



Journal
of the
**Railway and Canal
Historical Society**

RAILWAY & CANAL HISTORICAL SOCIETY

A company (No 922300) limited by guarantee and registered in England
as a charity (No 256047)

Local Group Secretaries

<i>London</i>	G. C. Bird, 44 Ravensmede Way, London W4 1TF
<i>North West</i>	G. Leach, 5 Tabley Close, Knutsford, Cheshire WA16 0NP
<i>North East</i>	D. B. Slater, 8 Granger Avenue, Acomb, York YO2 5LF
<i>West Midlands</i>	R. M. Shill, 100 Frederick Road, Stechford, Birmingham B33 8AE
<i>East Midlands (acting)</i>	B M Dobbie, 72 Moor Lane, Bramcote, Beeston, Nottingham NG9 3FH
<i>South West (acting)</i>	A. Richardson, 25 Boscombe Crescent, Downend, Bristol BS16 6GR

Co-ordinators of Special Interest Groups

<i>Tramroads</i>	P. R. Reynolds, 87 Gabalfa Road, Sketty, Swansea SA2 8ND
<i>Road Transport</i>	P. L. Scowcroft, 8 Rowan Mount, Doncaster, South Yorkshire DN2 5PJ
<i>Waterways History Research (including Docks & Shipping)</i>	D. I. Foster, 10 Mill Cottages, Distington, Workington CA14 5SR
<i>Railway Chronology</i>	D. R. Steggles, 8 Buckerell Avenue, Exeter EX2 4RA
<i>Air Transport Group</i>	N. Wood, 'The Poplars', Barnstone Road, Langar, Nottingham NG13 9HH

All copy for the July 2000 Journal should be with the Editor by 17 March 2000 and must conform to the Society's style-sheet. The Editor will supply potential contributors with a copy on receipt of a 8½" x 6" stamped and addressed envelope.

Original typescripts and other 'copy', maps, diagrams and photos, of published articles will not be returned unless requested by Contributors.

Whilst copyright in the Journal as a whole is vested in the Railway & Canal Historical Society, copyright in the individual articles belongs to their respective authors, and no article may be reproduced in whole or in part without the permission in writing of author and publisher. Views expressed in any article, review, or item of correspondence in the Journal of the Railway & Canal Historical Society are not necessarily those of the Editor or of the Society.

Published by the Railway & Canal Historical Society (Registered Office: 77 Main Street, Cross Hills, via Keighley, West Yorkshire BD20 8PH).

The Society is registered as a charity (no 256047).

THE RAILWAY & CANAL HISTORICAL SOCIETY

Founded 1954 Incorporated 1967

PRESIDENT: Dr S L Bragg

VICE-PRESIDENTS: Prof. T. C. Barker, Dr A. L. Barnett, G. J. Biddle, G. A. Boyes
Rex Christiansen, J. V. Gough, W. P. M. Reading, K. P. Seaward

CHAIRMAN: (Managing Committee): Roger Davies

HON. SECRETARY: M. Searle, 3 West Court, West Street, Oxford OX8 0NP

HON. TREASURER: G. H. Wild, 141 Allestree Lane, Allestree, Derby DE22 2PG

MEMBERSHIP SECRETARY: R. J. Taylor, 16 Priory Court, Berkhamsted, Hertfordshire HP4 2PD

HON. EDITOR: Dr J. C. Cutler, 24 Coryton Close, Dawlish, Devon EX7 9DT

BOOK REVIEWS EDITOR: Dr M. Barnes, Cornbrash House, Kirtlington, Oxfordshire OX5 3HF.
(To whom all items for review should be sent.)

DISTRIBUTION OFFICER: Mrs M. Garton, 49 Riverdale Road, Attenborough, Beeston, Nottingham NG9 5HU
(To whom notification of non-delivery or defective copies of the Journal should be sent.)

JOURNAL OF THE RAILWAY & CANAL HISTORICAL SOCIETY

VOLUME 33 Pt. 4

No. 175

MARCH 2000

Contents

THE CLINKER LECTURE: RAIL REPLACEMENT BUS SERVICES <i>J. Hibbs</i>	198
DANGER – CHRONOLOGERS AT WORK <i>P. Kay</i>	209
THOMAS HANKIN – WARE TRADER <i>K. R. Fairclough</i>	217
THE SONNING CUTTING INCIDENT <i>J. Wells</i>	228
DEATHS OF THE ENGINEERS <i>J. Rapley</i>	238
WATKIN, HUISE AND THE LEAMINGTON BRANCH <i>D. Hodgkins</i>	242
THE RCHS PHOTOGRAPHIC COLLECTION	252
COACH SERVICES IN CHESHIRE, 1834 <i>A. Brackenbury</i>	254
THE LAST TRAIN FROM PARIS <i>H. Compton</i>	258
THE WELSH HARP RESERVOIR <i>A. H. Faulkner</i>	262
REQUEST FOR INFORMATION	272
CORRESPONDENCE	273
BOOK REVIEWS	276

THE CLINKER MEMORIAL LECTURE 1999

Some rail replacement bus services in the Eastern Region 1929 – 1969

BY JOHN HIBBS

Introduction

After working there in the summer vacations of 1948 and 1949 I joined the Cambridge bus and coach company Premier Travel Ltd in 1950 as personal assistant to Mr Arthur Lainson, the Managing Director. In 1952 I was awarded the Rees Jeffreys Studentship at the London School of Economics, where my research on the economic consequences of the Road Traffic Act 1930 was supervised by the late Gilbert Ponsonby. Having completed my MSc(Econ) I went into partnership with the late A B Davidson to acquire the much smaller Corona Coaches Ltd of Sudbury, Suffolk. In 1961 I joined the headquarters team of the Eastern Region as Traffic Survey Officer, leaving in 1967 as Market Research Officer, to take up a post at the City of London College (now London Guildhall University). My background thus covers the two industries, but, if I may paraphrase Winston Churchill's remark, I still consider myself a "former railway person". These personal notes are meant to explain the nature of the insights that I shall be presenting to you in this lecture.

The passage of the Railways (Road Services) Acts of 1928 was followed by a stand-off between the London & North Eastern and Thomas Tilling Ltd over the purchase of the United Automobile Company, which Sir Frederick Heaton, the Chairman of Tillings, won hands-down. (I describe the course of this in my book, *The History of British Bus Services*.) As a result the four main lines invested substantial sums in most of the territorial companies throughout Great Britain, much of it, in W J Crosland-Taylor's experience, being wasted by the purchase of unsuitable competitors.

The key word of the day was co-ordination (just as today's is integration), which was the objective of the Royal Commission on Transport. So it is not surprising to find the British Railways Press Bureau in 1930 issuing a broadsheet with the title Co-ordinating Rail and Road Travel: How the Public will benefit. I will set out the expected benefits as they appeared in this document, and you can reach your own conclusions as to how far they were achieved:

- 1 The interavailability of return tickets by bus or rail.
- 2 Service arrangements to facilitate exchange of passengers between railway and road services
- 3 Combination of railway and omnibus timetable matter, and adjustment of services where possible to improve connections.
- 4 Employment of omnibus transport as extension of railway journeys for pleasure and other purposes.
- 5 Amplification of travel facilities by use of both arms of transport in combined tours.

Some of these benefits Mr Prescott is still seeking: some have recently appeared in the wake of privatisation. But the ensuing sixty years saw little progress, and the ownership of both railways and bus companies by the British Transport Commission after 1947 made no difference. Indeed, in the course of my work at Liverpool Street I came across

a document, dated about 1949, over the names of the then Chief Regional Officer and the Chairmen of the Eastern National and Eastern Counties bus companies (both BTC-owned) which recorded their agreement that co-ordination would be sufficiently provided for if bus services were routed as near as possible to railway stations; no co-ordination of timetables was to be required. This, to my mind, forms the subtext of much of the story I have to tell in this lecture.

Railway bus services, as you will know, commenced at an early date. In the area I cover, the Great Eastern had used its buses to avoid the cost of building branch lines from Colchester to West Mersea and from Ipswich to Shotley. But the '1929 settlement' transferred the railway fleets to Tilling & British companies, and the opportunity for the railway companies to progressively move out of the 'thinner' services was lost – so that in the 1960s Dr Beeching had to do it in far too much hurry. One example of what might have been done was the arrangement between the LNER and United Automobile whereby the smaller intermediate stations between York and Scarborough were closed, and bus services provided instead. So far as I know the experiment was not repeated. Following my own experience of the wide cultural gap between railway and bus company managers, I conclude that 'the culture of the rail' was largely responsible.

In one area, that of express coach services, confrontation entirely replaced co-ordination. After the passing of the Road Traffic Act 1930 the railway companies took every opportunity to object to applications for road service licences for long-distance express coach services. In one Traffic Court case, I believe in Scotland, Counsel for the railway invited the Traffic Commissioners to close down all such services, in the interest of his clients. Such a decision was successfully resisted, but the Commissioners over the whole country applied conditions to most such licences, limiting the number of vehicles that might be operated on any one timing. Ironically, several BTC-owned bus companies in the 1950s succeeded in having these protective conditions removed, on the argument that they were now 'under the same roof' as their railway competitors.

SOME PERSONAL EXPERIENCES

Railway opposition to coach operators through the Traffic Courts continued into the post-war years unchanged. While I was with Premier Travel in the early 1950s we had constantly to fight for additional duplication on the licence for our Birmingham, Coventry, Leicester, Northampton, Bedford, St Neots, Cambridge, Haverhill, Halstead, Colchester, Clacton service (Service 5), with its heavy demand for travel to Butlins Holiday Camp. Actually, we had a Joint Co-ordinating Committee with the Railway Executive, with representatives from each of the Districts along the route (which is why I have listed all the timing points). These would be from the Eastern and London Midland Regions, but because we served Birmingham the Western had to be represented – for what purpose I know not. But still, the meetings made a nice day out, whether in Birmingham or at our offices in Cambridge, and they served the purpose of reaching an agreement about what increased duplication we could apply for that would not attract an objection, thereby saving the expense of a Traffic Court hearing. The Tilling Group (nationalised) bus companies resented the existence of the committee, though the Midland 'Red' had no worries, having no chance of getting a licence for Clacton themselves.

Rather different was the case of our Service 38 (roughly Haverhill, Saffron Walden, London), which we had inherited from Burgoyne's *Grey Pullman* company of Haverhill.

This was stage carriage as far as Saffron Walden, with an express licence that carried on to Kings Cross. Licences had to be renewed every five years, and objections to renewals were extremely rare. However, in about 1952 the Eastern Region lodged an objection to the renewal of the express licence, claiming that it should be truncated and run as a feeder to the trains at Audley End station. So we had to produce witnesses to speak for the 'public need', which was not difficult in view of the popularity of the service. I have a happy memory of the Chairman of the Parish Council at Hempstead, a village en route. A local farmer, with a good Essex accent, he opened his evidence by saying, 'I represent the 'Empstead Parish Council, the 'Empstead Women's Institute, the 'Empstead Pig Club and the in'abitants o' 'Empstead'. He and the rest of the witnesses provided sufficient evidence for the learned Commissioners to refuse to uphold the objection.

Later on, when I was running Corona Coaches, I applied to extend a morning journey from Clare to Sudbury station, to connect with an early train for London. I argued that the market here was not the same as that for my much slower (though cheaper) coach service, which in any case would not get them to London until later. Much to my surprise there came a form of objection from the Eastern Counties Omnibus Company (the same that had agreed that there was no need to run bus services to railway stations). They had no *locus* whatsoever, but a bit of investigation told me that they had done it at the request of Liverpool Street (who presumably did not *want* any of the extra traffic I was setting out to bring them). No doubt I could have succeeded in making them look foolish before the Traffic Commissioners, but it would have been expensive and time-consuming, so I had a word with Mr Postle, our popular Stationmaster, and he spoke to someone up the line and the objection was withdrawn. But I still had to get permission to use the station forecourt.

