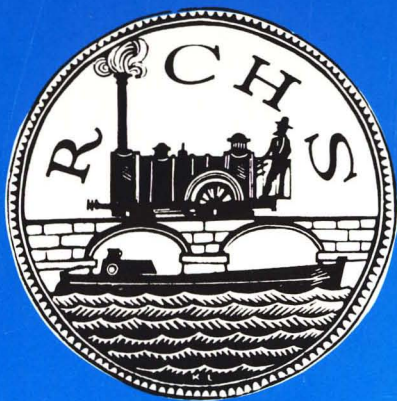




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Obituary: David Garnett, CEng, AIEE

Alan P. Voce writes:

David Garnett, who died on 24 July 1984, was an early member of the Society, joining in November 1954, shortly after it was founded. Within the Society he held office firstly as Secretary, South Western Group, and then, from 1963–1971, as Publications Officer. In this post he was responsible for the firm foundation on which the Society's publishing activities are based and the setting of a high quality for our publications.

A Lancastrian by birth, being born at Penketh, near Warrington, on 8 March 1908, he was educated at schools in Crowthorne, Berkshire, and Winchester before going to Faraday House, the well-known electrical engineering college in London. Here he qualified as a Chartered Electrical Engineer, following which he joined Brush Electrical Engineering Ltd, Loughborough, and then Waygood-Otis Ltd, London, the lifts manufacturer. With this firm he was responsible for the design of the lifts installed in the Cunard liners *Queen Mary* and *Queen Elizabeth*. On the outbreak of the 1939–45 war he joined the Fire Service, firstly in a part-time and finally in a full-time capacity. His electrical engineering abilities however were noticed and, in 1942, he was seconded to the Admiralty at Bath. In later years, whilst residing in Wiltshire, his electrical knowledge was put to good use, and he was responsible for the floodlighting of local buildings and churches including Malmesbury Abbey and the RAF Station, Lyneham, as well as for providing the lighting for many local stage productions.

He was an active member of the Boy Scouts Association, having been the County Commissioner for Hampshire and Wiltshire and also being sent by the Association to Persia in connection with scouting in that country.

As a railway historian (although he was interested in canals and all forms of transport), he first contributed to the Society's *Journal* with an article in the January 1958 issue on the Rosedale Incline in North Yorkshire (now Cleveland). He is, however, remembered for his work on railway maps and his three-part article on those of Zachary Macaulay and John Airey published in the *Journal* (Vol. 5 issues 3, 5, & 6) resulted in his being the first recipient of the Clinker Premium Award, presented to him at the 1962 Annual General Meeting. His work in this respect was updated over the years by further articles in the *Journal*, and his collection of these maps, built up over many years, led rightly to his being regarded as the expert on this aspect of railway history. It is pleasing to note that his collection of Railway Maps, along with many early OS maps he acquired, has been left to the Library of Brunel University. There they will be a permanent record to his memory and his work in this field. Apart from these articles, he contributed a number of other articles and letters to the *Journal* over the years, one of which 'George Bradshaw: a personal link' (Vol. XVI No. 3, July 1970) perhaps explains his keen interest in railway maps and timetables.

* * *

Nineteenth-Century Rail Excursions from Doncaster

BY PHILIP L. SCOWCROFT

The railway arrived in Doncaster in the summer of 1848, seven years after Thomas Cook's much-publicised rail excursion from Loughborough to Leicester, which was not however by any means the earliest railway excursion. By 1850 Doncaster had direct rail connections with the north and into the West Riding via Askern, with Sheffield and the Midlands via Swinton, and with London via Lincoln and Boston. Excursions to Rowsley (for Chatsworth House) and to London from Doncaster took place in that very year,¹ and these can be seen as pipe-openers for the enormous excursion traffic to the metropolis in the Great Exhibition year of 1851.² In the reverse direction there was each September from 1848 onwards (or 1840 onwards if we count Swinton as Doncaster's station during the 1840s) a steadily-growing influx of special trains bringing first thousands, then tens and hundreds of thousands, of eager excursionists intent on having a day at Doncaster races.³

Even before 1850, Doncaster's townspeople could, if they went to a little trouble, sample the pleasures of a railway excursion. In 1845 the Doncaster press advertised arrangements whereby people could travel to London (Euston) for the Great Free Trade Bazaar at £1.12s.0d 1st Class, £1.2s.0d 2nd Class, tickets being available for ten days from 25 April 1845. The point of departure for Doncaster was, of course, Swinton on the Midland Railway, linked to Doncaster by coach and canal passenger-boat services. On 13 July 1848 a 'special train' (Lancashire & Yorkshire Railway) was advertised as leaving Doncaster at 6 a.m. (6.30 a.m. from Stockbridge, or Arksey) to arrive in York via Knottingley at 8.50 a.m. for the Royal Agricultural Society's meeting. There are two points to make here. First, the Great Northern Railway metals were at that date complete only as far as Stockbridge, so the two-mile link from Doncaster would be by coach. Second, the 'special train' went only as far as Knottingley, where it connected with the first ordinary train onwards to York. An excursion managed by Thomas Cook himself, giving his address as 26 Granby Street, Leicester, was advertised in the *Doncaster Gazette* of 24 August 1849 and was available for 'all Stations on the LYR (e.g. Askern) and all other Local and Branch Lines' (e.g. presumably Doncaster). This was to Edinburgh, with facilities for visiting Melrose, Abbotsford, Linlithgow, Stirling, Perth, Glasgow, Ayr, Lochlomond, Lochlong, Lochcarrine (*sic*) and the Western Highlands as far as Staffa, Iona, Glencoe, Fortwilliam, Oban &c. &c. and was due to set out on Tuesday 28 August and to return on 31 August or 6 September. Cook had apparently previously arranged trips to Stoke, Trentham, Cambridge, Norwich and Yarmouth, Chatsworth, and the Lakes, but it is not clear which, if any, of these had been available to Doncaster people. Apart from the 1850 excursions discussed in my earlier article⁴ the South Yorkshire Railway advertised returns at single fare to Sheffield during the period of its November Winter Fair.

In 1851 the excursion focus for Doncastrians, and indeed for people all over the country, was of course London's Great Exhibition. The years 1852–5 brought repeats of the excursions tried out in 1849–51. London remained popular, particularly as the GNR's direct 'Towns Route' was opened in 1852, as was the GNR's permanent London terminus at King's Cross, which in 1857

acquired its own excursion platform complete with a portable booking office. We have details of three GN excursions in the autumn of 1853. These mostly originated at Leeds and left Doncaster, where a ten-minute stop was made, around noon. Further stops were made at Newark (ten minutes) and Peterborough (15 minutes, for refreshments). The first two (23 September, 7 November), for four or eight days and including optional further excursions to Crystal Palace, Brighton, and Hampton Court, cost £1.10s.0d 1st Class, 15s.0d 'Covered Carriages'. The principal attraction for the 7 November excursion was the Lord Mayor's Grand Procession on 9 November. The excursion on 5 December was for six days and its *raison d'être* was the Smithfield Cattle Show. The Rowsley excursion, primarily for Chatsworth House or Haddon Hall, both reached by bus (charge 6d), though the train also stopped at Matlock Bath in each direction, was repeated on 29 June, when 200 Doncaster people went, and 19 July 1853, each at a cost of 6s.0d or 4s.0d (1st or Covered Carriages) and again on 25 July 1855, when lunch was provided for 1s.6d at Chatsworth by Mr Jepson of the Chatsworth Inn, Edensor. Thomas Cook's Scottish excursion ran from Swinton on 27 July 1852 and 31 August 1853, fares to Edinburgh being £2.3s.0d, 1st, and £1.7s.0d Covered Carriages. The SYR ran special trains to Barnsley Races on 23 and 24 August 1852 and the GNR's special to Lincoln for the meeting of the Royal Agricultural Society set out at 9.5 a.m. and returned at 7 p.m., costing 7s.4d (3s.6d). By 1855 the 'Covered Carriages' London fare, admittedly for only a three-day excursion, i.e. giving one complete day in London, was down to 7s.6d (1st Class fare was double). The London excursion trains left Doncaster at 7 a.m. and, with a refreshment stop at Peterborough, did not reach King's Cross until 2.15 p.m. There were two or three such trips annually in the years 1855-7.

We read for the first time on 21 August 1855 of a special type of annual excursion, which was to be repeated many times in the future, when 260 from the GNR's Doncaster Sunday School went by special train to Askern at 3 p.m., having marched in procession to the station preceded by the Doncaster Plant Works Band and a banner. At the Swan Hotel, Askern, girls and boys were segregated and regaled with buns and coffee. The return journey was made at 8.30 p.m. In 1858 the Sunday School excursion was to Pontefract.

The first day-excursion to the seaside appears to have been on 18 August 1856 to Great Grimsby (for Cleethorpes), jointly organised by the GN and Manchester, Sheffield & Lincolnshire Railways at 2s.6d a head. Sea excursions to Spurn Head and up the Yorkshire coast were available. A repeat in 1857 (10 August) attracted 930 from Doncaster alone. The weather was fine for the four-hour optional sea trip offered on the steam packet *Sheffield* from Grimsby's Royal Dock Pier Head at the extra charge of a shilling (children, sixpence), but once the MSLR took over the train at Retford there were several delays and the return journey was a chapter of accidents. The train was divided into two parts, the second of which was derailed at Grimsby with a delay of 45 minutes. A coupling chain then broke near Brigg and several carriages were left behind; these had to be moved forward to Gainsborough by a goods engine which happened to be handy. Meanwhile the driver of this second part of the excursion blithely went his way, not realising he had left part of his train behind until he came up with the first train, which had run out of water and which he had to push into Gainsborough. The second train was eight hours *en route* and did not arrive in Doncaster until 2.30 a.m. On the same day the SYR arranged a trip from Thorne to an Art Treasures Exhibition in Manchester, leaving Doncaster at 7.10 a.m., though few Doncaster people booked, bad publicity and doubtless the rival excursion being deemed responsible. The Exhibition, though not its

refreshment rooms, met with approval, but on its return the excursion was shunted at Dunford Bridge to allow an express to pass and was further held up for nearly an hour at Penistone. These delays were attributed to the MSLR, who, it was alleged, did it on purpose, but the SYR guard was 'not one of the most obliging', passengers being left in the dark without lights. The same Exhibition attracted further excursions, including one from the Plant Works Mechanics Institute on 18 August, when it took the 400 passengers four-and-a-half hours to reach Manchester.

The year 1858 saw a wider range of excursions than before. The GN's Whitsuntide trip to London (four, six or 13 days, costing 18s.0d (9s.0d Covered Carriages), with children under 12 half fare and under three, free) attracted 300 Doncaster passengers alone for whom an extra train was provided. Four other London excursions for the shorter period of three days, which were at lower fares, or longer periods were advertised during the year. The Grimsby excursion was repeated in July, the North Lincolnshire Agricultural Meeting at Grantham was visited in July, and Boston in August. Boston was then a popular excursion, as the GNR's locomotive works had been there until its removal to Doncaster in 1853 and many Doncaster railway employees had associations with the place. These were GNR excursions; the MR, sometimes in conjunction with the SYR, provided day trips to Sheffield on three occasions for various Fêtes or Shows and the LYR laid on a well-patronised day excursion to Liverpool for a mere three shillings on 23 August, when 250 Doncaster people — many others were turned away — braved a 5 a.m. start and a seven hour journey.

In 1859 a comparatively new craze, brass band contests, brought about excursions to Lincoln, Sheffield, Boston, Peterborough, where only 43 went to see Doncaster Railway Foundry Band win First Prize (340 went to Boston, but as we have seen Boston was a popular excursion), and to Doncaster itself. There were at least eight London excursions, of four days or longer, via the GNR, which also advertised trips to Grimsby, to Boston's Temperance Gala and, a new departure, Bottesford, for Belvoir Castle, and Nottingham. The MR's three excursions to Birmingham and the West of England were probably less attractive as they set out, as far as Doncaster people were concerned, from Swinton, but 60 took advantage of the LYR's cheap rates to Liverpool, Chester and North Wales, and Thomas Cook was still organising his Scottish trip, from 'most Midland and GN stations'.

Brass band contest excursions, even to London's Crystal Palace, remained popular for some years as Doncaster's Railway Band earned successes in 1860 at Lincoln and Boston and in 1861 at Sheffield, Grantham, and Boston, where the excursion offered a steamship trip to Boston Deepes as an alternative to the music. The Boston excursion attracted 99 in 1860, 200 in 1861. As we have seen, fares were usually quoted 1st Class or 'Covered Carriages', but a MSLR Manchester excursion on 28 May 1860 also quoted a price for carriages 'with awnings and seats' at 6d below the 'Covered Carriages' rate. The SYR in July 1860 proposed an ambitious seven-day rail and steamer excursion to Hull and Bridlington: ordinary train to Keadby, thence by steamer to Hull, Spurn Point, the 'German Ocean' and Bridlington Quay, all for 6s.0d Covered Carriages and fore cabin (10s.0d 1st Class and best cabin). Optional sea excursions to Whitby and Scarborough from Bridlington were available. A similar trip was advertised in subsequent years. By 1860 there were excursions to race meetings at Lincoln and Nottingham and other events later deemed suitable to run special trains to were as diverse as Sheffield's Whitsuntide Fair, a Volunteer Review and Rifle Contest and the Oddfellows' Fête in London, the Royal Agricultural Society meeting in Leeds, Fife and Drum Band and Handbell Ringing contests at Belle

Vue, Manchester and even rope-walking feats at Matlock by Monsieur d'Alberti and at Newhall Gardens Sheffield by Monsieur Blondin.

