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# Barrowmore Model Railway Journal



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Published on behalf of Barrowmore Model Railway Group by the Honorary Editor:  
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Contributions are welcome:

- (a) as e-mails or e-mail attachments;
- (b) as a 3.5in floppy disk, formatted in any way (as long as you tell me if it's unusual!); disks can be provided on request;
- (c) a typed manuscript;
- (d) a hand-written manuscript, preferably with a contact telephone number so that any queries can be sorted out;
- (e) a CD/DVD;
- (f) a USB storage flash drive.

Any queries to the Editor, please.

The **NEXT ISSUE** will be dated December 2009, and contributions should get to the Editor as soon as possible, but at least before 1 November 2009.

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Copies of this magazine are also available to non-members: a cheque for £7 (payable to 'Barrowmore Model Railway Group') will provide the next four issues, posted direct to your home. Send your details and cheque to the Editor at the above address.

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**The cover illustration** for this issue is a 1958 photograph of a 12-ton 4-plank open private-owner wagon operated by the British Quarrying Company; you will notice the 'NON POOL' branding which meant that the wagon had not been incorporated into the British Railways fleet because of the specialised nature of its load: on the original photograph you can see the legend 'FOR TARRED MATERIAL ONLY' to the left of the large letter "C" on the side.

B.Q.C. was set up in 1929 as an amalgamation of a number of smaller quarrying companies. Their wagons were usually lettered "B.Q.C." with the number and the name of the quarry (in this case "419 Ceiriog") on the end. By the 1950s they had become part of the Amalgamated Roadstone Corporation, though the lettering had not been changed.

In my copy of the Railway Clearing House's 1950 list of *Non-pool wagons*, several hundred B.Q.C. opens are listed in the section for 'Wagons specially set apart for the conveyance of ... Tarred materials'. No.419 is recorded as having been built in 1914, and was first registered with the Great Western Railway as no.36380. I have no record of when it was scrapped, but a guess would be some time in the 1960s by which time more modern vacuum- and air-braked stock was becoming more common. Way back in the 1970s I was told the livery was 'pinkish/red, with white lettering, usually shaded black': but I do not have any definite evidence that this correct, apart from the photographs I have would not seem to contradict this!

The photograph featured is one of several of this owners wagons, held by the Historical Model Railway Society, to whom acknowledgement is made.

### **Forthcoming events**

**10 Sep. 2009:** Chester station guided tour: concourse 2.00p.m.

**12/13 Sep. 2009:** ExpoEM North, Slaithwaite.

**26/27 Sep. 2009:** Southport show (Birkdale High School, Windy Harbour Rd., Southport PR8 3DT).

**26/27 Sep. 2009:** Scaleforum (Leatherhead) show.

**2/4 Oct. 2009:** Manchester show.

**3 Oct. 2009:** 7mm running track, Llanbedr (see Editor for details).

**5 Oct. 2009:** RCTS meeting at The Town Crier, Chester (opposite Chester Station): slide show on Conwy Valley line by Larry Davies.

**17/18 Oct. 2009:** Blackburn show.

**30 Oct./1 Nov. 2009:** Merseyside show.

**31 Oct. 2009:** 7mm running track (American), Llanbedr (see Editor for details).

**21 Nov. 2009:** 7mm running track, Llanbedr (see Editor for details).

**21/22 Nov. 2009:** Warley show.

**5 Dec. 2009:** 7mm running track (American), Llanbedr (see Editor for details).

**5/6 Dec. 2009:** Darlington show.

**12/13 Dec. 2009:** Wigan show ("Mostyn" is appearing).

### **(2010)**

**6/7 Feb. 2010:** Rochdale show.

**6/7 Feb. 2010:** Stafford show.

**20/21 Mar. 2010:** Nottingham show.

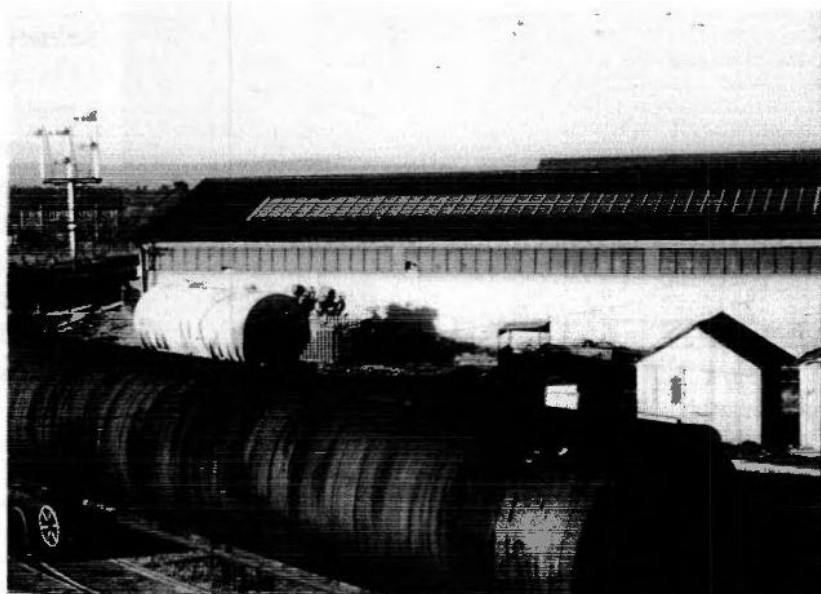
**27/28 Mar. 2009:** Alexandra Palace show ("Mostyn" is appearing).

**11/12 Dec. 2010:** Wigan show.

*(The Editor welcomes details of other events of railway interest for this column)*

Our web-site address is: [www.barrowmoremrg.org.uk](http://www.barrowmoremrg.org.uk)

(Also of interest is: [www.mostynhistory.com](http://www.mostynhistory.com) )



*Bogie tanker 7935 in Wagon Repairs' yard, Saltney, in the 1970s (J.Dixon)*

## Wagon Repairs Limited, Saltney

These two cast iron wagon repair plates are from the collection of John Dixon of Saltney, and in real life usage they would probably have been painted black with white raised letters and surrounds, and fastened to the solebars of wagons of companies with which Wagon Repairs had negotiated a repair contract.

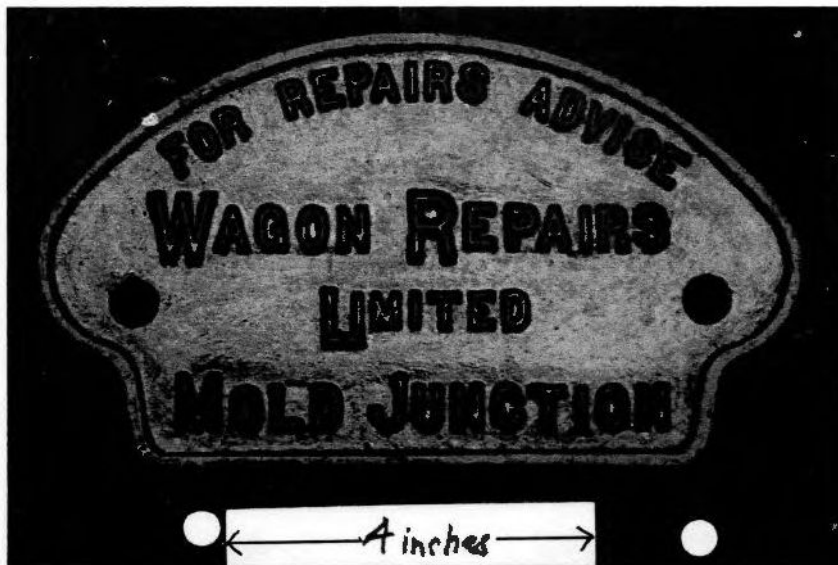
'Saltney Ferry' and 'Mold Junction' are names for virtually the same place: as well



as there being a free ferry over the River Dee here, there was also a station named 'Saltney Ferry' on the Chester to Holyhead line, at the junction where the branch to Mold/Denbigh turned off. Saltney Ferry station was closed in 1962, so I would guess the top plate (with some seriffed letters) was cast when the

station was still open.

The lower plate which gives the location of the works as 'Mold Junction', and using a more modern looking letter form, possibly dates from some time later.

