THE WOOLHOPE NATURALISTS' FIELD CLUB

(ARCHAEOLOGY RESEARCH SERIES)

RESEARCHING THE LEOMINSTER CANAL

Paper 6 : THE IRON HORSE

(COMETH THE RAILWAY)

Recalling the Survey of 1789

by

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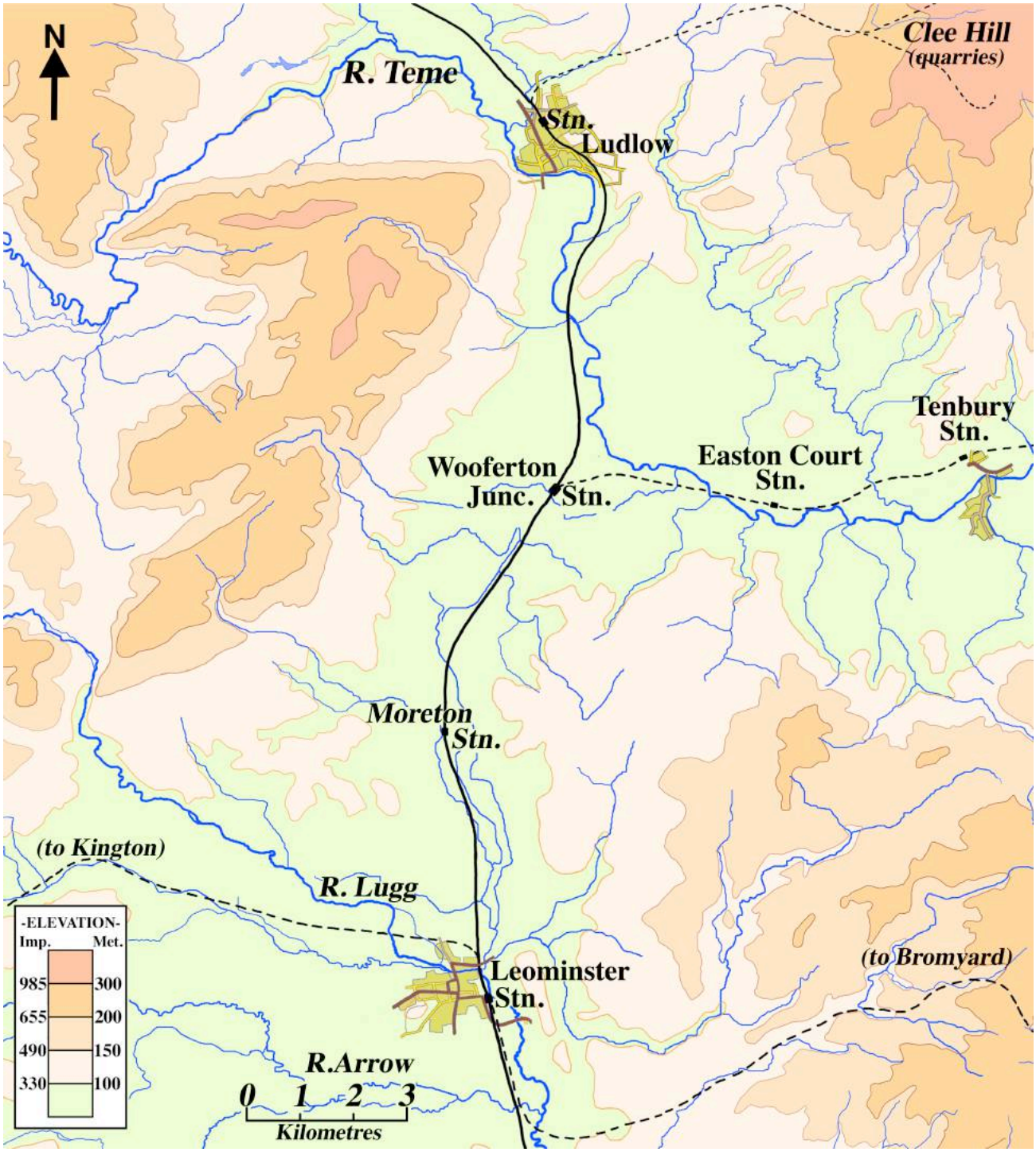
(revisited with Gerry Calderbank)

Railways of North Herefordshire



Cometh the railway

- INTRODUCTION -

Paper 6 resumes from where a predecessor paused, at the Wyson Top Lock, and with that hiatus having been chosen for several reasons. First, and of greatest significance, the Top Lock had marked the end of a summit level traversing the watershed between the Wye and Severn drainage basins. Secondly, the route from Leominster then switched direction - from S->N to a W->E alignment - with effect that different geological considerations came into play. From hereon the route was largely dictated by Teme valley geomorphology, coupled with that of the R.Rea and lesser Teme tributaries. Thirdly, the fortunes of the canal hereabout - even its very survival - lay at the mercy of blossoming railways, including the one that that came to dominate what's left of the canal in the Teme valley. It would also seem that this same railway interference and encroachment - allied to some questionable cartography - seemingly confused a few early historians of the Leominster Canal when dealing with the section around Woofferton and Gosford.

Between Leominster and Woofferton, railway interference had not greatly occurred, this despite the canal's occupation of terrain that would have been coveted by several prospective railway promoters, and whose surveyors must have been attracted to this potential route, just like their canal predecessors in the previous century. So this raises an intriguing question, shortly to be addressed, as to why the canal route suffered so much at the hands of the railway here in the Teme Valley, whereas it seems largely unscathed by railway construction works between Leominster and Woofferton - ?

- COMPETITION, perhaps with SURVIVAL . . . or maybe a sell-out?

Compared to steam railways, the canals were obviously up against a speedier form of transport but, not only were the railways faster, they were also much easier, quicker, and (relatively) less expensive to construct, whilst the subsequent maintenance costs were also found to be cheaper. Faced with such competition, individual canals had varied prospects for business survival so that, depending upon the local circumstances, several options may have seemed open to their proprietors although, essentially, they could either stand and fight or, alternatively, they might sell out and/or amalgamate with the newer form of transport. In the case of a well established and profitable concern, the adversarial option, despite a presumption of high legal and propaganda costs, might prove successful: maybe the intruding railway could even be fought off or, at the very least, there might be some chance that the canal's potential sale price could perhaps escalate and an improved deal result?

The Leominster Canal harbored neither prosperity nor prospects. Cohen and Hadfield have recounted the minutiae, but it's instructive to examine the wider perspective - of how, when, and where the new railways encroached upon this part of Herefordshire; something of their varied fortunes; some of the legal wrangling; and in particular, the commercial and physical effects they eventually brought to the canal. From the national picture, the contemporary legal/commercial battles between rail and canal would have been only too obvious for owners of the struggling Leominster Canal, which had already absorbed vast sums of capital without payment of a single penny to its shareholders. Bearing in mind their dire business situation, and having seen the writing on the wall, most proprietors must surely have pondered the impending railways with trepidation, although some of the shareholders could quite possibly have welcomed the prospect of <u>any</u> railway encroachment on their territory - as seemingly the only potential escape from their financial difficulties!

EARLY HORSE TRAMWAYS *. . . converge on Herefordshire*

The Leominster Canal Company first had its hopes dashed by 'railways' as early as 1820, when the *Kington Tramroad or Railway* was completed between Eardisley and Kington: this brought coal on the last lap from S.Wales via Brecon and Hay, and effectively put paid to any (residual) chances of future canal extension to Kington. Gradually at first, such tramway construction started to spread and then to gather pace, and soon the rails and plates were springing up everywhere, although many of them were very small and localised affairs since, originally, the tramroads were conceived as merely a convenient method of feeding coal, minerals and goods to the nearby navigable waterways, and so at first they tended to be fairly short-range affairs.

