## ROCKET TO BRUNEL'S FIREWORKS

Isambard Kingdom Brunel designed some of the greatest, most substantial works of engineering ever made. So, to mark his 200th birthday we took another hefty lump of British iron to the sites of his greatest achievements Words & photography: Martyn Goddard

A small man sporting a crinkled top hat and a knee length jacket and waistcoat mingles with the tourists at the SS Great Britain trust's Bristol dock. The actor playing Isambard Kingdom Brunel represents a small man physically but a giant in the history of Britain's industrial revolution.

Bristol is celebrating the birth (on April 9, 1806) of the Victorian engineer throughout the summer, and the 200th birthday party promises exhibitions, concerts, street festivities and fireworks over the Clifton suspension bridge. I plan a pilgrimage from Paddington Station West, taking in the party weekend and following the route mapped out by one of Brunel's greatest triumphs, the Great Western Railway (GWR).

My chosen transport is a Triumph Rocket III; IBK might have approved of this leviathan of a motorevcle. It's 2.5 metres long; weighing 320kg and powered b) a massive 140bhp 2.3-litre three-cylinder motor. Additionally, it's British. made at the Hinckley works of Triumph motorcycles.

Piloting the giant machine to Paddington, threading my way through the capital's congested thoroughfares it needed

> TEMPLE PLACE WC2 CITY OF WESTMINSTER

SAMBARD KINGDOM BRUNEL CIVIL ENCINEER BORN 1806 DIED 1859

## Left and above

Rocket III in front of the Royal Albert Bridge, Plymouth; Brunel's statue on Victoria Embankment.



## Above Paddington Station. London home of GWR designed by Brunel. And our journey's start point.

care and concentration, my usual urban mount being a Vespa. Brunel employed three ribbed arches to create a pillarless concourse for the London home of 'God's Wonderful Railway'. opened in 1854. He dreamt of an integrated transport system from London to New York using GWR trains, hotels and steam ships. A statue of Brunel once looked west over the platforms but in Alistair Darling's mongrel transport system the bronze is relegated to the ticket machine booth for the Heathrow Express! Before departing the capital. I steer a course via Temple Place on the Victoria embankment, where Isambard's bronze statue by Carlo Marchetti looks west along the Thames towards Maidenhead bridge (my next destination), as celebrated on a Robert Stephenson's works originally destined for New Orleans 68 pence commemorative UK postage stamp.

Heading west onto the M4, the Rocket III is at last able to demonstrate its ground covering credentials. I'm soon threading my way back to the Thames, and the GWR bridge comes into view. In today's era of box girder bridges. Brunel's Maidenhead crossing – consisting of two semi-elliptic brick arches, each with a span of 128ft - confirm the young engineer's talent for elegant solutions to utility structures.

I leave Royal Berkshire via the Great West Road, the very route Brunel would have travelled while overseeing his many projects. His black custom coach was equipped with plan table, engineering instruments and fold down bed. The A4 is a good alternative to the motorway frenzy, the Rocket coming into its own cruising through Wiltshire. The grin on my face widens with each squirt of the massive 147lb ft of torque to pass the odd horsebox hugging the crown of the road. The next place of interest comes into view across the massive fuel tank: Swindon, spiritual home of the GWR, which represents the central engineering theme of Brunel's short life.

Brunel's passion for detail resulted in a partnership with Matthew Digby Wyatt to construct outstanding workers' terraced houses in an era of industrial slums. The Railway works that produced the mighty broad gauge locomotive has found new uses in the 21st century. Designer outlet stores and coffee bars occupy the space where Sir Daniel Gooche's steam monsters were crafted in the heat and noise of heavy industry.

However, a few steps away is the Steam museum, home of a perfect replica of North Star, the locomotive to pull the first train from Paddington to Maidenhead in the summer of 1838. The 200 passengers sped at 36mph behind a loco made at railroad. Brunel was big on ideas and the 7ft 0.5in broad gauge caused consternation in engineering circles, as standard gauge is 4ft 8.5in. Brunel's track would support larger locomotives. which could travel between London and Exeter in under five hours, but commercial conservatism forced a change to standard gauge in 1892.

