by Richard Maund

Some names....

The crossing was usually referred to as Cambrian or Great Western crossing or Croesor crossing, depending on which railway one approached it from, but it is Cae Pawb ("everybody's field") crossing to both of today's railways.

There are two principal "Jones" in this story: **D G Jones** – David Griffith Jones – on 23 February 1922 was selected as Clerk to the Carnarvonshire (as it then was) County Council and also acted as secretary to the Representatives of the Investing Authorities, a committee of those local authorities who had been persuaded or coerced into loaning money to the Welsh Highland venture (their meeting minutes are archived with the county council minutes) – he had previously been the clerk to Gwyrfai Rural District Council and a member of the county council; **T D Jones & Co** was the London firm of solicitors which acted on behalf of the Council (one of the principals was T Ivor Jones). It is the latter firm's files, now archived at the National Library of Wales at Aberystwyth, that we have to thank for much of the information contained in this essay.

The road crossing next south of Croesor crossing was variously called Edwards' (after long-term tenants/crossing keepers), Traeth (Cambrian instructions 1921) or Traethmawr (GWR instructions). The Edwards family had moved by 1901 ¹ but it's not clear exactly when the crossing's name officially changed.

In the beginning (the pre-Cambrian era)

The Aberystwith and Welsh Coast Railway (A&WC) first sought powers to construct its railway from Barmouth to Pwllheli in the 1860/61 session of Parliament. Note the correct spelling, as shown in each of its five Acts of Parliament – railway historians seem to have taken it upon themselves to amend "Aberystwith" to more modern form ², without explaining why, while others misspell "Welsh" for some reason. The proposal was divided into two "Railways" – no. 4 from Barmouth to Portmadoc and no. 5 thence to Pwllheli. The end-on junction between the two was in a "field or piece of land forming part of the marshland" outside Portmadoc, south-east of the rock called Ynys Cerrig-duon. In the event, only railway no. 4 was authorised in the first Act, which received Royal assent on 22 July 1861. A year later, the A&WC had more success and the Portmadoc to Pwllheli section (now identified as Railway no. 7) was authorised by their Act of 29 July 1862. The only reference to a tramway in the Book of Reference deposited in November 1861 with the draft Bill was to the Gorseddau line – there was as yet no hint of the Croesor tramway. The standard gauge line did not actually open until 1867, by which time the A&WC had amalgamated with the Cambrian Railways.

Construction of Hugh Beaver Roberts' non-statutory Croesor tramway was under way, however, as early as April 1863 ³ and portions, at least, came into some sort of use later that year; an "official" opening date of 1 August 1864 is usually quoted ⁴. Roberts deposited the necessary documentation – including the plan of which an extract of sheet 3 is on the next page – in November 1864 to seek statutory powers, as the Croesor & Portmadoc Railway [C&P], both for his existing tramway and for a 1 mile 19 chain extension to Portmadoc wharves and Borth y Gest. Note that the Act renders Portmadoc as one word, not two, in the railway's title.

The C&P Plans & Sections (cover headed simply "Croesor Railway") were drawn by Charles Easton Spooner, described as Manager of the Festiniog Railway Co. These show the terminus of existing tramway as being just the town side of a weighing machine (grid reference 572393 - alongside where Beddgelert Siding was later located), about midway between Gelert's Farm and Pen y Mount. This spot also marked the commencement of the extension, as shown at the top of the plan extract on the next page. The broken line running across the plan, passing south of Ynys Cerrig-duon and marked "Authorized line of railway....", is railway no. 7 of the A&WC 1862 Act (as actually built it passes *north* of Ynys Cerrig duon, not as shown here); while there is a place for this on the Section accompanying the C&P plan there is no explanation. The C&P Book of Reference shows the Croesor's extension track bed as *already* "railway" (occupier: Hugh Beaver Roberts) for 3 furlongs (High Street crossing would have been just short of 4 furlongs) – in other words, construction of the extension had pre-empted their Act of 5 July 1865. Section 33 of that Act reads:

"33. The [C&P] Company shall not (except for the Purpose of the crossing the Railway of the *Aberystwith and Welsh Coast* Railway Company (herein-after mentioned as the Coast Company) near *Ynys-cerrig-duon* at *Portmadoc*) enter upon, take, or use any Land or Property of the Coast Company, or which that

¹ Welsh Highland Heritage – magazine of the Welsh Highland Railway Heritage Group (hereafter WHH) no. 42, p.2

² Bradshaw's Railway Guide adopted the modern spelling in 1867

³ Johnson, Illustrated History of the Welsh Highland Railway, 2009, pp.9-10

⁴ The Railway Year Book (various editions, presumably data supplied by the railway); Boyd {1}, Narrow Gauge Railways in South Caernarvonshire, Vol. 1, 1988, offers a choice of dates at pp. 89,99,100,101,117 and 143-Reference 1



Company are now authorized to take or use, without the previous Consent in Writing of the Coast Company under their Common Seal, and the Company shall not, without the like Consent, take or use for the Purposes of the Extension Railway by this Act authorized more Land between the Commencement thereof and the Point marked on the deposited Plans Three Furlongs and Six Chains than is sufficient for the Construction of a double Line of Railway on the mixed Gauge."

This indicates that the A&WC's powers over-rode those of the C&P so far as ownership of the site of the crossing is concerned but Stephens did endeavour, unsuccessfully, to pray it in aid some 65 years later. The C&P, incidentally, was stated to be operated as two units, either side of its original Portmadoc terminus ⁵.

Curiously, the standard gauge Beddgelert Railway – seeking powers in the same Session – showed on its deposited plan not only the *authorised* course of the A&WC with which it sought to form a junction, running south of Ynys Cerrig-duon,but also the A&WC's *actual* course – then under construction north of that rock – as "A&WC Embankment".

The A&WC obtained further powers with an Act of the same date (5 July 1865) as the C&P; the A&WC Deposited Plan and Book of Reference for their ultimately aborted harbour branch show subtle differences from the C&P Deposited Plan, although these are not relevant to the crossing (but seem to have led at least one recent historian to conclude that the C&P terminated alongside the Inner Harbour rather than where the C&P's own plans showed). While the crossing itself is not shown, the A&WC documents acknowledge that "Croesor Tramway" was already in existence at November 1864 (occupier misspelled as Henry Beevor Roberts) from the start of the C&P extension at least as far as Snowdon Mill. This Act also provided for the A&WC's amalgamation with the Cambrian; this took effect from 5 August 1866 so it was under Cambrian aegis that Barmouth – Pwllheli was eventually opened. This marked bringing into regular standard gauge use the crossing which had been *in situ* since at least March 1867 when the Board of Trade's Inspector, Capt. W H Tyler, had noted it with the comment that "accommodation" was required for the "signalmen" and that "Locked chock blocks should be provided on either side of the level crossing ... and distant signals to be worked in each direction." ⁶

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⁵ Boyd {1}, p. 116

⁶ The National Archives (hereafter TNA) MT29/28 folios 144-151

The Cambrian era

The standard gauge finally commenced regular services over the crossing on 20 September 1867 ⁷ – the day after the Board of Trade had given permission for the line to open for passengers – when the Carnarvonshire Railway started services between Carnarvon and Penrhyndeudraeth (with connections for Pwllheli). From 10 October 1867 the Cambrian started their service between Barmouth Junction and Pwllheli ⁸. It is possible that goods had started even earlier. On 19 August 1875, the Engineer's Report to the Cambrian Railways' Traffic & Works Committee (a sub-committee of their Board) stated that the Croesor Crossing signal cabin was "...dilapidated and a new one is necessary..." and he recommended "that a permanent one of brick the cost of which would be £16-0-0 [say over 100 times that at today's values ⁹] should be erected..." ¹⁰. While the report was "read" by the Committee the following day, no specific directive was given; in that the work was not "ordered", as in other cases, we must presume it was not undertaken ¹¹. It surely cannot be coincidence that the Board of Trade's Inspector, Col. J H Rich, had been in the area recently and submitted a report about the nearby Gorseddau Crossing – although this report makes no mention of the Croesor Crossing perhaps he had made some pithy comment on site to the Cambrian Engineer? ¹²

While some authors claim - without quoted provenance - that the signal cabin at the crossing was replaced in 1923, correspondence that May between the GWR and the WHR (see page 6) confirms that the cabin was not replaced that year. Indeed, it has been demonstrated very convincingly ¹³ that it dated from 1894, when Portmadoc Cambrian was resignalled, in particular to install improved interlocking in consequence of the requirements of the Regulation of Railways Act, 1889.

Maj. H A Yorke's report to the Board of Trade dated 20 July 1894 14 made the following references to Croesor Crossing:

"At the east end of this [Cambrian] station there are two tramways crossing the railway on the level. ... The second tramway crossing (known as the Croesor Crossing) is protected by signals in each direction and by safety points on the tramway, these signals and points being worked from a small signal box at the crossing containing 6 [six] levers of which one is spare. There is also a public road level crossing [Edwards'] a short distance east of the tramway which is protected by signals in each direction the signals being worked from a two lever frame at the crossing."

He then outlined the modifications required before approval would be recommended (items 1 and 2 did not affect Croesor Crossing):

- "(3) The [Up] distant signal for the box at Croesor crossing which is fixed on the same post as and below the starting signal of the East signal box at Portmadoc station should be dispensed with and in place of it the [Up] starting signal at the East signal box should itself be slotted from the box at the crossing.

 (4) There should be a gong fixed at Croesor Crossing and at the road crossing [Edwards'], both gongs to
- be sounded simultaneously by a lever in the East signal box so as to warn the persons in charge of these crossings when a train is approaching the crossings in either direction.
- (5) A code of gong signals should be fixed in the east signal box and at the two crossings for the information of the men concerned."

As originally installed by Duttons (the Cambrian's contractor), there was *no* spare lever in the Croesor Crossing frame – the plan supplied (see page 7) showed lever 4 as working a gong to East cabin but this clearly would have became redundant in the light of Yorke's requirement no. (4), above. At East Cabin, however, lever 5 was spare so presumably this was commandeered to meet his requirement. Yorke (promoted to Colonel during autumn 1894) insisted on re-inspecting the work (along with other Cambrian resignalling works) and reported on 26 January 1895 that he was satisfied.

From this we might be entitled to assume that his requirement about the gongs had been carried out but some mystery surrounds this. The plan mentioned had been annotated in pencil to the effect that the gong, worked by Croesor Crossing lever 4, had been moved from a position near East Cabin to Edwards' crossing. There are no instructions for use of such a gong in the Cambrian appendix to working timetable dated 1 June 1911 whereas there *are* in that dated 1 June 1921 – and Lt.Col. Mount found Croesor Crossing lever 4 working a gong to Traethmawr in 1923. It seems most likely that the Cambrian persuaded Yorke - in January 1895 - to accept that Croesor Crossing would relay messages from East Cabin (this implies that he omitted to minute that fact, merely pencilling the amendment on to the Board of Trade's copy of the plan). Alternatively, perhaps the

⁷ Carnarvonshire Railway advertisement in *Carnarvon & Denbigh Herald* of 28 September 1867

⁸ Cambrian's opening service poster: TNA RAIL 923/1

⁹ from www.measuringworth.com/ukcompare/ on an historic opportunity cost, GDP deflator comparison

¹⁰ TNA RAIL 92/25

¹¹ TNA RAIL 92/9

 $^{^{12}}$ TNA MT 29/36 folio 304

¹³ by Edward Dorricott – see his essay which follows at page 27, below

¹⁴ Original at TNA MT 6/685/12; transcribed version at TNA MT 29/56 folio 287

arrangement proposed by Yorke *was* duly installed in 1894 but proved troublesome and was later replaced. In either case, why did the Cambrian fail to mention gong signals to Traeth crossing in their 1911 appendix?

Note that the Cambrian seems to have used the term "cabin" in earlier days (it was ambivalent by 1911) whereas the GWR used "box" or "ground frame" to describe such structures – a plate labelled "Croesor Crossing Ground Frame" was ordered 15 .

Likewise, the original crossing track fitment must have been replaced by the Cambrian at some date – certainly between 1880 and 1902 because their engineer's report 16 of rail then over 22 years old did not include the crossing. However, if the fitment eventually taken out on 28 October 1928 (see page 13) really was manganese steel (as Mount was told in May 1923 and so noted in GWR records) it could not have been manufactured until ca.1902 17 .

