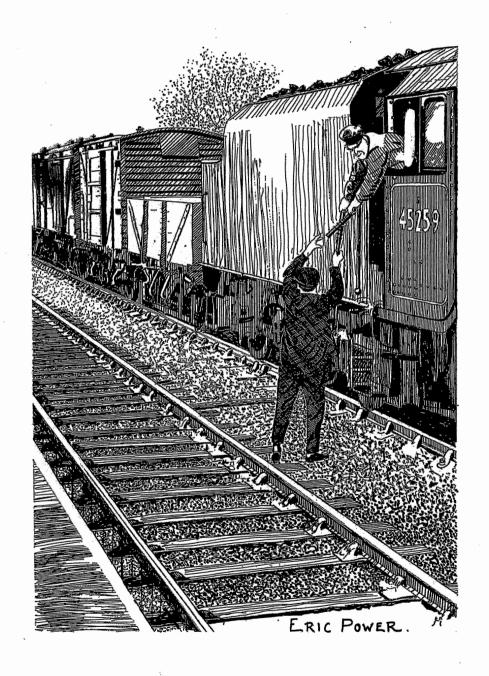
Barrowmore Model Railway Journal



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Published on behalf of Barrowmore Model Railway Group by the Honorary Editor: David Goodwin, "Cromer", Church Road, Saughall, Chester CH1 6EN; tel. 01244 880018. E-mail: david@goodwinrail.co.uk Contributions are welcome:

- (a) as e-mails or e-mail attachments;
- (b) a hard copy of a computer file;
- (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 September 2011, and contributions should get to the Editor as soon as possible, but at least before 1 August 2011.

Copies of this magazine are also available to non-members: a cheque for £8 (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.

The cover illustration for this issue is a drawing by Eric Power of West Kirby, and shows Black Five no.45249 at Hadlow Road station (Willaston, Wirral) on the Hooton-West Kirby branch in the 1960s. The engine-man, apparently nicknamed the 'Singing Dumpling', is exchanging staffs with the signalman.

Forthcoming events

(2011)

11/12 June 2011: Chatham show ("Johnstown Road" is appearing).

18 Jun. 2011: 7mm running track (American), Llanbedr (see Editor for details).

10 Jul. 2011: Gresford 7mm Group show (see Editor for details).

23 Jul. 2011: 7mm running track, Llanbedr (see Editor for details).

6 Aug. 2011: 7mm running track (American), Llanbedr (see Editor for details).

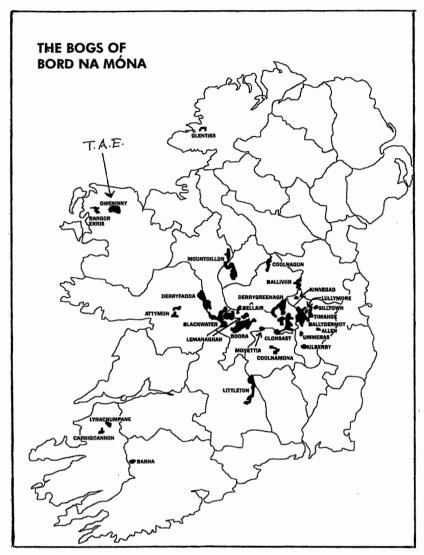
20 Aug. 2011: 7mm running track, Llanbedr (see Editor for details).

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



Pwllheli West S.B., 8 April 1972

Tionnsca Abhainn Einne



Bord na Mona (the Irish Peat Board) operates what was one of the largest narrow gauge industrial railways in Europe; indeed the total track mileage (nearly all three foot gauge) is said to be roughly equivalent to that of Irish Rail and Northern Ireland Railways combined. The purpose of the enterprise was mostly of course to win fuel for the country's power stations there is very little coal in Ireland. And lots of peat! The subject of this article was in a remote and virtually uninhabited part of County Mayo, in the far northwest of the Irish Republic. An acquaintance who was born in the area, told the Editor recently that "for 364 days in the year you could hear a pin drop!". The Editor has never visited this part of Mayo, and his experience of Bord na Mona peat railways is largely limited to a trip to the Blackwater Bog, near Athlone in the midlands, several years ago although peat operations can be seen from the main-line trains in many parts of the country. This article was first published anonymously in "Irish railfans' news", vol.9 no.1 (Jan. 1963), and so reflects the situation as it was then.

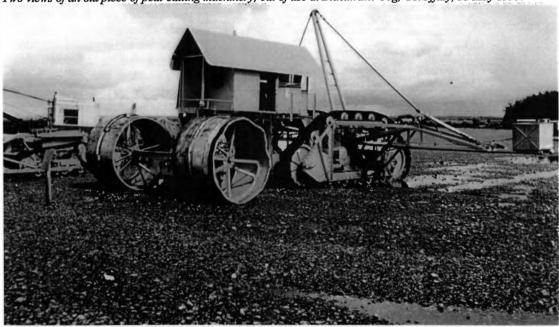
A note on peat: Peat (like coal, gas, and oil) is a fossil fuel, and is the only native fuel commonly found in Ireland. Peat is a soil that is made up of partially decomposed rotted remains of dead plants which have accumulated on top of each other in waterlogged places for thousands of years; the partial decomposition is largely caused by a lack of oxygen in the soil, high rainfall (over 175 rain days per year) and poor drainage. The three main types of peat lands are: <u>blanket bogs</u> which consist of a carpet of peat extending over a large area; <u>raised bogs</u> which develop on former lake basins and are dome-shaped in section and can be up to 12m thick; and <u>fens</u>, formed around the margins of lakes etc.

Only the first two types are commercially important.

In times when rail closures are the order of the day, it is a refreshing and very welcome change to report on a railway system - still only half completed - built to the three foot gauge and which boasts engineering and permanent way features that would put many a standard gauge line to shame. The system in question is operated by Bord na Mona - the Irish Peat Board - on the Oweninny Bog in North-west Mayo. In this region there are three bogs: Glenamoy to the North, which is run as a research station by the Agricultural Institute, and the Oweninny Bog, farther South, which is divided into two parts designated Tionnsca Abhainn Einne (T.A.E.) 1 & 2. It is on the latter two bogs that Bord na Mona are in the course of establishing an extensive railway system.



Two views of an old piece of peat-cutting machinery, out of use at Blackwater bog, Co.Offaly, 13 May 1999.



T.A.E.1 consists of 16 bog areas - a total of 6,500 acres of which it is hoped to have 4,530 acres in production this year. There will be 23 harvesters employed on the bog during the season from May to the end of August producing milled peat. The complete output is absorbed by the Electricity Supply Board's new power station which went into operation at the end of October [1962] and when fully operational will produce 160m units per annum. The production target on the bog is 300,000 tons a year making an average of 1,000 tons a day rising to 1,600 tons a day in the peak period. The scheme was first started in 1952 with the base depot on a site about ½ a mile farther West - nearer the village of Bellacorick and the site of the power station. The original railway system was built using second-hand 30 lb. rail in 1953-4 but this was superseded when the building of the present railway with new 35 lb. rail commenced in May 1960. The depot now in use was built on a site cleared in 1954 by

removing 8' off the surface of the bog at that point. It consists of offices, a hostel, a railway store and workshops as well as fuel installations.

A trip over the railway is full of surprises. The line is unusual among Bord na Mona railways in that the difficult nature of the terrain necessitates cuttings, embankments and bridges both under a road and over the Oweninny river. The line which is laid with a ruling gradient of 1 in 100, has metal sleepers, an extra sleeper being placed under each rail joint for greater stability in the fashion pioneered by the Tal-y-Llyn Railway in Wales. Sand ballast is used extensively on all the main lines. This is conveniently obtained from spoil removed during the excavation of cuttings on the main line. At present there are two such "pits" on the system. The railway is divided into 3 categories:- (I) the main line (2) other permanently laid lines serving the specific bog areas which are regarded as secondary main lines and (3) temporary sidings which are laid and removed according to the loading requirements. The first-mentioned consists of an inverted "U"-shaped line from the depot to the power station and along a roughly circular loop stretching North East over the bogs. About a mile from the depot, the loop and power station lines meet - another unusual feature being a triangular junction. Continuing from here to the power station, the Oweninny river bridge is encountered. On this section, the line is double, the right hand road

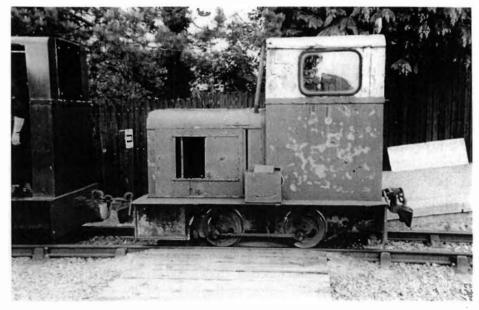


An example of present day technology: Fiatagri 10wheel tractors at Blackwater bog, Co. Offaly, 13 May 1999.

serving as an input and the left hand one as an outlet line. At the river two single line concrete bridges were built on gravel foundations 6' below the surface of the river. These are neatly finished off at the river edge with sandbags. Parallel to these, on a lower level, is a machinery bridge of similar construction. The combination of bridges is most impressive indeed and at once dispels any doubt about the utility of the narrow gauge railway! To complete the picture, there is a fine concrete road bridge over the double line about ½ mile further on.

The line, which at present is about 17 miles in length - although it is planned to double this eventually - is normally single, but a part of the loop section is double in addition to all the power station line. There is no signalling but the loop will always be worked in an anti-clockwise direction while the power station operation has been mentioned above. At various places on the line there are level crossings for the heavy machinery. At each of these, the track is protected by long wooden longitudinal sleepers placed alongside the rails.

For the operation of the line, 12 locomotives are provided: although it is planned to use 9 in future. Present stock is:- three 25 h.p. Deutz locos built in 1960 Nos. LM 182, LM 185, LM 196; seven type 40 DL Ruston & Hornsby locos Nos. LM 30, LM 137, LM 138, (built 1955); LM 96, LM 104, LM 116



LM 259 (Deutz KS28B class 0-4-0DM, built 1965; 28hp, 3.4tons, 4-speed mechanical, 1ft 4½ins wheel diameter. Originally allocated to Boora bog in Co. Offaly). Photographed on 11 June 2004 at Kilmadan. Typical small Bord na Mona diesel — more recent engines are much larger.