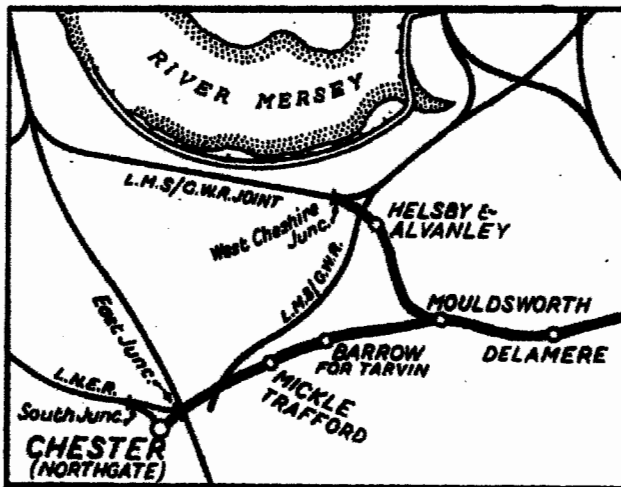


The works were a branch of a national chain and were established in Saltney in about 1919, on the site of a previous wagon repairers, just on the Chester (south-east) side of Mold Junction. The works had connections from

the 'up' line of the L.N.W.R.'s Holyhead main line, and also from the G.W.R.'s Saltney Wharf branch. They apparently finished trading in the 1970s.

## Mouldsworth to Helsby (West Cheshire Junction) by Norman Jones

(An edited version of an article first published in *Railway World* in May 1958; submitted by Norman's friend Tony Robinson).



*Cheshire Lines Committee lines in the Chester area, about 1930.*

BETWEEN Mouldsworth and Helsby (West Cheshire Junction), ran a single-line branch, closed to regular passenger service many years ago. In 1958 it was possible to traverse this important but little-known section when occasional Sunday trains proceeding over former Cheshire Lines Committee metals from Manchester to North Wales, traversed this route to join the more familiar path, that of the former L.N.W. & G.W. Joint line, Warrington to Chester, at Helsby proper. The route was via London Road, South Junction, proceeding through Oxford Road under the overhead wires of the M.S. & A.J., (otherwise "the leccy"), taking the slow line at Warwick Road. Then to Altrincham and Knutsford, crossing the west coast route by over-bridge at Hartford and so to Cuddington.



*A Class 108 DMU pauses at Mouldsworth Junction box in 1959 on its way from Manchester (N.Jones)*

The journey then through Delamere Forest is most attractive but at Mouldsworth the appearance of the signalman holding up the single-line token at Mouldsworth junction box, which lies just past Mouldsworth station, aroused even more interest. There was no spectacular exchange at speed (two minutes was allowed for the pick-up) but due to the excellent visibility of the diesels, "exchanging the staff" is no longer an esoteric rite merely for the enthusiast. But we are, I hope, more than dilettantes and to fully appreciate the branch it is necessary to touch on the history of the parent company.

The Cheshire Lines Committee was known principally for fast passenger services between Manchester and Liverpool Central stations. Ironically this part of the system lies mostly in former Lancashire. As originally conceived by an agreement made between the Manchester, Sheffield & Lincolnshire Railway (later Great Central Railway) and Great Northern Railway (a third partner, the Midland Railway was a latecomer), the two arranged to establish a Joint Committee to work four lines, authorised but not then open, and the title of the enterprise definitely indicated its locale.

These lines were: the Stockport & Woodley Junction Railway; the Cheshire Midland Railway; the West Cheshire Railway; and the Stockport, Timperley & Altrincham Junction Railway. Investigating still further this embryo C.L.C. we find that the Cheshire Midland Railway was incorporated by an Act of 14th June, 1860 to construct a line from the Manchester South Junction & Altrincham terminus at Altrincham, to Northwich, 12 miles and 65 chains. It was opened in two sections, Altrincham to Knutsford on 12th May, 1862, and on to Northwich on the 1st January, 1863. Incorporation of the West Cheshire Railway, with which we are directly concerned was by an Act of 11th July, 1861, authorising construction of a line from Northwich on the Cheshire Midland to Helsby a distance of 14 miles 50 chains, to make a junction with the G.W.R. & L.N.W.R. joint line from Helsby to Hooton (Birkenhead Railway). This was then the terminal point of the C.L.C. progress to Chester. The West Cheshire Railway was opened on the 1st September, 1869. The Cheshire Lines Committee had goods depots at Birkenhead. These were rather in the nature of a frontier post, for the Committee had access to them only over the Birkenhead Railway, although there was direct rail communication with the Mersey Dock & Harbour Board lines. However, as a *quid pro quo* the Great Western for their part had no direct access to Liverpool, and after 1873-4 when the C.L.C. had that facility by means of their direct line between Liverpool and Manchester (prior to that C.L.C. trains had run over L.N.W.R. metals on the bottom line via Warrington-Arpley between those two cities) the G.W.R. were obliged to exchange much of their traffic for Liverpool on to the C.L.C. at Helsby (West Cheshire Junction) thus maintaining a balance of interests.

Leaving Mouldsworth the single line skirts for its 3 miles 75 chains of length the outriders of Helsby Hills. A little way down is Manley, an unstaffed goods depot, used mainly for agricultural traffic, but which was briefly open for passenger traffic between 1870 and 1875. After that, Helsby & Alvanley, a little distance from the termination of the line, was the only station. It remained open for two passenger trains daily, but these were private trains, to all intents and purposes. They were known in the area as "The Girls' Train" and served the factory of British Insulated Callendar's Cables Ltd. The train was from Rock Ferry, which it left at 7.7 a.m. arriving at the one platform of Helsby & Alvanley at 7.44 a.m. after taking the token from the signalman at West Cheshire Junction. Afterwards the empty stock was propelled to West Cheshire Junction and remained in No.1 up siding awaiting the



return trip in the evening, the engine and train men leaving by 8.45 a.m. for other duties. At 5.30 p.m. the engine returned to West Cheshire Junction and propelled the stock to the station, passing the junction again *en route* for Rock Ferry at 5.58 p.m. to make connections for Chester and the Birkenhead and Liverpool suburban services.

Helsby & Alvanley (now a private dwelling) was a pretty station, with substantial stone buildings. Opposite the single platform was a run-round loop and a very leaky



*Helsby & Alvanley station, about 1959 (Norman Jones)*

water tank. Beyond the station is a bridge carrying the main Chester to Warrington road, followed on the right by that sorry spectacle, a disused and overgrown engine turntable and on the left a stone goods shed and sidings. As well as catering for local



traders a considerable amount of traffic is handled for B. I. Cables Ltd., who have direct rail communication from their works. There is a falling gradient from

Mouldsworth of 1/680, 1/100, 1/143, rising through Helsby & Alvanley at 1/400, to a bridge which carries the single line over the main Warrington to Chester line. From here there is a sharp fall at 1/70, to the Helsby-Hooton line at Helsby (West Cheshire Junction).

On opening in 1869, three passenger trains per day ran between Mouldsworth and Helsby & Alvanley, through trains to and from Altrincham and Manchester, but weekdays only, there was no Sunday service. In April 1875, the service was reduced to two trains daily from Helsby, but three continued to run in the opposite direction. The regular service of passenger trains was discontinued in May 1875, when a service was started to the new station at Chester, Northgate.

Although a long period elapsed before trains ran direct to Northgate and the section between Mouldsworth and West Cheshire Junction reverted to its later status, powers for the extension from Mouldsworth to Chester were acquired under the powers of the C.L.C. Act of 1866, clauses in which transferred to the Cheshire Lines Committee the powers of the Chester & West Junction Railway, incorporated by an Act of 1865, to build a railway from a junction at Mouldsworth on the West Cheshire Railway to Mickle Trafford, then on to Chester, Northgate. The distance was 7 miles 62 chains. The opening for traffic was in November, 1874, but it does not appear that the station was ready at that time.

The single line still remained an important one for freight traffic, and even more so by the 1960s. During the last war improvements were carried out at both the Mouldsworth and West Cheshire Junction ends, by double tracking at the entry and improving lay-by facilities and altering the sidings and crossover road at West Cheshire Junction, so as to improve the line capacity and availability. [Editor's note: See also our articles on West Cheshire Junction in *BMRJ* no.5, on Mickle Trafford in *BMRJ* no.6, and on the abolition of Mouldsworth Junction in *BMRJ* no.8. By the 1990s, traffic over the line had declined and the final straw was the destruction by fire of Helsby Junction signal cabin in September 1991; this meant that the line could not be used, and was officially closed on 20 October 1991. The points at each end were made inoperable. The track was lifted by the early 2000s, but the trackbed is so far largely undisturbed].

Traffic continued to increase for, near Helsby are the vast refineries at Stanlow and Ellesmere Port on the banks of the Manchester Ship Canal. Furthermore, close to West Cheshire junction was the B.E.A. Ince power station; a ground frame (electrically released by the signalman) gave access to the B.E.A. siding.

