

contributed to the advancement of photography and cinematography. One fruitful observation he made in 1883—the Edison effect—he left for others to utilise; and from this, through the work of Sir Ambrose Fleming, came the thermionic valve. The work of an inventor responsible for more than a thousand patents cannot be adequately dealt with in an obituary notice, but, in conclusion, mention may be made of his nickel and iron storage cell patented in 1900 and improved in subsequent years.

Many biographies of Edison have been written and many writers have put forward extravagant claims on his behalf. But he himself stood in need of no such panegyrists. His works speak for themselves, and the *Times* remarks that though his older friends and staff have passed away, "those who survive him retain an abiding impression of him as a great man, and a singularly delightful personality, devoid of egotism, inspiring enthusiasm and exceedingly human, as all who share his love of children must be".

For fifty years Edison's name has been a household word, and it is nearly forty years since it was included in the list of recipients of the Albert Medal of the Royal Society of Arts, where it is found beside those of Faraday, Wheatstone, Bell, Hughes, Kelvin, Swan, Parsons, Fleming, and Marconi. It is among such as these he rightly takes his place.

DR. C. A. KEANE.

DR. CHARLES ALEXANDER KEANE, who died, at the age of sixty-seven years, on Sept. 18, had been identified for the last thirty years with the development of technical education in London. After studying at Manchester under Roscoe and at Erlangen under Otto Fischer, he served as lecturer and demonstrator in chemistry at Liverpool for fifteen years before coming to London to take up the post of first principal of the newly established Sir John Cass Technical Institute. This Institute was founded out of the increased revenues of the trust established by Sir John Cass (1661-1718) for the maintenance of a Foundation School for the children of the Ward of Portsoken. Appointed in 1901, almost a year before the opening of the new building in Jewry Street—now, in eloquent testimony of the success of his administration, undergoing extensive enlargement—Keane at once gained the confidence of the governors, and was able to determine from the very beginning the lines on which the Institute should develop. As soon as possible another building was provided for Sir John Cass's Day School, and all elementary teaching was given up in favour of more advanced work. Two chief principles were adopted: first, the encouragement of research among the teachers and senior students, and, secondly, close association with the industries of the district. In both these respects the Sir John Cass Institute has fulfilled the wishes of its promoters; a long list of original researches has been published from its laboratories, while its industrial classes, each controlled by a consultative committee representing its special subject, are a characteristic and flourishing feature of its work.

Keane contributed a number of papers on organic chemistry to the *Journal of the Chemical Society*, but his chief interests lay in applied chemistry, and he did pioneer work on electrolytic methods of analysis and the analysis of gases. He wrote a book on "Modern Organic Chemistry", intended for readers with no special chemical training, and edited the English edition of Lunge's "Technical Methods of Chemical Analysis", which was completed in 1914 and was followed by a revised edition on which he was engaged almost to the time of his death. He was an active member of the various societies associated with chemistry, and acted as chairman of the London Section of the Society of Chemical Industry in 1917-19, a position in which his sound common sense and business acumen proved of great value.

Keane retired from his post at the Cass in 1926 after a period of ill-health culminating in a serious operation, and spent the remaining five years of his life at his country home near Canterbury, actively engaged in local affairs. A man of wide interests and culture, and a charming companion, his loss will be severely felt. A. H.

PROF. FRITZ FOERSTER.

WE regret to record the death on Sept. 14 of Prof. Fritz Foerster, Director of the Laboratory of Inorganic Chemistry of the Technische Hochschule, Dresden, and we are indebted to the *Chemiker-Zeitung* for Oct. 7 for details of his career.

Born in 1866 at Grünberg in Silesia, Foerster proceeded in due course to the University of Berlin, where he studied under A. W. von Hofmann. After graduation he became assistant to Mylius at the Physikalisch-Technische Reichsanstalt, and in 1894 he joined the staff of the Technische Hochschule in Charlottenburg, but in the following year he accepted a post as lecturer under Walter Hempel at the Hochschule in Dresden, where in 1900 he was appointed to the new chair of electrochemistry and physical chemistry. In 1905 a new laboratory of electrochemistry was established under his direction, and in 1912, on the retirement of Hempel, Foerster was elected to the chair of inorganic and technical chemistry. After the War he applied himself to the task of rebuilding the Chemical Institute, which was ready for occupation in 1925.

Foerster's experimental work lay chiefly in the field of electrochemistry, the bulk of his original papers being published in the *Zeitschrift für Elektrochemie*. The problems which he investigated cover a very wide field, and include the electrolysis of alkali chlorides and the salts of the halogen oxy-acids, as well as electro-analytical methods and technical applications. During the last twelve years he was particularly concerned with an investigation of the chemistry of the oxy-acids of sulphur and the electrolytic reduction of compounds of polyvalent metals. His well-known handbook "Elektrochemie wässriger Lösungen" (1905) is recognised as a standard work on the subject. In 1923 he began to remodel the whole work, and the first volume was approaching completion at the time of his death.