

of the department of mathematics at the Imperial College, combining the direction of two previously separate schools (one in the Royal College of Science, the other in the City and Guilds Engineering College) headed by Professors Perry and Henrici, who retired nearly at the same time. The Great War of 1914-18, and its aftermath, interrupted his plans for building up a new honours school of mathematics at South Kensington, and he retired from his chair in 1923, after ten years' tenure, on attaining the age limit of sixty-five.

While still in his twenties he attained a reputation as a pure mathematician that extended far beyond the borders of his own university and country. His distinguished researches led to his election as a Fellow of the Royal Society at the early age of twenty-seven, and eleven years later he was awarded a Royal Medal of the Society. In the same year he was President of Section A of the British Association at its Toronto meeting, a distinction which he held a second time in South Africa in 1905. He was President of the London Mathematical Society, 1904-6.

Besides making important original contributions to pure mathematics, he rendered a service of special value to his university in breaking the bonds of the isolation of its mathematical school, during the latter part of the nineteenth century, from the great continental movements of thought in the subject. By his lectures and his writings (he was a prolific author of mathematical books) he widened the knowledge and outlook of his colleagues and students, and stimulated a revival of pure mathematical learning and research in England.

For many years he was regarded abroad as the leader and representative of English pure mathematics, and honours from universities and academies the world over were bestowed upon him. He maintained many personal and official international contacts; he travelled much and was an accomplished linguist.

Professor Forsyth became a Fellow of the Society on 1895 May 10, but was not a frequent attender at our meetings, and never served on the Council. He made one contribution to *Monthly Notices* in 1921, entitled "Notes on the path of a ray of light in the Einstein Relativity Theory of gravitational effect."

S. CHAPMAN.

JOHN HENRY HINDLE was born at Edenfield, in the Rossendale valley of Lancashire, of Scottish stock, on 1869 November 2, and was elected to Fellowship of the Society on 1922 June 22.

He was a shrewd Lancashire ironmaster, generous of heart and hand, with all the many virtues of his race: a man of robust intelligence, inexhaustible patience and infinite resource. At the date of his death he was the governing director of the firm of Hindle, Son & Co., Ltd., Engineers, of Witton, Blackburn, where he produced, based on his own and his son's patents, electric and other baling presses, and powerful wide looms for the weaving of cotton and woollen dryer felts for use in the paper-making industry. He was indeed the first person directly to apply electrical power to the generation of mechanical pressure for baling loose materials, and the convenience of this machine has been widely recognized.

Apart from elementary education at the local school at Edenfield, Hindle was practically self-taught. At the age of twelve years he commenced work as a "half-timer" in the textile industry, and upon leaving school at the age of thirteen went into the mill office where his father was secretary and cashier. During this period he worked in an iron foundry and workshop in his spare time and developed very early his interest in engineering, particularly on the electrical side. About 1895 he had attained the position of electrical consultant on hoisting machinery and electrical motors and dynamos. He developed and patented automatic control gear, an electro-magnetic brake and an emergency safety mechanism for use in electric passenger and goods lifts.

In 1910 he courageously started in business for himself as a practical engineer in