

He was universally respected for his sterling qualities and genuine manliness of character.

Mr. Vidler was likewise for several years consulting engineer to the Commissioners of Rye harbour, the entrance to which was materially improved, in an inexpensive manner, under his direction. He was elected an Associate of the Institution in January 1869.

MR. THEODORE ANTHONY ROCHUSSEN was born at Rotterdam on the 26th of April, 1824, and belonged to an old patrician Dutch family. He was educated for the profession of a civil engineer at the Polytechnic University at Delft, in Holland. He aimed at an appointment under the Dutch Government as an engineer of the Waterstaat, but ultimately devoted himself to commercial pursuits, more or less connected with engineering enterprise. He was the representative in London of many important continental works connected with the metal trades, notably "The Veille Montaigne Zinc Co.," "The Hörder Iron Works," &c., and supplied, among others, German steel rifle barrels to the English Government for the Enfield factory, and the necessary machinery for finishing them. He likewise endeavoured to introduce to the British War Office a highly-cemented steel shot for heavy ordnance—the shot being intensely hard, and much stronger than the chilled shot and shell in use—but they were not adopted. He was the first to establish a line of steamers to Mogadore, in Morocco, where he was familiarly known as "The Father of Steam," at which period, as he remarked on one occasion at the Institution, as "a small steamship owner," economy prompted him to consider the relation between the engines and the ship and that of the ship and engines combined, to the freight they had to carry. He crossed the Desert of Sahara, and took much interest in the discussions upon a proposed canal to the ocean for the purpose of flooding the desert. In the spring of 1860 he accompanied Mr. George Peacock, F.G.S., to the Canary Islands and North-west coast of Africa, for the purpose of examining the locality, under arrangement with the French Government, to ascertain if guano existed there. The expedition was full of interest, and disposed of the question, as no deposits of that important fertiliser were found—in fact, nothing but sand was discovered.

Mr. Rochussen was elected an Associate of the Institution on the 7th of February, 1865. He frequently took part in the discussions at the meetings, and on the 24th of April, 1866, contributed

a Paper "On the Maintenance of the Rolling Stock on the Cologne-Minden and other Prussian Railways."¹ This Paper contained important statistical information of special interest to railway engineers, particularly with reference to the construction of disc wheels, and obtained for its Author a Telford Premium. He devoted considerable attention to the subject of railway engineering, and on the 21st of September, 1866, took out a patent for "Improvements in Constructing the Permanent Way of Railways." This invention consisted of a compound rail of iron carrying a steel bar, upon which the wheels of the vehicles ran. These rails were tried on several lines, including the sharp curve between the London Bridge and Cannon Street stations of the South-Eastern railway.

In conjunction with Mr. C. F. Varley, F.R.S., M. Inst. C.E., Engineer-in-Chief of the late Electric and International Telegraph Co., a patent was taken out for burning zinc in marine boilers instead of coal; but the difficulties in constructing the furnaces, and the bulky nature of the oxide of zinc produced, resulted in the patent being allowed to lapse. He displayed much interest in the progress of electric science, one of the latest works in which he was engaged being the formation of the Anglo-American Electric Light Co., of which he was a director. He was also, at the time of his death, managing director of the "Anglo-Scandinavian Condensed Milk Co.," and spent part of the winter of 1879-80 at the works.

Mr. Rochussen travelled during his active life in most parts of the world, and exercising great powers of observation, combined with a retentive memory and an intelligent mind, was possessed of a fund of information which rendered him an interesting member of every society he frequented. His knowledge of the mechanical and industrial sciences was wide and varied; he was extensively acquainted with the productive and manufacturing resources of this and other countries, and thoroughly well informed upon contemporary engineering achievements at home and abroad. His excellent temper and hearty disposition made him a most genial companion; fluent in conversation in Dutch, German, French, English, Italian, and Malay, and belonging to many debating societies, he was an active promoter of intellectual sociability.

From this brief record it will be observed that Mr. Rochussen was a man of no ordinary ability and energy. His death took place suddenly on the 12th of April, 1880, at his office in Abchurch Lane, City.

¹ *Vide* Minutes of Proceedings Inst. C.E., vol. xxv., p. 430.