(built 1954); & LM 174 (built 1957); two type 48 DL Ruston & Hornsby locos, LM 18 (built 1946) & another not observed. It is

proposed to replace these with two 48s and seven 80s – a new type of locomotive.

In addition to these, there is a Wickham railcar, with which trouble is experienced due to the wind catching in the roof eaves, and a standard railcar No. C 52. The workmen's shift wagon was once familiar to many readers as C.I.E. West Clare Section railcar No. 3387. The coach of this has been mounted on



A 'standard' Wickham Railcar, C 55 (Wickham, 1957), at Blackwater bog, 11 June 2004.

Bord na Mona bogies and repainted in the standard brown and cream colours. Yet another C.I.E. narrow gauge relic to be found on this amazing system is the body of ex Cavan & Leitrim Section coach 1L which found its way to the power station at Bellacorick also via the West Clare section. This is now without bogies and has been equipped as a short-wave radio control centre for the feeding of the power station from the bog. There are also a number of ex West Clare wagons which serve as shelters in isolated parts of the bog.



Wagon no.85 loaded with milled peat, at Blackwater bog, 11 June 2004.

Wagon stock consists of 150 Belgian wagons of 16 cu.ft. capacity mounted on two four-wheel bogies. These are equipped with a very ingenious swivel coupling which enables them to be drawn automatically through a tippler at the power station allowing the load to be discharged to the station feed directly without first uncoupling. There are four oil tankers and a total of thirty-eight 4-wheel hoppers which came from the original railway and are now worked for permanent-way jobs only.

T.A.E. 2 is situated 8 miles west of Bellacorick, near the village of Bangor Erris. Here the total bog area is about 3,500 acres and the produce is sod peat. The output will probably be sold locally although some may be crushed for use at Bellacorick power station. An early proposal of great interest called for an aerial ropeway link with T.A.E. 1, but this idea was later abandoned. It is proposed to lay about 10 miles of railway here eventually, using the 301b track from T.A.E. 1 which still exists as long temporary sidings laid on the surface of the bog.

The complete T.A.E. system reflects great credit on Bord na Mona and inspection of the line effectively disproves the idea that railways, especially narrow gouge railways have outlived their usefulness. In conclusion, acknowledgement is made to Bord na Mona, especially to Mr. J.E. Carley, Manager, T.A.E. for his invaluable assistance.

Postscript no.1:

The article above was written in 1962; in 1966, a small group of enthusiasts from the UK made another visit, and it was described by A.D.Semmens in *The industrial railway record*, no.13 in March 1967. The section relating to T.A.E. is reprinted below:

BORD NA MONA

THE IRISH PEAT COMMISSION

A. D. SEMMENS

This article results from the joint BLC-ILIS/NGRS visit to Ireland in July 1966 when the party consisted of only four members, many others having withdrawn owing to the prolonged seamen's strike. Let me begin by giving a warm and heartfelt thank you to the Bord na Mona head office in Dublin. A permit was provided for the party to visit all the Bord's works, and in taking full advantage of these facilities, help, information, and transport on the bogs were provided unstintingly and willingly. In the following paragraphs, all systems are 3ft 0in gauge unless otherwise stated; the number before the location identifies it on the accompanying map; Gaelic names are given in brackets.

6 - T.A.E. (TIONNSCA ABHAINN EINNE), Co. Mayo. This, the first milled peat bog to be visited, was a real eye-opener, being of vast size compared to the sod bogs seen so far. It is located 9 miles west of Crossmolina, on the road to Belmullet, at a place called Bellacorick. The main purpose of this bog is to provide fuel for the Bellacorick Power Station of the Electricity Supply Board which has no locomotives of its own. From Rustons, acting as maids of all work at the smaller bogs, we were now able to see Hunslet "Wagonmasters" hauling solid-sided wagons instead of the slatted type in use at the sod peat



A typical 'Wagonmaster' (1980) at Coolnamona, Co. Laois, March 2007.

bogs; four-coupled Deutz locomotives shared the humbler duties with the Ruston's. With some of the production areas being many miles from the headquarters establishment and the disposal of the milled peat being elsewhere, the number of locomotives engaged mainly on service duties was quite striking. The various tractor machines, purpose-built for digging, milling, draining, cutting and ridging, all need diesel fuel. This can occupy the full time of

one, two, or three locomotives, hauling tank wagons with (roughly) the capacity of a road tanker. Similar vehicles, painted white, and filled with fresh water, supply both vehicle radiators and fresh water containers. For the transport of men and urgently needed supplies to various quarters of the bog there are passenger vehicles of all types, from converted peat wagons with coverings against the weather to home-made corrugated-iron huts on wheels. The presence of stoves in some of these bears witness to the hard conditions under which work sometimes proceeds.

Another very important locomotive duty, constantly being done, is to assist with the lifting and laying of rails, for as the production of one bog is taken to the Power Station so the loading machines go to their next assignment. Some two or three trains can be thus engaged, and at T.A.E. is a most interesting machine carried on double bogies and propelled by its own diesel engine; the latter also provides the power for lifting the various rail sections from the bogie wagons and laying them on the peat, where the rail gang adds the fishplates and bolts. The quality of the track on the permanent sections is quite good, but the un-ballasted temporary sections can provide a rather rough ride. Sometimes this is not improved by the bog machines which cross the lines as though they weren't there!



Deutz LM 259 of 1965 (Mike Holmes photo).

Observing the locomotives at the larger bogs presents rather a problem as some are parked at the most convenient point for the workers. At T.A.E., certain locomotives returned to the main offices and workshops, but others were to be found clustered in and around the Transport Office, hard by the Power Station; some of the Service locomotives were left with their trains at various points on the bog whilst the drivers returned to base in the transport vehicles. There is, of course, the old "Paddy" who lives five miles from headquarters but yet only a stone's throw across the bog; individual locomotives, in these circumstances, tend to be found in odd places but usually these hidey-holes are known to the bog supervisors and gangers.

The locomotive stock at T.A.E. consisted of seven Hunslet "Wagonmasters", three Deutz, and ten Ruston's - a total of twenty compared with seven about 1962. A feature of the Deutz locomotives is the whistle, operated by the exhaust which is carried in front of the cab. There seemed to be fewer railcars at the larger bogs and T.A.E. was no exception with its one working example and another in a most woebegone condition out on the bog. It was interesting to see trailer car 3387 from the West Clare section of C.I.E. in use as bog transport, as well as a bus body on wheels, whilst the Transport Office consisted of a Cavan & Leitrim coach, less wheels!

7 - BANGOR ERRIS, Co. Mayo. Controlled by the manager of T.A.E., this site is some twelve miles distant, one mile west of Bangor Erris on the road to Geesala - an unsurfaced road which made us very glad to reach our goal. Three Rustons were found here, of which two were at rest in the open. The other was on a train of side-tippers obtaining ballast from a stone quarry adjoining the bog. When in full production it is quite probable that more locomotives will find employment here.

Postscript no.2:

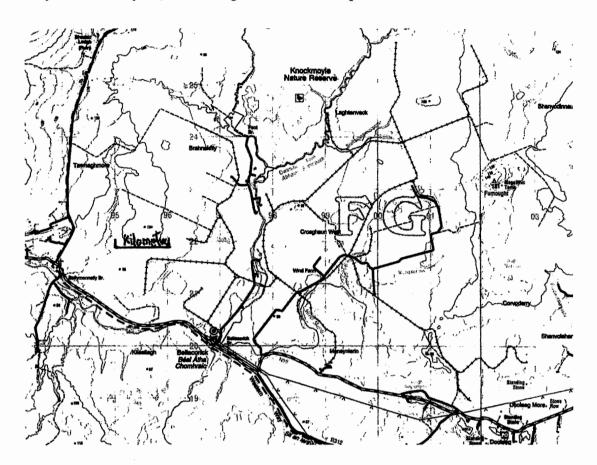
The 45 years that have elapsed since 1966 have seen big changes to T.A.E., and indeed to the whole of the Irish Republic (and the U.K.) economy. The Bellacorick Generating Station became 'non-viable' and was closed down by the Electricity Supply Board in 2004; the cooling tower was eventually demolished in October 2007.



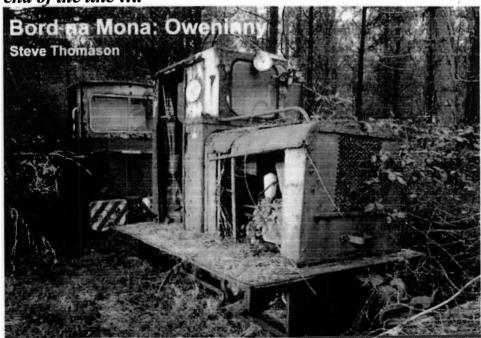
The cooling tower (300ft high) of Bellacorick power station.

Parts of the Oweninny bog are now reclaimed as nature reserves, while a wind farm has also been promoted there by Bord na Mona since 1993. Most of the bogs in Ireland have now been depleted, and factors such as this, plus increasing awareness of fossil fuel burning's aggravation of global warming, have persuaded the Bord to announce in 2008 that the remaining peat-fired power stations will close in the next twenty years. Of the E.S.B.'s generating stations in 2011, only a few are now peat fuelled. Some use gas, coal or oil, while most are

hydro powered. What this will mean for the Bord's railway system, I don't know; but presumably their peat briquette plants (for domestic consumption) and some peat production for horticultural use, will continue. The map below is an extract from the 2005 edition of the Ordnance Survey of Ireland sheet 23, and shows the T.A.E. system in its last years, still covering an area of over 20 sq. miles.



....the end of the line



Derelict Simplex (back) and Deutz (foreground)locomotives at T.A.E. about 2005 (Steve Thomason photo).

Firing on the Welsh Highland Railway

by Richard Stagg

There are many opportunities for volunteers on Heritage Railways. Some jobs are high profile, others very much behind the scenes; some are cool and clean, others hot and dirty; but whatever they are if you like them, they can be fun and rewarding. I am a volunteer fireman on the Welsh Highland out of Caernarfon. Most of the turns involve working on the ex-South African NG16s so this account relates to them; 87 and 143 use coal, and 138 oil.

