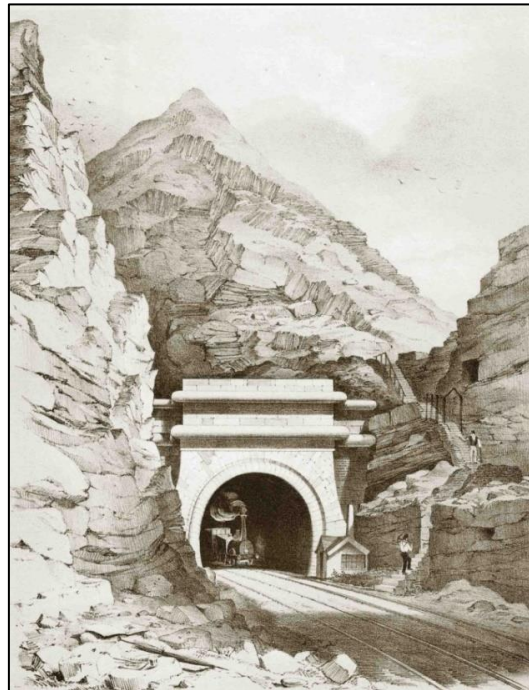


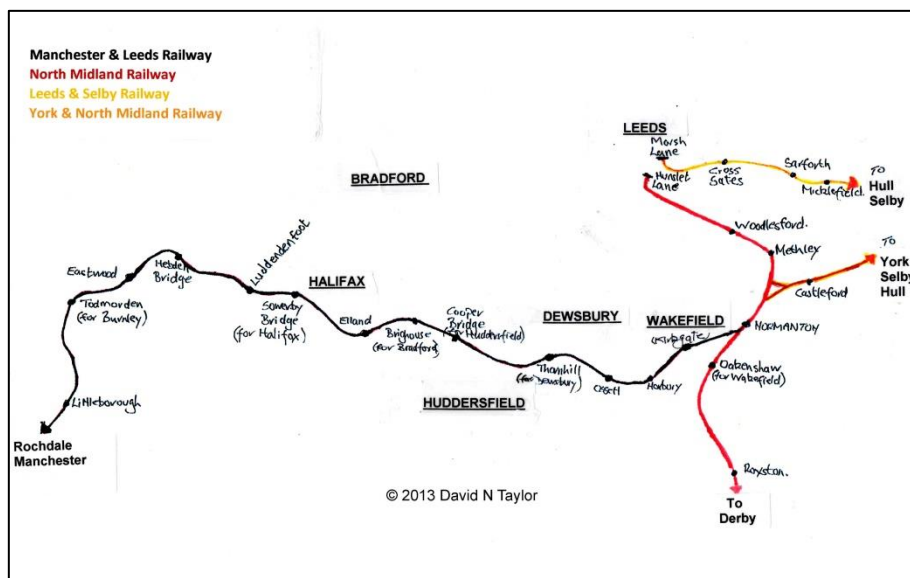
The Manchester & Leeds Railway and Summit Tunnel

175th Anniversary 1st March 2016.



Summit Tunnel west portal. A F Tait 1845
 Courtesy Pennine Horizons Digital Archive

With the completion of Summit Tunnel in February 1841 the Manchester & Leeds Railway (M&LR) opened over its whole length on the 1st March connecting the two growing industrial towns, not then cities, by railway and becoming the first trans-Pennine railway. The first section of the line had opened between Manchester and Littleborough on 3rd July 1839 and then the second section between Hebden Bridge and Normanton via the Calder Valley on 5th October 1840 and finally between Summit East and Hebden Bridge in late December. At Normanton the line joined the rails of the North Midland Railway, which had opened a few months earlier, for the final ten miles into Leeds where there was a terminus station on Hunslet Lane, south of the river and the town centre. The circuitous railway route between the two towns avoiding steep inclines was sixty miles although the direct distance between them was only thirty five.



1841 Route Map

By the time the M&LR had opened to Normanton in October 1840 there was, in addition to the North Midland's Leeds – Derby railway with its connections to Birmingham and London, the lines of two other companies which had also recently opened providing connections at Normanton to York, Selby and Hull. The route to Leeds used today via Halifax didn't open until 1854 and involved other railway companies.

The Chief Engineer of the Manchester & Leeds Railway was the famous George Stephenson assisted by Thomas Gooch and their engineer for Summit Tunnel was Bernard Dickinson. Work commenced on the tunnel in January 1838 at a tender price of £107,800 compared to Gooch's original estimate of £156,800 but it would eventually end up costing £251,000. Not only did the cost spiral but construction proceeded at a slow pace until the contractors were replaced in March 1839 when tunnelling then went ahead at about 150 yards a month. Unfortunately as with the construction of many railways and particularly with tunnels Summit claimed many casualties including sixteen fatalities amongst the labourers. A welfare fund was set up paying ten shillings a week to casualties until they resumed work together with widows and orphans benefits; in addition a hospital was set up with a surgeon retained by the company.

The total number of labourers varied between 800 and 1200 at different times with some being brought in from as far away as North Shields. At one point there was a labour dispute over bricklayers being brought in from further afield to speed up construction and some of the men formed a 'combination' (trade union) disrupting work but the ringleaders were sentenced to three month hard labour in spring 1840 by Rochdale magistrates. Would it have been any harder than building a tunnel? The company initially provided twenty cottages to let but these would almost certainly have just been for the foremen and overseers and as so often a shanty town of around 100 huts appeared at Summit amongst all the detritus excavated from the workings but the company did subsequently build seventy houses for the labourers.

The last brick was laid on 9th December 1840 and Dickinson declared that the tunnel 'defies the rage of tempest, fire or war or wasting age' and how prophetic he was. In December 1984 a train of petrol tankers derailed in the tunnel resulting in a fierce fire with flames rising out of the shafts visible for miles around high over the hillsides and the fire continued burning for several days. Remarkably there was little damage to the structure of the tunnel to the credit of its designers and builders.

On completion at 1 mile 1,125 yards it was the longest railway tunnel in the world but that accolade didn't last long not even just in the South Pennines where it was overtaken in 1845 by the Woodhead Tunnel on the Sheffield – Manchester line at 3 miles and then in 1849 by Standedge (Stan'edge to every self-respecting Yorkshire person) on the Huddersfield – Manchester line at 3 miles 62 yards; the adjacent canal tunnel there had opened in 1811.

Tunnel Statistics:

800 to 1,200 labourers as already mentioned

120 to 140 horses

13 stationary engines equivalent to 202hp

23,000,000 bricks in 10 layers plus a large quantity of ashlar stones

8,000 tons of Roman cement in place of ordinary mortar.

David N Taylor

Friends of Hebden Bridge Station

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