Much later again, one of my early consultancy contracts was to survey public transport in the Rural District of South Molton, well into Western Region territory for an ex-Eastern man like me, but never mind. Terraneau's Coaches ran the rail replacement service between South Molton and Dulverton (see Map 1) with a subvention from British Railways. The people of Molland were asking for it to be diverted to serve their village, which lies up a hill from the main road. I calculated (with my Costing Service training – Eastern Region, of course) that the short diversion would have an escapable cost of five and a half (old) pence per mile, and that two additional return passengers per week would justify the diversion; a bit of market research indicated a significantly larger demand. Sadly, the Western Region decreed that full average cost per mile should be applied to the diversion, so Molland did not get its service, and the railway lost the chance of reducing the subvention.

In fairness, I must add that standard practice everywhere was exact station-to-station replacement (we shall examine an exception later), and that in this way the replacement programme was generally inefficient on any cost/revenue calculation.

LINE CLOSURES AND SERVICE WITHDRAWALS IN EAST ANGLIA AND ESSEX

This is a list of the developments I propose to consider. For the dates I am indebted to Mr D I Gordon's *Regional History of the Railways of Great Britain – Volume V, The Eastern Counties* (David & Charles).

Southwold Railway – closed 12 April 1929

Ely – St Ives – passenger service withdrawn 3 February 1931

Hadleigh (Suffolk) branch – passenger service withdrawn 29 February 1932

Kelvedon and Tollesbury – passenger service withdrawn 7 May 1951

Mid-Suffolk Light Railway (Haughley – Laxfield) – closed 28 July 1952

Elsenham and Thaxted – passenger service withdrawn 15 September 1952

Wivenhoe and Brightlingsea – closed 31 January-7 December 1953 & 15 June 1964

Midland and Great Northern – most services withdrawn and sundry sections closed,
2 March 1959

Bury St Edmunds-Long Melford – passenger service withdrawn 10 April 1961

Colne Valley and Halstead – passenger service withdrawn 1 January 1962

Cambridge – Soham – Mildenhall – passenger service withdrawn 16 June 1962

Audley End and Bartlow – closed 28 December 1964

Sudbury – Shelford (Stour Valley) – closed 6 March 1967

This of course does not pretend to be in any way comprehensive, since I shall consider only those developments of which I had experience. As I shall have occasion to remark again, there is ample opportunity here for further research.

Many of the branch lines in Norfolk and Suffolk were known as “farmer’s railways”, built mainly for freight, much of which was decimated by the agricultural depression of the late 19th century. From the mid 1920s the motor lorry offered faster carriage to the London markets than the pick-up train, as recorded in Arthur Randell’s book, *Fenland Railwayman* (Routledge & Kegan Paul, 1968). The depression of the early 1930s increased the problem. Rural population was falling throughout the period, so that there was less and less traffic for rail and road passenger transport to share, and the buses went closer to people’s homes, and usually closer to the centre of the towns as well.

Few if any of the early closures needed or were given replacement bus services, and there were no regulatory requirements for them. The first line to go, the Southwold Railway, simply succumbed to a more direct bus service, though it was exceptional in being narrow-gauge. Less than two years later passenger services were withdrawn on the Ely – St Ives line and the Eastern Counties Omnibus Company put on a bus service at the request of the LNER. The final pre-war closure was the Hadleigh branch, which suffered from the disadvantage that the junction with the main line at Bentley faced the down lines, preventing a direct train service to Ipswich, which was served after 1919 by the bus services of the Eastern Counties Road Car Company and Skinners. But it must have been the commencement by Corona Coaches in 1930 of a feeder coach service to Sudbury, with connections and through workings to London, that led to the withdrawal of the passenger service on the branch two years later.

The post-war years

The Eastern Region of the Railway Executive started its closure process ten years before the arrival of Dr Beeching, and had indeed completed the greater part of it before some other Regions had started seriously to look at the problem of too many empty trains. The London Midland Region commenced closure proceedings for the Great Central at about the time Liverpool Street started them for the Midland & Great Northern, but the M&GN had been largely closed some seven years before completion of the Great Central process, since in the meantime line closures had become a highly political issue.

The first post-war line to receive attention was the delightfully archaic Kelvedon &

Tollesbury Light Railway, which had once extended to a pier on the Blackwater estuary which had been expected to have been used by ocean liners. At gated crossings the train would stop for the fireman to open the gates, and then stop again for the guard to close them. From 1930 Osborne's of Tollesbury had run buses that served every place along the line, and extended to Witham, while Tollesbury and Tiptree had had direct services to both Maldon and Colchester for some years, so it is hardly surprising that no replacement service was required. Then as now, people prefer a direct journey with no need to change, and the buses made trips to Colchester both quicker and more convenient; the trains did not even work into the main line platforms at Kelvedon.

The Mid-Suffolk Light Railway, essentially a farmers' line, between Haughley Junction and Laxfield, suffered from the same problem of lying on the wrong axis for the traffic, as did the Elsenham & Thaxted, which we shall be coming to next. Memorably, however, the Mid-Suffolk survives in John Hadfield's delightful novel *Love on a Branch Line*, and in the recent excellent film based on it. The passenger demand was entirely north-south, centred upon Ipswich, which doomed the line so soon as direct buses became available. What little demand there might be for Stowmarket could be served by the former carriers' market-day services, so the mere facts of geography caused its demise, without direct replacement.

The Elsenham & Thaxted Light Railway was the first of the lines I have selected to require a subsidised bus service when it closed later in the same year. For me it was perhaps the most delightful of the branch lines – I remember riding on it one summer afternoon, alone in the carriage, with my legs dangling out of the door at the back of the train, which stood open, watching the fields and farms as we passed by, with all of six passengers. The line terminated at the top of a hill a mile and a half out of Thaxted but it was much loved if little used, and the last train was packed out. It was met by the town band. The problem here was that the people of Thaxted looked to Saffron Walden and Great Dunmow, and they had a direct bus service operated by the *Viceroy* company connecting those towns. So it came as a surprise to most of us when the Eastern National company applied for a licence to run between Thaxted and Elsenham, connecting with the trains – and not for a service through to Bishops Cleeve, which in traffic terms would have appeared more logical. But this is the first strictly like-for-like placement that we have met with (it did not last all that long).

I turn now to the branch from Wivenhoe to Brightlingsea, which is the one I know best, having grown up in that northernmost of the Cinque Ports. One of the earliest examples of 'bus replacement', unintentional and incomplete but not I fear untypical, took place here in 1919. A W Berry & Son, the local bus company, had started a service to Colchester, with a stand outside the railway station, and when the 1919 strike closed the service, one of Mr Berry's sons, who was driving, found people coming out of the station to get on his bus. He phoned his father at the Port Lane depot in Colchester and another bus was sent down, and local tradition had it that many of the passengers never went by train again.

The railway formed the sea wall, behind the salt marsh, over much of its length, and the branch was expensive because of the swing bridge across the creek at Alresford, which allowed the Thames barges to reach the ropeway bringing gravel from pits on the Wivenhoe side, and Thorington mill at the head of the creek. (There is a picture of sand-loading at Alresford in Hervey Benham's book *Down Tops*!, Harrap, 1951 and 1971, and also one of barges at the mill). But closure first came on 31 January 1953 when the great

storm that caused chaos and loss of life right down to Harwich washed away three miles of the trackbed. The Eastern National company provided a replacement service between Brightlingsea and Wivenhoe, but local pressure led to the line being reopened ten months later.

Closure, though, was inevitable, and took place on 15 June 1964. Now, the obvious replacement service would have been from Brightlingsea to Thorington, some four miles distant, to which the Great Eastern had run its own buses when the line was cut similarly in 1904. But the station at Thorington had been closed on 4 November 1957 (despite the fact that no buses ran within a mile of it), so the 'permanent' replacement service ran to Colchester North Station, until, some time later, it was merged with the established Brightlingsea – Colchester bus service (no doubt when the subvention was no longer available)

In the meantime there had been two further closures; The Colne Valley & Halstead and the line from Cambridge by way of Soham to Mildenhall. The Colne Valley, which had remained independent until 1923, and was famous for never having had a fatal accident and never having paid a dividend, extended from Chappel & Wakes Colne, on what is now the Sudbury branch, to Haverhill, where it had its own terminus as well as working trains into the GER station. This closure was the first in my experience to involve a contested application for the necessary road service licence, for the section north of Halstead. In the event, the replacement service did not last long.

The Mildenhall branch, another farmers' railway, was never a success. Gordon reports an adverse operating ratio of eight to one in 1958. A belated attempt to improve traffic by operating trains from the Mildenhall – Soham section through to Ely and Newmarket produced no improvement, so that closure became inevitable. But here we meet a peculiarity of the process which gives me concern when I regard it still.

The replacement bus service consisted of two journeys each way on weekdays, provided by the Eastern Counties company. While no replacement services to my knowledge ever appeared in Eastern Region publicity, this one was included in the bus company's timetable with the London connections shown at Cambridge. A few years later the railway timetable was re-scheduled, but no-one at Liverpool Street seems to have thought of notifying the company, whose publicity continued to show the former times, now of no value to the travelling public. Hardly surprisingly, the service did not last much longer.

The Midland and Great Northern (M&GN) closure, along with the Great Yarmouth – North Walsham line of the Norfolk & Suffolk Joint Committee and the remaining section of the North Walsham – Cromer line, was the first high profile exercise of the Eastern Region. It had been completed two years before I 'joined the service' (as we used to say), so I have no knowledge of the process whereby the Eastern Counties company got lumbered with a complex collection of replacement services, much of which was thinned out pretty drastically when the subvention came to an end. But that the closure was justified, however much emotion was involved, cannot be doubted; each of the M&GN services was paralleled, point-to-point, by those of the Great Eastern, and these were better linked to the major attraction of Liverpool Street. Through workings from the Midlands to the holiday camps remained possible.

The problem facing the bus company arose from geography. For rural and inter-urban bus services the ideal journey time from one town to the next is fifty minutes; with a five-minute layover at each end, an hourly or half-hourly schedule is efficient to run, as well

as being good for traffic. Anything longer is expensive, so irregular headways become inescapable. And most towns in Norfolk (and Suffolk) tend to require that longer journey time. This, combined with the railway managers' requirement that buses served every station, produced a set of services that busmen regarded with horror, and so, by and large, did passengers too. But the volume of protest was such that replacement on this scale was part of the price the Eastern Region had to pay for the remarkable pace of the closure proceedings.

I turn now to an example of sensible planning, when the Audley End – Saffron Walden – Bartlow line came up for closure; the sensible planning, to be sure, coming not from the railway management but from the bus company. Map 2 sets the scene. In this case neither of the two Tilling companies, Eastern Counties and Eastern National, stood any chance of getting a licence granted, as the Colne Valley experience had made plain, so negotiations were opened with Premier Travel, and with Viceroy Coaches of Saffron Walden (who had for many years operated a Sunday evening service between Saffron Walden and Audley End, since no trains ran on the Sabbath Day).

The railway managers assumed that the replacement would be, as usual, point-to-point; unaware, no doubt, that Bartlow village consists of half a dozen houses, a church, a pub and a farm, and some prehistoric tumuli. I have little doubt that if either of the Tilling companies had had the *locus* to provide the service, that is what would have happened. Whether Haverhill passengers would have enjoyed changing from train to bus and then back to train again must be questioned. The bus service would surely not have lasted long.

Instead, Premier Travel's managing director, Mr E A Lainson, saw the situation through the eyes of a 'good traffic man' (a competence that seems to have been sadly lacking by then in the two Tilling companies, engaged as they were with 'managed decline'). Having a depot at Haverhill, Premier contracted to operate Service 59 direct, as Map 2 shows, which had the effect of giving Castle Camps a daily bus service for the first time, and of running the length of Ashdon where the railway 'halt' was at the end of a muddy lane. Much of the traffic on this section remained local to Saffron Walden, whence the rail feeder services was strengthened with journeys run by Viceroy Coaches.

