

## OBITUARIES.

JOHN JACOB BERINGER (1857–1915) was born at Penzance and educated at Redruth. He entered the Royal School of Mines as a Royal Exhibitioner, taking the Associateship in 1880. In 1881 he was assistant in chemistry and assaying at King's College, London, and from 1882–91 lecturer to the Miners' Association of Cornwall and Devonshire, and public analyst for the County of Cornwall. From 1892 until his death he was Principal of the Camborne School of Mines, where he had great success as a teacher. His 'Textbook of Assaying' is a standard work, and has passed through thirteen editions. He was a member of our Society since 1894. His death, on March 28, 1915, had been hastened by overwork, and by the loss of the sight of one eye due to too close application to the microscope.

Sir ARTHUR HERBERT CHURCH (1834–1915) was born, the fourth son of a solicitor, in London, on June 2, 1834, and educated at King's College, London, the Royal College of Chemistry, and Lincoln College, Oxford. He was Professor of Chemistry in the Royal Agricultural College at Cirencester (1863–79), lecturer in organic chemistry at Cooper's Hill College (1888–1900), and Professor of Chemistry in the Royal Academy of Arts, London (1879–1911). He was the author of several handbooks, some of which were prepared in connexion with the collections in the Victoria and Albert Museum. These dealt with a variety of subjects, and passed through many editions: 'Laboratory Guide for Agricultural Students' (1864, 9th edit. 1912), 'Precious Stones' (1882, several editions and reprints to 1913), 'English Earthenware' (1884), 'English Porcelain' (1885), 'Food Grains of India' (1886), 'Chemistry of Paints and Painting' (1890, 4th edit. 1915), and several other works. His scientific papers were also considerable in number and covered a wide range of subjects: the Royal Society Catalogue quotes 137 titles up to the year 1900. Several of them dealt with mineralogy, more especially with the analysis of Cornish minerals. He described as new species: bayldonite, botallackite, namaqualite, pelagite, restormelite, tallingite, tasmanite, and woodwardite; and also the rare hydrous cerium phosphate which bears his name—churchite,

Some of his papers appeared in the pages of this Magazine. He was an original (1876) member of this Society and a past President (1898-1901). He was elected a fellow of the Chemical Society as long ago as 1853, and of the Royal Society in 1888, and was created K.C.V.O. in 1909. He was D.Sc. of Oxford, and a fellow of King's College, London.

Sir Arthur Church had a private laboratory at his home at Kew Gardens, and he was an enthusiastic collector of objects of art of various kinds. He bequeathed his chemical and mineralogical apparatus and mineral specimens, together with a sum of £100 for the purchase of apparatus and specimens, to the Mineralogical Department at Oxford. His valuable collection of faceted gem-stones has, in accordance with a wish expressed in his will, been presented by his widow to the trustees of the British Museum, and is now on exhibition in the recent addition case in the mineral gallery of the Natural History Museum at South Kensington. This collection comprises about 200 choice and selected stones, most of them being mounted in gold rings. The sixty-nine examples of zircon display a wide range in colour and include two stones of a bright sky-blue. Of his many-sided activities mention should also be made of the assistance he gave in the preservation of the mural paintings and stonework of the Houses of Parliament and Westminster Abbey. He died on May 31, 1915.

CARL HERMANN CREDNER (1841-1913) was, since 1872, Director of the Geological Survey of Saxony and Professor of Geology of the University of Leipzig. In the same year he published his 'Elemente der Geologie', which passed through ten editions. Some of his writings dealt with petrology and mineral-deposits.

ORVILLE ADELBERT DERBY (1851-1915) was born at Kelloggsville, New York, and graduated at Cornell University, Ithaca, New York, where in 1878 he was instructor in geology. In 1876 he was appointed assistant on the 'Comissão Geologica do Brazil', and in 1879 director of the geological section of the 'Comissão Geographica e Geologica do Estado de São Paulo'. More recently, in 1906, he became director of the newly established 'Serviço Geologico e Mineralogico do Brazil' at Rio de Janeiro. He was the author of numerous papers on Brazilian geology, and on the deposits of gold, diamonds, and monazite-sands in that country. A note on 'Monazite and xenotime in European rocks' appeared in this Magazine (1897, vol. xi, p. 304). His papers on the

nepheline rocks of Brazil appeared in the Quarterly Journal of the Geological Society, of which society he was a fellow since 1884. The Brazilian mineral derbylite, named after him, was described in this Magazine (1897, vol. xi, p. 176).