Builder's plate



on no.143

Prior to the departure of the first train of the day from Caernarfon a lot of work has been done, so let's take a look at what has happened. First you have got to get there; so, it's set the alarm for a very early start, get up, have a good breakfast, and drive to Dinas (the railway's operating centre, about three miles south of Caernarfon) with all the gear for the day not forgetting food and drink. The drive itself can often be a delight especially at the beginning or end of the season with dawn or sunrise happening all around you.



No.143 at Dinas, on 6 August 2005, in lined black livery; she is now green.

Once at Dinas around 6.30 am, it's time to meet with your mate the driver, get into overalls, sign on, and check there are no surprises re loco, rosters, etc., etc. Then it's time to start on the engine.

Coal firing:

What follows relates to coal firing, and looks at it mainly from the fireman's perspective. Details about oil firing come later. Whilst the fireman is working on his tasks the driver, who is in overall control, will be dealing with his own list of tasks which are mainly ensuring that the engine is properly lubricated for the day's turn.

First, have a good look at it in the shed. How dirty is it? If there's no cleaner, there will not be time to clean all of it so which bit will, if cleaned, benefit the overall appearance most? While the driver starts the shunter and we wait for that to warm up and create the air for its brake one can do some of the visual checks required. So, onto the footplate and turn on the gauge glasses to see how much water there is in the boiler. Open the fire box door, shine a light into it and see how much dead fire is left from the day before. Then inspect the tube plate and fusible plugs for signs of leaks, and check that the brick arch is sound, the fire bars are level, and that in general, all is well in the firebox.



Coal-fired Beyer-Garratt No.143 at Waun Fawr while still in black livery, on 5 July 2003.

Once the engine is outside the shed the water hose can be put into the tank to top that up, and at some stage in the preparation the relevant amount of water treatment chemical will need to be added. Whilst by the front tank remember to take the lid off the chimney.

Provided there's enough water in the boiler it is policy to flush some of the sediments out of it by performing a "cold blow down". So the blow down control is operated to discharge water from the base of the boiler for the stipulated time. At intervals during the season samples are taken from the boiler to check on the pH of the water and adjustments to

the water treatment regime may be required following their analysis. There is also, of course, a regular schedule of boiler washouts which will remove the major scale deposits from inside the boiler.



The cab-side plate on no.143, betraying the first owner.

Preparing a coal fired engine can make a lot of dust and it is very easy to get thoroughly dirty very quickly but it's not compulsory, and with a bit of planning a lot of the dust can be directed away. So connect up the air hose. Using compressed air to power the blower allows the old fire to be cleaned out without getting covered in ash, and more importantly, allows you to see what you are doing! Same applies to inspecting and, if needed, cleaning out the smoke box. But remember, first time you power the blower there's going to be a shower of sooty water shot out from it. It's not very diplomatic to use a sooty aerosol on your mate! So make sure that he is not down-wind of the chimney.

Get the fire irons (variously shaped pokers and long handled tools, etc.) from off the bunker side where they live, and using your favourites break up and push the remains of the previous day's fire into the ash pan. NG16 No. 87 was designed to have a section of its grate to swing open, so you were able to quickly sweep the previous day's ashes and clinker residues away, but it was found to be prone to damage so this year this has been replaced with a plain fire bed. Once the grate is clean check again that all the fire bars are in their correct place, and that the brick arch is intact.

Now – around 7 am or shortly after - you can light up! Different firemen have different ideas of what is the best way to get a good fire going, so what comes next is my personal preference and is not meant to be dogmatic. First I put a layer of coal all round the firebox but leaving the centre clear, about 18-20 shovelfuls should suffice. Then I will put some rags from the "lighting up" box into a bucket and soak them with paraffin, and pile some wood from the wood store onto the footplate. I spread and pile most of the rags in that space left in the middle of the grate, light one that has been kept back and drop that onto the pile already formed, then quickly place the wood onto the burning rags so there is a good heap of kindling burning. Then I place several shovelfuls of coal onto this pile and shut the door. Ensure that the dampers are open and with the compressed air still powering the blower the fire can now be left to its own devices for some time while I get on with the next part of the prep.

The ash pans now have to be emptied. They need all the ashes that have dropped down from the cleaning of the grate raking out. It's a lot less dusty if you drench the ashes thoroughly with water first, and besides wet ashes cannot blow onto the engine's motion

which can lead to abrasion damage. So either use the drench system fitted to the engine which is used on the run to keep the ashes wet and so prevent lineside fires, or get another water hose. There are spark arresting meshes fitted to the openings in the ash pans that prevent burning fragments from falling out through the dampers which have to be checked and examined, and if faulty, sorted before the engine can leave. Similarly there are spark arresting screens in the smoke box that also require inspection. Coal burning engines have a long record of causing line side fires so great importance is placed on these preventive measures. All the ashes that have been removed then get shovelled into a barrow and taken to the ash dump.

Oil firing:

First difference from coal firing is that it does not take so long. A lot of the preliminaries are just the same but there are other differences, for a start is there any fuel? Coal can be seen, oil is not so obvious; so the tank has to be dipped. Also a record has to be kept of the fuel used. Once back on the footplate one can unfasten and open the firebox door which is a different design from the one on a coal fired engine. Inspection of the tube plate, fusible plugs and brick arch is just the same, but there's also the burner to examine. It will probably need to be cleaned of the rim of carbon that can form around it, using the specially designed long handled brush kept for the purpose. The base of the firebox — the panplate — needs looking at to make sure there are no loose bits of firebrick ready to fall out when the engine is working hard — when they can get red hot and become a potential fire source. If there are any there they need to be brushed down the air inlet tubes in the panplate. Once happy, shut the firebox door and re-secure its fastening.



No. 138 MILENNIWM is oil fired; photographed here about to run around her train at the Caernarfon terminus on 22 August 2007.

The fuel oil passes through a filter on its way to the fire. This is at the back of the cab so swivel round to check it and, if it's needed, clean it. Opening the filter causes a small amount of oil to be discharged, so it goes into a container which contains old rags that, soaked with oil, are used for fire ignition.

At around 7.30 am, it is time to light the fire. An oil fire is not like a coal fire. For a start there is only ever ONE flame, which can go out! Before it can burn, the oil has to be

blown into very fine droplets — atomizing it. Steam from the boiler is used for this job. Problem, till some water has been boiled there's no steam. Answer, connect up the airline and use compressed air to atomize the oil till there is sufficient pressure to switch over to steam. So compressed air will feed the blower and power the atomizer to start with. Lighting an oil burner needs to be done carefully and in strict conformity with procedure as getting it wrong could have explosive consequences! So turn on the blower and the atomizer, partially insert a suitable piece of oil soaked rag into the ignition port in the fire door leaving plenty hanging out. Then light it and let it get well alight before poking it down into the fire box, ideally near to the burner. Make sure it is burning well in the firebox. Then turn on the oil, and stand to the side. Within 10 seconds you should hear a whoosh as the oil ignites. Then balance the blower, atomizer and oil supply to get the amount of fire you want. If the fire did not light in those 10 seconds, turn everything off and follow the correct procedure prior to starting again.

It will take some time for the pressure to rise enough to switch from air to steam so an eye needs to be kept on the pressure gauge during the rest of the prep so as to change over at an appropriate time.

That's the fire taken care of. Time perhaps for a mug of tea. Next job is the sand boxes, four of them. They are those squarish black boxes high up, one on each corner of the engine. They need to be full, or almost so. So if they are not, get a barrow and get sand from the sand store. Sand these days comes in polythene bags in euro permitted weights. However it's still tricky getting it into the sand boxes without dropping some onto the cylinder lubricators cleverly situated immediately underneath. My method is to climb up onto the running board with about a half a bag decanted into a nice clean and dry bucket which gives a controlled pour into the sand box with good visibility of the job. A totally empty box will take about 1½ bags to refill. Now check that the sand can run out of the box when the driver wants to operate the steam sanders. There's a little inspection port under the box which has to be opened – if OK there will be a flow of sand; if there's no sand a piece of wire poked in should clear any obstruction and reward you with a good steady sand flow. But remember those lubricators and have something ready to catch the sand into.



No.87 in the previous grey livery – she is now painted in midnight blue.

What now? If on 87 time perhaps for a quick look at the fire. It might benefit from a bit more coal or maybe it will be fine just as it is. Then it is time to start the cleaning. Often the driver should be free by this stage to help with the cleaning but that does not always happen. As said before there will not be time for one person to clean everything. I think paint work takes priority over brass. There are at least three ways to clean the painted surfaces. If the engine is wet from recent rain then a bucket of water with some detergent in it can work wonders. If it's dry the traditional paraffin/lubrication oil mix is first choice. There is also the Boston Lodge (Festiniog Railway) practice of using a proprietary wax polish. Then there's the brass. In my opinion if it all looks the same then the engine will have a coherency of appearance, so either clean it all, or leave it alone. One area that often gets overlooked is the cab itself. If I find it very dirty I may well put all my efforts into cleaning that, especially if it's pouring with rain, so we crew can have a reasonable working environment. Of course if there are any cleaners around, or there's a trainee rostered, then there should be more opportunity to get things bright and polished.

During the cleaning I will have been monitoring the fire. By now the pressure should be rising and once there is a reasonable figure on the clock it is time to switch off the compressed air and use steam to power the blower. Before leaving the shed there are some tests and checks to be done, such as checking that both injectors are working, so there's no worry about putting water into the boiler, and checking that the gauge glasses are clean, working and showing the same level of water! Also when pressure has reached the permitted maximum that the safety valves will lift and blow off, however that is likely to be somewhat later in the morning. Oil firing is a much more precise science than coal firing so it is regarded as a great sin to allow an oil burner to blow off and so waste expensive fuel. We also need a number of clean rags so we can keep controls, hands, faces, etc., clean during the day.

At around 8.30 am, almost time to move from the shed in the south end of the yard to the coaling stage near to the carriage shed, but first it's time to change from overalls into footplate "uniform" - trousers or brace and bib, jacket and, for most of us, some sort of cap. And to collect food, drink, rule book and all other necessary papers that have to be with us on the footplate. Then someone needs to get the token so we can move off shed and go to the coal stage to fuel up. 87 needs its bunker piled really high if it's doing two trips from Caernarfon, so there will be a member of staff trained to use the tractor and shovel to refill the bunker which when full, i.e. piled high, will have about three tonnes of coal in it. Once coaled, time to get the cab floor cleaned up and washed down before moving off to collect the carriages for the empty stock movement to Caernarfon. (Oil fired 138 will have had its oil replenished the night before, so goes straight from the shed to collect its train about half an hour later.) The train will be waiting for us in the release road at Dinas with the service car alongside the buffet stewards' platform where those very hard working members of the team will have been finishing loading all their vital supplies. Locomotive crews are very appreciative of the buffet crews' efforts, particularly on hot days, to keep drivers and firemen well hydrated.

