

KEY READS: BOOKS THAT MATTERED

20. *Isambard Kingdom Brunel*

Longmans, Green and Co, 1957



ERIC DE MARE/BRIDGEMAN

My early 1970s Pelican copy of LTC Rolt's thrilling biography of Brunel is foxed and the paper rather ginger. But I only have to look at the cover, a detail of Brunel's portrait by his brother-in-law Horsley, and a bracing draught of energy, of optimism born of innate skill and of insight into a brilliant, indomitable mind, hits me. As AJP Taylor, quoted on the back cover, wrote in his *New Statesman* review, Rolt "is an excellent writer in love with his subject."

As I embarked on my own working life, I was reading about a man who lived a 26-hour day, who commuted between London and Bristol as if he were a late 20th-century professional, and who could turn his attention from railway gauge to tunnelling, from high-level bridges to workers' cottages, at will. At that time, I knew nothing much about the author of this book, originally published in 1957. Rolt's own life and work, it turned out, was hardly less ambitious or energy-consuming than those of his prodigious biographical subjects, the Stephensons and Telford. He died in 1974, in his early sixties. Nor had I encountered his widow Sonia, a friend of the SPAB and, I like to think, of mine.

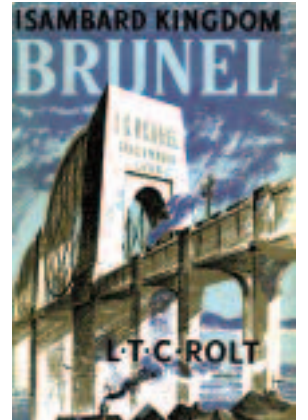
LTC Rolt's view of Brunel was enriched by his familiarity with the period, his passion for the Industrial Revolution as the engineers carved canals, railways, tunnels and even roads through Britain. Rolt's impressive bibliography includes studies of all this, the men and the technologies, the artistry and the romance, and includes volumes of autobiography too.

Brunel's working life began at 18, working alongside his father, Marc, on the Thames Tunnel. The device that made the entire enterprise possible, the Brunel Tunnelling Shield, was first installed below the river in 1825. The unforeseen troubles that hindered and threatened its progress included a faulty geological survey, penny-pinching financiers and the terrible health problems suffered by workers who spent their long and arduous working days in an atmosphere of unrelieved raw sewage. The programme slowed dramatically in the face of all these impediments. The great and the good came as sightseers to peer at the extraordinary project, and, on the

COURTESY SONIA ROLT



Top, Brunel's Royal Albert Bridge, spanning the Tamar between Devon and Cornwall, opened in 1859 (photographed in 1954). Brunel died within months of the bridge's opening. Above, Brunel's great biographer, LTC Rolt. His study of the engineer became an instant classic. Right, a first edition of 1957



second anniversary of the start of the excavation, returned for a great underwater banquet. The threat of the river breaking through was constant, and when it eventually came, young Brunel was there. He became trapped by his leg and suffered serious internal injuries. Brunel's diary, unpublished until after his death, told of his strange elation as the waters broke, responding to the tidal wave as if it was an act of nature; "the road of the rushing water in a confined passage, and by its velocity rushing past the opening was grand, very grand". Rolt and Brunel tell the story as if they had both been there.

When Brunel drew up a design for the Clifton Suspension Bridge, originally in a full-blown Egyptian style, it was to William Beckford (of all people) to whom he turned for approbation. Brunel, his biography reminds us, was not, after all, a Victorian but a Regency engineer – hence his delight in the sublime and his architecture with stylistic ties. As he pushed ever further into unexplored territory, he revealed engineering to be a combination of skill and nerve, requiring the courage to busk it as well as



This page (clockwise from above), launch day of Brunel's ill-starred leviathan, SS 'Great Eastern', 1857. Brunel (second from right), watches the ship take to water with its Master, William Harrison (far right); the acclaimed, wealthy engineer at 51, painted by John Callcott Horsley; his office; one of the original Brunel 'broad gauge' locomotive rails, used as a safety barrier at Neyland, Pembrokeshire; the SS 'Great Eastern', built at Millwall, was nearly 700ft long and weighed just under 19,000 tons. It was broken up in 1888/89

the brilliance to design it in a functionally effective manner. In the Box Hill tunnel the noise of passing trains was so ear-splitting, it was said, that nobody would ever choose to repeat the journey. Add to that, the experience of undertaking it without any form of lighting, and passengers would gladly post over the hilltop rather than enter the jaws of hell.

The ups and downs of the Great Western Railway were the stuff of legend. Brunel was immersed in every aspect of the saga. Occasionally it turned to farce; Kemble, an important junction, did not appear on a timetable until 1872, since there had been a stipulation from the landowner that it should remain unrecorded.

Yet as Rolt tells of Brunel's punishing schedule, journeying to and fro the West Country in the hours that he surely had already spent, he reveals that the man standing up to give a speech in the House of Commons at 10.30am had left Exeter that morning (albeit at 5.20). The four-hour 40-minute journey between Exeter and London is hardly longer than the time it takes on a (modern) coach trip, or even on a poor day on the 21st-century railway line. By the time he had reached 48, Brunel had built more than 1,000 miles of railway track. On his death in September 1859 aged 53, Daniel Gooch, the GWR's first chief mechanical engineer, noted that "Great things are not done by those who sit down and count the cost of



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every thought and act." Gooch lived long enough to add an epitaph to Brunel's ill-starred steamship *The Great Eastern* when it was broken up in 1888, writing "Poor old ship, you deserved a better fate." Trains still hurtle west over the Royal Albert Bridge crossing the Tamar at Saltash, Brunel's name proudly on the piers.

In summing up his subject, Rolt celebrates Brunel's catholic mind: "Nowhere, ever again, do we find so inclusive an intellect." Rolt was a one-man assault force on the massed ranks of biographers, so easily contented by extolling the achievements of writers and artists, generals and politicians, and so indifferent to the sciences. Rolt's biography was the first full study of the man to be written, except for his son's account in 1870.

Rolt was justifiably furious about the divorce between the arts and the sciences, so unthinkable in the 18th century and so seemingly irrevocable by the middle of the 20th. His life of Brunel, now in print once more along with several of his other books, should perhaps be compulsory reading for students as they decide which fork in the educational road to take. Perhaps, having done so, they will realise that the arts and science can and should be viewed in alignment in the interests both of equilibrium and excitement.

Gillian Darley

Sonia Rolt was LTC's companion on many adventures, as well as a highly valued supporter of the SPAB. She is interviewed in the features pages of this 'Cornerstone'. Philip Venning reflects on the fight to save a slice of Britain's industrial heritage, Back to the Battle, page 24. Many of LTC Rolt's book have been reprinted, see www.thehistorypress.co.uk