JAMES GEIKIE (1839–1915) was an original (1876) member of the Mineralogical Society. He joined the Scottish Geological Survey in 1861, and since 1882 was Professor of Geology and Mineralogy in the University of Edinburgh.

ROLF GÖRGEY VON GÖRGÖ (1886–1915) was an assistant in the Mineralogical and Petrographical Institute of the University of Vienna. Although a Hungarian, he acted as a company-commander in a Tyrolese regiment, and fell at Rudnik on the San in Galicia on May 25, 1915. Dr. R. Görgey had published several mineralogical papers, dealing more especially with zeolites and the minerals of salt-deposits. In 1907, in company with F. Cornu, he visited the zeolite localities of the Faroe Islands and of Scotland and wrote 'Ein Beitrag zur topographischen Mineralogie der Färöer' (1910). A detailed description of the newly-discovered deposits of potash-salts at Wittelsheim in Upper Alsace was given by him in 1912.

CONSTANTIN GUILLEMAIN (1873–1914) was born and educated at Breslau in Silesia. In his inaugural dissertation (Breslau, 1898) he gave the results of a large number of analyses of mineral sulpho-salts. He wrote on the geology and ore-deposits of Cameroon, Katanga, and Uruguay, and was a Privatdozent for geology and geography in the Technical High School at Aachen. He was a victim of the war.

Sir WALTER NOEL HARTLEY (1846–1913), since 1879 Professor of Chemistry in the Royal College of Science, Dublin, was best known by his researches in spectroscopy. He applied these methods to the spectrographic analyses of ores, minerals, and meteorites. The Kangra Valley (India) meteorite was described by him, and he afterwards presented the stone to the British Museum collection of meteorites.

ADOLF VON KOENEN (1837–1915), since 1881 Professor of Geology at Göttingen, and previously at Marburg. Most of his work was palaeontological and geological, but in 1874 and 1877 he gave descriptions of the zeolite occurrence on Mt. Stempel near Marburg. The mineral koenenite was named after him by F. Rinne in 1902.

HERBERT KYNASTON (1864–1915), since 1903 Director of the Geological Survey of the Transvaal and later of that of the Union of South Africa, was previously attached to the Scottish Geological Survey. Some of his work was petrographical, and he examined ore-deposits in the Transvaal. He died on June 29, 1915, at Pretoria, after an operation for appendicitis.

HENRY JAMES JOHNSTON LAVIS (1856–1914) early took an interest in geology and became a fellow of the Geological Society while he was a medical student at University College, London. He went to Naples in 1879 as a medical practitioner, remaining there until 1894. Here he made a detailed study of Vesuvius and other Italian volcanoes, and became Professor of Vulcanology in the University at Naples. His study of vulcanology merged into that of the petrology of igneous rocks. After leaving Naples he settled in France as a hospital physician. He met his death in a motor-car accident on September 10, 1914, while escaping from the German invasion. In 1912 he issued a bibliography of his publications, giving 161 titles; curiously, this does not mention his paper on a new Vesuvian mineral—chlormanganokalite, which appeared in this Magazine (1908, vol. xv, p. 54).

CHARLES RICHARD LINDSEY (     –1914) was a member of this Society since 1886, and he contributed a paper on 'Brookite in the Cleveland ironstone' to this Magazine in 1905. Being an Associate of Owens College, he received the degree of B.Sc. (Vict.) under the Charter of 1880. At one time he was honorary secretary of the Manchester Geological Society. His business as a chemical manufacturer gave him an opportunity of forming a collection of economic minerals.

SIEGFRIED MARTIUS (     –1914) was assistant in the Mineralogical Institute of the University of Bonn. His dissertation for the degree of doctor (Bonn, 1911) discussed the origin of the white pumiceous tuffs and trass of the Laacher See district. He also described occurrences in situ of nephrite in the southern Apennines (Abstract in Journ. Chem. Soc., 1915, ii, 360). He was killed in the war on October 23, 1914.