Riding west from Swindon, one of Europe's fastest growing towns, it's good to exit the A419 at Cirencester and weave my way through narrow Cotswold lanes. There is something magical about motorcycling; you feel part of the environment where aromas of wood burning stoves and cut grass mingle with engine note while you are travelling through lanes in deep tree shrouded lanes. Onwards towards my overnight halt, the home of composer Geoffrey Burgon, near Stroud. Even Geoffrey has a Brunel connection; he has been commissioned to compose a musical piece by the Brunel Sinfonia to be performed in Clifton Cathedral. Geoffrey is also a Bristol car addict, having owned 14 since his first tatty 403 bought in 1973.

There was a frosty nip in the air departing Stroud on the

traffic free A46 heading for Box tunnel. However spirits were

high, protected by a full windscreen and lined leather jacket. Box tunnel was a marvel when it opened in 1841, connecting Bristol with the capital. Early passengers were apprehensive about the safety of the 1.8 miles travelling beneath Box Hill and were given the option of alighting near Corsham to continue by road rejoining the train on the other side. The West Portal viewed from the A4 road bridge is a true architectural masterpiece, with an attention to detail and an extravagance of scale. The tunnel entrance is enormous (a train exiting looks like a toy) the arch at least three times larger than required.

It's Saturday April 8, the eve of IKB's birthday, so it's on to Bristol for the Brunel 200 celebrations. First port of call is the Great Western dock, home of SS Great Britain. The Trust has created a wonderfully alive museum, the centrepiece of which is the ship floating in the dock yet still allowing access below the water to keel and propeller. Brunel had to persuade the directors to build the vessel but they were rewarded in 1853 with a ship that could confortably cross the Atlantic, powered by steam. Her bunkers still had 200 tons of coal on arrival when lesser ships would be forced to burn cargo to complete the crossing! Leaving the dockyard, navigating the Rocket III up

through the twisting Georgian streets towards Clifton, was challenging, slow speed handling needing great care especially on mini roundabouts.

Brunel never saw his Clifton suspension bridge, which wasn't completed until 1864. The plans were drawn and entered for the design competition while he was

convalescing from injuries sustained in the Thames tunnel collapse early in his career. Approaching the bridge across a large green you are struck by the harmony of the bridge to its location. The 702ft span across the Avon gorge looks wonderful from all angles, surrounded by fine Georgian terraces.

That evening I joined the estimated 30,000 revellers to watch the climax to festivities, a firework display over Clifton Bridge. I found a grassy outcrop on the banks of the Avon thronged by all manner of photographers, one chap to my right using a replica 10x 12in plate camera: he had just four plates to expose. The wait was worth the cold feet – the pyrotechnics over the bridged gorge were fantastic.

From Bristol I pointed the handlebars west down the M5 towards Plymouth and the Royal Albert Bridge, my last place of pilgrimage. Making my way to the waterfront in Saltash I parked the Rocket III on the old ferry slipway with the towering bridge in the distance crossing the Tamar river. The 1000ft span 70 feet above high watermark must have been even more impressive before the modern road bridge was constructed. One nice touch was that the directors of the GWR had Brunel's name carved over the Bridge portals after his death.

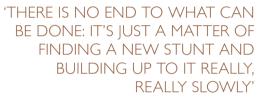
Sitting on a bench by the ferry slip, I watch an HS 125 train trundling towards Cornwall, and think of how diverse are each of the structures I have visited. Brunel's solutions were unique to each situation and extravagant in its execution. However it's that very extravagance of construction that stands testament to the condition and continuing legacy of great civil engineering sites on route to the West Country. Saltash was my terminus and from there it's home via the A303 to Camden Town.

The Brunel 200 exhibition runs from April 8 to September 9. Geoffrey Burgon's musical *Industrial Dream* will be performed on June 10 at Clifton Cathedral.



Clockwise from above Replica North Star locomotive (with replica Brunell) in Steam Museum Brunel's office re-created: Maidenhead GWR bridge: SS Great Britain: celebratory fireworks over Clifton Bridge:

HS train leaves Box tunnel



Route

A4 Bristol

London A4/M4/A4 Maidenhead

A419/Cirencester/A419 Stroud

A4/M4/A419 Swindon

A46/Bath/A4 Box

M5/A38/Plymouth

www.brunel200.com

A38/M5/A303/M3 London

**Useful websites** 

www.swindonbrunel200.co.uk

www.swindon.gov.uk/steam











