

# FORWARD



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# GREAT CENTRAL RAILWAY SOCIETY

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*Forward* is the journal of the Great Central Railway Society and is published quarterly in March, June, September and December.

The Society, founded in 1974, is open to all who are interested in any aspect of the Great Central Railway, its predecessors, successors and joint lines. For membership details contact the Membership Secretary or visit the website.

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Kevin Curran, Ken Grainger, Howard Turner.

Any views or opinions expressed in *Forward* are those of the individual contributors and not necessarily those of the Editor or Committee Members of the Great Central Railway Society. Contributions for the September 2015 issue (no. 185) must reach the Editor by 1<sup>st</sup> August 2015.

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## Front cover caption

LNER class B3/2 4-6-0 no.6164 *Earl Beatty* with a stopper for Marylebone at Woodford (*date unknown*). Robinson's class 9P for the GCR was also known as the 'Faringdons', the first of the class appearing in 1917 being named *Lord Faringdon* (Alex Henderson's new title). The five remaining members of the class did not appear until 1920. This was Robinson's first 4-cylinder design and he continued the use of Stephenson's valve gear despite the use of Walschaerts by other locomotive engineers for 4-cylinder designs. Gresley rebuilt four of the class with Caprotti valve gear, no.6164 being rebuilt in June 1939. These were classified B3/2. An idiosyncrasy of the class was that three had cut-out cab sides (including 6164) and three had window cabs. The class enjoyed working on the GN expresses out of King's Cross in 1923-27 when they provided a stopgap between the Ivatt Atlantics and the new Gresley Pacifics. They acquitted themselves well on those duties.

*photo: I.P.Allen*



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## Editorial

It is sad when we hear of the death of members, particularly when they are known to us personally. With the age profile of our society it is, unfortunately, a frequent occurrence. Most will have read in the railway press of the loss of Andrew Dow, one of our vice presidents. Members in the Manchester area will no doubt know of the loss of Allan Brown, who was a member of the Manchester Locomotive Society – an appreciation has been written by Eddie Johnson (*opposite*). We have also lost one of our founder members, Richard Graham, who lived in Wembley. He was a stalwart of societies, unfettered as he was by domestic responsibilities, the GCR being just one of his many interests. Such is the regard for Richard that no less than three of our members have felt the need to mark his departure with appreciations (*see p14*).

At the society's AGM, held at Loughborough on 16<sup>th</sup> May, we welcomed David Grainger as our new chairman – his election was unopposed. Mike Hartley, the outgoing chairman, was presented with a 3D display of his favourite locomotive, 'Director' no.434 *The Earl of Kerry* inside a glass block. The minutes of the AGM will appear in the September issue, however it is encouraging to report that we are maintaining our membership - in the last year for the 33 new members to the society more than offset the loss of 27 members. We now stand at 463 paying members and 18 honorary members.

The good news from Marylebone is that the unveiling of the three replica GCR war memorial took place on 16<sup>th</sup> April. There is a report of the event on page 19. After years of neglect it seems that war memorials are now seen as something worthy of care and attention – no doubt helped by the Great War anniversary. Associated with the Great War was the Quintinshill railway disaster of 22<sup>nd</sup> May 1915. The appalling loss of life in the resulting inferno was mainly due to the use of wooden bodied coaches with gas lighting, some of these being GCR 6-wheelers. A film crew from BBC Scotland visited Ruddington to see a similar type of coach being restored by the GCR Rolling Stock Trust. The programme, narrated by Neil Oliver, was shown on BBC2 Scotland on 20<sup>th</sup> May. Hopefully it will be repeated on other channels in due course

The result of the General Election with a Conservative majority makes the proposed HS2 even more certain to be carried forward than before. Those along the route, including the Chesterfield Canal Trust (of which I am a member), will continue to suffer from 'planning blight' with the uncertainties such schemes create. Let's hope it's all worth it in the end even if many of us won't be around to see it!

Digitising the archive is progressing slowly but surely. An increasing number of items can now be found on our website. If you feel you can help in this task please contact Geoff Burton, the archivist.

My apologies to those who have contributed articles and photos for inclusion in *Forward* and are disappointed to find that they have not been used. The amount of material now being submitted is such that much of it inevitably has to be held over to later issues. It is in no way a reflection on the quality of the material but a matter of balance and being able to fit into the space available.

Finally, get along to your local newsagent and buy a copy of the bookazine *GCR Past, Present and Future* by Robin Jones. I think it is a great read and Ken Grainger agrees (*see p18*).

*Bob Gellatly*

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## Welcome to the following new members

Mr S.T.Parker, Glenfield, Leicester  
Mr S.F.Mills, Coton in the Elms,  
Debyshire  
Mr I.Magowan, Wilstone, Herts

Dr G.Lethbridge, Sherborne, Dorset  
Mr J.W.Hart, Strensall, York  
Mr R.Bedwell, Grimsby, Lincolnshire  
Mr S.Holliday, Falköping, Sweden

## **In appreciation of Allan Brown who died on 15<sup>th</sup> March 2015**

**by Eddie Johnson**

It is my sad duty to report to members the news of the death of Allan Brown, aged 86, who passed away peacefully in the Manchester Royal Infirmary on the morning of Sunday, March 15<sup>th</sup>. Allan's funeral service was held in the chapel of the Manchester Southern Crematorium on Friday March 27<sup>th</sup> and was attended by members of the GCRS and the MLS.

Allan was one of, if not *the*, leading authority on the locomotives of the MS&L, the GCR and the LNER. His study of the steam locomotive was not confined to this genre, for Allan was possessed of extensive knowledge of many pre and post-Grouping designs.

William Allan Brown, always "Allan" to his friends and family, was born on May 19<sup>th</sup> 1928 in Chorlton-cum-Hardy, Manchester, the district where he was to live for the rest of his life. Allan's life-long passion for the steam locomotive got off to a shaky start when his mother took him to Chorlton station at around two years old to watch the trains. Apparently, the sight of a passing St. Pancras express caused him to burst into tears and aroused a fit of toddler tantrums! Such childhood reservations must have been quickly dissipated, for the young Brown grew up to be one of steam's most fervent admirers.

Allan's professional life was spent in the electricity supply industry. Beginning work as an outdoor assistant working for the Manchester Corporation Electricity Department, he rose through the ranks to become an outdoor manager responsible for sub-station maintenance, cable-laying and jointing. He had a fund of stories relating to his work, some bordering on the hilarious and others of a more sombre nature. When Manchester Metrolink engineers were excavating the central reservation along Mauldeth Road West for the extension to Manchester Airport, Allan remarked: "I hope they know about that 54,000 volt cable I put down in 1952!"

In 1944 Allan joined the Manchester Locomotive Society (MLS), an organisation he did sterling work for over many years. He worked also as the youngest member of the RCTS team that put together the society's seminal work on the locomotives of the LNER, the highly-respected green book series *Locomotives of the LNER*. He was a constant correspondent of the late Percy Banyard and Willie Yeadon; the former an ex-GCR section locomotive inspector and the latter a fervent collector of data on LNER engines which itself has spawned the lengthy series forming a complete history of that company's locomotive stock.

Allan had other passions too. He was a competent musician and had developed a keen interest in brass bands from a young age. Allan learnt to play the bass trombone and was able to give very creditable performances on the instrument becoming a member of several bands in the North-West. He continued playing well into his eighties. As with his study of railways, Allan's knowledge of music extended beyond his core interest of brass band music, and he was able to talk with authority on the works of many classical composers, his favourites being Bach, Beethoven, Mozart and Johann Strauss.

Allan had a very forthright nature and was never afraid of speaking his mind. Paradoxically he was a somewhat shy and retiring man, and certainly not an easy character to become acquainted with. He was never a man to suffer fools gladly and his blunt discourse could easily lead one to false impressions. However, once one gained Allan's friendship, his sincerity shone through and few people could ever prove to be more helpful.

A generous donor to many charities over his lifetime, Allan gave freely to many causes including the restoration of the ex-Great Central 04 2-8-0, the *Tornado* project and to countless medical and animal causes. A remarkable man has left us - for his legacy and being just the man he was, we should be grateful.

## **The Calow and Bond's Main Joint Railway**

### **J. Richard Morton**

*A further exploration of the railways around Grassmoor following the author's previous article 'A bit more on the Derbyshire Lines' (Forward 180 p50).*

The history of the Calow and Bond's Main Joint Railway is inextricably linked to that of the collieries of the north Derbyshire coalfield which it served. Very much a child of the Lancashire, Derbyshire and East Coast Railway, two other much larger companies, the Great Central and the Midland, became involved as each sought to develop its foothold in the area's lucrative coal traffic. The end of the nineteenth century was a period of complex manoeuvring for all concerned as the colliery companies courted rival lines with the aim of driving down haulage costs and the railway companies fought to gain access to as many pits as possible and obtain a major slice of their traffic – all of it if that was practicable.

Large scale exploitation of the coal measures to the southeast of Chesterfield really began with work on the first shaft at Grassmoor colliery in 1861. Owned by the Barnes family, this was to become the Grassmoor Colliery Co in 1893. Other shafts followed between 1875 and 1878, and the Midland Railway opened a branch to serve the pit from Avenue sidings on the North Midland line in 1872. When the MS&L's Chesterfield loop line opened through Grassmoor in 1893 there were two branches into the colliery, a sort of pincer formation, from both the north and the south. Exploitation of the coalfield continued apace with the sinking of the Bond's Main colliery, beginning in 1897. Immediately the MS&L, which ran right past the site, planned a connection into the new workings. This opened on 13<sup>th</sup> May 1901, although a colliery platform, served by workmen's trains, had begun life on 13<sup>th</sup> March 1900. Unsurprisingly the Midland looked at the new colliery venture with interest and considered how best it might tap into this new source of traffic, especially as its Grassmoor branch was so close at hand. However, there was a third player about to enter the scene in the shape of the LD&ECR, whose line was less than two miles to the north.

The "Dukeries Route", as the LD&EC liked to call itself, had opened to Chesterfield (Market Place) in March 1897 and had platforms at Calow Jct, although this was not a public station. Even before the line was opened the company was casting around to see what could be done to attract traffic. The Grassmoor and Bond's Main collieries were identified as targets and a branch from Calow was planned with parliamentary approval coming in 1897 – this was known as the "Temple Normanton and Grassmoor" branch. Then came news that the Staveley Coal and Iron Co (already owner of Bond's Main) was opening a pit at what became known as Calow Main colliery and so the LD&EC planned another branch to serve this new site the following year, portions of the original "Temple Normanton" branch being abandoned in the process.

Meanwhile the Midland had not been idle and its own branch to serve Bond's Main, confusingly known as the "New Grassmoor" branch, had also received parliamentary authorisation in 1897. This would join the LD&EC branch just short of the colliery sidings, so now three companies were likely to serve Bond's Main and Grassmoor with their own tracks. However, what could be considered as sanity prevailed and the revised LD&EC line beyond the colliery at Calow became the Calow and Bond's Main Joint Railway with the LD&EC, the GC and the Midland as equal partners. The new line was just one and a half miles long but was very steep, largely because of the desire to service the new pit up at Calow. The "Temple Normanton and Grassmoor" branch, as originally envisaged, was much more easily graded. Single line, the joint railway ran down the hill from Calow Main colliery into the valley of the Calow Brook, some 100 feet below, and then up another steep grade into the Bond's Main colliery sidings, the Midland's "New Grassmoor" branch joining at what became Bond's Main Colliery North Junction. The appointed contractors were Mitchell Brothers of Glasgow and the contract for £12,386 was let in June 1899 with the costs being equally divided between the three partners. For the first twelve months of the joint line's existence, Mitchells were to be

responsible for all maintenance at a price agreed with the three partners. The LD&EC engineer supervised the entire contract.

There followed the usual flurry of activity as construction of the various lines began. First of all came the single line LD&EC branch from Calow Jct to Calow Main, just  $\frac{3}{8}$  of a mile long, which opened in November 1899. The joint line down the hill to Bond's Main began operating on Monday 6<sup>th</sup> May 1901, initially with LD&EC traffic, and joined the following week, on the 13<sup>th</sup>, by Great Central operations, although whether these involved working trains up to Calow is open to doubt. Then the Midland opened its line from Grassmoor Junction (on the original branch of 1872) to Bond's Main North Junction on 9<sup>th</sup> June. Once everything had settled down the Midland allowed the LD&EC to use the branch to Grassmoor Junction sidings from where the owning company worked the LD&EC traffic into the Grassmoor colliery itself at a cost to the LD&EC of 4d a ton. This began on Monday 9<sup>th</sup> September 1901. There were reversals for the LD&EC wagons at Bond's Main North, where there were running loops beyond Hassocky Lane bridge, and also at Grassmoor Jct where the Midland had built the sidings at its own cost. Obviously this expense was worthwhile in keeping the LD&EC away from direct access into Grassmoor.

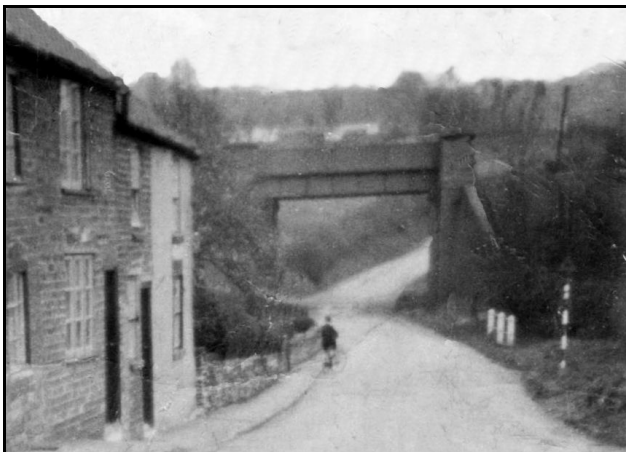
The complex of lines was not noticeable for physical features although the Midland's "New Grassmoor" branch did include the 110 yards long Mansfield Road tunnel which burrowed under not only the road but also the GC's Chesterfield loop line. Calow Junction required the widening of the cutting at Dark Lane bridge to allow a down goods loop to be created. The bridge itself (no. 10 on the LD&EC bridge register) stayed exactly the same, as it already had two side spans of 26 feet and a central skew of 27 feet with a height of 18 feet - quite large enough for the new loop. The excavated material was deposited in the vee of the Calow branch junction, allowing sidings to be built. Ballast was never anything more than ash throughout.