The C&P progressed through various changes of name and ownership (which need not concern us here) ending up as part of the Welsh Highland Railway (Light Railway) when that company was incorporated by the Light Railway Order of 30 March 1922 ¹⁸. Meanwhile, on 3 March 1922 the Railways Amalgamation Tribunal approved the agreed amalgamation of the Cambrian and four other railways into the GWR, back-dated to 1 January 1922, thus pre-dating by a year the 1923 Grouping of the main-line railways. As opening of the WHR Portmadoc extension approaches, the two protagonists are now the highly optimistic (but impecunious) WHR and the comfortably complacent (but powerfully affluent) GWR. Narrow gauge horse-drawn goods trains had been operating over the crossing without any apparent disharmony and without payment of any fees or charges to the Cambrian for nearly 60 years but that was to change....

The Welsh Highland arrives

In the run-up to the start of passenger trains over the line between South Snowdon (Rhyd Ddu) and Portmadoc, including the crossing, refettling work on the erstwhile tramway section was undertaken by Sir Robert McAlpine & Sons, the contractors ¹⁹. Although the contract provided for work to be undertaken on either side of the crossing, there is no mention of the crossing fitment itself. However, a request to the GWR Engineer to slue the crossing produced the response ²⁰ that this would cost the WHR an estimated £200; an internal WHR memo comments: "...there is a slight crack in the crossing casting and perhaps [the GWR] are providing for a new crossing altogether." There is no evidence the offer was ever taken up – and, indeed, there is no evidence of any change being made to the crossing, either at WHR request or by GWR initiative, until 1928.

On 2 May 1923, James (later Sir James) Milne, the GWR's Assistant General Manager, told the WHR that a signalbox (estimated cost £780 [say over £40,000 at today's values ²¹] and signalmen (annual staff cost £366 12s 0d) would be necessary, and requested confirmation that WHR would meet those costs. Milne had had dealings with the Welsh Highland's light railway order application when he was employed for a couple of years as Director of Statistics at the Ministry of Transport before rejoining the GWR, and he seems to have been behind (or certainly supported) the GWR's robust attitude towards the narrow gauge line. The copy of this letter in Welsh Highland files ²² is endorsed (apparently by Septimus Edward Tyrwhitt ²³, their General Manager) to the effect that the Railway Inspectorate had indicated that they would *not* require signalling at crossing – and so it duly turned out.

The GWR District Traffic Manager at Oswestry – responsible for the Central Wales Division (in essence the former Cambrian system) – drafted his proposed instructions for use of the crossing ²⁴ in readiness for the Ministry of Transport's Inspecting Officer of Railways, Lt. Col. Alan H L Mount's (later Sir Alan) forthcoming visit. After a false start ²⁵, the inspection took place on Thursday 24 May 1923, and Mount's report is dated the following Tuesday, 29 May. He describes the crossing and its signalling facilities, including:

"Up to a short time ago a woman was in charge of the crossing and the arrangements worked satisfactorily. A porter signalman has now been placed in charge of the crossing by the GWR and a telephone has been [note the tense – the work thus pre-dated Mount's visit] installed and is shortly to be placed on a separate circuit. By means of the telephone the crossing keeper will ascertain from the

 $^{^{\}rm 15}$ Dunn, Great Western Railway Signal Box Nameplates, 2004

¹⁶ Cambrian Engineer's Report dated 10 November 1902 (TNA RAIL 92/71 folio 395 et seq.)

 $^{^{17}}$ Supplement with WHH no. 46, p.9

 $^{^{18}}$ Boyd {2}, Narrow Gauge Railways in South Caernarvonshire, Vol. 2, 1989, p.4

¹⁹ WHH no. 55, p.6

²⁰ Letter from GWR General Manager 2 May 1923 (Gwynedd Archives XC2/33/64)

 $^{^{21}}$ from www.measuringworth.com/ukcompare/ on an historic opportunity cost, GDP deflator comparison

²² Gwynedd Archives XC2/33/64

²³ WHH no. 43, p.4

²⁴ TNA MT 6/3286; on 13 June he issued the definitive version (see below)

²⁵ "...it has been found that the 2ft. gauge track alongside the crossing of the Gt. Western Railway Company's line ... will require repair..." (letter Douglas Fox & Partners to Ministry of Transport, 14 May 1923: TNA MT 6/3286)

signalman at Portmadoc East whether the main line section is clear and will obtain permission to operate the crossing" (i.e. when required for the passage of a WHR train)

He continues: "...provided ... the following requirements are met, and the regulations drawn up by the GWR are strictly complied with ... the arrangements mentioned above provide adequate security as a temporary measure: (1) The trap points on the north side to be shifted outside the GWR boundary; (2) Long cattle guards to be provided in place of the existing gates; and, if a right of way exists along the light railway at this point, stiles should also be erected [they were] to enable pedestrians to pass over the fencing; (3) Stop boards illuminated at night to be placed outside the trap points [i.e. on the WHR line]; (4) The crossing to be in the sole charge of the GWR. Under no circumstances are light railway trains or engines to pass over the crossing without first coming to a stand at the stop board; (5) After ascertaining that the trap point is in its correct position, a [WHR] driver to be permitted to cross only under a hand signal from the GWR signalman. When authorised, the movement to be made without delay."

Mount went on to say: "If, however, after experience it is found that these arrangements are not satisfactory and that delay occurs, further measures such as the introduction of staff or other instruments and the alteration of the position of the down distant signal will be for consideration. Similarly, the gates may have to be re-introduced if cattle guards are found to be ineffective." ²⁶

Note that the GWR must have made the decision to install a telephone in advance of Mount's visit, without (so far as we know) prior consultation with the WHR, for their own operational purposes. They are known to have found Cambrian equipment not up to GWR standards and set about steadily up-grading it throughout that system 27 – but then they had deeper pockets than the local company! There appear to be no requirements imposed by Mount on the GWR (other than involvement in the WHR's movement of the north side trap points), despite what they subsequently claimed when demanding money from the WHR. However, we do not know what may have been said (but not recorded) between Mount and the GWR officials (led by Henry L Wilkinson, the assistant Superintendent of the Line 28) present on 24 May.

REGULATIONS FOR CROSSING THE GREAT WESTERN RAILWAY AT PORTMADOC.

A driver failing to comply with this regulation will render himself liable to dismissal.

- (2). When a train may cross the Great Western Railway, the Great Western Signalman will display a green flag by day and a green light by night as an "all clear" signal.
- (3). On receiving the "all clear" signal from the Great Western signalman, the driver, after seeing that the points are set for his train to pass, will take his train over the crossing without delay.
- (4). Drivers must exercise the greatest caution in approaching and crossing the Great Western Railway line.
- (5). The Stationmaster, or person in charge, of Portmadoc New Station must personally see each train in both directions over the crossing and report any irregularity in working.
- the crossing and report any irregularity in working.

 (6). The Stationmaster or person in charge must see that the lamps on the stop boards are lighted while trains are running during the hours of darkness.

S.E.TYRWHITT.

PORTMADOC 28th May, 1923.

²⁶ Original at TNA MT 6/3286; transscribed version at TNA MT29/81 folio 150, quoted in Boyd (2), p.28.

²⁷ *GWR Magazine* reported that signal & telegraph maintenance on former Cambrian lines was taken "in house" from contractors, J B Saunders, by GWR from 25 March 1923 and introduction of GWR-style instruments [e.g. Harlech – Llanbedr spring 1923, Portmadoc East – West summer 1923]

²⁸ Wilkinson went on to become the GWR's Superintendent of the Line, retiring in 1936, dying in 1954

On 28 May, in anticipation of a favourable report by Mount, the WHR issued the above instructions 29 for use of crossing (these were also incorporated as para. 13 of "WHR Instructions for Working" dated May 1923 30). The mis-spacing in the heading is as in the original – the remainder of the text is rendered as closely as possible to the original.

That same day, the GWR wrote again ³¹, recognising what had transpired during the inspection and agreeing that no new signalling arrangements would be needed after all - apart from provision of a telephone circuit "at the cost of your Company". There was no mention of the crossing fitment itself. From later evidence ³² it seems this was the first formal advice the WHR received of a requirement for a 'phone circuit (which was purely internal to the GWR) – even though Mount's report states that it had already been installed! Two days later – doubtless under pressure from his Directors to ensure his railway opened as soon as possible – Tyrwhitt replied ³³ to the GWR in the following terms:

"I ... note that, for the time being, you agree to the existing signalling arrangements remaining and the provision of a new signal box being deferred subject to an independent telephone circuit being provided between Portmadoc East and Penrhyndeudraeth with connections, as stated.

I note also that you agree to cattle guards being used in lieu of gates at the crossing and that you will not press for heavy permanent way material being provided up to the boundary.

It is understood that the cost of the necessary alterations at Portmadoc Crossing and that of the staff will be borne by this Company. I take it that the cost of staff that will be debited to this Company is the wages of the signalmen now employed less the cost of the woman crossing keeper employed formerly."

In reporting the exchange, Tyrwhitt got a rocket from Evan Robert Davies (a Director and the WHR company legal adviser) for, during the inspection on 24 May, the GWR's representative had been told that "terms for manning the signal box would be reserved for discussion at Paddington". Tyrwhitt was admonished that "... it is unfortunate that you conveyed the impression...that the [WHR] is prepared to pay the wages." Clearly Tyrwhitt had not been kept informed of what had been said by his Directors – a surprising omission for so small an organisation. No-one, however, had the wit to actually withdraw his letter. In 1928 the GWR stated ³⁴ that the letter "...merely raise[d] by way of enquiry whether [GWR] will concur in the deduction of the woman crossing keeper's wages. That was never agreed...". And yet this letter formed the basis of the GWR claims against the WHR until they finally conceded ³⁵ in 1930 that the GWR "did not now rely on [this] letter from Mr Tyrwhitt as an agreement". Despite this, Tyrwhitt has been unjustly accused by historians and commentators of saddling the WHR with heavy costs for the crossing ³⁶. He was more circumspect in his reply to GWR demands that the WHR pay for works at an estimated cost of £210 – on 16 June 1923 he simply acknowledged that this had been "referred to my Board"; engineering matters were, at this date, within Lt. Col. Holman Fred Stephens' bailiwick anyway.

The formula used for the Ministry of Transport's "fence-sitting non-disapproval" response to the company's application to open the line for passenger traffic is well documented elsewhere, and so the WHR duly opened on Friday 1 June 1923 ³⁷. No copy of the published timetable appears to have survived, but a draft, submitted on 10 May by the afore-mentioned E R Davies to the Ministry of Transport, is in The National Archives ³⁸.

That autumn, *The Railway Gazette* ³⁹ published an unattributed, illustrated article in which appears the well known photograph *(photo 1, page 19)* of an England loco. hauling an Up ⁴⁰ narrow gauge train across the GWR, with the signal lineman up the telegraph pole and the GWR signalman standing by with his flag.

