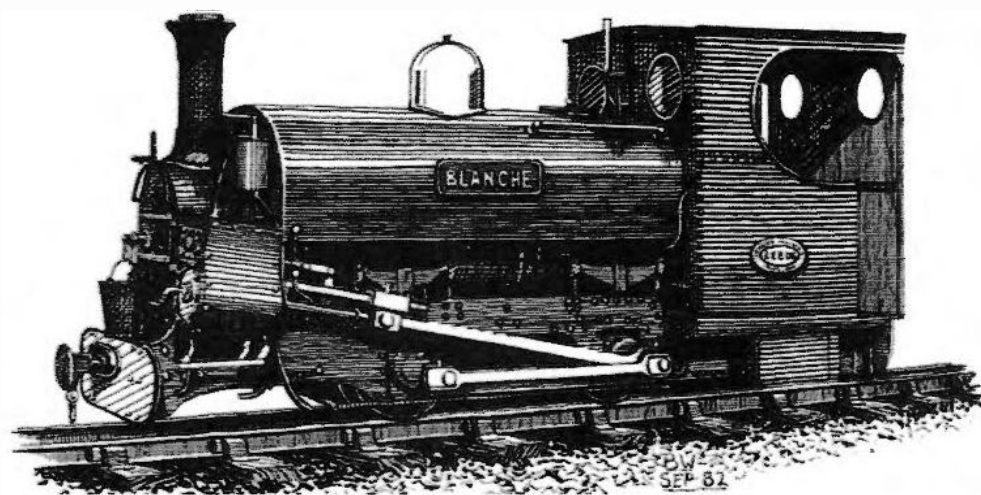


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Barrowmore Model Railway Journal



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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 March 2010, and contributions should get to the Editor as soon as possible, but at least before 1 February 2010.

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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 drawing, by Bryan Williams who lives in Bangor, of Penrhyn Quarry Railway "Blanche", an 0-4-0 saddle tank. Built in 1893 by Hunslet of Leeds (as their works number 589), she worked on the Penrhyn main line between the quarries at Bethesda and Port Penrhyn near Bangor until 1962, being larger than the quarry shunting engines. She was named after Blanche Georgiana Fitzroy (1865-1944), the wife of Edward Sholto Douglas-Pennant, the 3rd Baron Penrhyn. She was purchased by the Festiniog Railway in 1963 and provided with a tender in addition to her saddle tank, was converted to burn oil fuel in 1971, then the following year was superheated, fitted with piston valves and altered to a 2-4-0ST to give a smoother ride as she now operated passenger trains, generally working much harder and faster than she had ever done in her Penrhyn days. Incidentally, her new leading pony wheels were salvaged from the rear bogie of the old Welsh Highland Railway locomotive "Moel Tryfan". Now more than 115 years of age, she continues to operate trains of up to eight bogie corridor coaches on the Festiniog Railway, as she did on 19 August 2009, to the delight of thousands of visitors. Also to be seen on the Festiniog is sister engine "Linda", actually named after the daughter of Blanche, Lady Penrhyn.

(Caption by Bob Miller).

See also page 15.

Forthcoming events

(2009)

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

5/6 Dec. 2009: Darlington show ("Johnstown Road" is appearing).

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

23 Mar. 2010: "The Burry Port & Gwendreath Valley Railway": talk by Bob Miller to HMRS at the White Lion, Bolton Street, Bury. (Contact Bob Miller or the Editor for more information).

27/28 Mar. 2010: Alexandra Palace show ("Mostyn" is appearing).

17/18 Apr. 2010: S4 North, Wakefield.

12/13 Jun. 2010: Chatham show ("Mostyn" is appearing).

25/26 Sep. 2010: Scaleforum, Leatherhead ("Mostyn" is appearing).

11/12 Dec. 2010: Wigan show.

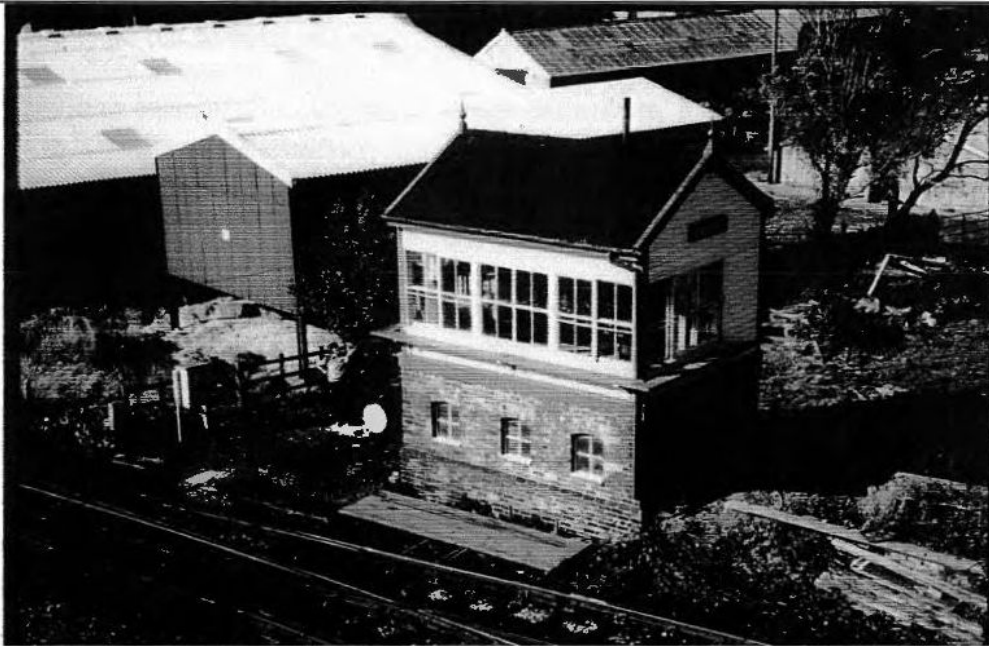
(2011)

May 2011: ExpoEM, Bracknell ("Mostyn" is appearing).

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

Our web-site address is: www.barrowmoremrg.org.uk

(Also of interest is: www.mostynhistory.com)



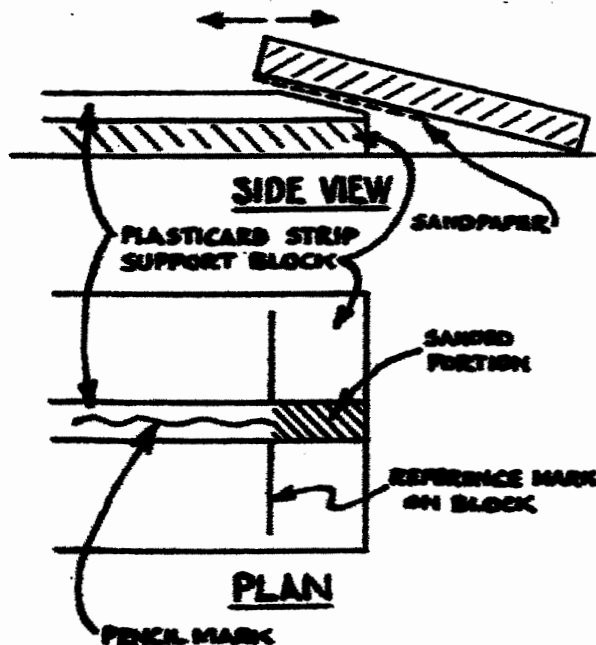
The next station down the Holyhead line from Mostyn was Talacre. Its signal box was still in place in the 1970s, when it was photographed by John Dixon. The station had been closed to passengers since 14 February 1966, but nearby Point of Ayr Colliery provided coal traffic for much longer.

Workshop notes, no.21: end stanchions

This is another reprint from "Precision" – the magazine of the now defunct Protofour Society. This was by someone called J.M.Walker to whom acknowledgement is made; it was first published in their issue no.10, in September 1975.

Many of the older goods wagons had their ends strengthened by wooden stanchions which were of rectangular section at the lower end but tapered towards the upper end. It can be a tedious job to make several stanchions all of the same thickness and taper but unless they are all identical it is a conspicuous fault on the finished model.

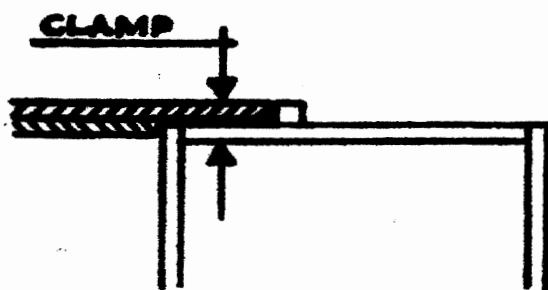
My methods are simple and give good results; I use 'Plastikard' but it should work equally well with wood. A rectangular strip is cut - say $1\frac{1}{2}$ mm - from a squared up edge of 0.060" sheet; this gives a $4\frac{1}{2}$ " sq. stanchion, this being a common size. Any burrs or other imperfections are removed by sanding and a pencil line is marked all along one side which will become the outside face. The strip is laid, marked face upwards, on a piece of hard wood about $\frac{1}{8}$ " thick with its end at right angles to, and level with, one edge. Make a pencil mark across this supporting the block to correspond with the required length of taper. Use a piece of wood 3 or 4" long as a



sanding block; rest one end on the bench, and wrap the sandpaper round the other end and steadily sand away the marked face of the strip until the pencil mark has been removed as far as the reference mark on the block. Short strokes suffice so that the angle of the sanding block to the work-piece does not vary too much. The burrs on the edge of the taper are scraped off with a knife blade; a little more scraping produces a chamfer if this is required. Now cut off to the required length and repeat for the next stanchion. By varying the thickness of the supporting block, or the

length of the sanding block, the steepness of the taper can be altered.