*The site of Calow Junction from Dark Lane bridge. The single line of the C&BM Jnt ran alongside the LD&EC and under the bridge before curving away to the south. The 5-coach Chesterfield Market Place - Lincoln service (possibly the 4.10pm) is being worked by an ex- GN 4-4-0 locomotive. The structure at the end of the train is an aqueduct.*  
Photo: H.K.Boulter (Ted Hancock collection)

The single line began with a ten chain curve on an embankment over a brick culvert (span of 3 feet) with a small brook flowing through it. Climbing all the way to Calow colliery at 1 in 50 it crossed Bolehill Road bridge at Cock Alley, a metal decked structure with brick abutments. Briefly on the level at the colliery sidings the line curved gently downhill at 1 in 69½ over Calow Green level crossing and then through the fields on a shallow embankment to a cutting with an occupation overbridge, the only one on the line. Next came a more substantial embankment through which the Calow Brook passed in another brick lined culvert. This short section was on the level but was followed by a nasty steep climb at 1 in 54 round a 15 chain eastwards curve to Bond's Main North Jct beyond which were the running loops, each holding 40 wagons. These were on the colliery yard side of Hassocky Lane bridge which, again, had a metal deck, but this time for the road above, and rested on brick abutments. Finally on the level it reached Bond's Main colliery itself with the Great Central connection to the Chesterfield loop away to the right beyond Grassmoor Sidings and Bond's Main signal box.

These were never easy lines to work as so much had to be done on gradients of varying severity. At Calow Junction on the LD&EC's line there was a strict Board of Trade instruction that up goods (coal or empties) must not, under any circumstances, be brought to a stand at the outer home signal because of the 1 in 100 falling gradient back towards Chesterfield. Equally no up or down goods (coal or empties) was allowed to detach or attach at the junction unless it was shunted clear of the running lines – only then could the engine be uncoupled. Each train leaving the junction had a brake van front and rear to increase braking capacity and at least one of them had to be of the 15 or 20 ton variety. Train length was limited to 15 loaded trucks or 25 empties for an LD&EC class A 0-6-2 tank loco (LNER N6) or 12 loaded trucks or 20 empties for a class B 0-6-0 tank loco (LNER J60) – the class C 0-4-4 tanks (LNER G3) and the class D 0-6-4 tanks (LNER M1) were both banned from the line. Brakes were pinned down before moving off, although judging what was "sufficient" was something of an art as first came the climb up to Calow colliery and then the plunge down to Bond's Main North Junction. In bad weather, fog or falling snow, trains were strictly limited to 10mph - given the gradients it is hard to imagine that anybody would wish to go faster! At least the sidings at Calow were on the level although wagon brakes here were usually pinned down as the single line fell away sharply in each direction – catch points were provided to deal with potential runaways.



*Bolehill Road bridge from Cock Alley c.1952. photo: Dave Wright*

Caution was very much the watchword of the Calow colliery staff. The yard was small and largely consisted of three loop sidings with others trailing in from the colliery tip. Train crews must have regarded the view southward from the colliery sidings as akin to looking over the edge of a precipice – even today the valley looks and feels a long way below as one stands on the site of the sidings.

Not far down the bank was Calow Green level crossing and although the road was a quiet country lane there were comprehensive instructions in the working timetable to



regulate the crossing's safe operation. A sequence of bells between the crossing and the signal boxes at Calow Colliery and Bond's Main North Junction made sure that trains approaching the gates knew that the line was clear for them. Should the two boxes fail to get a response from the gatekeeper, then the drivers were cautioned to come to a stand well clear of the gates with the front guard or fireman walking forward to check with the gatekeeper. In either direction, coming to a stand was a considerable skill. The gates themselves were interlocked with Calow's up starter and the down outer home signal and once these signals were lowered then the gates were automatically locked across the road. Notice that the regulations mention a "front guard", a reminder of there being two brake vans on each train.

The final challenge lay at the bottom of the bank where the steep climb at 1 in 54 awaited trains into the running loops at Bond's Main colliery. As the loops were still on the gradient, wagons had to have a "sufficient" (that instruction again!) number of wagons pinned down and two or more sprags inserted into the wheels with van brakes hard on before locomotives could be uncoupled to run round. Here LD&EC trains to Grassmoor Junction reversed direction, the two brake vans helping to speed this process. Right into British Railway's days wagons in the empties sidings above the screens at Bond's Main had alternate brakes pinned down before an engine was permitted to leave them.

What then of the traffic that actually worked over the lines? In short, coal and empties and precious little else – certainly no passenger trains – with Langwith Junction shed providing locos and crews. Beginning at Calow Jct on the LD&EC - from 1<sup>st</sup> July 1907 this was served by only one down train, the 8.45am from Langwith Jct which did not run on Saturdays and arrived at 10.20am. Conversely the up services ran to the sidings at Warsop Jct, leaving at 1.45pm and 9.15pm. All the foregoing trains were designated as coal in the working timetable although the down train would logically be empties. Nothing at all is recorded as calling at Calow Main colliery, traffic being most likely tripped to and from the junction by the locomotives of the Langwith or Warsop trains. On the joint line, only LD&EC trains appear in a working timetable for July 1902 - times are exactly the same from 1<sup>st</sup> July 1907 but by then the GCR had taken control. Up services (empties) left Calow Jct at 1.00pm and 8.05pm and worked to Grassmoor Jct on the Midland branch arriving at 1.25pm and 8.30pm respectively. A hardly generous ten minutes was allowed at Bond's Main North Jct to run round – brakes pinned down, wheels spragged and van brakes screwed down tight remember. In the down direction Grassmoor Jct was vacated at 2.00pm and 9.00pm, Calow Jct at the top of the hill being reached at 2.30pm and 9.30pm, oddly with no allowance being made for the much heavier trains going up the bank. The last noted up and down services ran only as required. Bond's Main colliery was served by empties that left Calow Jct at 4.30pm, arriving at 4.40pm – the engine then went back up the hill with a loaded coal train at 5.20pm, getting to Calow Jct at 5.30pm well in time for the evening up departure to Warsop Jct. Lastly, in July 1907 only, came a pilot engine leaving Bond's Main at 4.45pm and taking just 7 minutes to Calow Jct, returning to Bond's Main at 5.15pm and arriving at 5.22pm. Could this be to shunt the sidings at the junction, although 23 minutes hardly sounds long enough?

The Midland worked empties into Bond's Main at 3.30pm, leaving Avenue sidings at 3.20pm, and an hour later working back with what the Midland termed a "mineral" train, timed at Avenue at 4.40pm. This did not run on Saturdays with the engine expected to run other trips to Grassmoor colliery as directed by the inspector at Avenue - this was in July 1902. Five years later there was an additional Midland service to Bond's Main - empties leaving Avenue at 8.20am and arriving at 8.30am and then returning with coal at 9.00am and Avenue at 9.10am. All were worked by 0-6-0 engines, both tender and tank, from Hasland shed.

From the foregoing it will be seen that, although much of the line was a joint one, only the LD&EC made use of it with the Midland running only on the few hundred yards from

Bond's Main North Jct up to the running loops and colliery sidings. Control of the joint line was by electric train tablet with three signal boxes holding tablet instruments: Calow Colliery (LD&EC), Bond's Main North Jct (Midland) and Grassmoor Sidings and Bond's Main (GC). Interestingly when the line opened, each signal box was owned by a different company. Costings for the new boxes at Calow and Bond's Main North were assigned as 50% to the owning company with the three partners covering the rest equally. The same proportions were put in place to pay for the cost of the physical junction with the Midland's New Grassmoor branch. However, although the GC already had a small Grassmoor Colliery signal box (20 levers) on the Chesterfield loop, all the changes associated with the new joint line required a completely new box and the triumvirate paid for the additional 45 levers that the new layout required – GC staff carried out all the work on it. (The SRS register gives a revised total of 66 levers but official GC/Midland documents give 65 as the enlarged lever total).

Calow Jct signal box remains very much of a mystery – it was possibly a moderately sized LD&EC design with equipment from Saxby and Farmer who were still supplying the company at this stage. Indications of its site remain elusive although somewhere on the down side to the east of Dark Lane bridge seems likely and logical. Calow Colliery box is a similar mystery. Certainly a smaller box than that at the junction it cannot have had more than fifteen levers and, also certainly, was on the down (west) side of the colliery loops and sidings. In all likelihood it also came from the Saxby and Farmer stable and was, most probably, wooden. The North Jct signal box at Bond's Main was a small MR structure in the vee of the two single lines.

The Calow and Bond's Main Joint Railway was destined to have a very short and uneventful life for reasons which could not possibly have been envisaged when it was first proposed or even opened. First and foremost the LD&EC was absorbed by the Great Central, a quite remarkable change of events given the MSL's vitriolic opposition to the initial "East – West" scheme and the advanced negotiations between the LD&EC and the Great Northern Railway, widely thought to be the likely purchaser - at least the GN certainly thought so. First announced at the end of 1905 the takeover took effect from 1<sup>st</sup> January 1907 and immediately the GC began looking for economies and removing unwarranted duplications. Inevitably the joint line came into its sights - after all the GC had easy access to Bond's Main and Grassmoor collieries and Calow Main was still served by the original LD&EC branch. Thus negotiations with the Midland began and were rapidly concluded as the Midland had no interest in Calow Main and would continue to access Bond's Main over the New Grassmoor branch and the few hundred yards of the joint line to the running loops.

Straightaway the former LD&EC traffic to Grassmoor colliery ceased as the GC had absolutely no intentions of continuing to pay the Midland 4d a ton for the privilege of working coal from Grassmoor – its own branches were quite sufficient! Moreover, and probably just as importantly, events underground militated against the joint line's survival as the workings at Calow Main were joined to those of Bond's Main in January 1908. Once thurlings were adequate, ventilation approved and conveyors installed, coal from Calow could be wound up the shaft at Bond's Main where the screens, washery and surface facilities were hugely better than those at Calow. Miners continued to use the two Calow drifts to get to the faces for the moment.

Closure of the line south from Calow colliery officially took place on Wednesday, 17<sup>th</sup> November 1909, though the Midland's Bond's Main North Jct signal box is recorded as closing two days previously on the Monday. Tablet working now began between Grassmoor Jct (Midland) and Grassmoor Sidings and Bond's Main (GC). Calow Colliery signal box closed at the same time with the yard resorting to hand points and scotch blocks without the need for signals. Track removal by the GC took place quite quickly after closure with an equivalent value of recovered materials being paid into the joint line's bank account. Control of the running loops at Bond's Main fell to new ground frames installed at each end of the loops (the Midland providing the western frame and

the GC the other) although this arrangement was short lived. In 1914 the ground frames were abolished - one loop was removed and the other became a plain siding only accessible from the end where the Midland signal box had once been. The final agreement between the GC and the MR, dated 14<sup>th</sup> March 1914, noted that the remaining portions of the joint line at Bond's Main would henceforth be maintained and operated by the Midland and that the C&BMJR bank account would be closed once all final costs and remaining assets were accounted for.

Alterations at the GC's Grassmoor Sidings and Bond's Main signal box left it with 29 working levers (36 spares)- only 9 more than it started out with before the joint line was opened. On all these matters the GC paid two thirds of the costs as they now had two parts of the tripartite ownership, but still there were wrangles between the two companies as to the maintenance of the fences, drains and bridges on the now closed line. Curiously, extensive details were put in place as to the cost of reinstating the line should either party wish to do so!

Meanwhile the Calow Main branch was closed from Calow Jct in December 1912 as all coal was now being raised down at Bond's Main. Previously the junction had been simplified to just a trailing connection into the down line protected by a catch point on the branch - the loop and sidings having been removed once the joint line had closed with control coming from a "stage" which had replaced the signal box. The choice of nomenclature is interesting, being "stage" rather than "ground frame", as a handwritten note on a plan dated 14<sup>th</sup> October 1908 confirms. If it was a "stage" such as those which were fairly common on the L&NWR then this would probably be locked by an Annett's key kept in the nearest signal box, Arkwright Town Jct. The junction box, of course, was still comparatively new and might just have had another life elsewhere after closure. Thus the end had come and that was more or less it ... but not quite.

The Calow and Bond's Main Joint Railway continued to appear in the GC working timetables because of the Midland workings into Bond's Main over the few yards of the remaining joint line. Two loads of empties and two loaded coal trains continued to operate to and from Avenue sidings, still worked by locomotives from Hasland shed. Grassmoor Jct signal box closed on 19<sup>th</sup> March 1911 and its associated sidings became hand worked, whilst the New Grassmoor branch itself finished on 31<sup>st</sup> July 1955, being cut back at 144m 740yds (measured from St. Pancras) and thereafter just used as a storage siding for long lines of unwanted wooden mineral wagons. Bond's Main colliery was sold as a going concern to the Clay Cross Co in 1924, although it had closed after the miners' strike of 1921, and finally shut on 3<sup>rd</sup> June 1949, although clearing up operations continued until 1953.

Grassmoor ceased to be an independent colliery in August 1950 when it was absorbed into the Williamthorpe complex, although the washery and screens appear to have continued in use. Williamthorpe itself closed in March 1970. Grassmoor's history had not been entirely without incident - in 1928 the owning company, the Grassmoor Colliery Co, went into voluntary liquidation and then reinvented itself with exactly the same name! Coal raising at Grassmoor continued fitfully until somewhere around 1967. The main shafts are actually officially recorded as finishing in 1952, although the GC branches to serve it went with the end of the Chesterfield loop in 1963.

Finally the Midland lines to Grassmoor and Williamthorpe ceased in January 1971. As for Calow Main, although it was by some distance the most successful of the various pits and shafts around Calow, it never proved to be the great Golconda for which everybody had hoped. It officially closed on 16<sup>th</sup> April 1927 but the two drifts were maintained, later being used for the ventilation of the new colliery at Arkwright (opened by the Staveley Coal and Iron Co in 1938) whose own drifts connected into those of Calow Main. Machinery and other equipment often used the Calow Main drifts but weekly maintenance inspections gradually identified their deteriorating condition and they were sealed in 1972. Arkwright closed in 1988.

Unlike many larger joint railways the Calow and Bond's Main has left us with almost no paper trail to follow apart from working timetables, parliamentary papers and the occasional board minute. Waybills, correspondence and even wagon labels appear not to exist - a situation explained by the fact that the line operated as an adjunct to the main LD&EC which was very much the parent. The line never had a committee of the three owning company's representatives or a separate staff as it simply was not needed for something so small and straightforward. All matters were dealt with locally without resort to higher management levels unless finance was involved. The C&BMJ shared its bank in Chesterfield with the LD&EC. Eventually the joint's bank account was closed with the GC inheriting two thirds of the remaining monies. There cannot have been much! The working line even escaped recording by the Ordnance Survey on its large scale maps although, marked as a mineral line, it appeared briefly on the one inch survey of 1906.