No doubt even to that progressive man, Edward Watkin of the Manchester Sheffield & Lincolnshire Railway, who was the "brains" behind the formation of the Cheshire Lines Committee, current advances in nuclear science would savour of necromancy. Yet that doughty warrior had a hand in atomic development. Much traffic using the branch he instituted, was for Ince power station. The vast plant was specially constructed as part of a scheme to provide power for the Atomic Energy Authority at nearby Capenhurst. It cost £13,000,000 to build and covered a site of 83 acres, which area included extensive private sidings (British Railways had two lines, set back from the private grid and these run beside the down main in the direction of West Cheshire Junction box). The private sidings could hold 600 wagons. Seeing that working at full capacity the boilers consumed 18,000 tons of furnace slack weekly, the need for extensive sorting facilities is obvious. The B.E.A. worked wagons to the tippler and furnace conveyor belts by diesel shunter. When it is realised that traffic to and from the branch and the power station had to be crossed over the Helsby-Hooton line by the signalman at West Cheshire Junction, who had to



find paths between the frequent service of passenger trains, the importance of the junction is plain.

Directions were down main to Helsby and up main to Ellesmere Port and Hooton. West Cheshire Junction box, a typical L.N.W.R. wooden structure, had a 36 lever frame, fully track circuited, the diagram being illuminated by the passage of trains. There was a fireman's telephone affixed at the outer home signal for trains coming off the branch, to enable the fireman to communicate with the signalman when the outer home was 'on'. In fact there were ten telephone connections, with those to sidings and ground frames. It was a common occurrence for seven trains to be inside at the power station. There would be empties waiting a road for Lancashire, Yorkshire, via Helsby and Warrington, perhaps Wath or the North Staffordshire Section, via Mouldsworth and Northwich, and light engines for Birkenhead, Warrington or Chester General. It was the invidious job of the signalman, who must possess the wisdom of a Solomon, to weigh the rival claims of guards, drivers and the boxes in rear and advance, all clamouring for priority and at the same time to liaise with Control. British Railways allocated a regular shunter to the sidings (on the scanty occasions his services were not required he filled in at Helsby, his home station). He was in constant contact by telephone with the signalman advising him of the state of affairs in the siding. In between these multifarious duties the signalman had to go down on to the track to surrender, or collect the single-line token. On a dark and dirty night, with only the aid of an oil lamp this could be, to put it mildly, a tricky business. Sometimes, adding spice to life, engines from Northgate shed, destined for Chester General, came down the single-line branch to gain the General station via Helsby. Indeed, a variety of engines passed West Cheshire Junction. There were Great Western Pannier tanks and 2-6-2T, supported by 2-8-0s. Eastern Region engines come off the branch, ex-1914 war R.O.D. 2-8-0s amongst them. The L.N.W. "D" 0-8-0 trundled by with tank, coal and empty wagon trains, interspersed with the Midland 0-6-0, whilst on the passenger working the Stanier 2-6-4T and 2-6-2T mingled with their Great Western brethren. Quite a pre-grouping cavalcade at times.

The West Cheshire Junction sidings proper were on the up side of the main lines, with which they ran parallel. The siding line immediately adjoining the main up was No.1, then Nos.2 and 3, the latter two being progressively shorter than No.1 with which they communicated in loop formation. No.1 up siding was extended at both ends of the yard as a shunting neck, that at the end nearest the signal box curving alongside the branch up the 1/70 gradient. Trap points protected the branch and main lines and to gain access to the siding it was first necessary for trains to go up the branch. The lever frame in the box was of the type produced by Mr. Webb, with his stirrup type of locking catch. The single line instrument was of the standard L.M.S. pattern, made by the Railway Signal Company. Power was provided from a hand generating set affixed beside the instrument. The dynamo required vigorous rotation with one hand, whilst giving the bell code with the other. Quite a test of manual dexterity; then, to enable the man at the other end to withdraw his token another knob had to be depressed whilst the mangling operations continue. There was an interlocking device for transferring a number of tokens from one machine to the other should there be a surplus at one end. Only in respect of this equipment was the box similar to that of Mouldsworth Junction, to which we will now return.

Mouldsworth Junction box is a typical C.L.C. structure, of timber construction, slate roofed. There was a 34 lever frame, interlocking with the block instruments, with track circuiting of the earlier pattern. Indicators show, not on the

diagram which is merely a plan, but on small separate instruments indicating by rotation of a black bar on a white background. They were placed on the block shelf alongside the signal repeater instruments and in some cases are fitted with annunciators. The main line was protected by traps against runaways from the branch. Directions are up branch, West Cheshire to Mouldsworth and down branch, Mouldsworth to West Cheshire. The branch left the main with two roads. Guard's



*Mouldsworth Junction signal cabin, photographed by the Editor on 9 June 2005.*

telephones to the box are installed at two points beside the up branch. At signal No. 24, branch starter, was the crossover road to the single line proper. There was a fireman's telephone and plunger at this signal, which was locked by the track circuit and if a train was waiting here for the road (and the token) the fireman, who would have been dropped off at the box to await the token, has to "plunge" on arrival back at the engine before the signalman could set the road and pull off signal No. 24. From this point the lines which were the down branch were extended as a refuge siding again with spring trap points at the inlet end. This refuge was not track circuited. It terminated with an outlet to the single-line branch close to the up branch fixed "distant" signal, which was 545 yards from the up branch "home", at which was, again, placed a fireman's telephone. Pre-war Mouldsworth was a busy station, handling a considerable amount of agricultural traffic. There was a regular staff of shunters in the yard and a permanent way inspector was based in an office adjoining the signal box, this office later being converted into a cycle shed.

District No. 13 of the Signal Department comprised Cuddington to Chester, including the Winsford and Helsby branches. The lineman for this area was based at Mouldsworth, to which was sent all requests for repairs to signals, interlocking gear, etc. However, repairs to telegraph wires, instruments, etc., were the responsibility of the telegraph lineman, based at Northwich for No.9 district, Altrincham North to Chester, including all branch lines.

Freight trains and empty carriage trains, could be dealt with under Regulation 5, (warning arrangement) in clear weather only, on the up and down main lines at Mouldsworth and in both directions on the branch. There was a speed restriction of 10 m.p.h. to and from the Helsby branch, this also being the stipulated maximum speed for exchange of the token, the signalmen at Mouldsworth and Helsby (West Cheshire Junction) respectively being the designated persons to deliver and receive it.

At Mouldsworth there was a code of engine whistles as under:

- 1 for Chester (Northgate) on passing.
- 2 for Wrexham line on passing.
- 3 to or from Helsby branch.
- 4 to No. 1 siding and down main.
- 5 Warehouse siding and down main.
- 2 crows: up siding and down main.

And at Helsby (West Cheshire Junction):

- 2 L.M.S. and G.W. Joint main line.
- 3 to or from sidings.

The Cheshire Lines Committee also, under the "Propelling vehicles on running lines through block sections" Rule 149, allowed the following dispensations between Helsby junction (West Cheshire) and Helsby station:

Helsby Junction - Helsby station. Single line. Crippled wagon, when necessary for traffic to be transhipped. Authority is also given for a crippled wagon to be run without brake van in rear. In either case shunter must accompany trip. Helsby station - Helsby Junction. Single line. Not exceeding 15 wagons.

This, then, is the story of the single-line branch of the Cheshire Lines Committee between Mouldsworth and Helsby (West Cheshire) Junctions, only just over three miles in length, perhaps even more important latterly than when it was first mooted and, under the aegis of British Railways, bearing the stamp of that individuality which was so characteristic of the C.L.C. I am indebted to British Railways for some of the historical data comprising this article, and for facilities granted.

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## **Tracking down the best archive railway films**

**by Dave Millward**

The Railway Roundabout series (1958-1962), filmed with television studio equipment, now available on DVD. *Continued from the last issue.* This review covers discs 4-7 of what is likely to be the best value-for-money set of archive films for many years. Duke Marketing on 01624 640000 are amongst several distributors selling this 9-disc set for less than £30.

**Disc 4, British Railways steam 1961 (mainly black & white, some colour):** (Bala-Blaenau Ffestiniog; London Transport, steam & electric; Swindon engines; The Ravenglass & Eskdale railway; A goods train, the Somerset & Dorset with its Whittaker exchange apparatus; Lancashire & Yorkshire special from Newton Heath shed; The Welsh narrow gauge; Southern Region engines at Nine Elms; The Severn & Wye lines).

**Disc 5, British Railways steam 1962 (mainly colour):** (Isle of Wight locomotives; A journey from Ryde-Ventnor, inc. views of the ferries; The Jones goods 4-6-0; Kirtley, Johnson & Co; The Bluebell line; The Cambrian coast express; Western Region engines; Seaton jnc; Can you guess?).

**Disc 6, 1960s steam in northern Europe (colour):** (France - Cotes-du-Nord; Reseau-du-Vivaris; Reseau Breton. Switzerland - Furka Oberalp; Interlaken-Lucerne. Holland - Rotterdam steam trams. Germany - main-line steam. Finland - To the Arctic Circle.