HUGO HEINRICH WILHELM MÜLLER (1833–1915), a past-President of this Society, was born on July 29, 1833, at Tirschenreuth in Bavaria. He studied chemistry at Leipzig and Göttingen, graduating at the latter university in 1853. For a time he acted as assistant to Liebig at Munich, and it was on the recommendation of Liebig that he came to England in 1854 as an assistant to Warren De la Rue. He later

entered the firm of stationers and paper-makers, De la Rue & Co., having charge of the postage-stamp branch, becoming a partner in 1873, and retiring in 1902. Much of his scientific work was done in collaboration with Warren De la Rue, and more recently he worked regularly in the Davy-Faraday research laboratory of the Royal Institution. He early took an interest in mineralogy, his first papers, in 1852 and 1853, being on the minerals found in the neighbourhood of his birth-place, and on the preparation of lithia from the Bavarian triphylite. In 1859 he published in the Journal of the Chemical Society mineralogical notes on cinnabar pseudomorphs from Spain, libethenite from Congo, columbite from Greenland, and the meteoric iron of Zacatecas, Mexico. Most of his work, however, had reference to organic chemistry, more especially of substances of vegetable origin, and he always endeavoured to obtain these substances in a form suitable for crystallographic determination. He also made a study of vegetable fibres in connexion with their adaptability to paper-making.

Dr. Hugo Müller was a prominent member and frequent attendant of several scientific societies. He was elected a Fellow of the Royal Society in 1866, and was president of the Chemical Society (1885-7), and of the Mineralogical Society (1901-4). He was a member of the Crystallogical Society, which in 1883 was amalgamated with the Mineralogical Society. The honorary degrees of LL.D. (St. Andrews) and D.Sc. (Manchester) were conferred on him. At the time of his marriage with an English lady in 1878 he became a naturalized British subject. He died on May 23, 1915, at his country house at Camberley in Surrey, where he had established a beautiful garden. His collection of minerals, numbering some two thousand good specimens, has been presented by his widow to the University Museum at Oxford.

LEOPOLD OPPENHEIMER ( -1914) was a demonstrator under Prof. E. A. Wülfing at Heidelberg. His dissertation (Heidelberg, 1914; abstract in Journ. Chem. Soc., 1915, ii, 644) gave the results of detailed optical determinations made on carefully analysed specimens of cordierite from several localities. He was killed in Belgium on August 22, 1914.

ALBERT DE ROMEU (1875-1915) was Professor of Mineralogy and Geology in the École centrale des Arts et Manufactures in Paris. He was the first member (elected in 1903) of the French Mineralogical Society to fall in the European war. As a lieutenant of the reserve in the heavy artillery he was killed on January 12, 1915, at Bucy-le-Long on the Aisne. He had done petrographical work in Lacroix's

laboratory at the Natural History Museum in Paris, and had charge of the mineralogical section of the colonial laboratory of the museum. He made a special study of metalliferous deposits, visiting those of France, Canada, United States, and Congo, and had accumulated material for the preparation of a treatise on this subject. An obituary notice by Prof. A. Lacroix has been given in *Bull. Soc. franç. Min.*, 1915, vol. xxxviii, pp. 32-34.

The Right Hon. Sir HENRY ENFIELD ROSCOE (1833-1915), the celebrated chemist, claims also the attention of mineralogists. In connexion with his classical researches on vanadium he discovered in 1876 a vanadate of lead and copper, which he named mottramite, amongst the copper-ores of Alderley Edge and Mottram St. Andrew in Cheshire. In the same paper he also gave his results of an analysis made on a vanadium-mica which had recently been discovered in California and named roscelite.

FREDERICK WILLIAM RUDLER (1840-1915) was born in London on July 8, 1840, being the son of a schoolmaster. He joined the science classes at the Regent Street Polytechnic, and in 1861 was appointed assistant-curator in the Museum of Practical Geology. He left here for a time, 1876-9, to take up the post of lecturer in natural science in the University College of Wales at Aberystwith, returning again in 1879 as curator and librarian, and also (until 1880) as registrar of the Royal School of Mines. Here he did his chief work in forming and arranging the collections and in supplying information to all inquirers; and this was continued for a time after his official retirement in 1902 (when he was awarded the Companionship of the Imperial Service Order—I.S.O.), his very useful 'Handbook to a collection of the minerals of the British Islands' having been published in 1905. His earliest catalogue of the mineral collection dated back to 1864. He also wrote on the collection of British pottery and porcelain which he formed in the same museum.