It would be a pity to spoil the job by not attaching them to the wagon correctly, i.e. evenly spaced and upright. Measure the distance from the outside edge of the stanchion position to the corner of the wagon. Take two small pieces of 0.030" or 0.040" sheet each with one edge true and square and stick one piece onto the other, with these true edges parallel to each other, and apart by the same distance as the wagon corner to the stanchion edge. This simple jig is lightly clamped (ladies hair clips or cut down pegs?) to the wagon end making sure that it is snugly against the corner. Now



lay the prepared stanchion against it and attach to the wagon at top and bottom with a tiny spot of solvent (take care not to use enough solvent to reach the jig). As soon as it is dry remove the jig and attach the stanchion.

So many people are frightened off by the suggestion of making jigs, but so often they can be ridiculously simple items like the two described here. With tedious and repetitive work they are essential for consistent and identical results.

“A SUMMER EVENING RAMBLE: A driving (and firing) experience trip on the Llangollen Railway” by Tony Robinson.

Most worthwhile things are worth waiting for and to wait until after one turns the proverbial ‘three score’ for something one has always wanted to indulge in is not an inconsiderable wait! When my better half Gail, asked me what I would really like from the family for my sixtieth it didn’t take much cogitation to come up with the answer. Despite being bred and born amongst railways and their devoted servants as a youngster and having a couple of footplate rides in my schooldays I had never been given a chance at the regulator, so here was an opportunity if everyone was agreeable! So due enquiries were made with the likes of the S.V.R., the East Lancs and the Llangollen Railway.

Phew - pricey in most cases! However there was one deal that seemed attractive in both economic and content terms and that entailed the L.R. whereby one or preferably two would be ‘footplaters’ take a light engine out at the end of a day’s working when the line was free of traffic. The all in price of £160 each (not bad if you say it quickly or preferably get the family to split the cost between them) included overalls for the trip, a guided tour around the works followed by two trips up the line to Glyndyfrdwy and back. At the end of the proceedings, which lasted just over 2½ hours, one collects a certificate plus free tickets for two to take a journey to Carrog and back at their convenience. It was advised that it was always preferable to have two people on the course at once and if we knew anybody who would like to join in and share the driving/firing experience to ask them. It just so happened that Carolyn’s (my business colleague) better half Raymond, whose own father George Carr had been a signalman at Calveley, Beeston Castle, Tattenhall Road and Tattenhall Junction in the days of yore, was also recently past the three score and keen to take up such an experience as a family gift. And so the date was fixed at Monday 7th September, we were asked to present ourselves at the Traffic Office on the station at around 3.15pm. Untypical for the summer of 2009 it was a beautiful day and on arrival, with our respective clans, we were kitted out in blue overalls suitably labelled ‘Driver Experience’ and wearing (in my case) steel toe capped boots, and after parting company with the wives and offspring who departed in search of refreshment, we

were taken along the platform and up the ramp that led to the shed/works. Here we were met by an enthusiastic ex-apprentice called Simon who took us around the works describing the various activities, i.e. the new steam railmotor power unit nearing completion, the newly cut and drilled 'Patriot' frames and of course progress on "Betton Grange" to name but a few of the projects being concurrently undertaken. It seems that the works has gained an excellent reputation in steam loco engineering and as a result is contracted by several other preserved railways to do such things as boiler repairs (in the now soundproofed shed extension), machining of castings and drop forged motion rods etc. as well as the more well known projects mentioned above. Indeed it was readily admitted that this sort of activity keeps them in business throughout the winter periods when traffic receipts fall to zero. The works tour completed we were led to the down (westbound) platform where we once again met up with the traffic office lady and our clans that included my two offspring, Gemma and Liam (now grown up) whose job it was to man the cameras! At precisely 4.23pm our steed rolled in to the opposite platform bringing home the last (well patronised) train of the day. After uncoupling, the ex- Abercynon (88E) Collett 0-6-2T reversed and pulled forward into the down platform where we were waiting. Here we were introduced to our mentors for the event. Driver Steve and fireman Mike, who to add to the G.W. ambience, spoke with a mild West Country burr.



A pristine 5643 was our steed for the evening; seen here standing in Llangollen station prior to the start of our 'ramble' (AJR)

Pleasantries exchanged, Mike quickly mounted the boiler in order to 'put the bag in', whilst Steve manned the water column valve. This task completed, we were ushered onto the footplate whereupon our families did the photography (fame at last!). Then came the serious stuff: we were instructed on the basics of filling the boiler via the live steam injector and feed valve, watching the gauge glass and looking over the side for the expected overflow from the injector indicating the said device was not working, if this happened we were told to shut off and reopen until it ran *sans* the overflow.

Whilst the boiler filled we were given instruction on building up the fire by adding 'small' amounts of large and lumpy coal to back and sides of the firebox. This done, we were then shown the blower valve and instructed to just crack it open to draw the fire. Changing of the dampers was effected for the intended forward running, by

which time the boiler was full and the injector and water feed valve shut off. Then followed what seemed like an interminable wait (about 7-8 mins) for the boiler pressure to build up to about 160 lbs. Whilst this was in progress we were given instruction on the rudiments of driving, i.e. regulator control, the vacuum brake and reverser with recommended notching up etc. Then Steve popped the question ... "Who wants to drive first?" Well I just happened to be on the R.H. side of the footplate so here we go then!

Two good tugs on the whistle to let *les familles* know we were ready (they had by now encamped on the bridge ready with cameras); pushing the heavy reverser into full forward gear and having unwound the hand brake I opened the vacuum reservoir to the brake cylinder and gingerly opened the regulator very slightly. Puff, puff, puff and off she went without a murmur, Gawd this is easy I thought! "Just notch back to half gear now," instructed Steve, so grabbing the reverser I squeezed the release ... then the lever flew back, nearly sending me backwards across the cab, "put your foot on the bar" shouted Steve. Realising that I had previously assisted the very heavy forward action of the lever by pushing the treadle bar down as I moved it forward earlier, I quickly rectified things before the engine went into reverse!



*THE INTREPID
PAIR POSE PRIOR
TO THE START OF
THE "RAMBLE".
(C.C.)*

*Tony on the left and
Ray on the right*

By this time we had reached the Goods Junction signal box and instructions were given to ease back on the regulator for negotiating the points onto the single line, so this done we slowed to about 10 mph before opening up again past Pentrefelin sidings. Then it was the speed slack over the Dee bridge that necessitated another drop to about 10mph. This crossed, I was instructed to "open her up a bit" for the bank up past Berwyn Station. There was a fair crowd of folk taking it easy outside the Chain Bridge hotel, so I gave them a whistle to which they all replied with a joyful wave ...poser! Meanwhile Raymond was 'enjoying' the firing experience under the careful supervision of Mike who I noticed had kept him hard at it most of the way! Round the curve beyond Berwyn I was instructed to whistle for the tunnel, entering this was quite unnerving for the uninitiated as the single bore enveloped us and all I

could see in front of the loco was inky blackness. Mike instructed Ray to crack open the fire hole door, this served two purposes. It minimised the 'blow back' effect of the exhaust against the tunnel roof and provided some welcome illumination to the inky darkness within the cab. Well the tunnel was run through at about 20 mph but one had no sensation of movement within whatsoever, until the streaks of daylight began to appear where the line curved out into the forest at the western end. Before long we were approaching Deeside Loop station and Steve instructed me to shut off the regulator and apply the brake to stop in the platform road. With the brake hard on I then, also using the treadle bar to assist, pulled the reverser back into mid gear and handed over the driving to Ray.

It has to be said that even running light the firing was a fairly exacting job for a novice, firstly there was the matter of checking the condition of the fire by inserting an inverted shovel over the lip of the fire hole door, this action enabled a clearer view of the fire within and then Mike issued instructions for putting a small amount of (very lumpy) coal down each side and far front of the box. This done we were nearly at our return point, the down outer home signal on the approach to Glyndyfrdwy. Then it was time to open the water valve and injector as the water was bobbing about in the bottom of the gauge glass! Then I was asked to put another shovel or two of coal into the box before we started back. After a short interval the water started to overflow the injector so that was turned off and the water valve closed followed by changing over the dampers for backwards running. By now Ray had the engine in full reverse gear and we were accelerating backwards. On arrival again at Deeside loop I was asked to take over the driving once more for the remaining leg of the journey. I noticed how much smoother the ride was when the pony truck was leading, even the view through the bunker spectacles was a lot clearer without the boiler obstructing. Berwyn tunnel was a lot less scary too as once around the bend one can clearly see the eastern portal. Down the bank in ¼ gear and then gently apply the brake for the Dee bridge. This crossed, I opened up again past Pentrefelin yard only to slow for the double line points at Llangollen Goods Junction signal box. We virtually coasted from there back to the station where Steve instructed me to carefully pull up with the cab door opposite a bush beneath the water column. Of course I over-ran by about three feet, so a heave into full forward and some careful regulator work was required to achieve the desired alignment: this just put the loco's tank aperture in exactly the right spot for the bag to drop in! Steve remarked that the tanks on 5643 generally lasted for two trips to Carrog and back but for safety they were always refilled after each trip in Llangollen station.

And so the process of the first trip was repeated again with this time Ray taking the regulator for the portion to Deeside Loop. On our return we stopped just short of the Goods Line box, where we alighted to operate the points via the ground frame (by now it was nearing 6.30pm and the signalman had long gone). Using a combined staff and Annetts key the facing point locks were opened and the levers thrown over for the dolly and points, allowing us entry into the shed yard, Steve then drove the loco across onto the yard road, whereupon we threw back the levers and re-locked the frame with our key. Reversing into the head shunt our mentor came back to pick us up before backing finally up the shed road to the yard with all onboard. Once in the yard Mike damped the fire and filled the boiler with the injectors, before we thanked both Steve and Mike, and following a wash up in the shed amenity block bade them farewell. So ended a most memorable summer evening well actually not until we had joined our clans for a drink and superb meal in the Corn Mill pub just across the river!