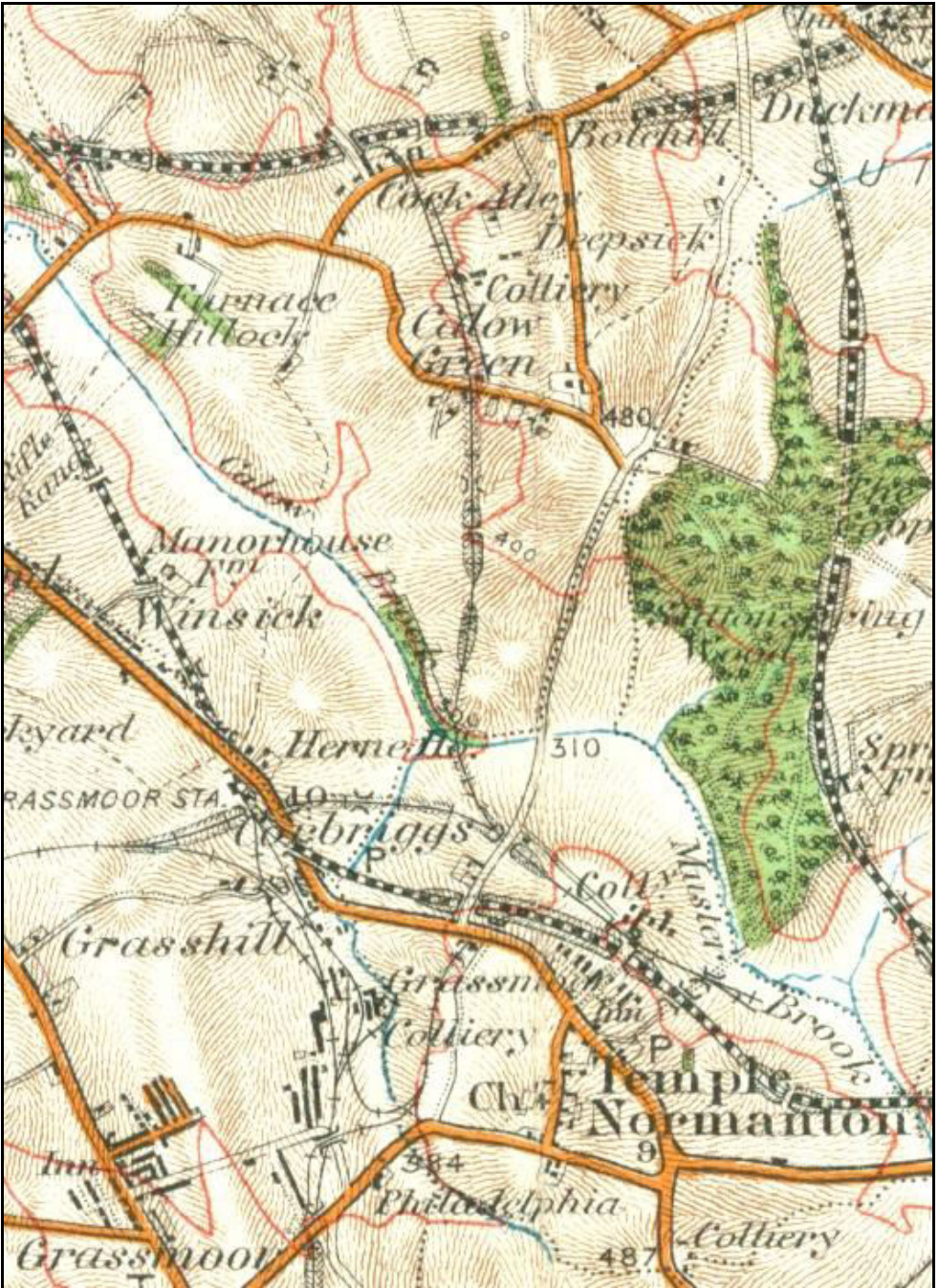
However, its remains were faithfully recorded for very many years. So, given that the joint line was closed well over a hundred years ago, it is hardly surprising that physical remnants are few and far between though traces of the line took



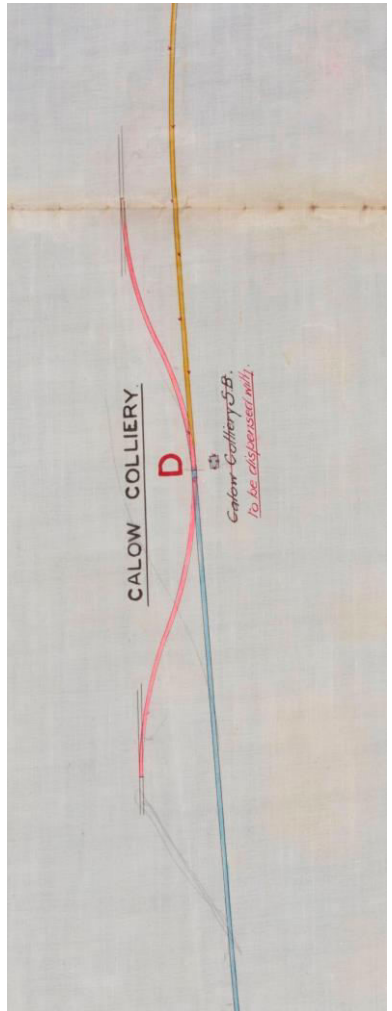
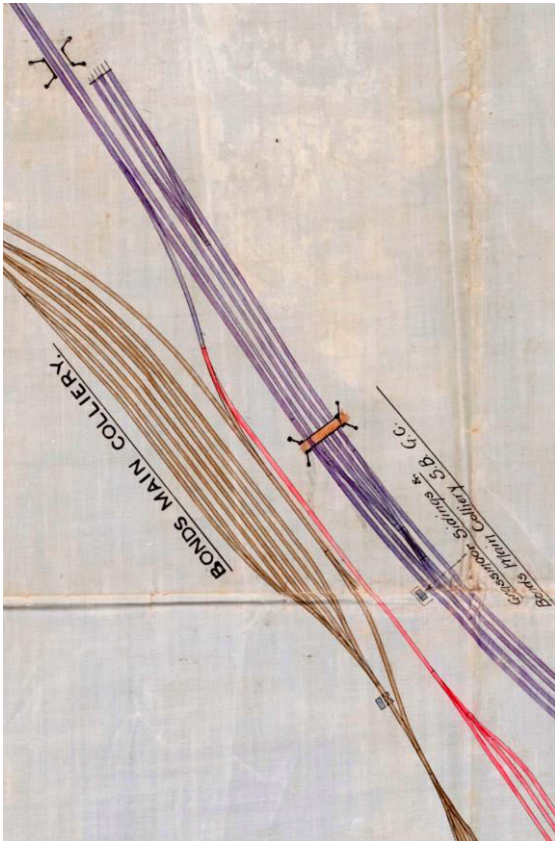
*Calow Green gatekeeper's cottage looking west. The gated level crossing was on the far side of the cottage. photo: "Ian T"/Google Earth*

a very long time to disappear. Bridges on the branch lasted until at least 1960 when the Chesterfield Borough Council engineers considered the demolition of the narrow Bolehill bridge and today only the Calow Brook culvert remains. The main track bed has blended into the landscape although to the practised eye, bits of embankment and cutting can be identified, although most cuttings have been infilled. A rough farm track follows the route through the fields in some places. The deep cutting at Calow Jct has been reclaimed right up to the bridge parapets of Dark Lane bridge although the boundary fences and hedges help to identify the outline shape of the junction. The most substantial remnant is the gatekeeper's cottage at Calow Green which is now the home for a cattery and kennels - although much altered its LD&ECR parentage can still be seen. In a proper nod to history the owners call the business "Gatehouse Cattery and Kennels".

The building of the Hasland bypass swept away any trace of Bond's Main colliery and Grassmoor colliery is now an attractive country park. The site of Calow Main colliery, though, is still easy to identify. The area of the pit top is covered in scrub and small trees, some shattered pieces of concrete and brickwork remain and a portion of the waste tip survives at the north end of the site. The sealed drifts are also there but of the screens, buildings and loading dock where the sidings once were there is nothing. A tantalising memory came from the late Walter Wagstaffe of Staveley engine shed who walked up from Bond's Main colliery yard (where family members worked) as a small boy with his father during World War I. The track had gone, the sleeper marks were full of water and all that Walter could recall was rain and bird song. Like us he wished that he could have remembered more!

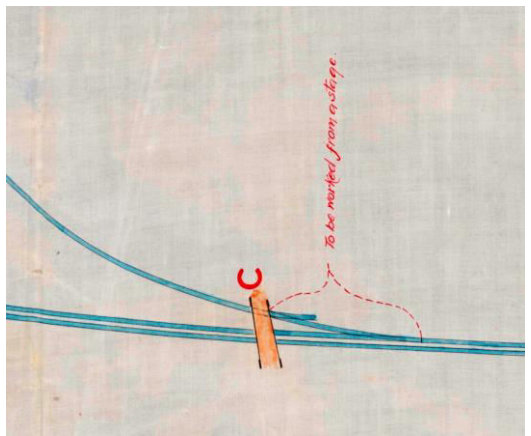


The OS One Inch map of 1906 showing the route of the C&BM Jnt. from Calow Jnt on the LD&EC (top) to Bond's Main Colliery alongside the GCR's Chesterfield loop line (bottom). The GC's direct line from Steaveley to Heath is on the right.



**Extracts from the GC/Midland closure agreement map dated 1914**

- above left: Bond's Main Colliery
  - above right: Calow Colliery
  - below left: Bond's Main North Junction
  - below right: Calow Junction
- (courtesy Univ. of Cambridge)



So, at the end of the day, was the Calow and Bond's Main Joint Railway of any great value? The short answer is "no"! Clearly the LD&EC received the greatest benefit by gaining access to three collieries, two of them at shared expense with its rivals, the Midland and GC. It was also the only company to make anything of most of the line and then for only five years. The Midland was able to prevent the LD&EC gaining direct access to Grassmoor colliery and also reached Bond's Main on the joint line. It would have done so anyway as the "New Grassmoor" branch was planned to join the original "Temple Normanton and Grassmoor" of the LD&EC. All the Midland really received was the 4d a ton for working LD&EC coal to Grassmoor Jct and it even lost that in 1907. The Great Central was pleased to keep the LD&EC out of Grassmoor but that was all it got until 1907. Neither the Midland nor the GC had any remote interest in serving the pit at the top of the hill, Calow Main. Best leave the nasty, steep single track to the little company to make the best that it could with it. Truly this had been a joint railway of only political convenience to the larger companies.

#### *Acknowledgements*

I am again grateful to Dave Clarke and Kim Godson of the Coal Authority archives and records section in Mansfield for guidance through the hazardous maze of colliery chronologies. Also to Neil Bridgewater for his excellent "Neil's local history and mining" website ([www.oldminer.co.uk](http://www.oldminer.co.uk)) which is a fine example of well researched local history. In the same vein Robert Bradley's website, "Mining History of Derbyshire, Notts and Leicester" ([www.healeyhero.co.uk](http://www.healeyhero.co.uk)) is superb and instructive. Roger Brettle provided an excellent groundwork with his article on the line's centenary looking at it from the Midland's perspective.

The staff of both Chesterfield Library Local Studies Dept, especially Marion Thorne, and Derbyshire County Archives at Matlock could not have been more helpful or long-suffering. Mike Higginson of "Picture the Past" sorted out photographs and permissions in double quick time. Glynn Waite, David Wright and Vic Halksworth were also immensely helpful – Vic actually lives in Calow and is a great enthusiast for the area and its history. As usual the staff of "Search Engine" at the NRM in York were both efficient and humorous with Kit Heyam doing her very best to keep me on the rails! Elizabeth Freshwater of the English Heritage Archive in Swindon was instrumental in searching out aerial photographs and cheerfully guiding me through the process of obtaining copies and licences. Andrew Alexander of the University of Cambridge Map Library went out of his way to provide me with collection details. Bill Taylor practically circumvented the entire counties of Notts and Derbyshire in providing all manner of GC/LD&EC documents, extracts from working timetables and maps and plans to aid my researches. This article would be much poorer and shorter without your help Bill, thank you.

#### *A bibliography*

*Memories of the Derbyshire Coalfields*, D. Bell, Countryside Books 2006.  
*The Lancashire, Derbyshire and East Coast Railway (2 vols)*, Chris Booth, Blurb 2013.  
*A Midland Joint Line*, Roger Brettle, Midland Journal no 17 Autumn 2001.  
*The Lancashire, Derbyshire and East Coast Railway*, J.Cupit and W.Taylor, Oakwood Press 1984.  
*Great Central. Vol 3; Fay sets the pace 1900-1922*, George Dow, Ian Allan 1965.  
*The Midland Railway; a chronology*, J.Gough, RCHS 1989.  
*Signal box register. Vol 3; LNER Southern area*, C.K.Hall (editor), SRS 2012.  
*The Great Northern Railway. Vol 3; Twentieth Century to Grouping*, J.Wrottesley, Batsford 1981.



*Brick from Bond's Main colliery.  
photo: "Nottsexminer"/Flickr*

## **In appreciation of Richard Graham who died on 22<sup>nd</sup> Dec. 2014**

### **by Ken Grainger**

I first met Richard on some of Len Bunning's famous outings to the back of beyond, but really had little contact with him at the time. What did bring us together was the GC Memorial project, where we found we had a common interest. When I asked via *Forward* if anyone would be prepared to help trace the Great Central fallen, he was the first to come forward. Thereafter he would very promptly return my lists of names, unit and approximate date of death (from the Great Central Journal obituary columns) annotated with the relevant Commonwealth War Graves Commission data, including alternatives where there were uncertainties - the Johnsons, I recall, were particularly fraught. I was very pleased to see him at the relocation and re-dedication of the Great Central Railway's memorial to the Great War dead at Sheffield on Remembrance Day 2003.

It was always a pleasure to renew our acquaintance over a meal in the Victoria and Albert every November 11<sup>th</sup> at Marylebone. However, I looked for him in vain last year. Len Bunning and Brian Holyland were unable to explain his absence. I was truly shocked when at our committee meeting in March Richard Butler told us that Richard had died and, on subsequent enquiry to Len, to learn that his death had occurred some time previously.

### **by Len Bunning**

I first met Richard at the 1996 AGM of the Great Central Railway Society at Woodford Halse. Richard and David Reidy had travelled from Marylebone together. However, there was no convenient bus connection back to Banbury in the afternoon after the meeting and I was asked if I could give both of them a lift back to Banbury station. This I duly did. Little did I know at the time that train services had been disrupted and they were stranded at Banbury for hours. It was only later I found out that Richard lived only a mile or so from my home!

Due to clashes with the activities of his many of his other societies, we never saw Richard at London area film shows or lectures, but an opportunity to meet up with him again occurred in October 1999 when I ran a car trip for those who had missed the 1998 minibus trip to Verney Junction. Brian Holyland dropped out at the last minute due to a trip to Ireland and I invited Richard to fill the gap. He was delighted to accept. It was a dismal, grey autumnal day but we all enjoyed ourselves and it was there when I first became aware of his love of cats. When we stopped at The Verney Arms for Sunday roast we attracted the attention of a very fine male marmalade one and Richard made a great fuss of it. As afternoon turned into evening Simon Perry suggested we finish the day at Cockley Brake Junction and so we trekked across muddy fields to find this great historical landmark in drizzling rain. Much later I came to realise that Richard was seemingly impervious to rain as we later heard at his funeral.

About ten years ago I was lucky enough to purchase some of the early issues of *Underground News*, the journal of the London Underground Railway Society. I was surprised to find many contributions from Richard and one concerned a traumatic trip with a cat in a basket which he was taking from his home to Swansea. It was called Lucifer and it didn't like tube travel. He miaowed all the way from Sudbury Hill to Paddington and probably also from Paddington to Swansea! Despite his life long asthma, Richard had a particular love of cats.