Such was the case, right from the outset, with the Leominster Canal at Mamble, as can be deduced from the wording of the first Leominster Canal Act of 1789 which is couched in terms possibly suggestive that a feeder tramway system, like the S.Wales developments, was envisaged. It was the normal procedure - in precisely the same way we've seen when the Dadfords, and their contemporaries built tramways in the S.Wales coal fields; in the Clydach valley some were even constructed *(in anticipation!)* prior to the actual canal itself.

Throughout Monmouthshire, the Blaenavon Railroad, Beaufort Tramroad, Sirhowey Tramroads, Hall's Tramroad, Bailey's Tramroad, Aberbeeg Tramroad, and several others, were mostly constructed in this fashion to carry iron ore, limestone and coal - so acting as mere canal facilitators. Nevertheless, the truth was quickly realised, of Francis Egerton's legendary remarks, that canals would last his lifetime: *". . . but I see mischief in those dammed tramroads."* - and with effect that soon the servant was to become the master.

Locally, it was Hereford's turn to next obtain the S.Wales coal when, in 1829, the horse-drawn *Hereford Railway* completed a through route between Abergavenny and the city, with communications having previously started in 1811/14 via the *Llanfihangel* and then the *Grosmont* 'railways'. To briefly jump ahead, these three interconnected horse-tramway concerns were later to be acquired by the *Newport, Abergavenny and Hereford Railway* when incorporated in 1846, whilst that, in turn, was destined to link with the *Oxford, Worcester & Wolverhampton Railway* - an eventual component of the *West Midland Railway* of 1860.

THE APPROACHING RAILWAYS *. . . some railway developments affecting the Welsh Marches and the Leominster Canal*

- THE HORSE TRAMWAY ERA -

These were mostly plateways, mainly of 3'- 6" gauge - but of varied flange and tread dimensions - and were originally intended to serve the collieries. Barely adequate for longer distances when horse-drawn, the trams, like the cast iron rails/plates upon which they ran, would not have been very suitable for the speed, weight, and intensity of the locomotive-hauled traffic to follow.

KEY: Incorporation/Authorisation dates emboldened : Company first references emboldened

***1789 Mamble Tramway**? . . . a Statutory provision; it is therefore just possible that this may have been operational, and presumably feeding the **Leominster Canal**, by 1794 - which seems too early for a plateway - in which case it initially, would have used edge rails (we know that the canal contractors certainly did so for tunnelling).*

***1809 Lydney & Lydbrook Railway** . . . renamed the **Severn & Wye Railway & Canal** in 1810 before the work actually started . . . Lydney to Bishopswood Wharf - and thereby feeding coal to the ancient **Wye Navigation** for carriage to Ross/Hereford etc.*

***1811 Llanfihangel Railway** . . . from Llanfoist Wharf to Llanfihangel Crucorney - exporting S.Wales coal.*

***Hay Railway** . . . from Brecon Canal Wharf, via Talgarth and Glasbury - exporting S.Wales coal (an early example of a canal feeding a tramway).*

***1812 Grosmont Railway** . . . from Llanfihangel Crucorney to Monmouth Cap - exporting S.Wales coal.*

***1818 Kington Railway** . . . importing S.Wales coal via the Hay Railway (plus limestone from the Burlinjob extension).*

***1821 Bailey's Tramroad** . . . authorised. from Nant-y-glo, via Brynmawr, then Clydach Gorge and Govilon to Llanfoist Wharf . . . opened in 1822.*

***1825 Hill's Tramroad** . . . from Hill's Ironworks and the collieries at Blaenavon to Llanfoist Wharf.*

***1826 Hereford Railway** . . . this completed the tramway system from Llanfoist : it is perhaps significant, that the **Brecknock & Abergavenny Canal** was bridged by (and thereby excluded from) some of this carriage.*

- STEAM TRACTION . . . locomotives and track developments-

Whereas the (horse-drawn) *Kington Railway* was our only new railroad opened in 1820, subsequent progress was rapid following further success on the *Stockton and Darlington Railway* (1825) and then the *Liverpool and Manchester Railway* (1830). In the single year of 1839, the national tally of such newly completed and extended lines was eighteen. There were then twenty eight further such completions (both new construction and/or extensions) the following year: clearly, the 'Railway Mania' of 1845 was already looming, and a pattern for the future interface between canal and railway beginning to emerge. Steam locomotion quickly brought a huge impetus to railways of course - commencing soon after the first commercial success with steam haulage had occurred in 1803/4 with Richard Trevithick's engine on the *Pen-y-darran* plateway near Merthyr.

Given the advent of locomotive traction, and in view of the increasing payloads plus track-work problems, the cast iron plates, mainly because their brittleness and resultant breakages under heavy locomotives, were soon displaced by wrought iron rails. There was considerable experimentation (such as rack-rail - using cog wheels) and other systems at first, and especially so with the detailed design of the actual rail profiles and railway sleepers supporting the track. In S.Wales, the *Mon. Railway & Canal Co.* - because of their heavy and relatively recent investment in plateways - made extensive efforts to develop a hybrid (plate + steam locomotive) track-work system, but frequent cast iron plate breakages meant this was never really viable. In general, there was a return to wrought iron edge rails, but this time using various flanged wheel profiles. It would be very much in the future when Bessemer eventually persuaded a *(highly skeptical)* L.&N.W.R. to try out some steel railway track.

In various other localities, the Welsh border lands became a battle ground between two rival gauge systems, leading to much 'political' scheming. Because of the traffic chaos at Gloucester, a Parliamentary Commission of Enquiry was eventually set up and this commenced work in August, 1845. Its findings were a body-blow to the *Great Western Railway:* the future national standard gauge was to be 4' - 8.5" and, in order to accommodate the Birmingham through traffic, the company was "recommended" to start laying narrow-gauge track between Gloucester and Bristol. The problem wasn't easily resolved, despite an ingenious compromise entailing mixed-gauge construction using three rails, some of which track endured until the demise of broad-gauge in 1892.

KEY: As above, except that the incorporation dates of subsidiary acquisitions are parenthesised

1833 Grand Junction Railway *(G.J.R.) . . . linking Birmingham with Warrington, Liverpool and Manchester by 1837. It soon absorbed the* ***Warrington & Newton*** *(1829);* ***Chester & Crewe*** *(1837);* ***Bolton & Leigh*** *(1825);* ***Kenyon & Leigh Junc.*** *(1829).; and* ***Liverpool & Manchester*** *(1826) railways.* ***London & Birmingham Railway*** *(L.&B.R.) . . . opened in sections, thus providing a London to Birmingham intercity through route by 1838.*

1835 Great Western Railway *(G.W.R.) . . . Brunel's original broad-gauge route - linking London with Bristol, and intended to share a terminus with the L.&B.R. until thwarted by financial disagreement about the cost of land at Camden and Euston (plus gauge considerations and potential congestion). Consequently, some spare canal company land at Paddington was purchased for a separate G.W.R. terminus.*

1836 Birmingham & Gloucester Railway *. . . the river port of Gloucester was in the front line during the 'Battle of the Gauges'- as something of a bottleneck - because of the infamous transshipment problems. Its end-on connection, the* ***Bristol & Gloucester(shire) Railway*** *(Br.&G. - 1828) had originally been intended as a purely narrow gauge line but became implicated with the (G.W.R.) broad-gauge system (separate narrow & broad gauge tracks were to be laid between Gloucester and Cheltenham!). Beyond Cheltenham, a midlands connection had been coveted by the G.W.R. but they procrastinated, with effect that the whole route from Bristol to Gloucester, Cheltenham and Birmingham was later snatched by the predatory (standard gauge)* ***Midland Railway*** *(M.R. - 1844) in 1845.*