I have fond memories of the 56xx class dating back to my school days as I, like our esteemed editor, was also educated at Hawarden Grammar School, but not until the early sixties. By this time the ex-G.C.R. locomotives had been displaced on the Hawarden bank by the 56xx and 57xx Panniers of Croes Newydd shed. Frequently on fine summer lunchtimes my pals and I would climb up the embankment by Aston Hall Lane bridge to witness these engines fairly lifting their fires off their grates working heavy Dee Marsh to Wrexham freights up the 1 in 50 bank.

Letters to the Editor

From Emlyn Davies of Bromborough:

"Dear David – With reference to the article entitled "The future of **Johnstown Road**" on page 26 of no.20 of the *Barrowmore model railway journal*, I would like to put the record straight.

I resigned my membership of the Barrowmore Group for personal reasons which had nothing whatsoever to do with exhibiting "Johnstown Road", in fact since the Glasgow exhibition earlier this year I have scratch built another Cambrian Railways loco which I anticipated would run on the layout, and commissioned a small 'Sharpie' 4-4-0. In addition ten further scratch and kit-built wagons have been made:- surely not the actions of someone not interested in the layout!

As I said earlier today, if the club wishes to fulfil its obligation to exhibit "Johnstown Road" at Darlington in December, I am perfectly willing to lend sufficient stock to run the layout. Please let me know what you collectively decide.

Yours sincerely – Emlyn."

(Editor's note: Norman Lee (tel. 01829 770555) is investigating putting together an operating team to take the layout to Darlington on 4/5/6 December 2009.

E mail from Tony Robinson (Whitchurch):

"Steam Days", October 2009 issue.

"There is an excellent article in the above magazine on **Chester Northgate and the C.L.C.**

Regards, Tony."

Excerpts from E mails forwarded by Dave Millward regarding Class 103 DMUs:

1 October 2009

"Heritage Railway Magazine are reporting the cutting up of 50397 on site at Swansea. Is this confirmed or a case of a rumour getting further than it should? Chris."

Reply from Alfred Roberts: "Yes ... this is confirmed ..."

(Letters continued on page 22...)

EGW. 531
GREAT WESTERN RAILWAY.

Circular No. 2868
G. 42978.

GENERAL MANAGER'S OFFICE,
PADDINGTON STATION, W.2.
25th June, 1923.

Alteration in Name of Station.

The name of Gresford Station will be altered
forthwith to GRESFORD FOR LLAY and all
letters, &c., should be addressed accordingly.

FELIX J. C. POLE,

General Manager.

An acknowledgment of this Circular is not required.

This notice was circulated by the Great Western Railway to its various offices (in this case, Queen Street, Cardiff—the former headquarters of the Taff Vale Railway). It was copied by the Editor from a file of correspondence to this former T.V.R. station, preserved in Widnes Library.

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

ADJOURNED CORONER'S INQUEST)

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

The report was a long and able document, and bore date June 15th 1847. It commenced by giving a description of the bridge, entering with great minuteness into all the details. Then an abstract of the engineering evidence was given with great accuracy and fairness; and the whole was illustrated with diagrams of the girders and also the fractures. It would be quite impossible to give the whole of this valuable document; but suffice it to say that Captain Simmons had minutely examined the whole structure, and tried many experiments with trains, in order to arrive at satisfactory conclusions. It appeared that an engine and tender weighing 30 tons, passing over at 15 miles an hour, produced a deflection of about one inch; and 48 tons of 2½ inches. The conclusion was the most important part of the report, which we give nearly *verbatim*:-

The abstract of the details may be stated thus:-

"That the bridge was of sufficient strength if the cast and wrought iron be supposed to act together, each taking its equal proportion of the strain.

"That there is great difficulty in insuring the joint action, and if this is a part of the principle of the bridge we do not approve of it.

"That neither the wrought nor the cast iron taken separately was sufficient for perfect stability, and that to have insured this, the cast iron girders alone should have been of sufficient strength to carry the whole weight, with an ample allowance for the various circumstances (some of them peculiar to this bridge) which we have explained.

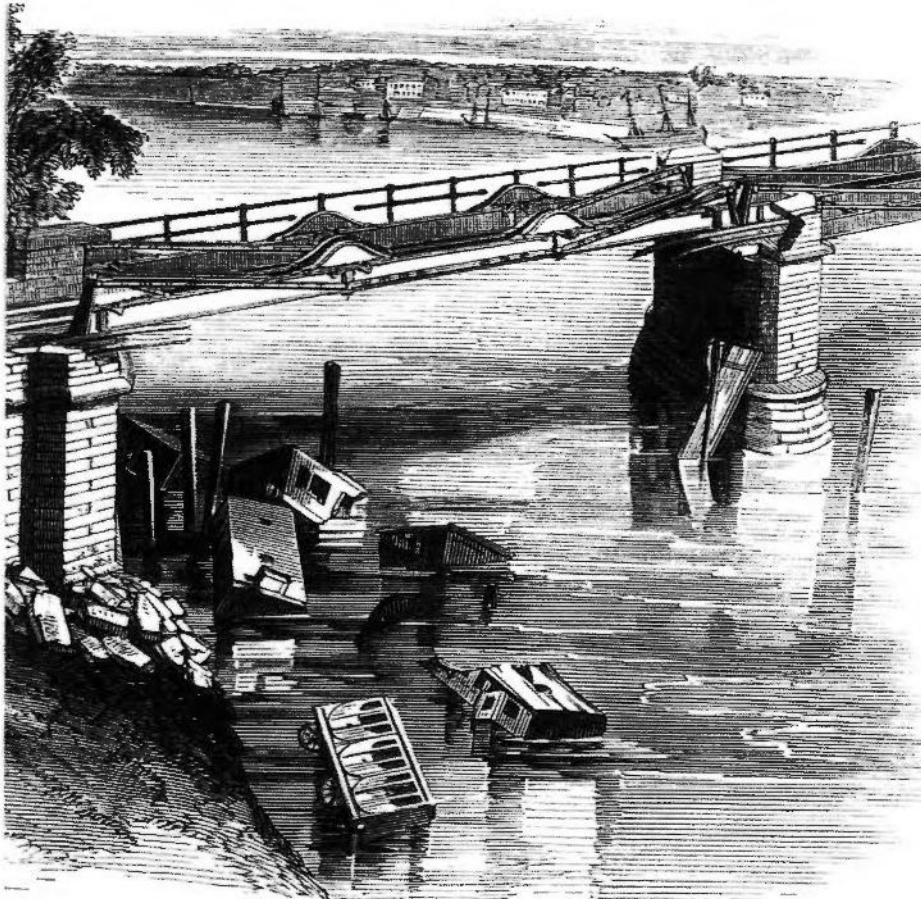
"That with the exception of the bends or warps [= illegible] in the top flanges, the castings are of good quality. That the wrought iron is also of good quality.

"That the stonework of the piers and abutments is good, and in no way contributed to the failure.

"We come now to the question, what was the immediate cause of the accident?

"As the bridge had carried as great or greater loads before, the suggestion that there was something peculiar in this case, as the end of a rail having projected from the straight line, and been struck by the engine, or the tender having got off the line and struck the girder laterally, is not improbable. The engineers who were called by the Railway Company considered that the breaking of one leaf of the wrought iron that was next the tender, the piece that was struck out of the girder, and the damage to the abutment wall, are all proof of the fact, that the accident was caused by the tender

having got off the line, and broken the girder by a heavy lateral blow. We refer to the evidence of Mr. Stephenson, Mr. Locke, Mr. Vignolles, and Mr. Gooch who were also of the opinion that the strength of the girder was sufficient. As to this latter point we have already stated the principles upon which alone this conclusion could have been arrived at, and our own opinion. As to the tender or the carriage immediately behind it having got off the railway and damaged the abutment walls there is no doubt: and if the tender struck the side of the girder when the latter was under a great strain, a fracture was the probable consequence. This is on the presumption of the tender having got off the line from some other cause than the breaking of the girder.



(Part of another contemporary artist's impression of the accident scene)

“Our own decided opinion formed from the statement we have made as to the strength of the girder, and from the position in which the broken pieces were found, the two halves, being each in a straight line, or nearly so, but at an angle with one another, is that the first fracture took place in the centre of the girder, and not in the end which rested on the abutment.

“In corroboration of this last view, the addition that was made to the permanent weight of the bridge immediately before the accident, by the stone spread over it, and the fact that when a weight, partly permanent and partly passing, but which *together* form a very considerable proportion of the *breaking weight* of the girder, are in *continued* operation, flat girders of cast iron suffer injury so that their strength becomes reduced, and if when this has taken place, the momentum of the passing weight is increased by an irregularity in the rails or in the motion of the engine, to which the best made and managed railways are subject, a fracture is likely to follow. The probability of this having been so in the present case and the fact of

the tender having been off the line and having been drawn up with great violence, so as to beak the end piece of the girder by the blow are to be weighed against each other in assigning the cause of this accident.

“Having reference to other cases, it is proper to name, that Mr. Robert Stephenson stated in his evidence that he had erected a number of bridges on the same principle as this, and that this was the first failure. We have not examined these bridges: they are stated to be all of less span than the Chester Bridge, that the dimensions of the parts are proportionally less, and it may perhaps be argued from the above numerous examples, and the opinions of eminent engineers, opposed by this one failure, that we are mistaken in considering the weakness of the girder to be the cause of the failure in the present case, and unnecessarily cautious in the objections we entertain, and have expressed as to the principles of this bridge and its security, but as we entertain these opinions very decidedly, it is our duty (by no means an agreeable one) to express them.

