## OBITUARIES.

CHARLES FRIEDEL, although most distinguished as a chemist, had a considerable reputation as a Mineralogist and Crystallographer. He was born at Strassburg on March 12th, 1832, and graduated in mathematics and physics at the University of Paris with special honours. His first public appointment (1856) was that of Curator of the Mineralogical Collection of the Paris School of Mines, In 1876 he became Professor of Mineralogy in the University, and eight years later succeeded Professor Wurtz in the Chair of Organic Chemistry. He received the distinguished honour of membership of the Institute (Academy of Sciences) in 1878, and in 1881 was President of the French Mineralogical Society. His numerous mineralogical papers deal with the pyroelectrical phenomena of crystals, the artificial production of minerals, and other subjects of a miscellaneous and descriptive character. The minerals adamite, wurtzite, delafossite and (in conjunction with another author) carnotite were first described by him; the mineral friedelite perpetuates his name.

Friedel's death took place on April 20th, 1899. A detailed account of his mineralogical work, together with an excellent portrait, is given by P. Curie in *Bull. Soc. franq. Min.* 1900, XXIII, 171-190.

Peter Waage, an original honorary member of the Society, died in January 1900, in his 67th year. Since 1862 he had held the post of Professor of Chemistry in the University of Christiania. As a chemist he was interested in the analysis of minerals, and he was also joint author of a primer of crystallography.

Townshend Monckton Hall, an original member of the Society, and a contributor to the Magazine, died July 1st, 1899, at the age of 54. He was well known as a local authority on the geology and mineralogy of Devonshire, and was the author of a very useful topographical index to British mineralogy, "The Mineralogist's Directory," published in 1868.

## REVIEWS.

Elements of Mineralogy, Crystallography and Blowpipe Analysis from a practical standpoint. By A. J. Moses, Professor of Mineralogy, Columbia University, and C. L. Parsons, Professor of General and Analytical