

# Robert Stephenson Trust



## Robert Stephenson & Co: 80 years on Tyneside

George Stephenson's first locomotives were built at Long Benton Colliery Forge but the idea of a new site to build further locomotives was a very attractive one as a proper works would enable it to achieve a higher standard of workmanship. On 23 June 1823 the first factory in the world specifically to build steam locomotives was founded in Newcastle upon Tyne. The firm, known as Robert Stephenson & Co had an initial capital of £4,000 divided into 10 shares. Edward Pease of Darlington had four shares, two of which were paid for by his cousin, Thomas Richardson, a powerful London banker. Michael Longridge of Bedlington, George and Robert Stephenson, both of Killingworth, had two shares each, although Robert had to borrow £500 from Edward Pease to pay for his stake. His valuable input to the later Killingworth locomotives was acknowledged by him being made Managing Partner at the age of 19.

The new company had a sub lease on land owned by the Hospital of St Mary the Virgin. The Hospital had been founded in medieval times across the road from St John's Church in Westgate Road and over the centuries had been endowed with many parcels of land. By the Nineteenth Century these lands were already occupied by a wide range of industries and had extended from Westgate Road, down to Hanover Street near the riverside, and from the bottom of Forth Banks on the west to the foot of the Tuthill Stairs on the east. Throughout his life Edward Pease referred to the factory as the Forth Street Works because of its location to the south of Forth Street. The land leased by the new company on 1<sup>st</sup> August 1823 lay between the cul-de-sac of South Street and Orchard Street and extended from Burrell's foundry to the north, to as far south as Hanover Street.

A small, one up, one down cottage on the site served as the offices of the Company. With its distinctive oriel window on the first floor, this building survived into the 1930s before being badly damaged by fire. A further building on site was adapted to house the stationary engine designed by Robert and assembled on site. The chimney for the engine's boiler can be seen in the only known elevational drawing of this 1823 site. Not surprisingly the factory developed initially in fits and starts according to the demand which followed locomotive design initiative.

After the success of *Rocket* in October 1829 the company soon needed to extend and by 1830 extended its foothold to the west of South Street. From contemporary plans, maps and letters it can be surmised that a new Smiths' shop was situated directly opposite the Company's first office. This area had its own engine to power what was in effect a separate works which grew rapidly on both sides of Sussex Street after Robert Stephenson's successful Long Boiler patent locomotive of 1841.

Robert Stephenson & Co already had a foothold on land to the east of Sussex Street in the form of a ribbon development, possibly of a temporary nature, marked Boiler/Tank shade c.1847 on two separate undated plans. This building extended along the whole of the site that eventually became 18 & 20 South Street. The new prestigious Georgian style offices at 20 South Street were built in 1848 fronting on to South Street in the more easterly of two new workshop bays with King Post roof trusses. The southern part of the older shade on Sussex Street was united to these new bays by the construction of a fourth bay having a tapered plan to accommodate the differing alignment of the two buildings

The site plan can be seen on the first Ordnance Survey Map surveyed in 1859 but the workshop, the northern end of the older shade, which became 18 South Street did not extend to South Street until 1867 with the demolition of Forster's Court. The new eastern façade was constructed to match the adjoining offices. The elevation of the western side of South Street showing the latest building development of 1848, including the offices, is shown in a lithograph printed in 1857 and labelled *Forth Street Works*.

These permanent structures, now known as the offices and boiler plate shop were constructed during Robert Stephenson's frequent visits to Newcastle when he was Engineer in Chief to the Newcastle and Berwick Railway from 1845. This project included the High Level Bridge and Central Station completed in 1850.

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The necessity for the large boiler/plate shop came with the increase in locomotive orders arising from the Railway Mania of 1845 and Robert Stephenson's wrought-iron box girder patent. By 1863, thirty-eight wrought iron bridges had been manufactured in the boiler/plate shop at 18 & 20 South Street.

From 1860 Robert George, Robert's cousin, who had become Managing Partner after Robert's death in 1859, started a major building construction, extending the factory northwards on both sides of South Street and replaced an assortment of buildings with a large erecting shop on the ground floor and over it a fitting shop. This listed building still exists immediately to the south of 20 South Street.

In 1883, the date of the last lease, Robert Stephenson & Company had reached Forth Street and almost completely encompassed Sussex Street and South Street. For the next 30 years the factory helped to supply the demands of world-wide railway networks and the Company became the largest employer on Tyneside manufacturing not only locomotives but stationary engines, marine engines and bridges as well. The size of locomotives being made, however, continued to increase and the South Street Works became too small and outdated. As the long term leases expired they were not renewed and during the 1890s a decision was made to move to Darlington. This took place in stages with the last locomotive being built at South Street in 1904.

Many famous locomotive names are associated with Robert Stephenson & Co, such as *locomotion* 1825 for the Stockton & Darlington Railway; *Rocket* 1829, *Northumbrian* 1830, *Goliath* 1831 and *Patentee* 1833 for the Liverpool & Manchester Railway; *North Star* for the Great Western Railway and *Mammoth* for the Paris-Orleans Railway.

## Illustrations

- Early engraving of South Street showing original works
- 1857 engraving of South Street showing new offices etc
- Plans of site from 1823 to 1904
- Plans showing growth of site from 1823
- Plan showing remaining RS&Co buildings today