

contributed a Paper to the Institution on "Chemical and Physical Analyses of Phosphoric Steel."¹ From 1876 onwards a series of Articles entitled "American Iron and Steel Works," from his pen, appeared in "Engineering," which illustrated and described nearly all the Bessemer works in the United States with which he was connected. In 1877 he became Consulting Engineer to the Bessemer Association, the chief object of the Association being to secure certain advantages in common, among others a knowledge of what was going on in similar industries in Europe. This led to an annual visit of several months' duration to England and Europe, during which he acquired the Thomas-Gilchrist basic process for the Association which he represented. He was largely instrumental in the introduction of the open-hearth process for making steel, and one of his last utterances was, in effect, "I should like to live ten or fifteen years longer to aid in realizing the possibilities of the open-hearth process. This would have rounded and completed my professional career; but I am satisfied." It was about 1875 that his strength began to fail. In that year he wrote—"I am going in a week to one of the Elizabeth Islands, off New Bedford, where there is neither mail nor telegraph, to lie on the sea-shore for a week, and try to get strong and sleepy." In the summer of 1880, while on the Continent of Europe, he was taken seriously ill; returning with difficulty to England, he slowly recovered, after many weeks of sickness, from a disorder of the liver. In August, 1881, he was again in England, apparently in better health than he had long enjoyed; but during his visit to the Continent he was overtaken by symptoms similar to those that characterised his illness of the previous year. He returned to England, but did not leave for New York till the 28th of December. The voyage somewhat restored him, but he continued to fail, and expired at his home in Brooklyn on the evening of Sunday, the 29th of January, 1882.

EDWARD JOHN JONES was the son of Mr. George Jones, a medical practitioner of Birmingham, and was born on the 25th of February, 1841. He was educated first at the Birmingham and Edgbaston Proprietary School, now absorbed into King Edward's Free School. After this he entered as student in engineering at Queen's College, Birmingham, attending the usual classes for

¹ Minutes of Proceedings Inst. C.E., vol. liii., p. 221.

three years, from whence he subsequently took his diploma as Civil Engineer. On leaving Birmingham he became a pupil of Mr. G. W. Hemans, M. Inst. C.E., with whom he was engaged from 1860 to 1865, during which time he acted as Assistant-Engineer on the Warrenpoint Junction, and the Newry and Armagh, Railways, also as Resident-Engineer on the Newry and Grenore Railway, and Engineer to the Rostrevor, and also to the Narrow Water Castle water supplies. On the 3rd of January, 1866, he went out as contractor's engineer for Messrs. Faviel, to construct the Ceylon Railway, where he was in sole charge of the construction, and the erection of the staging and ironwork of the Peradenia Bridge. This contract being finished, he returned to England, and was immediately appointed Assistant-Engineer, 1st grade, in the Public Works Department of India. In December 1868 he was posted to the 1st Division of the Agra Canal, and placed in charge of the Okla subdivision. Here he was engaged in the construction of the headworks and weir, and had charge of 70 miles of the construction of the canal. This weir and dam are 2,438 feet in length, and raise the level of the river Jumna 10 feet above its previous level. He had the satisfaction of completing this work, which, with the canal, was opened on the 5th of March, 1874.

In 1875 he was appointed to the Bhognipur division of the Lower Ganges Canal, and continued to be employed on the irrigation works until his return on furlough to England in 1877.

In January 1879 he recommenced his duties in India on the irrigation branch at Narora, the headworks of the Lower Ganges Canal, and remained there nearly a year and a half; but his health failing, he was transferred to the provincial works at Jhansi, where he was divisional officer until July 1882. He was then obliged to return to England on sick leave, and although his health improved considerably whilst at home, on again going to work in the summer of 1883 it broke down completely. Again he left India on sick leave, but died on the 29th of September, 1883, the day after the sailing of the vessel from Bombay.

He was an active, energetic, and thorough officer, and received the commendations of all with whom he came in contact. At the time of his death he had attained the rank of 2nd grade Executive-Engineer.

Mr. Jones was elected an Associate of the Institution on the 5th of May, 1868, and was transferred to the class of Members on the 19th of February, 1878.