²⁹ TNA MT 6/3286

³⁰ Copied in Boyd {2}, p. 72 and in *WHH* no.28, p. 3

³¹ Gwynedd Archives XC2/33/64

³² Counsel's Opinion dated 21 June 1928 (Gwynedd Archives XC2/33/16)

³³ Gwynedd Archives XC2/33/64

 $^{^{34}}$ Letter 26 October 1928 GWR Solicitor to T D Jones & Co

³⁵ Reported in letter 16 January 1930 T D Jones & Co to D G Jones

³⁶ Johnson, p.64

³⁷ Cambrian News, 8 June 1923

³⁸ TNA MT 6/3286

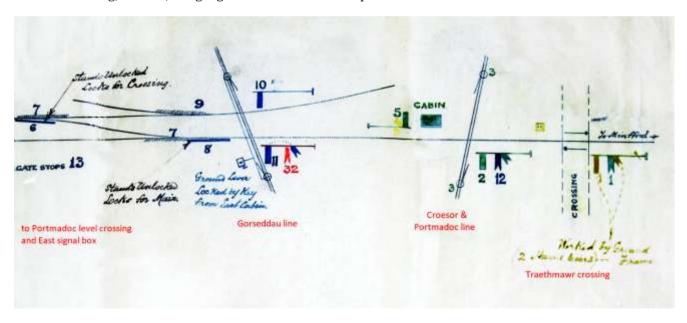
³⁹ The Railway Gazette, 26 October 1923, pp. 513-520

⁴⁰ The WHR's Up direction was towards Portmadoc (and Blaenau Ffestiniog); Down was towards Dinas Junction

Operating the crossing

In Cambrian days the crossing seems to have been treated in rather the same fashion as a minor road level crossing. Some details of the staff resident in the adjacent cottage, obtained from census records, have been published ⁴¹, and latterly a woman crossing keeper was employed at 15s 0d a week ⁴². Continuous (during train operating hours) cover was required of the keeper (with provision of a cottage as part of the *quid pro quo* as with road crossing cottages). The requirement to relay gong messages to Traethmawr crossing (*see page 3*) would also require that duty to be continuous. According to the Cambrian's first appendix to their working timetable dated April 1885 there was gong communication between Croesor Crossing and "Mr. Edward's level crossing" and between Croesor Crossing and Portmadoc station (although the codes are not spelled out). By the time of the issue dated 15 June 1888 (also those dated 1 July 1889 and 1 July 1890), gong communication was then in place: from Croesor Crossing to Edwards' Crossing: 2 beats denoted passenger train approaching, 3 beats goods train and 4 beats light engine (all Up movements, of course - i.e. towards Penrhyndeudraeth); from Croesor Crossing to Portmadoc station: the same numbers of beats denoted Down movements approaching. These arrangements, however, would have been superseded by the arrangements required by Maj. Yorke's 1894 report, as discussed on page 3.

The Cambrian's appendix to working timetable dated 1 May 1896 provides solely for gong communication between East Signal Box (sic) and Croesor Crossing: 2 beats for train entering section. As this event would be known only by the East signalman, it must represent messages from East to the crossing (although it could represent both Up and Down Cambrian trains). The moment of "Train entering section" seems rather late in the proceedings to warn the crossing keeper of an Up train, but it is the only gong signal quoted. The same applied in the Appendix dated 1 June 1911 but the issue for 1 June 1921 provides for gong communication "between Portmadoc East Signal Box and Croesor Crossing [and] between Croesor Crossing and Traeth (sic) Crossing": again, 2 beats for train entering section. At this stage, certainly, Croesor Crossing was required to be staffed whenever Cambrian trains were running, to relay messages to "Traeth" crossing. The Croesor crossing keeper must, therefore, have been on continuous duty (apart from nights and Sundays when no trains were booked). This point should have been of considerable significance for the WHR/GWR 1923 discussions over costs. At Croesor Crossing, at least, the gong was removed after the phone had been installed in 1923.



On the plan provided for the 1894 resignalling ⁴³ (part reproduced above) the signals controlled from the "East Tramway Crossing" (as Croesor crossing had been labelled) cabin are shown in green, those from Edwards' ground frame (the Traethmawr road crossing) in yellow (but alas do not reproduce well) and those from Portmadoc East cabin in blue.

⁴¹ WHH no.42, p.2; details for 1881, 1891 and 1901. 1911 details were not available at the time that article was prepared but we now know that in that year, 71 year old Isaac Pugh and his wife worked the crossing, for 5s. 0d. a week with cottage thrown in (£13 a year, when the Cambrian Directors were awarding themselves fees of £500 a year – perhaps 100 times that at today's values).

⁴² Letter 9 March 1925 Robert Evans to H F Stephens (Gwynedd Archives XC2/33/64)

⁴³ TNA MT 6/685/12 Plan dated 6 March 1894, signed by the Cambrian's engineer 6 July 1894.

The six levers in the Croesor cabin worked and were interlocked as follows:

- 1. Down distant (slotted by Edwards' road crossing's Down stop signal) (backlock 2)
- 2. Down stop (on same post as Portmadoc East Down distant and slotted with it, until the latter was "fixed" by the GWR) (release 1, lock 3)
- 3. Narrow gauge trap points (lock 2 and 5)
- 4. Gong to East Cabin. Notionally made redundant by Yorke. The gong is shown on left hand edge of extract of the plan, above, near the Portmadoc station level crossing but someone perhaps Yorke? had marked in pencil for it to be moved to Edwards' so the lever would have worked a gong to Edwards' crossing instead see commentary above.
- 5. Up stop (slotted by Edwards' road crossing) (release 6, lock 3)
- 6. Slot on Portmadoc East (after 1932 plain Portmadoc) Up starter (both cabins had to pull their respective levers before the arm would show clear). As installed by Duttons this lever would have worked an Up distant arm below the Portmadoc East Up starter but Yorke required this to be replaced by the slot (this prevented a GWR Up train leaving the station until the route across Croesor Crossing was clear). (backlock 5)

It is not clear how the two gongs *from* Croesor Crossing had been worked (presumably two separate levers) before being made redundant in 1894.

There is no reference in the GWR's 1923 instructions quoted on page 9 to gong signals being given to Traethmawr (whether by oversight or otherwise), and clearly the gong worked by lever 4 had ceased to play any meaningful role by the time Croesor Crossing was reduced to being staffed only during hours of WHR movements from autumn 1924 (see page 11) – any role of relaying messages would be rendered redundant simply by installing a 'phone at Traethmawr and making the Portmadoc East signalman responsible for keeping both Croesor and Traethmawr crossings advised, as Yorke had envisaged back in 1894 (albeit by different technology!).

As Mount found, the *interlocking* properly prevented the narrow gauge trap points being opened while any standard gauge signal was at clear, and while the traps were open, no standard gauge signal could be cleared. When the crossing box was unstaffed, and the standard gauge signals were all at clear, it would not be possible for the narrow gauge to cross. There was, however, clearly no *interlinking* to prevent a crossing move being made while the Portmadoc East – Penrhyndeudraeth section was occupied, so this relied on the competence of the GWR signalling personnel, the woman crossing keeper being kept in touch with GWR train running by gong: there is no evidence of any repeater of the block instruments or bells. However, modernity arrived at Croesor Crossing in Spring 1923 in the shape of a telephone linked to the omnibus circuit, as mentioned in Mount's report, to replace the gong from Portmadoc East. That 'phone was replaced (or supplemented) by a dedicated circuit – presumably the "works" for which the GWR endeavoured to charge the WHR £150 – or was it £210? (see below). It seems the crossing box was repainted in winter 1923/4 into GWR colours and again twice subsequently. The reference in Boyd 44 to "the former being added" by the GWR is incorrect, whether it refers to an Up signal or a new box.

The Cambrian seems to have accepted its place as second comer (also analogously with a road crossing) by bearing all the costs associated with the crossing – maintenance and operation. So long as the narrow gauge traffic was ambling horse-drawn movements the analogy and arrangements were not out of place. When the Light Railway Order was being consulted upon, no-one at Oswestry (perhaps more concerned over the impending demise of their company?) seems to have considered the implications of the changes the WHR would bring: "real" trains hauled by mechanical power. Indeed, the main line companies at the public hearings seem to have been more concerned about which way interchange traffic with the new line would flow. So the Cambrian arguably missed an opportunity to secure concessions from the then highly optimistic WHR. When the GWR took up the reins, the differences upon which they chose to latch were (a) the introduction of passenger services, and (b) extended hours of operation. Later, despite the inconvenience to their passengers, from 1929 to 1933 the WHR Receivers (Stephens, with Iggulden and Griffith - probably unthinkingly - following suit) responded simply by not using the crossing for passenger trains.

The GWR's definitive instructions, shown on the next page, for use of the crossing were issued from Oswestry, dated 13 June 1923 (Ref. SW2112) 45 , headed "Croesor Railway Level Crossing near Portmadoc East Box", and a copy was submitted to the Ministry on 18 June.

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⁴⁴ Boyd {2}, p. 72

⁴⁵ TNA MT 6/3286

The Croesor Railway Level Crossing will be in the charge of a Porter Signalman, who will hand-signal all the Welsh Highland Railway trains and engines over the crossing.

Permission must be obtained from the Signalman at Portmadoc East Box by means of the telephone, before any of the Welsh Highland Railway trains of engines are allowed to pass over the crossing, and the Porter Signalman at Croesor Crossing must send the following message:

"May Welsh Highland Railway Train (or Engine) pass over the Crossing?", and if permission can be given the Signalman at Portmadoc East Box will reply:"Yes, Train (or Engine) may pass over the Crossing."

If permission <u>cannot</u> be given, the reply must be "No", and the man in charge of Croesor Crossing must exhibit a red flag or light to the Driver of the Welsh Highland Railway Train or Engine.

The telephone messages must in all cases be repeated by an exact repetition, and the time sent and received recorded in the Train Register Books.

When permission is received, the Porter Signalman must place the Main Line Signals to danger, and after the Welsh Highland Railway Up or Down Train or Light Engine, as the case may be, has come to a stand at the Stop Board fixed near the Catch Points, he will - provided the line is clear - close the Catch Points fixed on the Welsh Highland Railway, and exhibit a green flag or light for the passage of the Welsh Highland Train or Engine.

As soon as the Welsh Highland Railway Train or Engine has passed over the Crossing clear of the Catch Points, the Catch Points must be opened, the Main Line Signals placed in the "All right" position, and the Signalman at Portmadoc East Box advised accordingly.

When practicable, permission for the use of the Crossing should be obtained when a Welsh Highland Railway Train or Engine is seen approaching from the direction of Beddgelert, or as soon as a Train or Engine whistles to cross from the direction of the Harbour; the Catch Points however must not be closed until the Train or Engine has been brought to a stand at the Stop Board near the Catch Points.

The Signalman at Portmadoc East Box must not give permission for a Welsh Highland Railway Train or Engine to pass over the crossing if a Down Passenger Train has been accepted from Penrhyndeudraeth, or the Signals have been lowered for an Up Train to leave the platform or yard for the direction of Minffordd. The crossing may also be used for five minutes after a Down Goods train has left Penrhyndeudraeth.

Except during foggy weather or falling snow, if it is found necessary for a Welsh Highland Railway Train or Engine to pass over the crossing before a Workmen's Train proceeding from Portmadoc to Minffordd only, has returned to Portmadoc East Box, or before a Goods Train or Light Engine proceeding from Portmadoc Granite Siding or Minffordd only, has returned to Portmadoc East Box, this may be permitted up to the time such Train or Engine is observed leaving or passing Granite Siding on the return journey.

Drivers of Trains, or Light Engines, proceeding from Portmadoc East Box to Granite Siding, or Minffordd only, and returning without going through to Penrhyndeudraeth, must when the Electric Train Tablet for the Portmadoc and Penrhndeudraeth Section is handed them, be verbally instructed by the Signalman that on the return journey they must regard the line as clear to Traethmawr Railway Level Crossing Down Home Signal only.

The Welsh Highland Railway Trains and Engines, when approaching, or waiting to use the Crossing, will give the following whistles:-

Up Trains or Engines - 1 long: 2 short.

Down Trains or Engines - 2 long: 1 short.

Note (a) that there were no such "Workmen's Train proceeding from Portmadoc to Minffordd only" in the 1923 GWR working timetable, (b) that the reference to "Traethmawr Railway Level Crossing" resulted from an erroneously carried forward amendment from the draft document (it should presumably have read "Croesor Railway Crossing"), (c) the lack of reference to gong(s) and gong signals, and (d) the implication that the standard gauge signals would normally stand at "clear".

The net effect was that the WHR could cross at any time the crossing box was manned except:

- a) when Portmadoc East Up signals had been cleared (i.e. for train towards Barmouth)
- b) after a Down GWR passenger had been accepted by Portmadoc East from Penrhyndeudraeth
- c) more than 5 minutes after a Down GWR goods had left Penrhyndeudraeth

Note, therefore, that a narrow gauge train could cross even with a Down goods approaching in section from Penrhyndeudraeth. Further, pilots (local goods shunt movements) working between Portmadoc and Granite Siding or Minffordd did *not* count as "obstructions" for WHR crossing movements. The narrow gauge movements were, of course, protected by the GWR semaphore signals. In effect, any GWR Down train involved in a crossing at Penrhyndeudraeth could not have been belled and accepted before the signalman there had received and restored the token from the Up train. But where no crossing was involved, the Down train *could* have been belled forward as soon as accepted from Harlech. Thus, the *minimum* "closed" periods for WHR crossing movements would be:

- Down GWR train: period of occupation of the Penrhyndeudraeth Portmadoc East section plus 2 minutes prior for Down passengers or minus 5 minutes for Down goods.
- Up GWR train: about 2 minutes prior plus about 5 minutes after booked departure from Portmadoc. The crossing box was not a Block Post and was, in effect, given permission to allow crossings by the Portmadoc East signalman.