Off to Caernarfon:

Once we are coupled up, have the right token and everyone is happy, we can go down to Caernarfon. At Caernarfon we come off the train to run round and take on water. The



The northerly end of the W.H.R. ends at a car park and temporary station consisting of Portakabins. The line between Caernarfon and Dinas uses part of the trackbed of the former standard gauge railway which went south to Afon Wen; the town centre (and the castle) are a short distance behind the photographer. 13 September 2008.

driver needs to position 87 very precisely so the water hose can drop directly into the filler hole. It's a lot easier with 138 and 143 as they have long filler troughs rather than the round port fitted to 87.

Fireman's duties on the move:

The fireman is not just there to shovel coal. He is part of a team. Visibility from the cab of NG16s is very poor so observing the line ahead is a two person job. All left hand bends running chimney first have to be watched by the fireman as do all right hand ones running bunker first. Thus keeping a good lookout and simultaneously operating all the fire controls is so much easier with oil firing as everything can all be done whilst observing the route. Coal firing on the other hand involves turning ones back to the route, concentrating on loading the shovel and then placing the coal accurately on the fire. Further many drivers will open and close the firebox doors in order to reduce the time the fire doors are open and so reduce the time cold air flows into the firebox. This, though, some think, has the potential to reduce the crew's concentration on observation of the line ahead.

The art of successful firing is to match the input of heat to the boiler against the demands made on it by the driver drawing power off it in his use of the steam generated and the need to replace the water boiled off with fresh but cold replacement water.

Thinking ahead is the name of the game. With oil firing the fire is so instantly alterable that literally as the driver uses more or less steam the fireman adjusts the fire size to match. If the driver shuts off and the fireman is too slow there will be clouds of dense black smoke. (As a result of the reduction in draft leading to a reduction in oxygen supply to the oil being supplied to the firebox thus leading to incomplete combustion.) If you see an oil burner making a lot of smoke you can suspect that all is not as it should be on the footplate – unless there's a photo charter on and the snappers want scenic effects! When the driver opens up and the fireman is too slow the pressure will plummet. In a good team the driver will be giving a running commentary on what he is doing or about to do; and the fireman will be

keeping an eye on the driver's hands and the cylinder pressure gauges as well. Route knowledge is vital too, so one knows when the demands for steam will be made — and when demands will be minimal. With the length of route and marked variation of gradient that exists on the WHR this knowledge is essential.

With coal firing there is a delay between adding fuel to the fire and getting the heat into the boiler. Consequently it is essential to plan ahead. Coal has to be added to the fire ideally so that it burns evenly producing a fairly constant delivery of heat. When the fire is producing more steam than the driver is using the pressure will rise giving an opportunity to add water to the boiler which by itself reduces the temperature and so the pressure. Conversely if more steam is being taken from the boiler than is being produced the pressure drops, followed by the water level. So a situation arises when trying to correct the water level causes the pressure to drop further so making matters worse, but opening the fire doors and putting fresh coal on the fire will reduce the fire temperature also as the ingress of cold air and the presence of "green" coal has its own deleterious effect. Damned if you do, and damned if you don't! If the boiler cannot be refilled and the pressure drops away it may be necessary to stop the train to sort everything out – what is called stopping for a blow up. So basically one needs to leave stations with a fullish boiler and maximum pressure, keep up a steady firing rate and remain in control of the boiler and not let it start to control you. Little and often is the secret; but how much is little and how frequent is often? Mastering that conundrum is the name of the game. Watching the smoke is also part of the technique. One cannot put fresh coal over all the fire bed at the same time. To do so would "blacken out" the fire. Therefore coal has to be placed judiciously where it is needed. So different parts of the fire will be at different stages of combustion at any one time. Furthermore, some parts of the fire burn away faster than others. It is necessary then to have a good idea of where the next shovelful or round needs to go. Failure to achieve this may lead to a hole developing in the fire bed causing considerable quantities of cold air to be drawn straight up from the ashpan and through the boiler leading to a sudden cooling and resultant loss of pressure.

There are a number of other variables relating to coal firing, such as grate size and shape, its slope if any, the type of coal supplied, its size (size of lump), its calorific value, its percentage of volatiles, its smokiness, its propensity to form clinker, to name but a few. For example the smallish fireboxes in the traditional FR engines burn a smaller sized coal than the WHR's Garratts, so the coal pile at Dinas has one size of coal while that at Boston Lodge on the FR has another.

Watching for signals and checking tokens is another joint activity. As we proceed along the line both members of the crew call out the presence – or absence! – of the signal lights, which are there to guard the crossing loops and some of the level crossings. Similarly the tokens are read out not only to one's mate on the footplate but to the guard as well.

Disposal:

At the end of the day the engine has to "be put to bed" – disposed is the correct term. Ideally there will be little fire left after shunting all the carriages into their shed. The boiler has to be "blown down". This involves opening a valve at the base of the boiler that discharges water and accumulated sediments from within the boiler. At normal operating pressure this water is discharged with a loud roar and instantly vaporises into steam so producing quite a spectacle. With the Garratts the discharge is to the side of the engine

whereas some of the FR's small engines discharge downwards so have to blow down into a pit. Obviously with side discharge one has to select a suitable site, and not do so beside the Dinas ash pile that is situated next to a car sales site! Yes someone did it — he had a lot of cars to clean up afterwards! Then the boiler needs to be refilled, but provided there is good pressure remaining the residual heat should be able to do this whilst the rest of the disposal process proceeds. Also to be refilled is an oil burner's oil bunker.

The fire has to be put out. Easy with oil, shut the valves, open the drain valve, a final whoomph as the residual oil in the feed pipe ignites and that's it. Coal takes longer. The fire has to be broken up, all clinker dislodged from the fire bars and as much of the fire as possible dropped down into a well drenched ash pan. The ash pan has to be emptied and the ashes taken to the dump.

All the motion on the engine has to be wiped down to remove excess oil, grease and dirt which will have accumulated during the day, and the driver will be re-lubricating as necessary and refilling oil cans ready for the next day.

Finally the engine is put back into its shed, and the lid is put onto the chimney to reduce heat loss from the boiler.

Lastly the crew can retire to the mess room, finish off the paperwork, clean themselves up and book off.



At the far end of the W.H.R. (and F.R.) from Caernarfon: the interchange between the narrow gauge Ffestiniog Railway (left, with a train from Porthmadog just arrived - passengers detraining and the F.R. engine running round the train in the background) and the standard gauge line from Llandudno Junction (right). Photographed on 6 August 2002, before the W.H.R. had been extended this far.

Book review by Norman Lee:

LNWR Wagons Volume Two by the LNWR Society, Edited by Chris Northedge. Wild Swan Publications. 220 pages, card bound. RRP £29.95.

Volume 1 is dated 2001 and so the new volume has taken ten years to produce - much of its gestation has been in the publisher's office but we are pleased to see the volume out at last and we hope that Volume 3, which will complete the series, will be ready more quickly.

Volume 2 includes all the LNWR's covered goods vans built from around 1859 onwards plus the Company's boiler, tramcar and general trolleys. Volume 3 will cover coal, coke and hopper wagons; departmental coal wagons; ballast wagons; goods brake vans; anything not included elsewhere. Volume 2 reached the shops in February or March 2011 [but the Editor ordered a copy from Amazon on 18 April and it has not appeared yet!?] and your reviewer must own up that he hasn't read it from cover to cover yet - he hasn't had his copy for very long.

The content of the new volume is to the same high standard as volume 1. The format is similar, giving lots of photographs with long captions to augment the text. There are drawings for nearly everything - a mixture of Earlestown and Crewe general arrangement drawings, smaller diagrams (usually from the LNWR's diagram book) with dimensions and a few drawings made by modellers and enthusiasts. The text is written by several specialists within the LNWR Society and Chris Northedge has done a splendid job putting it together in a coherent style.

The book is primarily a historical record, not a guide for modellers. However, the editor models in 7mm scale and has presented lots of the sort of detail which foxes even the best of experts when they come to build that part of a model. Who has modelled a 'CWP' (chain wearing plate) which the LNW sometimes placed above a van's door to prevent scoring during loading and unloading by crane? Copious details of liveries are given and these show the changes over the years. The colour of gunpowder vans has caused arguments for a long time - Chris sides with Philip Millard in saying 'red' until around 1912 when grey was adopted.

The photographs are wonderful and Chris has scoured many an archive to find them - I've not seen most of them before. My favourites are the WW1 tanks which illustrate the 'RecTank' chapter. The RecTanks served in WW2 as well but the Valentine tank in one of the plates looks quite flimsy compared to the tanks used by Rommel and James Mason in the desert - the LNWR CCT in the background appears much more robust! There is a good picture of Worthington's ale dock in Burton - Chris shows the whole print with lots of beer barrels and not just the LNWR wagon in the corner, so he's balanced his priorities well.

The quality of printing (by Amadeus) is high and my only real grumble is the binding. Volume 1 had hard backs, as did the two volumes of L&Y wagons. Unfortunately, Volume 2 of LNWR wagons has card backs. The leaves are stitched together in the traditional manner - the publisher hasn't used the modern technique of 'perfect binding' and so the book opens out properly without trapping pictures or drawings in the centre margin - but it seems a great pity that such an important book does not have hard backs. The publisher says that the price

would have increased significantly and that wagon books do not sell well (and copies of Volume 1 are still available).

I hope the new book does sell - go and buy a copy. Your £29.95 will be well spent (and you might get one for less if you shop around). Better still, buy two - keep one on your modelling bench and have a best copy for your book shelf.

Norman Lee (LNWR Society)

Obituary: Reg How: 1926 - 2011

The death has occurred in hospital, after a short illness, of Reg How of Pantymwyn, near Mold. Reg was a long standing member of the EM Gauge Society and was one of the original three members of the Dymock Group, named after their 30 feet long EM layout from the Gloucester/Herefordshire borders. The layout was on the exhibition circuit from the early 1990's winning several awards. Reg was responsible for the pointwork on the layout as well as the handheld controllers that he built to an EMGS design, and are still in use today, modified and improved by Reg using his extensive electronic skills.