But the major excursion feat of that period was London's International Exhibition of 1862 — almost a repeat of 1851, with the GNR responsible now for most Doncaster traffic, though the MR got in on the act in September. The GN booked 280,943 extra passengers on its system between 1 May and 31 October compared with 1861. Fares from Doncaster came down to as low as 10s.0d 1st Class, 5s.0d Covered Carriages by the end of the summer, compared with the 'normal' excursion fares of 18s.0d and 9s.0d. Specials ran thrice weekly. Despite the lower fares, the GNR took £5,830 more in the week ending 29 June 1862 than in the corresponding week of 1861. The arrangements were generally efficient and commendably safe. On several days London bookings from Doncaster by special trains reached three figures, impressive considering the Exhibition was open for such a long period, and in general the number of excursionists was 'far beyond expectations'. London could now be, and in 1863 was on a number of occasions, reached in a one-day excursion, which usually set off about 2.30 a.m. and returned from King's Cross at about 8.30 p.m. at a fare (Covered Carriages) of six shillings. In 1863 there were at least 14 excursions of varying length to London by the GNR, from 6 March (Procession and Illuminations for the Prince of Wales' wedding) to 7 December (Smithfield Show, a regular fixture in the GNR excursion calendar). In that same year the Doncaster Working Men's Clubs organised a day excursion patronised by over 1,600 people (100 were still disappointed), who went in two trains to Scarborough and Castle Howard. Most went to Scarborough, for a mere 2s.6d (children 1s.0d), as it was a gorgeous day. This is the first such trip of which we have details, but it apparently had two predecessors. The MR and SYR jointly promoted an excursion to Matlock and Buxton on 3 August 1863 which was not well supported by Doncaster folk, but custom from Mexborough and Rotherham ensured the success of the venture, which was repeated, in June, in each of the following two years.

With the growth of the railway network and the companies' accumulation of experience in the excursion field, programmes steadily became more sophisticated. A trip to York in May 1864 for the Yorkshire Gala and Flower Show combined a cheap six-day excursion to York or Scarborough. The annual Working Men's outing that year (26 July), again to Scarborough, was a mammoth affair. The first train (40 carriages) left at 6 a.m., the duplicate (39 carriages), which took up to 200 passengers at Askern, an hour later. Altogether, over 3,000 went, together with the Doncaster Drum and Fife Band, and Scarborough's hotels and eating houses were 'literally besieged'. This Scarborough outing continued for several years and the organisers expanded their operations, advertising in 1865 and 1867 a three-day visit to Newcastle; in 1866 Chatsworth was visited, and again in 1867, by 800 customers. In July and September 1864 the GN and MSL jointly advertised an excursion to Norwich, Lowestoft, Yarmouth, Cambridge, Ipswich, and Ely for five, eight, or 12 days at a fare of 18s.0d (10s.0d) to all destinations bar Ely and Cambridge which were 12s.0d (7s.0d). This remained perennially popular. At this period the MSLR ran a train/steamer day trip from Barnsley and Doncaster to Hull via Keadby which left Doncaster at 6.38 a.m., returning, hopefully, by 9.30 p.m., for several years and on several occasions in each year. No distance was too short for an excursion; in 1865 we read for the first time of the Good Friday cheap outing (MSL) to the Primitive Methodist Gathering in Conisbrough (6d 1st, 3d Covered Carriages), thereafter another constant feature of Doncaster's excursion calendar, and excursions were regularly run to Agricultural Shows in Thorne and, in 1882, to Finningley

for hare coursing. London was still a favourite outing for the GNR; the three-day excursion on 22 June 1865 quoted an inclusive price for the return journey to London, a train to Crystal Palace and back for the Handel Festival and admission to the Palace for the rehearsal on 23 June: at £1.5s.0d 1st Class and 14s.0d Covered Carriages this was a nice 'package' for a music lover.⁵ The MSLR advertised trips to Liverpool (one, five, or ten days) and the Isle of Man (five or ten days) in July 1865 and even, in August and September 1866, to Dublin via Holyhead.

Not always did things go smoothly. The Working Men's Scarborough trip on 18 September 1866 — 1,300 takers in all, but only 400 from Doncaster — took five and half hours to return, as the North Eastern Railway united the two trains and the locomotive power available only enabled the combined train to make ten miles an hour. It is hardly surprising that another Working Men's trip, to the Fine Art Exhibition in York (October 1866) was accompanied by the Doncaster Fife and Drum Band to relieve the tedium of the journey. A few years later, on 7 August 1871 the locomotive of a train returning from the Foresters' Fête at Nottingham was in collision just outside Doncaster station with the brake van of a goods train which had mistakenly been signalled to back out of a siding. Fortunately only one woman was slightly injured.

An excursion pattern was now emerging. In 1867 the GNR ran excursions to London maybe a dozen times, to Lincoln, to East Anglian resorts (twice), to Cleethorpes (a good 3s.0d worth, though the MSLR was 6d cheaper; perhaps the GN had to pay the MSL a toll?), to Boston (for the Oddfellows' Fête in July), to York (for races or a regatta or a gala/flower show), to Leeds (for various shows), to Scarborough, and to Nottingham Goose Fair in October. The MSLR that year ran regularly to Hull, Grimsby, and Cleethorpes, to Sheffield, and to Dublin for a mere 12s.6d Covered Carriages and fore cabin; in 1868 it added Thornton, for the Volunteer Review, a regular annual occasion for at least the remainder of the century, Chester Races and Liverpool, for the Isle of Man. The GN in that year added Louth. The GN's London excursions were slightly more expensive than formerly, costing £1.4s.0d (13s.0d) if staying longer than a day, 7s.0d (Covered Carriages only) for a day trip. Shorter trips to Sheffield or Leeds were available, usually with a theatre or fair in mind. Throughout our period, the LYR advertised excursions rather haphazardly in Doncaster, which was on the edge of its system, though we learn that on four occasions in 1870 trips went from Doncaster at 5.45 or 6 a.m. to Ashbury's (Manchester) for the Zoological Gardens and cheap tickets to Pontefract Races were advertised at times. After the opening of their 'direct' line from York in 1871 the NER occasionally advertised an excursion, usually to Scarborough, but sometimes to Pickering, Whitby, Northallerton, or Bridlington. On 8 August and 26 September 1877 its excursionists were admitted to the Scarborough Aquarium, opened that very year, at the reduced charge of 9d on production of the return half of their tickets. In the same way MSL trippers in February 1878 got in at reduced rates to any one of three different Manchester pantomimes. Pantomime trips, whether to Leeds, Sheffield, Lincoln, or Manchester, were now becoming popular.

The GN gradually spread its wings: a nine-day trip to Newcastle, Edinburgh, and Glasgow was advertised for 28 September 1871 and in subsequent years. The first excursion to Skegness was in August 1873, just days after it acquired rail connection.¹ Unlike Cleethorpes, which was shared with the MSLR, Skegness was an exclusively GN resort and a nice distance for a day trip from South Yorkshire — even half-day trips leaving Doncaster at 1 or 1.30 p.m. were run, and these must have been popular as they were regularly repeated, but they

could not have allowed their patrons very long in the resort. Skegness attracted 106,853 excursionists altogether in 1880. Mablethorpe acquired railway access in October 1877 and this too became a popular excursion (19,300 trippers in 1889) though never in the same class as Skegness, and so in the late 1880s did Sutton-on-Sea. In London, Alexandra Palace was opened in May 1873 and attracted 125,000 visitors before it was destroyed by fire on 9 June 1873. This misfortune did not stop excursions from Doncaster to the Scottish Fête on 28 June and to the Oddfellows' Fête on 14 July; it was rebuilt by 1875 and excursions to it were advertised from time to time thereafter. Galas, fairs, agricultural and flower shows and the like at Nottingham, Gainsborough, Boston, Retford, Bradford, Stamford, Leeds, Spalding, Grantham, Lincoln, and Newark — indeed all over the GN system — were visited, year after year. (The MSLR, the other principal excursion entrepreneur in the Doncaster area, concentrated on Hull, Grimsby, Cleethorpes, Liverpool, Manchester (whose Belle Vue was a perennial attraction), and, nearer at hand, Sheffield.) When the GN line to Derby opened in 1878 there was an excursion there on 1 July, and Derby subsequently became a regular goal for GN trippers, for races and other events. In April 1879 the GNR farmed out many (though not by any means all) of its excursions to an agent, O. H. Caygill, late of Thomas Cook's, who had offices at 371 The Strand, London WC, 141 Briggate, Leeds, and in Nottingham, Manchester, and Liverpool. From this time onwards, several of the longer London excursions had connections to Paris via Newhaven/Dieppe or Folkestone/Calais from £4.15s.0d, inclusive of hotels, carriages etc., for a six-day stay, occasionally to Holland, Belgium, and the Rhineland (from £8.8s.0d) and even, from Easter 1881, to Rome and Naples and the South of France. The number of trips to the Eastern Counties was expanded, and others to the West of England and the South Coast introduced during the summer months. An attractive-looking day trip to Harrogate and Ripon appeared for the first time in July 1882. By 1882 Caygill had Doncaster offices at 48 Young Street and in West Laith Gate, near the station. However, in 1884, he owed £1,400 to the GNR for excursions — a substantial sum — and 'would not pay'. The agency was terminated.

Special excursions continued to be arranged. The YMCA visited Stamford (for Burghley House) on 1 August 1881 and Belvoir Castle on 7 August 1882, both of them in conjunction with the GNR. A Mr Oliver of Frenchgate, Doncaster, organised, also with the GN, on 28 June 1881 a Grand Trip for children to Skegness, where tea was served in the Pavilion at 7d a head (adults 1s.0d) and the children were admitted free to the Pleasure Gardens. A repeat was arranged in 1883 when the tea was served in Oliver's own New Dining Rooms in High Street, Skegness!

On 3 September 1881 the leading axle of the locomotive hauling a return half-day excursion from Skegness broke at Funningley, derailling nine of the ten carriages and ploughing up over a hundred yards of the permanent way. Only the thirty Doncaster passengers were still on the train and fortunately no one was injured. With the opening of the GN&GE Joint Line throughout, the Joint Committee arranged its own excursions from 1882, the first year's programme comprising trips to Norwich (twice), Ipswich (twice), Yarmouth or Lowestoft (twice), Hunstanton (twice), Lincoln (twice, once for a Brass Band Contest and Fête) and London Liverpool Street (once). It continued to do so for the remainder of our period.

A sporting occasion was frequently a focus, or perhaps an excuse, for an excursion. We have mentioned race meetings and among those visited regularly were Epsom (for the Derby), Manchester, Halifax, Chester, Pontefract, Newmarket (especially after the GN&GE Joint Line was brought into use), Leicester

(especially after the GN&LW Joint Line was opened in 1882), York, where the race excursions and some others used special platforms at Holgate Bridge, Manchester, Aintree, Derby, Nottingham, and Lincoln, not to mention steeple-chases at Brocklesby and Lincoln.⁶ Other sporting events aimed to be visited by excursion were the University Boat Race, Athletic and Bicycle Sports at Lincoln, and cricket matches at Malton, where the 1880 Australian touring team played on 9 June, Bramall Lane (Sheffield), Trent Bridge (Nottingham), Headingley (Leeds), Bradford (the excursions went to Horton Park station) and Scarborough, a 15-day excursion being advertised for the period of the 1899 Festival early in September. The first football excursion from Doncaster which I have traced was by the MSLR on 10 March 1883, again to Bramall Lane, Sheffield, where Scotland defeated England 3–2. The GNR weighed in the following year with an excursion to the FA Cup Final in London. In many succeeding years matches at Lincoln's ground were popular attractions though Grimsby was also visited by Doncaster football enthusiasts. Not until 4 February 1899 does one come to an excursion to a Doncaster Rovers away match, a Midland League game at Chesterfield. Rugby League was added to the excursionists' tally of sports when a trip was run to Leeds for the Yorkshire Challenge Cup Final between Halifax and Castleford on 21 April 1894.

The GNR replaced the defaulting Caygill in February 1885 with Swan and Leach of Trafalgar Square, who appear to have given reasonable satisfaction, until around 1898, and in due course to have taken over Caygill's former offices in Briggate, Leeds. A few new excursions were tried early in their period, to Oxford, Lancaster, and Morecambe. To give an idea of the excursions available to Doncaster people at this time, these were offered during the year 1886: from the GN, 47 excursions to Leeds, 41 to Skegness and/or Boston, 23 to London, 22 to Nottingham or Leicester (the latter reachable from 1882 by the GN&LW Joint Line), 11 to Mablethorpe, eight to Lincoln, mainly sporting ones, six to Scarborough, six to Pontefract, six to the Eastern Counties, five to Bradford, five to York, five to the South Coast, four to the West of England, four to Derby, four to Wakefield, two each to Newcastle/Edinburgh/Glasgow and to Northampton and one each to Malton, Stafford (now on the GN system), Peterborough/Huntingdon, Oxford, Newmarket Races, and (a football excursion) Middlesbrough; from the MSL, two to Sheffield (though Sheffield excursionists were most often catered for by cheap tickets usable on the fairly frequent ordinary trains) and to Aintree Races, and one each to Manchester, Rotherham, Conisbrough (the Good Friday Methodist jaunt), and to races at Manchester, Brocklesby, and Chester (the absence of Grimsby and Cleethorpes from their advertisements is surprising – a few trips there were offered in 1888 and they were popular); from the NER, six to Hull; and from the GN&GE Joint Committee excursions to London and to Newmarket Races. Which destination was the most popular? Representative figures are hard to come by, but on Whit Monday 1888, a fine day, Doncaster excursion passengers were booked to Askern (300), Sheffield (136), Skegness (107), Cleethorpes (97), Manchester (78), Glasgow (67), Pontefract (41), Hull (34), Bradford (30), Lincoln (28), Boston (23), King's Cross (19, a low figure), Redmile for Belvoir Castle (17), Nottingham (16), Sutton-on-Sea (12), Leicester (11), Worksop (10) and Newcastle, Gainsborough, and Louth (3 each).⁷ By no means all of these bookings were by special train, as cheap excursion tickets were available by ordinary trains which were now much more frequent than formerly. Compare these figures with Easter 1889, when on Good Friday 1,124 went to Askern Spa, 1,300 to the Methodist gathering in Conisbrough, 380 to Grimsby, 80 to Boston/Skegness, and 60 to Hull – a busy day compared with Easter Monday, when 60 booked to Boston/Skegness, 50 to Sheffield, 40 to Manchester, 30 to

Mablethorpe and Sutton, 25 to Liverpool, 9 to Nottingham, and 3 to Leicester.

