gas-supply, Mr. Croll's energies were not exclusively devoted to that branch of engineering. He was for a long time connected with the United Kingdom Electric Telegraph Company, and finally became its Chairman. He rendered most important service to the late Mr. Frank Ives Scudamore in the course of the negotiations between the Government and the Telegraph Companies prior to their transfer; and while arranging for every officer of the United Kingdom Company to receive compensation, he asked for nothing, and received nothing himself. In recognition of his services in this business, a splendid piece of plate was presented to Mr. Croll, which is now to be seen in the Guildhall Library. The handsome pile of buildings in Coleman Street and Basinghall Street, City, known as the Wool Exchange, was erected by Mr. Croll, he having leased the land from the Merchant Taylors' Company, and planned and carried out the whole block, with its fine sale-room, the mart of the Colonial wool-trade. His last active work, as almost his first, was in connection with a patent for the production of sulphate of ammonia. He had matured every detail of his new process by daily experiment, and made his last test on the 14th of May, 1887. Three weeks later, on the 7th of June, his well-filled life came to an end. He died at Dunblane, N.B., not far from his birthplace.

MAJOR-GENERAL IRWIN MONTGOMERY GREIG, of the Royal (late Bombay) Engineers, died on the 4th of July, 1887, at Hyde Park Mansions, London, and was buried at the Kensal Green Cemetery, many of his brother officers attending the funeral. The deceased officer joined the service of the Honourable East India Company on the 9th of December, 1852, having been a cadet at Addiscombe. After serving at the Royal Engineer establishment at Chatham for two years, he proceeded to India, arriving in Bombay on the 1st of January, 1855. He was appointed an Assistant Engineer in the Public Works Department, Bombay, and was employed at Aden and Perim from October, 1855, to July, 1859, in the construction of masonry forts, tanks, barracks, tunnels, &c. He joined the expedition into Arabia in 1858, being present at the storming of the Arab village and fort of Sheik Othman. Between 1859 and 1862, he served as executive engineer in Poona, Khándesh, and the Northern Konkan districts, where works of irrigation and road construction were in progress. From February, 1862, to September, 1863, he was

deputy-consulting engineer for railways, and subsequently was executive engineer at Ahmedabad and Khándesh, largely employed in the construction of roads and bridges till 1867. In 1868, he served in the Abyssinian campaign as field engineer, in charge of the engineer park, and was mentioned in despatches. Between 1871 and 1879, he served as executive engineer in Kánara, Khándesh, Lower and Central Sind, and Dhárwár, when he was appointed superintending engineer of the southern division. Shortly afterwards he was transferred to the northern division, and in 1880 to the central division of the Bombay Presidency, which post he held till he finally quitted India on the 27th of February, 1886. He retired from the service on the 6th of November following. Major-General Greig was elected an Associate of the Institution in December, 1873.

ALFRED KRUPP died on the 14th of July, 1887. With him passed away one who, perhaps, has had the greatest career in manufacturing industry of any man in modern times, a man who from the smallest beginnings built up the largest metallurgical works in the world, and introduced into general use a material that has had a considerable influence in modifying the economical progress and resources of every country in Europe. Mr. Krupp was born on the 26th of April, 1812, and consequently was in his seventy-sixth year. He was the son of Frederick Krupp, of Essen, who really began the manufacture of steel on the large scale by the Huntsman system; but like most pioneers of a new industry, he lost his small fortune in perfecting the art. Therefore at his death in 1826 his son Alfred succeeded to an embryo manufacture, and certainly not with much encouragement to pursue a trade that appeared to possess none of the elements of success. At Frederick Krupp's death the little foundry had but a couple of workmen, and one of these was Alfred Krupp. The steel made then was exclusively for turning-tools, and such like, and Alfred Krupp when he had made sufficient at a time, used to ride on horseback through the neighbourhood to sell it, often in such quantities as ½ cwt. at a time. From this class of manufacture Alfred Krupp proceeded to make die-steel, as used for coining, and in this he had at last the highest reputation in Germany. The primitive tools he then possessed were chiefly made by himself, and of course were all handworked, the workman turning the crank, and Krupp manipulating the steel under the tilt. His first lathe was driven by an old barrel, which he had