A tabulation of the relevant movements during WHR operating hours for that first summer's main timetable from 9 July to early September 1923 - follows, with GWR trains in black normal font, WHR trains in red italics (without Penrhyn times, of course). The timings are at the GWR and WHR 1923 stations respectively, rather than at Croesor crossing. Conflictions are in **bold type** and highlighted in yellow. X denotes a crossing movement at Portmadoc or Penrhyndeudraeth on the standard gauge. Needless to say, in the working timetables from which these details have been drawn, all times were shown in 12 hour clock. On the GWR, Up is towards Penrhyndeudraeth while Down is towards Portmadoc; on the WHR, Up is towards Portmadoc and Blaenau while Down is towards Beddgelert. WHR ran no regular trains on Sundays (and nor did the GWR south from Portmadoc). This tabulation also shows potential connections between the two railways' passenger services.

	1		
Penrhyn	Portmadoc	Penrhyn	Direction/type
	0644	0653	Up Passenger
	0715		Down Goods
pass	0745		Down Goods
0819	08X28		Down Passenger
	0830		Up Goods
	08X36	0846	Up Passenger
	0845		Down Passenger
	0926	pass	Up Passenger
	1018		Up Passenger
1015	1023		Down Passenger
	1047	pass	Up Passenger
	1053		Down Passenger
	1105	1114	Up Passenger
	1222		Up Passenger
	1227	pass	Up Passenger
1302	1311		Down Passenger
	1330		Down Passenger
	1337	1346	Up Passenger
	1350	1407	Up Goods
	1420	1439	Up Goods

Penrhyn	Portmadoc	Penrhyn	Direction/type
1415	1430	3	Down Goods
	1505		Up Passenger
1503	1515		Down Passenger
	1555		Down Passenger
pass	16X27		Down Passenger
	16X36	16X45	Up Passenger
16X46	1655		Down Passenger
pass	1722		Down Passenger
	1730		Up Passenger
pass 17/43	17X52		Down Passenger
	18X00	18X12	Up Passenger
18X17	1827		Down Passenger
	1830		Down Passenger
1847	18X58		Down Passenger
	19X05	1915	Up Passenger
1946	1956		Fridays: Down Excursion
	2005		Up Passenger
2014	20X22		Down Passenger

It is of interest to note that the train running report form issued for WHR train crews' use contained the following instruction: "Delays at G.W. crossing and waiting connections to be noted specially".

Stephens issued new Festiniog and Welsh Highland (Light) Railways Working Instructions from 1 October 1925, which included:

"44. No engine or train must cross the Great Western Railway at Portmadoc without permission from the signalman, who will exhibit a green flag by day, and green light at night. All up trains must stop dead near the safety points, and remain there until signalled to proceed. When trains require to cross, the driver must call the attention of the signalman, by engine giving two long and one short whistles for the down trains and one long and two short, for the up trains." 46

It has been observed 47 that the crossing had no catch points to prevent errant narrow gauge movements fouling the Cambrian line until the resignalling in 1894 (which was undertaken in consequence of the Regulation of Railways Act), and that facing point locks were not then required for the new catch points because the narrow gauge was not a passenger line. When the Welsh Highland opened for passenger business in 1923 such locks were still not necessary – but the reason now was that the narrow gauge line was under the provisions of Light Railway legislation.

⁴⁶ TNA RAIL 1057/2846/7

⁴⁷ WHH no. 48, p. 2

The arguing starts....

On 4 June 1923 the GWR General Manager wrote that "...it will be necessary for the two porter signalmen to be stationed at Portmadoc level crossing instead of the woman crossing keeper ... and it is understood the expenses of these men will be borne by Welsh Highland Railway." This, of course, reflected the much extended hours of narrow gauge operation over the crossing – even the most partisan Welsh Highland supporter could hardly find it reasonable for the WHR to expect the Great Western to meet the costs involved, and this is doubtless what Tyrwhitt recognised in his letter of 30 May. However, no WHR officer (apparently not even Robert Evans) – then or later – seems to have asked the question: why was a crossing keeper on continuous duty to be replaced by two shifts of porter signalmen on higher wages? As Evans' letter ⁴⁸ in March 1925 demonstrates, they knew (or should have known) that the female crossing keeper's duty here had had to be continuous, rather than single shifted. So why did they make nothing of such a negotiating point? ⁴⁹

The GWR letter promised a draft formal agreement (which was eventually submitted on 23 October 1923 ⁵⁰) and was followed up by a further letter on 13 June 1923 advising that they had instructed installation of a phone circuit Portmadoc – Penrhyndeudraeth "...rendered necessary by the institution of a passenger service over the WHR..." at an estimated cost of £210 to be borne by WHR. There is no mention of such a requirement in Mount's report – indeed, it seems already to have been installed by then (although perhaps a *dedicated* circuit replaced or supplemented the omnibus circuit) but, again, WHR officers don't seem to have noticed – even though Nicholls and Stephens did question what difference narrow gauge passenger (as opposed to goods) trains made to the requirements for protection of GWR trains against conflict at the crossing. Meantime, as we have seen, Tyrwhitt kicked this letter into touch as having been "referred to my Board". A further letter from Paddington on 26 July advised that "...to properly safeguard the working of traffic over this crossing, it is necessary to carry out certain alterations to the signals at estimated cost of £150. This expenditure is solely brought about by the running of a passenger train service by the WHR." Note particularly the last sentence which was of significance for all that follows. Incidentally, it is not clear whether this is the telephone work previously estimated at £210, because no alterations to signals were called for by Mount (again the WHR seems to have failed to ask the question...).

John May succeeded Tyrwhitt in the hot seat at Portmadoc - and Eric Harry Raymond Nicholls succeeded him 51 - but no progress was being made on the discussions with the GWR. On 13 August 1924 Nicholls lobbed in the red-herring that the Croesor tramway had predated the Barmouth - Pwllheli line and hence the GWR predecessor "necessitated" the crossing, and - perhaps more cogently - that there was "...no knowledge of any payment ever having been made to Cambrian for either the maintenance or operation of the old signalling arrangements". Note that it is only signalling that is being discussed - throughout the exchanges there was never any suggestion of the GWR (or its predecessor) ever having made any charges against the narrow gauge for the trackwork of the crossing or its maintenance. Nicholls adds that the GWR employed and paid a woman crossing keeper prior to opening of WHR passenger service. He observes that the GWR has about 38 "trips" across the crossing, while the WHR only have 18 a day, that GWR staff are on duty at 6 a.m. whereas the first WHR trains is not until 9.38 a.m., with last WHR in winter "about 8 p.m." but GWR staff remain on duty until 10 p.m. He rejects the GWR terms but suggests the "... cost of the signalling arrangements might be divided between our respective companies proportionately to the number of trips... taking the winter timetable as a basis". The GWR reply, dated 16 August 1924, reiterates the rôle of WHR passenger trains: "... the employment of the two signalmen is entirely due to the institution of a passenger service over the line, and ... their expense, less the cost of the woman keeper previously employed, together with the maintenance and renewal of additional signals required are properly chargeable against the Welsh Highland company." Again, note no reference to track, nor any explanation of why additional signals were required when Mount had not specified any such requirement - again, the WHR failed to pick up this point. The GWR did promise to ascertain whether the expenses could be further reduced. In his response of 21 August, Nicholls astutely argues that any signalling should already have been adequate to protect the standard gauge passenger trains, so WHR passenger trains should have made no difference. He further argues about the accounts not off-setting the woman crossing keeper's wages, and being debited stores costs which cannot have been "new". On 17 October 1924 the GWR again asserts that the new signalling arrangements were required by Ministry of Transport. While not prepared to accept apportionment of charges they agree to reduced hours (9 a.m. to 9 p.m.), to be worked by a signalman plus porter signalman, thus reducing annual expenses from £159 to £124. This must signify that the crossing no longer had to relay gong signals to Traethmawr.

⁴⁸ Letter 9 March 1925 Robert Evans to H F Stephens (Gwynedd Archives XC2/33/64)

⁴⁹ It is quite likely that the GWR's agreement with the union over the grading of signal boxes etc. required the job to be upgraded from that to which the Cambrian had been accustomed – the emphasis on commencement of *passenger* trains on the WHR may be the clue. But the narrow gauge management consistently failed to extract any negotiating leverage from the topic.

⁵⁰ Copy at Gwynedd Archives XC2/33/65 (Exhibit HFS1 for H F Stephens's affidavit of 27 October 1927)

⁵¹ WHH no. 44, p.10

At last, on 10 November 1924 a meeting is held.... but we've all settled into established positions with no "negotiation" emerging, for the GWR – in a letter the next day – reiterates "that the cost of the works necessary for the proper protection of this level crossing is a legitimate charge against the WHR and that liability for such expenditure was accepted by your predecessor". Two months later (16 January 1925), the larger company offers to meet half the cost of installing the additional telephones and signalling if WHR pay the costs of maintaining and renewing appliances, and signalmen's expenses. The files reveal no further exchanges until three months later when the GWR remind Portmadoc that £400 is now outstanding. At about this time (four weeks ended 19 April 1925) the GWR engineer has 29 chains of the Coast line (of which the crossing was in the middle) resleepered in new material at a cost of £798 52. The crossing fitment itself, however, was not replaced at this time. There is no suggestion that the WHR were consulted, nor that they were asked to contribute (as explained above, no trackwork costs were ever raised against the WHR).

By this time, the redoubtable Stephens has entered the fray as Managing Director (now in addition to his engineering responsibilities), and on 22 April 1925 he writes to Sir Felix J C Pole, the GW General Manager, to seek a meeting, adding: "This agreement was dealt with before I took the Company over about 10 weeks ago fi.e. on Nicholls' departure| but was not settled." From the subsequent correspondence, it is clear that Stephens argued the "we were there first" line, while the GWR said "prove it" - and reiterated that the work was undertaken to requirements of Ministry of Transport inspector "on the express understanding that the WHR Company would pay the cost thereof and the expense of working"; like his predecessors, Stephens seems to have failed to check or query this assertion.

Three years after opening, the promised re-inspection by Lt. Col. Mount took place on Wednesday 6 October 1926; after lunch in Beddgelert, his inspection special train reached Croesor Crossing in the afternoon. In his report five days later (where he misquotes the inspection as having been a month earlier) he says: "I noted that at the GWR level crossing, the gates have been re-erected across the light railway, cattle guards having also been provided. The requirements here have all been carried out, and I was informed by the signalman that the arrangements were working smoothly." 53 Operationally they were, but the arguments about the costs rumbled on....

WHR into Receivership

On 4 March 1927 the WHR entered Receivership, with Stephens appointed Receiver & Manager. While management and operation of the company was still tied to the Festiniog, direction was not, with Stephens now obliged to take general guidance from the Investing Authorities in the shape of D G Jones, instead of from the "Dolgarrog" (Aluminium Corporation Ltd) board. This also meant that Davies' legal firm were no longer able to advise the Receiver; T D Jones & Co in effect took over the rôle. It is in consequence of this change that we are fortunate to have access to archival material (albeit that one frustratingly finds only part of the correspondence, often at one remove from Stephens). The GWR promptly entered their claim for the outstanding charges in the Chancery proceeding that followed Stephens' appointment, leading to a saga from which the GWR only extricated itself - with little or nothing to show for its efforts - in 1938.