But this was not all. Mr Lainson told the Liverpool Street management that he wanted through ticketing between bus and rail; I well remember the horror with which this suggestion was received. Despite all the talk about co ordination, nothing of the sort had happened so far. A compromise was reached, whereby through season tickets were made available, but I suspect these did not long survive the closure of the station at Haverhill, just over two years later. And, as I ascertained, booking clerks at Liverpool Street were not told about the arrangement, nor for that matter about the bus service itself, which of course did not appear in the Eastern Region timetable (the train services did of course appear in the Premier Travel leaflet). Saffron Walden, of course, was just dropped from the tannoy station announcements at Liverpool Street, as so many other places had gone as if they had never existed. So long as I was there I saw to it that the platform inspectors had copies of the Premier Travel leaflet, but then

My final example is the closure of the greater part of the Stour Valley line (no, not the one in the Midlands), just over two years later. This was the section from Shelford Junction, on the Great Eastern main line, to Sudbury, leaving that town as the terminus of a branch from Marks Tey. The Long Melford to Bury St Edmunds service had gone six

years before, and no replacement had been necessary there; Chambers' Colchester – Sudbury- Bury service covered the route on weekdays, while Rule of Boxford ran from Sudbury on Sundays, when Chambers did not run buses (and there had been no trains, anyway).

The Stour Valley was different. At one time it had seen the Birmingham-Clacton Trains that competed with Premier Travel's Service 5 (which I have mentioned above). They took just as long as the coach service, and were made up of non-corridor compartment stock – no wonder we could always get witnesses to tell the Traffic Commissioners that they would rather go by coach. But local people still saw this as a 'vital link', despite steadily falling traffic.

The replacement service ran only between Sudbury and Haverhill, and was awarded to Theobald of Long Melford since neither Eastern Counties nor Eastern National had any *locus*. The Eastern Counties service between Haverhill and Cambridge was no doubt deemed sufficient, but one wonders why no through service was provided; could it have been the thought of an independent running over a combine company's route? Old jealousies last long. As a result, it is doubtful whether the 'vital link' remained, and the through traffic must have disappeared very soon. Once again, the railway management did nothing to encourage it, and Haverhill became yet another town to be dropped from the loudspeakers. It had always been pronounced wrong, anyway.

Actually, a good traffic man might have spotted the potential for a limited-stop coach service between Colchester and Cambridge, calling at the main line stations at each end. Indeed, I contemplated something like it when I was running Corona Coaches. The licensing system would have prevented it, of course, and without the licensing system the rail replacement policy would have been very much more difficult. But, as I see it, the Stour Valley closure is yet another example of the failure of the railway managers to make any effort to retain the traffic they were losing, or to attempt any kind of co-ordination. It's a sad story.

SOME PROFESSIONAL ENGAGEMENTS

1 Thetford to Swaffham This was an exercise that I undertook while I was still at Liverpool Street, and it is not without its humour. Of the Thetford – Swaffham line it was said that it was expected to be closed for forty years before that finally happened, which must have served to weaken demand for the train service. The passenger trains were finally withdrawn on 15 June 1964, and the replacement journeys, run by a small local coach firm, ran almost entirely for schoolchildren. Some time after closure the District Manager at Norwich asked for someone to come down and find out why the subvention was so much higher than had been expected. So they sent me.

The answer was that the operator had convinced himself and his accountant that he was required to provide dedicated vehicles for the service. There were four of them, as I recall, all second-hand but all in very good condition. He was somewhat irate when we told his accountant to stop loading his invoices with the full replacement cost of the buses, but on the train back to London I was moved to reflect upon the skills of small businessmen in Norfolk

2 The Sudbury branch The second of these professional engagements came after I had left the railway and was setting up my own consultancy. One of my first commissions had

been a survey of the Waverley Line in Scotland in 1968, when I was called in by a consortium of local authorities, too late to do much about it. (I did recommend a light rapid transit service between Edinburgh and Hawick, which was a bit ahead of its time).

The following year I was invited by four local authorities to review the proposals for closure of the Marks Tey – Sudbury branch, which I knew so well. The Scottish Region had been helpful in providing me with figures, but this time the Eastern Region (by then based at York) refused to help, so I had to use the data supplied to the Tucc, together with my own insights. I attended the first day of the Tucc hearing at Sudbury, where tempers ran high, and I was threatened with physical violence by some men who identified me as a former railwayman and therefore responsible for the closure of the Stour Valley. It is very hard to reason with strong emotional commitment.

My conclusions were in favour of delaying the closure. Sudbury was to be an 'overspill town', and while I showed that industry had developed in Haverhill despite the loss of its railway, the threat of closure might prejudice further development at Sudbury. The line should be kept open at least until 1975, when the situation should be re-examined. However, if the line were to be closed I recommended a connecting coach (not bus) service to Marks Tey. Finally, I analysed the figures submitted for the cost of keeping the branch open, and showed that they had been seriously inflated. (No doubt that is why York had refused to help).

In the event, my recommendation for delay was accepted, and the branch remains open; long may it continue. Privately, I was assured that my report, which was published, had been well received in the 'corridors of power'. But I have one last regret.

The original station had been close to the town centre, but when the line was extended to Haverhill and Shelford a new station was built, further away – the one that I was later to run a bus service to – and the site of the old station became a goods yard, with turntable access to local factories. This was no longer in use, and so the opportunity was there to extend the branch tracks to the original site. But this was not to be, and the land was sold. I recall only too clearly how impossible it used to be to persuade the Estates and Rating people to look at any constructive use of a closed goods yard; all they intended to do was to sell off the land. But that is just another sad story of British Rail as I knew it.

3 A suggestion ignored My final case study concerns a closure case outside East Anglia: the East Lincolnshire line from Grimsby to Peterborough. Semi-trunk lines like this are much more of a problem than branches and buses generally fail to retain much of the through traffic. The East Suffolk remains open today partly because it was hard to see how to replace the service.

In the case of the East Lincs, however, I came up with a solution which I submitted in a report to the Eastern Region Board. As I have observed, so soon as a passenger service is withdrawn it disappears from the railway's consciousness. Haverhill and Saffron Walden are examples, but there must have been myriads more which were simply dropped from the public address system and the timetable. Such was the gulf between rail and road that I was determined, as a busman, to find a way to overcome it.

This was really quite simple. It was just what we have seen was claimed when the four main line companies obtained statutory power to operate road services in 1929, only to finish up by taking a share in the bus company's profits instead. Why not replace the

trains on the East Lincs line with buses run by (or for) British Rail?

The Transport Act of 1962 had given the railway powers to run buses without a road service licence in replacement of train services. Opinion had it that this was intended only for emergencies, but in my view the powers were seldom (if ever) used in order to avoid conflict, especially with the Tilling Group of state-owned bus companies. But my proposal was designed to get round this, in a very simple way.

What we should do, I said, was to contract with our 'associated' company, Lincolnshire Road Car, for them to provide a number of buses to work the service painted in British Railways livery, with Road Car drivers and British Rail conductors. I reckoned we should need six Leyland Atlanteans, and some of the downstairs seats should be removed to make room for parcels (but not fish). Road Car would be responsible for providing relief vehicles 'on hire' at busy times, and for the peak traffic to and from Skegness, using local coach operators' vehicles if required

Here again I looked for a good traffic route, and not an exact all-stations replacement. By avoiding Firsby, and so a double-run in and out of Skegness, I produced a timetable for a very promising limited-stop service between Grimsby, Louth, Skegness, Boston Spalding and Peterborough, calling at major settlements along the road. I assumed that few people (the occasional enthusiast apart) would travel the whole length of the route, but when I calculated the lapsed time from the middle section, north to Doncaster and south to Kings Cross, by connecting train services, it turned out in each case to be at least as good as the existing train service.

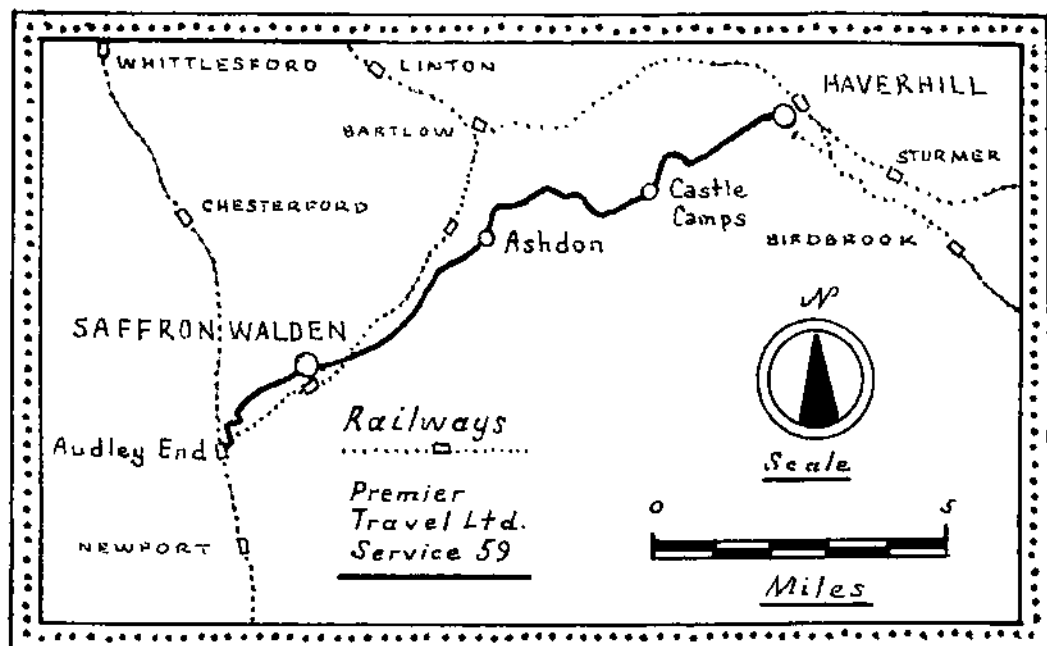
This, I thought, was a very attractive package, but I was not really surprised when it was rejected, without explanation. The idea of buses running as trains was too much to ask; it conflicted with what I have called 'the culture of the rail'. And it should be remembered that, to my knowledge, not one of the bus services I have discussed ever appeared in the Eastern Region timetable book. Sad, isn't it?

CONCLUSIONS

I have chosen these case studies to draw your attention to a problem that worried me during my time 'in the service' and that has continued to do so since. When I joined the Eastern Region team in 1961 I rather expected that colleagues would want to make use of my experience of the bus industry. With very few exceptions, they did not. And to a considerable extent the rail/road attitude was mutual. Between us and our 'associated' bus companies there was a series of Chinese Walls. Indeed, I heard at first hand that D F Dear, the founder of the British Transport Costing Service (along with my boss, A W Tait), offered to look at bus costing for the Tilling Group, but was given the brush-off. That was a shame, because their totally inept costing was to lead to what I have called 'the strange suicide of the British bus industry'.

I believe the problem arose from two factors, only one of which was peculiar to the railways. That one was a sense of the natural superiority of rail transport that is to be found only too widely in the British establishment. H C Johnson (later Sir Henry), who was my General Manager, used to say that the British were seriously over-worked. Everyone has his own job, he would say, and then to try and run the railways as well. I fear that this led to the erection of barriers which even common membership of the Institute of Transport could not dissolve, and I know that it was as strong on the freight

Map Two



Danger – Chronologers at Work

BY PETER KAY

Over the last forty years, R&CHS members have been responsible for many of the best developments in railway chronology. The society's Railway Chronology Group has recently been seeking a way forward on this front, for most of the job still remains to be done, but it cannot be said that any practical agreement has been reached. This may, therefore, be an appropriate time to sit back and see where railway chronology now stands. It is certainly a field where there has hitherto been much wasted effort by potentially useful authors.

THE LURE OF NATIONAL CHRONOLOGY

Some of the most practically and permanently useful work in this field has been done by those who restricted themselves to one particular region or company. Unfortunately, it seems to be inherent in the psychology of many chronologers that they must cover the whole of the country in their work – any lesser canvas does not seem to satisfy them. This has been the cause of much wasted energy and many an inaccurate 'fact' appearing in print. The reality is that, whilst a small and simple country (e.g. Ireland) can be sufficiently understood *in toto* by one person to allow of national chronology being a practical thing¹, any country with a railway system as vast, long-lasting and ever-changing as that of England, Wales and Scotland can never be wholly understood by one person. We may manage to muddle through without being caught out in Sussex or rural Lincolnshire, but London, South Wales, Lancashire and Yorkshire, and Central Scotland are just not places

to be trespassed on safely by those without detailed local background history knowledge. The many errors in Clinker's *Register* prove clearly enough that even a good chronologer cannot achieve accurate national chronology. Some will have seen the Society's draft list of 'amendments to Clinker' (which, fortunately, has not been committed to print). The first thing that strikes one about it is that many of the amendments are decidedly dubious, and the second thing is that one has never even heard of half the places in question and is therefore in no good position to contribute much oneself either.

