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### The Life of George Stephenson, Railway Engineer

A political and social reformer, Samuel Smiles (1812–1904) was also a noted biographer in the Victorian period, paying particular attention to engineers. His first biography was of George Stephenson (1781–1848), whom he met at the opening of the North Midland Railway in 1840. After Stephenson died, Smiles wrote a memoir of him for *Eliza Cook's Journal*. With the permission of Stephenson's son, Robert, this evolved into the first full biography of the great engineer, published in 1857 and reissued here in its revised third edition. This detailed and lively account of Stephenson's life, which proved very popular, charts his education and youth, his crucial contribution to the development of Britain's railways, and his relationships with many notables of the Victorian world. It remains of interest to the general reader as well as historians of engineering, transport and business.

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GEORGE STEPHENSON.

Engraved by W. Hoell, from a Portrait by J. Lucas Esq<sup>r</sup>

in the possession of Rob<sup>t</sup> Stephenson.

*London John Murray, Albemarle Street 1857.*

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## P R E F A C E.

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THE Invention of the Locomotive Engine and its application to the working of Railways, is one of the most remarkable events of the present century.

Within a period of about thirty years, railways have been adopted as the chief means of internal communication in all civilised countries.

The expenditure involved in their construction has been of an extraordinary character. In Great Britain alone, at the end of the year 1856, not less than 308,775,894*l.* had been raised and expended in the construction of 8,635 miles of railway, which were then open for public traffic.

This great work has been accomplished under the eyes of the generation still living; and the vast funds required for the purpose have been voluntarily raised by private individuals, without the aid of a penny from the public purse.

The system of British Railways, whether considered in point of utility or in respect of the gigantic character and extent of the works involved in their construction, must be regarded as the most magnificent public enterprise yet

accomplished in this country,—far surpassing all that has been achieved by any government, or by the combined efforts of society in any former age.

But railways have proved of equal importance to other countries, and been adopted by them to a large extent. In the United States, there are at present not less than 26,000 miles in active operation; and when the Grand Trunk system of Canada has been completed, that fine colony will possess railroad communications 1500 miles in extent.

Railways have also been extensively adopted throughout Europe,—above 10,000 miles being already at work in the western continental countries, whilst large projects are in contemplation for Russia, Austria, and Turkey. Railways for India and Australia are the themes of daily comment; and before many years have elapsed, London will probably be connected by an iron band of railroads with Calcutta, the capital of our Eastern Empire.

Their important uses need not here be discussed. As constituting a great means of social inter-communication, they are felt to enter into almost all the relations between man and man. Trade, manufactures, agriculture, postal communication, have alike been beneficially influenced by this extraordinary invention.

The following facts as respects railway communication in Great Britain, must be regarded as eminently significant:—The number of passengers conveyed by railway, in 1856, amounted to not less than 129,347,592; and of these, more than one-half travelled by third-class trains, at

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an average cost of eight-tenths of a penny per mile, the average fare for all classes of passengers not exceeding one penny farthing per mile. The safety with which this immense traffic was conducted is not the least remarkable feature of the system; for it appears, from Captain Galton's report to the Board of Trade, that the proportion of accidents to passengers, from causes beyond their own control, was only 1 person killed to 16,168,449 conveyed.\* Those who desire statistical evidence as to the extent to which this new means of communication is employed for the conveyance of manufactures, minerals, and agricultural produce, will find abundant proofs in the same report.

In Canada and the United States, the railroad is of greater value even than in England; it is there regarded as the pioneer of colonisation, and as instrumental in opening up new and fertile territories of vast extent—the food-grounds of future nations.

What may be the eventual results of the general adoption of railways in the civilised countries of Europe, remains to be seen; but it is probable that, by abridging distance, bringing nations into closer communication, and enabling them more freely to exchange the products of their industry, they may tend to abate national antipathies and bind together more closely the great families of mankind.

Disastrous though railway enterprises and speculations have proved to many concerned in them, and mixed up

\* Captain Galton's Report to the Committee of Council for Trade, &c., 21st July, 1857.

though they have been with much fraud and folly, the debt which the public at large owe to railways cannot be disputed; and after all temporary faults and blots have been admitted and disposed of, they must, nevertheless, be recognised as the most magnificent system of public inter-communication that has yet been given to the world.

What manner of men were they by whom this great work was accomplished? How did the conception first dawn upon their minds? By what means did railways grow and quicken into such vigorous life? By what moral and material agencies did the inventors and founders of the system work out the ideas whose results have been so prodigious?

These questions the Author has endeavoured to answer in the following Biography of George Stephenson, to whose labours the world is mainly indebted for the locomotive railway system. Indeed, he has been so closely identified with its origin, progress, and eventual establishment on a sound practical basis, that his life may be said to include the history of Railway Locomotion almost down to the present time.

Independently, however, of these considerations, the life of George Stephenson will be found to furnish subject of interest as well as instruction. Strongly self-reliant, diligent in self-culture, and of indomitable perseverance, the characters of such men—happily numerous in England—are almost equivalent to institutions. And if the Author have succeeded in delineating, however imperfectly, the life and character of George Stephenson, the perusal of this book may not be without some salutary influence.

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The Author's acknowledgments are due to the following gentlemen, amongst others, for much valuable information as to the successive improvements effected by Mr. Stephenson in the locomotive engine, and also with reference to the various railways at home and abroad, with which he was professionally connected:—Mr. Robert Stephenson, M.P.; Mr. Edward Pease, of Darlington; Mr. John Dixon, C.E.; Mr. John Bourne, C.E.; Mr. Thomas Sopwith, C.E.; Sir Joshua Walmsley; Mr. Jonathan Foster, of Wylam; Mr. Charles Parker; Mr. William Kell, and Mr. Clephan, of Gateshead.

Many interesting facts, illustrative of Mr. Stephenson's early career, have been obtained from William Coe and other humble persons, who were only too proud to have the opportunity of communicating what they remembered of their distinguished fellow-workman.

The Author is also under great obligations to Mr. F. Swanwick, C.E., Mr. C. Binns, of Clay Cross, and Mr. Vaughan, of Snibston, for many interesting particulars, introduced in the present edition, illustrative of Mr. Stephenson's private life and habits while residing at Liverpool, Alton Grange, and Tapton House, and which supply an admitted defect in the earlier editions of this biography.

8, Glenmohr Terrace,  
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