After serving a RAF apprenticeship, Reg served in Iraq and Rhodesia as well as several UK postings. After the RAF he emigrated to Canada where, amongst other jobs, he drove trolley-buses. On return to UK he worked for Aerofilms before joining the MOD as an instructor in electronics and avionics. He then moved to Deeside College (Kelsterton) as a lecturer.

Reg was interested in cine photography and latterly had been busy transferring a large number of his cine films to DVD, using mainly equipment he had made himself. Computers and electronic "gadgets" fascinated him – he was a recent convert to Kindle books. A keen musician his instrument of choice was, typically, the electronic organ and after retirement, and aged 80, he gained an Open University music degree.

He was an enthusiastic member of the Clwyd group of railway modellers based around Mold and will be very much missed.

(Dave Greenly).

[Reg also built very nice Great Western parcels stock for the Merseyside M.R.S. "Woodside" museum model.]

The Rule Book

by Dave Millward

The British Railways Rule Book of 1972 was issued to most employees and it was their duty to familiarise themselves with its contents and be subjected to Rules examinations as dictated by their superiors. Different grades of duties would clearly require different levels of competence in varying combinations.

There were 19 sections at this time:

- A Employment and discipline
- **B** General
- C Fixed Signals
- D Handsignals
- E Signals, Points, Track Circuits and other Signalling Equipment.....Failures, repairs and renewals
- F Detonators
- G Level Crossings
- **H** Working of Trains
- J Shunting
- K Detention of Trains on Running Lines
- L Signalling during Fog or Falling Snow
- M Trains Stopped by Accident, Failure Obstruction or Other Exceptional Cause
- N Working Trains of a Double Line over a Single Line of Rails during Repairs or Obstruction
- O General duties of staff of Engineering Departments
- P Safety of Men Working on or about the Line- Appointment of Lookout Men
- Q Protection of Engineers' Trains Working on a Running Line not under the Absolute Possession of the Engineer
- R Loading or Unloading of Engineers Materials to and from Rail Vehicles which may be Moved
- S Protection of Hand Trolleys on a Running Line Not in the Absolute Possession of the Engineer
- T Engineering Work, Obstruction of the Line, and Temporary Speed Restrictions

Snippets:

Within section J the use of 'Audible signals' using a bell, gong, horn or whistle is covered. One ring or blast indicating 'Go ahead'; Two....Set back; Three....Stop; Four....Ease Couplings.

Within section M the instructions for 'Divided trains' are listed. This includes instructing a driver that should he become aware that his train has become divided and there is any risk of the rear portion colliding with the front portion then he must continue to run forward but not pass any stop signal at danger unless authorised by the Signalman. He must also make every effort to attract the attention of drivers of approaching trains by giving a series of short blasts on the horn and where possible exhibiting a red headlight or handsignal.

Within Section D the use of Green handsignals is covered and authorises a Signalman to use a green handsignal to give a driver permission to pass a signal at danger during shunting.

The Francis Thompson buildings in North Wales today by Tony Robinson

Preamble

Firstly the writer would like to make it clear that he is not and never has been a student of architecture, railway or otherwise! That is not to say that he has not been captivated by the quality and finery of some of the still extant buildings to be found on the Chester - Holyhead line and the smaller ones on its erstwhile branches. Not all of the station buildings on this line were designed by Francis Thompson but most of those that were, still survive in one form or another and so have been recorded here accordingly.

The Architect - Francis Thompson 1808 -1895.

We should spare a moment to consider the man himself who was responsible for the design not just of the buildings in this article but several more spread over Great Britain and its overseas colonies. Born in Woodbridge Suffolk on 25th July 1808, Thompson was educated at Woodbridge Grammar School, his father George Thompson was a builder and County Surveyor of Suffolk. Information on the early career and training of the man is sketchy but he appears to have "cut his teeth" on general architecture in Canada, primarily in the area around Montreal from 1830 to 1837. At this time he returned to Gt. Britain due to the political troubles that were brewing between the French and English speaking settlers in Montreal. However he did indeed return after 1850 when it is believed that he became involved there with Robert Stephenson on the construction of a tubular bridge over the St Lawrence in the 1850s, where he was involved with the stone work design having been responsible for the stonework of both the Conway tubular bridge and Britannia tubular bridge over the Menai Straits. Before he returned to Britain for good he designed a number of station buildings in Maine and Michigan in the neighbouring USA.

His British career seemed to have begun with work on the North Midland line, the design of Derby station and associated buildings being his first really notable achievement. Stephenson was the engineer for this line and so employed Thompson as his architect on this and later, from around 1845 the Chester - Holyhead line. After the work on the C & H was completed he moved on again under Stephenson to the Eastern Counties Railway (later G.E.R.) where Cambridge station was his most notable design. Thompson clearly made a considerable sum from his work with major railway contractors and in 1866 designed a house for an early retirement in Hastings, Sussex. Sadly he was to outlast his accumulated wealth and died on 23rd April 1895 in poverty at Bredfield, Suffolk and was buried in Woodbridge cemetery.

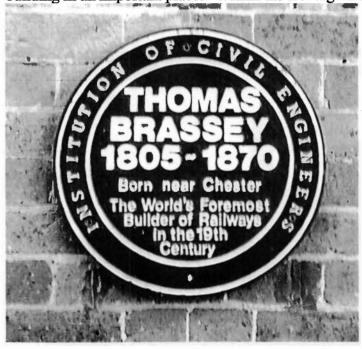
The essential purpose of this article therefore is of a photographic nature to look at the still extant station buildings designed by Thompson on the C & H line, few have been demolished and most remain in one form or another and it pleases me to report that most have been either kept in good condition or because of listed status unaltered externally. Some have been beautifully restored to perhaps better than their former glory by new owners occupying them as residences.



Chester station in 2006

Chester station

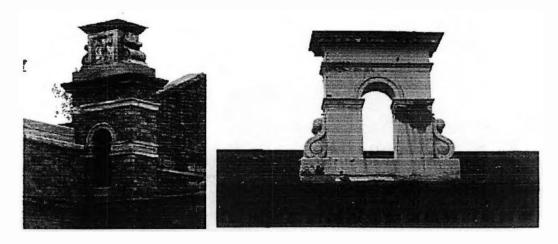
Taken from the west side of the main entrance, the bold Italianate design with its four mock bell towers is well maintained and one feels that it almost cries out "I am an important building in an important place!" Within the frontage are a number of office buildings that



The station was built in 1848 by the famous contractor Thomas Brassey, commemorated by this plaque on a wall inside the station.

today are either used by Network Rail or the local train companies plus some that are rented out privately. Clearly in pre-grouping days office space was probably shared, with the GWR taking the nearest first and second floor building and the LNWR the furthest (eastern) end. Interesting to note the sandstone balconies beneath the double towers, the windows behind the balconies conceal large rooms. The writer gained admittance to the furthest which revealed an ornate gallery with a surrounding banister above the room below. So, one could surmise that they were intended as board rooms for the respective early sharing railway companies.

Not shown here is the station interior which has been considerably modernised in what is (arguably) a tasteful manner with the usual plethora of cafe, information and travel centre etc., etc.



Now here's something interesting that the writer discovered when examining the frontage of Chester station. The ornamental tower on the left has a striking similarity to the well-known edifice atop of Bangor station (right). Chester's tower is immediately behind the frontage of the now (office) converted Mold wing. The question is.... Could they have been contrived "Architectural signatures" of Thompson? It should be noted that neither seem to have any real purpose and are not elaborate chimneys. The sandstone plinth on the left is somewhat weather worn but the letters can be picked out on a shortened (minus the arch) version at the eastern (Crewe) end of the station as "G S", I can only guess that this stood for "General Station"!

Moving westwards down the main line from Chester the first station that clearly is of Thompson's design is **Flint** (Fflint). This today is not very inspiring in its present condition

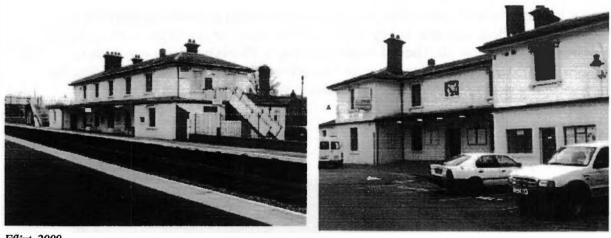


Fflint - waiting rooms, etc., on the up platform, 20 May 2001.

and is basically an enlarged version of the typical branch line or wayside station of the architect's design, of which several still exist today.



Fflint, from the footbridge, looking to Chester, on 20 May 2001.



Fflint, 2009.

Taken from the up platform in 2009, Flint presents a somewhat neglected air, an attached board indicates that the building is available "For Let", the street side view gives a less neglected and careworn impression. However it is heartening to see that most trains stop here today maintaining the importance of this Deeside town as a rail served destination.

Moving off the main line onto what remains of the erstwhile Mold & Denbigh branch one first comes to "Broughton & Bretton" or "Broughton Hall" as it was called when the line first opened in 1849. Shown on the left it has been converted into a Veterinary Centre and the building altered substantially with a gabled extension at the eastern (Chester) end. The up platform shelter has been tastefully preserved and serves as a reminder to the writer of his schooldays when frequent use was made of it whilst waiting for Chester bound trains. More grandly this edifice is believed to have frequently sheltered W. E. Gladstone when awaiting the initial portion of his conveyance to the capital. (His Victorian country pile was at nearby Hawarden Castle). As is apparent from the photograph the area where the tracks and

platforms once were is now a tarmac covered car park.



Broughton & Bretton, 2006

Llong, 2005.

On the right is perhaps the most original of the survivors on this branch, **Llong** was the last stop before Mold. The owner has taken care to retain the station name in the recessed panels either side of the central veranda. The roof of which has now received some supporting pillars in an effort to hold all together in the face of advancing years! This is a typical Thompson small station design that was also repeated at Pen-y-Ffordd. In each case all three station buildings were on the down platforms.