**Disc 7, 1960s steam in southern Europe (mainly colour):** By Orient Express to Greece; Yugoslavian narrow gauge; Austria - the Semmering line; Italian narrow gauge; Portuguese narrow gauge inc. the Corgo line and the Tua valley.

(Discs 8 & 9 next time).

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## **Workshop notes, no.20: Rivets, bolt-heads, welding seams, etc.**

**by Iain Kirk**

How far will you go?: the question of rivets, bolt-heads and such is one which can reduce modellers to a cold sweat. How many are there? Are there too many? Will anyone notice? Does anyone care?

Solutions to the issue of adding them range from individually adding tiny dots of styrene strip to miniature representations made by such people as the American firms, Grandt Line [1] and Scale Hardware [2]. All these methods can be tedious and a lot of work.

A new player in the market is Archer Surface Details [3] – they produce water slide transfer representations of rivets, fasteners and welds. They originally aimed the products at the military modeller but have now started to cater for other interests and that includes us railway modellers. The transfers represent their subject matter with a special resin and you use them just like you would with any lettering or numbering transfer. Having used them on some recent stock for “Mostyn”, I can safely say they are a very simple and effective solution.

The range suitable for railway modelling includes:

### **RIVETS AND FASTENERS**

#### Assorted Small Rivets

#### 0.008 inch (0.2 mm) Rivets

#### 0.011 inch (0.28 mm) Rivets

#### 0.014 inch (0.36 mm) Rivets

#### Large fastener heads

#### Double row rivets.

#### N-scale rivets

#### HO-scale rivets (7/8 inch)

#### HO-scale rivets (5/8 inch)

#### N-scale Alternate Center Rivets

#### N-scale Tank Car Double Row Rivets

#### HO-scale Alternate Center Rivets

**Various AR88001**

**Various AR88014**

**Various AR88015**

**Various AR88016**

**Various AR88009**

**Various AR88022**

**N AR88024**

**HO AR88025**

**HO AR88026**

**N AR88028**

**N AR88029**

**HO AR88030**

## WELD BEADS AND CASTING SYMBOLS

### Perfect weld beads

#### Arc weld beads

0.015 inch (0.38 mm) arc weld beads

0.025 inch (0.64 mm) arc weld beads

0.030 inch (0.76 mm) arc weld beads

0.040 inch (1 mm) arc weld beads

Various AR88005

Various AR88006

Various AR88017

Various AR88018

Various AR88019

Various AR88020

All cost \$14.95 and are available on line.

Ref:

[1] Grandt Line Products:

[http://www.grandtline.com/model\\_railroad/augmentables\\_pages.htm](http://www.grandtline.com/model_railroad/augmentables_pages.htm)

[Editor's note: I have previously bought Grandt Line bolt heads from M.G.Sharp of Sheffield].

[2] Scale Hardware: <http://scalehardware.com/>

[3] Archer Surface Details: <http://www.archertransfers.com/catSurfaceDetails.html>

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## Letters to the Editor

E-mail from Alfred Roberts, forwarded by Dave Millward:

"We might feel that we've had a bad day sometimes but this lot really have got their work cut out.

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To: ParkRoyal103@yahoogroups.com

From: alfredroberts2003@yahoo.com

Date: Sat, 1 Aug 2009 15:29:00 +0000

Subject: [ParkRoyal103] Movement of rail coach M50397 from Swansea to Great Yeldham

Members, Movement of rail coach M50397 from Swansea to Great Yeldham

I have been talking to Mr Michael Northfield of Essex Transport Museum Society. He has confirmed that he received Mr Thornton's letters in March 2009 authorising them to move rail coach M50397 from Swansea to Great Yeldham and he has been trying to arrange this.

You will all recall his postings to the group earlier this year and last year. If anybody wishes to donate money to pay towards the haulage costs then they can do so.

I have been thinking about the stripped condition of M50397 and I now accept that this makes restoration easier because one does not have to unbolt seats, rip out wooden panelling and scrape asbestos or bitumen off the walls and tear out a rotting wooden floor. BUT there are some big hurdles to overcome, such as the gas - torched engine etc mounts, substantial welding needed to replace rotten cladding, and the need to remove, straighten edges of the aluminium roof panels (where these edges have 'reacted' with steel bodyshell) and re - fit and re - rivet the aluminium roof panels and beams. (M56160 and W50414 aren't so bad for this, W56169 had its roof treated as above in 1992 - 3).

Offers of assistance will be welcome when the vehicle gets to Great Yeldham.

Mr Michael Northfield has been speaking to T.D. Williams on a weekly basis.

But, Mr Michael Northfield of Essex Transport Museum Society has said that there have been problems with the road transport companies over when they can do the movement. Allegedly, Moveright International (Goodmans) cannot do the move at this time because there has been a vehicle off the road because of an accident. When approached, Heanors (I do not know much about them) said

they would ring back with a quote within an hour but they did not do so.

Potential movement of M56160 from Bodfari

Obviously these sort of factors should be factored into the equation when anybody is discussing the potential movement of M56160 from Bodfari, which is required under the Planning Enforcement Notice issued after the appeal outcome on 03 October 2003.

Because of the remote location of the Bodfari site (the strip of land behind the council plant nursery, including some of the track bed of the ex - LNWR Denbigh - Mold line) there is obviously much more potential for hauliers delays, because the remote location is so much more difficult for them to get to and they are much less likely 'to be in the area' (i.e. have a lorry passing at that time from another job).

The consequences of such delays could be more serious bearing in mind the need to prepare the surface of the fields at Bodfari for the removal of M56160 and / or the need to get the Territorial Army in to drag the lorry through the mud (a la the arrival of the vehicle on 10 January 2002).

Thanks, Alfred."

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## **The Dee Bridge accident, 1847: part 4**

**by David Goodwin**

*Further "Chester Chronicle" reports from 18 June 1847 – continuing the reporting of the Coroner's inquest:*

### **THE LATE RAILWAY ACCIDENT**

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### **ADJOURNED CORONER'S INQUEST**

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The adjourned inquest was resumed on Wednesday morning [*i.e. 16 June 1847*] at the Town hall, before John Heritage, Esq. coroner.

We observed in court, Captain Simmons, R.E., and Mr. Walker, C.E., the Government surveyors, who were deputed to assist the coroner in the inquiry; Mr. R. Stephenson, C.E., Mr. Tyrrell, solicitor, Mr. Gooch, &c., on behalf of the on behalf of the Chester and Holyhead Company, Mr. Robertson, C.E., Mr. Roy, Mr. Kelsall, Mr. W.H. Brown, Mr. Wardell, Mr. Brown &c, on behalf of the Shrewsbury and Chester Company. There were also officers present from the Board of Admiralty and Board of Trade watching the proceedings; and also a vast body of gentry, and tradesmen, who took a deep interest in the proceedings.

The Coroner, addressing himself to M. Tyrrell said that he had a list of nineteen witnesses before him, and wished to know if the Chester and Holyhead Company had any more to examine?

Mr. TYRRELL wished to know who had sent the list in?

The CORONER said the superintendent of police, and the other railway company. Several parties wished to be examined; one had sent in his name to Capt. Simmons.

Mr. TYRRELL said that he did not think that course hardly fair, as it was understood the enquiry was closed, except to receive the report of the government commissioners. But he did not object.



The CORONER said he could not exclude evidence if it was tendered. He understood some of the evidence was very important; and would materially affect the evidence given on the part of the railway company at the previous sitting.

At the opening of the court, the jury were then called over, and all answered to their names.

The CORONER then said he had a number of witnesses tendered to him by the police, and the Shrewsbury and Chester Railway Company, who were to speak to facts about which they had a very meagre account. The evidence was important, as it differed from the evidence heretofore given as to the cause of the accident. Again a gentleman had tested what was said to be paint, which had been analyzed.

Sir Ed. WALKER wished to ask some of the other witnesses more questions.

Mr. BROAD recalled:- The girders are two inches thick; they are coupled together when tested; two girders may be cast of the same strength from the same mould; there will be a shrinking, but that is allowed for; we had two patterns for the 36 pieces which constitute the bridge; the proportion of hot and cold blast iron was half of each; all are of equal strength; those left are not stronger than the broken.

Sir E. S. WALKER wished to asked [*sic*.] Mr. Stephenson a question. He had occasion to observe, that at the bridge at the King's Ferry, where there was a comparatively small span, there were timber balks to support the girders.

Mr. R. Stephenson recalled:- On the bridge over the King's Ferry, the girders have wood attached.

Mr. TYRRELL objected.

Sir Ed. WALKER said that in that bridge being 30 feet span only, the girders were strengthened with timber; and at the bridge at Chester being 98 feet, there was no wood. He wished to know why in one case there was wood, and in the other, no wood.