This concludes the evidence.

The CORONER said perhaps it was wished by all parties to conclude this enquiry this evening. It could not be expected that he should go beyond the enquiry how these parties came by their death. In this case it would be absurd to suppose there had been gross negligence on the part of the contractors or the company, inasmuch as, although most conflicting opinions had been given as to the stability of the structures, yet all bore testimony to the engineering skill of the engineer of the line; and it was clear that as to the cause of death, it could not be carried to the criminal extent of manslaughter. With respect to so much of the enquiry as related to the bridge, it could not be profitless, inasmuch as the opinions of eminent engineers had been elicited, including the eminent gentlemen sent down by the government authorities, and there could be no doubt, but that the eminent engineers who were concerned in the building of railways, would feel the effect of the enquiry, and no doubt if the principle was faulty it would be abandoned or modified. He then went over the evidence as affecting the death of the parties. With respect to the theory of the accident being caused by a lateral blow the evidence of to-day, very materially rebutted that. One point, that the paint was proved not to have been paint at all, consequently one link of the theory was gone. However there was other direct evidence which affected that theory and his opinion was very much shaken, as the evidence cut the ground from under the feet of the Chester and Holyhead Company. The question however was for the jury. After the evidence of General Pasley, Mr. Kennedy and the Government Commissioners, that the bridge was not safe, it would be well if the opinion of the jury also went forth to the public. This bridge was erected by the most eminent engineer in the country, and who had examined this bridge on the morning of the accident; and unless an opinion was given on this bridge whether it was safe or not, this enquiry could have no practical result. With respect to the cause of death, he thought the jury would have no difficulty in arriving at a verdict; and that in substance it would be that the deaths were the result of accident. But with respect to the construction of the bridge, on that point, if they chose to give an opinion, they must give due consideration to all the facts given in evidence; and on that point he held a strong opinion that the fracture of the girder was not caused by the engine, tender, or any of the carriages, getting off the line; but that if they did get off the line, it was the effect and not the cause of the fracture of the bridge.

The jury then retired, and were absent about an hour. On their return, they gave the following verdict:-

"We find that George Roberts, John Matthews, and Chas. Nevett [*sic*], were accidentally killed on the evening of the 24th May last, in the parish of St. Mary-on-the-Hill, in the city of Chester, by being precipitated along with a train of carriages on the bank of the river Dee, from the breakage of one of the twelve cast iron girders constituting the Railway Bridge over that river.

"We find also that Isaac Jones died on the 26th May last from injuries received at the same time and place, and from the like cause; and we find that Thomas Anderson came by his death on the 24th May last, in the parish afore-said, by being accidentally thrown from the tender on to the rails.

"We are further unanimously of opinion, that the aforesaid girder did not break from any lateral blow of the engine, tender, carriage, or van, or from any fault or defect in the masonry of the piers or abutments; but from its being made of a strength insufficient to bear the pressure of quick trains passing over it.

"We feel that the eleven remaining girders having been cast from the same pattern, and of the same strength, are equally weak, and consequently equally dangerous for quick or passenger trains, as was the broken one.

"We consider we should not be doing our duty towards the public if we separated without expressing our unanimous opinion, that no girder bridge of so brittle and treacherous a metal as cast iron alone, even though trussed with wrought iron rods, is safe for quick or passenger trains. And we have it in evidence before us, that there are upwards of one hundred bridges similar in principle and form to the late one over the river Dee, either in use or in course of being constructed on various lines of railway. We consider all these unsafe more or less so in proportion to the span; still all unsafe.

"We, therefore, call upon Her Majesty's Government, as the Guardians of the public safety, to institute such an inquiry into the merits or demerits of these bridges, as shall either condemn the principle, or establish their safety to such a degree, that passengers may rest fully satisfied there is no danger; although they deflect from 1½ to 5 inches."

The CORONER said that the first part of the verdict he would record; but that the latter part, calling for government interference, might be taken notice of by the gentlemen of the press, and would be forwarded by him to the Board of Trade.

The court adjourned about seven o'clock.

On Thursday [17 June 1847], at two o'clock in the afternoon, the jury again assembled at the Town-hall, when the Coroner had the verdict engrossed in legal form, and the inquisition as signed by the whole of the jurors. A copy has also been sent to the government authorities.

The jury were entitled by law to an allowance for their time of about £32, but they directed their foreman to return it to the borough fund.

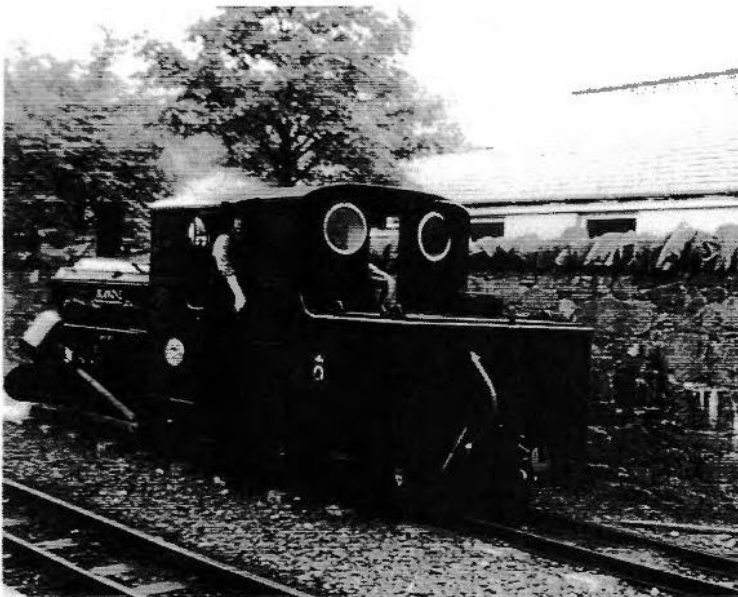
CONDITION OF THE RAILWAY PATIENTS IN THE CHESTER INFIRMARY –
To our latest enquiry yesterday, Mr. Jones, the house surgeon, reported that "he was happy to say the invalids were all going on well".

(To be continued ...)

"Blanche" and "Linda"



Name plate of "Blanche", photographed on 21 June 1979.



"Blanche" in her tender form, photographed at Blaenau Ffestiniog station, on 6 August 2002.



"Linda's" name plate, photo from 4 July 1978.

Barrowmore Model Railway Group member **Dave Millward** has had long experience in the railway industry, much of it as a driver. He thinks the following document dating from the 1960s should shed some light on the complexities of braking, with implications for model railway operation: some diesel locomotives used mainly on freight traffic were modified to improve the braking characteristics of such trains. Locomotives thus modified had the E.Q. notation inserted in the data panel sticker on the body-side e.g. VB (EQ), with V.B. indicating a vacuum braked



Detail of the data panel on the side of 25092

loco. The document is reproduced in full, together with the diagrammatic representation – this part has not photocopied very well, but the Editor has neither the time nor the expertise with Photoshop to tidy it up!

The E.Q. system of brake control is being fitted to give improved braking characteristics over those obtained with the conventional vacuum brake system.

The shortcomings of the conventional brake system are:

1. Brake application is faster at the head of the train than at the rear, giving a tendency for the rear wagons to run in on those at the front. This becomes more noticeable as train length increases, and as a result a different technique is required in the braking of short trains, as compared with long ones.
2. When the brake is being released there is a tendency for the vacuum at the front to build up much more rapidly than that at the rear, giving the driver the impression that the brakes are fully released throughout the train, when it is only so on the leading part. The driver has little indication of the state of braking on the train as the cab gauge records only local conditions.
3. Severe braking shocks can occur on a train with a fitted head, particularly when the brake is applied by the D.S.D. [Driver Safety Device or 'Dead Man's Handle'] or A.W.S. [Audible Warning System] equipment, due to the fact that the Passenger/Goods switch controls the timing of the rate of brake application on the locomotive only.

These deficiencies, which apply more in the braking of freight trains than passenger trains, are overcome with the E.Q. system by controlling the rate of brake application and release so that more even braking is achieved throughout the length of the train.

With the E.Q. system brake applications are made by admitting air to the train pipe through an Automatic Air Admission Valve. This valve is controlled by the