Free excursions for the employees at the GNR's Doncaster 'Plant' Works and their wives and girl friends began in 1861. (A charge of 6d was made if the trip was to Scarborough to cover the NER's toll). By 1885 the annual trip was going to two different places; in that year (27 June) London and Grimsby (via Boston) were each visited by three trains and 3,000 people. In July 1889 three destinations were favoured; London (two trains), Skegness (four trains), and Mablethorpe (two trains).⁸ During that same month 520 passengers went on an excursion to Chatsworth organised by Doncaster's North Ward Conservative Association. Smaller 'party' excursions did not need an entire train. On 25 July 1892 Doncaster Parish Church Choir's outing to Scarborough went in a special saloon attached to the regular 8.49 a.m. train (which arrived half an hour late). In the same month both Oxford Place Methodist Church Choir, to Belvoir Castle, and Priory Place Wesleyan Choir, to Bridlington, went by ordinary train. On 23 June 1900 the GNR Clerks' excursion to Scarborough, the first time the clerks had enjoyed a whole day's outing, went in reserved carriages attached to the 8.51 a.m. ordinary train. But the Doncaster Co-operative Society's 1893 excursion to Scarborough – 400 persons – would need a train to itself. And when we look at the annual Wesleyan Societies' excursions, which for example went from the Doncaster area to Hull, Grimsby, and Cleethorpes in 1877 and to Liverpool in 1878, we see that three trains were needed to cope with the rush.

New excursions continued to appear as the companies expanded even further: Harrogate and Ripon, for Studley Royal (GN), Wolferton, for Sandringham (GN&GE: 1893), Otley, Ilkley, and Bolton Abbey (GN: 1894), Hawarden, with its Gladstone associations (MSL: 1894), and Morecambe, for its Musical Festival (GN: 1895). Scottish excursions on Swan and Leach's list reached in the nineties as far as Oban and Helensburgh by rail alone. An attractive local rail/coach excursion during the late eighties and the nineties was to Worksop and included a 25-mile drive through the Dukeries, though a GN trip in June 1898 to Ollerton, Edwinstowe, and Chesterfield using the new Lancashire, Derbyshire & East Coast Railway managed to penetrate the Dukeries wholly by rail.

And so we arrive at 1900 and the last year of the century, a rich yet reasonably typical one for its number and variety of excursions from Doncaster. The Great Central Railway must have run excursions to Cleethorpes, and we know it did run the Good Friday trains to Conisbrough, but the only trips advertised in the Doncaster press were to Worksop and to Beverley Races, one each. Similarly the LYR's Isle of Man, Southport, Fleetwood, and Blackpool excursions, not to mention those to Askern every summer Thursday, would surely still be available, though they were not advertised either. The GNR arranged some 50 excursions to Leeds, 37 to London, 19 to Boston and/or Skegness, 22 to the South Coast, 13 to Lincoln, 11 to Scotland, eight to the West of England, eight to Sutton and Mablethorpe, seven to Scarborough/Bridlington/Filey, six to Melton Mowbray, six to Leicester, four each to Newark and York, three to Cambridge, two each to Pontefract, Horton Park (for Yorkshire cricket at Bradford) and Retford, and one each to Bradford, Chester, Market Harborough, Northampton, and Newmarket Races. The GN&GE Joint Committee offered a further 17 London excursions (to Liverpool Street, not King's Cross), five to the East Anglian Coast resorts and one each to Wolferton/Lynn/Hunstanton and to Newmarket Races. Some of the London excursions, which were of all lengths from a day up to eight days, had continental connections. In addition there was a wide range of cheap tickets available by ordinary trains of all companies serving Doncaster. Easter booking returns in 1900 showed that on Good Friday 1,500 went to Conisbrough, 110 to Cleethorpes, and 20 each to Manchester and

Liverpool on the GC, a mere 50 to all GN venues, and 140 to Askern (LY); on Easter Monday the GC again did well, with 120 to Sheffield, 110 to Manchester, 80 to Cleethorpes, and 30 to Liverpool; the GN booked 56 to Boston or Skegness and the same number to Mablethorpe, Newark, and Nottingham combined; and the LYR had another 120 going to Askern. The weather was bad, but numbers were not reckoned particularly disappointing. In the three Whitsuntide days, Grimsby topped the table with 355 excursionists (305 on Whit Monday) and was followed by Sheffield (324), Askern (295), Manchester (256), Skegness (117), and Bradford (86) — only 40 booked to London. This apparently gives the GCR, and perhaps the LYR, the better of the argument, but we must remember that Easter and Whitsun figures are *sui generis* and the high summer period would doubtless show a different pattern could we only know the number and destination of trippers booking, say, each Saturday.

One other type of 'excursion' we have not yet mentioned, but which was not uncommon in Victorian times, is exemplified by the specials run to Doncaster in connection with the singer Edward Lloyd's Farewell Concert on 29 November 1900: NE from Hull, GN from Retford and Bawtry, and GN&GE Joint from Lincoln, and additionally the GC's ordinary 11.25 p.m. train to Sheffield put in extra stops at Conisbrough and Mexborough. Earlier examples of these 'musical' trains can be quoted: the special late-night trains to Wath (and intermediate stations) and to Retford after Sims Reeves' concert at the Guildhall, Doncaster, on 10 February 1858; the excursion rate offered — single fare for a return journey — to Thorne for the opening of a new organ in the Parish Church (23 January 1861); and the special trains from Keadby and Sheffield in 1864 and in later years, when a train came from Barnsley also, for the South Yorkshire Choral Union's Church Music Festivals featuring massed parish choirs in Doncaster Parish Church between 1864 and 1884.

Again, though not strictly covered by the title of this paper, a few words should be said about excursions to the Doncaster Royal Agricultural Society Shows held in various years during the late nineteenth century; in some respects these rivalled the arrangements made for the annual Leger Week traffic. To take one year as a sample, in 1891 (20 to 26 June) the GNR needed to have about 140 extra horses and drays at work and 200 extra men for dealing with the additional goods traffic, which in turn necessitated considerable alterations to the yards and goods docks around Doncaster station, including a completely new dock, accommodating 26 wagons or horseboxes, to the south of the Station and known as Shakespeare Dock after the adjacent sidings. Four new signalboxes were set up and many new signals erected. The station staff was increased by some 130, porters, policemen, clerks, inspectors, and so on — the extra staff had their meals provided in a large tent erected, as in Race Week, in the Engineer's Yard. The GN, GE, Hull & Barnsley, LY, LNW, MSL, Midland, and NE Railways all ran passenger excursions, some 150 in all, additional to the ordinary trains. Of the 150, 104 came on the Thursday when 57,580 attended the Show (the whole week attracted 111,500), from as far afield as Carlisle and Penrith, Yarmouth, Wolverhampton, and Newcastle. The GN's own excursions arrived from Lincolnshire, Peterborough, Nottingham, and from London, whence special expresses made the trip in three hours, a good time in those days. The Prince of Wales arrived on the Wednesday in an MSL special from Elsecar, the nearest 'station', albeit one not normally used for passenger traffic, to Wentworth Woodhouse, where he was staying.

At the end of January 1901 Queen Victoria died, and as a mark of respect all excursions planned for 2 February, a Saturday, were cancelled — the GCR's ordinary trains on that day ran as if it were a Sunday. Her long reign had seen

the emergence of the excursion from a very occasional feature to an almost literally everyday occurrence, not only in Doncaster but in towns all over the country. The pattern of excursion provision set in Doncaster in the latter years of the nineteenth century continued at least until 1914, and perhaps even after 1918, the only major innovation being the GN's introduction of Sunday excursions in about 1904.

Excursions, whether to or from Doncaster, absorbed a substantial proportion of the energies of the GCR, the LYR, and above all the GNR, and made money for all of them. The GNR in particular saw the connection between social life and the railway excursion which these pages have sought to explore, and it is pleasing to record that when Doncaster staged the first-ever flying meeting in England in October 1909 that Company not only ran an excursion to it but also sponsored a prize.⁹

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- 1 See my article 'Early Railway Excursions from Doncaster, 1850' in *Journal*, XXVII, pp. 25–7
- 2 For this, see my article 'GNR Special Trains to the Great Exhibition, 1851' in *ibid*, pp. 27–30
- 3 I have attempted to cover this in my article 'Railways and the St Leger' in *ibid*, pp. 266–76
- 4 See 1 above
- 5 For the 1871 Handel Festival excursion ticket-holders were admitted to the concert for 2s.6d
- 6 On 10 and 11 April 1898 the Great Central Railway advertised excursions 'to run via the New Express Route to the GC Race Course Station which adjoins the course'. Other excursions to it followed in later years.
- 7 At the wet Whitsun of 1897, 300 booked to Askern Spa, 250 to Sheffield (plus 50 on the Tuesday), 160 (plus 36 on Tuesday) to Manchester, 131 to Skegness, 53 to Mablethorpe and 117 to other destinations. Over the whole Whitsuntide holiday of 1895, Sheffield attracted 624 excursionists, against 480 to Askern Spa, 267 to Cleethorpes and 95 to Skegness. In 1898, 292 booked to Askern Spa, 209 to Grimsby and Cleethorpes, 177 to Leeds, 140 to Arksey, 102 to Skegness, 60 to Bradford and 145 elsewhere, no more than 20 of them to London.
- 8 In 1895 Grimsby replaced Mablethorpe for the Plant Works outing. Two thirds of those attending went to Skegness — one lady gave birth to a child on the way and had to be left at Boston. In 1897 Yarmouth was substituted for Grimsby and proved to be more popular.
- 9 The material for this study largely derives from the files of the *Doncaster Chronicle* and *Doncaster Gazette* in Doncaster Central Library, and all unacknowledged quotations come from those files. Obviously not every pre-1900 excursion was advertised, and even if it was, less detail appeared in the newspaper than on handbills; but the latter survive only intermittently and one can acquire a fuller, more general picture from the press. John Wrottesley's *The Great Northern Railway* (Batsford, 1979) has some useful background on that railway's excursion traffic. I am obliged to the staff of Doncaster Central Library for their patient assistance and to Goulvain Guilcher of Paris, an authority on nineteenth-century English rail excursions, for providing the inspiration for this paper.

The Royal Commission on London Traffic 1903-5 and the Proposed North Metropolitan and Regent's Canal Monorail

BY D. GORDON TUCKER

The Royal Commission Appointed to Inquire into and Report upon the Means of Locomotion and Transport in London on 10 February 1903 decided understandably at its first meeting to give itself the short title of 'Royal Commission on London Traffic'. It worked hard, interviewed numerous witnesses, received masses of data and many suggestions, and published its report during 1905-6. There were eight volumes of large format, occupying in all just 18 inches of shelf-space. There had been other Royal Commissions and investigations of London's traffic problems, but this one worked at a crucial period when electric traction and the internal combustion engine were beginning to have a big influence. So its report is marvellously interesting. It is referred to from time to time by transport writers, but it is probably not very well-known. The purpose of introducing it here is to explain the source of information about an interesting monorail project based on the Lartigue monorail system. It seems worthwhile, however, first to say something more general about the contents of the report.

I The Royal Commission's Report

The concern of the Commission may be summarised as Tramways, Railways, and Street Traffic, and their integration. Almost all conceivable data relating to these matters are tabulated, graphed, and discussed. On the basis of this evidence, and of suggestions made by the Commission's own Advisory Board of Engineers and by many outside people, the Commission made recommendations. These were basically that the present means of locomotion and transport were seriously defective, that street-widening schemes should be adopted, that tramways should be built into an interconnected system running right through London from side to side, that railways should be extended and better means of passenger penetration into central areas provided, that underground electric railways should be built and extended, preferably on a shallow-tunnel basis rather than tube unless this proved too expensive, that urban railways traversing London should have four tracks to provide for fast and stopping trains, and that road traffic regulations should be made and a Traffic Board set up.

The Commission's Advisory Board of Engineers made many recommendations; among them was a proposal for two new traffic arteries of great width, with ample provision for street tramways and four lines of electric railway underneath. Associated with these were to be many new tramway schemes, including four in subway as follows:

- (1) Knightsbridge to Aldgate
- (2) Leman Street, under River Thames, to southern approach to Tower Bridge
- (3) Charterhouse Square, under Aldersgate, to the GPO
- (4) Grosvenor Gardens, under Hyde Park, to Edgware Road.

Of all those schemes which involved major engineering work, only the last-mentioned subway scheme was supported by the Commission itself.

A proposal somewhat similar to the two great traffic arteries mentioned above was submitted independently by Mr C. S. Meik and two colleagues; it comprised a north-south route and an east-west route, total length 48 miles, giving roadways, tramways, and a suspended monorail railway similar to that between Elberfeld and Barmen in Germany, still operating today and often known as the Wuppertal Monorail. The point of the monorail system was that it was so much cheaper than an ordinary underground railway, and even cheaper than an ordinary railway run overhead (such as the Liverpool Overhead Railway). Nevertheless, the cost of Meik's scheme was a massive £50 million, although it was expected to recoup much of this by sale of adjacent land at much-enhanced values. Details are in the Report, Vol. 3, Appendix 47, and Vol. 6, Plates 57-66.

It was hardly to be expected that the Commission would make recommendations in favour of ambitious schemes of these types. Even in more ordinary matters, however, their judgment was somewhat conservative. They faced the prospect of competition from motor omnibuses (Vol. 1, p.44):

... we think that, on routes suitable for tramways, where there is a large traffic, tramways will continue to be the most efficient and the cheapest means of street conveyance, and we cannot recommend the postponement of tramway extension in London on the ground of any visible prospect of the supersession of tramways by motor omnibuses.