Mr. Tyrrell objected, that the only question here, was, as to the cause of death. This was not a court of trial, but of enquiry.

Mr. STEPHENSON: I had better perhaps explain. I can leave it to Mr. Walker. I have no wish to conceal any reason why I do anything. The application of timber in a bridge 98 feet wide is an absurdity. It is used in other places as a matter of convenience and not of safety.

Mr. Samuel Tomkinson sworn.- I am a merchant, and live in Liverpool; I was a passenger at the time of the accident; I was in the second compartment of the carriage next to the tender; I think the speed was about twenty miles an hour; I was engaged in conversation with Mr. Grote before entering on the bridge; the rumble caused it to cease; I had my back to the engine, and was looking at the Roodeye race course; just as we were on the last span of the bridge I felt the line sinking under the carriage; I think we were about the centre of that span; we dropped for a moment; but there appeared a violent lift of the carriage, and we fell a great height, and all was dark in an instant; we struck upon the bank, and the carriage rolled over once or twice on the bank; I appeared to be on my head once or twice in the carriage; the carriage was crushed; when the rolling ceased I found myself on the cushions all of a heap; I sprang up and found I had no bones broken; the wheel of the carriage was close to my head; I found Mr. Grote was comparatively uninjured; I looked at the wreck; several of the carriages were on the bank, and one in deep water; a woman was struggling in the water; I went into the river and drew her on the side; she appeared confused; the first thing I observed was the sinking of the line; I did not see any carriage off the line; I could have told if there had as I was looking out of the window towards the race course.

By Sir E. S. Walker,- Up to the point of the sinking I heard no knocking as of a tender hitting a girder, or as if any part of the train was off the line; I felt no striking or concussion, but a sudden sinking of the line; I can't say if the carriage rolled over in the fall; the carriage fell direct down, and not laterally; when it hit the bank it went on its side.

Mr. Tomkinson wished to have permission to examine the witnesses who might be called. He considered he had a *locus standi* [a right to interfere – Ed.], as he had received a serious injury, and wished to suggest a remedy for the bridge. That remedy was to make this bridge stronger, which was a flimsy structure. He had made a representation to Mr. Miller, a superintendent of the Shrewsbury and Chester line, that he considered the bridge unsafe, and he said the bridge was not doing half its duty. That was before the props were taken away.

The CORONER said that Mr. Tomkinson could only give evidence.

Sir E. S. WALKER said that if Mr. Tomkinson would write his questions on paper he would put them to the witnesses.

Mr. Alexander Macgregor examined.- I am in the employ of Mr. Robertson, engineer to the Chester and Shrewsbury Railway Company; I was a passenger in the 6h. 15m. train on the 24<sup>th</sup> ult.; I was in the luggage van, which was the last carriage but one; Matthews, Nevitt, and Roberts the guard were with me; the train was going about twenty miles an hour; when on the first arch I directed the guard's attention to the Saltney signal; I was on the right hand of the carriage, being next to the down line, with my hand on the side of the van; I was looking along the train; the guard said he never saw the signal that way before; Matthews asked what I was shewing the guard; I heard a crash and then observed a deflection in the carriages; I did not observe any of the carriages off the line; I should have observed them if they had been off; I had the advantage of the curve, which brought the train more fully into view; I jumped off the carriage, and after that I knew nothing; the next thing I recollect was some[one] picking me up; they said "this poor fellow's dead;" I said "I wasn't;" I don't know where I was when I was picked up; the other three were killed on the spot.

By Mr. WALKER, C. E.- I do not think the tender could have been off the line without my observing; I was on the inner curve.

James Clayton, engine-driver recalled.- The engine or tender could not have got off the line without me knowing it.

Thomas Jones sworn.- I am a publican and milkman in Chester; I was on the Grosvenor Bridge at the time of the accident; I saw the train at the ship yard; I put my milk cans down and watched it across the bridge; when the train got on the furthest arch on the Saltney side, I observed a crack open in the middle of the girder; the engine and tender were about the centre; the crack opened from the bottom; the engine had passed the crack, and the tender was right upon it; the engine and tender went on, and I saw the tender give a rise up; the carriages gave a jump and fell backward; the last carriage went down first according to my judgment; the next I saw was the large stones fall off the wall on the Saltney side; I heard a crash when they fell; I am certain the girder opened from the bottom; all went smooth before the tender jumped, and went against the corner of the abutment; the bridge was broke before the tender jumped; I think the jump of the tender broke coupling of the carriages.

By Mr. TYRRELL.- I believe the first break was between the two eagles, about the centre.

Mr. KENNEDY recalled.- I have made another survey of the broken bridge; I have no reason to doubt my accuracy as to the cause of the accident; (the coroner then read to the witness his former deposition); I have nothing further to add to that evidence; I still think the same as I did before; I agreed with the calculations of Mr. Stephenson; I don't consider the cast iron strong enough without the tension rods; I consider one girder capable of sustaining 70 tons in the centre, without the tension rods; but without the tension rods were properly adjusted, it would not be safe for ordinary traffic.

By Sir Ed. Walker.- I don't think that putting on the wet ballast would affect the strength of the girder, as the quantity in contact would be small; I have not known any girder break by its own weight after being in use eight months.

Henry Cutter examined.- I am thirteen years of age; I was about the middle of the Roodeye when the accident happened; I saw the train come up and pass on to the bridge; it got safely over the arches, I heard a crash and saw the train go down about the middle of the arch; the engine and tender were close to the Saltney side; when the carriages broke away the tender gave a spring; the last carriage fell first, followed by all the others.

Mr. KELSALL said that at the last court great stress was laid upon the broken wheel, and the men were in court who broke it.

George Caldow examined.- I am in the employ of the Shrewsbury and Chester Railway Company; I went to the accident about a quarter of an hour after it happened; I went with Mr. Jones, the superintendent of the coach department; I saw a first class carriage lying on the bank; the body was considerably damaged; one pair of wheels and the axle were much injured; the other axle was bent, and one wheel partly broken; four wood spokes were broken; the fellies [*the circular rims of the wheel*] and tire were all connected together and unbroken; no other wheels were materially injured; the wheel is not now in the state as when I first saw it; I and the men employed in getting the carriages out of the wreck broke it to pieces; in capsizing the carriage, the whole weight came upon that wheel and broke it worse, and the labourers subsequently broke it again to make it easier to handle; I think the wheel was first broken by falling on the bank; the fracture could not have been occasioned by rotary motion, from the way the fibre of the wood was injured.

By Sir EDWARD WALKER.- We used a piece of timber eight or ten feet in length to force the wheel off, as it was in our way to get at the springs and wheels from the bottom of the carriage; the tire was on the wheel when we used the lever; I did not see any indentation on the tire of the wheels as if they had run on the chairs; I saw an indentation on one of the tires of a second-class carriage, as if it had struck some piece of iron.

By Mr. TYRRELL.- I looked over the wheels after the accident.

By Sir EDW. WALKER.- It was through the bend of the axle that we broke the wheel.

(The wheel was produced in court for the inspection of the jury, &c. &c.)

Henry Jones;- I am a coach-builder employed by the Shrewsbury and Chester Railway Company; I went with Caldow; I examined the carriages with him; three or four spokes were broken out of one of the wheels of the first-class carriage; I saw no marks on the tire of the wheel; by the appearance of the wood the wheels appeared to have been broken sideways; it seemed to me to have been done with the fall; the broken spokes were gone; there was an indentation in one of the wheels of a second-class carriage, No. 18; it appeared to have struck against iron; No. 18 was in front of the luggage van; the following carriages had breaks - the first-class carriage No. 6,

second-class No. 5. the van, and the tender; I assisted the last witness to prize off the tire of the wheel; the broken spokes would have floated if they had fallen into the river.

Mr. TYRRELL at this stage said that the distance had been measured as follows:- from the Grosvenor Bridge to the Railway Bridge 690 yards; from St. Bride's Church to the Railway Bridge 786 yards.

John Starkey examined.- I am a coachmaker at the Chester general station; I examine all the carriages before they leave the station; I examined the state of all the carriages in the 6h. 15m train; I sounded every wheel with a hammer; they were all sound; all the axles were sound.

By Mr. TYRRELL.- I examine the soundness of a wood wheel by the felly [*the circular rim of a wheel*].

