

Japanese battleships "Fuji" and "Shikishima." He designed and carried out a large electro-plating plant, a motor and accessories for an electric travelling crane, and a special form of motor and conductors for a new electric traction system, and only so late as last November he was engaged on the tender for the Metropolitan and District Railways electric system.

Mr. Grove was a Member of the Institution of Electrical Engineers, by which he was awarded last year the first Premium of £25 for a Paper on "The Electrical Equipment of Ships of War."¹ He died at his residence, Rosedale, Selsdon Road, Wanstead, on the 11th January, 1901.

Mr. Grove was elected an Associate Member of the Institution on the 5th April, 1898.

CHARLES HALL, born on the 15th November, 1842, was educated at Southampton Diocesan College. In July, 1857, he entered the service of the Peninsular and Oriental Steam Navigation Company at Southampton, under Mr. Andrew Lamb, who was at that time the Company's Superintendent Engineer. In January, 1875, he was transferred to the London staff at the Company's offices in Leadenhall Street, under Mr. Manuel, the present Superintendent Engineer, and in 1886 he became Head of the Repairs Department, which post he held until his death on the 30th December, 1900.

Amongst important work with which Mr. Hall was intimately concerned may be mentioned the use of the electric search light for the passage of ships at night through the Suez Canal and the electric lighting of the Peninsular and Oriental Company's and the Union Company's fleets. He served as a member of the jury at the Crystal Palace Electrical Exhibition of 1884. A keen golfer, he was instrumental in forming, and was for some time secretary to, the Redhill and Reigate Golf Club. In amateur orchestral circles he was well known as a capable double-bass player.

Mr. Hall was elected an Associate of the Institution on the 24th May, 1870, and was subsequently placed in the class of Associate Members.

¹ Journal of the Institution of Electrical Engineers, vol. xxix. p. 530.