The implications of avoiding the GWR costs by reverting to goods-only use of the crossing first emerge in June 1927 when Stephens asked his local staff about the possibility of turning WHR passenger trains back north of Croesor Crossing, by providing a platform and running round coaches with rope 54; he was assured that a platform facility could be provided and that trains could be run round without the use of rope. On 5 July 1927 Stephens issued instructions to his Permanent Way Inspector at Boston Lodge: "Please get the west side of the line (that nearest the GWR Railway station) [just north of Croesor Crossing filled up and made fairly level at the first opportunity and have a seat put there and two posts on which hurricane lamps can be hung also arrange to have a name board painted, 'Portmadoc North'" [in fact, no such name board appeared], while on 12 September Robert Evans was instructed: "...you had better be prepared, if necessary, to stop the WHR trains on the Beddgelert side of the crossing and make passengers walk across the GWR level crossing... This however does not apply to goods traffic ... Personally I should not very much object to making the passengers always alight on the Beddgelert side of the crossing and walk over to the Festiniog train, or alight on the Blaenau Festiniog side and walk over to the Welsh Highland train." Then, in a letter of 10 September 1927, Stephens told D G Jones: "We should not be able to work the line without crossing the GWR as far as goods are concerned, because the slate traffic from the Croesor Quarries has to go down to the wharves at Portmadoc. We could, of course, make the passengers alight on one side of the crossing and walk across to the other. I cannot see that the GWR have any power to close the crossing as we have statutory power

⁵² GWR Abstracts of Relaying & Resleepering [Abstracts] No.17 1925 - held at Wiltshire & Swindon Archives, under their reference 2515 (bay 64)

⁵³ TNA MT 6/3286 and MT 29/83

⁵⁴ Exchanged correspondence in Gwynedd Archives XC2/33/64

to cross ... The charges suggested by the GWR are much in advance of anything we could afford to pay. ... It seems to me if we decide to run only goods traffic over the crossing the cost of protecting the crossing would be entirely at the expense of the GWR Co. ... There is a public footpath 55 at the point so there is no question of our passengers having the right to walk from one side of the crossing to the other, over the GW line.... I have fixed up a temporary water supply at Pont Croesor so there would be no difficulty re- water." Incidentally, despite Stephens' statement, this footpath (which included stiles at the GWR fence lines) was not submitted as a right of way when the work on establishing definitive footpath records commenced in 1954 - it should not be confused with the footpath west of the line through the Gelert's Farm area. During pressing exchanges between the respective solicitors, the GWR threatened to withdraw operation of the crossing (although that never actually came to pass) - the GWR Solicitor to T D Jones & Co on 30 September: "[The GWR] position is that they will not continue to incur the expense of working this crossing without receiving an undertaking that the expense will be repaid to them."

Both sides sought to establish their "title" to the ground and the crossing - in January 1928 the GWR claimed that, when their predecessors bought the land over which the tramway crossed the railway, they bought both land and tramway, and they subsequently allowed the tramway to run across their land as licensees; words to this effect appeared in their affidavit (dated 29 March 56) of their claim in the Chancery court. For his part, Stephens replied 57, then went on to trawl through the 1864 C&P Deposited Plan and Book of Reference, and obtained affidavits from elderly residents.

From 1 October 1928, winter passenger services south of Beddgelert were withdrawn (there was no Friday market train between Portmadoc and Croesor Junction, as there had been the previous winter), and on 21 December Stephens reported to D G Jones; " ... some traffic has arisen between the WHR and the Docks at Portmadoc. I am holding my hand, therefore, re-closing the GWR crossing altogether until I know what the GWR Co. are going to charge ... for the occasional use of the crossing."

Apparently without prior consultation with the WHR (other than on a day to day operational basis, no doubt), the GWR engineer replaced the old (allegedly cracked - see page 4, above) Cambrian crossing fitment on Sunday 28 October 1928 58 at an internal cost of £82 59 (surprisingly low, even for a figure net of scrap value of material

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GREAT WESTERN RAILWAY.
                                                                 District Fraffic manager's Office.
                                                                               Oswostry...... Uctober 26th. 1928.
 Notice No. 489.
                             Absolute occupation of the line between
                             minffordd and Fortmadoc, Sunday. Jot. 28th.
                                The Engineering Dept. will have absolute occupation
of the single line between winffords and rortmades at 119m.513ch. on almost the 28th instant, from 7.0am to 5.0pm for the purpose of relaying crossing at Grossor Grossing. Token to be withdrawn after passage of the last train on Saturday, "ctober 27th and placed in the box provided in Portmades West Cabin. The token to be replaced in the box by the Permanent Way Inspector on completion of the work on Sunday, October 28th.
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recovered, particularly when compared with the 1925 resleepering cost). This was when the "bull head" material (in manganese steel, Mount was told in May 1923 and so noted in GWR records) was replaced 60 by the bridge rail fitment - with its check rails that look as though made of angle iron! - that is seen in the photographs of the 1930s. As in 1925, there is no suggestion that the WHR were consulted (still less that they ordered the change), nor were they asked to contribute And the work seems to have been undertaken entirely without regard to the

⁵⁵ Letter 7 August 1923 Tyrwhitt to Warwick (GWR, Oswestry): "... [the WHR] does not admit that there is any public right of way alongside its line. There is therefore no need for the stiles [at Croesor crossing] to be re-erected." But the WHR changed their mind and on 30 October 1923 Capt. May told Stephens that they were replacing the stiles. (Gwynedd Archives XC2/33/64) It wasn't, however, a public right of way.

⁵⁶ Affidavit of Henry Wheeler (Gwynedd Archives XC2/33/18 and XC2/33/58)

⁵⁷ Affidavit of Holman Fred Stephens 12 July 1928. Also of interest – for its dissection of the arcana of the relevant Acts, if for nothing else - is Counsel's Opinion dated 21 June 1928, obtained for Stephens (Gwynedd Archives XC2/33/18)

⁵⁸ GWR notice no. 489, dated 26 October 1928, issued by the District Traffic Manager, Oswestry (TNA RAIL 279/37)

⁵⁹ Abstracts No.20 1928

⁶⁰ WHH no. 42, p.3: there is no evidence of any work in 1923 or 1924, so Antia's photograph did not show this crossing renewal.

on-going financial dispute between the two companies – it certainly never features in the available archived correspondence between them.

At long, long last, a meeting with the GWR local *supremo*, Henry Warwick, took place in London on 20 February 1929, at the Welsh Highland's initiative. Warwick – District Traffic Manager, Central Wales Division, Oswestry – had from 1 March 1919 to 1922 been the Cambrian's Superintendent of the Line ⁶¹. Stephens was accompanied by Robert Evans, his local manager. Warwick's note of that meeting (he sent a copy to Stephens) reads:

"Col. Stephens stated that they were not at present working any passenger trains over this crossing las noted above nor was there any prospect of any passenger trains being run in the immediate future. The present use of the crossing is very slight, averaging 30 mins to one hour per week. It was further stated that in all probability passenger trains would only be worked over the crossing during the time of the GW Company's summer Train Service, namely middle of July to middle of September = 10 or 11 weeks. It was agreed that the WHR at Portmadoc would agree with the GW Company's Station Master at Portmadoc to work their goods trains over the crossing at such times as would permit the Station Master to utilise an existing Signal Porter for the passing of such traffic. These arrangements permit the GW Coy. to withdraw the additional [i.e. the second] Signal Porter. Col. Stephens agreed to pay the wages of the Signal Porter for the actual time occupied at the crossing during the nine slack months. Also of additional Signal Porter whom it will be necessary to employ during the 10 or 11 summer weeks. In both cases less 16/6 [16 shillings and sixpence] per week the former cost to this Company [i.e. GWR] of the Woman crossing keeper. Attention was called to the cost of maintenance of signals and telephone apparatus, and Col. Stephens pointed out that whether the WHR was there or not, the signals and telephone would have to be maintained on account of the Croesor Line and the WHR Company should not therefore be called upon to bear the cost of maintenance. Col. Stephens asked for the arrangements to be retrospective since the appointment of the Receiver & Manager for the WHR, namely 4th March 1927."

Of this meeting, Stephens reported back to D G Jones that the "Proposals made seem to be very fair provided we have to pay anything at all." WHR would "...pay wages of signalman employed, less 16/6 per week, for months of June to September each year. During the other 8 months we are to arrange to cross by mutual agreement with their local people and pay the proportion of signalman's wages for actual time he is occupied in attending the crossing only, which will come to 1/- or 2/- each attendance." Approval by Paddington headquarters of the offer Warwick had made was now awaited.... and awaited.... (it's not just latter-day nationalised bureaucracies that ground very slowly); it is not even clear, from the available papers, that the offer was ever formally underwritten by Paddington – still less that it was formally accepted by the narrow gauge camp!

The tenuous GWR argument that staff costs were chargeable in consequence of the running of WHR *passenger* trains (rather than extended hours of operation) was, tacitly, accepted by Stephens in this negotiation with Warwick: one wonders why Stephens did not make more of the point – presumably a failure to get back to first principles on the issue. Even though the point had, to some degree, been conceded by his predecessors, Stephens was not elsewhere afraid to renege on their competence and prior commitments.

On 15 October 1929 Stephens confirmed to D G Jones that "We have ceased using the crossing for passenger purposes and the matter, now, is exactly the same as it was in the days of the Cambrian Railway (sic). It is only used for the infrequent crossing of goods traffic, which has been going on since 1863 or thereabouts without any payment being made." So, from October 1928 the WHR chose of its own volition to run no further loaded passenger train over the crossing (services were anyway summer only after the 1930 summer season) by turning back trains either side of the crossing: why – having negotiated a modus vivendi for limited summer passenger service – did Stephens not take advantage of the offered deal for using the crossing just during summer months but instead consign his customers to five seasons of having to clamber over stiles at Portmadoc New?

This situation obtained until the FR lease in 1934 although goods traffic was quite unaffected, continuing – when it offered – to operate over the crossing as it had since 1867: like the erstwhile Windmill Theatre, "we never closed"! The suggestions of "illegal" goods movements – presumably made at dead of moonless nights.... – over the crossing without the knowledge of the GWR are the stuff of fantasy when there was a straightforward facility at minimal cost and when any such skulduggery would not have remained "secret" for long in a community the size of Portmadoc. On the other hand, movements of individual wagons by pinchbarring or manhandling over the crossing could be credible (although one wonders why, when a loco. or horse would still be needed on at least one side of the crossing for the remainder of the "journey"), but that should not be equated with surreptitiousness. For passenger trains, however, the Festiniog's company secretary was later to

⁶¹ Warwick had joined the Cambrian's traffic department from the North Eastern Railway in 1902 and was Assistant to their Superintendent of the Line from 1915.

remark 62: "... [in 1934] there was not, as far as I am aware, any agreement in existence with the GWR for the use of Croesor crossing and if, therefore, my Company desired to run the Welsh Highland line over the crossing for the purpose of bringing passengers nearer to Portmadoc some arrangement had to be made."

In the meantime, the GWR continued to render accounts in respect of the crossing: one such for half year ended 31 December 1929 was for £23 14s 10d. Evans sought Stephens' guidance in a letter ⁶³ and was instructed to meet Warwick; the latter replied that the matter was entirely in Paddington's hands so Stephens drafted a letter to Paddington, which Robert Evans sent on 13 February 1930, disputing the account on grounds that the crossing was only used twice a week and that signals being charged for were in position before the WHR ⁶⁴. The GWR response is not recorded, but doubtless these charges were simply added to the long list of outstandings: however "exorbitant" or otherwise they might have been, they simply weren't being paid. As T D Jones & Co remarked in December 1937 to D G Jones "... on looking through the Receiver's accounts nothing appears to have been paid the GWR Co in respect of the crossing at any time." [This statement does not refer to payments by FR during the lease period].

Eventually, on 27 October 1930, Stephens' fuller response to the GWR affidavit of $2\frac{1}{2}$ years earlier was signed. As the WHR's arguments (which should be clear from what has already been said above), about who came second at the crossing were rejected by the Chancery Master in favour of the GWR's position, there is little point repeating them *in extenso* (the document can be examined at the National Library of Wales at Aberystwyth while the GWR affidavit is at Gwynedd Archives, Caernarfon 65). To be noted, however, are item 1: "None of the Acts and Orders mentioned [by the GWR] imposes on the [WHR] any liability in respect of works executed by the GWR as incidental to the crossing in question.", and item 3(ii) where Stephens endeavours to turn Section 33 of the C&P Act of 1865 to his favour: "... the [WHR] Company were for the purpose of the crossing impliedly authorised to enter upon or use the land or property of the Coast railway without the consent of the Coast railway as therein mentioned."