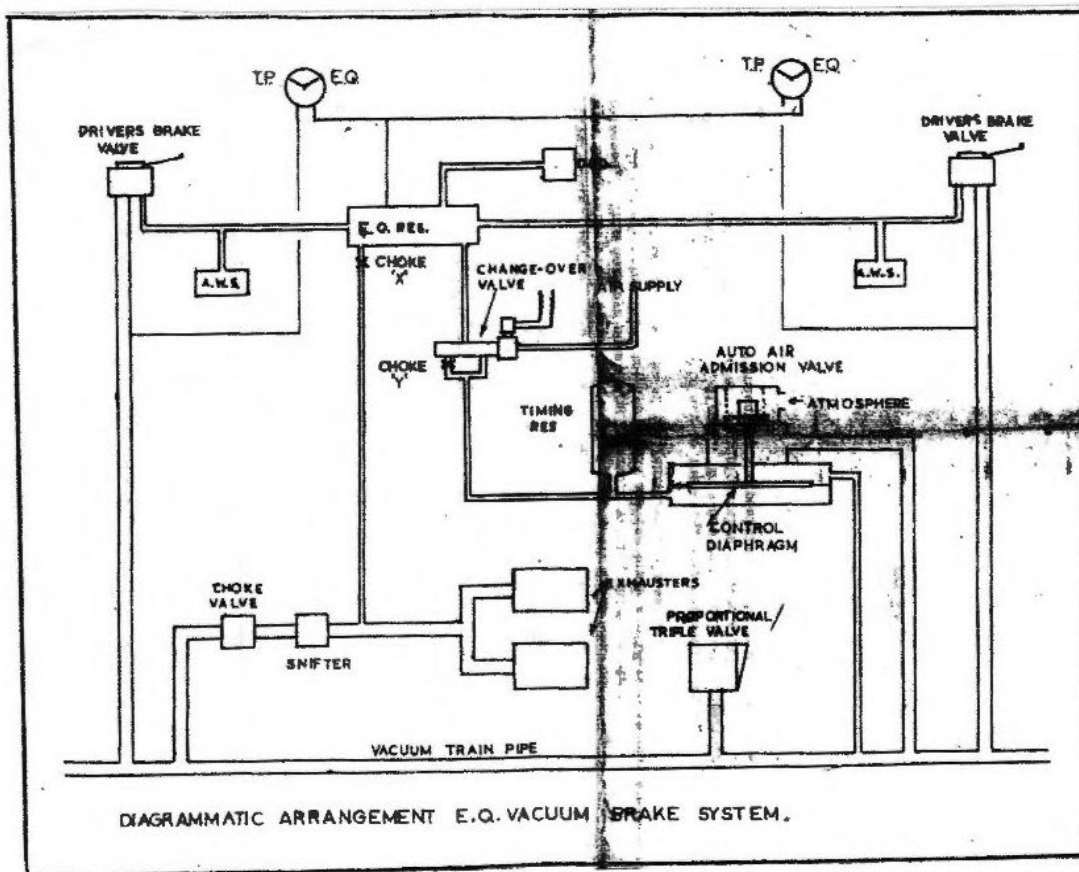
vacuum in a small equalising reservoir, and is designed to maintain train pipe vacuum approximately equal to the vacuum in the equalising reservoir. The equalising reservoir vacuum is controlled by the drivers brake valve, which may be set and left in any one position to give any required drop of vacuum in the train pipe. Furthermore, the handle position for any given degree of braking is the same for trains of varying length.

The Passenger/Goods switch controls the rate of train pipe fall and rise on both the locomotive and on the train when the brake is applied and released. With the switch in the 'Goods' position full application or release takes about 35 seconds, but with the switch in 'Passenger', no restriction on brake timing is imposed.

Passenger trains are invariably fully braked, close coupled and of a straightforward pipe layout which offers little resistance to the flow of air, so the difference in the rate of brake application between the front and rear is small. Thus the difficulties experienced in the braking of freight trains do not apply and little advantage would be gained by delaying the build up of brake power.

On E.Q. fitted locomotives the Duplex vacuum gauge on the driver's desk indicates equalising reservoir vacuum on one pointer and train pipe vacuum with the second pointer.

The brake on the locomotive is applied by the Proportional Valve or Triple Valve in the same manner as with the conventional system. These valves retain their timing device to control the rate of build up of brake cylinder pressure.



SYSTEM DESCRIPTION

Vacuum Exhausters – draw air from the small equalising reservoir through choke 'X' and from the train pipe through the electrically operated choke valve. This valve places a restriction equal to 5/8" diameter in the train pipe to limit the exhauster suction, except when the exhauster speed switch is depressed, when the valve will open to the full bore of the train pipe.

Snifter Valve - limits the train pipe vacuum to 21".

Automatic Air Admission Valve - controls the entry of atmospheric air to the train pipe. It is controlled by a large diaphragm which is influenced by train pipe vacuum above the diaphragm and equalising reservoir vacuum below. With equal vacuum on both sides the valve is closed.

Drivers Brake Valve - is a disc valve connected to the equalising reservoir and the train pipe. The valve has three operating positions.

1. Running

Equalising reservoir and train pipe are isolated from atmosphere. Normal operating vacuum is obtained in equalising reservoir and train pipe. Air admission valve is closed.

2. Service Range (Running to Full Service)

If the handle is moved from Running towards Full Service, a connection is made from atmosphere to the equalising reservoir only. The size of the aperture increases progressively with handle movement.

Air is admitted into the equalising reservoir faster than the exhausters can withdraw air from the reservoir through choke 'X'. As the exhauster suction through choke 'X' is constant, the vacuum in the equalising reservoir will be reduced and held at a level established by the position of the brake valve handle.

The equalising reservoir is connected via the Goods/Passenger Change Over Valve to the timing reservoir and to the underside of the air admission valve control diaphragm. Thus, if equalising reservoir vacuum is reduced, the control diaphragm is subjected to an upward force due to the differential between the timing reservoir (or equalising reservoir pipe) vacuum and train pipe vacuum. This forces the valve open, admitting air into the vacuum T.pipe. This reduced vacuum is felt at the top (train pipe) side of the diaphragm, so the differential across the diaphragm is reduced. When train pipe vacuum is equal to timing reservoir (or equalising reservoir pipe) vacuum the air admission valve closes, so that train pipe vacuum is reduced to the level that exists in the timing reservoir.

To release the brake the handle must be returned to 'Running' to isolate atmospheric admission and re-establish equalising reservoir vacuum. The air admission valve will have already closed as the vacuum levels have balanced, so the exhausters will re-establish train pipe vacuum.

The Exhauster Speed Up Switch may be pressed if it is required to release the brakes quickly. This will speed up the exhausters and open the choke valve.

3. Emergency

The handle may be moved against a controlled resistance from the Full Service to the Emergency position. In emergency, both the equalising reservoir and train pipe are connected directly to atmosphere by large ports. Thus, the locomotive and train brakes will be rapidly and directly applied, by-passing the action of the auto admission valve.

Goods/Passenger Change Over Valve is a two position valve, operated by compressed air, and fitted in the pipe between the equalising reservoir and the control diaphragm of the auto air admission valve. An electro pneumatic valve controlled by the Passenger/Goods switch selects the position of the change over valve.

With the switch in 'Passenger' there is unrestricted communication between the equalising reservoir and the auto air admission valve, but in 'Goods' the communication is via the small choke 'Y'.

Thus, in the 'Goods' position the control diaphragm of the auto air admission valve is subjected to a much slower fall in vacuum than in the 'Passenger' position. The valve admits air from atmosphere to the train pipe more slowly to give a much slower vacuum reduction, ensuring an even brake application throughout the train.

When the brake is released the recreation of vacuum on the underside of the control diaphragm is restricted by the action of choke 'T'. The operation of the auto air admission valve prevents train pipe vacuum being created at a rate faster than that permitted by the recreation of vacuum below the control diaphragm. Thus, the build up of train pipe vacuum will be at a controlled steady rate, enabling brake release at the front and rear of the train to take place evenly.

Passenger/Goods Switch - controls the Goods/Passenger Change Over Valve, and also controls the normal timing chokes associated with the loco proportional valve or triple valve.

Drivers Safety Device Valve - admits atmospheric air directly to the Equalising reservoir, after a short delay period, if the D.S.D. pedal is released. This destroys equalising reservoir vacuum, which reacts on the auto air admission valve to give a full service brake application at a rate dependent on the position of the Passenger/Goods switch.

A.W.S. Valves - admit atmospheric air to the equalising reservoir, in the case of an unacknowledged A.W.S. signal. This destroys equalising reservoir vacuum which reacts on the auto air admission valve to give a full service brake application at a rate dependent on the position of the Passenger/Goods switch.

Dave also remarks: The cost [of the alterations] should be viewed in terms of less wear on loco brake blocks, therefore longer intervals between changing; less damage to customers goods and vehicles because braking shocks are reduced; fewer injuries/sick leave for guards due to smoother running; fewer signals passed at danger because braking shocks induce wheel-slide. Aslef and the NUR were very powerful at this time and would fight hard to improve working conditions for their members. Locos subsequently built with dual braking would have the advantages of this system 'built in'; certainly I found that when running in 'vacuum goods' with a dual braked loco there was a noticeably delayed brake application.

Port Sunlight Station (L.M.S. and G.W. Joint).

By THEODORE G. HERON,

On Monday, May 9 [1927], the station at Port Sunlight, Cheshire, the pretty garden village with which is associated the famous soap factory of Messrs. Lever Bros., Ltd., was first opened as a public passenger station. Hitherto it had only been used for the convenience of the workpeople, special workmen's trains being run morning and evening between Port Sunlight and Birkenhead.

Within the last two or three years a new housing area has sprung into existence, known as the Edgeworth Estate. As this is in close proximity to Port Sunlight, it was felt that it would be a great convenience to the new population which has come to live in that district, as well as to the residents of the model village, if this station was opened for general use. A decision was therefore arrived at between the Joint Railways and Lever Bros., with the result already indicated.

Port Sunlight station is situated on the Birkenhead-Chester Section of the London Midland and Scottish and Great Western Joint Railway, about four miles south of Birkenhead, and lies midway between Bebington and Spital stations. There are two exceptionally long platforms, the workmen's trains using the station often consisting of fourteen or fifteen coaches. The permanent way at this point consists of two sets of metals, slow and fast, but as there is no " island " platform, stopping trains have to make use of the outside rails. There is a " Bay " adjoining the " up " platform from which Lever Bros.' own trains, hauled by their own locomotives, convey the workpeople to their associated company's factories in the Bromborough Pool and Port Rainbow districts.

The waiting-room accommodation consists of an artistically designed wooden entrance and booking hall on the ground level, connecting with the platforms by flights of steps. A subway connects the two sides of the station, whilst there is a substantial brick built waiting room on the " down " platform. A unique feature about the entrance hall is that it comprises a portion of the premises of Lever Bros. Co-Partners Club, and there is a small inscription over the main door announcing that the hall is licensed for dancing, music, &c. Surely this is the only instance of any station in the British Isles holding a dancing licence ?

The contract for the construction of the station was signed on March 2, 1914, and it bears testimony to the speed with which the late Viscount Leverhulme was accustomed to do things that the station was completed in readiness for the Royal Visit to Port Sunlight on the 25th of the same month, when His Majesty King George,

accompanied by the Queen, laid the foundation stone of the Lady Lever Art Gallery. The building of the entrance hall and waiting rooms was not finished until February, 1919.