1845 Oxford, Worcester & Wolverhampton Railway *(O.W.&W.R.) . . . this was incorporated as a broad-gauge line (with Brunel as engineer) and was originally intended to penetrate standard gauge territory. However, financial difficulties, together with a protracted, chaotic, and stormy relationship with the G.W.R. ensued; this was engendered and perpetuated by their ongoing negotiations and arrangements with the M.R. and with the G.J.R.* ***Monmouthshire Railway & Canal Company*** *(M.R.&C.C.) . . . a Newport to Pontypool railway incorporated (opened 1848).*

1846 L.&N.W.R. *. . . this was an amalgamation of the G.J.R.; L.&B.R.; and the* ***Manchester & Birmingham*** *(M.&B. - 1837) railways. Soon known as the 'Premier Line' , it quickly became the largest joint-stock company in the world - of any description! - and yet still continued to expand until the railway 'grouping' legislation of 1923 whereupon it formed the largest single component of the* ***L.M.S.Railway.*** ***Shrewsbury & Hereford Railway*** *(S.&H.R.) . . . the only survivor of four such 'Railway Mania' schemes that were each intended to open up the S.Wales coal field to the Midlands. Initially, the work was delayed through tardy payment of share calls, but the company was 'rescued' in 1850 by its contractor, Thomas Brassey, who undertook to complete and then manage the concern, at his own risk, and with brilliant effect. His (extended) lease was due to terminate in 1862.*

1847 S.&H.R. *. . . shareholders confirmed purchase of the* ***Leominster Canal*** *(23.02.1847).*

1850 O.W.&W.R. *. . . . completed as far as Worcester, although actually built to standard gauge (for the M.R. traffic), having been subject to continued G.W.R., L.&N.W.R. and M.R. 'meddling' in its affairs.*

1852 S.&H.R. *. . . . their engineer, Henry Robertson, examined the state of the Leominster Canal in the Teme Valley but, because of ambiguity in the canal company legislation, renewed doubts emerged concerning the legal title to the land, so the project was shelved.*

1853 L.&N.W.R. *. . . . Crewe - Shrewsbury - a strategic connection authorised (later to open in 1858).* ***Hereford, Ross & Gloucester Railway*** *(1851). . . broad-gauge - opened from Gloucester to Hopesbrook (Longhope).* ***Severn Valley Railway*** *. . . authorised, but not completed until 1862 . . . S.&H.R. fully opened to Hereford - 06.12.53.* ***Worcester & Hereford Railway*** *. . . incorporated, but handicapped because House of Lords originally stipulated that, with other railways in mind, it should be a financially independent concern.*

1854 Newport Abergavenny & Hereford Railway *(N.A.&H.R.) . . . an amalgamation of the Llanfihangel, Grosmont, and Hereford lines. Hereford, Ross & Gloucester Railway . . . completed to Hereford and worked by the G.W.R. as a broad-gauge route.* ***Leominster & Kington Railway*** *. . . with extension and branches, it eventually passed to W.M.R. - and thence to the G.W.R. in 1865.*

1856 Shrewsbury & Welshpool Railway *. . . purchased by L.&N.W.R. (1864) and vested as a joint railway - L.&N.W.R./G.W.R. - in 1870.*

1858 Knighton Railway *. . . opened in 1860 and leased to L.&N.W.R. (1863) before purchase by that company in 1868. Worcester & Hereford Rlwy. . . now granted Parliamentary subscription powers, enabling it to proceed via Malvern, and Ledbury to Shelwick Junc. and Barr's Court Station (S.&H.R.) with financial backing from the O.W.&W.R., the N.A.&H.R., and the M.R.*

1859 Tenbury Railway *(T.R.) finally incorporated, following a Parliamentary ruling regarding the 'land issue'. The branch was included in the S.&H.R. leasing arrangement, and was initially operated by Thomas Brassey and then, jointly, by the L.&N.W.R./ G.W.R.*

1860 West Midland Railway *formed by a merger of O.W.&W.R. with N.A.&H.R. plus the incipient Worcester & Hereford Railway.* ***Tenbury & Bewdley Railway*** *. . . incorporated, despite S.&H.R. hostility to a linkage with the O.W.&W. /S.V.R. - which was viewed as potential competition.*

1861 Ludlow & Clee Hill Railway *. . . a mineral line which opened in 1864 and was jointly worked by the L.&N.W.R. and G.W.R. after 1877; later becoming vested in their joint ownership in 1892.*

1862 L.&N.W.R. *. . . . leased the* ***Merthyr, Tredegar & Abergavenny Railway*** *which was later fully absorbed (1866). This steeply graded route exploited the S.Wales coal field, bringing alliance and working arrangements with the* ***Rhymney Railway*** *and also with the* ***Brecon & Merthyr Railway****. Brassey completed his contracts with S.&H.R. and T.R. - which were then replaced by L.&N.W.R./ G.W.R./ W.M.R. joint leases.*

1866 Tenbury Railway *. . . vested by Act of Parliament in the L.&N.W.R. and the G.W.R. jointly - to be with effect from January, 1869.*

1873 Ross & Ledbury Railway *and also the* ***Newent Railway*** *. . . separately incorporated, but only the latter was (eventually) developed - by the G.W.R. - as a route between Gloucester and Ledbury where it joined the Worcester & Hereford section of the West Midland Railway. By these means the* ***Hereford & Gloucester Canal****, whilst nominally under a joint railway/canal management committee, ultimately passed into G.W.R. control, and was finally to be closed : ", , , By Order : Dated this 2nd day of June, 1881".*

PS: This marked an end to the Herefordshire canals - unless we include work undertaken following the formation of the Herefordshire and Gloucestershire Canal Society (13.04.1983), to be followed, in 992, by the foundation of the Herefordshire and Gloucestershire Canal Trust & Trading Company.- *-e -*

- PROSPECTS OF RAILWAY SALVATION ? -

Negotiations are reported to have started in June 1845, following overtures to the Leominster Canal Navigation from a subcommittee of the prospective *'Shrewsbury and Herefordshire Railway'* (original title before incorporation in 1846 and hereafter abbreviated S.&H.R.) - although nothing seemingly materialised. The canal company also took the initiative (1845) in approaching the grandiose *Welsh Midland Railway* and £20,000 was their asking price for sale of the canal, but the *Welsh Midland* then failed to obtain its Parliamentary authorisation.

By 1845/6 there were several alternative and/or rival projects afoot for a route between Shrewsbury and Hereford. In the face of this prospective competition there followed renewed meetings probably with a view to heading off any rival projects - whereupon a tentative alliance of canal and *S.&H.R.* was mooted. - his was to be in return for the proposed sale of the canal, albeit at considerable financial loss for the *L.C.N.* proprietors. However, the canal's commercial viability had long been hopeless, and its future prospects, especially in the face of impending railway competition, must have seemed very bleak - so hence the impetus, described at length by Cohen and Hadfield, to sell the canal to one or other of the new railways. From these two writers we read that the canal company, having flirted with the various prospective railway concerns from 1845 onwards, then seems to have actually agreed a provisional sale price of £12,000 - subject to Parliamentary approval and shared legal costs with the *S.&H.R.* It should however be stressed that this 'outline agreement' although applicable to the whole canal, is here relevant only to our discussion of the route between Woofferton and Leominster; that Parliamentary authorisation was required to sell the canal; and that although contemplated, any concrete proposals for a future Tenbury branch railway in the Teme valley still lay in the future.