We next met in 2001 when members of the London group walked the LMS branch lines around Watford. The group all gathered at Croxley (Met) station in torrential rain and I was astonished to see Richard dressed beautifully in tweed jacket, shirt and tie but no hat or raincoat - not even an umbrella! I couldn't believe he would last the day like that. We scrambled up muddy embankments and groped our way along the track bed to Watford, and by the time we stopped for lunch at the Wetherspoon's in High Street (built



by the Met but never used as a station) he was literally drenched. It didn't seem to bother him one bit, and he joined us for the afternoon walk down the Rickmansworth branch quite oblivious to any discomfort.

Two years later Richard caused a concern of a very different nature. We met for the annual walk at Mill Hill East and all went well till we reached the outskirts of Edgware. Somebody mentioned that he was no longer with us. As he was a perfect gentleman, there was no way he would have sloped off without good reason or without telling anybody. We reached the lunch stop at Edgware and wondered what had become of him. An hour or so later he came striding in to The Blacking Bottle as if nothing had happened. He didn't know which hostelry we would be going to and had searched every pub in the area until he had found us. Subsequent enquiries provided the answer - a call of nature.

Richard's knowledge was so encyclopaedic that we could never find any subject on which he could not converse. This became a tempting challenge and on one occasion, when I had just seen a green public telephone box, I approached him about whether he knew about them and how many there were in England. Not only did he know but he also knew the book they were listed in and the name of the author. He probably also knew the ISBN number but I was too bowled over by this time to find out.

He was kind enough to invite me to the unveiling of a plaque to the late Sir William Perkin who was the creator of mauveine (also known as aniline purple), the first synthetic organic chemical dye which had been developed in East London. I was unable to make the ceremony due to work commitments and for some years tried to find the plaque which was situated in Greenford. Years went by and I was still searching when a rainstorm one night caused me to take shelter in a porch at the front of a factory. Gazing up into the night sky I suddenly found I was looking at the plaque and so found it last November.

We began to wonder about his health when we gathered at Marylebone station last November for the annual Remembrance Day service. Richard never missed this event and it was only a few days later that we heard that he was very ill and in hospital. Nobody will ever forget the efforts he made to locate the precious war memorial which was situated in the booking hall at Marylebone, although even his great tenacity proved unable to trace it.

Richard was a highly intelligent man with great integrity. Despite his vast knowledge, he was always warm and approachable. His self-effacing humour was particularly attractive and he will be missed so much by those who were privileged to know him.



## **by David Reidy**

Richard Graham, a founder member of the Great Central Railway Society, and of its predecessor, the Great Central Association, died on 22<sup>nd</sup> December 2014 after a short battle with cancer. He was 72. The Society was well represented at his very moving humanist funeral on 8<sup>th</sup> January. He had given instructions that his body be donated to medical research, but the Christmas/New Year holiday prevented this from happening.

Richard was born on 1<sup>st</sup> December 1942 at Bushey Maternity Hospital and was proud of his Hertfordshire heritage. A fellow Hertfordian, I encountered him regularly at meetings of the Hertfordshire Record Society and annual garden parties and symposia of the Hertfordshire Association for Local History where he would regularly test my knowledge on obscure aspects of Hertfordshire history. He would always comment on how adept I was in arranging lifts to railway stations for him and Mike Taylor (a friend of his for over fifty years) and myself at the end of these events. I particularly remember a visit to Haileybury College near Hertford where together we were able to translate a Latin inscription over a doorway. He said his Latin was very rusty, having passed O level in 1958! He took particular interest in the many memorials there to long deceased military alumni.

As a child of primary school age, Richard and his sister Barbara would travel to North Wales, near Caernarfon, for summer holidays with relatives. This was the start of a life-long attachment to the country. He enjoyed regular steam-hauled train journeys to visit his family there and this fuelled his interest in the Ffestiniog Railway. He was head boy at Preston Park Primary School, which mainly involved running messages for the headmistress! A bright boy, he won a scholarship to the prestigious Haberdashers' Aske's School in Cricklewood where he enjoyed History and English- but found Physics and Physical Education less appealing! In 1961 Richard went to University College, Swansea (now Swansea University) where he graduated as BA in History, Politics and Economics. He then took a PGCE at the University College of North Wales at Bangor (now Bangor University) and taught for a couple of years at Hitchin Technical College. He later took an MA in American Political History at Essex University - he later called this one of his few positive achievements. Richard later took up accountancy studies and became a bookkeeper.

From a very early age Richard was an enthusiastic and talented historian. He also showed an early interest in public transport (other than aeroplanes- he never flew!). In 1956, together with his life-long friend Michael Berridge, and another friend, he formed the Wembley Transport Club of schoolboy trainspotters (and also briefly an I-Spy Club!). In the late 1960s he moved to Sudbury Hill, thus having an ex-GC station as his nearest rail access. He always remembered the paucity of the service. The signal box on the up platform was gas-lit and the booking office too. The stationmaster's house was still there, as were the through lines. He had memories of the down *Master Cutler* passing through daily at about 6.20pm. Only once did he travel a long distance on the former GC - in the early 1960s when he had a job interview in Sheffield.

Richard remembered attending the inaugural meeting of the GCRS on 19<sup>th</sup> April 1974 at Friends House in London. About forty people attended, many of whom joined on the spot. He remembered seeing there an elderly man who had begun his railway career in Sam Fay's office! Subscriptions were fixed at £1.50 for adults, £2 for families and 50 pence for juniors [under 16]. The chairman and secretary was Michael Minter Taylor, whose inspiration the Society was. It was also agreed that a Midland Co-ordinator and a Northern Co-ordinator be appointed to deal with regional aspects and encourage membership from their respective regions. The first *Forward*, dated May 1974, stated rather enthusiastically: "*With both railway history and industrial archaeology gaining such a hold on leisure activities in this country, there was created a definite case for the formation of the Great Central Railway Society. Particularly bearing in mind that the now truncated London Extension must inevitably hold much in store for the student of this*

*subject. Being one of the four or five finest engineered lines in the country, it was the last to reach London and the first to close - an enigma in its own right."*

I came onto the scene ten years later in 1984 and have fond memories of regularly seeing Richard at Society meetings at the quaint Fred Tallant Hall near Euston Station. I also have memories of being with him on many London group excursions. The annual minibus trips evoke particular nostalgia. Like me, his interest was essentially in the London Extension.

Richard was also an active and long-term member of the Railway & Canal Historical Society (membership number 369) and London Group committee meetings were held at the National Liberal Club, of which he was also a member - and the now sadly defunct Railway Club.

He was always interested in the arts and history and spent his spare time researching local Wembley and Hertfordshire history, railway history and the World Wars. He worked for more than ten years at the Newcomen Society which is dedicated to recording and celebrating achievements in technology and engineering. Although not a scientist, Richard was fascinated by the history of invention, in particular locomotives and engines. He disliked much modern technology, particularly mobile phones - he would be surprised to learn that he had been mentioned on Facebook - but volunteering for seventeen years at the Imperial War Museum gave him an incentive to master computers and digital cameras. There he carried out research into the history of war memorials and contributed to the National Inventory of War Memorials and research publications. I liked to act as a field scout for him, regularly furnishing him with details of all manner of war memorials I had come across. I personally inspected and annotated for him all (300+) war memorials in the London Borough of Croydon. I particularly remember accompanying him to Sheffield to attend the relocation and re-dedication of the Great Central Railway's memorial to the Great War dead on Remembrance Day 2003.

He was an active member of the Society for the Preservation of Beers from the Wood and the Campaign for Real Ale. He also belonged, amongst many others societies, to the Greater London Industrial Archaeology Society, the London & Middlesex Archaeological Society, the Wembley History Society (he was a member from 1957 and chairman in 1977 - its silver jubilee year), the Wilfred Owen Society, the Siegfried Sassoon Fellowship, the London Garden Squares Society and the Crystal Palace Foundation. He was a founder member of Waffles Dining Club. I remember inviting him to an annual garden party of the Barnet Local History Society - and he won the quiz of course! I was particularly pleased to see Richard on 1<sup>st</sup> April last year at the unveiling of a centenary plaque at Carpenders Park Station and the launch of my history of the station. In later years the National Liberal Club was his second and more comfortable home. He loved showing people round.

Richard exhibited an extraordinary range of interests and accomplishments - a true polymath. He loved researching obscure matters and was a real pedant in the best sense of that word. He selflessly gave so much of himself to so many people and organisations. I was always struck by his wry sense of humour and his unique self-effacement, sensitivity and charm. He touched people very deeply and will be sorely missed by all who knew him. His was a good, well-lived life in which he contributed more than his fair share to the sum of human knowledge, enlightenment and friendship. He wanted, as most of us do, to be fondly remembered, but he also wanted everyone to be happy and pursue their own fulfilment.

His *Times* obituary notice read: "*Richard Graham passed away on 21<sup>st</sup> December 2014, aged 72. Historical researcher of war memorials, Wembley history and railway and transport history. A true and witty friend who will be missed by many.*"

## Arrival on the bookshelf

### "Great Central - Past, Present and Future" by Robin Jones

Published by Mortons Media Group Ltd ([www.classicmagazines.co.uk](http://www.classicmagazines.co.uk)), 2015 at £6.99. ISBN 978 1 909128 42 2. Softback 130 pages.

"Bookazine" - there's a new word for you, or at least for your reviewer, but a good word to describe this publication which is essentially of magazine format, but book bound with a spine.

The focus of this bookazine is preservation, primarily the Loughborough and Ruddington lines but also including the Elsecar Heritage Railway and the Buckinghamshire Railway Centre, and not forgetting the stillborn Dinting museum and the formative, by-invitation-only Finmere. GCR locomotive and stock preservation (and reproduction) is also well covered. All is cleverly interwoven with the history of the Great Central, that of Sir Edward Watkin and Lord Faringdon, Sir Sam Fay and John G. Robinson, which provides the past element.

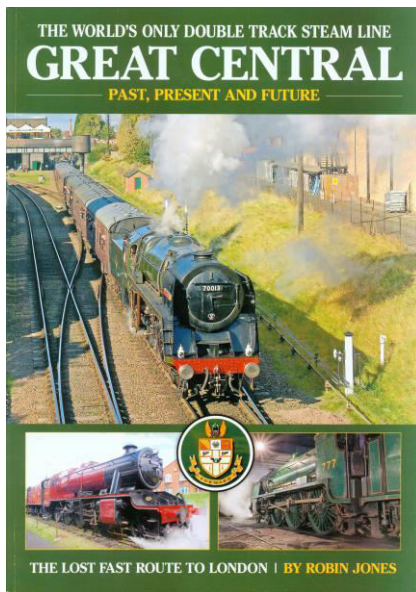
As is to be expected, for students of the Great Central, there's nothing new here (including the fallacy that, for the opening of the Immingham Dock, their Majesties King George V and Queen Mary arrived by paddle-steamer \*) but the history is well and succinctly written. Inevitably, given the publication's main focus, whilst Woodhead and Immingham are not forgotten, the London extension takes centre-stage through to its eventual demise.

For the most part, the development of the preserved Great Central Railway, building upon so much that has already been achieved, provides the future element, not least the projected bridging of the Midland at Loughborough, the catalyst for an eventual Leicester-Nottingham connection. Also considered though are the further extensions along the former GC trackbed of the Nottingham tramway, and the projected HS2, yet another underlining of the crass stupidity of the politicians who so profligately discarded the Great Central line. What a boon it could have been, now that the railways are up to the capacity to which they have been so short-sightedly reduced! The point is made though, that the preserved Great Central is not threatened by HS2, because piecemeal re-use of the routes through Nottingham and Leicester dictate they must be by-passed.

Inevitably this publication is a snapshot in time, albeit a very exciting time for the preserved Great Central, and as said the historic content presents nothing new, however it is well written, lavishly illustrated with both historical and contemporary photographs, and is a most enjoyable read. At the very modest price of £6.99 it is highly recommended.

*Kan Grainger*

\* *Editor's note:* Those who have a copy of the GCR's *Immingham Dock Centenary Souvenir* will know that their Majesties arrived at Immingham by train from King's Cross. However, on arrival they took a tour of the Dock on board *PS Killingholme* before disembarking at transit shed No.2 for the Opening Ceremony. It is photos of this event that have led some to conclude erroneously that their Majesties had arrived at Immingham by boat - though from where is never stated!



## **The Marylebone GCR war memorials rededication on 16<sup>th</sup> April 2015 by David Grainger**

En route to London (which was a lot more straightforward than on our previous sortie) Ken and I (without our wives on this occasion) had been reflecting on the sacrifice made by so many during any conflict. I have always tended to think of these men as being heroes but, when thought about, the armed forces personnel were and are ordinary individuals, just like you or me, under abnormal situations – how would I have performed under similar circumstances? I simply do not know. What I do know is that I could never agree to the demand of today's youth for respect as a right. The conclusion we arrived at is that we were on our way to pay our respects to men who had earned that respect.

An impressively sized gathering met towards the western end of the concourse at 2.00pm for the unveiling and rededication of replicas of the memorials to 43 of the Marylebone employees of the Great Central Railway who fell during the 'Great War'. No separate memorials were ever raised to an additional 65 casualties from the London area. Displays, including photographs of several of the men plus extracts from some of their letters home, had been set up. The letter extracts were accompanied by illustrations by Tim Fox-Goddon, a relative of James Sainsbury Mould, named on the Goods Department memorial.

The plaques, which celebrate the Centenary of the station and also the contribution of Sir John Betjeman to the saving of the station, have been removed for relocation to the platform side of the entrance to the old booking hall. The three replica memorials have replaced them in the vacated positions adjacent to the Victoria & Albert pub. All three memorials, funded by the Railway Heritage Trust, are replicas of the originals, only one of which is known to survive – the smaller brass memorial with just four names from the Engineer's Office which is held by the National Railway Museum in York. The second, larger brass memorial commemorates the eight men from the Goods Manager's Department, the original of which disappeared from its location in the old booking hall some time during the 1980s. We were told that, during his term as MD of Chiltern Railways, Adrian Shooter had a comprehensive search of the station site carried out in an unsuccessful attempt to find this memorial. The third, a marble memorial, is from the Goods Department and the original was destroyed in a heavy bombing raid on the night of April 16<sup>th</sup> 1941, hence the choice of today for the unveiling. While photographs of the original memorial are available, details of the physical size have not surfaced so that the size of that replica is an educated guess.

The ceremony, planned and funded by Chiltern Railways, closely followed the format of the 1920 dedication down to the Order of Service being, in the main, a replica (with additional materials) of that produced for the occasion. Graham Cross, Chiltern Railways Business Development Director, and Andy Savage, Executive Director of the Railway Heritage Trust, opened the proceedings with welcoming addresses and brief details of the jointly run project and crediting the contributions made by various organisations and individuals. These included the GCRS (and Ken Grainger by name) and also Graham's own mother, Sheila, who had traced a number of descendants, a number of whom were unaware of their connection, of those named on the memorials and who were present for the ceremony.