The weekday service at present advertised shows that 10 trains from Birkenhead to Chester and 11 from Chester to Birkenhead call at Port Sunlight, including several of a semi-fast character ; five from Birkenhead to Helsby, one to Ellesmere Port and one to Heswall, three motor-trains between Rock Ferry and Hooton, and one ordinary train from Birkenhead to Hooton ; and in the opposite direction five trains from West Kirby to Birkenhead, two from Helsby to Birkenhead, and five motor trains between Hooton and Rock Ferry. The non-advertised workmen's trains call as follows : down, 6.20, 7.4, and 7.34 a.m.; daily on Mondays to Fridays at 5.10, 5.20, 5.35, 5.40, and 5.50 p.m. ; and on Saturdays at 12.25, 12.35, 12.40, and 12.50 p.m. Up, 5.42, 6.14, 7.25, 7.32, 7.39, 7.52, and 8.29 a.m., and on Saturdays at 12.38 and 12.53 p.m. There are no trains on Sundays.

It is understood that the Stanton Estate, adjoining the Edgeworth Estate, is in course of being cleared, and that the Bebington and Bromborough U.D.C. propose building about 200 houses upon it. This, no doubt, will also have an effect on the traffic passing to and from Port Sunlight station.

(Reprinted from vol.61, July-December 1927, "Railway Magazine")



Port Sunlight station today – the road side.

Letters to the Editor (continued from page 9)

The Editor came across this old letter from Campbell Highet (while looking for something else!) and thought it was of potential interest to operators of "Mostyn", if only because we use so many Class 40s! At that time I was working in Widnes library and one of the regular visitors to our railway collection was Campbell Highet, a former railway engineer, by then retired from British Railways (and prior to that employed by the L.M.S.). Campbell was the author of a number of railway books, the best regarded being *Scottish locomotive history 1831 - 1923*, published by Allen & Unwin in 1970.

"Wallasey. 31 October 1973

Dear David - With reference to your question regarding the stopping of trains from high speeds.

During the evening after my visit to you I got out some data I had collected over the years. The figures are taken from some breaking tests carried out on the LMS some years ago.

"Duchess" 160tons, with 14 coaches, 575 tons, from 60mph - 0mph:
780yds.

"Jubilee" 122tons, do. do. do., 403 tons do. do.:
600yds.

From these I estimated the co-efficient of friction and applied it to a Diesel/Electric EE/4 133tons with 10 coaches, 340 tons, from which I found the stopping distance to be 670 yds.

In all the above cases the braking percentage of the locomotive has been taken from the official drawing, and that of the coaches from accident reports. The resistance to motion (tractive resistance) has been ignored for simplicity though this would not make too much difference to be significant in such a case as we have been considering. Remember too that the calculation deals with the distance from the moment the brake starts to take effect. From sighting a signal at danger until that happens may take some seconds during which the driver has to translate vision into action, i.e. close regulator, or controller in the case of a diesel or electric, make an application of the brake and for the vacuum to be destroyed in the train pipe or air pressure start to take effect according to the type of brake. It is an interesting study and one of paramount importance in these days of the ton and more. A fast train today may need more than a mile to pull up from 90 or 100 miles/hr.

I hope this will help to answer your query.

Best wishes, yours etc.



(I can't now remember what my original query was!!)

Editor's page

On page 2 of the last issue (*BMRJ* no.20) was a note about **B.Q.C.**, and now a little further information has come to my notice: the Amalgamated Roadstone Corporation was formed on 23 April 1935 (and included British Quarrying Company). By 1958 the A.R.C. included 58 previously independent quarries, but not all were rail connected or had their own railway wagons. A further source of information is an article by Keith Farmer, *Amalgamated Roadstone*, which was published in volume 2 (1967/8) of *Industrial Railway Record*. This lists the main quarries and some details of their operation.

AN EDITOR'S DILEMMA

Producing a magazine is entertaining but it's no picnic.

If we print jokes, people say we are frivolous, facetious and fatuous:

If we don't we are too serious.

If we clip things from other magazines we are too lazy to write them ourselves:

If we don't we are too fond of our own stuff.

If we don't print contributions we don't appreciate true genius:

If we do print them the pages are full of fol-de-rol and rumble-down-dilly.

Now more than likely, someone will say that we borrowed this from some other magazine. **WE DID !!**

(Actually taken from the April 1974 issue of "Nacelle" – the magazine of the Triumph Owners' Motorcycle Club, of which I was a keen member at that time).

Recent books (and C.D.s):

Journal of the Railway & Canal Historical Society, volumes 1-35 (1955-2007) and indexes. R.C.H.S., 2009. £12.00 (C.D.).

Railway passenger stations in Great Britain: a chronology, by Michael Quick. 4th ed., R.C.H.S., 2009. ISBN 978 0 901461 57 5. £30.

Standard Railway Wagon Co, Heywood Works by David W. Tandy. Ty Mawr Pubns., 2009. ISBN 0 9552354 2 1. £14.95.

International train-ferry wagons in colour, for the modeller and historian by David Ratcliffe. Ian Allan, 2009. £16.99. ISBN 978 0 7110 3404 4.

Railway through Talerddig: the story of the Newtown & Machynlleth and associated railways in the Dyfi valley by Gwyn Briwnant-Jones. Gomer, 1990. ISBN 0 86383 662 3.

Modern locomotives illustrated, no.179: The Class 40s. M.L.I. (Ian Allan), 2009. £4.20.

There seem to have been a lot of **deaths** within the hobby of late: local ones who may have been known to some readers include **Helen Fox** of Leebotwood (wife of Derek Fox, and a regular visitor to the Llanbedr O Gauge meetings); **Bill Rear**, well-known railway author who formerly lived in (the real) Johnstown, who loaned us his copy of the 1977 *Carriage marshalling circular* which enables us to model accurately the make-up of the passenger trains on "Mostyn" (obituary below); **Hilary Harris**, wife of Alan Harris who makes the best 7mm scale locomotive wheels on the market; and **Jimmy Carlin** of the Liverpool Model Railway Society.

The following obituary of Jimmy is copied from their magazine (with acknowledgement to Richard Thwaite):

"Another member also left us recently in his 84th year: Jimmy Carlin. Jimmy was a founder member of the club back in 1982 and brought to the club first hand knowledge of the main line railway scene. He started the traditional way as a cleaner, I think at Bank Hall shed and over the years worked his way up to driving electric expresses to and from Euston and Lime Street. In his private life he was a stand up comedian in many clubs and halls and continued at the railway club telling his many jokes and quips. Many we had heard often before but with Jimmy telling them they enlivened many a meeting and gathering. Jimmy took over the canteen at the club in Aigburth station and at Chapel Avenue. He worked for many, many years 'behind the bar' as he called it. He also provided the refreshments after the annual AGMs and for a long time supervised the annual Mince Pie night held by the club just before Christmas. In fact when we had to leave Aigburth, after six months Jimmy found the premises at Chapel Avenue which secured the future of the club. The premises had been a church social club and Jimmy had spoken to the priest, enabling us to find a new home for the next ten years. He supported Chris [Hewitt] as he toured the country with his layouts and was a wonderful ambassador for himself, his club and the model railway fraternity. Lately he confined himself to operating his many models on the test track at the club. Woe betides any one who ran their engine without a crew on the footplate and ran any trains without taillights. Jimmy's engines always had a two-man crew (no inspectors), proper lamps on front and back and a correct set of fire irons on the tender.

We shall greatly miss him, he has been in and supported the club since the very beginning and speaking as a friend for all that time your editor will always be grateful that he had the honour to count him as a dear friend. We extend our deepest sympathy to his family; Chris, Vicky and his much loved granddaughter Emily".

"Bill Rear, 1933 - 2009

The sad news reaches us that William G. ('Bill') Rear has passed away in hospital. He was a supporter of our website (www.nwrail.org.uk/), always willing to help with information, and the author of a twelve very popular books on the railways of North Wales including *The Denbigh and Mold Line, Corwen to Rhyl via Ruthin and Denbigh, Caernarvon, Afon Wen & Llanberis*, for Foxline Publications, and *Chester to Holyhead, the Branch Lines* for OPC, as well as other books on railway and bus subjects.

From 1948 to 1954 he worked for British Rail at Bangor depot as a cleaner, then as fireman and 'passed fireman' (authorised to drive locos when necessary), while driving buses for Whiteway of Waunfawr in his spare time, before leaving the railway to become a full-time bus driver, and later a scheduler, with Crosville in North Wales. In 1972 he embarked on a new career as a teacher, training at Cartrefle College of Education in Wrexham, and teaching at various establishments in the area until his retirement in 1988 following a heart attack.

Larry Goddard writes: He was planning to [write] a book covering steam on the North Wales mainline, which from what I saw would have been a splendid album. He had a reputation for delving deep into train diagrams and the men that worked the trains, and as someone once said, he could even tell you what such and such a driver had for breakfast! A man and author that will be sadly missed."

[The Editor first came across him some years ago when Bill edited the *HMRS Newsletter* (now called *Points*). At that point he lived in Johnstown near Wrexham with his first wife and daughter and pet dog; Bill and dog occupied the back of the house, and wife and daughter lived at the front, so you had to go round to the back if you wanted Bill. His garage was filled, not with a car but with Bill's large collection of timetables and similar railway ephemera. When he drove buses in North Wales (before we met) he was alleged to stop his bus when an opportunity to take a photo of a train occurred: I wonder what some passengers thought when their driver abandoned the bus – even if only temporarily! After his divorce, he went to live in

Gyffin on the outskirts of Conwy with new partner Kate Kelly. The house was on the side of a hill and although Bill had plans to model part of the Welsh Highland Railway in 7mm scale, it didn't seem to me to be a practicable enterprise. Kate died a couple of years back, followed (I'm told) on Friday 13 November 2009, by Bill himself].