There's no doubt that the *S.&H.R.* was genuinely and desperately short of funding, for which its reluctant shareholders must entirely be blamed; however, in expectation of completion with their contract, the requisite 'Leominster Canal Sale Act' was obtained by the L.C.N. Company in 1847 - but the legislation was seriously flawed in certain respects. There was ambiguity concerning the proper legal title to the lands supposedly to be sold to the railway company, with it later being argued - eventually as far as a House of Commons Select Committee - that, according to the actual wording of the earlier 1826 legislation, the canal's land should initially have been offered (on a 'first refusal' basis) to the original landowners prior to the making of the canal, or to their successors in ownership of the property in question - where adjacent to the canal. This legal issue coincided with the aftermath of 'Railway Mania' and the financial collapse in railway shares that ensued, so sadly, the Leominster Canal proprietors would be further afflicted by prevarication - although this time by default, since the sins of others (the S.&H.R. shareholders) were now to be visited upon them!

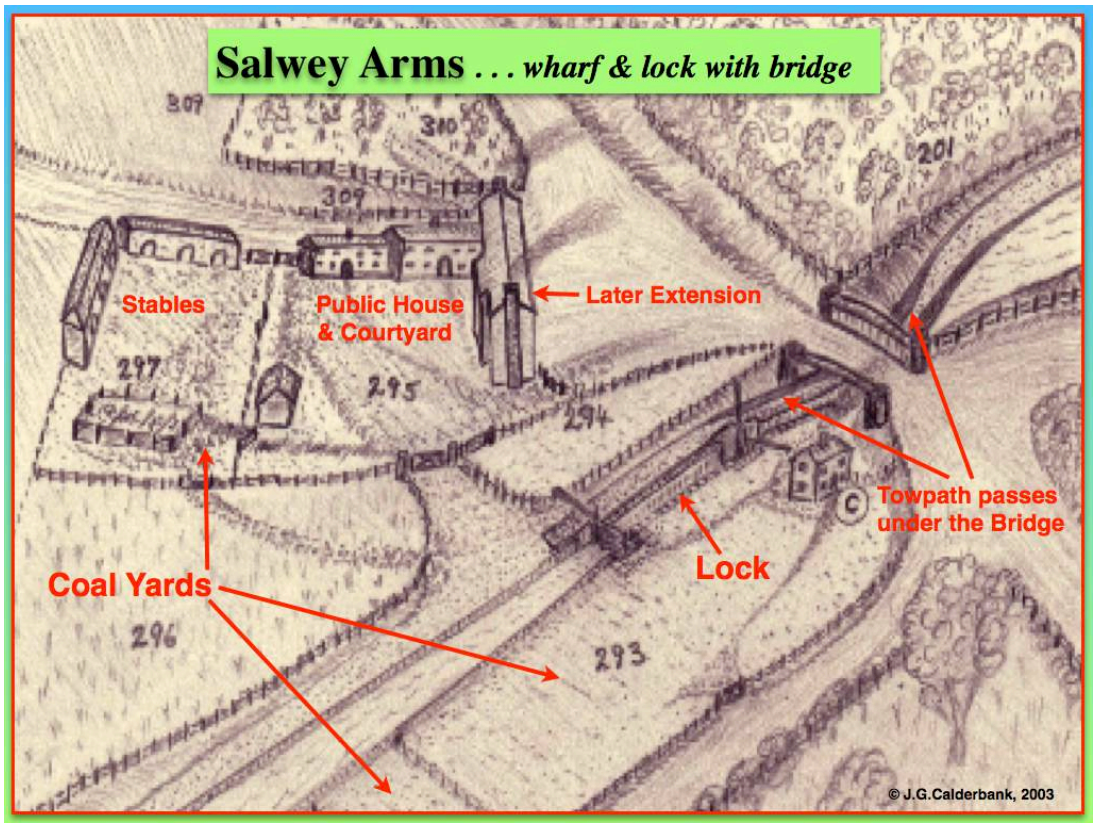
This time the delay was caused by objections from disgruntled landowner, John Salwey who disputed the sale of his former lands "over his head" and without an offer. It's obvious that the railway officials twice made rather a meal of these legal issues in pondering the matter to the extent that they did - and in each case over a period of many years - without considering possible Parliamentary amendment of the old legislation. Although evidently acting within the letter of the law, their motivation in dragging their feet now seems very clear: they simply lacked the finances! The ensuing criticisms heaped upon them is both justified, and compounded, by the fact that the railway company must always have been perfectly aware of the ambiguity since, at an earlier shareholders' meeting (23.02.47) called to confirm the intended canal purchase, their Chairman had made a specific reference to this very same matter. Conversely, the railway company lawyers could hardly be blamed for non-completion of the sale where they perceived any legal title still to be unsettled: it appears to be the question of duplicity and obvious prevarication, seemingly implied by all of this, that must be remarked.

Many journalistic details were unearthed by Israel Cohen when researching his Woolhope Club paper - as made freely available to Charles Hadfield. These derived from the Hereford Journal as preserved in the Hereford City Library but, since the history is well documented, it doesn't require repetition here - except to remark that the engineering implications are sometimes overlooked.

- A LEGAL DIVERSION . . . consequences of legal dispute -

Because of the 'legal title' issues outlined above, it now seems clear that the *S.&H.R.* solicitors required their engineers on no account to interfere with either the alignment or working operation of the canal - *at that date* (1847). So it's obviously this railway company awareness of the legal ambiguity that explains why the canal was not converted to track-bed between Leominster and Woofferton. What's more, there may also be the possibility, because of the chronic debts still outstanding from the Act of 1791 - as remarked in subsequent legislation - that some of the original landowners may never even have been paid for their land in the first place! Obviously, the missing canal company minutes would have been crucial in settling these outstanding questions; but despite this documentary vacuum, any alternative historical sources seems not to have been pursued (and subsequently published) but quite probably by reason of lingering disillusion and likely acrimony revealed in the Beverley documents.

We shall see that even following the outcome of the celebrated 'Bill in Chancery' case of 1856 (whereby the L.C.N. took legal action against the *S.&H.R.* for non-fulfillment of the alleged 1847 agreement to purchase) that the old obstacle concerning the legal title to (and disposal of) canal company land still remained. In summary, the contemporary reports had indicated that the *S.&H.R.* was technically within the law, in so far that the mandatory two Directors' signatures were not obtained for the sale agreement; but with the court's adjudication concluding, however, that their conduct was "seemingly dishonest". Faced with widespread opprobrium, ignominy, and the prospect of an imminent appeal, the railway company hastily decided to seek some form of accommodation, and a (less than satisfactory) sale agreement eventually resulted.



- THE 'SALE OF LAND' ISSUE -

Somewhat ironically, when next this same kind of legal problem recurred, the tables were turned, since it was now the *Tenbury Railway (a S.&H.R. subsidiary)* company that suffered delay - at the instigation of a local landowner. Construction of the *Tenbury Railway* was initially delayed by re-emergence of the 'land-title' issue - although this time raised the disgruntled John Salwey of Moor Park who opposed a branch-line on the grounds that his estates had previously lost considerable lands to the *S.&H.R.* construction; whereas

(according to the 1826 Act) he argued that such canal lands should first have been offered to himself in preference to the *S.&H.R.* By way of further contention, he asserted that the canal still furnished an essential water supply - so that these objections, together with other issues, gave rise to the Select Committee hearings previously mentioned, but the requisite Bill eventually prevailed and the Tenbury Railway Act followed (21.07.59).

