

University and Educational Intelligence.

BIRMINGHAM.—The following appointments have been made: Assistant Professor K. N. Moss to be professor of coal and metal mining; Prof. G. Haswell Wilson to be professor of pathology in succession to Prof. Shaw Dunn; and Mr. T. H. P. Veal to be assistant lecturer in civil engineering.

CAMBRIDGE.—The Chancellor of the University has appointed Prof. H. R. Dean, professor of pathology in the University of Manchester, to be professor of pathology in succession to the late Sir German Sims Woodhead.

THE Salters' Institute of Industrial Chemistry has awarded fellowships for post-graduate study to Messrs. C. G. Harris, W. S. Martin, J. H. Oliver, and W. Randerson, and has renewed the fellowship of Mr. F. R. Jones.

A PROSPECTUS has been issued from the chemistry department of the Borough Polytechnic Institute, Borough Road, S.E.1, for the coming session. In addition to the customary course in general and organic chemistry, electro-chemistry, and the chemical technology of the essential oils, a grouped series of courses have been arranged, for this session, to meet the needs of students taking the National Certificate in Chemistry. There will also be a series of lectures on the chemistry of foodstuffs and a course on chemistry as applied to the laundry industry. In assessing the fees payable by students, special consideration is given to apprentices, while there is a special scale for students residing outside the county of London.

THE convenient practice of issuing abridged and sectional calendars adopted by the authorities of Battersea Polytechnic, Battersea Park Road, S.W.11, has been continued for the coming session. The abridged calendar of afternoon and evening classes gives some idea of the scope of the institution's activities; courses are provided in mechanical, civil, and electrical engineering, pure and applied mathematics, physics, chemistry and technological chemistry, hygiene, photography, and domestic science. The fees are fixed for students residing in the London area while at the Polytechnic, but for those residing outside the county an additional fee, generally equivalent to the difference between the ordinary school fee and the cost to the London County Council of the student's education, is charged.

It is announced in *Science* that Prof. A. Sommerfeld, of the chair of mathematical physics at the University of Munich, will be in residence at the University of Wisconsin for the first part of the academic year 1922-23, holding the Karl Schurz memorial professorship in the university for that period. The Karl Schurz memorial professorship was founded in 1910 in memory of Karl Schurz, of Watertown, Wisconsin, sometime member of the board of regents of the State University, as an exchange professorship with the German universities, and the appointment of Prof. Sommerfeld marks the resumption of the professorship after the interruption caused by the war. Prof. Sommerfeld is expected to lecture on atomic structure, and on either the analysis of wave propagation or the general theory of relativity.

Calendar of Industrial Pioneers.

September 10, 1827. George Medhurst was buried.—The projector of the atmospheric railway, of which he published descriptions in 1812 and 1827, Medhurst was born in 1759, began life as a clock-maker, and was afterwards a machinist in Soho. Various atmospheric railways were constructed, but not till some years after Medhurst's death.

September 12, 1870. Karl August Steinheil died.—Born in Alsace in 1801, Steinheil in 1835 became a professor in Munich, where he invented a form of electric telegraph. During 1849-1852 he was director of the Department of Telegraphs at Vienna, while three years later he founded an optical institute at Munich.

September 12, 1914. Edward Riley died.—Riley's name is associated with two great advances in the manufacture of steel. As a young chemist at the Dowlais Iron Works in 1857 he made experiments on the Bessemer process, while some twenty years later as a consulting chemist he was associated with Thomas and Gilchrist in the introduction of basic linings in converters. He was also a pioneer in the accurate analysis of iron and steel.

September 13, 1906. Hubert Henry Grenfell died.—A pioneer in the development in modern gunnery, Grenfell, when first lieutenant of H.M.S. *Excellent* in 1869, with Chief Engineer Edward Newman, worked out the first design of hydraulic mounting for naval ordnance. Retiring in 1886 he joined Armstrong's of Elswick, and in 1891 invented self-illuminated sights for night firing.

September 14, 1882. Georges Leclanché died.—An inventor who by a single invention won a worldwide reputation, Leclanché was for some years chemical engineer in the laboratory of the Chemin de Fer de l'Est. His well-known battery was patented in 1867.

September 14, 1892. Rudolph Proell died.—Trained at the Technical Academy in Berlin, Proell became a professor in the Technical High School at Aix-la-Chapelle, but afterwards as a consulting engineer devoted himself to the development of automatic valve gears.

September 14, 1907. Leveson Francis Vernon-Harcourt died.—Educated at Harrow and Balliol College, Oxford, Vernon-Harcourt, after graduating in 1862, became a pupil of Sir John Hawshaw. From 1882 to 1905 he was professor of civil engineering in University College, London, and was widely known as an authority on all that concerns tidal harbours, rivers and estuaries. In 1895 he served as president of the Mechanical Science Section of the British Association.

September 15, 1859. Isambard Kingdom Brunel died.—Among the engineers of the first half of the nineteenth century Brunel holds a high place. He assisted his father on the construction of the Thames Tunnel, became engineer to the Great Western Railway, introduced the broad gauge, and was the designer of the Clifton Suspension Bridge and the Albert Bridge at Saltash. With his three ships, the *Great Western*, 1838, *Great Britain*, 1843, and *Great Eastern*, 1857, he made notable contributions to the advancement of naval architecture. He is commemorated by a window in Westminster Abbey.

September 16, 1871. Dennis Hart Mahan died.—For forty years Mahan was professor of civil and military engineering at the Military Academy, West Point, and published works on these subjects, his course of civil engineering being translated into various foreign languages. He was one of the incorporators of the American National Academy of Science.

E. C. S.