Thomas Truss.- I am principal superintendent of the locomotive and carriage department of the Shrewsbury and Chester Railway Company; I was at the scene of the accident, about an hour and a half or two hours after; I had my attention drawn to the general position of the carriages; I saw the wheels; some of the spokes were broken out; it was not denuded of all the spokes; two of the spokes were entire; two or three were injured, and the rest broken out altogether; the carriage to which the wheel was attached was turned upside down; it had fallen amongst the piles; the carriage was five ton weight, and I think the wheel was broken by hitting against a pile or a stone; the tire of the wheel is perfect; there is no indentation, and the timber is good of the portion of spokes remaining in the boss; these kind of wheels are considered the safest; I examined the whole of the other wheels; of some of the other wheels, some of the axles were bent; all the tires were in good condition except one, on which there was an indentation on the tire; the wheel may have hit upon a piece of iron; it had fallen amongst the wreck; I am satisfied that if one of the wheels had broken the chairs, there would have been more indentations in the wheels, as there were more than one chair broken; I think that if a wheel made a dent in a chair, there would be a corresponding dent in a wheel; I have the axle box of the tender; I am satisfied the tender could not have rode up the tension rods as stated by Mr. Locke, as the axle boxes being slight would have broken away, or have been more broken than what they are; the weight of the tender and water would be thirteen tons; I examined what was called paint by Mr Locke; I call it a mixture of sandstone and marl; I am satisfied it is not paint.

Sir ED. WALKER said that the jury went to see the bridge after the last adjournment, and found two pieces of glass on the wall, and he wished to know what carriage it belonged to.

Mr. Truss.- I also picked up some glass on the end of the wall on the Saltney side; it is plate glass; portions of the frame of a first class carriage were also found there; plate glass is used in both first and second class carriages.

Mr. TOMKINSON said in his opinion that was probably done, when the carriage was lifted up.

Mr. Truss.- The pieces of wood found were the same as used in the construction of the first class carriage of that train.

Major Robe also produced some pieces of the carriages, belonging to both first and second class carriages, which had been found on the stone work.

Mr. Truss examined by M. Tyrrell.- The second class carriage was about 12 feet from the abutment; I say the wheel may have been broken by a pile or a stone; I have found carriages in singular [*sic*] positions after accidents.

Mr. TYRRELL wished the witness to select between the probabilities, as to whether it fell on the stone or a pile.

Witness.- I cannot speak definitely; but if the carriage struck the pile, it would have been thrown farther off.

The CORONER. - Mr. Tomkinson said the carriage had turned over two or three times, and I want to know if it might rebound if it fell on a pile.

Thomas Truss continued.- I stated before that the weight of a first class carriage was five tons and that a carriage of that weight falling upon the wheel and which came into contact with a pile or stone would cause the breakage.

By Sir Ed. WALKER.- If the axle had bent before the permanent way went down, I don't think the wheel would have revolved, as the wheels are very true set, and would not have answered the gauge of the rails.

By Mr. TYRRELL.- I never saw anti-corrosive paint used; if it was so, it would not agree with that found on the axle box.

Mr. Tyrrell produced part of the suspending rod, and said it was painted with sileicious matter and oil; and he was instructed that it was the same as found on the box of the axle of the tender.

Mr. DAVIES (a juryman) denied that the paint having become hardened would have softened in the way referred to by M. Tyrrell.

Mr. Truss, by the CORONER.- I saw the other tension rods, as well as the one broken; there was no indentation upon them; had the tension rod being [*sic*] broken by a lateral blow, there would have been marks on the others.

--- Taylor.- I am a labourer; I am in the employ of Mr. Dixon, timber merchant; I was on a raft near Green's wharf when the accident happened; it is about two hundred yards below the railway bridge; I saw the bridge belly in the middle, and all go down together; I went to the place with a boat immediately; I assisted in getting the people off; the rails were extended over one of the carriages; they were the double line of rails, bound together; there was six or seven yards of railing; I saw Matthews lying dead; we wanted a bar to prise a step off the carriage; a man was knocking off the chains which hold the rails, with an iron bar; he used the bar over hand, and then got the bar between the chain and the rail; the step was cross cut out with a handsaw, and then Matthews was got out.



*Henry Robertson (1816-1888), Engineer to the Shrewsbury & Chester Railway, pictured later in his life than at the time of the accident, when he was just 31 years old.*

*(See also "Henry Robertson" by Emlyn Davies, detailing his career, in "BMRJ" no.6, of March 2006.)*



Mr. Henry Robertson.- I am engineer to the S. and C. R. C.; I have examined the bridge since the accident happened; I am of opinion that the bridge broke under the weight of the engine and train, increased to a large extent by the immediate laying on ballast before the accident; I produce the report I made to the directors:-

"Chester, 15<sup>th</sup> June, 1847

"I minutely examined the Dee Bridge on the Chester and Holyhead Railway on the occurrence of the accident, and have since examined repeatedly the points which bear upon the accident.

"I have caused drawings to be prepared, and also a model, shewing the details of the structure, and the fragments of the beam, in as far as now discovered, and to these I would refer you, instead of attempting to give a written description of the bridge.

"You will perceive that there are two principal fractures in the beam, one near the centre, 5½ feet from the west abutment, in the middle portion of the girder; the other in the portion of the girder next to the abutment, and 30 feet from its fence; the latter fracture appears to me, from its form and especially from the position in which the fragments lay, as shown in the ground plan taken the morning after the accident, to have been caused by the fall; any disturbing cause previously to the fall is quite inconsistent with the close proximity of the fragments.

"The fracture at the centre, from the position of the fallen portions, as shewn on the drawing, and of the middle tension rods wrapped over the girder, and especially from the form of the fracture, appears to me to have first taken place. This fracture I consider to have resulted from the weakness of the top flange of the girder, which was compressed and broken by the strain arising from the rolling weight of the engine and train, and vibratory weight of the structure itself, increased to a large extent by the deposit of 25 tons of ballast on the roadway immediately before the accident. This compression is remarkably evident by the bulging out of the metal at the point of the fracture, at the top of the web or vertical portion of the girder.

"In estimating the strength of the girder, I am of opinion that the tension rods, from the form of the section of the girder, tended to weaken it, and to throw an undue strain, by compression on the top flange; but, assuming that they did not weaken it, and applying the formula as given by Eaton Hodgkinson, F. R. S. to the girders – by one formula the breaking weight is equal to 61½ tons, and by the other the breaking weight is 76 tons. Now, it has been an established rule in practice, that ⅓d or ¼th of the breaking weight is the safe working weight to which a girder should be subjected; and the larger the size, the smaller weight to be the proportion taken; therefore, ¼ of 76 (the breaking weight), it follows, that the safe working weight to which one of the girders ought to be subjected is 18½ tons, and the two girders, 37 tons.

"The weight of the timber platforms, beams, rails, chains, &c. exclusive of the girder, according to an approximate calculation I have made, is 19 tons 6 cwt.; and adopting the rule, that a uniform weight, diffused over a beam, is equivalent to one half that weight suspended at the centre, this becomes equal to a weight suspended at the centre of 9 tons 13 cwt.

"The equivalent weight of an engine and tender of 33 tons 10 cwt. 2 qrs. suspended at the centre of the beam, I estimate at 32 tons, making a strain of 41 tons 13 cwt. against 37 tons, the safe working strain to which the bridge ought to be subjected.

"However, on the afternoon of the accident, immediately previous to the passing of the train, the bridge was subjected to an additional strain by the laying on



of five inches of broken red sandstone ballast, amounting to a weight over the bridge of 25 tons, which is equivalent to a weight suspended at the centre of 12 tons 10 cwt.

"This makes a total of 57 tons against the safe strain of 37 tons formerly stated; and this last addition appears to me to be the immediate cause of the accident.

"In these calculations, however, it is assumed that every thing is at rest, and that the forces applied are those resulting from direct pressure; while the evidence shows that there is a vibratory movement of the whole structure to a large extent; and there is besides the percussive movement of the engine and tender, which, with a heavy long boiler engine with outside cylinder, is considerable. The weight of the structure and of the train in motion will be about 164 tons in all; and the strain from this cause must be added to that formerly stated.

"This strain, although it cannot be ascertained by accuracy of calculation founded on experiment, experience shews to be great; and I am of opinion, that it formed a large element in the strain which broke the bridge down.

"There is also the whole gross strain arising from the pressure, and the percussion of the structure and its load, the apportionment of that strain between the girders; for I am of opinion that from the loose and independent connexion of the girders, and the giving of the structure, the strain may have been unequally divided between the girders. These investigations independently of the evidence of the eye witnesses, lead me to the conclusion that the girder broke in the middle from its weakness to resist the strain increased by the laying on of the ballast.

"The opinions of Mr. Stephenson and Mr. Locke, founded on the alleged facts as to the paint on the tender, the broken carriage wheel, and the snips in the chairs, appear to fall to ground, as they must have been misinformed on these particulars, which can all be disproved.

"HENRY ROBERTSON, Engineer"

By the CORONER.- I take the girder to be 100 feet long, 12 feet wide, 5 inches deep, which gives me 500 cubic feet, and I allow 20 feet to a ton; I found it to be 5 inches on the adjoining girder.