It is noticeable that many chronologers do not seem to show much interest in the writing of detailed local railway history – confirmation perhaps that only the broad task and the neat ordering of the world appeals to them. If they are fully *au fait* with the pitfalls of railway historical sources, this does not necessarily handicap their chronological work but for many the full realisation of the dangers of secondary (and, indeed, primary) sources never comes unless they are disciplined in the mill of fully detailed research into one particular station or line. Those innocent of this discipline are liable to go through life still believing that they can produce some Grand Work merely by cobbling together the 'established facts' from secondary sources and adding a bit of corrective titivation.

It is true that those national chronologers who have made it into print have at least been modest enough to restrict themselves to one particular aspect; line openings², line closures³, station openings⁴, station closures⁵ and station renamings⁶.

Most of these works have some valuable content (even if one or two would best be put in a locked cupboard with only the most sophisticated allowed access). Those of line openings and closures have, where reasonably accurate, an obvious permanent value in their existing form. But it is difficult to believe that 'partial chronologies' of this kind are really the way forward. Apart from the accuracy problem, many facts fall between the various chronologers' stools, yet are hardly suited to listing in a further distinct listing of their own. For example, it would be foolish to attempt to cover the so-far-evaded subject of dates of opening to goods traffic in a separate publication from the closely-related subject of the passenger openings.

The chronologer can only achieve true understanding of the development of the railway system if he does as Borley did for London⁷, that is devote himself to the recording of *all* aspects of the development of the system in one particular region. Accurate national chronology may be impossible as a task in itself but the same authors tackling regional chronologies would make far fewer errors and by the putting together on the shelf of their regional works a full and accurate (insofar as anything ever is) national chronology could actually be created. Alas, such has been the siren voice of national chronology that very little has actually been produced so far in the way of regional chronologies of value⁸. Chronology by pre-grouping company is an alternative, albeit one that may increasingly come to be seen as peculiar in the 21st century as the railway system develops ever further away from the old pre-grouping ownerships. But even here there has been little forthcoming⁹. In something like a third of the country, regional and pre-grouping-company areas are actually more or less coincident.

TIDY FACTS AND UNTIDY REALITY

The skimping 'line history' author may happily miss out basic facts altogether. The chronologer, however, is more likely to be tempted by the search for definite fact where no one simple definite fact ever actually existed – the single specific date for every event, the single correct name for every place.

There are particular dangers on this front in dealing with the earlier decades. Too many people still seek to look at the 1840s through 1950s spectacles and if the chronologer waits to *present* everything in the same format throughout, he may also find himself having to bend reality just to fit his system. The early railways were not the large organised bureaucracies that they became from the 1870s and 1880s onwards.

The whole process of running a railway was much more informal at first. The idea of what was or was not a 'station' did not have to be clarified until the Board of Trade started demanding more specific safety standards in the 1860s. We may perhaps be glad that the Board of Trade was empowered to inspect new lines prior to passenger opening from as early as 1840, as this gave an officially imposed discipline to passenger opening that might otherwise have been less evident. With goods traffic there was no such discipline; many authors assume (often in silence) that a line opened to goods traffic at the same time as to passengers but in many cases goods traffic began much earlier or later.

In the case of the last two lines that I have done detailed research into myself, it emerged that goods traffic had been conveyed (by the contractors) on an unadvertised basis, in one case five years before and in the other two months before the 'opening' dates recorded by all past authors. Are these *ad hoc* activities not significant historical facts, as worthy of the chronologer's pen as the 'official' opening dates? Time and time again detailed research ends up in the feeling that 'this was an odd line'; well, some lines were certainly odder than others but one is driven ever further to the conclusion that most lines were not actually straightforward reflections of the overtly overgeneralised and anachronistic perceptions that we have been too much brought up on.

The naming of stations and other locations was also decidedly less definite in the earlier years, a point made by Clinker in later editions of the *Register*. Some junctions in particular went under several different names for many years until the increasing complexity of the system brought a need for more certainty (and the arrival of signal boxes with nameboards gave visible indication). The chronologer would be well advised to tell us what *all* the names were but is liable to be distracted into deciding that one of the names is 'correct' and thereby into seeking to suppress the others. Even passenger stations did not necessarily have single definite names in the early years, until the Railway Clearing House's efforts to reduce misdirection and delay enforced it. And the official suffix names that we have all been used to as a near-universal thing to distinguish one station from another in the same town, are largely an invention of the interwar years (hence *Bradshaw's* need previously to invent distinguishing names of its own, the officialness or otherwise of which can vex the chronologer's brain). Local people sometimes invented their own names for stations, and sometimes (e.g. 'Colchester North Station') these were used by railway officials also but without ever becoming 'official'.

Even in our own time the reality of, for example, a station renaming can be untidy. In a recent *Journal* Michael Robbins recalled the mutual incomprehension that arose between Borley's ordered chronologer's mind searching for a correct date and the not-very-officious London Transport officers trying to explain to him what had actually happened, over the renaming of Chorleywood.

In contrast, definite official dates may exist but bear no relation to what actually happened. We have in recent years seen signal boxes burnt out by vandals or wholly demolished long before they were officially abolished, and track lifted (or stolen) on lines that the bureaucracy had not yet formally closed. Again, events for which a single date

is quoted may actually have taken place over several days or weeks around that time.

The future chronologer is also likely to become decidedly troubled by the way in which the whole process of closing lines has collapsed into a wholly inconsistent anarchy in the 1980s and 1990s. There are now more types of closed (or 'closed-except-when-they're-used') status than anyone can cope with. It is doubtful if anything more than the date of lifting and the date of last train have any real validity, although the various official declarations should no doubt be recorded also. Similarly recent changes in railway freight handling, the de facto demise of the public goods depot, and the splitting of infrastructure from train operation, have effectively pushed us into a situation where freight traffic is simply handled wherever and whenever it can be got (how does the chronologer deal with loading timber on the running line between stations?). The formalised process of 'goods stations' being 'open' or 'closed' no longer really exists. However it is possible that future generations, brought up as they will have been in a world of continuous flux, will not actually suffer the same urge to see tidy order in the historical record, in the way that those brought up in the comfortable and solidly-organised railway world of the 1890s-1950s period expected to.

THE 'SINGLE ORACULAR STATEMENT'

Much chronology to date has been set out in the form of the 'single oracular statement', that is, the chronologer examines the available sources, decides which date is most likely to be accurate, and makes a single statement of (alleged) fact in his public work, which is not substantiated by any specific cited sources but is meant to be taken as correct on the author's general authority. There may perhaps be occasional footnotes noting that uncertainty exists but rarely as many as there ought to be; Clinker's *Register* could have done with many more. Here we venture into the matters aired in a previous Journal article¹⁰, – the author as Authority, bearer of Tablets from God. The chronologer, with his impressive-looking pages of tabulated fact, is surely even more likely than most authors to become venerated by the innocent as infallible. Indeed, if one reads reviews of or listens to people talking about a work such as Butt's *Directory of Railway Stations*, it is evident that one of the appeals of such tomes is that it makes people feel comforted to have all this 'fact' put together in such a fashion and bound in solid hardback. Perversely, many purchasers of such works only feel the more happy if they discover a few errors, pleased that they have been clever enough to catch this Jove nodding. Alas, the notion that any work of this kind might have so many errors as to be near-valueless scarcely seems to enter most users' heads at all. We should actually be grateful in the circumstances that so many of our past chronologers have been people of high standards – indeed, they have often achieved a higher standard of accuracy in their near-impossible task than many a branch line history author has in his easy task. Nevertheless the 'warnings' have rarely been conspicuous enough.

We may perhaps suspect that the 'single oracular statement' has some psychological appeal to the chronologer; it helps somehow in his transformation from J. Smith of 31 Acacia Grove to *Smith*, the name in print, the Authority. But this is not entirely fair – there are also practical considerations. Whilst we might reasonably expect a little more openness in print as to cases where there is residual doubt, the inclusion of full source referencing in a chronological work produced for commercial sale is often out of the question on space (and price) grounds. Chronologies are often over-large as it is, and hardly the best of sellers: if we want our wisdom to reach a decent audience we cannot handicap them further in the

market place by forcing on them the (in principle admirable) approach of the academic thesis. Moreover, most of the actual users will have no interest in references; and many of the discrepancies in the sources involve only relatively minor differences which, whilst they ought to be pursued, are really beyond the interest of the average user. Yet something ought to be done for those users (in practice, other active researchers) who do wish to know the sources, and from the author's own viewpoint it is surely a pity if much of the information he obtains 'disappears' in the process of reducing the work to a commercially publishable size. Here however we may now be able to benefit from the advent of the personal computer. In future most chronologers will have a full database on disk (instead of the scrappy pencil notes and record cards of the past) which can be made available to the few who really need the whole work. Copies might also be deposited in selected railway reference collections.

THE 'SYSTEM'

The chronologer inevitably needs rules (hopefully set out clearly in a Preface) as to the principles followed in the choosing of the dates recorded. The fewer the artificialities, and the fewer the symbols and code letters, the better. There has been much debate on the merits of rival principles – indeed, such debate seems to excite some more than the actual hard work of chronology itself! Some conventions have now been formed, notably the practice of recording closure dates as the first day on which trains did not run when they would have run if the line had not closed. All such principles can produce absurdities in certain cases and therefore be mocked by the advocates of rival principles, but where conventions have become established it is better that everybody should use them. In the instant case of closure dates, though, it might be better if the term 'withdrawn as from...' were used in preference to 'closed on...', and if the 'last day of service' were quoted as well, by which means all scope for confusion will be eliminated.

With openings, the main debate has been whether to quote ceremonial or public traffic dates. But both dates have a historical validity and surely both are worthy of mention. If the chronologer establishes that the ceremonial opening was on 19 May, and that public traffic began on 26 May, he is surely doing the world a disservice if he merely quotes the latter date, for anyone looking into the subject is likely to come across other works which simply quote the 19 May date, and confusion and error will be perceived when the real facts have actually been established, more than once, already.

The manner in which a railway company 'opened' a line may also cause problems to a chronologer's system. A line might be brought into use, per notice, on 1 August, meaning that the signalling would be commissioned and the signal boxes staffed as from that date. But the passenger service might start on 2 August and the goods service on 7 September. If the chronologer's system is to record the 'opening to passengers' and 'opening to goods' dates, the 1 August date may not fit into his world at all, and he may be tempted to suppress it. Some other publication, however, will state that the line 'opened on 1 August'. Again confusion is generated where no problem really exists.

Much ink was wasted in past years over whether some station should be 'in Clinker' or not, as a 'new' or 'moved' station. It is difficult to think of a more futile approach to chronology. A whole generation seems to have been so much in awe of 'Clinker' that they could not see themselves as anything more than servants to this partial record, bound by its limitations. We should now say thank you to Clinker for his labours and ask ourselves how the job ought to be done. What the world needs to know is *what happened*

(and everything of significance that happened). If there was a new up platform but the old down platform remained; if there was a new entrance building on a different site but the platforms stayed as before; if there was a stopping-place that appeared in 1840s timetables even though no physical station structures existed, then let us be told these things clearly in so many words. We do not need pointless arguments about whether it was or was not a 'new station' because the mid-point of the platforms may have shifted only by 219½ yards rather than 220½ yards, or total suppression of an established stopping-place because it does not fit the chronologer's 1950s perceptions of what a 'station' is. Much information has been discovered, and then lost to the world without ever appearing in print, because of the artificialities of chronologers' 'systems'.

The columnar tabulation format, whilst insufficiently used in other railway history works, has probably been rather overdone in chronological publications. It can become a straitjacket preventing one from saying everything that needs to be said. In this respect the footnotes in Borley's *Chronology* as typed up by Tony Jervis are not a bad way of dealing with the situation.