Similar buildings to Broughton, Pen-y-Ffordd and Llong still exist on the main line at Prestatyn, Aber, Bodorgan and Valley. Of these the example at Bodorgan is probably the most impressive of them all. The old station building at **Prestatyn** dates way back to the C & H Railway when a level crossing ran across the pre-widened formation, this building has since widening in 1897 been used by successive P-way and Engineering departments.



Prestatyn old station, 23 March 1991.



Holywell Junction, 2005

With its Italianate trim picked out in a newly painted restoration, **Holywell Junction** building harks back to the Chester design, indeed it is very much a "mini" version of that much larger grand edifice. Still standing are the two elaborate "pavilions" that once supported the down platform roof which spanned the area between them. Access to this disused station is very limited due to the now private nature of the building but the writer could not detect any visible remnant of the two embossed stone plaques declaring the C & H tolls and byelaws that once resided either side of the arched doorway twixt the similarly decorated windows. However the whitened areas above the arches still have the original "Rose" motifs displayed, as does the broad frieze running beneath the roof around the building where one can clearly see the three motifs on each face. At the time the photo was taken restoration work was still in progress, hence the builder's fence along the platform. One assumes that the building is being converted into a classical residence as is the next example down the line, Mostyn.

The external condition of **Mostyn** today has to be perhaps the most impressive restoration of them all along the coast. When one considers the dilapidated condition the building was in just over ten years after its 1966 closure, (see Barrowmore Club model below) it is very heartening indeed to see such attention to detail such as the decorative coat of arms panel below that sits between the right hand ground and first floor windows. Again whilst there is indeed a resemblance to that at Holywell Junction the building is not as elaborate but as can be seen from the model there were platform side pavilions that again supported a roof between them. The white Penmon stone corner quoins have been picked out and serve to greatly enhance the visual effect as teamed with the white window framings.





Mostyn, 2007



Mostyn - modelled as it was in 1977.

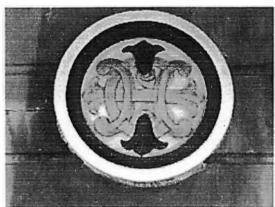
The model also shows the hipped roof design (hidden from ground level) and the elaborate

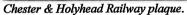
chimney stack cappings that are picked out in white. Built in 1848 when the line opened, the station served the adjacent Mostyn Iron Works and docks, and the design was influenced by by Lord Mostyn's estates company that stipulated that the station was built 'to a first class design'!

Moving on to what is undoubtedly the next grandest design of them all after Chester we come to the City of **Bangor** where despite the years and the removal of the station's down platform buildings the (up side) station building still retains its impressive reverence.



BANGOR STATION 2006.







Bangor tunnel entrance.

The well-known "C&H" plaque has been meticulously picked out in green and gold and can still be seen on the platform side of the main building above. Another well-known example of Thompsons "stonework" survives in the form of the tunnel portico to the east of the station.



Bangor's Platform 1 now overlooks the station car

park but the Booking Hall is still extant and can be seen in the distance.

It is heartening to see that the corner quoins and characteristic window framings have been carefully picked out and structurally the building remains much the same as when built in 1848.

Moving on to Anglesey we find two of Thompsons wayside station designs, the first is **Bodorgan** and is undoubtedly the finest of all the still extant examples to be found anywhere in North Wales today! As can be seen the platform side has been exceptionally well kept with the stone name plate taking pride of place on the platform wall. The rear view reveals the characteristically long vertical window of the stair well, the generous overhanging gable ends and the wide capping to the chimney stacks.



Bodorgan station, 2009.



Valley station, 19 July 2005

Valley, which is the last station before Holyhead, is almost identical but is clearly not as well kept as its sibling. The right hand rear view below, illustrates how the single storey platform building has been extended enabling the addition of extra facilities where such space permits.





Valley station, 2009

So in conclusion what the compilers of this photographic record found was generally very heartening indeed. Today there is undoubtedly a much greater appreciation for the fine architecture of the like of Francis Thompson and in most cases it must be deemed that many of the buildings have probably attained a grade 2 listed status that befits their proud lineage. My thanks to John Stockton Wood for the Anglesey photos and to David Goodwin of the Barrowmore Group for information about the life of Francis Thompson.

The Sea Venom incident - see BMRJ no.9 pages 16/17, and no.10 page 29.

The Editor can't recall where he got this information from; unfortunately it still does not identify the locomotive involved! ...

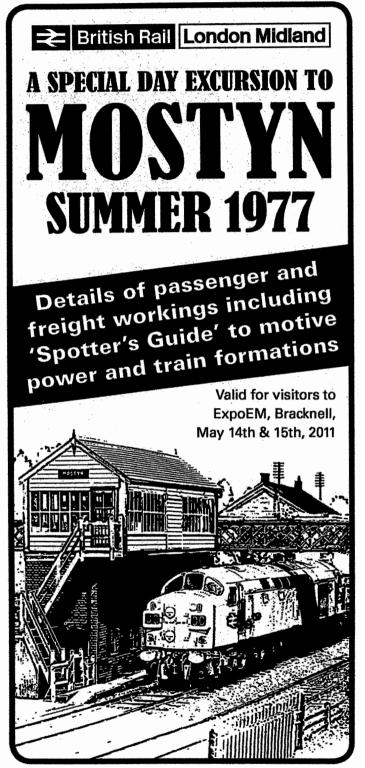
50 DE HAVILLAND D.H.112 SEA VENOM Faw.29 ORDERED 2.1.51 UNDER Cont No.6/Acft/C3794/CB.7(b) built at Chester and Christchurch and numbered WM500 to WM523 &WM542 to WM567. (4,850lbs at De Havilland Ghost 103)

WM544 (c/n 12627) Built Chester

Test flight, struck stationary railway engine tender on low approach to Runway 23. Hawarden, skidded down embankment, went through fence, came to rest short of runway, Cat E 16.7.54 (Mr.J.J. Phillips & Mr. A Chalk both slightly injured), Deleted from Contract, not replaced.

Mike Grant. Royal Air Force Historical Society Dated First May 2007.

"Mostyn" at ExpoEM 2011 – back on track reported by Richard Oldfield



During the last 18 months or so some of the joy of taking "Mostyn" on the exhibition circuit had steadily evaporated. It was difficult to see at first because there were so many factors at play. Question marks existed over the quality of trackwork laying in the second fiddle yard, we were going to exhibitions with inexperienced or in some cases, press-ganged operators, novel challenges such as the electrical interference at Ally Pally and airborne dust at Chatham arose and then, finally, there was the aggravation surrounding our abortive appearance at Scaleforum 2010. Above and beyond all of this there was the feeling that we were generally battling with "Mostyn", inward focussed, not interacting with exhibition visitors and unable to deal appropriately with enquiries from other exhibition managers. I don't suppose that the great majority of onlookers would have noticed anything but that's not the point we set the standards for ourselves and were falling short.

Given the big gap between Chatham June 2010 and ExpoEM May 2011, how well did we take advantage of the time off the circuit? Well, apart from progressing stock projects, nothing really happened for the remainder of 2010 – "Mostyn" sat dismantled in the clubrooms awaiting some action. In early January David Faulkner and I established a 'must do' list of layout

developments that had to be completed in order to move "Mostyn" substantially forward before ExpoEM. The big priorities were to complete the new double fiddle yard control panel including the all-important 'route-setting indicator' LEDs and resolve any running difficulties in the second fiddle yard. We decided to tackle all outstanding electrical issues in one fell



DOUBLE VISION: Mostyn's second fiddle yard has been commissioned and was in full use for the fist time at ExpoEM thanks to the completion of an impressive new control panel which makes route setting in the storage sidings much less stressful. Kevin Bays (far left) is seen selecting roads whilst Richard Oldfield and Dave Millward (far right) are engaged in discussion with Geoff Kent. The extra capacity has reduced the need for double train occupation in the old yard whilst providing room for another 400+ items of rolling stock! Picture: Philip Sutton

swoop so that "Mostyn" would be electrically complete by ExpoEM and this required the temporary abandonment of several stock projects when we realised how much had to be done to achieve this.



The latest addition to the buildings modelled was made possible by the extension 'towards Chester' of the scenic boards. It represents nos.1-3, Railway Cottages, near to Rock Bridge, which were built for railway workers by the LNWR around 1900; modernised subsequently, but still recognisable as conforming to a standard LNWR design. The project was a collaboration between the Editor, Richard Oldfield and Phil Sutton; more work on the surroundings still to be done! (Phil Sutton photo).

The run-up to ExpoEM was fairly intense (no change there then!!) but also satisfying as we discovered that, apart from the usual minor fettling, the trackwork in the new fiddle yard was

fine albeit at the tighter end of P4 tolerances rather than the more forgiving original fiddle vard. The derailments that occurred at Chatham did not re-occur in the clubroom and our best guess is that inadequate levelling at Chatham caused the problems. During testing we realised that stock maintenance was long overdue on the Mark 1 rakes and these were overhauled to run in any road of either fiddle yard.









Power Districts are employed as part of the Lenz Digital Command Control system.

100 is the total number of turnouts used on the layout, most of which are in the fiddle yards.

Punk rock was the new craze, with the Sex Pistols awearing on live TV, but for many the key event was the death of Elvis Presley, Top of the charts were Rod Stewarts 'I Don't Want to Talk About It, Donna Summer's 'Teel Love' and It, Chona Summer's 'Teel Love' and It, Chona Summer's 'Teel Love' and It.

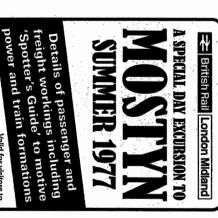


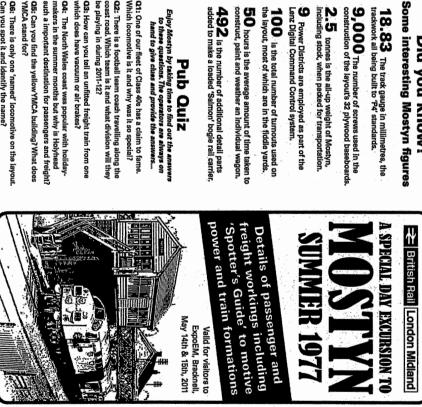
v on the gogglebox in 1977 was 'Citizen Smith' and 'The long and the cantury orge & Mildred; This is Your Life' and 'The Benny Hill w. Any kids would be glued to Noel Edmonds' 'Swap pr on Saturday mornings. At the cinema, it was a year

coast road. Which team is it a be playing in during 2011-12?

