



# THOMAS TELFORD

ANTHONY BURTON

Robert Southey, whose descriptions tell us so much about work on the Caledonian in 1819, went on to look at Telford's other works, and he provides a memorable sketch of what it was like to share in Mitchell's travels. His other travelling companion was John Rickman.<sup>4</sup>

I went back on the S. Side of the river with R. in Mitchell's gig. Had the distance been a few miles farther, I believe neither my poor pantaloons, nor my poorer flesh, nor the solid bones beneath, could have withstood the infernal jolting of this vehicle, tho' upon roads as smooth as a bowling green. As for M. he is so case-hardened that if his horse's hide and his own were tanned, it may be doubted which would make the thickest and toughest leather. But for me – *Pone me nigris ubi nulla campis*, etc. – in short *pone me* anywhere, except in Mitchell's gig.

We returned to dinner so late, that before we rose from table it was nearly ten o'clock.

It was a gruelling day, but there was to be no respite on the next. Southey went off on an excursion by coach down Glen Spean, with Mitchell joining them on horseback. The route they followed is now the A86. After 11 miles they paused to rest the horses, but there was no resting when Mitchell was around.

M. urged us to go three or four miles farther along the road, which is but just finished, for the purpose of seeing it; by way of inducement, he added that there were some good falls to be seen. He had reason to be proud of the road, which is made with consummate skill and care. Davison was the contractor; an honest, plain, contented man, who works with his workmen, places all his pride and pleasure in performing his work well, and has lost by several of his contracts. If ours was not an *economical* government, such a man would be not merely reimbursed, but remunerated as he deserves – but as things are, he must put up with his loss for his pains. These roads when they are cut thro' the rock, or have the high bank turfed on one side, and are walled up and parapetted on the other, are beautiful works of art; and even when they have no picturesque features of this kind, you cannot look forward or backward upon them without a sense of order, and care and fitness, which is a pleasure of no mean degree.

After viewing the Inverlair Falls, they went on to Roybridge, and then went to see the 'parallel roads' of Glen Roy, which they mistakenly believed to be man-made, but are in fact the shores of old glacial lakes. Southey had an opportunity to see an aspect of Telford's character that was commented on by all who knew him: his generosity. They were staying at an inn in Glen Roy.

When Mr Telford paid the bill, he gave the poor girl who had been waiter, chambermaid, and probably cook in chief also, a twenty shillings bill. I shall never forget the sudden expression of her countenance and her eyes when she understood it was for herself.

The trip also provided an opportunity to compare the new roads being built under Telford's direction with General Wade's military road up the Great Glen. Southey noted that 'he seems to have, like other road makers, followed the old horse track, instead of surveying the country like an engineer', a view he no doubt borrowed from his travelling companion. It reminded him of the old nursery rhyme:

Here we go up, up, up,  
And here we go down, down, down-ee  
Here we go backwards and forwards,  
And here we go round, round, round-ee.

The road, he decided, was not for the nervous, even if it did offer good views. Southey exaggerated; one can still walk the old military roads of the region. A good example runs along the southern shore of Loch Oich, and while it does have something of a switchback character, it generally keeps to a reasonable line. One other description from Southey describes the road running south over the hills from the Dornoch Firth.

It is carried 700 feet above the level of Dornoch Firth: nor is there anywhere a finer specimen of road-making to be seen, than where it crosses one dingle on one side, and one on the other; the bridges, the walled banks, the steep declivities, and the beautiful turfing on the slope, which is frequently at an angle of 45, and sometimes even more acute, form a noble display of skill and power exerted in the best manner for the most beneficial purpose. The views over the bay are fine. From this high ground the lake above Bonar Bridge is seen, formed by Shin-Water and Rappoch-Water. The sand and gravel brought to the mouth of this lake by a third stream, the River Carron, have formed the strait where the Bridge is built. We looked down upon the old Highland road, in a part where a little old bridge of one arch over a rivulet, made a subject which an artist would not willingly have left without bringing away a sketch of the scene. On the summit is a point which Mr Telford and Mitchell call Davison's Crag, because when that humourist was met here one day, descending and leading a horse (it was before the road was made, and he was a timorous rider) his knees trembling as much from fear as fatigue, he cursd the place and the Crag too, which, he said, had been making faces at him.

from two or three facts. There was no bridge over the Tay at Dunkeld, or over the Spey at Fochabers, or over the Findhorn at Forres. Nothing but wretched pierless ferries, let to poor cutters, who rowed, or hauled, or pushed a crazy boat across, or more commonly got their wives to do it.