One is also struck by the minimal use made of maps, or even sketch maps, in past chronologies (although some works of basic 'line opening dates' chronology have successfully been produced in a largely cartographic form). Chronologies can be produced together with a full historical Atlas, as Johnson has recently done for Ireland¹, but for England Wales and Scotland there are already Atlases available for the railway system from the later pre-grouping period onwards, and the chronologer can reasonably assume that his readers will have these, and need not feel obliged to produce another full Atlas himself. However, maps of the railway system in earlier days are less likely to be to readers' hands and for those locations which underwent major transformation prior to 1900, a latterday Atlas can be a menace rather than an aid to understanding. Many chronologies would benefit from sketch-maps of appropriate places. Purely verbal description can sometimes produce no illumination at all – for example, Borley gives correct information on the original connection from Kings Cross Goods to the North London but nobody could work out from his words where it was, and not many will have a map showing it. A sketch-map produced in a couple of minutes would have provided instant enlightenment by comparison. One does get the impression that the older generation in fact made curiously little use of maps and plans in their researches at large, seemingly trying to wrestle with their chronological problems in words in their mind, rather than on maps in their mind. The Ordnance Survey 25in maps were always available (albeit less conveniently so prior to the arrival of universal photocopying in the 1970s) but few seem to have used them until recent years. Even Borley with his immense knowledge of London, got into a muddle with the Stratford curves, a matter which could have been sorted out in a few minutes with the help of the First Edition OS.

THE WAY FORWARD FOR CHRONOLOGY

The R&CHS ought to take a leading role in the future of railway chronology but one fears that we are too prone to spend our time in debating the principles whilst other parties get on with doing the job badly and see their works appear in the shops. There is however no point in trying to impose some vast centrally-planned project; there are precious few candidates to do the work, and most of those who are intellectually qualified do not have the time available. Nothing will actually happen unless some one person, as Borley did, seizes the initiative in one particular area.

What we can do is to make a clear decision not to waste our time producing 'amendments to Clinker' or 'amendments to Butt'; and also publicly eschew all attempts at national chronology, as a dangerous distraction that can only end up with a badly inaccurate publication or with the project never finished.

What we need is more 'Borleys'. Regional chronology, although not a task for the lethargic, is a practicable job; the non-industrial regions are naturally an easier job and if the right authors (or coordinators) appeared we could surely have good chronologies of areas such as East Anglia, the South East, and the West of England relatively quickly. The basic records of the railway companies, the Board of Trade inspections, and the OS 25in maps would readily reveal the answers to many problems which have only been guessed at ineffectually hitherto. But do we have the candidates?

CHRONOLOGY – A DISCIPLINE FOR ALL

Whilst this article has concentrated on the temptations that the Devil throws before the chronologer, it is also desirable to note the equally (if not more) important point of the failure of many other railway historians to adopt any disciplined chronological analysis at all. Chronology has hitherto been seen too much as something for a distinct class of author, the 'chronologer', and many authors of local or line histories seem not to have seen it as a job for them at all. It ought, surely, to be seen as an art to be pursued by every railway historian – the art of getting a grip on the basic facts. For the general railway author chronological discipline can only come via *tabulation*, something sadly lacking in many a line history. One can pick up many such 'histories', even on a line which one knew nothing about previously, and within the first ten pages the omissions and self-contradictions start to show; the author has become oversatisfied with having accumulated a lot of information and has failed to subject it to any disciplined analysis. A large part of the British railway system, particularly rural branches, has now been covered by purportedly-detailed local works, which should in principle have already completed the chronological job for those lines; but in practice many are so unreliable that the whole job will have to be started all over again for the lines in question. Not all tabulation need appear as such in the final work; some can simply be part of the author's self-criticism in the drafting process.

Finally it has to be noted that there are still those who seek to play down the whole idea of railway chronology as not being 'proper' history of the type that they think we ought to be writing. But if that is what appeals to people it is (except where public money is involved) entirely their business what they do. In any case, works of overview cannot check everything back to original sources; they must rely on the spadework of others. Architects may become famous and brickmakers and bricklayers die in obscurity but if the latter have not done their job properly the whole edifice is a pack of cards. Chronology is the production of good bricks.

References

1. As now done to a large extent by S. Johnson in *Johnson's Atlas and Gazetteer of the Railways of Ireland* (Midland Publishing, 1997). Station dates given to the year only.
2. National line openings for 1803-1844 listed by Tony Warren in R&CHS Chronology Group Newsletter No.2 (draft-see also amendments in Newsletter No.3); for 1845-1852 by H.Grote Lewin in *The Railway Mania and its Aftermath*; for 1853-1855 by Tony Warren in R&CHS

Chronology Group Newsletter No.4 (draft); for 1856-1870 by Greville in annual articles in the R&CHS Journal (1955-1970); for 1871 – 1872 by Whittle in the R&CHS Journal (1971-1972). All these are in date order. For the post-1872 period there is still nothing except the annual listings in *Bradshaw's Manual* of the previous year's openings, up to 1922.

3. National line closures to passenger traffic listed by Greville & Spence in *Closed Passenger Lines of Great Britain 1827-1947* (R&CHS) and Geoffrey Hurst in *Register of Closed Railways 1948-1991*, also in alphabetical order by Daniels & Dench in *Passengers No More* (Ian Allan); national line closures to all traffic by Hill & McDougall in *A Guide to Closed Railway Lines in Britain 1948-1975* (Branch Line Society) .

4. National station openings for passenger traffic listed by Michael Quick in *Opening Dates of Public Passenger Railway Stations in England, Wales, and Scotland*; and by R.V.J.Butt in *The Directory of Railway Stations* (Patrick Stephens). Also by Clinker in a private list of passenger station openings since 1929; and in various publications for the 1960s-90s period. There are no national chronologies for the openings of goods stations.

5. National station closures listed by Clinker in *Clinker's Register of Closed Passenger Station and Goods Depots in England, Scotland, and Wales 1830-1980*; by Butt (op.cit); and by Daniels & Dench (op.cit).

6. National station renamings listed for passenger stations only by Butt (op.cit); Quick (op.cit – selective); and Spence (several articles in the R&CHS Journal in 1965 covering all companies except the GW); for passenger and goods stations (but excluding those stations still open in 1980) by Clinker (op.cit).

7. H.V.Borley, *Chronology of London's Railways* (R&CHS).

8. Borley (op.cit) is the only full regional chronology. However there are chronologies of line and station opening and closing dates by Clinker for Cornwall, Northamptonshire, and the West Midlands (*The Railways of Cornwall 1809-1963*, David & Charles; *The Railways of Northamptonshire*; and *Railways of the West Midlands: A Chronology*, Stephenson Locomotive Society). Greville, *Chronology of the Railways of Lancashire and Cheshire* (R&CHS) has line opening dates only.

9. John Gough's *The Midland Railway: A Chronology* (R&CHS) is the most comprehensive chronology of any type produced to date. Much credit is also due to the GNS Railway Association's various chronological works, practically produced in sections and an example to other pre-grouping company societies. Otherwise we have only R A.Cook's *Historical Maps* for the L&YR, NER, GNSR, and Highland (line opening dates only); a *Chronology of Highland Stations* by the Highland Railway Society; Clinker's *London & North Western Railway 1900-1960* (David & Charles); R.H. Clark's *A Southern Region Record* (Oakwood); and contemporary internal publications by certain railway companies themselves giving Acts of Parliament and line opening dates (often untrustworthy) – Caledonian (1902), GCR (1909 and 1913), GER (1908), GWR (1926), L&YR (1920), and LNER (1926). Those for the GWR and LNER were reprinted by Avon Anglia. R.A.Cooke's GWR Track Layout Diagrams volumes, and G.Pryer's similar volumes for the ex-LSWR routes, also contain a substantial chronological record at least for the post-1880s period.

10. *This I Know – Because The Bible Tells Me So* in R&CHS Journal 156 pp.154/5.

Thomas Hankin, a Ware trader and bargeowner

BY K.R. FAIRCLOUGH

Long before the river Lea was canalised in 1767 it had been an important transport route, mainly for the supply of London markets and industrialists with raw materials such as malt, meal and grain, and to a lesser extent for supplying the river communities with items brought back from London. The eighteenth century in particular saw many traders along the upper river at Ware and Stanstead taking advantage of these market opportunities to acquire wealth and status. Even though no substantial personal or business papers of these traders remain, biographies of several can be pieced together from local, probate and insurance records. This article is an attempt to provide one such biography, that of Thomas Hankin who died on 9 January 1765 and was buried in the local churchyard of St James, Stanstead Abbots on 26 January.¹ Hankin has been chosen because his will is one of the most informative about the business opportunities open to Lea traders that has so far been uncovered.

The Will of Thomas Hankin

Describing himself as infirm and weak in body but sound in mind Thomas Hankin of Stanstead Abbots, gentleman, made his will on 21 January 1764. Making only a perfunctory mention of god and making no mention of any funeral arrangements he immediately turned to the settlement of his business affairs. He noted a partnership that he and his son George had been engaged in for some years as 'Factors in Malt and Wheat to London by water in Barges', a partnership with a capital of £15000 of which Thomas held £10000 and George £5000. Thomas instructed his executors, his wife Ann and his son John, to provide an account of the existing financial state of this partnership and to make a settlement with George as soon as possible after his death. Out of his share in this partnership Thomas gave his son John £5000 and expressed the wish that Ann, John and George should continue to work this trade in wheat and malt as equal partners thereafter. He specified that if ever Ann remarried she was to lose her share in this partnership.

Thomas next noted that he had entered into a partnership with Messrs Thornton and Company, brewers at White Lyon Yard in Spitalfields, with a £10000 investment. Thomas left this share to his sons Ambrose and Cornelius, expressing the wish that they would become partners in the venture. Thomas then noted that he had for many years 'carried on in a Mercantile way the Iron and Coal Trade'. He now instructed Ann and John to continue with this trade for their own profit until his son Thomas reached the age of 25 when Thomas was to inherit this trade. He expressed a wish that Thomas would then employ his brothers to carry his goods from London at the accustomed price for carriage. He also specified that Thomas should receive £1000 when he was 25, £1000 when 26 and £2000 when 28. He instructed his executors to maintain Thomas until he was 25, but expected Thomas to assist the executors in the several branches of trade in which they were concerned.

Thomas left all his freehold real estate to Ann for life as long as she did not remarry. After either event it was to be split between their children. Thomas was to receive Fish's Yard² in Stanstead Abbots. John was to get the family house at Stanstead and the nearby

maltings and barns that Thomas had recently purchased from James Brown. Immediately after his father's death John was also to inherit two copyhold estates in Ware, Little Sawtridge and Noblands Green Farm, both in the tenure of Christopher Lewis. During Ann's life John was to pay her an annuity of £20 out of the income from the farm. George was to receive a freehold estate and a copyhold estate in Stanstead Abbots that Thomas had recently purchased from Mrs Newton, fourteen acres of freehold land in Stanstead Abbots known as Wheelers Ley that Thomas had purchased from Mr Audley Britten, a copyhold property near Green Tye in Great Hadham lately purchased from Thomas Bawkes and copyhold property in Chappel Field, Haw Field and Clay Pitts in Stanstead Abbots purchased from Jonas Trayhearn. George was to receive the freehold property after his mother's death or remarriage and the copyhold on his father's death, but he had to pay an annuity of £26 to his mother. Ambrose was to get freehold and copyhold property in Furneaux Pelham and Stocking Pelham recently purchased from Nicholson Calvert, MP, and John Garrett, whilst Cornelius was to get a freehold tenement and lands in Stanstead Abbots in tenure of James Ward. The terms of their inheritance was the same as that for Thomas and George, but Ambrose and Cornelius were not expected to provide an annuity for their mother.

Thomas noted that he had bequeathed real estate to the value of £1780 to John, £1095 to George and £1500 to Ambrose. He did not note the value of the real estate left to Cornelius, but it was equivalent to £150. Because of this imbalance Thomas instructed his executors to provide money out of his personal estate so that all his sons should have an equal inheritance. He left the rest of his estate to his wife Ann for her natural life, after which it was to be shared equally between his sons.