How can you tell an unfitted freight train from one

Q1: One of our fleet of Class 40s has a claim to fame





For expoEM, Phil Sutton produced this leaflet (above and next page) about "Mostyn". Styled similar to British Rail publicity of the time, and printed in London Midland Region maroon, it gave visitors some background information.

A Spotter's Guide to the trains passing through Mostyn

Watch out for these formations on the DOWN line towards Holyhead (travelling from left to right)...

- Scarborough-Llandudno (SO) passenger: 10 x Mk. 1s.
 - Chester-Bangor/Holyhead parcels: Long rake of BR Crewe-Bangor passenger: 4 x Mk. 1s.
- Relief Parcels: Long rake of mixed NPCCS including & LMS Full Brakes and BR General Utility Vans.
- Empty Pipes: 24 x opens returning to Anglesey Aluminium vehicles of GW, LMS, SR and LNER parentage. DMU parcels: Class 128 DPUs and trailing load.
 - Trip freight 'Target 30': Chester-Holyhead pick-up.
 Trip freight 'Target 36': Chester-Llandudho Jct.
 Trip freight 'Target 47': Weekend enginesers' working Trip freight 'Target 29': Empty 16-ton coal minerals.
- St. Helens to Penmaenmawr empty ballast: 'Catfish' and comprising variety of wagons inc. ex-iron Ore tipplers. 'Dogfish' hoppers with a Shark brake van at rear.

and in the other direction, on the UP line towards Chester, the following rakes should be in action...

- Holyhead-Euston passenger: 11-coach rake of Mk. 1s noluding Buffet facilities.
 - Holyhead-Manchester Mayfield Parcels: A 15 vehicle formation with 'Siphon Gs' and LMS BGs in quantity, Llandudno-Nottingham (SO) passenger: 9 x Mk. 1s
- Holyhead-Garston empty Freightliner flats (for repair). Bangor-Crewe Relief Parcels:
- Trip freight Target 29': Long rake of 25 x 16-ton minerals loaded with coal from Point of Ayr colliery.
 - Chester with 21-ton coal hoppers in the short consist. Trip freight 'Target 37'; Weekday working returning to
- Trip freight 'Target 47': Weekday working with a numbe comprising 11 'Salmons' loaded with old track panels. Trip freight 'Target 37': Weekend engineers' working
- Empty continuous welded rail train, chute wagon at rear Trip freight Target 47: Weekend engineers' train with a of 16-ton minerals loaded with scrap metal at the head. eal mixture of departmental open and brake vans.

Over half of all passenger workings through Mostyn in

Barrowmore Model Railway Group's BR blue period 4mm:1ft scale layout built to 'P4' standards An introduction to Mostyn

day in 1977? The sky is blue and so are the trains for this is haulage or searching out the dwindling band of Class 24s? 'bucket and spade brigade' heading for a day out to the North Wales coast resorts like Rhyl and Colwyn Bay or just an enthusiast looking forward to getting in some Class 40 ARE YOU READY to step back in time to a bright summer's

Mostyn station is on the ex-LNWR Chester-Holyhead main line and closed in 1967. The running lines have been de-quadrified and there is an intensive rhythm of regularly timetabled trains supplemented by summer excursions. cobbling together long and varied DMU formations whilst locomotives from much further afield were pressed into passenger service whether they had train heating or not. Relief trains still abound and Chester Diesel depot were

quarry and Associated Octel and the commodities carried we Freight trains served collieries, power stations, Freightlin terminals, Mostyn docks, an aluminium smelter, Penmaenm axtremely varied. The humble unfitted Trip freight ambled along the line at 25mph whilst Class 1 passenger services took advantage of the 75mph line speed past Mostyn.

just catch the Yorkshire Engine Company 0-4-0 No. 2 shunte working the dock branch and co-ordinating movements with Our aim is to give the onlooker a trackside pass to watch the BR freight services that call in at the exchange sidings. accurately modelled and prototypically correct formations work past Mostyn. When the main line is quiet you might

tailed. Like her operators she is now older and wiser and ver new set of challenges for the group. There are exciting plan For ExpoEM 2011 we present Mostyn for the first time in he to double the amount of stock we currently have and plenty When Mostyn made its first major exhibition appearance (at ExpoEM 2002) she was smaller, bright-eyed and bushymuch bigger – having been doubled in size during 2009/10. final form – not exactly a debut but, hopefully, the start of a of scenic enhancements are in the pipeline

the inside or perhaps you want to look at the intricacies of th hings are running smoothly we can show you Mostyn fron We like to talk so feel free to ask questions - as long as

www.barrowmoremrg.co.uk

		100 TO 10			till till
POWER REPORT	47447 CD 47468 CD 47555 CD	CLASS SO 2700HP C. SOOLO BR DIESEL MUTIPLE UN	CLRSS 101 50109 + 59001 + 50197 50222 + 59120 + 50310 51170 + 56335 51102 + 56346	51109 + 56239 51109 + 56243 51201 + 56342 CLASS 104 50455 + 59163 + 50404 50510 + 59104 + 50476 50539 + 56102 51177 + 56366	CLR8S 106 51569 + 59386 + 56932 51872 + 56935 51819 + 56562 CLRS 128 DPU 55999 CH 55993 CH
MOSTVN AREA	NOSTVN DOCKS SHUNTER NO. 2 BR MAIN LINE LOCOS	CLASS 24 1160HP BO-BO 24047 CD 24133 CD CLASS 25 1250HP BO-BO		CLASS 40 2000HP 100-C80 40001 L0 40044 L0 40046 KD 4006 L0 4011 L0 40127 SP 40122 SP 40182 SP	CLASS 47 2580HP CO-CO 47034 CD 47063 CF 47166 CD 47227 CD 47339 CD 47365 TO 47365 CD 47369 CD

We had a somewhat edgy start to the ExpoEM weekend - on turning up at the hire company the booked 7.5T box lorry with tail-lift had not appeared and, following an exchange of pleasantries, Dave Millward finally came away with a narrower curtain-sided 7.5T lorry with a non-working tail-lift. Loading went smoothly after an amiable squabble about how best to load the lorry and the logistics of getting the team together worked well with everyone

arriving at Bracknell within an hour or so of one another - not bad considering the team came from Birkenhead (2), Burton-on-Trent (1), Chatham (1), Leek (2), Nantwich (1), King's Cliffe, near Peterborough (1) and Warrington (1).

We always arrive early at venues, preferring to avoid any risks with Friday rush-hour traffic and ever mindful of the 6-7 hours set-up time we need for "Mostyn". Having encouraged the hall set-up team to give us early access, off-loading started around 4pm and, as the clock approached 9pm, both we and the ExpoEM stewards had had enough for the day and we descended on the delights of Bracknell Wetherspoons following a brief detour to the hotel. The most important change we introduced during set-up was to spend upwards of an hour carefully levelling all the baseboards.

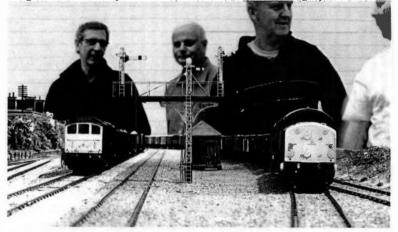
Early Saturday breakfast at 6.30am followed by access to the hall at 7.30am enabled us to complete preparations in time for show opening at 10.00am. A few of the usual settling-down niggles occurred but we were largely 'in the groove' by lunchtime and, for most of the weekend, "Mostyn" ran very well indeed with the new fiddle yard coming into normal use without problems. You can tell when things are going well – off-duty operators tend to stay by the layout talking to the public rather than seeking out some quiet area to re-charge and relax.

Saturday night saw a repeat visit to Wetherspoons followed by a quick call at one of the cultural hotspots of Bracknell, the 'Mr Kebab' mobile van strategically placed between Wetherspoons and the town centre night life - such as it is.

The real joy of the weekend for us, however, was the pleasant and supportive atmosphere of the ExpoEM exhibition - everyone from the organising team, leisure centre staff, fellow exhibitors, demonstrators, traders and, most importantly, paying visitors seemed hell-bent on having a good time. In such a happy space we re-discovered the pleasures of operating "Mostyn" at an exhibition - something that had got lost in the last 18 months or so. We do now know that the fully-extended version of "Mostyn" is both practical and enjoyable.

Having not accepted a new exhibition invitation for over two years I think we can now say that we are back in business and ExpoEM 2011 will hopefully prove to be the springboard for the next phase in our layout's exhibition life.

The icing on the cake is that, by a narrow margin from the other excellent layouts at ExpoEM, "Mostyn" won the Best Layout Trophy.



HAVE A GOOD TRIP: With captivated visitors to ExpoEM watching every move whilst standing like giant sea monsters in the Dee Estuary, a low level vantage point on the exit from Mostyn exchange sidings is the ideal location to capture two Up trip workings. 8T37, with No. 25307 in charge, is held on the Main as No. 40044 whistles slowly out of the yard with a long 8T47 freight complete with a healthy loading of scrap at its head. The layout was judged 'best in show' by the visitors at the end of the weekend. Picture: Philip Sutton.

Letters to the Editor

Copy of advertisement from reader Tony Robinson of Whitchurch
"LAYOUT FOR SALE - HOUSE DOWN SIZE FORCES SALE OF PARTIALLY BUILT MODEL IN EM OF
AFONWEN IN N.WALES, JOINT LNW & CAMBRIAN.

C & L TRACKWORK ON SCENIC BOARDS ALMOST FINISHED, SOME MINOR EASILY CORRECTABLE DAMAGE DUE TO STORAGE/HANDLING. FITTED AMBIS LEVER FRAME WITH SOME MECHANICAL LINKAGE WORK DONE. 3 X BOARDS EACH APPROX 6FT X 3FT, WILL SELL SIGNALS (PRE 1958) SEPARATELY IF REQUIRED. ALL OFFERS CONSIDERED, BUYER COLLECTS, CHESTER AREA." Regards, Tony: 01948 664994.

Copy of an e-mail from Richard Oldfield to John Dixon:

"Hi John, Tim Easter has continued to search for photographs of the front of Mold Jcn No. 2 box and Geoff Kent has responded with the attached photograph dated 1966 which shows 45404 on an up express. Tim has scanned the photograph and produced the detailed enlargement of the signal box. Would you care to comment on the design/spacing of the windows in the locking room? It is obscured by the lattice signal post but this may be the best that Tim is going to unearth before embarking on his model."