One commissioner, Sir George Bartley, perhaps foresaw the future better. In a minority report, he disagreed and recommended that more experience be obtained with omnibuses before extending tramways in narrow streets.

One of the more fascinating but less ambitious proposals was put to the Commission by Mr F. B. Behr (Vol. 3, Appendix 54 and Vol. 6, Plates 72 a-e). It was for a Lartigue-type monorail running mainly over the Regent's Canal. It was sufficiently realistic and modest to be worth discussing in some detail.

II The Proposed North Metropolitan & Regent's Canal Monorail

Fritz Bernhard Behr, who proposed, planned, and designed this monorail line across north London in the 1890s, and presented the proposal to the Royal Commission on London Traffic in March 1904, was born in Berlin in 1842, became a naturalised British subject in 1876, and died in 1927. He had a good engineering training and much railway engineering experience. In 1885 he became associated with C. F. M.-T. Lartigue, the French engineer whose name is inextricably associated with a straddle-type of monorail system.¹ After demonstrations, the Listowel & Ballybunion Railway was constructed on this system, and opened for passenger and goods service in 1888. Behr was Managing Director of the companies which were responsible for the construction of the line, and also of the L&BR Company, which operated it under an Act of Parliament. However, he always had his office in London, and was very active in planning and promoting other schemes using the Lartigue monorail. Of these, the most important was the Lightning Express electric monorail, on which speeds up to 150 mph were to be attained. The Manchester & Liverpool express monorail, which got its Act in 1901, would probably have been built had the Board of Trade not managed to obstruct it.²

The NM&RC monorail (Behr gave it the title Railway) was not of the Lightning Express type,³ but was intended to have an average speed of about 20 mph, with very frequent stops, as can be seen from the closeness of the stations in Fig. 1. Unlike the L&BR, it was to be electrically operated, and apart from less than a mile of tunnel, it was to be essentially an overhead line. The Lartigue monorail system lent itself very well to an overhead construction, for it did not need a

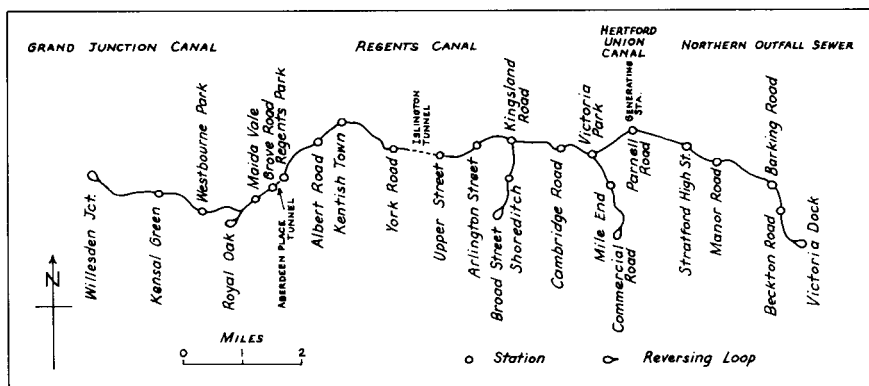


Fig. 1. Proposed North Metropolitan & Regent's Canal Monorail

flat trackbed on which to lay its rails. They were instead laid on a lattice girder structure with an A-trestle cross-section — the running rail at the apex of the A, and a guide rail along each side — and this structure was basically a rigid longitudinal girder which merely needed to be supported on towers at intervals to give an elevated railway. The obstruction to light was minimal, and the ground space occupied was very small. Behr's proposal was that for most of the route the line would follow a canal, with the towers on the tow-path or on canal land beside it. Where the canal passed under a road, the monorail would descend and also pass under if there was room; alternatively it could go in a short tube tunnel. Where the canal went into a tunnel, the monorail would have its own tube tunnels, one for each track. The various types of route-structure are illustrated in Fig. 2, where (a) shows a simple double cantilever-tower for a simple double track, (b) shows a gantry spanning the canal for a part of the route where the two tracks have to be well separated, (c) shows a double-tower arrangement for supporting a station, and (d) shows the two tracks in tube alongside the canal tunnel.

For junctions, turntable-type switches would be used as on the L&BR and explained in a previous article in this *Journal*.⁴ The line would be double track the whole way, and at the terminuses, run-round loops would be provided for reversing, so that no switches would be needed here. Behr proposed that the trains would each accommodate 172 passengers, and that the service should comprise 330 trains a day in each direction over each section.

The plan to follow the canals meant that the line had to take in some very sharp curves. The monorail system was able to do this much better than an ordinary two-rail line. Behr planned for frequent curves down to 62 ft radius, and saw this as no obstacle to operation. There were to be some short steep gradients, the steepest being 1 in 20 with a length of 175 yards.

The route is shown in Fig. 1, where all the proposed stations are marked and named. The westernmost section lies along the Grand Junction canal, but seems to have been regarded by Behr as a branch. He regarded the main line as from Royal Oak (on the GWR and Metropolitan lines), along the Regent's Canal to Victoria Park, then along the Hertford Union Canal for a short stretch, and then along the Northern Outfall Sewer, terminating at the Victoria Dock.

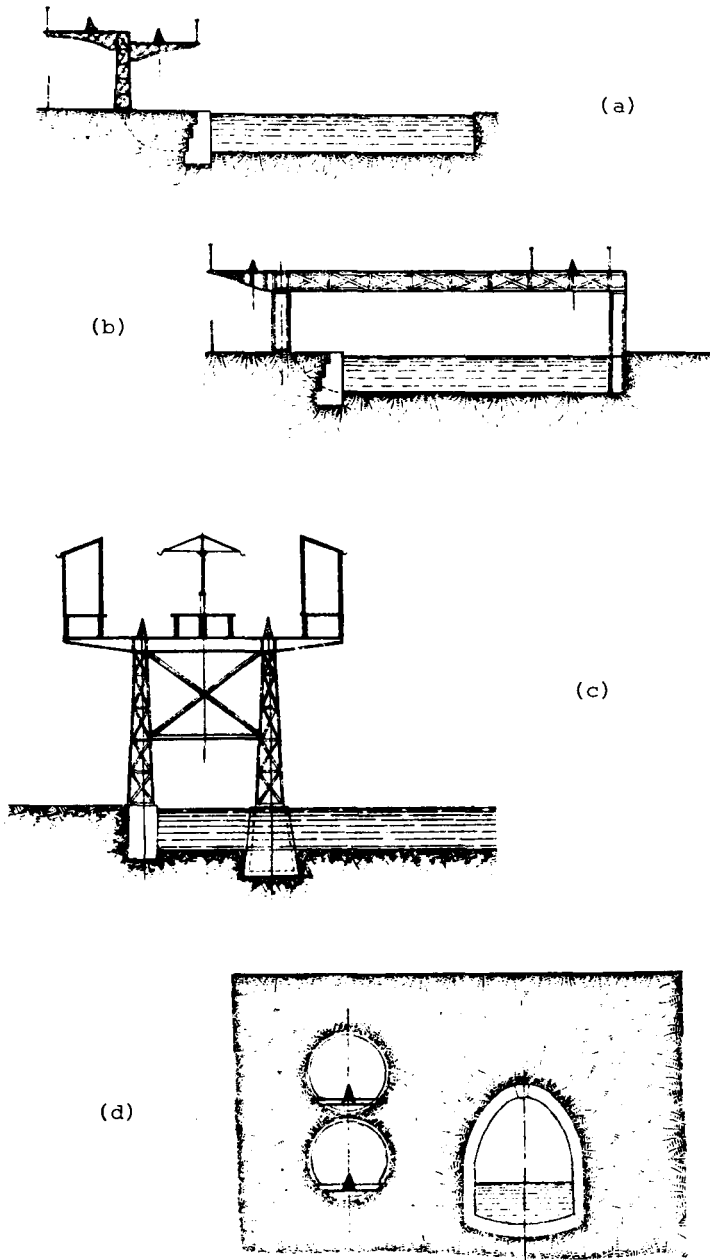


Fig. 2. Transverse cross-sections at various places

The eastern branch through Mile End would follow the Regent's Canal, but the branch to Broad Street would run above the North London Railway. A detailed design for the junction at Kingsland Road, including all the proposed gradients, was given in the proposal put before the Royal Commission.

The two main tunnel sections were the canal tunnels under Aberdeen Place in Maida Vale (272 yd) and from Muriel Street to Colebrooke Row in Islington (960 yd).⁵ Behr gave the total length of tunnel as 1,530 yards, so the remaining 300 yards (approximately) must have been made up by road crossings where an existing bridge could not be utilised.

The central electricity generating station for the whole system was to be near Parnell Road in Old Ford. The length of the 'main line' from Royal Oak to Victoria Dock was 12 miles 1 furlong, and the three branches totalled 5 miles 5.8 furlongs, giving a total length of double-track railway of about 17.8 miles. Of the 24.25 miles of single track on the main line, 15.7 miles were to be level. The Up and Down tracks did not run together over all the route, and the Down track had 0.58 mile more level than the Up track. Only 17% of the single-track mileage was on an up-gradient, and only 28% was curved.

A description of the monorail line proposed by Behr having been given, it is now necessary to attempt some assessment of it and its prospects had it been built. Technically, the proposal seems sound enough. The Lartigue monorail principle had been operating on a commercial railway — the Listowel & Ballybunion — since 1888, and, indeed, continued to function and give service until 1924. Behr, as managing director of this railway company until its bankruptcy in 1897, had had a great deal of experience of the operating and technical features of this low-speed, steam-worked line. Then Behr had also, by the time he presented the NM&RC proposal to the Royal Commission, had not only the experience of designing the Lightning Express electric monorail intended to run between Manchester and Liverpool, but had also carried out extensive experiments on a full-scale three-mile demonstration track at Tervueren in Belgium in 1897–8.⁶ This line was electrically operated, the train was a single car seating 100 passengers in great comfort and weighing 55 tons. Speeds of 70–80 mph were reached with apparent safety. Thus Behr was very well qualified to design and construct the NM&RC monorail line; he was, moreover, also well qualified to estimate costs of construction and operation. He was much less well qualified to estimate likely traffic.

As a commercial proposition, the NM&RC line was not so obviously sound. It was a purely passenger line, leaving goods traffic to the canals. It ran over a route which kept quite close to the existing North London Railway line, and would in many parts be competing with it for passengers. The NLR passenger traffic and receipts were in 1900–05 still more-or-less at their all-time peak,⁷ and as their subsequent decline would not have been anticipated by Behr and his contemporaries, they would probably have thought that there was plenty of potential traffic for both lines. Figures obtained by the Royal Commission, for 1903, (Vol. 1, p. 64) show the NLR's Broad Street terminus as the third busiest of London terminals (behind Liverpool Street and Waterloo), and more significantly, Mr E. Harper's evidence in Table 39 of Appendix 6 of Vol. 3 shows Broad Street heading the list of terminals with overcrowded trains; on the morning inward rush, 32 trains were overcrowded to an average extent of 21.6% and a maximum extent of 65.2%. There was apparently not only scope, but a real need for relief.

Behr estimated 40 million passenger journeys a year for his line, with an average fare of 2d, giving total annual receipts of £341,000. This estimate is very close to the actual figures for the NLR. We can see now that there was little likelihood of the NM&RC line actually attaining such a traffic had it been built. Being a sort of orbital line, it did not have the potential for expansion into the countryside and the creation of traffic from greenfield development which the radial railways — including the expanding tube routes — possessed and exploited. Although, compared with the NLR at that time, it would have had the advantage of electric traction and low costs of construction, it would have had the very serious disadvantage of the impossibility of through running over other lines. Nevertheless, one cannot help regretting that such an interesting line was not built. As far as is known, no company was formed to promote it, and no Act was sought.

Behr was not the first to propose a railway along the canal route he had chosen. The Regent's Canal had been transferred in 1882–3 to a new statutory company, the Regent's Canal, City, & Docks Railway Company, which had obtained an Act of the same name in August 1882. This Act provided for the construction of a railway from the GWR near Royal Oak, along the Regent's Canal, the Hertford Canal, and the Northern Outfall Sewer to the Docks, leaving the canals still functioning. At the western end the railway was to be largely in subway, and at the eastern end on a viaduct. There was also to be a City branch, to the Barbican, but under an Act of 1883 this was to constitute a separate entity.⁸ The cost of the railway was going to be about £6 million. It was not built. Behr made quite a point of the fact that his monorail would cost only about £1.2 million; nevertheless, it seemed to make no impact on the Royal Commission.

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- 3 Although Behr carelessly says it was, when being interviewed by the Royal Commission (Vol. 2, minute of evidence No. 18281), and this was repeated by J. R. Day and B. G. Wilson in their otherwise excellent short account in *Unusual Railways*, Müller, London, 1957, pp. 169–70
- 4 As ref. 1, Appendix 2
- 5 Tunnel lengths as given by E. W. Paget-Tomlinson, *Canal and River Navigations*, Wayne Research, Albrighton, 1978, p. 206
- 6 As ref. 2
- 7 H. P. White, *Regional History of the Railways of Great Britain*, Vol. 3, *Greater London*, Phoenix, London, 1963, p. 79
- 8 *Regent's Canal, City, & Docks Railway (Various Powers) Act, 1883*. An interesting point about the names of the 1882 and 1883 Acts is that Behr refers to the company as the North Metropolitan Railway & Canal Co. and Day and Wilson repeat this. But it must be wrong; the NMR&C Company is not mentioned in either Act, and Paget-Tomlinson quotes the RCC&DR Company.

Railways and Crime in Victorian Kent

BY ADRIAN GRAY

A large proportion of the events in a railway company's life are omitted from railway history books because they are more about people than about trains, or because they are found in sources not regularly consulted for transport history. Local newspapers are often referred to for such matters as the opening ceremony of a particular line, but a thorough perusal of them can shed much more light than this on the day-to-day existence of a railway.