- CONSTRUCTION OF THE S.&H.R.-

In 1850 their experienced engineer, George Findlay, was appointed by contractors, Brassey & Field, to supervise construction of the intended *S.&H.R.* - Shrewsbury to Ludlow section - whereafter, when Thomas Brassey appointed him Manager (1852) Findlay and his *S.&H.R.* colleague, Henry Robertson, were able to arrange the Ludlow to Hereford completion in such a way that both canal and railway could, theoretically, have continued to function independently. This was in compliance with a resolution of the former L.C.N. Special Meeting (07.07.1846) which had stipulated that the railway company should not close the canal before completion of this new construction. Apparently there was an intention to continue working parts of the canal until such time that the water was let off. Whatever the true reason/s - legal and/or commercial - the ensuing railway bridged the Leominster Canal at two points, as may be seen from the mapping. These bridges, being only temporary, probably featured timber decking in anticipation of an imminent change, whereafter they were replaced by additional embankments at the two railway intersections; one being culverted and the other featuring a pedestrian underpass. It is especially significant that, as regards this same L.C.N. constraint, the railway engineers were also required to culvert and perpetuate the Ashton Brook feeder - instead of simply reinstating its natural drainage across the Wyson Common.

The entire railway between Shrewsbury and Hereford was completed in 1853; Brassey's extended contract empowered him to continue operating the concern on behalf of the cash-stricken *S.&H.R.* for the time being - but more of this below. There next ensued a period of intense and complicated maneuvering between two much larger interests, with each wishing to utilise, or even to directly control, this strategic route between S.Wales and the N.Midlands. To some extent the maneuvering formed part of the renewed efforts by the *Great Western Railway (G.W.R.)* and its satellites to extend (preferably utilising Brunel's broad-gauge system) to N.Wales and to N.W. England. Having already made considerable inroads in this respect - to Shrewsbury, Chester and Birkenhead - the G.W.R. was now expected to push further into Shropshire and to concentrate its designs upon the *S.&H.R.*, as and when allied to its wayward satellite, the above mentioned *West Midland Railway*. Alarm bells rang in the *S.&H.R.* boardroom, who's directors, fearing an outright *G.W.R.* take-over, became sufficiently worried to enter into negotiations with the *G.W.R.*'s chief rival hereabout - the mighty *London & North Western Railway (L.&N.W.R.)*. Although a victim of 'Railway Mania' speculation, the impecunious *S.&H.R.* had first been rescued, completed, and then leased to its contractor, but Thomas Brassey's contract was due to expire in 1862. Apparently the *S.&H.R.* proprietors wished to retain ownership of the assets, but with the more prestigious *L.&N.W.R.* assuming purely the operational side of the business and thereby, hopefully, establishing a long-term leasing arrangement in lieu of Brassey.

The *'North Western'* was naturally delighted and, as an opening gesture, magnanimously invited the *'Great Western'* (together with its *'West Midland'* partner) to participate in a joint leasing arrangement, but which the *G.W.R.* pairing promptly declined, being quietly confident that the plan could be defeated in Parliament. A joint application by the *L.&N.W.R.* and *S.&H.R.* for the requisite Bill sanctioning their agreement therefore ensued in 1862 but, to many onlookers' surprise, the Parliamentary opposition suddenly folded. The G.W.R. partnership had unexpectedly withdrawn from the contest and sheepishly accepted a renewed offer by the *L.&N.W.R.* of their joint leasing arrangement, although they needed to share the 50% apportionment between themselves until such time that a 1863 amalgamation became effective - as an enlarged *Great Western Railway*. This later culminated in the outright acquisition of the line (1870) when it next became the 'L.N.W.R. / G.W.R. – S.&H. Joint Railway'.

- THE TENBURY RAILWAY -

Meanwhile, the Tenbury Railway had opened (01.08.61) having been constructed by Messrs. Brassey & Field and worked by Thomas Brassey from the outset; with it being intended that this short branch-line, engineered by David Wylie, was also to be included in the same leasing agreement with the *S.&H.R.* A brief outline of the Tenbury Railway, plus a much more detailed history of its extension to Wribbenhall has been published: *"The Tenbury & Bewdley Railway"* - Beddoes & Smith, Didcot (1995), which provides an excellent account; although the first chapter perpetuates a few long-standing errors and misconceptions concerning the Leominster Canal.

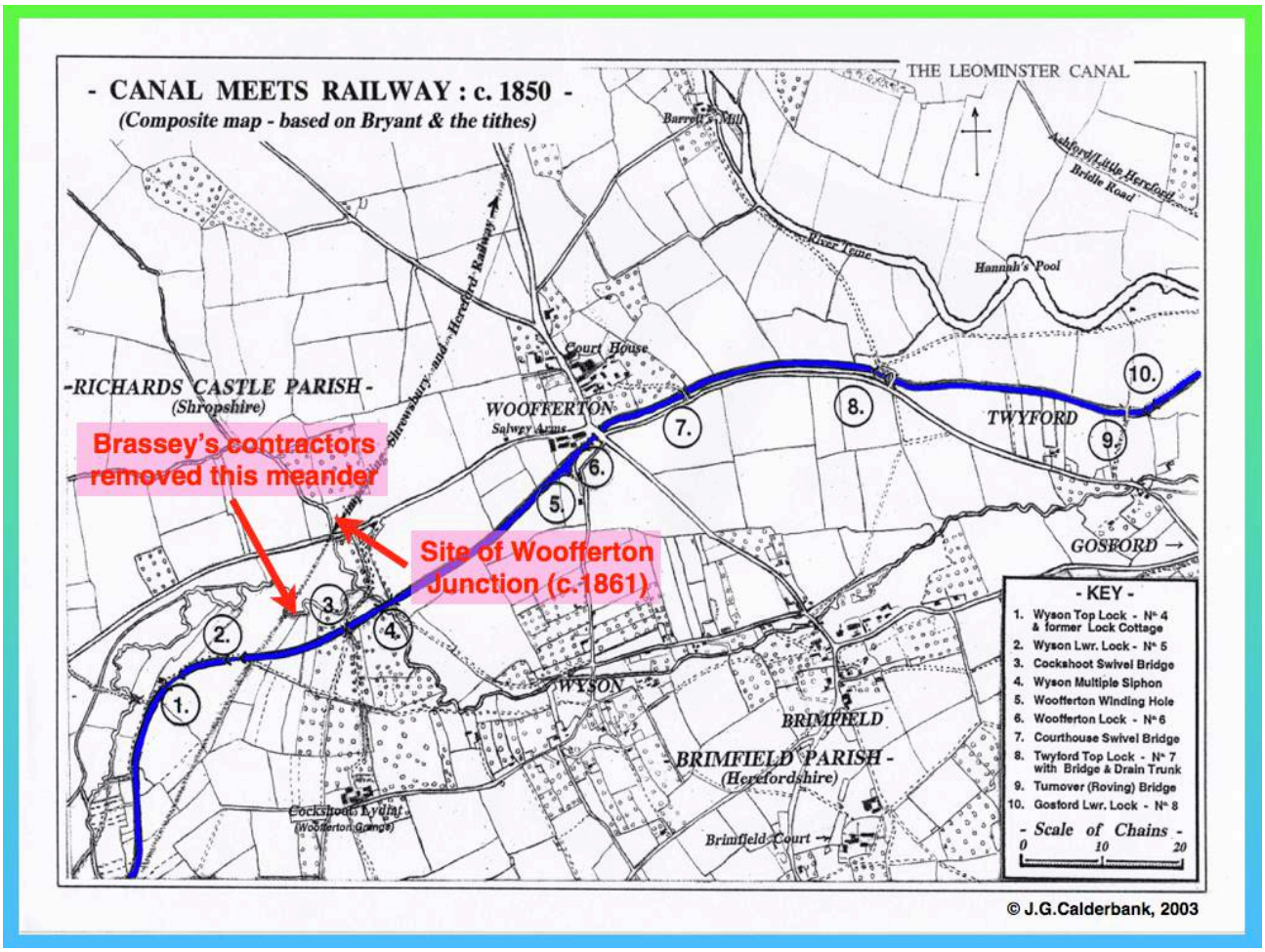
Of the personalities involved, Tenbury solicitor William Norris was undoubtedly the driving force; whilst Capt.Rushout, MP (later Col., and then, Lord Northwick) of Burford House - as Chairman of the *Oxford, Worcester & Wolverhampton Railway* - was probably the most influential figure. William Davis of Dean Park