The ceremony, conducted by Andrew Hall, Railway Chaplain, consisted of the hymn 'O God our help in ages past' and a dedicatory prayer. This was followed by a final speech by Rob Brighouse, MD of Chiltern Railways, in which he related how the funding of the original memorials was by the colleagues of those commemorated rather than by the railway company or any other official body. Alan Bryson, nephew of William Richardson Bryson, named on the Goods Department memorial, was then introduced to carry out the unveiling. The exposure, particularly of the white marble, inspired quite an intake of breath. Ken commented that, though he knew what the memorial looked like, he was

quite astonished at its effect. David Heathfield and Tom Painter, both of Chiltern Railways, then read out the names of those commemorated which led into the playing of the Last Post.

Those who know me will tell you that I am not an emotional person – the Last Post, however, always affects me. From the sounding of the first note I start to choke up and, in fact, the mere memory of the occasion is having an effect on me as I write. It would appear to evoke something of the same feeling among a lot of people – while the station continued with the general sounds of a working railway, the general background hubbub dropped perceptibly throughout the playing and the subsequent one minute's silence. Andrew Hall then brought the proceedings to a close with the Benediction following which the congregation was invited to take refreshments in the Victoria and Albert.

Chiltern Railways and the Railway Heritage Trust are to be congratulated for a wonderfully moving occasion which would have been relished by Richard Graham (see elsewhere in this issue).

Photographs courtesy of Sally Gillespie, Chiltern Railways and thanks to Ken Grainger and David Heathfield for accuracy checks

*Editor's note:*

To mark the return of three war memorials to Marylebone Station, illustrator Tim Fox-Godden and animator Josh Fortune have created a film depicting the experiences of nine of the Marylebone railwaymen who fought in the Great War. The video can be seen at <https://youtu.be/vAXG7nD5bnM>.

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## **Model railway exhibition diary**

*Some events that may interest our readers*

Sat 6<sup>th</sup> & Sun 7<sup>th</sup> June: Chesterfield RM at Agricultural Business Centre, Bakewell DE45 1AH. [www.chesterfieldrailwaymodellers.co.uk](http://www.chesterfieldrailwaymodellers.co.uk)

Sat 13<sup>th</sup> June: Hazel Grove & District MRS at Hazel Grove Methodist Church Hall, Wesley Street, Stockport SK3 9RH. [www.hgdmrs.org.uk](http://www.hgdmrs.org.uk)

Fri 19<sup>th</sup> - Sun 21<sup>st</sup> June: Great Central Railway Model Event at Quorn & Woodhouse station LE12 8AG. [www.gcrailway.co.uk](http://www.gcrailway.co.uk) \*

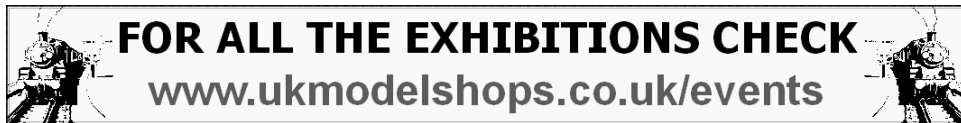
Sat 5<sup>th</sup> & Sun 6<sup>th</sup> Sept: Soar Valley MRC at Loughborough Grammar School, Leicester Road, Loughborough LE11 2DU. [www.svmrc.co.uk](http://www.svmrc.co.uk)

Sat 5<sup>th</sup> & Sun 6<sup>th</sup> Sept: The Gauge 0 Guild at The International Centre, St. Quentin's Gate, Telford TF3 4JH. [www.gauge0guild.com](http://www.gauge0guild.com)

Sat 19<sup>th</sup> & Sun 20<sup>th</sup> Sept: Scalefour Society at Stoke Mandeville Stadium, Aylesbury HP21 9PP.

**The Gainsborough Model Railway**, at Florence Terrace, Gainsborough DN21 1BE, is open to the public (1.30pm-6.00pm) on Sat 20<sup>th</sup> & Sun 21<sup>st</sup> June, Sun 19<sup>th</sup> July, Sat 29<sup>th</sup> and Sun 30<sup>th</sup> and Mon 31<sup>st</sup> Aug (10.30am-6.00pm).

Visit [www.gainsboroughmodelrailway.co.uk](http://www.gainsboroughmodelrailway.co.uk) for more information.



**FOR ALL THE EXHIBITIONS CHECK**  
[www.ukmodelshops.co.uk/events](http://www.ukmodelshops.co.uk/events)

## The replica GCR war memorials at Marylebone



above: Andy Savage (left) of the Railway Heritage Trust and Rob Brighouse (right) of Chiltern Railways stand in front of the new marble memorial commemorating the men of the GCR Goods Department at Marylebone. The original was destroyed in a bombing raid on the night of 16<sup>th</sup> April 1941. *photo: Sally Gillespie/Chiltern Railways*

below: The three memorials unveiled on the concourse at Marylebone. The smaller brass plaque is to commemorate the men of the Engineer's Office at Marylebone. This is a replica of the original now in the NRM. The larger brass plaque is to commemorate the men of the Goods Manager's Department. The original has gone missing. *photo: "Squaddie's Legacy"/Flickr*





**"Great Central Atlantic no.264."** This magnificent painting of Robinson's class 8B Atlantic no.264 bears the signature of "F.Moore" and was published by The Locomotive Publishing Company. These colour paintings were often the result of painting over black-and-white photographic prints. The name "F.Moore" was a pseudonym under which such paintings were published. The LPC accumulated a substantial collection of railway photographs which passed to Ian Allan in 1956 and then to the NRM at York in 1992.

The subject of this painting, Atlantic no.264, was one of the first production batch from Beyer Peacock & Co., supplied in July 1904. They had been preceded by the two prototypes nos.192 and 194 in Dec. 1903. (As a result of haphazard numbering policy, a class 9K 4-4-2T already carried no.193.) These were built to compare with the two class 8C 4-6-0s nos.195 and 196. The result of the comparison was to build more of the Atlantics (nicknamed 'Jersey Lilies') rather than the 4-6-0s, a decision that was vindicated by the subsequent success of the Atlantics. Altogether 27 simple (class 8B) and 4 compound (classes 8D and 8E) Atlantics were built, the last (nos.364 and 365) appearing in Dec.1906. No.264 became LNER class C4 no.5264 in 1924 and no.2903 in the 1946 renumbering. It was withdrawn in June 1949 without its BR number being applied. Sadly, none have been preserved. Surely a good candidate for a new-build project.



## Some recent items from G.W. Railwayana Auctions

The next auction will take place at Pershore on 25<sup>th</sup> July. See [www.gwra.co.uk](http://www.gwra.co.uk) for further details.



A pair of MS&LR mahogany chairs, re-upholstered with red vinyl. Initials carved into the backs. Sold for **£360**.



Hand painted GCR carved oak Coat of Arms surrounded with ornate wings and borders. Reputedly from Grimsby Docks Directors Room. Measures 47"x30" in two halves that slot together via dowels. Sold for **£800**.



GCR police truncheon. One half is ordinary hardwood but the other appears to be ebony. Measuring 15in length, it is stamped GCR and retains the original strap. Sold for **£60**.



Tyers alloy single line tablet MALTBY COLLIERY NORTH - MALTBY COLLIERY SOUTH on the SYJnt. Sold for **£80**.



MS&LR sliding knob handlamp. Brass plated 'MS&L 3800 BRIGG'. Sold for **£550**.



GCR metal driver's lunch box bearing an oval brass makers plate 'Dobson, Grimsby' and plated 'Great Central G. Riches Lincoln Loco'. Sold for **£70**.

## **An overview of developments in AC electric traction technology - Part 2** **by Ron Gee**

*The final part of Ron Gee's two-part review.*

### **The exploitation of semi-conductors**

In 1947, Messrs Bell Telephones was granted US patent number 1,745,175 for a point contact transistor. "So what?" the reader might ask. The invention of the transistor was the first step, culminating some five decades later, in the use of semi-conductors to make possible the conversion of DC power into variable frequency, alternating power. Such controllable, variable frequency power was ideal as a voltage source for the squirrel-cage motor. Thus from the 1990s onwards, traction unit designers were afforded the opportunity to design wheels with integral motors, wheels which did not need to be mounted on axles, and smaller wheels which enabled design of low-floor trams and railway carriages. To return to the event in 1947, what was significant about the patent was the achievement of refining the material used in semi-conductors to a purity one part in 10,000 or better. Previous attempts to utilise semi-conductors to construct an alternative to a thermionic valve had foundered because of the inability to achieve the requisite purity. Semi-conductors are the chemical elements which contain 4 electrons in the outer ring of an atom (valence electrons). These elements are silicon and germanium. As well as such elements there are some compounds such as gallium arsenide which have the same number of electrons available for conductivity manipulation. As the name implies, the conductivity of semi-conductors lies between that of conductors and insulators. The conductivity can be adjusted during manufacture of a semi-conductor device by doping with microscopically small proportions of elements as follows:- If the doping element has five electrons in the outer ring (eg phosphorus), then a surplus of electrons arises and the semi-conductor becomes N-type (negative). If the doping element has three electrons in the outer ring then it becomes P-type (positive) as there is now a shortage of free electrons to enable conductance of electricity. The blending of layers of P and N parts may, if the geometry, topology, design and purity of a sample is appropriate, culminate in a useful result such as a transistor. Fortunately users of semi-conductor devices do not have to worry about how they are made. All they have to do is connect a transistor to a circuit or these days plug in a single chip containing a multitude of transistors and other semi-conductor devices.

After the successful production of the first transistor, came the spawning and evolution of a whole inventory of semi-conductor devices. For example, for rectification purposes semi-conductor diodes offer much superior abilities than other rectifiers. The use of silicon followed and then displaced germanium as the element for use in diode manufacture. A development of the diode was the silicon controlled rectifier (SCR) or thyristor patented by General Electric in 1957. The thyristor permitted the design of circuits which could be switched on at will, but unfortunately could not be switched off. So the passage of current through the thyristor had to wait for such a current drop to zero before the thyristor ceased to conduct, thus the utility of this device was limited. Some decades after the patenting of the first transistor, the need to not only switch circuits on but also to switch circuits off led in the early 1970s to the invention of the gate turn off thyristor (GTO), which enabled such devices to be utilised for the conversion of DC supply to provide not only variable frequency but also three phase AC power that can be used to energise squirrel cage type motors. As these motors could be mounted in the wheels of trams, a new world of mechanical engineering design has become possible. As a postscript, the use of this technology can also be applied to a constant frequency AC supply by first rectifying the AC current, so as to provide fluctuating, uni-directional current, which can then be fed into an electronic circuit, that can then generate a variable frequency, three phase supply.

### **France and Great Britain - The second half of the 20<sup>th</sup> Century**

In 1954, SNCF opened a new electrified line (25kV, 50 Hz) between Charleville and Valenciennes, that was later extended from Thionville. It was primarily a freight line of length 168 miles over which trains of 1,800 tons would be hauled at speeds of up to 37 mph. One innovative feature was the use of 50Hz, single-phase motors as the first, primary

stage of the traction process in the first batch of 65 locomotives. The single-phase motors drove generators to provide DC current for the bogie mounted secondary stage motors. Furthermore, for a second batch of 20 locomotives, frequency changers and three phase generators were provided to power secondary motors. One noteworthy feature was the ability of the primary motors to draw current at unity power factor as well as the utilisation of industrial frequencies instead of needing a supply at much lower frequencies.

In ref. 10 M.Gareau of SNCF in his paper read at the Institution of Electrical Engineers (IEE) in 1954 stated that the aim of the 50 Hz traction system was as follows :

- a) To link into the National Electricity Supply Network.
- b) To use high voltage on the contact line.
- c) To take advantage of the possibility of electrical science to produce satisfactory locomotives to work at industrial frequencies.



*SNCF BB 12000, built in 1954 for operation on the 25kV Charleville line, still at work in northeast France in April 1976. Perhaps the ugliest electric loco ever built. photo: Jean-Claude Delagarelle.*

The new system met all these objectives, thus paving the way forward for future use of these systems as new electrification of railway routes was introduced elsewhere in Britain and France. The locomotives were also successful. M.Louis Armand, the SNCF President paid a compliment to the new system as follows "Under the lightest catenary on earth run the heaviest trains in Europe." In order to achieve this goal, it should be remembered that SNCF had been experimenting for some years on a 55 long line between Aix-les-Bains and La Roche sur Forun using a surplus railcar fitted with single-phase 50Hz motors. These had been procured by SNCF from small French manufacturers as the larger companies considered such motors to be technically impractical. In 1951, the line was visited by Robert Riddles (Chief Mechanical Engineer, British Railways), who was impressed by what he saw, and who subsequently obtained authority and finance for the re-electrification of the Heysham line.

In 1955, at a IEE conference (ref.11), Mr W.J.A.Sykes of British Railways also delivered a paper making comments on the newly electrified Charleville line after a year of successful operation had taken place. One comment was that substations were located at intervals of 30 to 50 miles and provided an advantage of being housed and manned in substations of the country's national grid system. Thus the costly "in house" high voltage cable

transmission system required for the DC system was also eliminated. Mr Sykes also mentioned that a special signalling frequency of  $83\frac{1}{3}$  Hz was provided. The paper by Mr Sykes made no mention of future official BR approval for a system of 25kV, 50Hz electrification. However by 1959 such a system was introduced into Britain. It followed the already described experimental electrification at Heysham and used rectifiers to supply power to DC motors instead of using outmoded electro-mechanical devices to change frequency and magnitude of the supply. Nevertheless it was the success of the 1950s SNCF pioneering work that resulted in the 25KV, 50Hz AC supply system becoming the standard for future electrification in both Britain and France.

One factor which was omitted from Mr Sykes's report was the increase in the weight of traction units because of the need to incorporate transformers so that an acceptable lower voltage became available for use in the motors. Whilst such an increase in weight was acceptable for use on railways, the increase in weight would be counter-productive for tramway systems which had many more stops, for which acceleration and retardation of heavier units would lead to an increase in energy consumption, that could not be recouped using the engineering resources then available in the 20<sup>th</sup> Century. With today's technology, such energy can now be harnessed instead of being wasted but not in the 1960s. To the best of the writer's knowledge in Britain, all new or revamped tramway systems have used DC current supply and not AC. In many cases a DC supply was already available, so there was little incentive to change. With respect to railways, after the pioneering events in Northern France, the use of 50Hz AC supplies was generally utilised to electrify new lines, but not to change extant electrification.

To digress slightly, the author has observed the 18 carriage long Eurostar trains which incorporate traction units at both ends. Similarly on the Deutsche-Bahn, ICE trains again need two power units, or even double this number when two ICEs are combined. Yet until the 1960s, a sole steam locomotive such as a Duchess Pacific would regularly haul 16 coach trains from Euston to Glasgow, albeit with banker assistance over Shap and Beattock. Such heat engines cannot match the journey times of today's electrics, but how volumetrically efficient were such steam locomotives compared to the volume provided at present for traction units on today's AC electric trains!



