, graduating in 1877 with the dual degree of E. M. and C. E. Remaining in the school he did a large amount of original work on metallurgical subjects which placed him in the front rank of authorities on these matters. His metho is of working were marked for their accuracy and delicacy and caused him to be in demand among those manufacturers and others who required special researches upon metallurgical processes. In the year 1886 he went to the Lehigh University to take charge of the chemical laboratory of that institution, and in May, 1888, he became chemist to the Consolidated Gas Company of New York, which position he occupied at the time of his death.

During his later years he was interested in the extraction and preparation of the rare earths of the lanthanum group, and his excellent work on these metals was cut short by his untimely death.

As a man Mr. Mackintosh was of a most gentle nature, and those who knew him best loved him most. Among scientific workers he was full of enthusiasm and quick to observe practical ideas. As a manipulator of delicate apparatus he had few equals, and this, combined with a clear knowledge of the sciences generally, was the sources of his success. Cut off in his best years we feel that science has lost one of her devoted workers, and his friends a co-laborer whose place in their esteem it is hard to fill.

> Loathing pretense, he did with cheerful will What others talked of, while their hands were still.