Newspapers like the *Maidstone Journal* reveal some unusual views of certain aspects of railway operation in Kent during the Victoria era, particularly where crime is concerned – a topic not often discussed in relation to railway history. Three particular aspects of crime on the railways seemed to interest the Kent journalist at that time: the organisation of illegal prize-fights, crimes connected with the hop-picker trains, and the then novel crime of 'assaulting a train'. There were also occasional problems caused by navvies.

Amongst the people of London there was considerable interest in prize-fighting, an activity which attracted numerous betting men. It was not possible for this activity to take place within the Metropolis since the police would be attracted, so fights took place in more remote parts of Kent. In the 1830s and 1840s the normal practice was to hire a steamer, which sailed down the River Thames and put everyone ashore on some part of the Kent marshes. In December 1843, for example, a fight was held near Greenhithe between Taas Parker and the 'Tipton Slasher', to which a large crowd and much alcohol were brought by the steamer *Nymph*. These fights continued for many years as such places as the *Long Reach Tavern*, until they were halted by a sad event in 1855; a notorious 'pugilist', John Jones, who used to warm up for fights by drinking a mixture of cocoa and brandy, was killed, and thereafter police action became more efficient.

Police intelligence about prize-fights improved, and so the sporting fraternity began to use the railways as a means of evading police attention. A secondary source, *Kent Police Centenary* (1957) details one such incident. In 1859 the South Eastern Railway organised excursions for over two thousand spectators, which apparently headed down its Dover main line in quest of a suitable field for fighting in. Two fights were held in a field between Headcorn and Pluckley before the Kent police arrived and interrupted a third; the SER was reportedly rebuked for its role in this affair with a stern message from the Home Secretary.

Nonetheless the SER was again involved in 1861, when two incidents received prominent coverage in the *Maidstone Journal*. On the first occasion the SER ran an excursion from London Bridge to Strood, where the fight-goers were picked up by the ferry *Jupiter* and taken to an island in the River Medway. On the second occasion the London, Chatham & Dover Railway ran an excursion from Pimlico to Meopham, where a fight was held between two men named Brettle and Rooke for a purse of £1,000. Police from Rochester and Dartford interrupted the proceedings and so the train proceeded to Milton Meads, near Sittingbourne, where the fight continued.

An article in *Hartley Parish Magazine*, September 1927, asserts that the LCDR station at Fawkham (which opened eleven years after the rest of the line) was positioned near to a spot where prize-fights regularly took place; however, this is unverifiable.

In September and October each year thousands of hop-pickers were returned to London by train amidst scenes of chaos and drunkenness. In 1874 the *Maidstone Journal* carried a series of articles describing the SER's attempts to remove these people from the county without too many accidents or crimes. At East Farleigh station in October 1874 large numbers of police were on hand to filter the hop-pickers through the booking office; there was no way of inspecting tickets on the overcrowded trains. Whilst the reporter was watching, two drunks fell from the platform; one was rescued by a policeman, the other was run over by an approaching train and died.

At the SER's station in Maidstone a special wooden hut was erected in the goods yard. The railway staff locked themselves into the building at the start of the day, and barricaded the door from the inside with an iron bar. Numerous attempts were made by the hop-pickers to defraud the ticket office staff. A measure of the pace of trade was that over £80 was collected within half an hour of opening.

The local press was also alive with legends as to what actually happened on the trains. It was said that one woman died in the course of the journey back to London and that her corpse was robbed of her eighteen shillings savings. Another report alleged that one woman had assaulted another by bashing her head with a salt-cellar. Fights between the women were common, those waiting at East Farleigh being entertained by several.

Rather smaller in scale, but potentially just as dangerous, were attacks by vandals on the trains themselves. One of the first instances of this took place at Higham in 1846. A man standing on an overbridge near the station, at the point where the Gravesend to Strood railway ran alongside the former Thames & Medway Canal, threw a stone down onto a passing train. The court decided that he had wanted to derail the train into the canal but the man asserted that 'the stone fell from my hand'. He was given six months hard labour.

In July 1846 a charge of 'endangering a railway train' was brought against six boys in Canterbury. They had placed a series of obstacles along 1½ miles of the Canterbury & Whitstable line, including a four-foot-long iron bar which had been positioned vertically between the rails. An alert engine-driver prevented disaster by putting the engine in reverse when he saw the obstructions. The boys were given three months hard labour.

A more unusual way of damaging a train was perpetrated by John Humphrey on an LCDR train at Bromley Common in 1865. He threw a live terrier dog over a bridge as the Ludgate to Dover express was passing beneath. The animal smashed into the 'birdcage' section of the guard's accommodation. Guard John Wells was knocked out and cut by flying glass; he recovered to find the dog's corpse on the floor of his compartment!

Similar events have continued to the present day, of course, though methods of punishment have changed. In 1894 two New Brompton boys were given eight strokes of the birch each for 'intent to injure a certain engine' of the LCDR — they had tried to throw stones down its funnel.

Assaults on railway staff were quite rare, the most severe being when a porter at Dover Harbour station shot dead his own station master in 1868; the man was later hanged for his crime. In 1894 a young female lunatic stabbed a clerk at Ashford (SER) with a pen. Assaults were more usually the province of navvies, who occasionally staged a full-scale riot as at Edenbridge in 1866. The cause of this was the employment by the contractors of foreign labourers on low wages in the building of Mark Beech tunnel, undercutting the wages of the English. The latter attacked the foreign camp near Cowden with bludgeons and staves, driving

out the French and Belgians, who fled to Edenbridge. The next day the marauding navvies literally took over Edenbridge in their search for 'the enemy', but the Chief Constable used the SER's telegraph to summon troops from Shorncliffe in order to avert a bloodbath. Thus injuries to navvies were confined to about thirty.

The latter incident shows how the spread of railways helped to improve law and order. The railway telegraph overcame the isolation of rural areas whilst the trains themselves offered a means of moving police and troops around the county as need indicated.



The Oxford Canal

BY HUGH J. COMPTON

Since I wrote my book on the Oxford Canal, the Government has lifted its 30 year restriction on publishing details about the last great scheme for improving the southern section.

During the last war the canals were placed under government control, with committees being responsible for various parts of the system. The southern committee, based in London, had been receiving a number of complaints concerning the lack of dredging between Napton and Oxford, which prompted F. V. Spiller, manager of the Oxford Canal Company, on 11 March 1942 to suggest to the committee that the off side of the canal should be piled and the towing-path walls generally strengthened, so that when dredging was carried out, the wash from passing boats would not nullify the improvement.¹

As the matter was progressed through various committees the situation as to the number of locks on the Grand Union canal route from London to Napton as opposed to that via the Thames and the southern section of the Oxford canal highlighted the facts that the latter route had a smaller number of locks and that on the river, at least, there was no water problem. Accordingly, when Sir Osborne Mance chaired a meeting of the Inland Waterways Division of the Ministry of Transport on 9 October 1944 at which the Thames Conservancy Board were present they agreed to approach a firm of consultants with a view to their producing a scheme for modernising the southern part of the Oxford Canal and also approach HM Treasury for permission to spend £3,500 on the enquiry. The specification called for a canal suitable for a barge 94' x 14'8" capable of carrying 100 tons. The measurements suggested seem strange when the GUC was only capable of passing boats 72' x 14'3" (abeit with difficulty), but on the other hand the Thames below Oxford could accommodate craft 110' x 17' and depth was gradually being increased to seven foot.

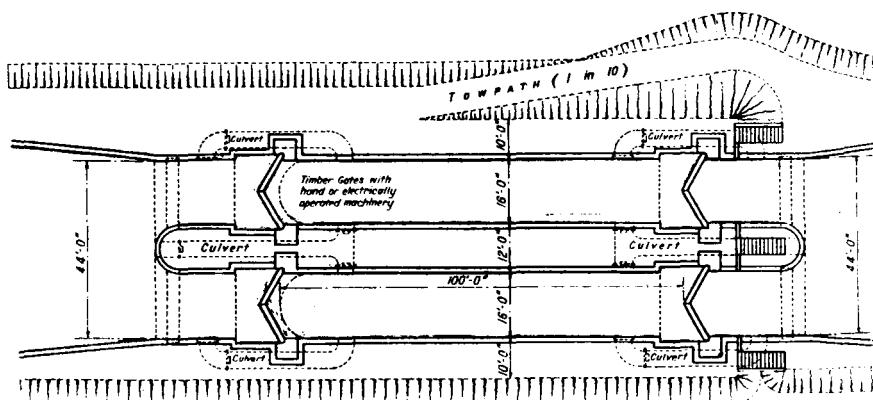
Detailed requirements were as follows:

- (1) Depth 7'6"
- (2) Headroom 10'6"
- (3) Width of canal 64'
- (4) Width of towing path 8'
- (5) Lock gates to be of timber construction.
- (6) Sluice gates to be electrically or hand operated.
- (7) Clay puddle, where necessary, to be 18" thick.
- (8) Sides of canal to be piled with a concrete cap.
- (9) Minimum radius curve 800 ft.

Following approval by HM Treasury, Rendel, Palmer & Tritton of London, consultant engineers, agreed to examine and report on the proposal. In their report prepared by R. V. Allin, dated June 1946, a number of interesting facets are shown.²

- (a) To overcome the water shortage, instead of building side ponds double locks were proposed (each 100' $\times$ 16') irrespective of situation.
- (b) The river Cherwell was to be diverted in three places.
- (c) At Wormleighton, on the summit pound, a new cut 1000 yards long involving a 35 ft deep cutting was to be made in order to reduce the length of the canal by 2½ miles.
- (d) Existing rail levels at all points where they crossed the canal would be maintained.
- (e) Canal would be capable of passing 10,000 barges of the 100-ton model proposed each year.
- (f) Boddington reservoir to be further enlarged to hold 540M gallons as compared with the then present of 200M gallons. To achieve this it would be necessary to raise the bank by eight foot to permit the depth of water to be raised by five foot. This would result in the flooded area being increased from the present 65 acres to 250 acres. In addition the Upper Boddington — Byfield road would be diverted to cross the reservoir on the dam.
- (g) Clay puddling would only be necessary between Napton and Hampton Gay. Between the latter and Kidlington, a distance of two miles, the canal traversed Cornbrash, a very hard type of limestone, which could not be moved by mechanical equipment. The remaining part of the canal was on Oxford clay.
- (h) The cost of the scheme could be kept down to £4.2M and the work carried out in three years using seven drag-line excavators, providing during this period the canal was entirely closed. The firm considered the then-low level of traffic insufficient to justify attempting to keep it open during the reconstruction period. Furthermore, elsewhere the GUC had been pressing for this part of the OC to be closed so that the whole of the water supplies from the Boddington reservoir should flow down the Napton flight into their canal. In addition to the costs to be incurred on the Oxford, certain alterations, estimated at £100,000, would have been required on the Thames in the Oxford area.

By the time the report was published, the war was over and canals were being viewed in a different light. Copies were, however, sent to the Great Western and London Midland & Scottish Railways together with the Oxford county council, with a note to the effect that no further action was being taken in the matter.



General arrangement proposed for locks. (By permission of Rendel, Palmer, & Tritton)

REFERENCES

- 1 Public Records Office, Kew — MP1/414 & MT52/124
- 2 Rendel Palmer & Tritton (now at 61 Southwark Street, London, SE1 1SA) Q416



Book Reviews

LOCOMOTIVES OF THE LNER, PART 6C, TENDER ENGINES CLASSES Q1 TO Y10. 174 pages, 150 photo illustrations, 16 diagrams, card covers. Published by The Railway Correspondence & Travel Society, ISBN 0 901115 55X 1984, £7.50

This completes the study of the main classes of LNER locomotives which began with Part 1 published in 1963. All that remains to come is Part 10, Miscellaneous locomotives, railcars, and statistics. Unlike most of the other parts, 6C describes a mixed assortment of engines ranging from the tiny NBR Y10 0-4-0 to the W1 4-6-4 No. 10000, and including the 0-8-0s of the GNR, GCR, NER and H&BR, the 2-6-2s of classes V2 and V4 and the GCR 4-2-2s. It is a fascinating book, with interesting photographs and several details clarified by diagrams. The various accounts are well written and contain a tremendous amount of detailed information on design and construction, allocation and work. A curious omission, common to the series as a whole, is mention of maximum valve travel and cut off in full gear, and steam and exhaust lap, except for the V4 and W1. This is a matter which should be dealt with in tabular form in Part 10. The information is readily available in the LNER diagram book of which a copy is held in the NRM library. To your reviewer at least this is more important than the distance between handrail pillars. JOHN MARSHALL

THE LONDON, CHATHAM & DOVER RAILWAY by Adrian Gray. 241 pp. 36 maps, plans, and diagrams, 97 illustrations in the text. Meresborough Books, 7 Station Road, Rainham, Kent, ME8 7RS. ISBN 0905270886. £7.95

'Unlike many books on railways this is not full of nostalgia: the historian must be honest . . . ' writes the author in his foreword, setting the tone for a balanced, soundly-based account of the eventful years of this minor, much-embattled company. Mr Gray has used the minute books and other contemporaneous sources, and sets out to place the story in its rightful setting. The tortuous financial affairs are handled with considerable competence. He is always readable, writing as he does in a plain, straightforward style, with reflective pauses when due. On rolling stock he is pardonably sketchy, referring locomotive enthusiasts to the thorough work of D. L. Bradley published by the RCTS in 1979. Surprisingly, he does provide (in the text, where it breaks the narrative flow) a catalogue of the company's vessels.

Timothy Blake's plans, maps, and diagrams are above average, both in number and clarity, although one will look in vain for adequate illustration of the several complications at Margate. Many of the photographs are fresh and unusual, but sadly, the paper used, although of good quality, deprives them of sparkle.

