

## OBITUARIES.

## GUSTAV ADOLF KENNGOTT.

THE following particulars of the life and work of this well-known mineralogist are mainly derived from an obituary notice by U. Grubenmann, in the *Vierteljahrsschrift d. Naturforschenden Gesellschaft in Zürich*, XLII. pp. 74-9:—

Gustav Adolf Kenngott was born on January 6th, 1818, at Breslau. In the university of his native town he studied mathematics and natural science, and in 1844 became Privatdocent for Mineralogy, Crystallography and Geognosy. In 1850 he removed to Vienna, and in the winter of that year obtained the Professorship in Natural Science in the Oberrealschule at Pressburg. In 1852 he returned to Vienna as Custos-Adjunkt in the Hofmineralienkabinett, which position he held until 1856, when he was elected Professor of Mineralogy in the Polytechnic School in Zürich, and a year later obtained the ordinary Professorship in the University. These posts he held until his retirement in 1893. What use Kenngott made of time and opportunity in the interests of his tutorial work, in order to further the advance of mineralogy, may be judged from the list of his published works, which occupies seven pages appended to his obituary notice.

He was the author of various text-books on crystallography, mineralogy and petrology, while his book, *Die Minerale der Schweiz*, Leipzig, 1866, remains the standard work of reference for Swiss minerals. His first published papers relate chiefly to crystallography, but his subsequent contributions to mineralogy are for the most part devoted to the description of the character of particular mineral species. From his papers and his method of teaching it is clear that throughout his career Kenngott directed his efforts rather to accurate observation and grasp of detail than to the pursuit of brilliant generalisations. He died on March 14th, 1897.

## SAMUEL HAUGHTON, M.D., F.R.S.

Samuel Haughton was born December 21st, 1823, at Carlow, in which town his father owned extensive flour mills.

He entered Trinity College, Dublin, and in 1843 was first Senior Moderator in Mathematics. He obtained his Fellowship in the following year, at the very early age of 21. He at once took Orders, as at that date two only of the Fellows could be laymen. At first he devoted himself to

Molecular Mechanics, and in 1848 received the Cunningham Medal of the Royal Irish Academy for his *Memoir on the Equilibrium and Motion of Solid and Fluid Bodies*. He also worked much on Tidal questions.

In 1851 the Professorship of Geology in the University fell vacant, owing to the appointment of Oldham to the Superintendentship of the Indian Geological Survey.

Haughton took the post, which thus connected him with the then rising Engineering School. At this time began his long and intimate connection with Professor Galbraith, another of the staff of that School. The two Professors brought out together a series of Manuals of Science, which had a great popularity. The two also threw themselves with great zeal into the Military Classes, in preparation for the Commissions at Woolwich, thrown open at the time of the Crimean War.

In 1854 Haughton took up Chemistry, and that led on to Medicine, and he became Registrar of the Medical School. This Journal, however, is hardly the place in which to deal with his researches into Animal Mechanics.

He held his Geological Professorship for 30 years, till 1881, when he became a Senior Fellow.

In his Geological work he principally dealt with Chemical Petrology. His analyses, however, were not minutely exact; in his analyses of felspars he often estimated all the alkalies together, and then proceeded to treat the results mathematically, as if all the data were rigorously correct. The outcome of this was that his conclusions were somewhat sharply criticised.

His papers on the Granites of Donegal are the best examples of his methods of calculating rock constituents.

The number of his papers down to 1884 in the Royal Society Catalogue is no less than 173.

He was elected F.R.S. in 1858; he received Honorary Degrees, not only from home, but also from foreign Universities. He was an original Member of the Mineralogical Society, and one of its Vice-Presidents from its institution in 1876 to the present year.

His death occurred on October 31st, 1897.

He married his first cousin, who predeceased him, and left three sons and one daughter.

Dr. Haughton leaves behind him the memory of one of the warmest of friends; of him also it might almost be said that in Science at least *Nihil tetigit quod non ornavit*.

R. H. S.