[Tim Easter is planning to build a 4mm scale model of Mold Junction locomotive shed and its environs — it has proved difficult to find detail photos of No.2 box].





The Editor nowadays has very little hair, but when it needs cutting, I visit the Barber Shop in Buckley (20 Mill Lane, Buckley, 01244 548534), which is run by reader **Chris Dawson.** Chris is a railway enthusiast, modeller and author of a well-regarded book (now out-of-print) about the Buckley Railway – consequently you get a better class of conversation! He has submitted the following ...

"Having read with interest the articles in the last two editions of the Barrowmore Journal concerning the history of the **Chester Model Railway Club**, and, whilst never having been a member of the club myself, I find it has never been far away from my own railway interests!

As stated the club was formed on the 9th February 1951 at the 'City Arms' public house in Frodsham Street - and I was there!!! Not at the meeting it has to be said -1 was only 18

months old! My parents, Frank and Pauline Dawson kept the pub, and I remember there were rooms on the first floor which were let out for meetings; trade unions, Chester & District Football Ass., Chester Mountaineering Club and a Tontine club being some which I recall. Growing up in the pub was great because on the top floor were a couple of large rooms used only for storage, and by the 1960s my younger brother David (later to become a club member during his teens) and I had established a reasonably large OO layout. Our first loco was a Hornby 4MT 80033. David still has it! The other advantage of being in Frodsham St. was that directly opposite the pub was Barnby's toy-shop and 30 yds up the road was the Model Shop; who could ask for more?

I also have vague memories of a super little model shop in White Friars, in the front room of a house, I think. Thus the seed was sown. David and I did the train-spotting bit at the General Station and occasionally the Northgate, but unfortunately I was the wrong age, and by the early 60s I was getting lured away by pop music and girls!! Oh the folly of youth. My brother David had more sense, he went on to become a signalman!!

I completely missed the end of steam, courtesy of these other attractions, although I distinctly remember my last sighting of a working service steam-hauled train. I was on the city walls by the water tower and I saw Jubilee No. 45666 'Cornwallis' working a passenger into Chester, I presume from the North Wales line. I wish I could remember the date, probably 1965/66ish.

In the early 1960's I was friendly with a boy called Colin Richards, whose Dad, Hugh, had an engineering workshop at the family home in Seller Street, and always had a 5" model loco in the window. I seem to remember that he was a member of Chester M.R.C. because I'm sure he took Colin and I to the Northgate Station clubrooms on a couple of occasions.

By the early 70s I had married, was living in Buckley and had small children, and was looking for a hobby to fill the winter months.

I worked in Chester, and at the accountants chambers next door worked one John Raymond, one of the Chester stalwarts! John introduced me to 3mm, the old Triang TT, and helped me acquire a second hand collection, on the promise that I joined the 3mm Society, of which he was the Chairman! Nothing like starting at the top! Thus followed 30 years of 3mm modelling, at home and later on the exhibition circuit, including a few appearances at the Chester Shows run by Chester M.R.C. In 1980, with some fellow 3mm modellers from the Chester, Mold and Buckley area I organised an Area Group, under the auspices of the 3mm Society, and I am very proud to still be the Secretary of the Group to this day.

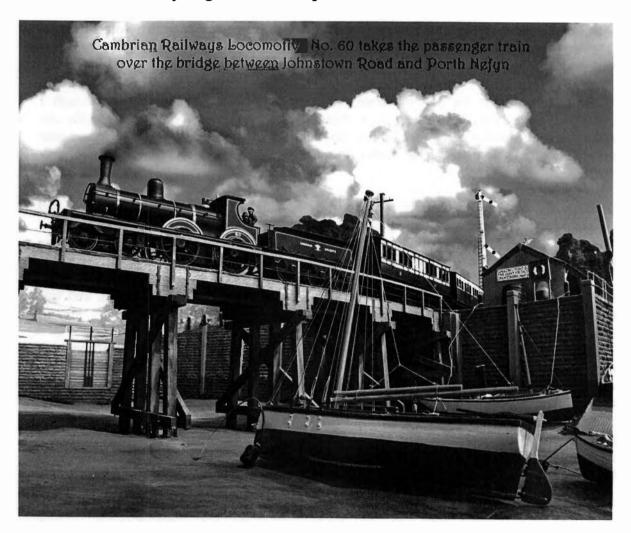
Like most of us the old eyesight is not what it used to be and these days I model in OO, using ready to run rolling stock and just model the scenery, but I do still build in Gauge 1-1 can see that!!! In the last few years my wife and I have been regulars on the Ffestiniog/ Chester MRC train trips organised by Lawrence Wheeler, so it seems that whatever I have done 'railwaywise' in the last 62 years, Chester Model Railway Club has been lurking in the background. Long may it continue."

"Johnstown Road" at Chatham - it doesn't get much better than this!!

related by Richard Oldfield - illustration devised by Phil Sutton

It has been over a year since "Johnstown Road" was last at an exhibition, so how did we fare?

With "Mostyn" having devoured most of our attention up until mid-May, "Johnstown Road" was subjected to a three-week intensive session of cleaning, re-greening and repairs before departing southwards to Chatham. Emlyn Davies has been busy extending his Cambrian Railways locomotive stud so some essential modifications were required to the operating timetable to ensure everything had its time in public view.



On Friday, after leaving home to pick up David Faulkner, our van driver, at 7.30am we came away from the hire company with a brand-new Luton-bodied Transit, briefly stopped at MacDonalds for a bowl of Alpen and fresh fruit (not really!!) and started loading the layout at 9.30am. The van plus accompanying car were ready for the journey by 10.45am and, after a cuppa, we set off southwards at 11.00am with the general intention to arrive in Chatham late afternoon and avoid the jollities of the M25 during rush hour.

It turned into a stressful and lengthy saga. Having opted to avoid the M6/M1/M25 route we chose the A51/A50/M1/A14/M11 route east and then south. We reached the M1 in good time only to be greeted with the news that it was completely closed just ahead of us. A 'quick'

detour across to Melton Mowbray, Oakham and then Corby turned bad due to a broken down van and trailer in the centre of Melton Mowbray but we eventually reached the A14 and started catching up time. This progress was halted at Huntingdon where emergency bridge repairs brought the show to a stop before a burnt-out Transit on the M11 and accident on the M25 approaches to the Thames crossing further delayed our journey.

Our arrival at Chatham at 5.30pm was greeted with some derision by Tim Easter who, told to be punctual, had planned his trouble-free rail journey from Harpenden and arrived a couple of hours earlier. The car arrived by 6pm and, after the obligatory and welcome cuppa, set-up commenced. Dinner consisted of fish and chips fetched by Kevin Bays and we ate this in the atmospheric gathering gloom of the big slipway hall before heading to the hotel. After checkin and a quick wash, The Cannon at Brompton ale-house was reached by 10.30pm and our thirsts were enthusiastically quenched.

"Johnstown Road" is very much 'plug and play' and without the intense work required on "Mostyn" so we enjoyed a leisurely breakfast on Saturday morning before ambling into the venue just before opening time. The first revelation of the day was the discovery that Tim Easter had got the 'hots' for the shunting challenges of the layout timetable and took to it like a duck to water. Kevin Bays from Chatham club also found the "Johnstown Road" operating experience to be very pleasant. The day passed quickly in a whirl of smooth reliable operation and new exhibition invitations. The timetable worked well - it takes about three hours to complete the whole sequence - and I noticed that individual flourishes and 'extras' were starting to be added by the end of the day.

Saturday night included an excellent meal in the Alisha Indian restaurant on Canterbury Street, Gillingham.

Sunday started with the arrival of Clive Mortimore and Philip Sutton to bolster the team following the departure of Tim Easter the previous evening. These two were soon struck down with Cambrian-itis and spent many happy hours 'playing trains' during the day. The only 'emergency' occurred when No.57 decided to shed a couple of wheel tyres but this was quickly rectified and she was restored to the roster. A degree of flamboyance entered the timetable as the day progressed leading to some finger-wagging when a passenger train departed Johnstown Road with two unfitted cattle wagons between loco and passenger coaches.

Dismantling was safe and rapid, we departed Chatham at 6.30pm, arriving back at our clubrooms following a meal stop at 11.30 pm. Nothing damaged, everyone happy, eight new invitations to consider and a thoroughly enjoyable weekend. The new invitations include our first firm enquiries from the continent and could see us in Utrecht and Dortmund.

Your Barrowmore team for the weekend was Emlyn Davies, David Faulkner, Norman Lee, Philip Sutton plus myself. On behalf of the Barrowmore team, let me offer a big 'thank you' to our guest operators, Tim, Kevin and Clive who 'wore the tee shirt' and really contributed to a successful outing.

Editor's page

Publication of *BMRJ* seems to be getting later with each issue! Shortage of time on the Editor's part is the main reason, and this is also the reason for lack of both a new 'Workshop notes' and more research into the 1870s renewal of the Dee Bridge – this, I'm assured, is eagerly anticipated by enthralled readers; memo to self: must do better!

And a further two factors conspire to slow me down! First the constraint of having a four-page (four sides of A4 copied onto A3 paper by our printer) base for the magazine copy; second the fact that I am now having to operate in Word 2010 word processing, under the Windows 7 operating system (both new to me) with a new computer.

Recent books:

The torn curtain: an Inspector Vignoles mystery by Stephen Done. Hastings Press, 2009. ISBN 978 1 904109 20 4. £8.99.

The Marylebone murders: an Inspector Vignoles mystery by Stephen Done. Hastings Press, 2011. ISBN 978 1 904109 21 1. £8.99. (Two more detective stories by Stephen Done with railway backgrounds, set in the 1940s.)

Private owner wagons: a ninth collection by Keith Turton. Lightmoor Press, 2010. ISBN 978 1 899889 49 5. £19.95. (Nearly 100 wagons, mainly for coal transport, from the 19th and early 20th centuries, including Birkenhead Corporation Gas Works, Dutton Massey, City of Liverpool Equitable Coop, Llandudno U.D.C., Lobitos, etc.)



Another of John Dixon's photos of the longgone Liverpool Exchange station, from 1977.

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