As the reader comes to the final chapters he will notice a perceptible falling off in the original research base. A final 13-page chapter covers events in LCDR territory between 1923 and 1984 and whilst this renders the book in a sense complete (for the time being) it is no more than a re-ordering of familiar material readily accessible elsewhere. One wishes the space had been used to provide more on the years before 1923, perhaps a more complete and more accurate account of the London suburban services and traffic, and more detail on the proposals and works at Margate between 1913 and 1919.

Occasionally a certain looseness of editing is apparent, with near repetition allowed to stand in one or two places. A minor printer's derailment has occurred on pp.30-31, but the remedy is soon established.

Mr Gray is an author deserving of encouragement. Something on the same lines for the SER and LBSCR would be most welcome. Meanwhile this is a pleasantly produced book offering excellent value both for sequential reading and reference.

ALAN A. JACKSON

THE CHESAPEAKE & OHIO CANAL by T. F. Hahn, Scarecrow Press, Metuchen, New Jersey, U.S.A. viii + 269 pp. ISBN 0-8108-1732-2. Obtainable from Bailey Bros. & Swinfen Ltd. Warner House, Bowles Well Gardens, Folkestone, Kent CT19 6PH. £23.40 inc. p & p.

When one thinks of the Chesapeake & Ohio one thinks of Tim Hahn whose devotion to the 185-mile canal goes back to 1948. Walter S. Sanderlin published a full-length history, *The Great National Project* (Johns Hopkins Press) in 1946. Dr Hahn has supplemented it with several specialised publications.

It is these that, in whole or in part, have been collected in this book, and often given added illustrations or drawings. Here are plans of the canal's whole length, with historical descriptions of sights to be seen — they include one of America's few tunnels and the seven-arched Monocacy aqueduct. There is much about boatmen: an account of a round trip made in 1859 and recollected later, a collection of recorded interviews or reminiscences of 1892-1924, and a study of

canal boat children. Lastly, but by no means least for the historian, is an account of the canal's predecessor, the Potomac Company, and especially of the river by-pass at Great Falls, 'George Washington's Canal', with its astonishing flight of five masonry locks 90 ft x 14 ft, opened in 1802.

Dr Hahn's is the canal browser's ideal book: many delightful and often informal photographs; plans and drawings; a great number of vivid verbatim contemporary quotations; a wide spread of information, and above all the author's infectious interest. CHARLES HADFIELD

THE QUEENSBURY LINES, by A. Whitaker & B. Cryer. 72pp., card covers, 62 photo illustrations, 1 map, 3 plans. Dalesman Books, Clapham via Lancaster. ISBN 0 85206 807 7. £3.50.

This book describes itself as a 'Pictorial Centenary Edition'; roughly two-thirds of it is taken up with illustrations, the remainder being text. The rather unhelpful title actually masks an account of the former GNR lines in the triangle of Yorkshire bounded by Bradford, Keighley and Halifax; Queensbury is merely the junction at the centre of the network. The majority of the photos date from the 1950s and 1960s, so they hardly provide a thorough 'historical' survey; many are also printed so darkly that detail is obscured. The text would have benefited from a few lively anecdotes, particularly from the pre-1939 era. ADRIAN GRAY

TOM ROLT AND THE CRESSY YEARS, by Ian Mackersey. 106pp, 34 photo illus., index, card covers. M. & M. Baldwin, 98 Kenyon Street, London SW6 6LB. ISBN 0 947712 01 1. £3.95.

Rolt's introduction to canal boating on *Cressy* with his uncle is related as a prelude to his 'design for living', made possible by his eventual purchase of the boat for conversion to a floating home and his marriage to Angela, with the intention of paying his way by writing. This story of their twelve years on the canals draws heavily upon his published works, but new slants have been facilitated by *The Gifts of Gradual Time*, an unpublished third part of his autobiography, *Cressy's Log Book*, and other records made available by his widow, Sonia. The personal recollections of Angela, whose death is sadly postscripted, and of many waterways acquaintances have helped to produce a portrait of the man who so influenced the change in function of our inland waterways and who has himself become part of their history. The strife that beset the young IWA he had been largely instrumental in forming, and from which he was so unhappily expelled, is recorded fairly. His later achievements are outlined in a final chapter; marriage to Sonia, two sons, the Talylyn Railway and his biographical and other writings in the fields of Engineering and Industrial Archaeology. An enjoyable little book in which the author displays a genuine warmth for his subject. EDWIN SHEARING

MONTGOMERYSHIRE CANAL AND THE LLANYMYNECH BRANCH OF THE ELLESMERE CANAL, A TOWPATH GUIDE, by John Horsley Denton. 100pp with strip maps and sketches in text, 25 photo illustrations. Lapal Publications, 53 Senneleys Park Road, Birmingham, B31 1AE. 1984. ISBN 0 9509238 1 8. £5.00.

The reviewer must admit a personal interest, for this little book brings nostalgic memories of hot summer days 25–30 years ago, with the rich flora and insect life, honeysuckle, and dragon flies along the banks of a mysterious canal about which little topographical information was available. How useful then would have been this guide with its bonus chapter on the associated wild life by Catriona Paskell. How still more valuable now to kindle interest in the partly derelict waterway from Welsh Frankton to Newtown, with two sections again navigable and through restoration haltingly under way.

Background history, including an explanation for the lengthy title, is followed by a description of engineering works, relics of industrial activity and the surroundings along the route, accompanied by strip maps and pleasing sketches in the text, and a selection of photographs new and old. The production is attractive and there are few printing errors; in good company, Hazledine's name is misspelt. The strip maps are in diagrammatic form, showing the towing path and indicating the location of items of interest; in general they are very helpful but some bridges or their sites are not recorded while others are not identified by their numbers and names or their present lowered state noted, especially on the Llanymynech line.

While the Preface refers to 'sites' of mile posts, the text reads as though substantial markers exist where mile posts there never were, for historical reasons implicit in the title. An indication of distance along the line from Welsh Frankton is obviously desirable but several handsome new iron mileposts have been erected very recently north of Welshpool in locations differing from those shown in the maps. One omission relating to civil engineering design is the extraordinarily long overflow weir, some 40 yds or more in length, parallel with the waterway a little to the east of Maesbury Marsh.

The reviewer, as a result of scanning the SUR&CCo. minutes some years ago, has doubts whether there was a bone works at the Rednal railway interchange arm in the 1860s. The plan in the late Edward Wilson's book may be misleading as the original GWR plan of 1861 does not identify his 'Rednal Bone Works' building as such. The Richards' bone works may well have been at Maesbury but land at Rednal for the superphosphate plant was not leased to them until 1886. As suggested on the cover of the book, there are problems still to be solved. Search, especially for instance in the canal company minutes at Kew, is an expensive and daunting business for country-dwellers. John Denton's book stimulates the reader to find out more, but first to put on his wellies and walk this attractive canal. Such towpath guides make a valuable addition to canal literature.

EDWIN SHEARING

THE CHESHIRE LINES COMMITTEE THEN AND NOW by N. Dyckhoff. 112 pp., numerous photo illustrations., map, and gradient profiles. Ian Allan Ltd. ISBN 0-7110-1410-8. £6.95.

Hard on the heels of Paul Bolger's publication comes another book on this hitherto little written-up railway. The present work is in no way competitive with the previous one but rather complementary to it. The text is limited to ten pages and

gives a potted history of the concern, followed by brief accounts of locomotives, rolling stock, stations and signalling, and finally a bibliography, in which Bolger's book does not appear in view of its very recent appearance.

The remaining 100 or so pages are given over to photographic illustrations, covering motive power from an MSLR 2-2-2 to BR DMUs, stations, shed views, signal boxes, and other structures, a selection of tickets and even a reproduction of an eyesight test board from Trafford Park loco shed! There is an interesting view of the experimental Beyer-Ljungstrom 4-6-6-4 condensing turbine locomotive on a trial run at Chorlton-cum-Hardy. The photographs, very few of which have previously appeared in print, have been selected carefully and have reproduced well.

The book is certainly to be recommended to anyone interested in the CLC.

NEIL PITTS

STEAM FROM WATERLOO, by Colonel H. C. B. Rogers. 144 pp. 27 photo illustrations. 2 maps, 2 gradient profiles. ISBN 0 7153 8617 4. David & Charles, 1985. £7.95.

The introductory chapter ('Waterloo') includes such diverse topics as the development of the London terminus of the LSWR; nineteenth-century opinions of this railway, in the form of long excerpts from Foxwell and from Ackworth; descriptions, with gradient profiles, of the main lines to Bournemouth and to Salisbury; an account of the rivalry with the GWR during 1904/1906 for the transatlantic traffic via Plymouth; a description of the Atlantic Coast Express. As all this occupies only seventeen pages, it will be appreciated that the treatment is in essay, rather than treatise, form.

Subsequent chapters are devoted to steam locomotive matters, in which the author comments in turn on the design and performance of the locomotives of Beattie, Adams, Drummond, Urie, Maunsell and Bulleid. Here the true purpose of the book becomes apparent: to publish the personal recollections of Mr Jim Marsh, top-link fireman on the LSW section during the nineteen fifties. Marsh's letters to the author, presented verbatim, give a clear and attractive account of his foot-plate experiences on a wide range of the locomotive types under discussion. For those whose special interests lie in the field of the handling and working of main line steam locomotives, these first-hand experiences should prove of considerable interest. B. S. COOPER

A REGIONAL HISTORY OF THE RAILWAYS OF GREAT BRITAIN, VOL. 8, SOUTH AND WEST YORKSHIRE by David Joy. Second edition 317 pp., 33 plates, 7 engravings in text, 9 maps in text, one folding map. David & Charles 1984. ISBN 0 946537 11 9. £12.50.

The first edition was reviewed for the RCHS in June 1976. Dr Slatcher criticised the arrangement of the material, possibly with justification; but with an area as complex as this any arrangement will have faults. One is left with the question: could anyone else have done the book better? Your reviewer doubts it. The text is compact, with maximum information packed into available space. It is not light reading but that is not what we look for. This edition is 13 pages longer,

and includes a postscript outlining the many changes which have taken place in the area during nine years. The reference section has been up-dated with recent closures and other developments, pieces of recent information have been inserted into the text and new titles appear in the bibliography. A detail almost too trivial to mention: in the 'Primary Sources' it could have been noted that BT Historical Records are now at Kew. Most of the photographs have been re-used and they have not reproduced as well as in the first edition. JOHN MARSHALL

A REGIONAL HISTORY OF THE RAILWAYS OF GREAT BRITAIN, VOL. 6, SCOTLAND, THE LOWLANDS AND THE BORDERS, by John Thomas, revised and enlarged by A. J. S. Paterson. 325 pp, 49 illustrations, 12 maps. David & Charles. ISBN 0-946537-12-7. £12.50.

THE WEST HIGHLAND RAILWAY: VOL. 1, THE HISTORY OF THE RAILWAYS OF THE SCOTTISH HIGHLANDS, by John Thomas, extra material by A. J. S. Paterson. 184 pp, 8 full page colour plates, 58 half tones, illustrations, maps and diagrams in text. David & Charles 1984. ISBN 0-946537-14-3. £9.95.

These are welcome re-appearances of two popular works by the late John Thomas, having been extensively revised by Alan J. S. Paterson. *The Lowlands and the Borders* first came out in 1971 and proved a very worthy addition to the Regional Railway History Series, covering Scotland south of the Firth of Forth — Loch Lomond and including the 'penetrating lines' of the North British into England. It has been expanded by 37 pages by Mr Paterson, a self-confessed admirer of John Thomas's work. For example, there is a new section 'revival' to the chapter on Glasgow, a gratifying example of recent expansion of the rail system. The half-tones have been increased in number and expanded in scope, including early photographs and one of the HST.

The story of the much-loved West Highland is a third edition, brought up to date and with new material. There are eight magnificent full page colour photos, which add to the word pictures of this unique line. Both volumes are valuable additions to any library of transport history.

H.P. WHITE

THE GREAT WESTERN RAILWAY: 150 GLORIOUS YEARS. General Editors: P. Whitehouse & D. St. J. Thomas. 206 pp., 287mm x 220mm. Profusely illustrated, colour and monochrome photographs, maps, plans and drawings. David & Charles 1984. ISBN 0 7153 8530 5. £12.95.

The Act of Parliament incorporating the GWR was passed in 1835 and thus the 150th birthday of the company takes place in 1985. This publication carries on its dustjacket the GWR 150 logo and is the official souvenir of the event, authorised by British Rail, Western Region. More books have been written about the GWR than about any other railway, certainly in this country and almost certainly in the world. There have been several histories of the GWR, the most noteworthy being that by E. T. MacDermot. The present book does not set out to be another history, but rather an overall picture of this great undertaking covering the whole period of its existence, including its metamorphosis into the Western Region of British Railways. It achieves this objective very well.

Besides the general editors five further authors, namely O. S. Nock, G. F. Fiennes, G. Kichenside, P. M. Kalla-Bishop and B. K. Cooper write about their own specialities. There is a foreword by Bill Bradshaw, General Manager of the Western Region. The book consists of 20 chapters which collectively cover all aspects of the GWR except ports and shipping services. Commencing with the Broad Gauge there is then a chapter entitled 'Three Famous Stations' which gives potted histories of Paddington, Bristol Temple Meads, and Birmingham Snow Hill. The next two chapters are concerned with locomotives: 'Locomotive Construction' and 'Locomotive Sheds and Workshops'. The latter chapter includes the locomotive allocations as at June 1947. There follow chapters on train working, trials of locomotives on other lines, passenger and freight traffic, signalling, publicity (in which the GWR was very much to the fore), such pioneering ventures as the early road buses, air services, and the introduction of the AEC diesel railcars in the 1930s. Organisation and management next come in for treatment, followed by the GWR at war, Great Western into Western, and finally three chapters entitled 'Branch Lines', 'Narrow Gauge' and 'Preservation'.