Merseyside M.R.S. clubrooms in Brassey Street in Birkenhead suffered a break-in during the middle of November, when thieves broke through a window into the club 'shop', and a lot of stock was stolen. Luckily, there was no damage/theft regarding layout rooms. The stuff that was stolen appears largely to have been boxed locomotives, the value of which is variously calculated at between £5,000 and £10,000. It has to be said that it could have been a much worse loss to the Society if the intruders had managed to get into the main layout rooms, rather than just into the 'Shop'!

Tracking down the best archive railway films

by Dave Millward *Continued from the last issue.*

The Railway Roundabout series (1958-1962), filmed with television studio equipment, is now available on DVD. This review covers the remaining two discs in the collection, available from Duke Marketing on 01624 640000, and are entitled "Railway Roundabout revisited" and "The end of the line".

"Railway Roundabout revisited" includes the following short films:
York signal box in 1959, the introduction of route setting. Black & white.
Viaduct inspection unit, the Eastern region unit in action. 1958, Black & white.

Midland Pullman in colour, 1960.

Riding with the driver in a DMU. Black & white 1960.

Bank holiday at Bewdley. Colour, 1961.

Last train on the Shropshire and Montgomeryshire. Black & white 1960.

A day at Shrewsbury station. Colour 1961.

Miniature railways- Sutton, Stapleford. Black & white.

Snowdon Mountain Railway. Colour 1960.

Steam through the fells - Shap. Colour 1963.

"The end of the line" includes:

Spotters' special to Swindon works. Black & white, undated.

Newton Heath shed. Black & white, undated.
The changing railway. Black & white, undated.
Historic locos at Crewe, Black & white, undated.
Caerphilly Castle - by road transporter from Park Royal to the Science Museum. Black & White, undated.
'Lion' in steam. Black & white, undated.
GN tank No.1247. Colour, undated.
The Marylebone exhibition, Black & white.
Two Glens to Fort William. Black & white 1959.
By slip coach to Bicester. Black & white.

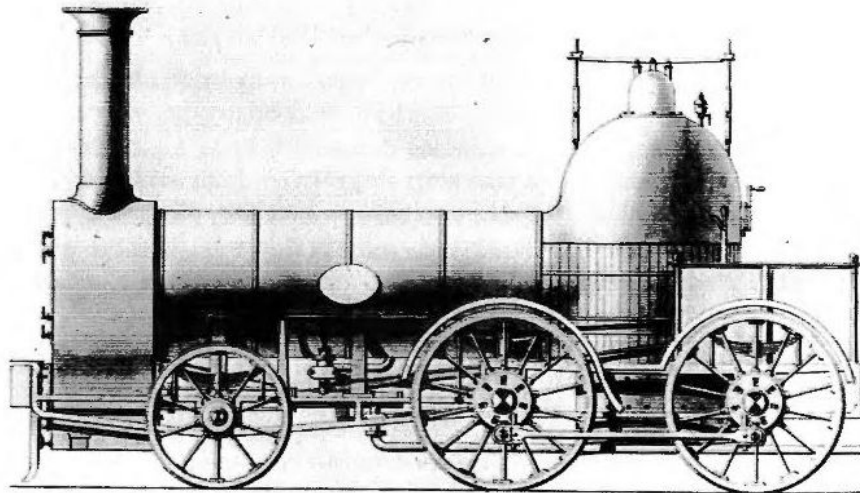
Each of these films was recorded by high quality studio equipment and represents some of the best footage available for their period; all 9 DVDs are offered for less than £30.



KDB 732830 (ZDV 'Tube') was operated by the Chester S&T section when it was photographed at its home base on 5 May 1982. Former B.R. 'Tube' wagons were popular as departmental stock because of their length. Several of these wagons are in the process of being built from the Parkside Dundas kit by Group member Richard Oldfield, and should join the "Mostyn" fleet in 2010.

How to be an unwitting victim of a con-merchant by A Gullible Editor

When I was preparing the copy for the September 2009 issue of *BMRJ*, I hoped to use this seemingly-attractive engraving of an early locomotive; so I sent this note to my consultant on historic railways – Norman Lee:



Bury's Type F 2-4-0 standard goods
engines

Norman – front of *BMRJ* 20: can you
do me a caption please? Thanks!

WJ
26.6.09

And this was Norman's demoralising reply:

"Bury 'Type F' 2-4-0 Goods Engine

The drawing isn't really a Bury engine - it is probably a 'Stretton'.

Clement Stretton was a well known enthusiast who produced lots of articles in railway magazines and journals during the 20th century. Unfortunately, he combined a vivid imagination with an authoritative manner - what he didn't know, he made up and presented as the obvious truth. It's easier than research!

Edward Bury designed several series of locomotives in the 1830s and 1840s, mainly for the London & Birmingham Railway. Most of them were 4-wheeled and had his characteristic bar

frame structure. Towards the end of his career he built a few 0-6-0 engines for the Trent Valley - these look rather like the engines in the drawing but with larger wheels at the front.

These larger wheels are important to the design. Like many of Bury's 0-4-0 designs, the 0-6-0s had cylinders well down under the smokebox - they sloped upwards towards the middle, driving axle and the piston and connecting rods went beneath the leading axle. In the drawing, the cylinders appear to be low slung and leading axle looks to be in the way - the leading axle of the Bury 0-6-0 is a few inches higher and gives enough clearance. The 2-2-0 passenger engines generally had cylinders higher up beneath the smokebox, with the rods being above the leading axle.

Clement Stretton is known to have made several drawings of early locomotives and he appears to have presented them to the Science Museum. His enthusiasm must have overcome the museum's doubts long enough for the museum to have copied the drawings - they are quite attractive - and put them on sale in its shop. There is no evidence of Bury ever having built a 2-4-0, nor of any other of his engines being rebuilt with that wheel arrangement. The 'Type F' designation appears to be a fiction too - most of Bury's engines ran on the L&B, which never used a class lettering system. Perhaps Stretton put letters A, B, C etc on his own drawings as references."

So, I investigated Mr Stretton further, and discovered that he was a trained engineer, born in Leicester in 1850, and a freemason and real railway enthusiast whose enthusiasm seems to have overtaken his sense of right and wrong in many instances; but he wasn't entirely a rogue - he appears to have taken the side of working railwaymen when he sensed that they were persecuted by the railway company management (as was often the case in those days). But a flavour of the disrepute in which he is nowadays held by railway historians may be sensed by some excerpts from the steamindex website (www.steamindex.com/library/stretton.htm):

"Clement E. Stretton: pedlar of fabricated information

The following references and brief extracts should make it abundantly clear that Stretton is completely unreliable and was unscrupulous in his handling of primary sources.

Harry Jack: letter to *Backtrack* in Volume 11 page 460: Writer would like to believe that the locomotive building records of Edward Bury & Co. still exist somewhere, but the recurring story that they went to the United States in the 1890s is probably just another myth put about by that irrepressible railway writer, Clement Edwin Stretton (1850-1915). who published hundreds (perhaps thousands) of articles and letters and several books about railways and locomotives, but most of his work is misleading - or quite worthless - because so much of it is fiction. What he did not know, he simply made up. He was involved in the preparation of railway exhibits for the 1893 Columbian Exposition at Chicago and claimed that Bury's books and working drawings were sent there. As "there was a very great probability of these interesting records being lost to this country" he said he had made copies of them. But, from drawings and details of Bury engines which Stretton subsequently published, it is obvious that his information was not authentic and that, as usual, much of it came from his fertile imagination.

He also claimed that the originals were then deposited in the Field Museum at Chicago. Enquiries to the Museum and to other likely sources in America have produced no information at all. It is difficult to believe that the Bury archives, which must have contained original material about several of America's first locomotives, could have simply disappeared in a land where there are so many knowledgeable researchers into railway history if they ever were in Chicago. On page 689 of the same Volume of Backtrack Jack returned to the attack noting that as early as the 1890s G.A. Sekon of the *Railway Magazine* was questioning the veracity of some of Stretton's statements.

Rutherford considers the unreliable Stretton in his correspondence concerning CR No. 123 where Stretton "knew better" than the man responsible for designing it! (*Backtrack* 13 200).

Ottley who was normally extremely cautious noted on the huge entry for 5592 that "As sources of information these popular lectures are incomplete and **unreliable**. [KPJ added the bold]. There are six editions of his *Locomotive engine and its development* Ottley (2837). The entry by (Simmons) in the *Oxford Companion* borders on the wildly generous and should therefore cast some questions about the reliability of Simmons and of the *Companion* in particular.

Harry Jack in his seminal study of the locomotives of the LNWR Southern Division takes Stretton asunder: The work of Clement Edwin Stretton (1850-1915) comes into an altogether different category, and if only to forestall readers' perplexity, some words of warning must be given. This prolific author wrote a popular book on locomotive history which, although **filled with errors**, [KPJ's emphasis] ran to six editions between 1892 and 1903; he also published hundreds of quite unreliable pamphlets and articles on railway and locomotive history - reference libraries throughout the land are stuffed with them. The various periodicals covering railways contain scores of his didactic letters between the 1880s and 1914. His manner towards anyone who questioned his version of events was overbearing; he was quite irrepressible. But he was often wrong, because whatever he did not know he simply made up.

Much of his writing about railway history, although it is always decked out with vivid and memorable details, can now be recognised as fiction. His stories about the two LNWR Southern Division locomotive superintendents, Edward Bury and James Edward McConnell, give a completely false impression but it is one which has coloured most writing about the subject for the past hundred years. His account of the Chester & Holyhead engines, which were transferred to the Southern Division and which he claimed to know all about, was accepted for a long time but can now be seen for the nonsense it always was.