On 8 November 1930 Stephens reiterated to D G Jones: "No WHR passenger trains have worked over this crossing since the summer of 1928 and there is no intention of any such trains passing over in the immediate future. The present use of the crossing is very slight, as it is only used for the passage of goods traffic." He explained again the arrangements agreed with Warwick: "The crossing, on an average, is only opened twice a week, for 15 minutes at each time, to allow the WHR goods traffic to pass over. The GWR have tendered accounts for the half years ended 31 Dec 1929 and 30 June 1930 for £23 14s 10d and £20 2s 2d respectively but they have not been accepted by the WHR." An analysis of the latter account reads: Labour 11s 6d; Use of telegraph £17 4s 11d, Clothing £1 4s 2d, Stores 9d; Oil for lights 18s 3d; Maintenance of clock 1s 9d; Total £20 2s 2d 66 (note: items quoted total only to £20 1s 4d). The clock – or lack of it – was the subject of comment by the narrow gauge party during these exchanges.

On account of his failing health, Stephens became unable to fulfil duties as Receiver & Manager – his assistant J A Iggulden acted in his stead from March 1931 ⁶⁷ until 12 April 1932 when he gave up the responsibility in favour of Richard Thomas Griffith of Caernarvon. Chancery proceedings continued their glacial "progress" but, eventually, reality started to intervene: reporting a meeting with the GWR Solicitor, Griffith stated (on 22 November 1932) that the GWR acknowledged there was no point in pursuing "the major part" of their claim: "On the other hand there is this difficulty, we should like to be allowed to use this crossing especially for the summer traffic as I understand from enquiries made that we lost a large amount of traffic last summer [as they must have done every summer from 1929 ⁶⁸] because people went by bus from Portmadoc rather than walk from the Ffestiniog Railway station to meet our trains. I do not think it will be possible for us to use this crossing until we come to terms with the GWR." So, rather than seek an accommodation with the GWR, Griffith continued to turn WHR passenger trains back on the north side of the crossing during the 1933 season. During spring 1934 Griffith sought ⁶⁹ the approval of the Investing Authorities for closure of the line (which by then had been reduced to one goods train a week – but only north of Beddgelert – plus Croesor valley traffic). However, such a decision was never actually taken because the Festiniog proposed leasing the line, to which course the Investing Authorities gratefully agreed, the lease taking effect from 26 June 1934 ⁷⁰.

⁶² Letter 15 February 1938 FR company secretary to D G Jones

⁶³ Reproduced in WHH no. 33, p.1 [note, however, that the letter was from, not to, Evans]

⁶⁴ Johnson, p.74; this was based on facts stated in Evans's letter of 25 January 1930 to Stephens (transcription in *WHH* no. 33, p.1).

⁶⁵ Affidavit of Henry Wheeler 29 March 1928 (Gwynedd Archives XC2/33/18 and XC2/33/58)

⁶⁶ Mitchell et al., Branch Lines around Portmadoc 1923-1946, 1993, alongside plate 44

⁶⁷ Iggulden was never formally appointed by the Court as Receiver & Manager; Stephens (and, after his death, his estate) legally retained that office

⁶⁸ Local bus operator Crosville - established in the area since 1924/5 - passed to LMS Railway ownership in 1929

⁶⁹ Meeting of Representatives of Investing Authorities 13 March 1934 – proposal deferred [Gwynedd Archives]

⁷⁰ Although the document itself says 1 July, the Festiniog took possession immediately upon signature and the lease came into effect on 26 June 1934 – affidavit of David G Jones 28 January 1935 [Gwynedd Archives XC2/33/27]

Festiniog Railway lease period

Despite the experience of running the WHR from 1923 to 1926, the FR decided to have another go and took out a lease of the line in 1934. The WHR Receiver's role did not give scope for squandering money but could bitter reaction to Stephens' and his successors' "penny pinching" (rather than revenue seeking) policies be part of what prompted the FR Chairman, Evan Robert Davies, to give his "creation" a chance to prove itself in 1934?

Immediately after committing to the lease, Davies negotiated terms with the GWR for resumption of use of the crossing by passenger trains; although an agreement was never formalised, the terms applied throughout the lease period, so the FR paid the GWR fixed sums towards the maintenance of the signalling and telephone apparatus, and also a fixed charge for each return journey made over the crossing ⁷¹. There seems, therefore, to have been advantage to FR to avoid unnecessary crossings – for example, by continuing to turn back some trains north of the crossing, as shown, for example, in photo no. 13, below. On 5 and 6 June, a GWR official inspected WHR stock at Dinas, with a view to it being allowed to cross the GWR in regular service ⁷², and the FR recommenced the summer service of passenger trains on the WHR from Monday 9 July 1934, resuming use of the crossing by such trains. After three seasons, the last WHR passenger train ran on Saturday 26 September 1936. However, it seems certain that this train did not use the crossing ⁷³ – and, indeed, very likely none did in the final fortnight of reduced service: the final narrow-gauge passenger crossing could well have been Saturday 12 September 1936.

On 18 May 1937, having decided they would not run the WHR at all for passenger or goods traffic during the 1937 season, the FR served the GWR with one calendar month's notice of their intention to determine the arrangements for using the crossing, and advised the GWR that, being only lessees rather than owners, it wasn't their job to consent or otherwise to the crossing's removal. This, of course, doesn't exactly square with a leaseholder's obligation to hand the property (in this case, the WHR) back as they received it, and it does seem a reckless stance to have taken (particularly for a solicitor, which the then FR company secretary was) 74 .

The end of the crossing

According to Lee and others 75, the last narrow gauge use (non-passenger) of the crossing was Saturday 19 June 1937, but a letter ⁷⁶ from the FR Company Secretary states: "The transference of [FR] stock from the WHR line and vice versa was completed on [Friday] 25th [June] and since that date we have not had cause to use the above crossing for any purposes whatsoever." This may or may not imply movements over the crossing after the normally quoted date (but it may simply be the date of the final movement from Dinas to recover rolling stock left at Beddgelert on the 19th – vide Lee 77 - but not south thereof). He also made it clear the FR would pay nothing further in respect of the crossing, regarding it as henceforth entirely up to the Receiver & Manager. Later during summer 1937, Griffith wrote to the GWR: "I have to inform you that until the lease granted by us to the FR Co has expired I am not in a position to do anything in the matter lof agreeing to meet GWR costs of retention of the crossing" - the GWR were clearly trying to get someone in the narrow gauge world either to pay for work on the crossing and its signalling, or to agree to its removal. Another approach to the FR brought a reply on 15 October 1937 declining to be responsible for any costs after 30 June of that year and adding: "If the Receiver of the WHR is not prepared to give you a definite statement as to whether he will be responsible for the maintenance [of the crossing] we must leave you to take such steps as you think fit." In December the GWR made one more effort, by giving formal notice to Griffith that they intended to dismantle the crossing on a specified date [the letter does not seem to have survived in archived papers] unless they heard from him to the contrary; they received neither acknowledgement nor reply from him 78. And so - having exhausted the routes open to them (and their patience, no doubt) - the GWR replaced the crossing with plain line on Monday 27 December 1937, in an occupation of the line between 1110 and 1250 in accordance with the notice of which an extract appears below 79:

 $^{^{71}}$ Letter 15 February 1938 FR company secretary to D G Jones

⁷² Festiniog Railway Heritage Group Journal, no. 39, p.7

⁷³ On two journeys to Portmadoc in the final week of service of 1936, Geoffrey Hughes recorded his trains as turning back at platform north of the crossing: *WHH* no. 32, p.6

⁷⁴ Letter 15 February 1938 FR company secretary to D G Jones

 $^{^{75}}$ Lee, The Welsh Highland Railway, 1962, p.40; Boyd {2}, p. 45

⁷⁶ Letter 19 July 1937 FR company secretary to Superintendent of the Line, GWR

⁷⁷ Lee, p.40

⁷⁸ Letter 1 February 1938 T D Jones & Co to D G Jones

 $^{^{79}}$ GWR notice no. 532, dated 21 December 1937, issued by the District Traffic Manager, Oswestry (TNA RAIL 279/43). The work is not recorded in Abstracts for 1937 but presumably was carried forward into those for 1938 (which are unfortunately astray). The date of October 1938 quoted at Boyd $\{2\}$, p.49, WHH no. 8, p.5 and elsewhere is therefore in error.

Private and not for publication. GREAT WESTERN RAILWAY. District Fraffic Manager's Office, Qawestry Clat December 1987. Notice No. 552. ARSOLUTE OCCUPATION OF THE LINE SETWERN MINEFORED AND PORTHADOG. MONDAY, DECEMBER 97th. The Engineering Lepartment will have absolute occupation of the Single Line between Minffordd and Portmadoc at 119m. 34ch. on Monday next, 27th instant, from 11. 10mm for after passage of the 10.25am ex Pwllheli) to 12.50pm for the purpose of taking out Welsh Highland Pailway Orossing and Oatch Points. Drivers of all trains to be warned at Minffordd and Pertusdoo respectively, that whilst passing the site at 110m. 34og. between the hours of 7.0am and 5.0pm on this date, speed must be reduced to 15 m.p.h.

Token for the section Portwador - Peurhymieu Frach
to be withdrawn at Portwador after passage of the 10.25am
Passenger Train ex Pwilheli. The token to be returned to the
Signalman at portmador in time for the passage of the 12.5pm Passenger Train ex Barmouth. to "Taking out of use of Crossor Rarrow Sauge Level Crossing District Inspector Owen to make the necessary arrangements so far as the Traffic Department is concerned.

When challenged by the Investing Authorities on this, Griffith replied on 4 February 1938 that "... I was under the impression, in view of the fact that the whole of the Undertaking had been leased to the FR Co, and that there was a clause in the Lease that on the expiration of the Lease they were to give up the property in the same condition as they took it over, that it was not part of my duty to interfere in this matter." Griffith's noted reluctance to take any action for which he might later be called to account was sadly misplaced in this instance – it is clear that he did not even trouble to seek guidance from D G Jones (on behalf of the Investing Authorities), still less play for time with the GWR: the Welsh Highland Railway just rolled over and died. Perhaps his attitude is not entirely surprising in view of his attempts in spring 1934 (see page 15) to persuade the Investing Authorities to agree to closure of the line.

Resolution of the claims

In a letter of 20 December 1937 T D Jones & Co reported to D G Jones (getting towards the end of the interminable claims for the pre-receivership and winding up period) that the GWR claim was deferred by the Master in Chancery but that "... nothing appears to have been paid the GWR Co in respect of the crossing at any time." The WHR had made such use of the crossing as it had, throughout its life, without paying the GWR a bean! (Note that this comment does not apply to the operations during the FR lease period). It was stated, before the Master in Chancery on 16 February 1938, that there was no likelihood of any assets being available to meet other than preferential claims and so the GWR stated that they were prepared to withdraw their claims amounting in aggregate to £1746 9s 2d if two points were agreed:

- 1. that GWR's "title to soil upon which the Croesor crossing was constructed is accepted by [the Investing Authorities] and they acknowledge that the soil is the property of the GWR Co."
- 2. "that [the Investing Authorities] admit that the lien exercised by the GWR Co on certain materials at the Croesor crossing is a valid one and they do not now challenge it."

In other words, that the WHR would not further dispute the ownership provided under the 1865 Act and would not claim for the value of any material the GWR had removed at the crossing – which, of course, the GWR had provided in the first place! The sorry saga was finally drawn to a close when "The representatives of the Investing Authorities at a meeting held on 27th [July 1938] resolved to agree to the terms [offered by] the GWR".

And so all the clerical, managerial and legal time and expense – not to mention the engineering and operating costs – incurred by both parties over the Cambrian/Croesor crossing over its last 15 years resulted in the WHR having had its cake, eaten it – and had it paid for by the GWR! Even if the GWR had been somewhat disingenuous in seeking to charge to the WHR relatively minor telephone and signalling works, which general up-grading of safety standards would anyway have required, it did them no good at all in the long run. What a pity that local WHR management and Warwick of Oswestry had not simply been left to resolve matters (as the latter would possibly have done in Cambrian days) - but then there would have been hardly any "story" to recount here.

