Isambard Kingdom Brunel: Britain's Greatest Engineer [B2]

È stato uno dei più importanti ingegneri della Rivoluzione industriale, le cui costruzioni e infrastrutture hanno trasformato il paesaggio e lo stile di vita della società occidentale

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When the young Isambard Kingdom Brunel stopped growing, he was just 1.52 metres tall. He would prove, however, to be a giant of civil and mechanical engineering who would change the physical landscape and culture of Britain forever. Brunel was born in Portsmouth, England, on 9 April 1806, to an English mother and French father. His father, Marc Brunel, was also an engineer, and was determined that his son should follow in his footsteps — aged just eight, Isambard was already studying Euclidian geometry.

TUNNEL UNDER THE THAMES

In 1825 Isambard began his career assisting his father in designing and constructing the four-hundred-metre Thames Tunnel, a massive project that took nearly two decades to complete. It was dangerous work, so the two invented a **tunnelling shield** to protect the workers from the river's dangerous **raw sewage** and methane gas. Isambard almost died in a sudden inundation, and had **to be dragged** from **the rising** water at the last minute.

BRIDGES AND RAILWAYS

In 1831 Isambard Brunel designed the two-hundred-metre-long Clifton Suspension Bridge, seventy-five metres above the River Avon near Bristol. One of his best-known creations, it was once famous for having the longest **span** in the world and is still used by four million vehicles a year. Brunel then turned his attention to trains and the railways, the revolutionary new phenomenon of the time. In 1833, he was invited by business investors to lead an ambitious project to link London and Bristol — one of Britain's most

important ports — through a two-hundred-kilometre railway. Brunel helped design Paddington Station in London as the main terminal for the Great Western Railway (GWR).

TRANSATLANTIC TRAVEL

In the late 1830s, Brunel's vision of the world of transport began to include designing **steamships** for transatlantic voyages, a revolutionary idea. His dream was to extend the journey of the GWR from London through Bristol to New York, finishing by steamship. His first ship, the **SS**Great Western, the largest passenger ship in the world, **sailed** from Bristol to New York in fifteen days in April 1838. Brunel's next steamship, the **iron-hulled**, **propeller-driven SS** Great Britain, was the most experimental steamship of its time, revolutionising travel and setting new standards in engineering, reliability and speed — and size! It finished its sailing life in 1937, almost a hundred years after its **launch**.

THE GREAT EASTERN

After decades of often working twenty-hour days, and smoking forty cigars a day, Brunel's health was beginning to suffer. He had time for just one more ship. In 1858, the **SS** Great Eastern took **to the waves**. Although it failed financially as a passenger ship, it was still very important historically, as it **laid** cables across the floors of the Atlantic and Indian Oceans, taking the revolutionary technology of the telegraph to distant continents. The ship was considered the prototype of the modern **ocean liner**.

LAST CALL

Brunel was a visionary who only thought on the grand scale and never allowed anything to stop him. He built across **gorges** and tunnelled under rivers and through hills to construct railway lines, stations, bridges and viaducts. And the three ships he built were the biggest, fastest and most advanced of their day. However, after living life at an incredible speed,

Britain’s most famous engineer died at the age of just fifty-three. On 15 September 1859, he suffered a fatal **stroke** aboard his last ship.

Glossary

- **gorges** = gole, forre
- **propeller-driven** = propulsione a elica
- **to the waves** = prendere il largo
- **tunnelling shield** = copertura protettiva per i tunnel
- **to be dragged** = trascinare
- **the rising** = salire
- **span** = campata
- **steamships** = navi a vapore
- **sailed** = salpare
- **ocean liner** = transatlantico
- **stroke** = ictus
- **raw sewage** = liquame grezzo
- **SS** = piroscafo (acronimo di screw steamer)
- **iron-hulled** = scafo in ferro
- **launch** = prendere il mare
- **laid** = posare