

THE REDBROOK TRAMROAD INCLINE, IN THE WYE VALLEY

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When the Monmouth Railway Company obtained its Act of Parliament in May 1810, to build a line from the Forest of Dean through Coleford to Monmouth, it was also empowered to build a branch to Redbrook. This involved a steep descent into the valley of the Upper Redbrook, as the main line was high on the hillsides, but the expense seemed justified as there were tinplate works nearby in the Wye Valley, and an existing wharf which would be a useful alternative to Monmouth, being downstream of the congested wharves there. Also there was a proposal to build tramroads on the other side of the Wye, with a ferry to transport wagons across the river, although this idea was later dropped.

No record is to hand of the construction of the incline, but like the rest of the line, the engineer in charge was Roger Hopkins, who later built the Teignmouth bridge in Devon. The main tramroad was opened to Monmouth on 17 August 1812, and it is likely that the Redbrook incline was also ready, because as early as December 1808 the promoters had agreed that if any difficulty arose with regard to the line to Monmouth, that to Redbrook would be given priority.

Redbrook incline was one of two rope-worked inclines on the line, the other being at Poolway, east of Coleford, but at Redbrook the engineer had to make provision for crossing the road in the valley bottom at a height suitable for the road traffic, which was achieved by means of a masonry arch at the foot of the incline. The neat stone abutment walls on each side of the incline are about 18' 0" apart, and as the track gauge was a nominal 13' 6" there was ample room for the double track necessary. No real details survive of the machinery, but the incline was of the self-acting variety, the descending traffic being heavier than that in the opposite direction and therefore well capable of hauling the latter upwards; thus no steam or other engine was required at the incline head, but a weighing machine was provided there, and a little house for the man on duty. The gate at the machine-house was open for traffic between 5 a.m. and 8 p.m. in Summer months, and between 6 a.m. and 7 p.m. in Winter, so that the "candles for the man weighing coal by night, at Redbrook, 18s." (Accounts, 1815) were no idle luxury. The weigh-house

was also originally provided with "a desk, table, etc" at a cost of £7.8.0d, and by 1815 a fresh supply of ink and paper was called for. Bearing in mind the hours involved, it may be hoped that the "etc." included a chair.

As to the mechanical equipment of the incline, it appears that some initial trouble was experienced, because the original costs included nearly £53 paid to Js. Davies & Co. of Redbrook for "altering the barrell, etc". In 1815 over £6 was spent on "timber and sawing etc. for the barrels and roller-boxes at the Incline", and George Buckle (who was also the Company treasurer) was paid nearly £40 for a new rope, four worn ropes from the inclines being sold, along with over 9 tons of "old tram rails" from them, for £58, of which sum the ropes fetched only £10.12s.

The job of tending the incline was a busy one in the early years, and in 1815 John Hutchinson earned 24s per week, while his counterpart at the Coleford incline was paid only 21s. Thomas Probert was officiating at Redbrook in 1820, at the much lower rate of 2/6 per day, which was still his wage in 1823, but as he put in over 300 days a year, nearly £40 p.a. had to be found each year to pay him. Add to this the costs of oil for the rollers, repairing the hitches, smithwork for the incline and gates, machine books, tarring and oiling the ropes, "repairing the machine at Redbrook Incline" (£10 in 1841, this was probably the weighing machine), it can be seen that owning an incline plane was an expensive business.

On the income side matters started well enough. In the six months ending 30 April 1815 nearly 2000 tons of fire coal (toll for the full journey 2/2d per ton = £216) and 300 tons of lime coal (1/9d per ton = £27) found their way to "Lower Red Brook and Wye", and 1175 tons of fire coal (2/1d per ton = £122) went to Upper Red Brook works. Other goods from Coleford to Redbrook did not even reach 4 tons. In the same period nearly 4000 tons of coal went to Monmouth. The works at Upper Redbrook were situated near the incline foot, but those at Lower Redbrook were, as the name suggests, somewhat lower down the Wye by about $\frac{1}{4}$ mile, and the difference of one penny in the toll is thus explained.

In 1820, however, in six months, only about 660 tons of coal went to Lower Redbrook and the Wye, and only $1\frac{1}{2}$ tons to Upper Redbrook, due no doubt to the closure of the works there, which were described as "The Redbrook Tin Works" in 1818, but were soon afterwards demolished (Hart, "The Industrial History of Dean" p. 194). The last occupier was Henry Davies, possibly a successor to James Davies & Partners who were tenants until 1805 - probably he was the "Js Davies & Co" mentioned above.

In 1820 a few wagons of stone and tiles from Coleford went to Redbrook, while some sand from Upper and Lower Redbrook to Lydney and 60 tons of tinplate sent from Lower Redbrook also to Lydney, indicate that not all the up-going wagons were empty.

In the half-year ending in April 1822 the tonnage of coal going to Redbrook was nearly 550, of which 135 tons was destined for

Chepstow; this produced an income of about £50, but of course by no means all of this could be set against the incline expenses, and Probert's 155 days at 2/6d. alone cost the Company over £19. An apparently new traffic of "Ton Wood" and "Ton Wood and Loops" to Redbrook (207 tons) appears to have been short-lived, and as 4253 tons of coal went to Monmouth in the same period, the incline must have been a source of some disappointment to the proprietors.

By 1837, however (When the next accounts are available), the sombre figures of 1822 would have been deemed princely - the tonnage of coal to Redbrook had dwindled to a mere 21 in six months, and figures of the same order are recorded in such accounts as are available up to and including 1843. Surprisingly in 1841 the man at Redbrook machine was paid 3/8d. per day, but his duties included mending the fences. In the first half of 1842, 50 days were paid at 2/6. and 105 at 1/9. and the latter rate was standard in the first half of 1843. As only 17 tons of coal went to Redbrook in that period it is likely that most of the 155 days were spent fence-mending along the main line.

The virtual disappearance of coal traffic to Lower Redbrook between 1822 and 1837 may most likely be explained by a change in power supply at the tinplate works there. A leat was constructed in 1824 to improve the water supply, and Dr. Tucker has made out a good case for suggesting that use of the steam engine recorded as existing in 1802 was abandoned when the leat was proved to be effective.

From 1830 at least, lime in considerable quantities was carried to Monmouth and Redbrook, but no separate figures are given for the latter place, and no mention is made specifically of Redbrook as a destination for lime after the period 1838-1842.

In 1851 the incline man began paying rent (£2 p.a.) for the incline house, and he acquired an additional duty - to "gather the old tram-plates together". By the following year the Coleford incline had been repaired, and provided with a new £30 rope, but Redbrook incline and branch still needed "improvement". It is very unlikely that anything was done there, in view of the above quoted tonnages, although as some traffic was still using the main line tramroad in 1872, it would be unwise to assume that the Redbrook incline, like an old soldier, faded away as early as the 1850's.

The masonry arch which supports the foot of the incline as it crosses the road bore a 9'0" headroom notice. This may have been achieved by a narrowing of the span between which the figure was effective, or by a lowering of the road, or a combination of both. The earlier photograph, taken from the north, shows a considerably greater depth of cover at the top of the arch than is shown on the 1966 view, taken from the south. There are three further (very shallow) arches east of the road, and examination of the whole structure by an architect or civil engineer would be merited, as the incline is one of the most substantial relics of the Forest's horse-tramroad era to

survive, and it is moreover one of the most tangible reminders that Redbrook was, for no less than three and a half centuries, the centre of many and varied industrial activities - iron smelting and forging, copper-smelting, tinsplate manufacture, paper-making, foundry-work, brewing, flour-milling and transport by river, road, tramroad and railway.

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