Thomas was to add several codicils which suggest some family problems. On 11 May 1764 he noted that he had left the iron and coal branch to Thomas when 25 and the residue of his estate to Ann and then to the children equally. He now specified that if George should decide to trade in iron and coal then his share of the residue of the estate should be revoked. On 13 December 1764 he added a further codicil expressing concern that 'some disputes animosities' might arise in the partnership between Ann, John and George and that they might wish to dissolve it. If this happened Thomas specified that six months notice in writing had to be given. A third codicil on 17 December 1764 noted that Thomas suspected that his son John had for some considerable time courted Ann Harding, the daughter of Robert Harding of Stanstead Abbot, baker. Thomas thought that such a match was not a proper one for John and that 'in all human probability if it should take place will create great Animositys in the family'. He thus stated that if John did marry Ann he would lose the £5000 share in the wheat and malt partnership, although he would retain the other bequests. This was the last codicil. Soon afterwards Thomas died and on 21 February 1765 this will was proved with Ann and John as executors³.

The will suggests the pride and wealth of a self-made man. This wealth was confirmed by an agreement made on 3 May 1769 between Ann and the three remaining children, George, Ambrose and Cornelius. It noted that Thomas' personal estate, including the profits from his trading activities, had been valued at £27287. Of this sum £25400 was secured by bonds and the remaining £1887 was put out at interest. It was now agreed that Ann should receive the income from this estate for the rest of her life, and that after her death it should be split three ways, but only after £685 had been paid to George, £280 to Ambrose and £1630 to Cornelius. It was also agreed that the real estate devised to John was to be split three ways after Ann's death.⁴

This agreement had been made after the death of the son Thomas at the age of 20 on 11 November 1766 and the death of John on 25 May 1768 at the age of 40. Ann was to remain a widow until her death on 10 September 1781 when she was 70. By this date two of her other sons had already died, Cornelius on 18 February 1770 at the age of 28 and Ambrose at the age of 33 in 1774. In her will Ann left everything to her only surviving son George who was to die on 1 November 1805 at the age of 72⁵. Ann had been left in a very comfortable position and in 1772-73 she lent £6000 to Mrs Thrale, a loan which enabled the Thrale brewery to survive a severe financial crisis. This loan was probably given because the Hankin family business was owed £6400 for malt deliveries by the brewery. It was an attempt to ensure repayment by allowing the brewery to continue in business and make repayment out of future profits⁶.

The forbears and kinsmen of Thomas Hankin

Registers for the parish of Stanstead Abbots do not survive for the years before 1685 and those that survive for the century after that date are inadequate and contain huge gaps. It thus cannot be established with certainty if the family had long links with the locality before January 1704 when the name of Hankin first appears in the extant registers. On that occasion the registers note the baptism of Humphrey, son of Joseph Hankin on 6 January and his burial on 9 January⁷. Joseph was the father of Thomas Hankin, but no details of Joseph's birth or marriage or of the births of any other children have been found. In 1713 Joseph was described as a victualler of Stanstead Abbots, and in 1714 as a yeoman of that parish when he took out a lease to the tolls of Stanstead Bridge. In 1713 he had negotiated an agreement for a 21 year lease that included the provision that he pay no rent for the first year in return for repairing the bridge. At the conclusion of this year an agreement was made on March 25 1714 whereby he leased the tolls for 21 years at £8 a year⁸. In 1710 he had given evidence in a case concerning his daughter Sarah, the widow of William Fairman, after which an order was made that Sarah's three children be maintained by the parish⁹. The parish registers indicate that William was a bargeman in 1707, that by April 1709 he had become a 'Meeter' responsible for measuring the grain loaded onto the Lea barges, and that he was buried on 26 October 1709. His father Richard was described as a fisherman, he probably leased a fishing weir on the Lea¹⁰. The two families were to retain their links.

Joseph Hankin died on 8 August 1728 aged 70, but no will has been found for him. His gravestone described him as Mr Joseph Hankin, indicating that he had achieved success in his business affairs. His widow Sarah died on 11 June 1732¹¹. In her will she left the three children of her son Thomas £10 each when they attained sixteen. To a grandson Humphrey Fearn she left £30 when he attained eighteen, but only £5 to Humphrey's brother and three sisters (the Fearn family had a malting at Ware). A similar amount was left to grandchildren named Henry and Anne Johnson (probably part of a Stanstead family who owned barges), and to a grandson Joseph Fairman. To a granddaughter Sarah Fairman she left £10, a feather bed and all her wearing apparel, whilst a grandson William Fairman received £5, a feather bed and the remainder of the lease to the tolls of Stanstead Bridge. However she specified that William was not to sell liquors from the tollhouse at the east end of the bridge without the consent of her executors, adding that if he did the legacy would be void. She also left £20 to a nephew Thomas Ives (a member of a Ware family with malting and barging interests), £10 to apprentice him when 14 and the remainder when he reached 21, but she added that if he refused to be apprenticed

then he was to receive the £20 only when he was 21. Finally she left her son Thomas 1/- and the remainder of her estate, to her other son Joseph whom she appointed as executor¹².

This son Joseph died in 1735. In his will he left his son John 5/-, but to his daughter Sarah he left his share in the barge he owned in partnership with George Haggar. His widow Sarah was left a tenement in Hockerill in Essex that was occupied by a blacksmith. After her death or remarriage this tenement was to be split between her daughter Hannah and her son Thomas but if she remarried then she also had to pay £50 to her son John and deliver to him the smith's shop and tools for his own use. Sarah was also left the rest of Joseph's estate, except for 1/- which was left to brother Thomas for his trouble as an executor, the other being the widow Sarah. The will of her nephew Cornelius suggests that she took over the Rose and Crown Inn at Stanstead¹³. Joseph was obviously engaged in barge carriage along the Lea, but nothing has been found of his activities in this sphere. His partner George Haggar was a Ware Quaker with malting and barging interest who at his death in 1738 was said to be 'an eminent Malt-Factor...one of the richest tradesmen that have died at that Place for many Years past'¹⁴.

Of John, the son of Joseph II, there is a problem in that he shared the same name as John the eldest son of Thomas. Given that the latter was born c.1728 it does seem that early references to a John Hankin must be to the former. Thus it was he who in September 1742 insured the utensils and stock in his malting at Stanstead Abbots for £200, and it was he who in September 1744 signed a petition to the City of London about problems along the lower Lea. However there must be doubt as to which John Hankin it was who signed a petition about reducing tolls at Dobbs Weir in 1748 and about who provided a surety for Michael Starling of Saffron Walden, waggoner, when, he was bound over for good behaviour in April 1750.¹⁵ However, it must be John the son of Joseph II whose gravestone at Stanstead Abbots gave his date of death as 13 April 1757 aged 39. His burial does not appear in the incomplete registers, but he and his wife Elizabeth had three children baptised, Sarah in May 1754, Joseph in August 1755 and Elizabeth in December 1756¹⁶. The evidence shows that he pursued the same career as his father and his uncle, but that he had probably not achieved the same degree of wealth by his death as his uncle was to. His widow Elizabeth survived him until her death in May 1794 at the age of 76. Her will notes an estate of at least £4000, mostly invested in bank stock, but in 1788 she was also owed £500 by the trustees of the Wadesmill Turnpike to whom she had made a loan in 1761¹⁷. Nothing has been discovered about Thomas the son of Joseph II.

The career of Thomas Hankin

Little has been uncovered about his mother and father, but the mother's will shows that they were part of the trading community at Stanstead who used the Lea. It is not known when Thomas was born, probably before 1704, or indeed whether he was born in Stanstead Abbots, but he certainly lived there throughout his working life. Throughout most of his career he chose to describe himself as a maltster, even though there is little of this activity in his will and even though the will suggests a far wider range of activities. Thomas obviously received some sort of financial start from his father, the size of which cannot be ascertained but the wealth he held at his death must have been largely that he obtained from exploiting the opportunities available to traders along the upper Lea that were offered by the London markets. The will shows that towards the end of his life he

had begun to invest in local property, and that he was able to leave substantial bequests to all of his five children.

The earliest evidence of his career is that in May 1720 Thomas Hankin of Stanstead Abbots, maltster, insured his stables and coalhouses near his dwelling house for £300. The property was let separately to three tenants, one of whom an in-law Henry Johnson was described as a bargemaster. Later that year Thomas insured 'his House being the Dwelling House only of the George and Dragon Inn' in Stanstead which was tenanted by Thomas Perrin, another of the coalhouse tenants¹⁸. In May 1725 Thomas insured goods and merchandise to the value of £500 in a malthouse known as 'Hunsdon's Mill Malting' at Hunsdon¹⁹, whilst the following year he witnessed the will of the miller at Stanstead Mill, Michael Pepper with whom he obviously had close personal and business links²⁰.

In January 1733, he acquired a copyhold property in the manor of Ware Extra, a messuage and 21 acres of land at Nobnall Green in Thundridge. This was a farm that he let out rather than worked himself²¹. In February 1735 he acquired a malting and six shops at Stanstead Abbots that had been built by William Clark, a Stanstead Abbots carpenter and speculative builder. Clark retained the right to keep pigs and fowl in the yard next to the malting and the right to nail fruit trees to the walls of the malting. This purchase also allowed Thomas the use of a wharf in common with Clark as long as he met half the costs of maintenance, a proviso being added that if any profit was made from the wharf, presumably by landing the goods of other bargemen, then Clark was entitled to a half share of such profits. This property was obviously very much part of Thomas' trading activities²².

In 1738 another aspect of his trading activities was disclosed in the will of John Allis of Little Amwell, maltster. Allis owned a one third share in a 'Barge Tackling Sacks and all materials thereunto belonging' which he left to his wife. The other two thirds share was owned by Thomas²³. Also in 1738 Hankin in partnership with Michael Pepper and Joseph Fairman²⁴ insured stock in two granaries in Clarks Yard at Stanstead Abbots for £300²⁵. In 1742 Thomas took out other insurance cover, £200 for the brick timber and tiled malthouse called Clarks Yard he had acquired in 1735 and £300 for the utensils and stock therein; £200 for another malthouse in Stanstead Abbots and £200 for the utensils and stock therein; £400 for Crooks Malting²⁶ in Stanstead St Margarets and £400 for the utensils and stock therein; and £200 for another malthouse at Stanstead St Margarets with £200 for the stock therein²⁷.

Such insurance cover emphasises the extent of his trading activities as a maltster, and it is not surprising that he was involved in affairs relating to the maintenance of navigation along the river Lea. In the early 1740s he was one of those bargeowners who signed petitions to the City of London and made complaints to the Commissioners of Sewers concerning problems with navigation along the lower Lea, particularly in the vicinity of Temple Mill²⁸.

In September 1743 he gave evidence to a Court of Sewers concerning problems with the river Lea at Stanstead. His evidence was on behalf of himself and other local owners and occupiers of maltings. He stated that they had always used water out of the Lea to steep their malt and that the inhabitants of Stanstead Abbots had always been supplied with fresh water from an overshot in the head stream of Stanstead Mill. He claimed that recent alterations to the navigation by the erection of Stanstead Turnpike meant that no water ran over the overshot and that some maltsters no longer had water to steep with.

Furthermore the town often suffered from fire and in such circumstances 'the Town used to be flowed with Water through the Streets' but now there was not enough water in the Lea at the bridge to dip a pail in. He also complained that he owned 30 or 40 acres of meadow along the Lea and that previously he had used ditches filled with river water as fences, but now there was so little water that this was not possible and his cattle had wandered onto adjoining lands and 200 sheep had strayed onto his. At the same time he emphasised the continuing importance to the town of the navigation by raising a complaint about how a flash from Stanstead Turnpike had been delayed for over 24 hours to the detriment of local bargeowners, including one who had missed a deadline for an export shipment as a result²⁹.