Second attempt

It's not the rôle of this essay to review the subsequent history but it is appropriate to note that a new crossing fitment was craned into position on Wednesday 1 November 2006 80 (albeit not connected on either narrow gauge side) and the first trial narrow gauge train crossed on Thursday 12 March 2009 81. After various "false dawns", new signalling – compatible with the European Rail Traffic Management System - was finally brought into full public passenger use on the standard gauge line on 28 October 2010. The first narrow-gauge passenger train under the new arrangements (being the first ever narrow gauge passenger train between Caernarfon and Porthmadog) ran on 30 October 2010. Regular WHR public services over the crossing (round trips between Porthmadog and Hafod-y-Llyn) started 8 January 2011; through services between Caernarfon and Porthmadog followed from 19 February 2011.

Plans by the Group for a replica cabin, to house equipment and staff to protect the new crossing fell through because of lack available ground, so the replica building is now at Pen-y-mount – between the Welsh Highland and the Welsh Highland Heritage railways' lines.

Notes and source references

Where not otherwise referenced, letters quoted in the text are at The National Library of Wales, Aberystwyth in the archive of T. D. Jones, London (Solicitors), under reference /2 and title *Welsh Highland Railway:* Receivership 1864-1956 (accumulated 1923-1956) supplemented by material at Gwynedd Archives (Caernarfon) from the Welsh Highland files of the County Clerk (XC2/33/--).

Author's acknowledgements

That the text for this essay – debunking as it does a number of myths that have arisen over the years – is based largely on material that was not available when earlier authors set out to research and write the WHR's history should caution we historians from claiming to have written "the last word": we can only offer the story on the basis of the best evidence *available at the time of writing*. Indeed, I acknowledge that there were some loose ends which have been cleared up since the original edition, and that there remain some in the text above so I can only hope subsequent researchers may be able tie them up.

Meantime, my thanks go to various Group members with whom I've debated aspects of the crossing's history, and particularly to Edward Dorricott and Mike Christensen for their contributions about signalling matters.

Opinions and errors are, of course, all mine.

The essay was originally published in print in 2009 by the Welsh Highland Railway Heritage Group as **The Chronicles of Croesor Crossing** (ISBN 978 1 906205 39 3) with a corrigenda sheet dated 8 August 2012. This present internet version – containing further amplifications – was prepared in February 2018.

⁸⁰ Snowdon Ranger no. 55

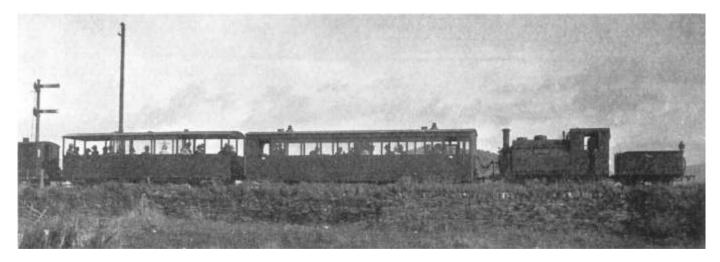
⁸¹ Snowdon Ranger no. 64

Photographs

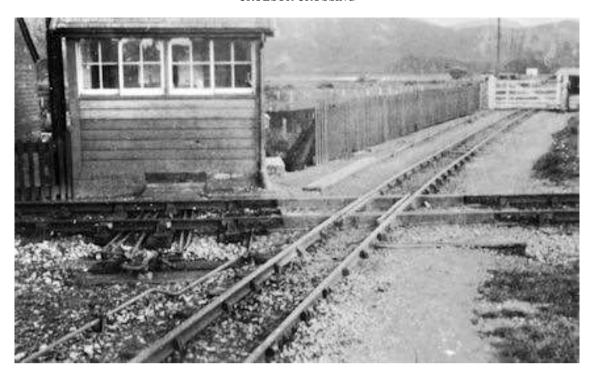
There are fewer than a dozen known published photographs from before 1938 with the crossing as their centrepiece (although a few more have something of it in the background of a view of Portmadoc 1923 station or its 1929 north platform) and I'm particularly grateful to Peter Liddell for providing a list and copies of them. They are arranged below in chronological order (so far as that is possible from the available dating) with captions underneath. In addition, two photographs to place the crossing "in context" and two more recent aerial photographs are also included.



1. *above* Looking east with a Festiniog England engine on an Up train about to pull into Portmadoc 1923 station (off photo, to the right). Note the GWR Porter signalman with flag outside his box; the about-to-be removed gong on a wooden post in the south-west angle between the two lines, and a lineman up a telegraph pole. The piece of white fence (right) is not present in photo 4, but the telegraph pole in the angle certainly is! An interesting comparison with photo 11, thirteen years later. This iconic shot, from the Topical photographic agency, appeared in *The Railway Gazette* of 26 October 1923.



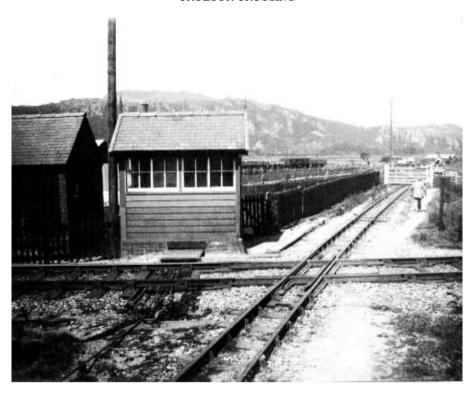
2. above The Festiniog's *Prince* with an Up train, Ashbury Corridor No 23 and the Gladstone Observation Car, plus FR 4-wheel brake van (its end verandah is adjacent to the back of the Observation Car). *Prince* was fitted with chopper couplings (a temporary fit over the early part of WHR operations) and both the Observation Car and Corridor No.23 were dual-braked so all of the vehicles in the train would have been operating on the vacuum brake system. Train is just south of the crossing, entering the 1923 station. The GWR's Down signal, protecting the crossing, with Portmadoc East box's fixed lower Distant arm, is shown, left. The telegraph pole (there were four around the crossing!) is not the one as in the previous illustration (it is the left hand one of the two in photo 4). As No. 23 has not been cut down, the date is either 1923 or early 1924. From the collection of the late C C Green.



3. *above* From the south side looking north (the 1923 New station is behind the camera). The Cambrian's bull-head crossing fitment with short check rails – not yet replaced by the GWR – is clearly shown. The temporary removal of part of the fencing to the right of the box and of the rodding run cover at the base of the box suggest some "engineering" works in progress. Note the end wall of the crossing keeper's cottage at extreme left. Compare with photos 5 and 9. Photo by Khurshed Framroz Antia, then an Indian engineering university student; now believed to be 1924 (see *WHH* 49, page 1)



4. *above* From the north side looking south, showing the new GWR crossing fitment. The New station's water tower is prominent above the gate. Note post and wire fencing opposite the box (on the GWR's down side) instead of white fence in photo 1. The left hand telegraph pole is that in photo 2, the right hand one is that in photo 1. Locomotive Publishing Co. photo no. 1663 (later 77880) had usually been dated summer 1928 but it must post-date the relaying of the crossing fitment on 28 October 1928



5. above From the south side looking north, showing the 1928 GWR crossing fitment. The rodding runs to the north and south trap points can be seen. Compare with photos 3 and 6. This appears to be a passenger walking to the north platform (is there another climbing the stile by the gate across the line? it looks as though the photographer was on the equivalent stile on *this* side of the line) which was brought into use from the 1929 season to avoid WHR passenger trains having to traverse the crossing. The date was a Monday during the last week of the pre-season thrice weekly service on the WHR. The advertising sign (for Raleigh bicycles) shown in photo 6 does not yet appear to be in place. The wagons beyond the box are on the standard gauge Beddgelert Siding. The end of the crossing cottage is to the left of the box. Photo by Edward Wallis, 1 July 1929



6. *above* From the south side looking north, again showing the 1928 GWR crossing fitment. The rodding runs to the north and south trap points can be seen. Compare with photos 3 and 5. There is an advertising sign (for Raleigh bicycles) alongside the WHR track, short of the gate. Note the stile by the right-hand side of the gate. Photo by W D Miller, 1932



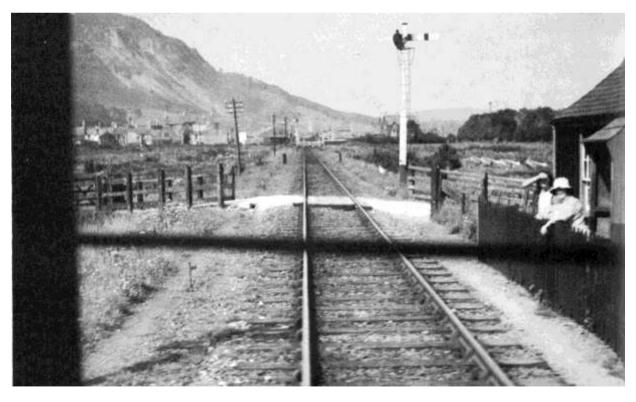
7. above. The crossing from the Gelert's Farm occupation road crossing, looking east towards Minffordd, with the cottage extreme left and the box beyond. The crossing's Down stop signal (with Portmadoc's fixed distant arm beneath it) is prominent – as is the hill, Ynys Cerrig-duon, mentioned in the A&WC Acts. This picture shows clearly how the Cambrian line was built north of that rock, rather than south of it as envisaged in the plan on page 2. The 1923 New station is off to the right of the picture. The telegraph pole on the right is that shown in photo 1. Only a close scrutiny reveals evidence of Traethmawr road crossing in the distance. Photo by W D Miller, presumed to be 1932 (contemporary with photo 6)



8. *above* Baldwin *590* on a three coach Down train. Although the crossing box is largely hidden, the crossing cottage is clear – as are three of the four telegraph poles! The bell crank (bottom right) is part of the rodding run to the north trap point. The only date offered for this photo from FR Archives is "1930s". However, the orientation of the loco puts the photo as being during the FR lease period, i.e. 1934-1936.



9. *above* The crossing from the south: another useful comparison with photo 3 of a decade earlier (the piece of fence and rodding run cover are in place!) and photos 5 and 6. The 1928 crossing fitment – in bridge rail and angle-iron style check rails – is clearly shown. Photo by F C LeManquais, 11 August 1934.



10. *above* The right foreground is the west corner of Croesor Crossing cottage with the road access (occupation crossing) to what is now Gelert's Farm beyond. The photo was taken from the Pickering Brake-Composite no. 8 in a Down WHR train at the moment of crossing the GWR. The Stop signal – at Danger – protects the train from Up GWR trains. The crossing gates at Portmadoc East can be seen in the distance, closed across the GWR. Photo by H F Wheeller, 8 August 1935.



11. *above* The crossing from the west, with *Russell* on a Down train, providing another comparison with photo 1 of an earlier decade. Looking in the opposite direction from photo 10, it shows the east corner of the crossing cottage, left, as well as the box. The GWR Down stop signal, protecting the WHR train, is obscured by steam above Portmadoc's (formerly East box) Distant which can be seen. Photo by Stanhope W Baker, 8 July 1936.

Not of the crossing itself, but to put it into context.....



12. *above* A view from the south side: a photograph of the 1923 station with no train in the way! It thus provides a useful panorama of the crossing cottage (behind the WHR water tower), box (behind south gate), GWR Down Stop signal (extreme right) – and various telegraph poles that dot the landscape! Photo by Charles Loch Mowat, most likely summer 1926.



13. above A view from the north side: a photograph of a train, hauled by 590, standing at the north platform of the New station. Actually, the ground level "platform", name sign and shelter hut were on the other side of the train – on the opposite side of the WHR line from the two stiles over which passengers connecting with the 1923 New station building (photo 12) had to clamber to cross the GWR line. The back of the crossing box and the end of the crossing keeper's cottage, also the water tower of the New station, can be seen. Photo by F C LeManquais, 11 August 1934.