Although Mr. Rudler had little time or opportunities for original research in mineralogy, yet he possessed a vast store of detailed knowledge relating to mineralogy and geology, more particularly with reference to their practical applications and their connexion with other branches of inquiry; and he was always ready to impart this information to others in a quiet and unassuming manner. His knowledge was indeed encyclopaedic. He commenced writing articles in 1867 for 'Ure's Dictionary of Arts, Manufactures, and Mines', the seventh edition

of which he edited in 1878-9. He wrote a long series of articles for Thorpe's 'Dictionary of Applied Chemistry' (1890-3) and the ninth and eleventh editions of the 'Encyclopaedia Britannica'. He also wrote many articles of a more popular character, and many reviews, and for several years was very successful as a University Extension lecturer on geology. His work in another direction was in connexion with various scientific societies. He was President of the Anthropological Institute, the Geologists' Association, the South-Eastern Union of Scientific Societies, and the Essex Field Club, and vice-President of the Geological Society. He was an original member of the Mineralogical Society and treasurer for a number of years (1891-1901). He died on January 23, 1915, at his residence at Tatsfield, in Surrey. His library and collection of minerals, ethnological objects, &c., have been transferred to the University College of Wales at Aberystwith, where an F. W. Rudler scholarship has been established. Biographical notices with portraits have appeared in 'Man' (Royal Anthropological Institute), 1915, vol. xv, p. 33, and Geological Magazine, 1915, vol. ii, p. 142.

FRITZ SEEMANN (1884-1914) was curator of the mineralogical and geological section in the town museum of Aussig, Bohemia, and had just been appointed Professor of Mineralogy and Geology in the Agricultural Academy at Tetschen as successor to J. E. Hibsch, with whom he was associated in the preparation of the geological map of the Midland Mountains of Bohemia. Some of his papers were descriptive of Bohemian mineral occurrences. He was an early victim of the European war, falling in Serbia on August 16, 1914.

WILLIAM SEMMONS ( -1915) was at one time a member of this Society, and he contributed five papers to the early volumes of this Magazine, these being descriptive of new occurrences of the copper minerals chrysocolla, brochantite, enargite, and connellite. Being a copper-broker and connected with mining enterprises, he took advantage of his good opportunities for collecting minerals. During the sessions 1878-80 he was President of the Liverpool Geological Society. He died at East Dulwich, London, on October 13, 1915, at the age of 74.

JOHANNES KARL THEODOR STRÜEVER (1842-1915), more often known as Giovanni Strüever, was born at Brunswick on January 23, 1842. He studied at Göttingen, and was assistant there to Sartorius von Waltershausen, during which period his published papers dealt with fossil fishes. At the end of 1864 he migrated to Italy, acting first as teacher

of mineralogy and geology in the Engineering School at Turin, and later as Extraordinary Professor in the University of the same city. In 1873 he was appointed Ordinary Professor of Mineralogy and Director of the Mineralogical Institute in the University of Rome, holding this post until his death on February 21, 1915. He was the author of several elaborate crystallographic memoirs on Italian minerals, and in 1868 described sellaite as a new species. His last papers, in 1901, dealt with the chemical action at the ordinary temperatures of mineral sulphides (hauerite and iron-pyrites) on metallic silver and copper. On two occasions, in 1876 and 1907, have minerals been named after him. He was a member of the Lincei Academy, and was elected an honorary member of the Mineralogical Society in 1903. A biographical notice with portrait and a bibliography of fifty-six titles has been given by A. Rosati in *Centralblatt Min.*, 1915, pp. 321-330.

WIRT TASSIN (1869-1915). During the period (1893-1909) in which he held the position of chemist and assistant curator of mineralogy in the United States National Museum at Washington, he wrote papers on meteorites and meteoric minerals, as well as various museum catalogues, of which the most useful is a 'Descriptive Catalogue of the Collection of Gems' (1902). Since his retirement from the museum he practised as a consulting metallurgist and chemical engineer.

NEWTON HORACE WINCHELL (1839-1914) graduated at the University of Michigan in 1866, and was attached to the Geological Surveys of Michigan and of Ohio. From 1872 to 1900 he was State Geologist of Minnesota, and Professor of Geology and Mineralogy in the University of Minnesota at Minneapolis. Since 1905 he was archaeologist to the Minnesota Historical Society. He founded and edited (1888-1905) the 'American Geologist', a journal which was afterwards incorporated in 'Economic Geology'. He was a founder and three times president of the Minnesota Academy of Science. In collaboration with his son A. N. Winchell he wrote 'Elements of optical mineralogy' (1909).

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