was already a Director of the *S.&H.R.* - as were E.V.Wheeler of Kyrewood House and Sir Edward Blount of Mawley Hall, wit the latter also perpetuating that family's Mamble colliery interests. These gentlemen, together with others of the Provisional Committee, are listed in the 1859 *'Prospectus'* a copy of which is held in the Tenbury Museum. Additional to Norris, we notice a Shrewsbury solicitor, Joshua Peele of the *S.&H.R.*, as his fellow (acting) co-Secretary but, conspicuous by their absence from this prospectus, were the Baileys who had previously purchased Easton Court (Little Hereford) from the Dansey family in 1837.

Joseph Bailey was a nephew of Richard Crawshay, the celebrated iron-master of the Cyfarthfa Works near Merthyr Tydfil - a forceful and notoriously 'difficult' character who periodically antagonised both his own family and fellow iron-masters around Merthyr. It was principally Richard Crawshay and Francis Homfray who had enticed both Thomas Dadfords (senior and junior) away from the midlands and also induced the Dadford/Sheasby partnership to engineer the *Glamorganshire Canal Navigation*. Upon Richard Crawshay's death (1810), Joseph Bailey had inherited a 1/4 share in his uncle's Cyfarthfa business before selling it back to the estranged elder son (his cousin) William Crawshay. William had originally inherited only 3/8 of the business but, by buying out first his cousin, and then his brother-in-law, he was eventually to repossess, and so become the sole owner, of the Cyfarthfa Ironworks by 1817.

Joseph and his brother, Crawshay Bailey, had earlier worked in their uncle's business interests - including the *Glamorganshire* and the *Aberdare* Canals - before embarking upon various partnerships of their own in the Monmouthshire iron-making districts of Beaufort and Nantyglo. Under Richard Crawshay's tutelage they had acquired considerable commercial and technological expertise and later amassed a vast business fortune in the 1830s and 1840s as, possibly, the foremost global manufacturers of wrought iron rails. The firm of Bailey Brothers eventually sold up at the height of the S.Wales wrought iron boom (just before the crash of 1873) and allegedly for a sum of over £4,000,000!

Although mostly non-resident, Sir Joseph Bailey had by now inherited the Easton Court property, and had consented to the Bill, but only on condition that a Little Hereford deviation be substituted for the canal route through his park, and that a station be built convenient to Easton Court itself. Sir Joseph then became a director of the *Tenbury Railway* and, hardly surprisingly, he indicated (1859) that his trustees' factors could arrange the supply of wrought iron rails for the intended *Tenbury & Bewdley Railway* extension, in exchange for shares - of equivalent value - in the new railway company!



CONTRACTOR, ENGINEERS & ENGINES . . . *contemporary with the Canal*

- THOMAS BRASSEY : 1805 -1870 -

Thomas Brassey is amongst the greatest of early railway builders, although not always fully appreciated - mainly because such contractors usually played 'second fiddle' to their engineer counterparts in public esteem but, also, because of his modest and unassuming nature. Both civil engineer and contractor, Brassey was born in Bruerton, Cheshire, and educated in Chester before, at the age of sixteen, being apprenticed to a local surveyor named Lawton: he then entered into partnership with his master, but soon took charge of the business affairs of Lawton & Brassey. In 1831 the mighty Joseph Locke, as engineer of the *Grand Junction Railway*, awarded Brassey his first full railway contract - 10 miles in extent - following his successful (sub-contractual) work on the Penkridge viaduct. Numerous contracts, undertaken for Locke and others, were soon to follow in Britain and France.

Brassey and his like were, of course, men of business and they had to operate within the prevailing commercial practices of their day, which might necessitate their payment (and subsequent dealings) - in shares.

Consequently, whereas some railway contractors were commonly viewed with disdain - as frequently rather shady characters! - with Thomas Brassey it was quite the opposite. Always a man of complete integrity and utter reliability, his word was his bond - to both workman and magnate alike - even if he should (occasionally) suffer financial losses in its keeping. The preservation of this reputation and his business probity was always uppermost in Brassey's mind and amongst the early projects to benefit from this attitude, in various ways, had been the *Paris & Rouen Railway* and later - following the financial collapse of 'Railway Mania' - the *Great Northern* and the *Shrewsbury & Hereford* railways.

- HENRY ROBERTSON : 1816 -1868 -

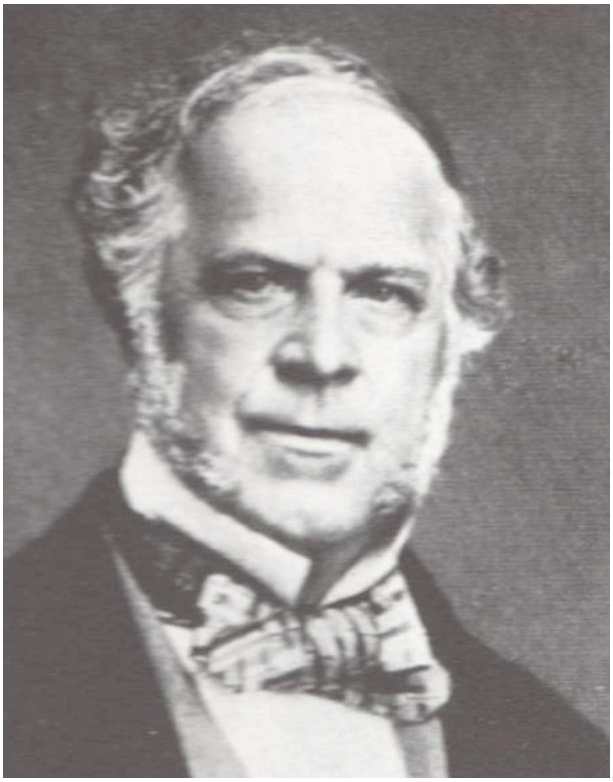
A graduate of Aberdeen University, Robertson started out as a railway contractor - again for Joseph Locke - at Port Glasgow before, in 1842, undertaking a (railway) consultancy to the Brymbo Iron Works, which was followed with railway construction work in the adjacent colliery district around Wrexham. Robertson was the engineer responsible for projecting the *North Wales Mineral Railway* between Wrexham and Chester, together with its *Brymbo Branch* - and also much of the railway system which, following the amalgamations of 1846, stemmed from this so as to eventually reach Shrewsbury. As a component of the resultant *Shrewsbury & Chester Railway*, these developments were later to become part of the *Great Western Railway* network in 1854.

Robertson had been appointed engineer to the *Shrewsbury & Birmingham Railway* (c.1850) and the work around Coalbrookdale linked up with his *Shrewsbury & Chester Railway* route, by means of which the *G.W.R.* extended to Birkenhead. A group of *Shrewsbury & Chester* proprietors were behind the proposed (originally single track) line from Shrewsbury to Hereford with Robertson as their chosen engineer. The actual construction was contracted out to Thomas Brassey who, following the financial difficulties which beset the *S.&H.R.*, came to their rescue by agreeing to complete the project himself and to then lease the railway at a guaranteed minimum of 4% for the time being.