Further evidence of his interest in the navigation is that in 1748 he signed a petition from the bargemen to the Lee Trustees requesting the reduction of the toll collected at Dobbs Weir, and that in 1753 as a representative of the bargemen of Stanstead he made a complaint along with the bargemen of Ware about water being deliberately wasted by the miller at Stanstead Mills, still his erstwhile partner Michael Pepper³⁰. Then in December 1757 he was amongst a group of bargeowners who were appointed as Trustees of the River Lee in a deliberate attempt to revive and strengthen this body and in particular to try and ensure that the necessary quorum of ten was more regularly obtained³¹. Thomas was an active Trustee. He served on a committee to rebuild Dobbs Weir turnpike in 1758, on a committee to purchase a boat for the use of the Trustees in 1760. In the latter year he also proposed that a new turnpike be built at Waltham, but this suggestion was not taken up. He also scoured the lower Lea as a contractor to the City of London in partnership with Michael Pepper³². In 1759 Thomas had been the Trustee chosen to give evidence to parliament in favour of a proposed but unsuccessful Lea improvement bill³³.

It is not certain whether Thomas ever worked a barge himself in his early days but as his business interests expanded he certainly did not. In October 1749 it was John Hatt, a steersman employed by Thomas, who complained about navigation problems in the vicinity of the Four Mills at Bromley by Bow³⁴. It is not known how many barges Thomas owned, but evidence from 1763 shows that he owned more than one barge, and probably more than the two barges mentioned. This evidence concerned a certificate that Thomas obtained from J.P.s entitling him to a refund on excise duty he had paid after two of his barges full of malt had sunk near London Bridge³⁵.

In November 1753 Thomas took out a further insurance policy for £600 on property in Stanstead Abbots. This included £100 for a house divided into two tenements occupied by James Battail, bargeman, and Thomas Bishop; £100 on a malthouse in Hankins' occupation plus £200 for the utensils and stock; and £70 on a separate malthouse and office plus £130 for the utensils and stock therein. In November 1763 he took out a new policy on Crook's Malting, insuring it for £400 with a further £400 for the utensils and stock. On both occasions he still described himself as a maltster of Stanstead Abbots³⁶.

One aspect of his career that has not been discussed except for the information in his will is his involvement in the iron trade. Little indeed is known of the carriage of iron on the Lea except that it was mentioned as important in evidence to parliament in the 1730s³⁷ and Hankin is the only bargeowner so far discovered with links to this trade. Yet in 1711 Ambrose Crowley, Europe's leading ironfounder, chose Ware as one of the distribution and warehousing centres for his business which was run from Thames Street in London and later Greenwich, even though his manufacturing base was in the north-east of England³⁸. At present nothing else is known of this Ware depot. It cannot be

proved but Thomas may have had some link with Crowley, the fact that he called one of his sons Ambrose must surely be significant.

The children of Thomas Hankin

Thomas the youngest son was the first to die, in November 1766 at the age of 20 before he could inherit the business and estate from his father. Not unsurprisingly nothing has been uncovered of his activities. The next to die was the eldest son John, in May 1768 aged 40. As discussed above there are problems ascertaining whether references to a John Hankin in 1748 and 1750 were him or his cousin John, but no other references to John the son of Thomas have been found until his will which he made in March 1768 shortly before his death. The will makes it clear that he had not married as his father had feared, indeed there is no mention of the lady who had aroused his father's ire.

In this will John described himself as a malt factor of Stanstead. His brothers were the main beneficiaries, but he shows concern to help some poorer neighbours. He left all his real estate including a farm at Hunsdon to his brother Cornelius, but specified that out of this bequest Cornelius had to pay 2/- a week to Mary Rance(?) of Stanstead Abbots, spinster, and 1/- weekly to Susan Brown. He also had to ensure that they received some decent mourning clothes. He instructed his executors to invest so much of his personal estate in 3% Consolidated Bank Annuities to produce an annual income of £20. Out of this they were to pay 7/8d a week to Steward Bass(?) of Stanstead Abbots, flour dresser, and to continue such payments to his wife and his children after his death if this should be necessary. John also left £1000 to Joseph Hankin, the son of brother George, hoping that George would not reduce his bequest to Joseph as a result. The residue of his estate was left to his three remaining brothers. As executors he chose his brother Cornelius, Richard Ide of Stanstead Abbot, grocer, and Randie Cheney of Christ Church, Middlesex, brewer. In a codicil he left his post chaise, horses and harness to brothers Cornelius and George and appointed Mr John Trayhearne of Stanstead Abbots, meter, as his replacement in the executorship of his father's estate³⁹.

Cornelius was the third to die, being buried at Stanstead on February 28 1770 at the age of 28⁴⁰. His will suggests that he had continued to live at Stanstead Abbots and although it suggests that he was no longer involved in the brewery his father had left him a share in, he does describe two brewers as his friends, Randle Cheney and Mr John Thornton. To his friend Cheney he left the farm in Hunsdon that brother John had left him as long as he continued to pay the legacies his brother had insisted on, although he himself had increased the payment to Mary Rance to provide her free lodging and 3/6 a week. After some small bequests totalling £80 he left the rest of his real and personal estate, except that due from his father's estate after the death of his mother, half to his wife Elizabeth and half to any children of their marriage. If there were no children then Elizabeth was to get everything. Cornelius made separate arrangements for those monies due from his father. He left £500 to the children of Stewart Bass(?) of Stanstead, flour dresser; £500 to Sarah Hankin, the daughter of Mrs Hankin of the Rose and Crown at Stanstead, probably the daughter and widow of uncle Joseph; £2000 to his friend Randle Cheney; and the rest to Elizabeth, but if Elizabeth died before his mother then this residue was to go to his brother Ambrose and to two of brother George's children, Michael and Sarah⁴¹.

Whilst Cornelius remained at Stanstead, Ambrose moved to London on inheriting his part of his father's share in Thornton's brewery. In July 1766 it was as Ambrose Hankin

of Great Russell Street, brewer, that he insured his household goods⁴² and in August 1774 when he made his will he was living in Percy Street in St Pancras and chose to describe himself as esquire⁴³. The main purpose of his will was to provide for his wife Rebecca and their son John instructing his executors, brother George and Thomas Thurgood of Broxbourne, mealman, to liquidate his assets and invest in public funds for their benefit. It seems likely that Ambrose was no longer involved in the brewery in which his father had left him a share, for he makes no mention of it in the will but he does ask his executors to sell his share in the Pantheon in Oxford Street. This was one of London's most popular entertainment centres from its opening in 1772 until it burnt down in 1792⁴⁴ and it seems likely that Ambrose was one of the original investors in this venture.

The second eldest son George was the only child to survive his mother. In May 1756 when still a minor he married Mary Twitchell, a niece of Michael Pepper, in her local parish church of St Paul's Covent Garden⁴⁵. In December 1756, described as a maltfactor, he insured a new house in Stanstead Abbots he was building for himself and his bride for £300, in 1761 he insured his malting at Stanstead abbots £150 and his utensils and stock therein for £250, whilst in 1762 he insured another malting at Stanstead Abbots occupied by Michael Pepper for £200⁴⁶. When George's wife died in 1784 she was able to dispose of over £2000 in her will⁴⁷. Such evidence shows that George had a separate business identity from his father even whilst they worked as partners together in the barge carrying trade.

George continued his father's malting and barge carrying businesses. He owned several barges and was active in maintaining the Lee Navigation, both as a Trustee and as a contractor responsible for maintaining the navigation in the vicinity of Stanstead⁴⁸. In 1783 George took over the lease to Ware Mill. In 1795 he was supplying the government with flour and he gave evidence to a parliamentary committee about this trade. Initially he worked Ware mills in partnership with his son Michael, but in his will George left this lease to his son Thomas who worked the mills until 1818 when he left after failing to agree new terms with the New River Company who owned these mills. In the flour trade George worked in partnership with another Lee Trustee, Henry Whittingstall⁴⁹. On his death in November 1805 George still owned maltings and a brewhouse at Stanstead which was left to his wife Hannah, whilst his son Thomas received £20000 as well as the lease to Ware mills, George specifically stated in his will that he had laid out large sums on repairing the mill⁵⁰.

FOOTNOTES

1. Hertford Family and Population History Society, *Monumental inscriptions of Stanstead Abbots* (1987), E38; Hertford RO, D/P 102 1/1
2. The will of Thomas Fish, a Quaker maltster of Ware, made in 1734 noted his dwelling house at Stanstead Abbots. In 1744 his daughter Ann Fish insured the malting at Stanstead. The Fish family also had maltings at Ware, and there was a Fish's Yard there as well: Essex RO, D/AMR 22/269; Guildhall Library, Mss 11936/52 no.80972, Mss 11936/68 no.97944
3. Public RO, PROB 11/906 sig 59
4. Public RO, PROB 11/955 sig 61

5. Monumental inscriptions of Stanstead Abbots, E38, p.42; Public RO, PROB 11/108; sig 435; Hertfordshire RO, D/P 102 1/1, D/P 102 1/2. The age of Cornelius and the date of Ambrose's death transcribed from the gravestone in 1905-06 cannot be correct. George's age in 1802 is taken from the parish registers. Since Thomas had three children in 1731 there must have been two other children who had died by the time Thomas made his will.
6. P. Mathias, *The brewing industry in England 1700-1830* (Cambridge, 1959), 267. For details of this financial crisis: Mathias, 265-76; L. Morgan, *Dr Johnson's "Own Dear Master": the life of Henry Thrale* (Lanham, 1998), 59-71
7. Hertfordshire RO, D/P 102 1/1. It can be noted that the name of Hankin does not appear in an undated list of contributors to the building of St Paul's whilst those of Pepper and Clarke do
8. Hatfield House, Deeds 29/13, Legal 204/8
9. W.J. Hardy, W. le Hardy, editors, *Hertford County Records* (10 vols, Hertford, 1905-57), vii.102
10. Hertford RO, D/P102 1/1
11. Monumental inscriptions of Stanstead Abbots, E47 & E48
12. Essex RO, D/AMR 11/16
13. Essex RO, D/AMR 11/81. Made September 28 1735, proved November 4 1735; Public RO, PROB 11/955 sig 61
14. A. Boyer, *The political state of Great Britain* (60 vols, London, 1711-40), lvi.380
15. Guildhall Library, Mss 11936/63 no.92561; City of London RO, Mss 18.14; Public RO, RAIL 845/1, Trustees minutes 23 November 1748; Hertford County Records, vii.356
16. Monumental inscriptions of Stanstead Abbots, E40; Hertfordshire RO, D/P 102 1/1. The former source gives 1750 and 1757 as alternative dates, but the latter source confirms that it must have been 1757
17. Hertfordshire RO, D/P 102 1/2, Public RO, PROB 11/1246 sig 313. George Hankin the son of Thomas was an executor of her estate
18. Guildhall Library, Mss 11936/11 fo.279, Mss 11936/12 fo.194
19. Guildhall Library, Mss 11936/20 fo.67
20. Public RO, PROB 11/616 sig 147. This Michael was the second of three Michael Peppers who were millers at Stanstead Mill during the eighteenth century, a fourth was wealthy enough to live as a country gentleman. The first Michael Pepper was definitely miller by March 1708, whilst his son had taken over by November 1718. It was the third Michael Pepper who was malting in partnership with Hankin in 1738. He had a career in malting as well as milling and was wealthy at his death in 1774. In his will he specified that if there were no heirs to his son Michael, then the heirs of George Hankin should inherit the bulk of his estate: Hertfordshire RO, D/P 102 1/1; Monumental inscriptions of Stanstead Abbots, R3; Public RO, PROB 11/996 sig 107