BR electric loco type AL1 (later class 81) no.E3007 at Longsight depot on 8 Aug 1965.

photo: Bill Wright

In the late 1950s, based on pioneering work on the SNCF, BR obtained British Transport Commission approval for electrification of the line from Euston to Manchester at 25kV, 50Hz. A total of 100 locomotives spread over 5 types were procured from five locomotive manufacturers. The first locomotive was delivered in 1959. Each locomotive was powered by DC motors after the supply had been transformed down to a lower level and then rectified to provide fluctuating, uni-directional current to the motors. The rectifiers on sixty locomotives were delivered with Mercury-arc rectifiers. On the last batch of 40 locomotives (Type AL5) half were fitted with germanium rectifiers and half with silicon rectifiers. The latter soon proved their superiority and the remaining fleet of eighty locomotives was subsequently re-engineered to use silicon rectifiers. Four out of the five manufacturers were later incorporated into GEC headed by Arnold Weinstock. Today the firm no longer exists but for several decades, this was the major manufacturer of electrical equipment in Britain. In 1965, its subsidiary AEI provided 5 sets of chopper control equipment to the London Underground. In the 1970s, a BR Class 87 locomotive (No. 87101) became the test bed for the first application of a thyristor control system on a main line locomotive in Britain. With respect to traction, research and innovation using semi-conductors continued and still continues on British and other railway systems. By the 1990s railways throughout Europe were introducing semi-conductor devices which could be switched off as well as on, eg Gate turn off Thyristors and/or Insulated Gate Bi-Polar Transistors (IGBTs). Hence it was possible to provide variable frequency supplies to power synchronous squirrel cage motors for the purpose of AC traction from both AC and DC supplies.



*The first thyristor control locomotive on BR was built at Crewe in 1974 and used as an experimental loco until Jan.1977 when it entered public service. The name 'Stephenson' was transferred from 87001 (which became 'Royal Scot') in Oct.1977. The unique 87101 'Stephenson' is seen here at Crewe on 15<sup>th</sup> January 1989, carrying its original stainless steel nameplates.*  
*photo: Paul Bettany*

Nevertheless, returning to the events of the 1960s, BR policy was also to extend DC electrification on the third rail routes already in being on the Southern Region, albeit with a voltage increase from 660V to 750V. As an example of such an extension of a DC route, from 1967 onwards a diesel hauled, 10 coach boat express from Weymouth Harbour would wend its way at walking pace through the streets of this town preceded by a policeman on a bicycle, and then continue on to the railway line to London. An hour later, at Bournemouth, the express would be coupled behind an electric locomotive, which would then run at 90mph for much of 108 mile journey to Waterloo. The Bournemouth electrification of 1967 also produced a unique example in Britain of an 8 coach train of unpowered multiple units

being propelled from Weymouth Town station to Bournemouth by a Class 33 diesel locomotive. At Bournemouth the unpowered 4 car units were next attached to 3,200HP 4-REP emu, the attachment taking about 4 minutes. The writer has been told that the 4-REP emu sets plus the additional load of eight, unpowered coaches could be restrained to a maximum speed of 94mph because at a higher speed, conductor shoes were apt to thrown off, much to the annoyance of householders living next to the line. Each day, the 4-REPS traversed a distance of over 650 miles, during which the 4-REPS were not burdened by a transformer of weight equal to that of one of an unpowered coach (40 tons). Also as space was not needed for a transformer, more seats could be provided. DC supply had and still has much to offer! The latest electrics on this line are now permitted to run up 100mph.

So how did tramways fare during the second half of the 20<sup>th</sup> Century? The answer in Britain was unfortunately not very well. Abandonment was the order of the day. The systems at Leeds, Sheffield and Glasgow closed by or in the early 1960s leaving only Blackpool as an operational tramway. Fortunately the Blackpool system was not only unique, but also progressive. In 1984, new "Centenary" trams were procured. Instead of resistances, these used semi-conductor "chopper control" to feed current to the DC motors, which had been salvaged from cars scrapped in earlier days. Meanwhile across the English Channel, the tramcar was regarded with more benign attitude. Messrs Skelsey and Hansart report that between 1980 and 1983, 105 new cars for the Vicinal systems in Charleroi and Oostende were manufactured by Messrs BN of Brugge; and that the new cars were fitted with chopper control. The firm later obtained orders for similar cars for Manila in the Philippines.

A renaissance commenced in 1990 when a new tramway was opened in Manchester followed by new tramways in Sheffield, Croydon and other towns. Unsurprisingly most of these new systems used advances in design and technology such as low floors, and semi-conductor control. Elsewhere in Europe, a major step took place in 1994 with the delivery of the 'Tram 2000' type of tramcar to the Brussels system. This was a low-floor car pioneered by BN of Brugge, the powering of which was enabled by motors that were mounted on the wheel hubs and were of the three phase synchronous type, supplied with variable frequency power. By using these it was possible to provide an "all low floor tram", and of course avail the purchasers of these trams of the benefits of cheaper, smaller motors which required less maintenance. Since then the use of synchronous motors has become "par for the course" as far as tram procurement is concerned. In Britain the trams in the fleets of all but one of the tramway systems, now include trams which utilise synchronous, squirrel cage motors. The list includes the ever-progressive Blackpool which in 2012 took delivery of 16 Flexity cars from Bombardier. AC traction is now here to stay on the railways and tramways of Europe.

### **The Woodhead Railway**

At this juncture the author must thank the patient reader who must be wondering what all this has to do with the former Great Central line. The answer is unfortunately not much. As recorded in E.M. Johnson's definitive book (ref. 12), the electrified line from Manchester to Sheffield via Woodhead was opened in September 1954, and was electrified at 1500V DC in accordance with the Minister of Transport's "Standardisation of Electrification Order 1932", which specified that future railway electrification should be at either 1500V DC overhead or at 750V DC third rail. Thus new electrification schemes (eg Manchester to Altrincham, London Liverpool St to Shenfield, and Manchester to Sheffield) were enacted in compliance with the Order and with other delaying circumstances such as WW2. Thus by the time that the Woodhead line was opened, the technology used was already out of date. It did however fulfil its planned role of conveying trainloads of coal, other goods and passengers across the Pennines.

Unfortunately by the 1970s, these customers had diminished in numbers, over-capacity existed on the routes across the Pennines, and the losses incurred by British Railways increased annually much to the chagrin of Parliament and the tax-payer. The last train to cross the Pennines through the Woodhead tunnel ran in July 1981. The last passenger trains to use the Woodhead line had already ceased in January 1970.



*BR electric loco type EM1 Bo+Bo no.26020, built at Gorton in 1951 for the 1,500V DC Woodhead route electrification. On display at the NRM York. photo: Bob Gellatly*

So what was the state of the art of railway electrification in the 1970s? By this time other lines (eg Altrincham, Shenfield) had been converted to 25KV, 50Hz. The use of industrial frequencies had proved its worth in practice. The Woodhead line was the last survivor using 1500V DC on BR . Ref 12 quotes from a 1980 BR paper that the estimates of cost for changing the Woodhead route to AC were £24m and a further £20m for the purchase of new locomotives. However by 1970 (the last year of passenger trains) an alternative solution could have been the use of polycurrent locomotives, ie locomotives which could run using both types of supplies and at a voltage magnitude to fit the supplies.

Polycurrent locomotives were very much in vogue by 1970, thus through traction was in use to run from Paris to Brussels using first 25KV, 50Hz in France. and then 3,000V DC in Belgium. Almost certainly at this time, 25KV, 50Hz /1,500V DC locomotives would have been in use in France where both systems of electrification existed. Nowadays polycurrent traction enables through trains to run from Paris to Amsterdam, and from Paris to Cologne, using three different supplies en route. It may be that such polycurrent trains are not ideal, because over the DC sections, the traction units have to hump along a heavy, quiescent transformer. Also on the DC sections, the traction units have to use the relatively coarse controllers and power-consuming starting resistors instead of the more refined taps on transformers. It would seem that it is the case nowadays that BR and its successors belittle DC systems because the 50Hz AC system consumes less electricity. Possible disadvantages such as the need for new or larger tunnels are glossed over and perhaps the costs of these are transferred to other accounts instead of the bills expended in order to install AC traction. For example

- 1) With respect to the Euston to Manchester electrification, a new railway tunnel had to be bored at Harecastle. Does the amortisation of the expenditure for this appear in the accounts.
- 2) With respect to the Channel Tunnel, at a public meeting a BR Manager once quoted that an annual saving of £1m per annum would accrue if AC traction were to be used

through the Channel Tunnel.

However, could the cross-sectional area of the two tunnels have been reduced if the tunnels did not have to allow for a pantograph and an overhead line above the power units? The cost of the Eurotunnel was about £20m per mile, per bore, giving a total of about one billion pounds. Even a small saving in cross-sectional area would lead to significant savings on the mega-pound expenditure, and furthermore could make use of the 750V DC traction supply that already existed from London to Folkestone.

Back to polycurrent traction and the Woodhead line, whether liked by railway managers or not, such polycurrent usage is now common practice not only in Britain but throughout Europe. In Britain several routes in London are now dual voltage eg Moorgate to Finsbury Park and northwards, Brighton to Bedford via Farringdon, and the former London Midland routes around Willesden. All of these have to effect a physical changeover from third rail to pantograph or vice-versa, which is done whilst stationary at a station, although in early days the changeover was done "on the fly" on the line between Kensington Olympia and Willesden. Thus a solution of using 1500V DC along the Woodhead line, then changing to 25KV 50Hz was feasible in the 1970s. However Mr Johnson's researches and arguments suggest reasons why this was not the case. First the primary case for the Woodhead route was the coal traffic across the Pennines. By the 1970s this had dwindled to 50% of its peak magnitude, and was shrinking further. Second, the lines from the collieries were not electrified, so diesel haulage had to be used for the first leg of the journey. BR stated that if diesel traction was used throughout, then a three hour saving would accrue on a trip from a South Yorkshire colliery to a power station west of the Pennines, and then return to the colliery.

To conclude, it seems illogical that the electrified Woodhead route was sacrificed in preference to three competing, unenergised routes. Unfortunately the shrinking market for coal led to the loss of the route's *raison d'être*. The route was sparsely populated compared to the other Trans-Pennine routes, so passenger and local goods traffic along the line was limited. So the Woodhead route was chosen to be the one for closure.

## Conclusion

These two articles (Part 1 and 2) have described developments in AC traction throughout the 20<sup>th</sup> Century, mainly in the USA and Western Europe. During the first half of the 20<sup>th</sup> Century, AC traction systems were not very successful and most closed during this period. However in the second half of the Century, the development of semi-conductor devices led to these being used on railways as rectifiers, which then supplied current to power DC motors. In the last 10 years of the Century, semi-conductor development provided the ability to convert DC supplies to variable frequency, 3 phase supplies which could be utilised to power propulsion units such as a squirrel cage motor. Thus a whole new generation of carriage and/or tramcar designs became possible. The author would like to express thanks for the advice and photographs provided by Bob Hall, Henry (Hank) Raudenbush and David Gibson. The author would also like to acknowledge the assistance of the staff of the Libraries at the British Library, the Institution of Engineering and Transport, and the John Price Library at Crich. Last but not least the author thanks Werner Duschek and Ing Walter Pramstaller of the Tiroler Museumsbahnen for providing extracts from 100 year old journal and advice.

## References

10. *Electric Traction using 50 cps Current* by M.Garrau. Proceedings of the Institution of Electrical Engineers. 1954.
11. *The Progress of 50 c/s Electrification in France* by W.J.A.Sykes. Journal of the Institution of Electrical Engineers. 1955.
12. *Woodhead the Electric Railway* by E.M.Johnson. Published by Foxline Publishing. 2001.



## **On Great Central lines today** **by Kim Collinson**

Saturday 7<sup>th</sup> February saw a rare GBRf working over the GC between Guide Bridge and Manchester when 66758 hauled some intermodal wagons from Doncaster to Trafford Park, passing Guide Bridge at 13:07 and Ashburys at 14:27 on its return journey.

A steam hauled railtour on Sunday 15<sup>th</sup> February from Preston and return was worked by Stanier Black 5s 44871 and 45407, passing Guide Bridge at 10:45, thence to Sheffield, Barnsley (14:18) and Penistone (14:38), the first steam working over the Penistone branch since 2013.

On Saturday 31<sup>st</sup> January a landslip occurred near Harbury Tunnel between Banbury and Leamington Spa causing extensive damage. As a result the route was closed. All Marylebone to the West Midlands and return services were suspended with a revised service in operation to and from Banbury until the line reopened. Chiltern services between Marylebone and the West Midlands resumed earlier than expected on the 13<sup>th</sup> March after the line through Harbury was reopened. The first service was the 05:15 Birmingham to Marylebone.

There have been a couple of interesting Class 37 workings over GC lines during March as follows. On the 7<sup>th</sup> 37425 and 37688 worked a test train from Doncaster via Penistone (passing at 00:05) to Huddersfield and returning at 00:59 en route to Hatfield Colliery. On the same day a Pathfinder railtour ran from Crewe to Glossop (00:21) then to Hadfield, back to Glossop (00:52), then via Guide Bridge and Ashburys before heading to the Leeds area. It then returned through Guide Bridge at 06:40 en route back to Crewe. The train was worked by 37604 and 37419. This very unusual railtour ran overnight because of pathing problems during the daytime.

One of the GC lines furthest outposts, the route from Wrexham to Bidston, is now the only line on the GC System where regular coal trains can still be seen that do not serve power stations or steelworks, this being to Pen-y-ffordd cement works. On 13<sup>th</sup> March 66056 departed at 15:05 with empties for Doncaster. The loaded trains usually arrive from Scottish opencast mines. The other freight traffic using the route is a daily train of steel coil from South Wales to the steel coating plant at Shotton. There is another coal working, not serving the power or steel industries, which runs over the GC - it is the 'as required' ThO 13:20 Immingham to Ketton cement works.

During April there have been a couple of empty trans Pennine coal workings from Fiddlers Ferry power station, the first such workings for some considerable time, these being on Saturday 4<sup>th</sup> when 66620 passed through Guide Bridge at 13:40 en route to York and then on 15<sup>th</sup> when 66520 worked through at 22:16 conveying 8 hoppers to Leeds Hunslet. Also the same evening the Network Rail Measurement Train from Heaton to Manchester and return was worked by 37609 and 37612 instead of the usual HST set.

At the beginning of April, class 67s were still in use on Chiltern services alongside the new Class 68s. On the 1<sup>st</sup> April the five evening services from Marylebone were worked by the following locos:

16:47 to Birmingham	67013
17:15 to Kidderminster	68008
17:50 to Banbury	68015
18:15 to Kidderminster	67017
18:47 to Kidderminster	68010

Also during the Harbury Tunnel landslip blockage, three class 67 services were worked via an indirect route to Wembley from Stourbridge then used on revised services between Marylebone and Banbury with the ECS returning to Wembley.