Mr. Stephenson said, I only made it 3 inches.

Mr. TYRRELL said the value of the girder could not depend on ten or twenty tons; if it could not bear a great deal more than the maximum it was not worth anything.

Mr. Robertson.- I have made the calculations according to my own experience; Mr. Morelli stated in his evidence that the ballasting was to be from 4 to 6 inches; the side broken down had been perfected; but on the other side the ballasting has, as yet, only been partially laid down.

Captain SIMMONS said that he took the depth of ballasting at four inches on some of the girders.

Mr. Robertson.- I did not survey the bridge before my Company used it; I had no authority to examine it; I made enquiries about it; Mr. Jeffreys was sent to examine it, and he was turned off it by Mr. Betts; I went over it before opening on three engines; the piles and staving were then all round the bridge, but I don't know whether the wedges were on; one engine had the steam on and two were dead; two engines and tenders were on at once; my object as to test the stability of the bridge; I had no right to interfere with the bridge; I have had no complaint about the bridge; I do not like that style of bridge; I had seen Mr. Betts' engines going over with heavy ballast trains.

By Mr. TYRRELL.- I have no doubt of the safety of the bridge; I have doubted the principle and mode of construction; I tested the bridge practically by taking over the engines in the manner described; it was no test when the supports remained by which the bridge was built; previous to that I had taken steps to know if the supports had been removed, but not at that time; I instructed one of my assistants to get information about that bridge; I did not directly apply to any officer of the Holyhead Company for information; I was not directly in communication with Mr. R. Stephenson with reference to the Holyhead Railway: I have met him in London about the Saltney junction; I don't think I saw him more than once; I did not doubt Mr. Stephenson, or his ability to make a safe bridge; I don't like the principle of the girder being in three pieces supported by a tension rod.

By Sir ED. WALKER.- I should have great confidence in Mr. Stephenson's work, and have so still; there is no gentleman in the profession in whom I have more confidence.

Sir Ed. Walker said a Mr. Parry of Hawarden had a plan of the bridge in court which would shew the utter worthlessness of tension rods; and he alluded to a letter in the 'Mining Journal,' the writer had sent him a plan of girder he had recommended to Mr George Stephenson when he was building the 'Manchester and Liverpool Railway'.

Mr BROAD.- The supports were removed before the first engine went over; I don't know if they were removed when Mr Robertson went over.

Joseph Wood.- The wedges were removed from the bridge before the inspection of the railway by General Pasley; the trusses were screwed up before that time; the bolts have been screwed up since; all the screws went home, as tight as I could get them.

Mr John Morris examined.- I am a painter; I have examined the material on the tender called paint; I did not find anything that bears any appearance to paint or anti-corrosive paint; I found only earth and grease; I don't think it is the same compound as covered the torsion bar.

By Mr Tyrrell.- I went to the bridge to examine the tender on Friday the 4<sup>th</sup> June, two days after the adjournment.

The coroner said that Captain Simmons, R.E. and Mr. Walker, C.E. had made a report to the government which they would produce.

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*(To be continued in the next issue, with the end of this "Chester Chronicle" report from 18 June 1847, plus later items)*

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## **Book Review**

*Done in a day: easy detailing and weathering projects for your model railroad* by Pelle K. Søbørg. Kalmbach Publishing. ISBN: 978-0-89024-762-4

It sometimes is very worthwhile investigating the world of 'Model Railroading', i.e. modelling railways as modelled in America. The author of this book, Pelle Søbørg [1], came to my attention through some articles in one of the British model railway magazines - *Model Rail*. He is a Danish gentleman and models American outline practice to a very high standard -

he is also a graphic designer by profession and it is obvious to me that he has taken the disciplines and standards of his profession and used them in his modelling. He is regular contributor to the American modelling magazine *Model Railroader* and brings a very readable edge to his articles.

The book is very well presented and is in full colour. It is written in a very clear and concise manner, with excellent and very well worded captions to all of the photographs used to outline the projects contained therein. There are fourteen individual projects listed and each one is aimed at being literally "done in a day". The weathering techniques outlined are very interesting, as are some of Søbørg's opinions on paint types. Much use is made of powdered chalks and he also mentions the use of airbrush-ready acrylic varnish - no thinners need here! There are also sections on making dummy loads and detailing - whilst these relate to American outline stock, I do feel that the general thrust of the writing and the photographs will give most modellers enough inspiration and direction to tackle their own given prototype.

This book is well worth the money to my eyes; my copy cost £12.15 through Amazon [2], and will provide a good deal of stimulation to the modeller looking to add that extra dash of "something" to his work.

It is worth pointing out that the author has another book due in the autumn relating to his techniques for scenery. It could be another interesting read...  
Iain Kirk

Ref:

1: Pelle Søbørg's website - <http://www.soeeborg.dk/myhobby.html>

2: Amazon Page - [http://www.amazon.co.uk/Done-Day-Weathering-Railroaders-How/dp/0890247625/ref=pd\\_sim\\_b\\_1](http://www.amazon.co.uk/Done-Day-Weathering-Railroaders-How/dp/0890247625/ref=pd_sim_b_1)

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*As mentioned in the 'Letters' column in the last issue, Cyril Freezer died a couple of months back. This obituary is based on that on the web-site of the 'Telegraph Media Group' to whom thanks are due:*

## Cyril Freezer, 1924-2009

*Photo: Railway Modeller*



Cyril John Freezer was born in Poplar, east London, on June 27 1924 and went to Barking Abbey School where he developed a fascination with the local railway lines. After the outbreak of war in 1939, he was evacuated to Weston-super-Mare, but returned to London after the Blitz. He worked as a shipyard apprentice on the Isle of Dogs and qualified as an engineer in 1945.

After the war, Freezer worked in a newspaper print room on Fleet Street and developed his interest in model railways by joining the Model Railway Club, which then held twice-weekly meetings in a side arch at Waterloo Station. At the time the club was roughly organised into four groups, LMS, LNER, GWR and

Southern, and the groups took turns to organise weekly "track nights" when members would bring in their models to run on test tracks.

In 1950 his love of railways won Freezer the job of editor of a new magazine, *Railway Modeller*, founded to capitalise on the huge surge in interest in model railway building as a hobby. Over the next 27 years, Freezer turned the magazine into the leading publication for model railway enthusiasts before moving on to edit a rival publication, *Model Railways*.

As editor for more than 30 years, first of *Railway Modeller* magazine, then of *Model Railways*, "CJF" as he was affectionately known, did much to encourage the idea that railway modelling should be about the realistic operation of railways as well as the building of models. He also championed the idea that model railway-building was not just a hobby for the rich, but one which could be pursued by almost anyone with an interest in running trains.

He published numerous practical guides, ranging from the simple *First Steps in Railway Modelling* to the more adventurous *Model Railway Operation: In Accordance with Prototype Practice*. In this he demonstrated how to operate a model railway in accordance with a real one, with advice on combinations of rolling stock and how to run trains in a realistic setting along plausible operating lines. Few model railway enthusiasts are without copies of his *60 Plans for Small Layouts* or his *Model Railway Manual* on their bookshelves.

Freezer remained active in retirement, serving for many years as vice-president of the Model Railway Club and travelling around the country to address model railway shows or judge their layouts. His other books include *Plans for Larger Layouts*; *The Garden Railway Manual* and several instruction manuals covering specific aspects of model railway design and operation, from wiring and signalling to cab control and landscape modelling. His last book, *First Steps in Railway Modelling*, was published in 1998.

Cyril Freezer, who died on May 19, is survived by his wife, Doris, and by their daughter and two sons.

*Published June 12 2009*

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## **Track topics, no.2, by Syd Wainwright**

Years ago, in the days of steam locomotives and jointed track, people used to ask me how I could tell the speed of a train I was travelling in, without a stopwatch. It was really quite simple. In those days most rails used on jointed track were sixty feet long, so the number of rail joints you passed over in 41 seconds was equivalent to your speed in miles per hour:

There are 3600 seconds in 1 hour;  
there are 5280 feet in 1 mile;  
length of a rail (between joints) is 60 feet.

Therefore, number of rail joints passed over in one mile is equal to:

$5280 \text{ divided by } 60 = 88;$

So, at one mph time taken to pass over one rail length is equal to:

$3600 \text{ divided by } 88 = 40.9 \text{ seconds, say } 41 \text{ seconds.}$

And at two mph =  $20\frac{1}{2}$  seconds, and so on.

A change from reading on a journey, particularly as it worked as well in the dark as it did in daylight. All you needed was a watch with a second-hand. But you had to

remember in the immediate post-war years that the G.W.R. were sometimes still using 45 foot rail in places. Nowadays, of course with long-welded rail becoming universal on most railways, the only chance of using the speed estimation would be on preserved lines – and most of these are operated as ‘light railways’, with a notional 25 mph speed limit.