It was Robertson who, in 1852, was instructed by his employers to investigate the condition and suitability of the Leominster Canal - as a potential track-bed - in the Teme valley but, as with the section between Leominster and Woofferton, this was premature because of the ongoing 'land-title' legal dispute. Of other local interest, but outside our period, Robertson was later to engineer much of the *Central Wales* line between Craven Arms and the Swansea district - a route which eventually passed into *L.&N.W.R.* ownership. Likewise, he was responsible for further railway developments in N.Wales and the Wirral and, now as proprietor, he developed the Brymbo Ironworks into the largest such local enterprise. Robertson is further remembered as the MP for Shrewsbury; as a railway director; a company director of several Wrexham firms; and founding partner in the Beyer Peacock locomotive works.

- MARK HUISH : 1808 -1867 -

Lurking in the background throughout most of this period in time was Nottingham born Captain Mark Huish, formerly of the *British East India Company*, but attracted to his home scene by the 'Railway Mania'.



Following a short spell as Secretary to the *Glasgow, Paisley and Greenock Railway*, in 1841 Huish was appointed Manager of the *Liverpool & Manchester Railway* and its associated companies (tabulated elsewhere). He next became General Manager (1845) of both divisions of its successor company - the mighty *L.&N.W.R.* - which would have pitched him into fierce controversy and commercial maneuvering with other Welsh border railway companies, albeit a situation to which Huish was ideally suited!

An inveterate schemer, Huish has been dubbed 'Power-Politician of the Iron Road' and his business ambition was clearly the original driving force behind *L.&N.W.R.* traffic policy in our region. He caused universal friction with its neighbours and eventually even inside his own company. Foremost of our modern, business-oriented railwaymen, Huish ultimately crossed swords with an equally assertive figure, and one of the North Western's most powerful directors - the formidable Richard Moon - and so he was soon (1858) 'eased' into early retirement at Ventnor. There, he initially advised the infant *Isle of Wight Railway*- then later joined their Board in 1861 - as a co-director.

- SIR GEORGE FINDLAY : 1829 - 1893 -

Findlay was born at Rainhill, the son of a master stonemason who, as an assistant engineer, was then working at the famous skew bridge site on the *Liverpool & Manchester Railway*. Following his father's move to the Halifax Branch of the *Manchester & Leeds Railway*, Findlay was to be educated at Halifax Grammar School before, at the age of sixteen, being sent to assist his elder brother who was currently engaged by Thomas Brassey on the construction of the *Trent Valley Railway*.

Next, there came a period with contractors Bransome & Gwyther on *L.&N.W.R.* developments at Camden and Chalk Farm before, in the period 1847-9, a Brassey agent, Thomas Jones, employed him to work on the *North Staffordshire Railway* and its *Churnet Valley Branch* - whereupon Findlay displayed considerable tunnelling expertise. In 1849 Brassey put him in charge of the Walton tunnel on what was later to become the *Birkenhead Railway*.

Renamed at incorporation in 1846, construction of the first part of the *Shrewsbury & Hereford Railway* - the section from Shrewsbury to Ludlow - eventually commenced in 1850 with Findlay in charge of this work on behalf of Thomas Brassey. We have previously remarked that Robertson was the Railway Company's engineer - so it's assumed that the two engineers must therefore have worked closely together - and, having also noted that Brassey then "rescued" the ailing S.&H.R., the contractor next appointed Findlay as his Operational Manager for the Shrewsbury to Ludlow section.

On completion of the line to Hereford (1853) Thomas Brassey, having noted his managerial skills, made Findlay his Traffic Manager - to include all of the through traffic from Shrewsbury to Newport.

Under the joint railway leasing regime that was to succeed Brassey's tenure, the *L.&N.W.R.* subsequently recruited Findlay's services - but now as a direct employee - to be their District Manager for the Shropshire & S.Wales Region because, by the end of 1862, the '*North Western'* had already acquired control of the spectacular and strategically important (although still incomplete) *Merthyr, Tredegar & Abergavenny Railway*. A talented manager was therefore essential since, by such means, they had accessed much of the S.Wales coal and iron trade whereby, in a close alliance with the *Rhymney Railway* (including a joint extension and the use of various running powers), they were eventually able to reach Cardiff; here the *L.&N.W.R.* Tyndall Street goods station was later to be established, opening in October 1875.

George Findlay's transfer to Euston (1864) seemed inevitable: he was duly appointed General Goods Manager, and then Chief Traffic Manager - a specially created post which was calculated to retain his services until William Cawkwell retired from active management. Findlay was thereupon appointed General Manager (1880) and became the first such incumbent to be knighted in 1892: he was also a celebrated writer and lecturer of the day, being remembered both for his administrative talents and also his spectacular career from fairly humble origins.

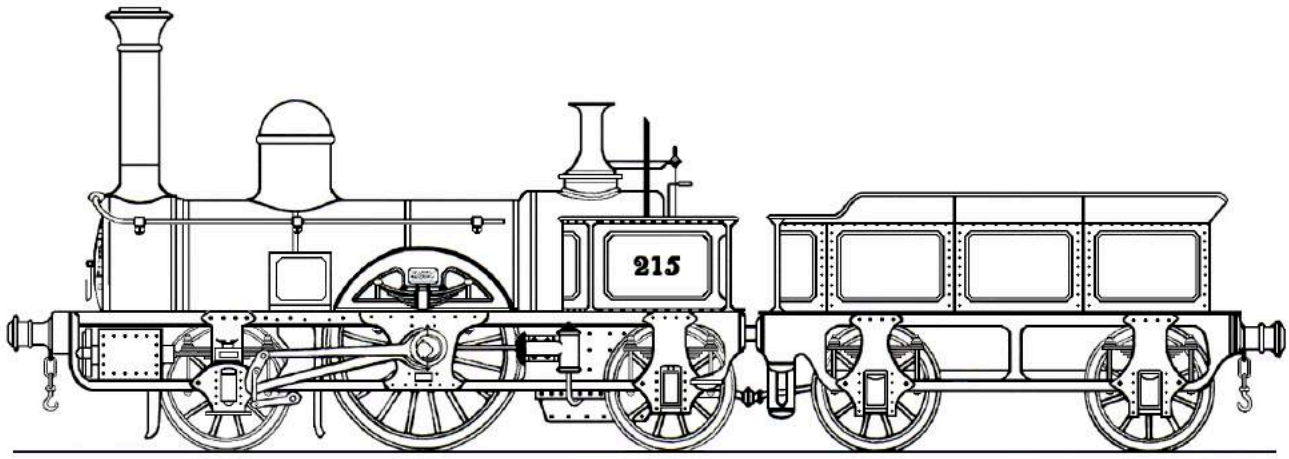
- THE VULCAN LOCOMOTIVES . . . of the S.&H.R.

The first *S.&H.R.* locomotives were supplied by the famous Vulcan Foundry, an early purpose-built locomotive works, strategically situated to serve the embryonic railway system around Warrington and Newton-le-Willows. Following the initial *L.&N.W.R. / G.W.R.* joint leasing agreement these Vulcan engines were presumably either retained by the contractor, sold on, or taken into joint-railway stock, although each company would subsequently introduce its own locomotive fleet when working the line. The coal traffic on the main-line route was formerly of prime importance, especially to the '*North Western'* - and increasingly so throughout the nineteenth century; this was despite the fluctuating trade cycles and other disruptive factors - frequently influenced by events overseas.

Early next century for example, given the submarine menace to coastal shipping during the Great War, the route fulfilled a crucial (safety) rôle in supplying steam coal to the transatlantic shipping on Merseyside and the other west-coast ports. Such traffic also included Admiralty coal for the Grand Fleet at Scapa Flow, which was shipped via Grangemouth, so that the (mainly *G.W.R.*) 'Jellicoe Specials' were a daily occurrence between Pontypool, Abergavenny and Warrington; at the latter place the *North Western* then took over the haulage, preparatory to a laborious climb through the Lune gorge and across Shap to Carlisle and the Firth of Forth.