*If you have any news of current activity on ex-GC lines please let me know - Kim Collinson, 18 Close Hill Lane, Newsome, Huddersfield, West Yorkshire HD4 6LE or by e-mail : kimcollinson1949@gmail.com (note change of e-mail address).*



*above:* At the fourth attempt! "The Tin Bath" ran on 15<sup>th</sup> Feb. 2015 behind Black Fives 44871 and 45407, seen here approaching Guide Bridge. The single track to Stockport is branching off to the left. The catenary supports date from the Woodhead scheme although the wires now carry 25kV AC current.  
*photo: Anthony Roberts*

*below:* Three different types of Chiltern Trains traction at Marylebone on Friday 24<sup>th</sup> April 2015. From left to right, new DRS Vossloh 68010 with the 17:15 to Kidderminster, 'Clubman' unit 168107 with the 16:50 to Bicester North and DBS 67008 with the 16:47 to Birmingham Moor Street.

*photo: Barry Adams*



# ENGLAND'S GREATEST POET



Shakespeare's Birthplace

**GREAT CENTRAL RAILWAY**

**SHORTEST & QUICKEST ROUTE TO STRATFORD ON AVON**

SAM FAY GENERAL MANAGER

## Modellers' Corner by Tony West

Firstly some good news. It appears that a buyer has come forward for 'Gladiator Kits'. Hopefully this means little or no interruption to the availability of GC loco kits in 7mm.

In 4mm, **Bachmann** have released a set of three wagons in their Collectors Club range (code 37-079K) that they say is intended to complement the Bachmann class 9J (J11) in GC livery. The set consists of three open wagons: a 3-plank dropside in GC livery, a 5-plank open in CLC livery and a PO coal wagon appropriate to the Manchester area. The finish on these wagons is very good even including printed representations of the solebar cast number plates and builders plates. Strangely the PO wagon livery proclaims L&NE Rly as part of its address. Unfortunately as to accuracy of the mouldings, things are not so rosy. Bachmann have in their wisdom used what appears to be generic mouldings for both the bodies and underframes and are not accurate for any diagram of 3 or 5 plank opens that I'm aware of. A great opportunity has been missed and given the technology and sheer weight of available information these days, there is no real excuse for these inaccuracies especially when they expect you to part with £37.50. But then, they probably satisfy collectors who are more interested in their value as collectibles rather than in the accuracy.



For practitioners of the 'senior' scale, word has arrived from deepest Cornwall that test etches for the long promised **Quinton Road Models** 6-wheel brake third have been ordered.

A new name on the modelling scene is **Intentio Design**, basically one man and his laser cutter. First product of interest to us is a 1907 GC p'way hut kit for both 4mm (£10) and 7mm (£20) scales. Consisting of laser cut MDF and thin ply components, the test build I've seen looks very neat and well thought out. Please contact Phil for availability. I am considering asking for a GC (London Extension style) weighbridge hut for which drawings exist ....anyone else out there interested?



### **contact details**

Bachmann Collectors Club

website: <https://bachmann-collectorsclub.co.uk>

Quinton Road Models, *Chyanbre*, Polyphant, Launceston, Cornwall, PL15 7PT.

website: [www.quinton-road-models.co.uk](http://www.quinton-road-models.co.uk)

tel: 01566 880157.

Intentio Design

e-mail: [info@intentio.co.uk](mailto:info@intentio.co.uk)

website: <http://intentio.co.uk>

Lasercraft Devon, 98 Thirlmere Gardens, Derriford, Plymouth, PL6 5HG.

e-mail: [andyp37@gmail.com](mailto:andyp37@gmail.com)

website: <http://lasercraftuk.com>

## The Readers' Forum

from John Ambler, West Sussex

*Forward 183 p24:* 'How can an LNER plate carry a BR number?'

With reference to the LNER pattern plate carrying the BR number 69820, you ask how that is possible. I can't answer with authority but only as an observer of the railway memorabilia auction scene. I think this may be a transition period expediency. These 9"x5" plates carried the locomotive's running number and are not the same as the maker's plate which carries the 'serial number' of the loco in its specific manufactory. Since the LNER had a major renumbering scheme under Thompson, many plates were replaced when the locomotives passed through the works. I suspect that immediately after nationalisation, it was business as usual until told otherwise, so when the BR numbers were issued, new plates would be cast but for a time a new pattern may not have been available so the old one was used. Many locos also carried LNER plates which had the old number machined off and the BR number applied as a renumbering strip, possibly cheaper than replacing the entire plate.

The other plate in the auction report (LNER Gorton 1923) is also interesting and possibly another transition period expediency. The plate is in the style of a Great Central 10.5" x 6.75" worksplate. Former GCR locos carried LNER plates giving the name of Gorton Works and date of manufacture but not the running number unless stamped on the rim or rear. The LNER would have taken over Gorton in 1923, so perhaps this plate reflects a reluctance on the part of the former GCR employees at that time to change style until ordered to standardise.

I have an LNER plate with cast BR number from V2 no.60842, the loco mentioned in the recent *Forward* article about the Master Cutler as the loco which hauled the final up working north of Leicester.

To illustrate just a few of the LNER plate variations I have provided the following illustrations of plates in my collection or taken from auction catalogues.

The plates from A3 Pacific *Minoru* have appeared at auction in recent years – first the worksplate recording its serial number in the Doncaster works list. This style of plate originated with the Great Northern. And two 9"x5" plates reflecting the two LNER numbering schemes. I don't know if there was a third BR plate for this loco.



*Builder's plate with works no.1617.*



*Works plate with running no.2561.*



*Works plate with running no.62.*

This is an LNER plate showing Armstrong Whitworth as the builder of J72 no.68744 in 1921 that has been modified by BR with a re-numbering strip.



And finally, BR's interpretation of the 9"x5" plate for a B1 renumbered a year after it was built by North British but they are not credited, though I have seen Doncaster and Darlington credited on similar plates. These loco specific 9"x5" plates were only made by the LNER and its successor BR(ER).



The LMS used plates giving the build or rebuild date, but they were not obviously personalised for the loco which carried them, though some may have a loco number stamped on the rear. The SR and GWR had carried their cabside plates for part or all of their post-Grouping era but they did not provide works or date information.

**from Michael Reade, Pinner, Middlesex**

*Forward 183 p24*: 'How can an LNER plate carry a BR number?'

I think this was quite a common practice in early post LNER days when presumably no instructions were issued by BR, it being purely a local ex LNER practice. The other three companies of the Big Four did not, as far as I know, cast plates with post 1923 fleet numbers.

Many plates were altered with a re-cast number section during the LNER 1946 renumbering while others were newly cast, as a look through the *Great Central Railwayana Auctions* catalogues will reveal. This practice was continued after 1948 and a look at catalogue no.187 will show on the same page as 69820 (which appears to be a complete re-cast), a plate from 67643 with the number bolted on as a strip.

Lot 413 appears to show a new 1946 casting for 5914. Lot 240 shows a strip for 65777, as does lot 298 for 63422. Lot 383 for 61420 appears to be a re-cast but a close look at lot 342 shows 4919 as a 1936 plate with the numbers 4, 9 and 19 apparently inserted after the original 1936 number of 1540 was cut away. 'Darlington Works 1936' is shown even though the loco. was built by Beyer Peacock! Lot 177 shows 1505 as 15 and 05 inserted although only the 8 would have needed changing, but Lot 194 appears to be a recast for 1521.

I do remember noticing these differences many years ago on ex GC and LNER locos in the London area during early BR days, particularly when bunking Neasden, when they tended to be near eye level!

I must emphasize that these are purely personal views and it may well be that other society members can correct my assumptions from personal works experience.

*Forward 182 p8*: 'The Master Cutler' by Robert Carroll.

The references to this train in recent *Forwards* brings back memories of school day spotting. Prior to the allocation of B1s to Darnall, the working of the train before it acquired its name is worth mentioning. One Saturday morning at Pinner in 1945, D10 5433 *Walter Burgh Gair*, in spanking external condition, ran through on the up line with a load of corridors just after 11.00am. I could not find this train in the Met and GC timetable, presumably because the last intermediate stop was north of Woodford & Hinton.

The following week I went again and the same occurred. Hopeful of another D10 cop, further visits continued to produce 5433 with one exception which I think from fading memory was 5436 *Sir Berkeley Sheffield*. It took many years for the penny to drop that 5433 was probably the last of the class from overhaul at Gorton. Timekeeping was excellent (of course), there being only one occasion when it had not turned up by 11.30 and I went home disappointed.

I would suggest that this 250 mile round trip, if the D10 returned north as far as Leicester on the mid-day Manchester, was probably the most arduous roster of a 4-4-0 post war in the UK and a tribute to JGR, who, for a change, would be smiling rather than turning in his grave.

If a Midland Compound 4-4-0 was to appear on a Sheffield to St. Pancras express in 1945 it would only be as a pilot!

*Forward 183 p40/1*: 60108 *Gay Crusader* on the GC.

With reference to Rob Lane's comments, 60108 *Gay Crusader* had three spells at Neasden from Sept.1952 to January 1957, alternating with sojourns at Kings Cross, finally leaving the GC for 34A in February 1957.

**from John Hicks, Rickmansworth, Hertfordshire**

*Forward 182 p8: 'The Master Cutler' by Robert Carroll.*

I am not sure whether any of this will be of any use to publish, but the article on 'The Master Cutler' certainly was of great interest to myself, and has led me to do some research into the allocation of A3s and V2s on the GC.

The first A3s were allocated to Leicester (6) and Neasden (3) in February 1949 and the last 6 were withdrawn from Leicester in August 1957 when the V2 allocation at Leicester was increased from 4 to 9, the V2s being substantially withdrawn in August 1959. The largest number of A3s at any one time was 14, between September 1952 and March 1953.

Altogether a total of 20 A3s spent time allocated on the Great Central Line during the course of 8 years, the complete list being as follows:-

60039 <i>Sandwich</i>	60053 <i>Sansovino</i>	60103 <i>Flying Scotsman</i>
60044 <i>Melton</i>	60054 <i>Prince of Wales</i>	60104 <i>Solario</i>
60048 <i>Doncaster</i>	60059 <i>Tracery</i>	60106 <i>Flying Fox</i>
60049 <i>Galtee More</i>	60061 <i>Pretty Polly</i>	60107 <i>Royal Lancer</i>
60050 <i>Persimmon</i>	60063 <i>Isinglass</i>	60108 <i>Gay Crusader</i>
60051 <i>Blink Bonny</i>	60090 <i>Grand Parade</i>	60111 <i>Enterprise</i>
60052 <i>Prince Palatine</i>	60102 <i>Sir Frederick Banbury</i>	

Of these, 60111 spent the whole of period between Feb 1949 and Aug 1957 allocated to the GC, whilst 60049 was at King's Cross between July and Sept 1955, but was otherwise allocated for the whole period.

The GC line also had 16 V2s allocated at various times to either Leicester or Neasden between Aug 1953 and May 1962.

The complete allocation being as follows:-

60815	60842	60871	60879
60820	60854	60876	60890
60828	60855	60877	60911
60831	60863	60878	60915

Up to the withdrawal of through trains from Marylebone to Sheffield, the GC had 6 down trains, which departed Marylebone at broadly the following times:-

10:00 scheduled to take 3h 57min  
12:15 scheduled to take 4h 12min  
15:20 scheduled to take 3h 58min  
16:50 scheduled to take 3h 50min  
18:16 scheduled to take 3h 37min  
22:00 scheduled to take 4h 47min

All of which, apart from the 22:00, supported refreshment facilities of some sort, and all, apart from the 18:16, went forward to Manchester or in the case of the 16:50 to Bradford. The 12:15 stopped at High Wycombe, whilst apart from the 18:16 all the rest stopped at Aylesbury. These particular timings being from the September 1955 timetable.

The 16:50 departure was named "The South Yorkshireman", a name which it carried until withdrawal of through services. The 18:16, the subject of the article, was named "The Master Cutler" from October 1947 until September 1958, but continued un-named with a 18:18 departure until at least June 1959, but this was eventually moved to a 19:15 departure. When a 18:18 departure it was scheduled to arrive in Sheffield at 22:00, that is just 5 minutes before the arrival of the 19.20 "Master Cutler" departure from King's Cross!

As a 12 year old I was spending time locospotting in the summer of 1960, and can well remember going to Rickmansworth station after school and seeing "The South Yorkshireman" pass through. I think from memory usually hauled by a B1, such as 61116. Seeing people sitting in a restaurant car seemed rather incongruous amongst the Metropolitan line commuters.

Whilst it is conceivable that 60056 *Centenary*, 60109 *Hermit* and 60110 *Robert the Devil* worked on the GC, they were never allocated to either Leicester or Neasden

#### **from Richard Hardy, Amersham, Bucks**

*Forward 183 p38: G.Bagnall and the Royal Train.*

When I read Mr Greenwood's letter and came to " Mr G. Bagnall", I realised that this was the George Bagnall that I knew at King's Lynn. George had finished with the main line some time before I went to King's Lynn in January 1946 as a Relief Foreman and I am sure that he had a regular turn on the day shift station shunter duty. I think he had already been on this job quite a few years. His regular engine was class F3 2-4-2T no.8046. I think he still signed for all lines from King's Lynn except to Norwich. He and Ted Shaw, the shedmaster, both came from Gorton and were on very good terms and he must have retired in the latter part of 1946 or in 1947. Each day he booked on at the shed and then walked across the tracks short of the platforms to relieve the early turn men on no.8046.

He never said anything to me about working a "Royal", but then he wasn't that sort of man. But he did tell me that he had had a spell at York with a GC Atlantic. The engine and men would be temporarily transferred from Gorton and I have a feeling he was rostered at Banbury on the same basis.

So the men who worked such turns must have had a pretty comprehensive route sheet that covered from York to Banbury although a pilotman might be needed for the last stretch to Worksop. George would have been about 30 years of age in 1912, very young for a "Royal" job driver. But if Mr Maclure, the Locomotive Running Supt. laid it down that Bagnall and so and so were to work the job, that was it! So long of course that he has signed the road and knew it fluently. A great deal of this sort of thing went on in those days. Cambridge and Kings Lynn had "Royals" to Wolferton (for Sandringham) well into BR days until closure in 1967 of the Hunstanton branch.

#### **from Allan Sibley, March, Cambridgeshire**

*Forward 183 p42: the Humber ferry 'Farringford'.*

I refer to Fred Hartley's letter regarding the Humber ferries and in particular his reference to the *Farringford*. As may be deduced from her name, the ship, a diesel electric paddle vessel, was built for the Southern Railway's Isle of Wight service between Lymington and Yarmouth which she joined just after nationalisation in 1948.