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## Editor's page

One of the landmarks of serious large-scale P4 modelling, and in many ways a forerunner for our “Mostyn” layout, is the 21mm gauge “Adavoyle Junction” which models a Great Northern Railway (Ireland) prototype in the 1948 era. This model was developed by Tony Miles (with various helpers – including the Editor, Martin Wynne – the ‘Templot’ guru, and others) as a successor to “Adavoyle” – an exhibition continuous-run layout built originally in Merseyside Model Railway Society’s Chester Street clubrooms. Tony retired from his job in Warrington, and moved to a small village in Shropshire, and in about 1980 the layout followed him. His new house could accommodate a bigger model, and as with most layouts it expanded to fill its room above a double garage! It was largely rebuilt, starting about 1982, with new trackwork to a new track plan: everything bigger and better than before! (Does this seem a familiar scenario? ...).

Time catches up with us all, and the increasing average age and decrepitude of the exhibition team eventually made finding ‘a good home’ for the layout seem sensible; there was no likelihood of it being able to stay at its Shropshire home. To his credit, Tony (now aged 87) did something about the problem before it was too late, and the layout made a third trip across the Irish Sea (it had previously been exhibited twice in Ireland). This time it had a one-way ticket, and in July 2009 it was presented to the South Dublin Model Railway Club, together with most of the rolling stock, buildings, etc., and is now installed in their clubrooms in Knocklyon, Tallaght, in south Dublin. (See their website for more information: [www.sdmrc.hobbysites.net/](http://www.sdmrc.hobbysites.net/) ).

### Recent books:

*Private owner wagons: a seventh collection* by Keith Turton. Lightmoor Press, 2009. £19.95p. ISBN 978 1899889 35 8.

*Sligo, Leitrim and Northern Counties Railway* by N.W.Sprinks. Irish Railway Record Society, 1970.

*The Cavan & Leitrim Railway* by Patrick J.Flanagan. David & Charles, 1966.

- The above two volumes were donated to the Editor by Pat McCartan of Balbriggan, and of particular interest in view of the Editor’s recent trip to that part of the country.

*Wagons of the early British Rail era: a pictorial study of the 1969-1982 period* by David Larkin. Kestrel, 2009. £14. ISBN 978 1 905505 10 4.

*Modern locomotives illustrated, no.178: Desiro EMUs*. M.L.I. (Ian Allan), 2009. £4.20.

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## **The future of Johnstown Road**

Emlyn has now decided that he wants nothing more to do with exhibiting "Johnstown Road", and consequently has no reason for continuing to travel to Barrowmore. Since all the 4ft8½in stock and the NG locomotives remain Emlyn's personal property (only the narrow gauge wagons were built by other group members), the continued appearance of the layout on the exhibition circuit must be in doubt. Unfortunately Emlyn is unable to accommodate the model, in its extended form, in his house in Bromborough; but he is happy for his buildings, vehicles, boats, etc. to remain on the layout, and ownership (less of course Emlyn's rolling stock) to pass to Barrowmore M.R.G.

So we have to decide what to do with it. There is no need to come to a decision in a hurry, but letting things 'slide' is just a recipe for the layout to deteriorate. Emlyn himself thinks that selling it is the best bet, and I'm inclined to agree with him, but the value of easily salvaged items like point motors needs to be a factor. My experience suggests that less discrete components (track, etc.) are either damaged in removal or take too much time to recover.

Perhaps one solution would be to remove Tortoises and then to give the boards, etc., to a 'good home'???

All group members' opinions will be welcome.

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## **A contrast in journeys: Wrexham to Chester in 1947**

**by Syd Wainwright**

When discussing the weather, people often refer to the freezing temperatures we experienced at the start of 1963; this lasted from Christmas 1962 until the following Easter. However I can remember quite clearly the blizzards at the start of 1947 which only lasted for about three weeks, but which were far more severe than the 1963 episode. Many of us were put out of work for a fortnight.

During the winter of 1946-7 I was attending the Technical College at Wrexham as a day-release student completing an engineering course. It was about the middle of January, and on the Wednesday in question it started to snow heavily during the morning, becoming worse after lunch. By about 3.00p.m. it was a foot deep in parts and our lecturer, Ron Roe, in the middle of a mechanics lesson, said to us "I think you Chester people had better get off home or you are going to be stuck here all night". Crosville Motor Services had already stopped running its buses up into the hills and the Chester road was becoming blocked in parts; so our only chance was train – which I pointed out was due in about fifteen minutes (if it was on time, which was doubtful in the conditions). Anyway, a group of us walked the short distance to the Great Western station, to be told that the train – the 11.10a.m. Paddington-Birkenhead – was very late leaving Wolverhampton, and we were in for a long wait: three hours, as it turned out.

During that time there was activity in the station area: unfreezing points, using a 14xx inside cylindered tank locomotive and three or four men with shovels. The method was to stand the locomotive over the point blades, open the cylinder drain cocks to blow steam down and thereby melt the snow and ice which was preventing





*Castle class no. 5070 'Sir Daniel Gooch' passes Saltney Junction on 31 March 1956, at the head of a Birmingham Snow Hill – Chester relief express. (Syd Wainwright photograph).*

them from moving. This, together with shoveling was achieving some success, but things soon became blocked up again. Eventually just before 7p.m. the starting signal at the end of the down platform came 'off' and we could see that the level crossing gates at Watery Road were open to the line. In a minute or two our train arrived: 5021 "Whittington Castle" and the usual seven coaches. We piled in; it was warm, and we were in Chester in about thirty minutes. Speed had not exceeded 30-40 mph anywhere and I distinctly remember us passing over the level crossing at Balderton at little over walking speed.

It was about 7.30 by now but my friend Jack Evans who lived at Flint had to wait another three hours for a train to get him there (time spent in the refreshment room, I hasten to add). Most of the buses in Chester had ceased to run by now, so four or five of us walked the three miles or so to Blacon where we lived, through the deepening snow. We arrived home about 8.30, tired and very hungry.

This massive snowfall had taken place all over the country and the result was that coal could not be transported to power stations and consequently industry was shut down for a couple of weeks due to a lack of electricity. At Chester locomotive shed, coal was frozen solid in trucks and could not be moved with a pick-axe, let alone a shovel. Anyhow, after a couple of weeks we were back at work though things were not completely normal for quite a few weeks.

However – fast forward three months to the start of May – and the weather had changed completely from icy cold to being abnormally warm and fine for late spring. It was exam time, and Monday evening of May 5<sup>th</sup> found me sitting in the 'Tech' sitting my final mechanics exam, 6p.m. to 9p.m. By about 8.40 I had completed the paper, checked it over and realised that there was no point in staying

any longer. It was a beautiful late spring evening, just right for a ride down the 'Western', so I hot-footed it the two hundred yards or so to the G.W.R. station, just in time to catch the 4.10p.m. Paddington-Birkenhead express which was again pulled by a 'Castle' class locomotive, booked to leave Wrexham at 8.50. Now the G.W. line north of Shrewsbury has often been referred to as a 'secondary' main line – but there was nothing 'secondary' about the loco work. The journey was a complete contrast to the one I had made earlier in the year: the twelve miles or so to Chester were completed in a couple of minutes less than the nineteen allowed.

We made the usual vigorous G.W. start, accelerating all the time as far as United Collieries at Gresford followed by the descent of the 1-in-82 Gresford Bank with its 40-50mph restriction as far as the gravel quarry at Marford. From here we were off like a rocket topping sixty over the level crossing at Rossett and eighty plus over the one at Balderton. Brakes hard on for the curve round to the junction at Saltney, and another three or four minutes brought us to a stand in Platform 3 at Chester. I nipped out of the station just in time to board a bus which was heading for Blaenau, a couple of minutes walk when I got off and I was home under forty minutes after I had left the 'Tech' in Wrexham.

Later in the year, I mentioned this trip to a Great Western passed fireman I knew, and he reckoned that he and his regular driver held the unofficial record for the fastest run from Wrexham to Chester – start to stop – which he claimed they had completed in fifteen minutes, with all speed restrictions strictly observed. To manage this, he said you had to be over the level crossing at Rossett in seven and a half minutes from the start, and passing Saltney Junction (10.3 miles) in not more than twelve.

There was an article in *Railway magazine* for September/October 1947 giving details of a journey made by the late Cecil J. Allen, when the Wrexham-Chester run was completed in sixteen minutes by no.2915 "Saint Bartholomew" hauling seven coaches. I have never, though, seen a log of the run being accomplished in fifteen by steam; though I did not doubt my fireman friend in the slightest. Bear in mind that Gresford Colliery was working in those days, and speed restrictions due to ground subsidence on the bank could vary.

Incidentally, I passed the exams!

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