

latter case on a fast train between Doncaster and Peterborough. After being thus employed for about a year, an injury to one of his legs obliged him to return to the fitter's shop, whence he was promoted, in June 1865, to be District Locomotive Superintendent at Leeds. In this capacity Mr. Hawkins earned the good opinion of all with whom he came in contact. Mr. Sturrock's successor, Mr. Patrick Stirling, wrote of him, when asked to nominate a suitable person for the position of Locomotive Superintendent of the Great Indian Peninsula railway: "Mr. Hawkins is one of my best assistants I consider him a superior young man both in education and knowledge of his business, and he is endowed with untiring energy. He is always at his post, and gives evidence of his heart being in his work He has not disappointed me in any one instance; and if I had a post of greater responsibility to give to-morrow I would unhesitatingly give it to him."

This resulted in Mr. Hawkins receiving the appointment, and on the 30th of April, 1869, he left the Great Northern Company to become Locomotive and Carriage Superintendent of the Great Indian Peninsula railway, in which capacity he had the control of the repairs and working of the engines, carriages, and wagons, as well as the fixed mechanical plant for the whole system, embracing 1,275 miles of opened line. In India, Mr. Hawkins was characterised by the same energy and ability as at home; and that his services were thoroughly appreciated is illustrated by the fact that, in October 1871, the directors increased his salary to the maximum pay of the appointment.

Though considered a healthy man, and never known, when in England, to be absent from his work by reason of illness, yet the seeds of a serious disorder must have been latent, for on the 3rd of August, 1875, Mr. Hawkins was found dead in his bed from heart-disease, after a short indisposition of only two or three days. He was elected a Member of the Institution of Civil Engineers on the 5th of May, 1874.

Mr. Hawkins was most attentive to his business, and was ever ready with expedients in cases of emergency. He was, moreover, not at all averse to put his own shoulder to the wheel; and it is melancholy to think that a career that promised so well was destined to be cut short before its subject had reached the prime of life.

MR. ROBERT DUDLEY BAXTER, eldest son of Mr. Robert Baxter, solicitor, was born at Doncaster on the 3rd of February, 1827. After the usual preliminary education he proceeded to

Cambridge, where he graduated in 1849, coming out with both classical and mathematical honours. On leaving the University he entered upon the study of the law, and in due time became a member of the firm of Baxter, Rose, and Norton, of which his father was the senior partner. Being of a remarkably active and energetic turn of mind, Mr. Dudley Baxter's labours extended far beyond his professional engagements; and being also an ardent politician, he at an early period of his career took a prominent part in the polemics of the day. His first brochure was a pamphlet on the Volunteer Movement, which attracted much public attention. It was not however until 1866 that he found an opportunity for the exercise of the peculiar analytical skill which he subsequently so frequently applied to statistics. In that year he published a pamphlet with the object of exposing the fallacies of the returns laid before Parliament in support of Mr. Gladstone's Reform Bills, and furnished tables of the redistribution of seats and the franchise returns of the boroughs. In 1868 he contributed a work on "The National Income," which, though less known to the general public, has served as a storehouse of facts and figures to a large class. In 1869 there followed an elaborate work on "The Taxation of the United Kingdom;" in 1870 a history of "English Parties and Conservatism;" and in 1871 a work on "The National Debts of the Various States of the World." In 1873 he read before the Social Science Congress at Norwich a paper, which was in the following year published in an extended form, under the title of "Local Government and Local Taxation;" he also supplemented a previous work by the publication of "The Recent Progress in National Debts." From this enumeration it will be seen that Mr. Baxter was an incessant worker, his labours marking a mind capable of embracing extended literary pursuits whilst pursuing professional duties. He possessed, to a remarkable degree, the art of putting figures into an intelligible form, and was distinguished for the extreme accuracy of his tables.

The legal firm with which Mr. Baxter was connected being largely concerned for railways and other public enterprises, he was much in contact with engineers, by whom he was sincerely esteemed; he moreover took considerable interest in the commercial aspect of engineering works. A memoir on "Railway Extension and its Results," read in November 1866 before the Statistical Society, of which he was one of the foremost members, attracted considerable attention, it being, in fact, an epitomised history of inland communication during the present century, and supplying useful and trustworthy forecasts of the effects of the

extension of railways. Shortly after the reading of this Paper, on the 4th of December, 1866, Mr. Baxter was elected an Associate of the Institution of Civil Engineers, he being already connected with various other scientific and literary societies. In politics a thorough Conservative, he for many years occupied himself busily in the registration and organization of his party in the West Riding of Yorkshire, where his loss is severely felt. Some time before his death he experienced symptoms of valvular disease of the heart—an ailment to which it is said men of sedentary habits and intellectual proclivities are peculiarly liable—and wasted away, until he became in a few days but the shadow of his former self, finally succumbing to its effects on the 20th of May, 1875.

MR. THOMAS BELL was born at Lofthouse, in the North Riding of Yorkshire, where his father, Mr. George Bell, occupied a small farm. In early life he was employed to lead coals from Stockton and other places on the river Tees to various towns and villages in North Yorkshire, and also in connection with the Stockton and Darlington railway. He afterwards worked as a platelayer at Chatmoss, on the Manchester and Liverpool railway, during its construction by George Stephenson. In 1827 Mr. Bell undertook the platelaying of short lengths of the Stockton and Darlington railway as a sub-contractor under the Resident Engineer, Mr. Thomas Storey, M. Inst. C.E. He then passed some years in Scotland in various capacities connected with the construction of the earlier Scotch lines, after which he acted, under Mr. Edward Steel, the Engineer, as General Inspector of Permanent Way on the Clarence railway, which line conveyed coals from the South Durham coal-field to Stockton and Port Clarence. Here Mr. Bell acquired, for the most part, his theoretical knowledge of civil engineering. In 1848 he was appointed Chief Superintendent of the West Hartlepool railway and colliery branches, which position he continued to occupy until shortly before his death.

Mr. Bell's career was contemporary with the early history of railway-making in the north of England. Having been closely associated with that branch of engineering, he gained, during an industrious life, much sound practical knowledge, together with an experience in the maintenance as well as in the construction of the permanent way that well fitted him to become an Associate of the Institution of Civil Engineers, to which he was elected on the 23rd of May, 1854. He died on the 20th of February, 1875.