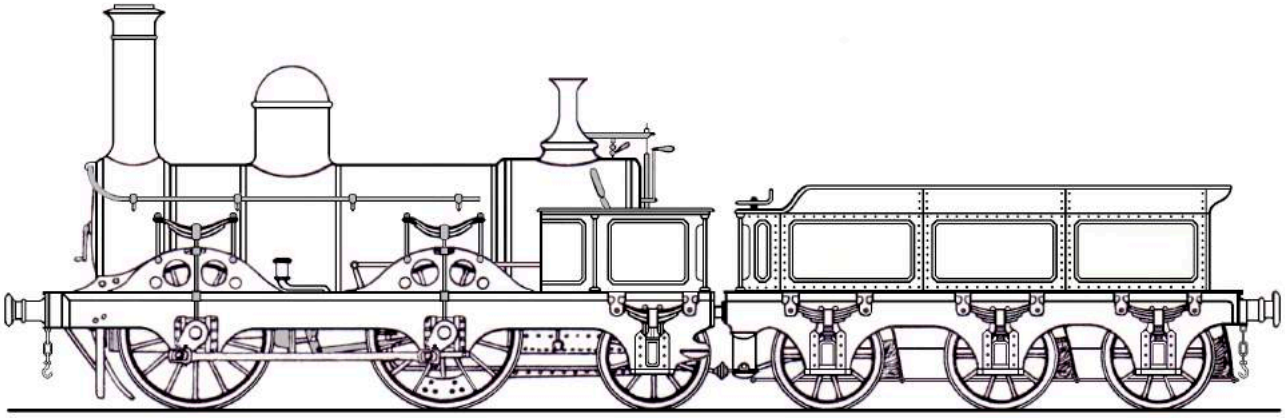
As a passenger route, the joint line was possibly less important, and certainly this was so for the *L.&N.W.R.*, who came to regard Crewe to S.Wales via Shrewsbury and the Marches as a suitable workplace for their demoted front-line express locomotives, previously employed on the prestigious London - West Coast main line. For this reason, some of the famous 'Webb compounds' were to complete their working days in this fashion - prematurely replaced, but always meticulously cleaned, polished and gleaming in their 'blackberry black' lined livery. Hereabouts, for the loco enthusiasts of the day, they provided a much more glamorous alternative to the average secondary-duties engines usually employed on such work.

Some years ago I was approached by the Hereford Museum – in preparation for their "S.&H.R. 150" Exhibition – to draw an example of each locomotive type originally deployed on the route:



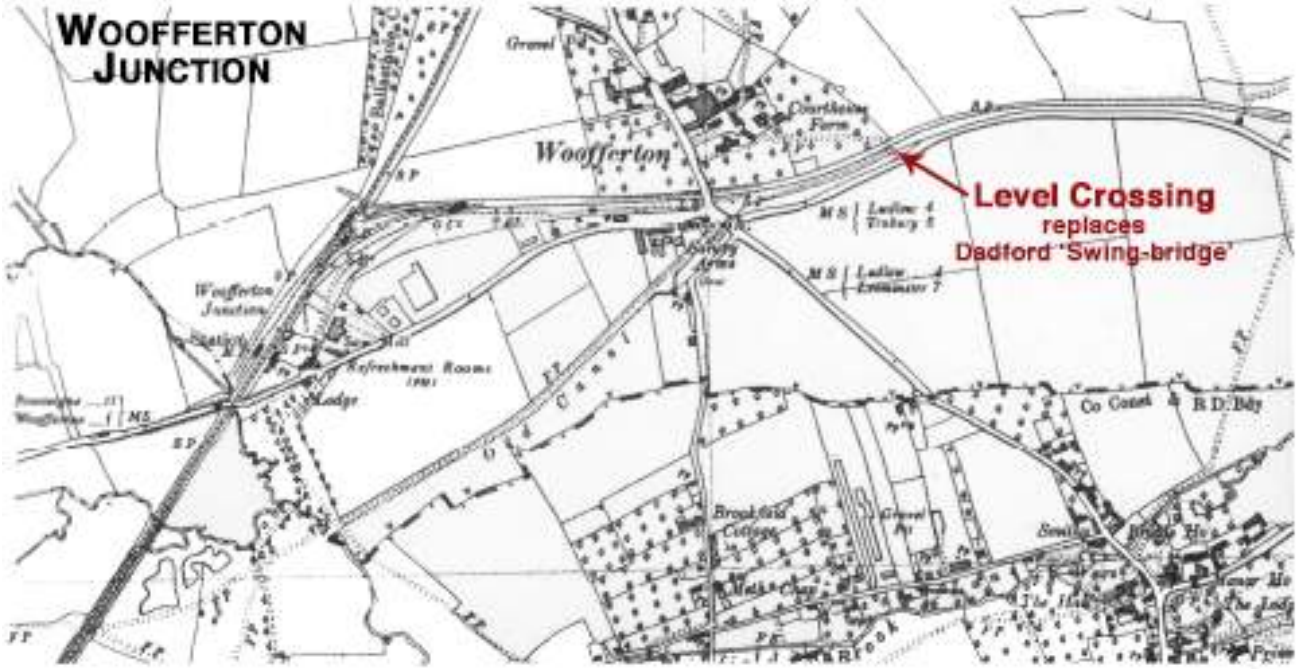
2-2-2 Express Locomotive . . . © J.G.Calderbank 2003

Archaic but speedy 'single-wheelers' were still commonplace in the 1850s, although this was a decidedly unorthodox design because the eccentrics were mounted on the ends of the driving axle outside the external frames - as were the steam chests and valve gear - whereas the two inside cylinders are hidden from view.



0-4-2 Mixed Traffic Locomotive . . . © J.G.Calderbank 2003

By contrast, this was a more conventional design, and very much in the Stephenson tradition. These engines would have served the local branch lines. Our W.N.F.C. Transactions indicate that the Club was swift to take advantage of the new railway network for their field excursions, and doubtless the membership was delighted with conveyance by an 0-4-2 Vulcan 'Iron Horse' – despite sometimes traveling in close proximity with sheep and cattle on the branch lines!



Ordnance Survey "Six Inch" 1884/85 Survey - 1938 edn.

- EPILOGUE -

Alas, the *S.&H.R.* branch lines have long since gone - victims, mainly, of Beeching's purge - and so it's no longer possible to travel from Woofferton Junction to Tenbury – nor through the delightful Wyre Forest to Bewdley in an rumbling, rattling (ex *G.W.R.*) railcar, as I very occasionally did when the snow was deep at Clows Top.

Neither can you journey by train from Leominster to Kington or Bromyard, nor proceed from Hereford to Hay and Brecon or perhaps to Ross-on-Wye and thereby to reach Gloucester or the Forest of Dean.

Fortunately, we still have several preserved railways nearby, but just imagine the tourist attractions of a (steam) railway from Hereford to Ross and then onwards to Symonds Yat, Tintern and Chepstow via the scenic lower Wye Valley!

Thankfully, Henry Robertson's breathtaking route through the Cambrian uplands - the *Central Wales Line* between Craven Arms and the Swansea district - still manages to survive, thereby providing invaluable service to places like Llandrindod Wells, and offering a scenic contrast with its more famous North Country counterpart - the (ex-*Midland Railway*) *Settle & Carlisle* line.

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MAPS: (*any maps included, quoted, or consulted – of varied survey and scale – are specified in the body text)*