He concocted many bogus works lists (such as one which claimed to enumerate the locomotives built by Bury, Curtis & Kennedy) and produced quite inaccurate drawings of engines, some of which he foisted on the Science Museum; his absurd drawing of Southern Division H class No 373 was reprinted in two books as recently as the 1980s. [*And the Editor nearly joined in!*]

In all cases he announced that his sources were official and authentic. He published so much and gave himself such an air of authority that his work will continue to be 'rediscovered' by researchers, and will continue to spread confusion. Maybe I have unwittingly included some Strettoniana in these pages; I hope not".

Editor's note: Many of Stretton's books are in stock in Widnes Library ([http://library.halton.gov.uk/...](http://library.halton.gov.uk/))
See also: *Clement E. Stretton: railway engineer, historian and collector* by Stephen Duffell. In *Journal of the Railway & Canal Historical Society*, no.193 (2005), pp162-9.

Cheers to beer: Amazing benefits!

by Shawn McKee

What if your doctor prescribed you a medicine that could reduce strokes, heart and vascular disease, and the incidence of cataracts and breast cancer cells? You would take it every day, right? Well, you won't have to go see your doctor for this remedy, but you may want to visit your favourite bartender.

It's fairly common knowledge that beer (or lager, or ale, or stout!) has a relaxing effect on the body and can reduce stress, but there are a myriad of other health benefits of this potent potable that are probably not as apparent during your local happy hour. There have never been better reasons to enjoy a cold beer. So test your beer health IQ.

The healthy, happy hour beer quiz:
True or false?

Beer is good for your heart.

True: A Dutch study conducted by TNO Nutrition and Food Research found that a known reference for predicting future cardiovascular disease, blood C-reactive protein (CRP), declined by 35 percent after three weeks of regular beer consumption compared with levels after three weeks of drinking non-alcoholic beer. The same study found that levels of HDL or "good" cholesterol rose by 11 percent during the same period. Beer also contains vitamin B6, which prevents the build-up of an amino acid called homocysteine that has been linked to heart disease.

Also, the Archives of Internal Medicine published an article confirming the benefits for women drinking alcohol. Data was collected from more than 70,000 nurses aged 25 to 42 whose health histories were tracked from 1989.

Younger women who drink two or three alcoholic beverages a week have a lower risk of developing high blood pressure than women who do not drink alcohol. The women in the group who drank two or three alcoholic drinks a week had a 14 percent lower risk of developing high blood pressure than those who abstained.

Beer will reduce the chance of stroke.

True: One drink a day for women or up to two drinks a day for men will reduce your chances of strokes, heart and vascular disease. Stroke is the third biggest cause of death in the UK and the largest single cause of severe disability. It is said that light to moderate drinkers will decrease their chances of suffering a stroke by 20 percent.

You should give your grandma a beer.

True: Don't load her up a beer funnel yet or take her on a drinking marathon at your local pub, but in moderation, beer has been proven to have positive effects on elderly people. It helps promote blood vessel dilation, sleep and urination.

Beer makes you funnier and more attractive to the opposite sex.

False: I'm sorry; beer won't make you funnier, although it will lower inhibitions and may make your bad jokes seem funnier to your inebriated amigos. In this state of lowered inhibitions, "beer-goggles" can take over and make that 4.5 at the end of the bar seem like an eleven. You'll see clearly in the morning. (Again, sorry).

Beer is both fat-free and cholesterol-free.

True: Check the label. Nutritionally, a beer is similar to a soft drink in its calories and carbs, but can your coke curb cancer?

Beer is good for breasts.

True: Research by scientists at the Universidade do Porto in Portugal found that polyphenols in wine and beer appeared to decrease breast cancer cells significantly. Numerous other experiments have shown that certain polyphenols, mainly flavonoids, can protect against heart disease and have anticancer, antiviral and antiallergic properties.

The Portuguese study concluded that xanthohumol, which is found in beer, was the most potent polyphenol over breast cancer cell growth; it showed its effect more rapidly and at a lower concentration than the others.

Beer could save the Three Blind Mice.

True: John Trevithick, Ph.D., and Maurice Hirst, Ph.D. conducted a study that suggests beer reduced the incidence of cataracts in mice (but increased their propensity to "go wild" and get tattoos they'll regret later in life - my own inference). If the same cataract protection occurs in humans, it would be especially beneficial to people with diabetes.

"Beer is proof that God loves us and wants us to be happy."

Benjamin Franklin said it; it must be true!

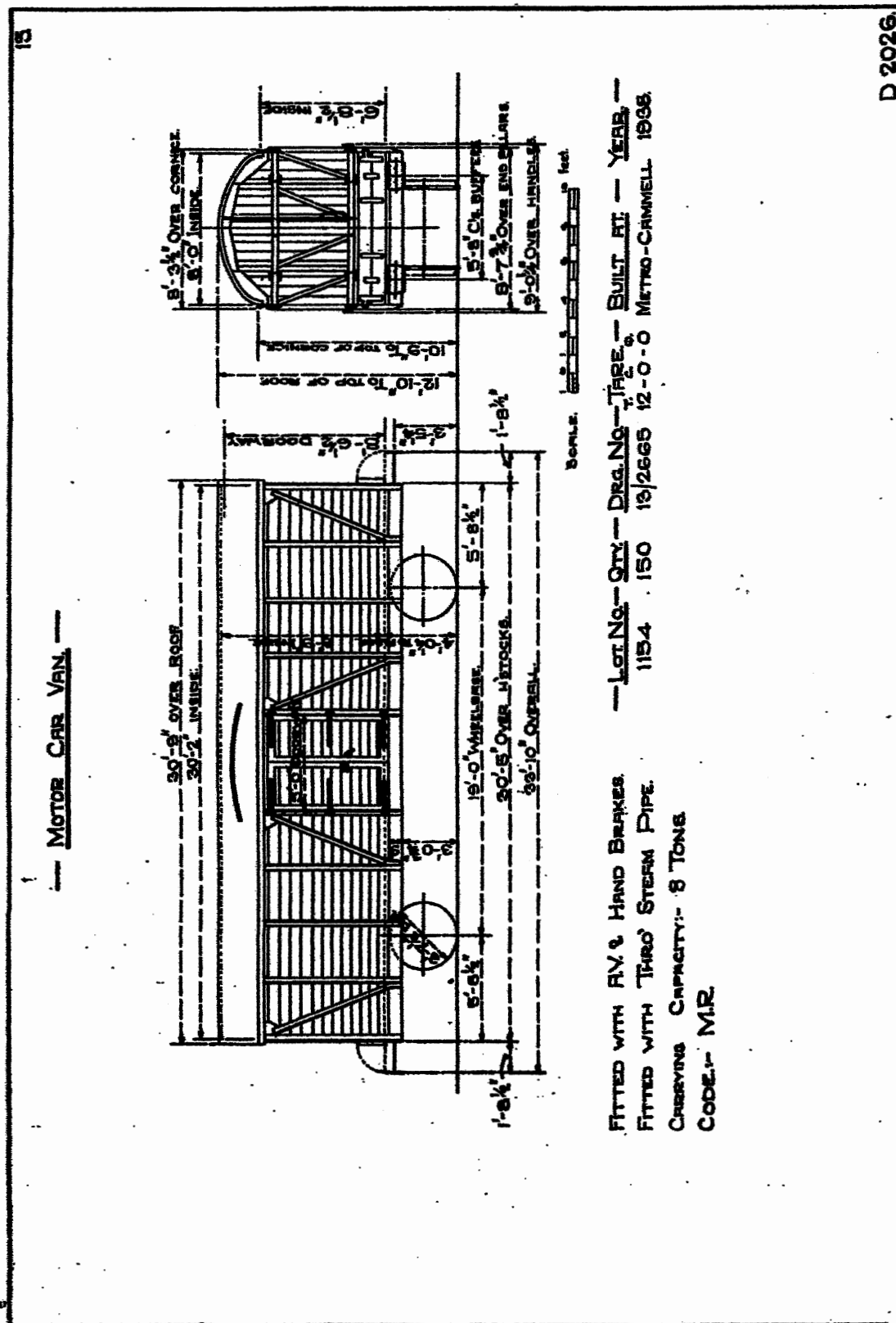
Beer has many healthy benefits when enjoyed in moderation. One or two beers a day can keep you healthy, but don't overindulge or you'll watch your beer belly blossom. Drink responsibly.

Note that a drink unit of alcohol is half a pint of beer, lager, ale or stout, a measure of spirits or a glass of wine (125 ml).

Cheers!

L.M.S. design motor car van, diag. D2026.

Group member Dave Millward came across diagrams of L.M.S. parcels stock in the files where he works; he copied them, knowing of our predilection for these vehicles!



Diagr. D2026 first came into use in 1938 with an initial batch of 150 wagons in Lot 1154 (nos. 37000 – 37149); they were the same overall length and wheelbase as many of the company's 'covered combination trucks' of diagsr. D1872 and D1929 built between 1925 and 1937, but slightly wider (Parkside Dundas make a suitable kit for these older vehicles – unfortunately of little use when modelling the 1977 scene!). The diagram D2026 continued to be used by British Railways from 1951 to 1956 when another 75 vans were built to Lots 1636, 1770, and 1773; they were numbered 37298 to 37327, 37200 to 37234, and 37235 to 37244. In B.R. usage they were classed as CCTs, and generally used in parcel trains. There were still 172 still in revenue service at the beginning of 1976, but only 52 by the end of 1977.



An unidentified van pictured at Colwyn Bay in the early 1970s – in the days before I documented my photographs! Although the original is a colour print, it is hard to be definite about the paint colour, and I am inclined to guess at bauxite.

So it is a desirable prototype for our non-passenger stock on "Mostyn".

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