The whole book is extremely well illustrated with colour and black-and-white photographs, some reproductions of Bourne's prints and a few drawings from Heath Robinson's *Railway Ribaldry*, a cartoon publication sponsored by the GWR on the occasion of its centenary in 1935. It is well supplied with maps, pride of place among these going to the large folding system map in colour reproduced in stouter paper than the rather flimsy style used by the company. The particular issue is 1947, just prior to nationalisation and it distinguishes between lines open for all traffic and those open for 'merchandise' only. It even shows one of the 'connecting lines' in Eire as open for merchandise only! There is also a double-page spread map of the system, including absorbed lines, showing opening dates of the various sections of line. Other maps show the extent of the Broad Gauge in 1868 and lines equipped with Automatic Train Control and water troughs in the 1930s.

The book is produced to a high standard, entirely on art paper. The photographs have reproduced well and there is no doubt that the publishers have pulled out all the stops in order to do full justice to this great birthday. Although it contains little which is new, nowhere else can such a wide ranging spread of subject matter about the GWR be found between one pair of covers. It is reasonably priced and should be on the shelves of every GWR admirer.

NEIL PITTS

TALES OF THE GREAT WESTERN RAILWAY by O. S. Nock. 176 pp., 18 line diagrams. David & Charles 1984. ISBN 0-7153-8347-7. £7.50

Modestly introduced as 'for browsing, perhaps at bedtime' this is a more enjoyable and fascinating, albeit non-critical, book than its arch title might suggest. The thirteen independent chapters cover not only technical matters such as slip coaches, brakes and signals, but also personal recollections of Sir Felix Pole, and J. A. Kay of the *Railway Gazette*. Mr Nock continues to tell a good story, even if rather differently from some other authors. The critical historian should not underestimate Mr Nock's professionalism, and most readers will find some nuggets worthy of deeper exploration. A pity that space is devoted to yet another outline history of GWR carriage design rather than more of the personal anecdotes that give the book its particular flavour.

The appearance of the book is its weakest feature (a hard-bound paperback?): the line diagrams are sometimes too small, and how much better to have seen historic photographs rather than have them described. DENNIS HADLEY

GREAT WESTERN LOCOMOTIVE DESIGN: A CRITICAL APPRECIATION
by John C. Gibson. 157pp., 38 photographs, and 16 diagrams.
David & Charles 1984. ISBN 0-7253-8606-9. £9.95.

John Gibson worked at Swindon during the 1920s, and his 'commentary' on Holcroft's *Outline of GW locomotive practice*, purportedly 'written mainly from the point of view of the men who had to maintain and run the engines', though generally appreciative, looks at affairs in a different light from most popular eulogies. With so little space available the author might well have concentrated on a shorter timespan, rather than discuss the complete period from the arrival of Gooch to the aftermath of nationalisation. Churchward is his hero (viewed rather differently from Mr Nock) and the *Saint* class 4-6-0 his masterpiece: *Saint* better than *Star* better than *Castle* better than *Hall*; and a *Super-Saint* would have bettered a *King*. The 4-cylinder designs are called 'the great enigma', which worked amazingly well despite all the classes resulting from over-hasty expediency. They succeeded, in spite of unnecessarily complicated valve gear, weak frames .. and poor bogies, because of good piston valve and steamchest design, and Swindon craftsmanship. After Churchward the tale told is rather a sad one — if only Stanier had got the job!

'Critical', yes; but certainly also an 'appreciation', with much of what was best about BR steam attributed to the Swindon mystique. The book is easy to read and quite pleasantly produced; but at what readership is it aimed? Some of the technical diagrams are inadequately described for the lay enthusiast (and not always at the appropriate page); yet the photographs are mostly of the popular variety, and do not draw attention to specific features. The index is inadequate, and the 'further reading' simply a publisher's puff. DENNIS HADLEY

THE WISSINGTON RAILWAY: A FENLAND ENTERPRISE, by Roger Darsley.
133 pp., 67 photo illus., line drawings, maps. Industrial Railway Society, 1984
ISBN 0-901096-48-2 (hardbound), 0-901096-49-0 (softbound). £6.50/£5.00
post free from 2 Garrick Gardens, Sholing, Southampton SO2 7DN.

The subject of this book is the system of standard-gauge privately-owned lines which fanned out southwards across the Black Fen from Abbey on the GER Stoke Ferry branch. The early history (1905-17) was closely associated with an ill-fated scheme to convert the peat into a chemical fertiliser, but from 1918 until the closure of the last remaining section in 1981 its primary purpose was to serve the sugar beet industry.

The history of this group of lines — they were not a single entity in a legal sense — is bewilderingly complex, but it has been thoroughly researched from both documentary sources and personal reminiscences; and it is clearly and comprehensively presented. The book is attractively produced and the maps are exemplary.

The Wissington Railway generated a significant volume of both inwards and outwards goods traffic for the 'main line' railway and during World War II it was worked by the LNER. The book will therefore be of interest to members who may not normally venture into the industrial railway field. GRAHAME BOYES

RAILWAYS AND WATERWAYS TO WARRINGTON by P. A. Norton.
Published by Cheshire Libraries and Museums 1984. 88 pp., numerous
illustrations. Card covers. 300 X 210 mm. Revised edition. ISBN 0-904-53209-7.
£4.50 (£5.20 post paid)

This little book, the first edition of which was published by our Society, incorporates a considerable amount of local knowledge properly related to the national systems. Although it is copiously illustrated it is a serious work of historical research which your reviewer read with great interest and recommends for general reading as well as for those studying transport history in the area.

CYRIL T. G. BOUCHER

SHORTER REVIEWS

HOW THE RAILWAYS CAME TO HASTINGS, Hastings Area Local Studies Project, Centre for Continuing Education, University of Sussex, Falmer, Brighton BN1 9RG. 37 pp., 10 illustrations, 2 maps. £1.20 + 25p p&p.

This little book gives the history of the construction and opening of the three lines to Hastings with brief notes on subsequent developments. The information has been culled from contemporary newspaper accounts and not from company records.

PUBLIC TRANSPORT IN FERMANAGH Part I Road, Part II Water, Part III Rail, 12 pp., 16 pp., 16 pp., respectively. Photo. illustrations, maps, tables.

These booklets are offprints of articles by our member Dr D. B. McNeill in *Clogher Record*, the journal of the Clogher Historical Society. Collectively they cover the history of public transport in this part of Ulster. The treatment is detailed and accurate.

Obtainable from 8 Marcella Park, Newtownards, Co. Down BT23 4SF. No price quoted.

SWIFTS AND QUEENS by A. I. Bowman. Strathkelvin District Libraries and Museums, 170 Kirkintilloch Road, Bishopbriggs, Glasgow G64 2LX. 80 pp., photo. illus., £2.70.

This is the ninth in the Auld Kirk Museum publications series on local historical matters. It covers in great detail the story of passenger services on the Forth & Clyde Canal throughout the existence of the waterway, commercially from 1783 to 1939, and on a short restored length again since 1982. It consists of a full account of the vessels involved and the services they operated, researched from primary sources. A good publication on a subject about which little has hitherto been written.

GAS AND ELECTRICITY COLLIERS by D. R. Chesterton and R. S. Fenton. World Ship Society, 18 Durrington Avenue, Wimbledon, London SW20 8NT. 120 pp., numerous photo illus., £4.50 post free.

This is another of the excellent publications for which the WSS is noted. It covers the sea-going colliers owned by the gas and electricity undertakings of South East England. Brief chronologies of each of the undertakings are given, followed by fully illustrated fleet lists. Details of flags and funnels of the various concerns are also provided. A high standard of accuracy is maintained throughout and the fleet lists are comprehensive.

GAZETTEER OF THE RAILWAY CONTRACTORS AND ENGINEERS OF WALES AND THE BORDERS 1830 – 1914 by L. Popplewell, Melledgen Press, 71 Thornbury Road, Southbourne, Bournemouth BH6 4HU.

This is the fifth booklet in a series intended to cover the whole country. Each area is dealt with chronologically, enumerating under each railway company dates of opening of lines, contractors, engineers and sources. Sketch maps showing lines opened during various periods of the whole time span covered are appended to give an indication of the build-up of the system. The earlier booklets cover the South of England (3 booklets) and East Anglia. In the current work details for the complex railway system of South Wales are representative only and not comprehensive. A most useful series which fills a gap in existing literature.

Correspondence

Moveable bridges

Sir, — There is yet another important omission from Stanley Tyson's list in the July 1984 *Journal*, a surprising one considering that in its present form the bridge concerned has been very much in the news of recent years. I refer to the Mawddach Viaduct at Barmouth, the moveable portion of which was from 1867 until 1900 an 'overdraw' span. From the side this looked like a drawbridge on wheels, which is precisely what it was. To open the span, the 'counterbalance arms' were wound down, tilting the span up so that it was clear of the bridge decking, the whole affair then being wheeled back to leave the navigation opening clear. There is an excellent photograph of the bridge on p. 30 of *Cambrian Railways Album* (C. C. Green, Ian Allan 1977) while on p. 62 of the same book there is a photograph of the last vessel to pass through the original bridge on 28 July 1900, showing the end of the tilted span drawn back over the landward fixed span. This overdraw span was subsequently replaced by the conventional swinging span seen today.

I do not think that Mr Tyson's original list did in fact overlook the 'Telescope' at Ford. As the River Severn somehow became associated with the Crinan Canal in the same list, I suggest that 'River Avon' was supposed to read 'River Arun'; though of course this still recognised the original bridge alone and not its successor. It is interesting that the original proposal for bridging the Arun here was for a swing bridge on a floating central pier, thus avoiding the problem of building a fixed pier of sufficient stability to support a heavy swinging span — the usual reason for adopting the telescopic or overdraw bridge. This was considered to be impractical, yet the correctness of the proposal was later demonstrated when Col. Saner adopted this principle on the River Weaver.

A notable European example of the breed was the Steffenbach Bridge on the Furka-Oberalp Railway in Switzerland, built in 1927 after the previous bridge (built in 1926!) had been swept away by an avalanche. During the winter months, when the mountain section of the FOB was closed, the bridge could be folded back against its abutments leaving nothing in the path of the frequent avalanches. The bridge has now been superseded by the boring of a base-line tunnel to cut out the section of line concerned. RODNEY WEAVER

Traction Engine Locomotives

Sir, — In answer to Mr Leonard's query in the last *Journal*, rail-mounted traction engines were once fairly common. The two makers usually associated with this type of light industrial locomotive were Aveling & Porter and John Fowler, though others such as Marshall & Sons produced the occasional example. Where shunting duties were light, a converted traction engine would be cheaper than a small locomotive of conventional design; probably due to their proximity to Aveling's works at Rochester the cement works along the Thames Estuary were regular employers of the type. At the opposite end of the country, Aveling & Porter supplied several to Scottish distilleries, where once again the shunting duties were quite light.

Three contrasting Aveling & Porter locomotives spanning the fifty years during which this type of locomotive was made can be seen today.

AP 807 of 1872, originally supplied to the Oxford & Aylesbury Tramway, now in the London Transport Museum at Covent Garden.

AP 8800 of 1917, is preserved in working order at Hollycombe House, near Liphook.

AP 9449 of 1926, a former cement works locomotive, is now preserved in working order on the Bluebell Railway.

The three locomotives mentioned represent the whole range of such machinery, for while 807 has both axles driven by chain from the crankshaft, 8800 has both axles driven by gearing and is rather more of a locomotive chassis powered by a traction engine and 9449 is simply a traction engine with flanged wheels.

RODNEY WEAVER

Sir, — If Mr Leonard has dated his postcard correctly (*Journal*, 1984, XXVIII, 139) the locomotive he refers to at Hall & Company Ltd's Croydon East Station Depot was built in 1915 by J & H McLaren and was scrapped in 1938. Aveling & Porter were by far the most common, but several traction-engine manufacturers endeavoured to get into the railway shunting-engine market in similar manner and their products appear to have been particularly popular in the south-east.

An Aveling & Porter locomotive from Kent was preserved on the Bluebell Railway, and may still be there, whilst another dating from 1872 that worked on the Wotton Tramway is at the London Transport Museum.

I would refer Mr Leonard to the Industrial Railway Society's excellent publications for further details of these interesting machines. M. J. MESSENGER

The Gooch Ancestry

Sir, — H. W. Paar asks, in an aside (*Journal*, November 1984, p. 141), whether Sir Daniel Gooch was related to the Gooches of East Anglia, in spite of his birth-place being at Bedlington, Northumberland. The answer is: yes, he was. His grandfather John Gooch 'of Beccles, Suffolk, yeoman' was born at Ringsfield near Beccles on 11 August 1746. He must have migrated early to Northumberland, where he married Barbara, daughter of Michael Longridge of Newburn-on-Tyne. John Gooch, the sixth child of this marriage, was born on 17 March 1783 and was married to Anna, daughter of Thomas Longridge of Gateshead in 1805. John and Anna Gooch were the parents of Thomas Longridge born 1808, John Viret, born 1812, Daniel, born 1816, George Henry, born 1820, and William Frederick Gooch, born 1825, all of them railway or civil engineers.

These particulars appear in a table, Pedigree III, included in a privately-printed work, *Genealogical Notes of the Kindred Families of Longridge, Fletcher, and Hawks*, collected and arranged by Robert Edmond Chester Waters, of the Inner Temple, undated but *circa* 1872. (The village of Ringsfield is there misprinted 'Kingsfield'.)

Daniel Gooch was proud of his descent in the female line, with a hope that it might be traced back to Alfred the Great; but though he was aware of the Suffolk connection he left the tracing of it 'until he had a little time' — this was written in 1867, but he did nothing more about it (*Sir Daniel Gooch: Memoirs and Diary*, ed. R. B. Wilson, David & Charles, 1972, p. 3). His elder brother Thomas Longridge Gooch, in his MS memoir of his life now in the library of the Institution of Civil Engineers, briefly referred to his Longridge descent but not to his paternal grandfather. I have mentioned the facts given above about the Gooch family in a paper about T. L. Gooch's career which is in course of printing for the *Transactions of the Newcomen Society*.