In Scotland, Telford felt able to indulge himself a little when it came to design and decoration. His English bridges followed either a very utilitarian pattern, as with the iron bridge at Buildwas, or stuck firmly to the rules of classicism, as at Bewdley. But as he had hinted in his plans for London Bridge, he was beginning to develop something of a taste for the Gothic. It seemed appropriate for bridges in a wild setting, where the only other building of note in the entire district was likely to be a dour, grim fortress. His first important example came very early in the list of Scottish bridges. It crosses the Dee at Tongland, a little way north of Kirkcudbright. Fundamentally, it is a simple, bold design with a single, segmented arch of 110 feet (33.5 metres) spanning the river. The two flood arches to either side, however, are narrow and pointed in the true Gothic style and set a pattern that is followed through in the rest of the detailing. At either side of the main arch are semicircular towers, complete with arrow slits, and the parapet is crenellated to give the whole the vague air of being the approach to some medieval castle. It is the sort of thing that could be comical in the hands of a more rumbustious Victorian designer, but Telford still had enough of the classicist about him to keep the decoration under restraint, and subordinate to the design as a whole. A similar decorative motif was used in the rather grander Dunkeld Bridge, begun in 1806, the year Tongland was completed. Here he had seven arches graded down from a central span of 90 feet (27.5 metres) to 20 feet (6 metres) at the ends. Once again he stuck on mock fortifications.

Among the most impressive works of the period was the road system along the far north-eastern coast. One major obstacle was represented by the crossing of the Dornoch Firth at Bonar. Telford had another bridge planned at the same time, across the Spey at Craigellachie. Both were to be built of iron, so he very sensibly produced designs in which the same castings could be made for both. Each was to have 150-foot (46-metre) arches, but at Bonar two arches were needed, with a central pier on the river bed. Initial tests had suggested that there was a sound rock bottom, but to Telford's considerable chagrin he found that this was not the case. There was solid rock on the left bank, but not on the



right. As a result, he had to abandon his invariable practice of always building bridges of perfect symmetry. The main arch was still the 150-foot span, but was flanked on either side by stone arches of 60 feet and 50 feet (18 metres and 15 metres). A stone was erected by the bridge, headed: 'Traveller! STOP and Read with *Gratitude* the names of the *PARLIAMENTARY COMMISSIONERS*.' Their names were listed prominently, with in addition in noticeably smaller lettering the name of 'Thomas Telford, Architect'. Travellers did have good reason to be grateful, for a short time before work began in 1811, there had been a tragedy on the same spot, when a ferry had capsized and passengers and crew were all drowned. Southey was told the story about the events and the bridge.<sup>10</sup>

An inhabitant of Sutherland, whose father was one of the persons drowned at the Meikle Ferry, over this Firth, in 1809, could never bear to set foot in a ferry boat after that catastrophe, and was thus cut off from communication with the south till this bridge was built. He then set out on a journey. 'As I went along the road by the side of the water,' said he, 'I could see no bridge: at last I came in sight of something like a spider's web in the air – if this be it, thought I, it will never do! But presently I came upon it, and oh, it is the finest thing that ever was made by God or man!'

The commissioners themselves were certainly proud of the bridge, and recorded their delight at its proven durability.<sup>11</sup>

In the year 1814 the Iron Arch sustained, without damage to itself, a tremendous blow from an irregular mass of Fir Tree logs consolidated by Ice; and in the year 1818 it underwent the same sort of probation on its other side; for being situated at a narrow part of the Frith [sic] where the Tide flows with great rapidity, a Schooner was drifted under the bridge, and suffered the loss of her two masts, the Iron Arch remaining uninjured.

Sadly, however, the bridge did not survive the severe floods of 1892, which swept it away. Further north along the same road is another impressive engineering feature, the Fleet Mound. The road rounds the end of the sea loch, Loch Fleet, and is built up over low-lying marshy ground on an immense embankment and bridge. The latter originally had four arches, but at Mitchell's suggestion, after damage by flooding in 1832, two further arches were built and stone reinforcement added to the bank.<sup>12</sup> The road itself continued north all the way to Thurso.

The other great iron bridge of the period at Craiggellachie does sur-



## SCOTLAND

Showing roads, bridges, harbours, piers, canals & railways  
for which Telford was engineer