Her conversion from bow-loading to side-loading and transfer to the Humber crossing in January 1974 was something of a 'stop-gap' measure until the Humber bridge was completed and I remember that there was concern prior to the move that she was unsuitable for the shallow waters of the Humber, and so she proved to be. Her draught was 6ft - considerably more than the 4ft 6in of the *Castles* and even they had to take a very roundabout route across the river at certain states of the tide. I recall that the *Farringford* was not a popular vessel on the Humber, being notorious for grounding, which is no doubt why on Fred's crossing the crew had to resort to depth-checking with poles whereas this was not necessary with the *Castles*.

#### **from Les Warren, Sheffield**

*Forward 183 p13: 'Elsecar to Swinton walk'.*

I have just read Chris Booth's article about the Elsecar to Swinton walk, and it brought back fond memories when I got to the paragraph that mentioned the Dearne and District Light Railway.



Its depot (or should I say 'car barns') was at Wombwell. This eventually became Yorkshire Traction's Wombwell bus depot where I worked as an apprentice and skilled bus mechanic from 1975 to 1999. I remember the company having some repairs done to the garage floor in about 1978/9 and whilst braking up the concrete floor the contractor hit the old tram lines, sending an ear splitting DING through the whole depot. I also recall there was the original tram pit in the workshops. This was about 40ft long and something in the region of 5 to 6 feet deep and could only be accessed from one end. There were also the tram car overhead insulator brackets still in situ in the roof girders. The depot was situated at the end of Knolbeck Lane and was very close to the Dearne and Dove Canal. Alas all has now gone - the depot was closed about 2003/4 and is now a housing estate. I believe there is still a short stub of the canal that is used as a fishing pond, this is where the canal passed under Knolbeck Lane.

### **from David Anderson, Bidford-on-Avon, Warwickshire**

*Forward 183 p16: 'The Woodford accident of 1935'.*

David Reidy's account of the accident involving a slip coach to Stratford-on-Avon reminds me of the efforts put into serving that town from Marylebone via the S&MJ. A memorable poster (see p34) entitled "England's Greatest Poet" advertised the GCR as the "shortest and quickest route to Stratford on Avon". It featured Shakespeare alongside a map of the Marylebone - Manchester main line with connections, including Woodford to Stratford. It's currently available as a copy or as a letter card, mug decoration etc, from the NRM and other outlets, including recently the Royal Shakespeare Theatre in Stratford.

As David mentions, the end of slipping led to the 6.20pm from Marylebone becoming a slower service but, unlike David, I wouldn't say "considerably". The changes to this train are described by Cecil J. Allen in *The Railway Magazine* for April 1936. The extra allowance for the new stops at Finmere and Woodford was only 5 minutes. Allen comments that the task of locomotive running on this train, hard enough with the slips, had been made considerably harder. He quotes a run with the additional stops behind Atlantic no.5363 hauling 7 coaches. The train beat the 67½ minute timing to Finmere by 40 seconds but the 14.6 miles on to Woodford, scheduled at 16½ minutes, took a little over 17 minutes. The run on to Leicester occupied around 32½ minutes, compared with a scheduled 34 minutes.

Further runs on the 6.20pm were published by Allen in *The Railway Magazine* for April 1937, featuring eight mainly excellent runs behind 'Footballer' 4-6-0s. By this time the schedule to Finmere had been tightened to 66 minutes, but the run on to Woodford was now allowed 17½ minutes. These times, along with the 34 minutes from Woodford to Leicester, also applied in 1939. December's *Railway Magazine* for that year gives runs on the 6.20pm behind V2 no.4830 with 7 coaches and Pacific no.4474 *Victor Wild* with 11 coaches.

Bringing running over the GC up-to-date, in October last year I travelled on the 18:15 Marylebone-Kidderminster formed of Chiltern's "Silver Train", hauled by 67014 *Thomas Telford*. We passed the site of Ashendon Junction, 45 miles from Marylebone, in 38 minutes. The fastest timing from the runs mentioned above was 51 minutes, behind 'Footballer' no.2849 *Sheffield United*. So we've made some progress, as long as you want to go to Banbury and not Leicester!

David comments that the slower service "hardly constituted good publicity for the LNER". With the London Extension in mind, what influenced passengers in their choice of route? Have we an idea how much actual journey times influenced decisions? *Roaming the Rails* by John Meredith, published by Ruddocks of Lincoln last year, mentions always travelling from Nottingham Victoria to Marylebone. This was because of his grandfather's fondness for the GCR and a possible dispute with the Midland. Writing in *Trains Illustrated* for March 1950, Cecil J. Allen had enjoyed an excellent lunch on the up "South

Yorkshireman" but, as mentioned in *Forward 182*, unpunctuality of the "Master Cutler" resulted in loss of passengers.

In the '50s and '60s I lived in Hartlepool with only one direct route to London. I'd be interested to read in *Forward* the reasons why those from Manchester and stations to Rugby chose to use the GC route to London or not, as the case may be!

**from John Hitchens, Kirkby-in-Ashfield, Notts**

*Forward 183 p42*: letter from Fred Hartley on the GCR viaduct at Nottingham.

Fred Hartley is correct in that several arches of the GC viaduct survive to support the tram stop adjacent to the Midland Station, but he is incorrect regarding the rest of the viaduct. The tram lines diverge from the route of the railway and this is clearly shown in Philips Street Atlas for Nottingham. For a short distance the tram lines ran almost parallel with the viaduct almost as far as Weekday Cross where the remains of the route of the GN lines coming in from Grantham could be seen, which I observed on a number of journeys on the tram to the City Centre. The GN viaduct had disappeared by this time but it was not until the end of 2014 that the GC viaduct was removed. A photograph appeared in the *Railway Magazine* showing the start of this demolition, but was incorrectly captioned as the GN viaduct. The GN viaduct had by then already been demolished.

*Editor's note*: There will be an article on 'The GC and NET' in *Forward 185*.

**from Mr M. Waters, York**

*Request*

I am seeking a model of a 'Sir Sam Fay' class locomotive (LNER B2) in 4mm scale, 00 gauge. I would like the model to be in 1930s condition in green LNER livery. I am willing to pay for a top-class model. If anyone has such a model and is willing to sell or can build one, then please contact me by phone on 01904 765198 or by letter at 15 Strensall Road, Huntington, York YO32 9RF.

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**The Woodford 50<sup>th</sup> Anniversary Gala on the GCR  
by Martyn Ashworth**

There are several defining dates in the history of the Great Central Railway - from the Grand Opening through to London Marylebone on the 15<sup>th</sup> March 1899, through to Grouping on the 1<sup>st</sup> Jan. 1923, nationalisation on the 1<sup>st</sup> Jan. 1948 and eventual closure of the London Extension on 3<sup>rd</sup> Sept. 1966 and the Rugby to Arkwright Street section on the 3<sup>rd</sup> May 1969.

To this list of memorable dates must be added Monday the 14<sup>th</sup> June 1965, for it was on this day that we see the final run down of the GCR getting fully underway with the closure of Woodford Halse shed, the closure of Staveley shed and the removal of most of Annesley's allocation of locomotives, leaving just 21 locos to soldier on. The inevitable closure was only a few months later on 3<sup>rd</sup> Jan. 1966. By that date only five locos were still stabled there: 44848, 44932, 44984, 45267 and 92096.

The run down of the GCR can be traced back to January 1960 when express services were cut back. In March 1963 local train services were reduced and many local intermediate stations were closed. In 1963 the infamous Beeching Report had been published and this hastened the closure of the GCR. By 1965 express freights and most parcels services had also been withdrawn.

On the 13<sup>th</sup> and 14<sup>th</sup> June 2015 - exactly 50 years to the day of these shed closures, today's Great Central Railway will be marking this defining day in GCR history with a special event entitled the "Woodford 50 Gala". The proposed locomotive line up for this event will be as follows;

6990 *Witherslack Hall*    45305    48624    47406    43106    92212    92214

As always these locos are all subject to availability.

It is hoped that some of the home fleet locos will be renumbered for the occasion, so, for example, 'Jinty' 47406 may become Leicester GC station pilot loco number 47203 and 'Black Five' 45305 may well become one of the last ever Woodford engines for the weekend - perhaps 44814? There will also be a few other surprises. We know that 92214 visited Woodford in October 1963 and was photographed on shed there by David Pesterfield on the 20<sup>th</sup> October. 43106 was shedded at Woodford Halse from 1955 until 1962, so there are going to be some really accurate re-creations seen at this event.

Highlights of the event will include the 9Fs and the 5MT hauling the famous GCR rake of "Windcutter" wagons (also known as the 'Annesley Runners'), and frequent passenger trains, some hauled by visiting Ivatt Class 4MT loco 43016 from the Severn Valley Railway and making her first ever appearance at the preserved GCR. There will be a chance to listen to guest speakers talking about Woodford Halse - the town and the coming of the GCR and then the effect the closure of the shed and the GCR itself had on the town and the area from 1965 onwards.

We cannot lose sight of the fact that Woodford village became a railway town and owed its prosperity from 1899 until 1965 to the railway. This was also true to a large extent of Staveley and Annesley where the railways were major local employers. To really bring home the full story of life at these sheds we are very fortunate that a number of Annesley men will be joining us for the weekend and so will famous GCR man Richard Hardy (Saturday only). The meeting room in Lovatt House will be open throughout the event and as well as being a place for reunions to take place, it will also host guest speakers Rex Partridge and Chris Bazeley of the Great Central Railway Enthusiasts Association (Woodford Halse) who will be giving regular short talks on the history of the town and the rise and fall of the railway at Woodford Halse.

The "Woodford 50 Gala" promises to be a truly nostalgic weekend for all GCR enthusiasts and all are welcome to attend. September 2016 will see the 50<sup>th</sup> anniversary of the closure as a through route and we already have big plans for a major gala to mark this occasion. I did organise the 30<sup>th</sup> and 40<sup>th</sup> anniversary galas at the GCR but the 50<sup>th</sup> will be a very poignant occasion and it deserves to be marked with a VERY special event. By the 60<sup>th</sup> anniversary of the closure I suspect that memories will have faded and there will probably be very little left of the course of the London extension and I feel that September 2016 will probably be our last chance to recreate that last day as faithfully as possible.

Anyone who worked on the GC at Staveley, Annesley or Woodford Halse is invited to get in touch with us and, if possible, come along to the reunion at the railway during this gala event. We would also like to hear from anyone with memories of the GCR over that weekend in June 1965 or of the closure weekend in September 1966 as we are keen to make both events as accurate as possible. Photographs of both occasions would also be most welcome.

We hope to see you at the GCR in June 2015 for this poignant weekend event.

Commemorating 50 years since the closures of

WOODFORD HALSE

ANNESLEY MPD

## More on 'Zeebrugge' railtours

The following additional information has been received – for earlier discussion see p38 in Forward 182 and p35 in Forward 183.

### from Dave Munday, Doncaster

The photo of 62666 at Bourne End with 'The Northern Rubber Special' appeared in the August 1953 issue of *The Railway Magazine*. It was credited to K.A.C.R.Nunn. A preview of the railtour with route description is to be found on page 425 of the June 1953 issue of *The Railway Magazine*.

### from John Bennett, Guildford

I have to disagree with the Editor's suggestion that the train in the Bourne End photo was the return working. The train is approaching Bourne End station from High Wycombe. The photo was taken adjacent to Bourne End North signal box which controlled the points at that end of a lengthy loop through the station, together with a level crossing. The other end of the station was worked by Bourne End South signal box along with the junction to Marlow.

Today the Maidenhead-Marlow trains reverse at Bourne End, the line terminating at the north end of the station where the level crossing used to be. The line between High Wycombe and Bourne End closed on 4<sup>th</sup> May 1970.

### from Ron Walker, Hayes, Middlesex

I can confirm that the location of the lower photograph on page 38 is Bourne End on the former High Wycombe - Maidenhead line of the former GWR.

The large building on the left of the picture is the telephone exchange, indeed the blackened iron letters are still there, while the house behind the buffer (a 'des res' in 1953) has now become an 'Office Suite'. These buildings are to the west of the railway which shows that the train is on the outward part of the journey travelling south towards Maidenhead.

The level crossing on the Bourne End - Marlow road lies behind the photographer and slightly further back is the station itself.



above: 'The Farnborough Flyer' at Basingstoke on Sun. 11<sup>th</sup> Sept.1955.

below: 'The Northern Rubber Special' at Bourne End on Sat. 6<sup>th</sup> June 1953.



The present day Bourne End station. This would be the driver's view from 'Zebrugge' in the 1953 photo. photo: Google Earth

As for the photographer, could it be E.R.Wethersett? On page 104 of Brian Haresnape's book *Robinson Locomotives* there is a photo showing this train just to the west of High Wycombe and even in those pre-motorway days it may have been possible to have driven to Bourne End in time to have secured the second photograph.

The locomotive could have been turned on the Slough turntable in readiness for the return journey.

*Editor's note:* Yes, I got the direction of the train wrong. In any case the return working was via Slough and the GW main line not through Bourne End. Egg-on-face all round!

### from Bill Gee, Felixstowe

I travelled on 'The Farnborough Flyer' the previous year on Sun. 12<sup>th</sup> Sept. 1954 when hauled by C1 no.251 and D11 no.62663 *Prince Albert*. On arrival at Basingstoke the two locos were detached and U class 2-6-0 no.31798 was attached at the opposite end for the journey to Farnborough. On the return journey the train was hauled by two class U locos nos.31627 and 31798 as far as Basingstoke.

I have enclosed two photos of 'Directors' on railtours on successive days (*see below*).



*left:* 62666 'Zeebrugge' at Retford waiting to take 'The Northern Rubber Special' to Eton and Windsor Central on Sat. 6<sup>th</sup> June 1953. *right:* 62667 'Somme' at Elsecar on Sun. 7<sup>th</sup> June 1953 with the RCTS 'South Yorkshire Railtour No.2'.  
*photos: Bill Gee*

*Editor's note:* A Zeebrugge nameplate will be auctioned by Great Central Railwayana Auctions at Stoneleigh Park on 6<sup>th</sup> June.

### Gresley statue update

The inclusion of the mallard duck at the feet of the proposed statue of Sir Nigel Gresley at King's Cross has apparently not met with the approval of his two grandsons (see *Railway Magazine May 2015 p52*). The Gresley Society has bowed to their wishes. This in turn has caused many to complain that their contributions were made for the original design with the mallard and that it is the Gresley Society that is paying for the erection of the statue not Sir Nigel's family.

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### Rear cover caption

GCR class 8A 0-8-0 no.960 is the prop for this group portrait of engine cleaners. The location and date are unknown but certainly pre-WW1. One wonders how many of these young men survived the trenches.

The 89 locos of this Robinson design were built for hauling heavy coal trains over the Pennines and their large size earned them the nickname 'Tinies'. No.960 was built in 1910 and withdrawn in 1936 as LNER class Q4 no.5960. Although successful they were eclipsed by Robinson's 2-8-0 design, many of which were bought by the LNER out of surplus ROD stock in the early 1920s. The name 'Tinies' was also applied to the 2-8-0s. Thompson rebuilt 13 of the Q4s as 0-8-0 tank engines and they were classified Q1. They were not a success.

*photo: GCRS/John Alsop collectio*