MICHAEL ROBBINS

Sir, — According to *Burke's Peerage & Baronetage* Sir Daniel Gooch (1816–1889), 1st Baronet of Clewer Park, was son of John Gooch (1783–1833) of Bedlington, Northumberland, and grandson of John Gooch (1746–1818) of Beccles, Suffolk.

Sir Edward Gooch (died 1856), 6th Baronet of Benacre, was descended from Sir Thomas Gooch (died 1754), 2nd Baronet (Bishop successively of Bristol, Norwich, and Ely), who was a brother of Sir William Gooch (1681–1751), 1st Baronet (Lieutenant Governor of Virginia). Both brothers were sons of Thomas Gooch (died 1688) of Yarmouth, Norfolk, and descended from Peter Gooch (died 1558) of St Margaret Ilketshall, Suffolk.

It is possible therefore that both families share a common Suffolk ancestry in the sixteenth or seventeenth centuries. H. J. VINCENT

Single-track railways

Sir, — Professor White's talk on the Liverpool & Manchester Railway (London, 7 November 1983) led to a lively discussion on several points of interest and importance. One observation concerned the incidence of single-track railways, bearing in mind that the L&M and the major trunk routes which rapidly followed it were provided with two tracks, and that such long single lines as the Cambrian, the M&GN and the rural Scottish lines belonged to a considerably later period. J. G. Cox, in his book *Castleman's Corkscrew; The Southampton and Dorchester Railway, 1844–1848*, records that this line was opened on 1 June 1847; it was some 62 miles long, of which only the first four were double. Captain Coddington, the Board of Trade Inspector, noted: 'This railway is, I believe, the longest which has ever been constructed in England with a single track.' Leaving out of account short branch lines and mineral or private lines, I wonder if any single-track main- or cross-country line preceded the Dorchester line, and when the next such line was constructed. The book, by the way, was bought at Swanage station in September 1983 for its original 1975 price of 70 p. It is an excellent work, combining the triple virtues of subject interest, good research, and high literary quality. HARRY PAAR

Early River Navigations & Mill Sites

Sir, — I have read Michael Lewis's review article on Roman navigations with much interest. He discusses Raymond Selkirk's beliefs that the Romans used many smaller rivers for navigation, complete with weirs and even pound locks for the purpose.

On rivers in general, water mills are, of course, frequently encountered, and at the risk of drawing a large red herring across the trail I should like to take the study a stage further, by suggesting a connection between mills and river navigations, which it appears has not been considered before. The association of one with the other was often uneasy, since locks tend to starve mills of water. One solution, attempted in the 1750s on the Stroudwater river, involved transshipment of cargoes at every mill, albeit at considerable delay and expense.

Such problems were inevitable with any river previously harnessed for the supply of power. But if we suppose that the river was made navigable *before* the construction of mills, some intriguing deductions may be drawn. The channel would be impounded at regular intervals, with perhaps deepening by excavation below each weir and embanking the sides above, in order to provide sufficient depth at all points. The difference in level between adjacent stretches, depending on terrain, might be anything up to 6 or 7 feet. If, instead of transshipment, pound locks were used, these would be built into or alongside the weirs. All this, of course, is common knowledge. But now imagine that such a navigation falls derelict and becomes abandoned and forgotten, perhaps for centuries. Then arises a need for mills. A heaven-sent opportunity thus presents itself, not only to site them at these ancient weirs, but in the case of a pound lock, *actually to put the wheel within its walls*. Whether or not the adaptation of any such chambers took place, it would explain what has often puzzled me, namely, how mills are often regularly spaced to gain maximum usage of power; something that implies a conscious and not chance disposition of sites. If old navigation weirs were in fact chosen, maximizing would follow automatically.

If correct, this hypothesis suggests the possibility of navigations extending back into antiquity on many more hitherto-unsuspected streams and rivers, with the

physical evidence largely disguised by later developments. At all events, a close scrutiny of likely mill sites might provide some very illuminating evidence.

D. E. BICK

Sharp Curves

Sir, — Having enjoyed the correspondence on the great ‘staggered platforms’ question, I wonder whether any of our members can explain another puzzling factor in the design of early railways such as the London & Birmingham and the Great Western. Why were they not built with sharper curves? Writings about early main-line railways frequently refer to their easy gradients necessitated by the low tractive force of early locomotives, but why also the easy curves? Curvature can be compensated for by superelevation and, in any case, at the modest speeds and weights of early trains centrifugal forces would have been quite small. Similarly, friction between rail and wheel can hardly have been a factor, given the short wheel-base of the vehicles used, the existence of a lot of other friction in primitive wheel bearings, and, except on the Great Western, primitive track comprising short lengths of cast iron rail.

Cursory examination of the route of the London & Birmingham Railway, for **example**, suggests that, if tighter curves (no more severe than those tolerated soon after) had been adopted, the tunnels at Berkhamsted, Linslade, and Stowe Hill would have been unnecessary. Tring Cutting and the large embankment south of Watford could have been much shorter. On the Great Western, the earthworks and bridges in the Thames Valley between Reading and Didcot, and the tunnels between Bath and Bristol might have been unnecessary. Particular choice of route was often dictated by the need to avoid built-up areas and the property of intransigent landowners, but I doubt whether the instances I have mentioned can be attributed to this factor. In the case of the London & Birmingham Railway tunnels mentioned, they are all alongside the Grand Junction Canal, built not all that long before the railway and on an alignment which needed no tunnels at these locations. So why did the early engineers go to so much trouble and expense to avoid curvature? MARTIN BARNES

Weedon Barracks

Sir, — I hope you will be able to publish any new information about the railway/canal bridge(s) at the Weedon Barracks that comes to light as a result of Mr Jordan’s letter in the November 1984 issue of the *Journal*, but I fear that he seems to be creating unnecessary confusion.

He quotes two references: one dated 1882 refers to the point where a section of the main railway line had to be removed bodily by unbolting fish-plates, etc. whenever a barge entered or left the depot, while the other dated 1888 refers to the same cumbersome arrangement and also to a drawbridge, still in existence in 1888 but only used by goods shunting engines. This clearly refers to *two* places where a railway line crossed the canal arm, and it is difficult to see how any alternative interpretation of the references is possible. To some extent, therefore, Mr Jordan has answered his own letter!

When I visited the depot in July 1983 in connection with an article I was writing, I was not surprised to find no sign of the primitive arrangements that were formerly used to breach the main railway line for the passage of boats. The canal has not been used for transport since about 1920, and the arm has been infilled between the mainline railway and the depot entrance, where it passed through a gatehouse, still complete with working portcullis at the time of my visit. I found that a swing bridge (of which I have an earlier photograph) that carried a public road across the arm just outside the main entrance had been removed.

Within the depot there used to be an extensive railway network on both sides of the canal arm, but mainly on the north. By 1983 most of this had been removed or was invisible under tarmac, etc., but the layout was shown on plans still held on site at that time, and there were also constructional drawings of the bascule bridge which still crossed the canal within the depot. It is my recollection, apparently but indistinctly confirmed by a photograph which I took (see *Canal and Riverboat*, May 1984, p49) that this bridge had railway lines on it and was therefore the one that linked sidings on opposite side of the canal arm, although no connection at all is shown on a plan dated 5 October 1915 which I was able to copy, even though the railway system was well used at that time and an extension was planned on the northern side.

Since my visit, the Government's Property Services Agency has put the property on the market and it has been sold to Kentish Homes Ltd, largely for development as office accommodation. The site is of considerable historical interest for a variety of reasons, and it is therefore a little disturbing to hear concern expressed that even listed buildings on the site might not be safe, and could follow the fate of Weedon's Royal Pavilion which was demolished about 12 years ago despite its listed status. Any member of the Society who lives near Weedon might like to keep an eye on this site to ensure that the planned development takes place and that listed buildings are not allowed to become derelict and vandalised in order to provide an excuse for demolition to make way for other less desirable development. STANLEY A. HOLLAND

Research Materials: The Mowat Photographic Collection

Sir, — The late Charles Mowat took about 1500 photographs of railway scenes between 1924 and 1969. He concentrated on smaller and medium sized stations, and branch lines, and so recorded long-gone scenes of particular interest to the railway modeller and historian, as well as to the general railway enthusiast. The GWR is well represented particularly in Wales, but Professor Mowat visited almost every part of Great Britain in the course of his photographic tours. There are particularly interesting selections from the Bristol area, the Bishops Castle Railway, Edinburgh, Leith and Lowland Scotland, and North Wales, and good coverage e.g. of the Manchester area, East Anglia, Lincolnshire, Gloucestershire, Oxfordshire, and the Home Counties.

The collection passed into the archives of the late Charles Clinker, and thence into the care of Brunel University Library. However, it is still available to the general railway public, and prints or black-and-white transparencies from the original negatives can be obtained. If you wish to see what there is in the collection, please send 50p for a catalogue (post free), or 80p for a catalogue and a sample postcard size print, to: W. R. Burton, 3 Fairway, Clifton, York YO3 6QA. W. R. BURTON

Metric equivalents

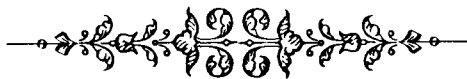
Sir, — I agree entirely with Mr L. Durham's letter in the *Journal* for March 1985 (p. 181).

Following the Metric Act of 1897 metrics were taught in most British schools after all British weights and measures, including apothecaries' measures, rods, poles and perches, square poles and perches, and so forth.

This all changed in 1965 when children were taught almost entirely in metric and know little or nothing of yards, feet, and inches. This is why young lorry drivers as well as continental drivers sometimes collide with low bridges, because the government refuses to show clearances in metric.

Nearly all members of the British Commonwealth are virtually entirely metric; this is another reason why I consider metric equivalents should always be given.

Railways were always measured in miles, chains, and links, but I understand some new lines are built to metric measurements. H. V. BORLEY



Miscellany

The following letter appeared in the *Braintree & Bocking Advertiser* for 30 November 1859:

Perils of Railway Travelling

Sir, — Some months ago I was seeking a second-class carriage at the Shoreditch terminus. A pretty young lady attracted my notice by politely informing me that there was room in her compartment, politely pushing open the door at the time. As soon as I was seated opposite her she pulled to the door, as much as to say there was enough. We started, I very ungallantly becoming engrossed in my newspaper, she silent, having no-one in the carriage but myself to speak to. I felt the carriage very narrow and feared I was crowding her, and I moved back as far as I could. In a few moments I still felt her dress against me, and soon was really crowded, being pressed by her. Now, I must confess with shame that, being a young man, I felt a little vanity at her attentions, and I yielded to temptation so far as not to move from her. In half an hour a gentleman got in, which, from the lady's face, was not an agreeable thing; she looked vexed. However, our silly conduct proceeded, she throughout taking the lead. At length the gentleman observed us, and my companion, blushing crimson at being discovered, very wickedly drew herself away from me, and flying to the opposite side said I had insulted her. When she found, moreover, that she was known to the thirdcomer,

she became very indignant, and screamed for the train to stop; that she had been most grievously assaulted etcetera. I cannot tell you, sir, my confusion. I durst not charge her with being the first to commence — how cowardly it would have looked! — and upon reaching the terminus her brother was informed — not by the lady, but by the gentleman — how infamously I had insulted her. He flew at me like a tiger, thinking I had really ruined his sister; he smashed my new hat over my eyes, and being much bigger than myself, and assisted by the other passenger, gave me such an awful punishment, that I shall never forget it. They were then going to give me into custody; but on my appealing to her, she said that she would gladly have given me into the charge of the police, but was too bashful to appear in a court of justice to prosecute; and so I got off.

No name was printed at the bottom of the letter. *(From Adrian Gray).*

The 'excursion-train' — an absolutely new departure in the history of travel — was still a novelty on the Wessex line and probably everywhere. Crowds of people had flocked to all the stations on the way up to witness the unwonted sight of so long a train's passage, even where they did not take advantage of the opportunity it offered. The seats for the humbler class of travellers . . . were open trucks without any protection whatever from the wind and rain; and damp weather having set in with the afternoon, the unfortunate occupants of these vehicles were, on the train drawing up at the London terminus, found to be in a pitiable condition from their long journey; blue-faced, stiff-necked, sneezing, rain-beaten, chilled to the marrow, many of the men being hatless; in fact they resembled people who had been out all night in an open boat in a rough sea, rather than inland excursionists for pleasure. The women had in some degree protected themselves by turning up the skirts of their gowns over their heads, but as by this arrangement they were additionally exposed about the hips, they were all more or less in a sorry plight.

(From Thomas Hardy's short story 'The Fiddler of the Reels' written in 1893 and collected in *Life's Little Ironies* (1894) but set in the Great Exhibition year of 1851 and probably drawing on Hardy's own memories of early rail travel).

(From Philip L. Scowcroft).

On reaching Barnstaple one day last week the driver of a mail train from Lynton was surprised to find that the passenger coaches, which also carried the mails, were missing. They had been uncoupled during shunting at Chelfham, and the driver had restarted without them!

(This refers to the Lynton and Barnstaple Rly.)

Tiverton Gazette, January 31st 1922.

Mr Fred Taylor, a railway official, who has just retired at Holsworthy, relates that he was once on duty when an absent minded clergyman arrived to see his wife off by train. He (the porter) assisted the lady with her luggage and as the train was about to depart, the clergyman, to show his appreciation, gave a kiss to the Porter, and a 'tip' to his wife.

(This relates to the L&SW Rly line from Okehampton to Bude.)

Tiverton Gazette, January 10th 1922 (From Alan P. Voce).

Correction

March *Journal*, page 158.

In line 19 the word *not* was accidentally omitted. Correct the line to read: 'the winter supplies at Crofton were not sufficient to refill the canal for the following summer.'



All copy for the November *Journal* should be with the Editor by 5 July 1985 and must conform to the style-sheet published in the November 1981 issue. The top copy should be sent, not a carbon or a photocopy.

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