outbreak of arsenical poisoning some years ago, and for his indefatigable and original work on the amount of soot in the smoke-laden atmosphere of Manchester. His efforts in association with the Manchester and Salford Sanitary Association to obtain a purer atmosphere should be a memorial to him among the public of that city.

In recognition of his many original contributions to science, Thomson was elected a fellow of the Royal Society of Edinburgh in 1876. He was also one of the original members of the Society of Chemical Industry, was elected to the committee in October 1884, and acted as chairman of the Manchester Section for some years. He was a prominent member of the Institute of Chemistry, of which he was elected a fellow in 1877; he served on the council from 1887 to 1890 and from 1893 to 1896. For some years also he was on the committee of the Society of Dyers and Colourists. He was the author of a book on "The Sizing of Cotton Goods," of which the first edition was published in 1877 and the second in 1879.

SIR WILLIAM RICE EDWARDS, K.C.B., K.C.I.E., C.M.G.

THE death on October 13 of Major-General Sir William Rice Edwards from pneumonia, after a very brief illness, at the comparatively early age of sixty-one, has come as a great shock to his many friends, and especially to the members of his service, who trusted and honoured him as their chief and loved him as an upright and sporting gentleman. He studied at the London Hospital, took the M.B. with honours and later the M.D. of Durham, and entered the Indian Medical Service in 1886, serving in his earlier years at the Eden Hospital, Calcutta, and on Lord Roberts's staff in India and later during the South African War, and was Residency Surgeon in Kashmir for some years before selection for the administrative grade. After a successful period as Surgeon-General, Bengal, where his abilities and accessibility endeared him to all who had the privilege of serving under him, he succeeded Sir Pardey Lukis in 1918 as Director-General at the most critical period in the history of the Indian Medical Service. He fought unflinchingly, without the least regard to his personal prospects, for the Service, first to obtain justice with regard to the increased pay recommended by the Public Services Commission, and afterwards to lessen, so far as possible, the disastrous effects of the Montague reform scheme. He succeeded in the first, with the help of the British Medical Association, but regretfully admitted, when speaking as chairman of the I.M.S. dinner only last June, that he had failed to a large extent in the latter superhuman task. He did much to foster the scientific work of the bacteriological department, while the successful organisation of the Calcutta School of Tropical Medicine was due in no small degree to his invaluable support.

By the death, on September 4, of Prof. Dr. Paul Friedländer another favourite and successful pupil of Adolf von Baeyer has passed away. He had many friends and was highly esteemed by his colleagues

beyond the boundaries of his native country. Paul Friedländer was born in 1857 at Königsberg, Prussia, where, having finished his school education, he began his academic studies under Graebe, and continued them in Strasbourg and Munich under A. v. Baeyer in 1878, whose private assistant he was at the time. From 1884 to 1887 Friedländer was chief chemist of the scientific laboratory of the Oehler Works at Offenbach a.M. Afterwards he entered upon his academic career in 1888 at Karlsruhe, where he was made professor-extraordinary in 1889; from 1895 to 1911 he was professor at the Museum of Industrial Technology in Vienna, whence he passed to Darmstadt as professor of chemistry of dyestuffs. Friedländer's most important work was connected with the group of indigo dyes; he found that the ancient Tyrian purple, the dyestuff of the shellfishes, contains highly brominated indigo derivatives; his discovery of thio-indigo red, a sulphur derivative of indigo, was most important in the development of vat dye manufacture, and enabled Friedländer to find a number of new compounds. His main literary work is well known and in daily use by colour and dyestuff chemists, though, so far as we know, published in German only.

MR. ARTHUR L. DEARLOVE, who died on October 19, was a well-known consulting engineer. He was senior partner in the firm of Messrs. Clark, Forde and Taylor. He superintended the laying of many thousands of miles of submarine cable, and did a large amount of cable work during the War. He did much careful research work on the Clark and Weston standard cells, and contributed largely to the technical journals.

WE regret to announce the following deaths :

Prof. Carl Harries, honorary professor of the Technical High School at Charlottenburg, and formerly professor of chemistry at Kiel, who was known for his work on the action of sodium on isoprene, aged fifty-seven.

Prof. P. W. Latham, formerly Downing professor of medicine in the University of Cambridge, on October 29, aged ninety-one.

Dr. Charles Frederick Millspaugh, curator of the department of botany of the Field Museum, Chicago, and professor of botany at the University of Chicago and the Chicago Medical College, on September  $\tau_5$  aged sixty-nine.

Prof. F. P. Spalding, of the School of Engineering of the University of Missouri since 1900, on September 4, aged sixty-six.

Dr. J. E. Stead, F.R.S., president of the Iron and Steel Institute 1920–21, on October 31, aged seventytwo.

Dr. A. Stutzer, the well-known agricultural chemist of the University of Königsberg, who has carried out many researches both alone and with collaborators on Chile saltpetre, soil organisms, and nitrifying and denitrifying bacteria, on September 3, aged seventyfour.

Prof. James Sully, emeritus professor of philosophy, University College, London, on November 1, aged eighty-one.

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