

The philosophical faculty of the University of Heidelberg marked its sense of the importance of the occasion by renewing the diploma of doctor of philosophy granted half a century ago, and addresses were also presented from the Victoria University of Manchester, the old students, the universities of London, Cambridge, Liverpool, Birmingham, Edinburgh, Glasgow, Aberdeen, St. Andrews, and Montreal, University College, London, Yorkshire College, King's College, London, University College, Sheffield, Durham College of Science, University College, Dundee, Royal Society, British Association, Literary and Philosophical Society of Manchester, Chemical Society, Society of Chemical Industry, German Chemical Society, Bunsen Gesellschaft, Physikal. Verein, Frankfort, Kön. Gesellschaft, Göttingen, Pasteur Institute, Lister Institute, Owens College, Chemical Society, Chemical Society of Rome, the Dutch Chemists, American Academy, American Philosophical Society, and American Chemical Society.

A large number of personal congratulations were also received from scientific men all over the world. To each of the addresses a separate reply was made, and in these concise and pointed speeches, each embodying some fresh line of thought, the audience was delighted to recognise the best possible proof of the continued mental and physical vigour of the speaker.

SIR CLEMENT LE NEVE FOSTER, F.R.S.

THE tidings of the death of Sir Clement Le Neve Foster on April 19 brought to a wide circle of friends a great shock as well as sincere sorrow, for all hoped that he might enjoy for many years the final stage of an active and honoured career. His death is a serious blow to the public service to which his life was devoted.

Born at Camberwell on March 23, 1841, he was the second son of the late Peter Le Neve Foster, who for a quarter of a century was secretary of the Society of Arts. He received his preliminary education at Boulogne-sur-Mer, and obtained his degree of Bachelor of Science of the University of France at the age of sixteen. In 1857 he entered the Royal School of Mines, and in two years achieved the remarkable distinction of securing the associateship in the mining, metallurgical and geological divisions, as well as the Duke of Cornwall's scholarship and the Edward Forbes medal. He then proceeded to the mining college of Freiberg, in Saxony, which at that time was supreme in its special field. In 1860 he received from Sir Roderick Murchison an appointment on the Geological Survey, and for five years was engaged in mapping the Wealden beds of Kent and Sussex, and the Carboniferous rocks of Derbyshire and Yorkshire.

In 1872 Le Neve Foster was appointed H.M. Inspector of Mines. The new Metalliferous Mines Regulation Act, which had just been passed, was received with a certain amount of disfavour by the Cornish miners, and the work of the first inspector was particularly difficult. The severity of which Le Neve Foster was sometimes accused bore, however, remarkable fruit. The average death rate from mine accidents in his district was reduced from 2 per 1000 during the first three years of his inspectorship to 1.3 per 1000 during the last five. In 1880 he was transferred at his own request to the North Wales district, where he remained until his retirement in 1901. His twenty-nine annual official reports afford clear evidence of the mass of work that he got through, and indicate the many ways in which the laws for the regulation of mines have been improved in con-

sequence of his efforts. In 1890 he was, on the death of Sir Warrington Smyth, appointed professor of mining at the Royal College of Science and Royal School of Mines, and continued to hold that appointment until his death. He largely improved the system of instruction, and insisted upon adequate attention being given to practical training.

He was a frequent contributor to the *Proceedings* of the many scientific societies of which he was a member, and in spite of the exigencies of his official appointments he found time for literary work. He published in 1867 a translation from the Dutch of P. van Diest's book on the tin deposits of Banca, and in 1876, with Mr. W. Galloway, he translated from the French Callon's "Lectures on Mining." He also wrote the article on mining in the "Encyclopædia Britannica." In 1894 he published his great work on "Ore and Stone Mining," the first systematic English treatise on the subject, of which the fifth edition has just been issued; and at the beginning of this year he published a smaller volume on "Mining and Quarrying," noticed in this issue of NATURE (p. 603).

In 1895 Le Neve Foster issued his first annual report upon the mineral industry. This formed an entirely new departure in official literature, and embodied the results of a vast amount of labour and technical skill in comparing the mineral industries of the United Kingdom with those of other countries. Its value was so much appreciated that his services as editor were retained by the Home Office after his retirement from the post of inspector.

Sir Clement was elected a fellow of the Royal Society in 1893. He was a juror at the Paris Exhibitions of 1867, 1878, 1889 and 1900, and was created a Knight of the Legion of Honour in 1889. He also acted as juror at the Inventions Exhibition in 1885, and at various other less important exhibitions. He served upon various departmental committees on mineral statistics, open quarries, slate mines, and explosives in mines, as well as upon the Royal Commissions for the Chicago Exhibition and for the St. Louis Exhibition. His faithful and long continued services to the public weal were officially recognised by the knighthood conferred upon him on the King's birthday last year.

No man in this, or perhaps in any other, country has rendered more conspicuous services to metalliferous mining than Le Neve Foster did. In his twenty-nine years of Government mine inspection he did much to ameliorate the lot of the miner, and by his teaching and writings he secured for metal mining, that had previously been practised mostly as an empirical art, a scientific basis.

B. H. B.

A large number of men of science attended the funeral of Sir Clement Le Neve Foster on Friday last, among them being the following representatives of scientific societies and other bodies:—Sir Norman Lockyer, president of the British Association; Sir George Armytage, Sir W. T. Lewis, and Prof. Hull, representing the Royal Commission on Coal Supplies; Prof. J. W. Judd, F.R.S., Dean of the Royal College of Science, and Mr. J. J. H. Teall, F.R.S., Director-General of the Geological Survey of the United Kingdom, representing the Royal Society; Mr. H. B. Woodward, representing the Geological Society; Mr. H. Jennings and Mr. Charles McDermid, representing the Institution of Mining and Metallurgy; Mr. Aubrey Strahan, representing His Majesty's Geological Survey, and Mr. Morant's private secretary, representing the permanent secretary of the Board of Education. The Royal College of Science and the Royal School of Mines were represented by the council and some of the students.