14. above A two coach diesel multiple unit heads west towards Porthmadog station and Pwllheli. The rear vehicle (nearest the camera) is straddling the site of the Croesor Crossing. The Welsh Highland Railway's trackbed runs from bottom left (south) to mid right (north) of the photo, while the cleared area to the left of the train represents the site of the Festiniog Railway's 1923 station – used also by the WHR. The front vehicle is crossing the Gelert's Farm occupation road crossing and public footpath – Croesor Crossing cottage and signal box were to the right of the train, between the WHR and the road crossings. The buildings and narrow gauge tracks in the top middle of the photo are the Gelert's Farm facilities, museum and works of what is now known as the Welsh Highland Heritage Railway. Porthmadog BR (Cambrian) station is off the top of the photo – the centre of town is off to the left. Photo by Aerial Views, 6 May 2006. © WHRHG



15. above From bottom right (west) to top middle (east), the former Cambrian Railways' Pwllheli line runs towards Minffordd and Barmouth. Alongside it, at bottom right, is the station of the Welsh Highland Heritage Railway, with its track to Pen-y-Mount curving away to mid left of the photo, passing their Gelert's Farm facilities en route. Just below (west of) Gelert's Farm is a drainage ditch, passing under both railways. Access to Gelert's Farm is by the road (occupation) crossing from the right (south), past the cleared area which represents the site of the Festiniog Railway's 1923 Portmadoc New station, used by the WHR. Note the water tower support structure (which is also prominent in photo 4). The WHR's trackbed runs from left (north) to right (south) behind (east of) Gelert's Farm, over the site of Croesor Crossing, whose keeper's cottage and signal box were to the left of the standard gauge line. Towards the top of the photo is Traethmawr (previously Edwards') road level crossing, while the hill to its right (south-east) is Ynys Cerrig-duon, mentioned in the Aberystwith (sic) & Welsh Coast Railway's Acts. This picture shows clearly how the standard gauge line was built north of that rock, rather than south of it as envisaged in the plan on page 2. Porthmadog town centre is off the right of the photo and the Network Rail station is off bottom right corner. Photo by Aerial Views, 6 May 2006. © WHRHG

Text © Richard Maund 2009 and 2018

The following essay by Edward Dorricott examines the evidence for the date of origin of the Cambrian's signal cabin at the crossing

When was the Cambrian's signal box installed?

by Edward Dorricott

When the Barmouth – Pwllheli extension of the Cambrian Railways opened in 1867 82, attendants' single-storey cottages were built at level crossings along the line, some of which survive to this day as private dwellings (e.g. at Bennar Fawr), and one such residence was provided at Croesor Crossing, apparently in the 1870s.

It is fairly certain that the standard gauge here was protected, in these early days, by one of those signals with an arm projecting either side of the post, rather like the well-known replica at Tan-y-Bwlch ⁸³. An isolated 'S.P.' (signal post) is shown on the 1889 O.S. map. A keeper's hut was also provided, the one described as 'dilapidated' even by 1875 in the Cambrian Railways Engineer's Report to the Board on 19th August of that year ⁸⁴. It has been suggested that this wooden shelter lasted until 1923, then being replaced when the GWR erected the signal box which is familiar in many Welsh Highland photographs, and there are several references in published books to this cabin dating from the opening of the WHR. However, my own investigations have led to the conviction that the box actually dates from 1894, during the Cambrian regime.

The Regulation of Railways Act of 1889 enforced, *inter alia*, properly interlocked signalling installations on our passenger-carrying railways, so the Cambrian, who had previously done very little in this matter, found they were faced with a sizeable and urgent programme of interlocking. They turned to the newly-established firm of Dutton & Co. of Worcester, which was in business from 1889 to 1899. Samuel Dutton (whose life and work form the subject of my principal research) had virtually equipped the entire Cambrian system by 1892, although the Portmadoc area evidently received particular attention two years later.

In his report to the Board of Trade written on 20 July 1894, Col. Yorke lists recent improvements here, ending with "...the resignalling and interlocking of the whole place" 85. The same report discusses the 'Croesor Crossing' (as it was known to the Cambrian) noting that it was "...protected by signals in each direction, and by safety points on the tramway, these signals and points being worked from a small signal box at the crossing, containing 6 levers, of which one is spare". Lever 3 worked both narrow gauge trap points; spare lever 4 was subsequently made to operate a gong at nearby Traethmawr (then known as Edwards' Crossing) which had its own small ground frame. Filed with the report is a plan 86 of the area with 'CABIN' boldly marked at the tramway crossing One modification required by Yorke was that the up distant for the crossing, which was mounted beneath the starting signal of Portmadoc East box, at the Cambrian station, should be dispensed with and replaced by a slot on the starter (this would result in the signal arm being lowered only if the relevant levers in both boxes had been pulled).

Later in history, when Col. Mount inspected the WHR on 24 May 1923, he found at 'GWR Crossing' the cabin with its frame just as it had been in 1894. He reported: "There is a signal box on the north side of the crossing containing 6 levers working the light railway trap points, the main line down distant and up and down home signals for the crossing, a slot on the up starter for Portmadoc East, and a gong at the neighbouring level crossing over the main line, a short distance to the east. The locking is correct" ⁸⁷. We know this 6-lever frame was a Dutton design, as it is listed as such in the GWR Signal Department's 'Return of Levers' made when a full survey of the entire Cambrian system was carried out in 1929. The lever functions were unchanged. It would seem most improbable that in 1923 the GWR would have re-located a second-hand Dutton frame from elsewhere to perform precisely the same operation. Although it is true that there are instances of Dutton frames being moved around, both in Cambrian and GW days, that scenario hardly fits the circumstances of this case.

If, as appears almost certain, the levers which operated Croesor Crossing in WHR days were installed by Dutton in 1894, it is likely that the actual cabin also had the same origin, but we must not make assumptions. Is there any evidence for the box being a Dutton product? Unfortunately no relevant company records survive to enlighten us, so we must look for other indications.

 $^{^{82}}$ Preceding article page 3

⁸³ See also plate 8 (Penrhyndeudraeth in the 1880s) in Briwnant-Jones, Gwyn: Welsh Steam, University of Wales Press, NLW (1991)

National Archives (hereafter TNA) RAIL 92/25

⁸⁵ Preceding article page 3; original of report at TNA MT 6/685/12; transcribed version at TNA MT 29/56 folio 287

 $^{^{86}}$ Partially reproduced in preceding article page 7 $\,$

 $^{^{87}}$ Original at TNA MT 6/3286, transcribed version at TNA MT29/81, folio 150 $\,$

Photographs certainly confirm that the outside equipment was made by Dutton: the signals on the main line were of the type prevalent throughout the Cambrian (some of them lasted into the 1960s) and the point rod rollers have similar provenance. Close examination of photographs, with the benefit of a loupe, reveals that many distinctive features of the cabin's construction accord with details I have studied and measured on extant Dutton Type 4 boxes, such as the finials, the bargeboards with their distinctive chamfers and rounded ends, the 6¼" lap boarding, the arrangement under the eaves and the fenestration. A typical Dutton window handle can even be glimpsed within.

Those with a close knowledge of Dutton's architectural style may raise the matter of two non-standard features at Croesor Crossing, namely (i) the absence of the almost universal fretwork on the upper part of the bargeboards, and (ii) the slate roof, instead of corrugated iron sheeting invariably found on the small Type 4 boxes. Regarding (i) I would comment that the crossing box was not unique in this respect: Llanbrynmair's bargeboards were identical. Moreover, many of Dutton's tiny boxes on the Highland Railway were likewise undecorated. With reference to (ii) I would observe that Dutton did generally use slate as a roofing material on his larger boxes. As an aside, it is hard to resist the comment that slates were not exactly scarce in the Portmadoc area! Another plausible explanation is that the roof may have been modified at some stage, perhaps as a result of storm damage (of which there are several documented occurrences on this coast between 1894 and 1923).

There remains the possibility that the 6 levers of 1894 were housed in an earlier structure until 1923, when the GWR encased them in a signal box, either new or transplanted from elsewhere. Once again, there are known cases of Dutton cabin re-locations, but having combed my list of every Cambrian box, there are, in reality, very few contenders for this theory. Or was it newly constructed, with Dutton detailing faithfully replicated? We know that, to our great delight, this has happened in this century, but it would hardly have been the GWR's approach in 1923. In any case, they had their own small, ground-level box design for such situations (Type 21, as exemplified at Staverton Bridge, on the South Devon Railway). Furthermore, it scarcely looks like a smart, fresh building, even in photographs taken at the start of the WHR era. Additionally, when the GWR was pursuing recompense from the WHR for crossing expenses ⁸⁸, no mention is made of providing a *new* box – indeed, correspondence from Paddington stated that the existing crossing arrangements should continue, and that a replacement signal box was deemed unnecessary at that date. The GWR did order a cast iron plate reading 'Croesor Crossing Ground Frame' c.1923 ⁸⁹ but this was just one item in the widespread naming policy for absorbed railways. Incidentally, if the nameplate were made, it seems never to have been fixed to the box.

Do contemporary O.S. 25" maps offer any clues? The first edition, dated 1889, shows the crossing keeper's bungalow, not labelled but obvious from its location and ground plan. Beside it is a small square, unnamed but surely the lineside hut. The next edition of 1901 again maps the cottage, but now with a larger square whose front line is noticeably nearer to the standard gauge track. Definitively, it is marked 'S.B.' (signal box). Also shown are the two home signals, as seen on WHR era photographs. All these features are perpetuated without amendment on the 1918 edition and also on the GWR Land Plan of 1924, itself adapted from the O.S. map. The strong suggestion is conveyed that our familiar signal cabin was installed in the 1890s.

However, perhaps the most conclusive evidence is to be found from old postcards. One in Peter Johnson's collection, which he kindly let me study, is an early photograph of the town and traeth from the lower slopes of Moel-y-Gest; it is possible, with the aid of magnification, to make out the crossing. The tramway has not been "up-graded" to become the WHR yet, but the bungalow is discernible, and next to it – the signal cabin! That was enough to convince me that Croesor Crossing signal box had its incarnation in 1894.

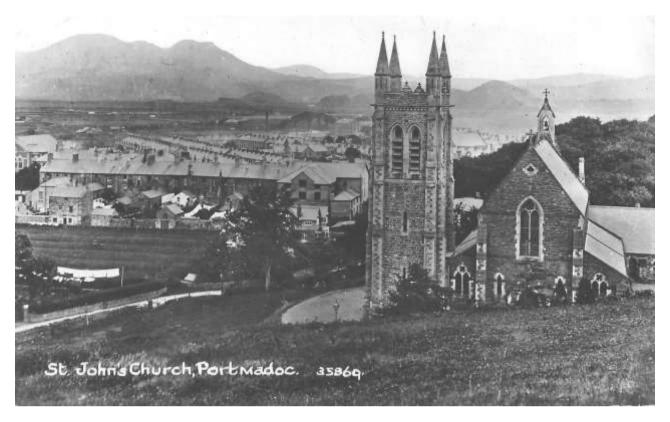
Subsequently, an old postcard of Porthmadog came into my possession, showing St. John's Church, with the town and traeth in the background. Published by Photochrom (no. 30816), its postage stamp (Geo.V, ½d) dates it at the latest by 1918. Clearly visible in the distance is the crossing with its bungalow, signal box and signal posts. This assured me that the box familiar in old WHR photographs was indeed the Dutton-built Cambrian cabin.

Following this, I discovered another card of similar vintage showing much the same view over the town, but with a little more zoom. This is in the Graphotone 'Real Photo' Series (no. 35869) and was posted in January 1916 – *reproduced below.* It shows with even greater clarity that the Dutton signal box existed well before the Welsh Highland era. I consider that the case for Croesor Crossing signal box dating from 1894 is now established beyond doubt.

Text © Edward Dorricott 2008 and 2018

⁸⁸ Preceding article page 11

⁸⁹ Dunn, Michael V.E.: Great Western Railway Signal Box Nameplates, Kidderminster Railway Museum (2004)



The Graphotone 'Real Photo' Series postcard, published prior to 1916, gives a panoramic view over the town, looking towards the Moelwyn range. Collection of Edward Dorricott.



An enlargement of part of the above photograph: the crossing cottage and signal box at Croesor Crossing appear in the centre - beyond the projecting terrace of houses – with the Gelert's Farm buildings to their left.



For comparison with photographs on pages 19 to 24 – *above* - the very similar Dutton Type 4 signal box originally at Llansantffraid Crossing (Cambrian Railways) *below* - a replica of Croesor Crossing box, at Pen-y-Mount in October 2017 (note: the original had no steps) Both photos: Edward Dorricott