21. British Library, Add Mss 27978 fos.91-92. For a full description of this property in October 1768: Hertford RO, 49040
22. Hertford RO, 10855
23. Public RO, PROB 11/692 sig 249. Allis was a member of a family with long links with the river and the malting trade. His will shows that he also owned the White Swan at Ware and the meeting house for Protestant dissenters that stood in the yard of the inn. Two of his children had been apprenticed with a London brewer, William Haggar, whilst George Haggar was his brother-in-law: Guildhall Library, Mss 5445/27 fo.126, Mss 5445/28 fos.115,124
24. In December 1736 Joseph Fairman of Stanstead Abbot, mealman, was acting as guardian for Henry Johnson, a minor, and in September 1748 these two insured a malthouse in the Barge Yard at Stanstead Abbots which was owned by Johnson for £300 and the utensils and stock therein for £300. In 1744 and 1748 Joseph signed petitions about the navigation, and in November 1753 he purchased a malting known as the Kings Head in Mill Lane, Ware for £315. He was still living at Stanstead Abbot in 1757 and 1764 when he insured maltings at Ware and Stanstead, but by 1767 he may have moved to Ware for it was either he or his son who was licensed as a badger. Both were living at Ware when they died. The son died in 1794 so when Joseph died in 1799 or 1800 his real estate passed to his grandson, Joseph, the eldest son of his son, whilst another £4000 was bequeathed to eight other grandchildren: Guildhall Library, Mss 11936/47 no.72141 Mss 11936/83 no.113385, Mss 11936/119 no.155537 Mss 11936/158 no.215612; City of London RO, Misc Mss 18.14; Hertford RO, D/ESb T127, Hertford County Records viii.506; Public RO, RAIL 845/1, Trustees minutes 23 November 1748, PROB 11/1246 sig 308, PROB 11/1335 sig 23
25. Guildhall Library, Mss 11936/50 no.79310
26. It seems probable that this malting was once owned by Japhet Crook or his family. Crook was a Quaker born at Hunsdon who traded for many years as a maltster at Stanstead St Margaret and Ware. He was executed for forgery in the early 1730s, but his whole career seems to have been one of fraud and trickery. In the 1700s Henry Johnston the Stanstead bargemaster was involved in a Chancery case over maltings at Stanstead St Margaret: British Library 518.g.27, James Moore, *The Unparalleled Imposter: or, the whole life artifices and forgeries of Japhet Crook, alias Sir Peter Stranger, Bart* (London, 1731); Public RO, C7 189/56, C7 647/21,
27. Guildhall Library, Mss 11936/60 no.90102, Mss 11936/64 no. 93105
28. City of London RO, Mss 18.14; Court of Aldermen Reports and Papers, September 1742 and February 1743, Public RO RAIL 845/53, Court of Sewers 28 January 1743
29. Public RO, RAIL 845/53, Court of Sewers 14 September 1743
30. Public RO, RAIL 845/1, Trustees minutes 23 November 1748, RAIL 845/2, Trustees minutes 20 November 1753
31. Public RO, RAIL 845/2, Trustees minutes 26 December 1757
32. Public RO, RAIL 845/2, Trustees minutes 27 February 1758, 19 May 1760, 8 September 1760; City of London RO, Repertories 165 fo.26

33. Commons Journals, xxviii.436-37
34. Essex RO, D/SH2, Court of Sewers 14 October 1749
35. Hertford County Records, viii.95
36. Guildhall Library, Mss 11936/103 no.138454, Mss 11936/144 no. 195044
37. Commons Journals, xxiii.166-67; Lincolns Inn Library, MP 102 fo. 174, MP 103 fo. 241
38. M.W. Flinn, *Men of iron: the Crowleys in the early iron industry*(Edinburgh 1962), 142; Flinn, 'Sir Ambrose Crowley ironmonger 1658-1713', *Explorations in Entrepreneurial History*, Vol 5 no.3(1953), 162-80. Ambrose had another warehouse centre at Blackwall, near the mouth of the Lea
39. Public RO, PROB 11/940 sig 242
40. Monumental inscription of Stanstead Abbots, p.42; Hertfordshire RO, D/P 102 1/1
41. Public RO, PROB 11/955 sig 61
42. Guildhall Library, Mss 11936/169 no.235845
43. Public RO, PROB 11/1001 sig 339. Curiously Ambrose refers to a legacy of £6000 to his wife from brother Cornelius, but this does not appear in Cornelius' will
44. *Gentleman's Magazine*, xiii(1772), 44; *Survey of London*, Volume 31 (London,1963), 268-83; E. Beresford Chancellor, *The pleasure haunts of London*, (London,1925), 247-58; A.T. Bolton, 'The Pantheon in Oxford Road: James Wyatt, R.A., architect 1770-72', *London Topographical Record*, Vol 13 (1923), 55-67; *British Library*, 840 m.30, Newspaper cuttings relating to the Pantheon
45. W. Hunt, editor, *The registers of St Paul's church, Covent Garden*, Vol III, marriages 1653-1837, *Publications of the Harleian Society*, Volume 35 (London, 1907), 194
46. Guildhall Library, Mss 11936/117 no.155295, Mss 11936/136 no.180456, Mss 11936/141 no.188302
47. Public RO, PROB 11/1119 sig 389
48. Public RO, RAIL 845/4, Trustees minutes 2 November 1767, 14 January 1772, PRO, RAIL 845/5, Trustees minutes 16 September 1772, 18 September 1778; Hertford County Records, viii.375,378; Guildhall Library, Mss 11936/282 no.428509
49. London Metropolitan Archives, Acc 2558/NR/1/2 fos.192,209, Acc 2558/NR/1/6 fos.85,105, Acc 2558/NR/1/8 fos.349-50, Acc 2558/NR/1/9 fo.5; Public RO, RAIL 845/7, Trustees minutes, 29 July 1795, 23 September 1795, 12 March 1801; Guildhall Library, Mss 11936/319 no.486543; Minutes of the evidence taken before the Committee of Council.Trade and Foreign Plantations, presented 10 November 1795, pp.166-67
50. Public RO, PROB 11/1434 sig 837

The Sunning Cutting Accident and the Board of Trade Inquiry into Third-Class Carriages

BY JEFFREY WELLS

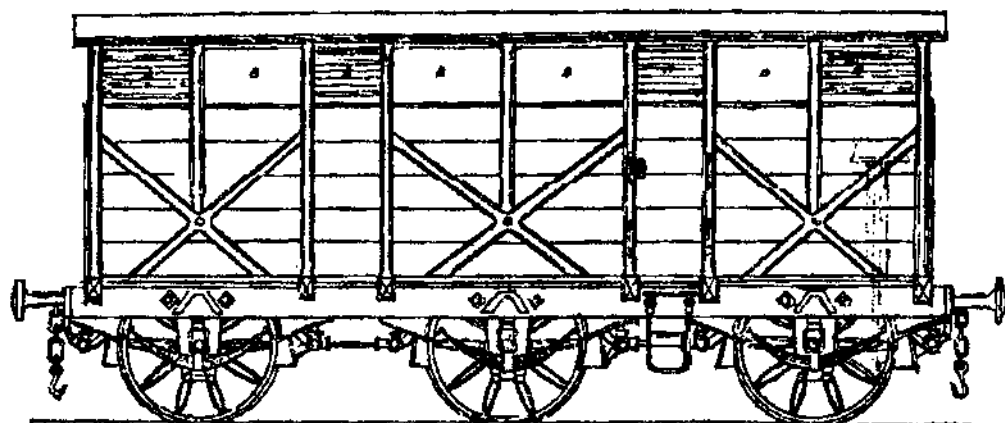
The Great Western Railway Company's line between Paddington and Bristol, a distance of 118½ miles, was opened throughout (despite being incomplete) on 30 June 1841. Once services were established the fastest train to run between the termini was the Down Night Mail which was timed to run the journey, inclusive of stops, in four hours ten minutes. Less speedy but no less impressive, other trains, travelling in both directions, took between 4¼ and 4¾ hours. In contrast, third-class passengers had a choice of two trains: an overnight goods train, taking eight hours and ten minutes, or a goods train which departed the Metropolis at the unearthly hour of 4.40 am and, if all went well, taking 9½ hours.¹ Both journeys must have been a feat of endurance for even the hardiest of passengers.

It was one of these goods trains which was involved in a disastrous accident, during morning darkness on Christmas Eve, 1841. *The Railway Times* referred to 'a most deplorable accident' in its 1 January 1842 edition, delaying the news until it was certain of the facts rather than present speculative rumours. The comprehensive report included eye-witnesses' accounts which reporters, sitting at the Coroner's inquest, paraphrased. The inquest took place several hours after the accident despite it being Friday, market day in Reading, when 'most of the respectable yeomen were absent from their homes'. A public house known as 'The Shepherd's House', located 'about half a mile from the Reading side of the Sunning Cutting (sic)', served as the venue for the Coroner and the jury; the second sitting took place on Monday, 31 December 1841.

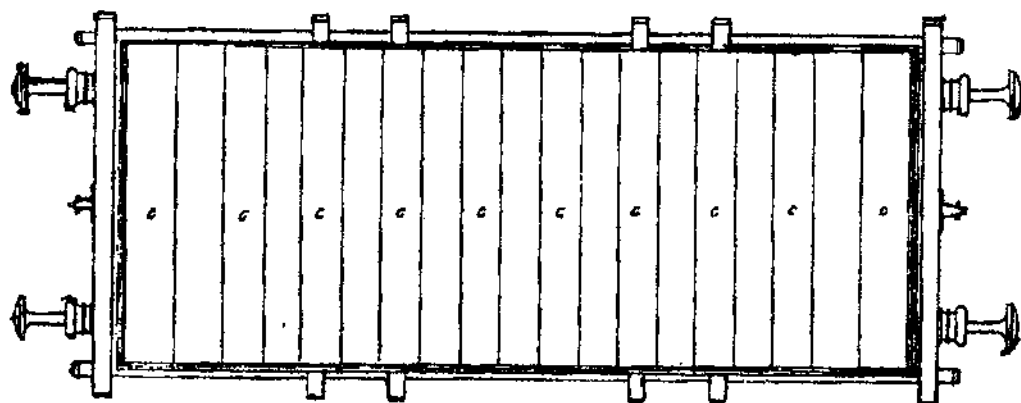
A description of the proceedings appeared in *The Railway Times*, 1 January 1842, falling under the head of 'Fatal Accident on the Great Western Railway'. The almost sensational description is worth recording in full:

It appears that a luggage train, which leaves Paddington at half past four, am, was proceeding at the usual hour, with about 38 passengers, chiefly the poorest class, who were looking forward to a Christmas holiday in the country, when, on reaching the middle of Sunning Cutting, about two miles and a half from Reading, it suddenly came in contact with a mass of earth which had slipped from the slope above, and covered one of the rails to a depth of two or three feet. On meeting with this obstruction the engine was immediately forced off the rail, dragging the tender after it; the next truck, which contained the passengers was thrown athwart the line, and, in an instant was overwhelmed by the trucks behind which were thrown up into the air by the violence of the collision and fell with a fearful force upon it. The engineer, and the guard who was in the same truck with the passengers, had just time to perceive the danger, and springing from the carriages escaped; but of the rest of the passengers no fewer than eight were killed on the spot, and seventeen others more or less severely wounded'. [In fact, one died later in Reading hospital].

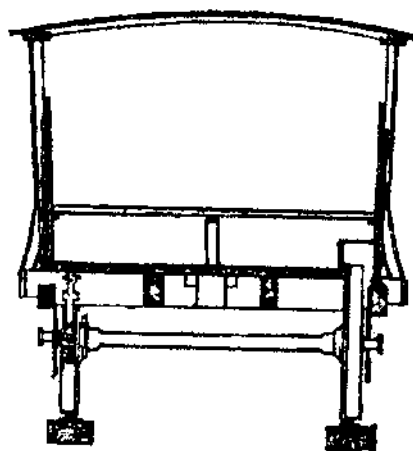
The account omitted to give details of the engine. This was 'Hecla', a broad gauge 2-4-0 of the Leo class, built by Fenton, Murray & Jackson of Leeds, and delivered to the Company in April 1841. The train it hauled to destruction comprised, in the following order, two third-class carriages [open trucks], one six-wheeled, the other four, a parcels truck, and a rake of 17 four-wheeled goods wagons. The train left Twyford ten minutes



SIDE ELEVATION



PLAN

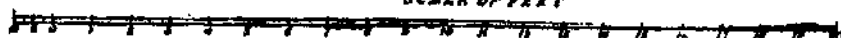


TRANSVERSE SECTION

REFERENCES

- A. Third Ventilator, or Ventilator.
- B. Spaces to be open, or closed, by sliding shutters.
- C. Seats for 6 passengers each.
- D. Seats for 3 passengers each.

SCALE OF FEET



GWR Third class carriage 1844

late, starting from the station at 6.40 am, a fact noted by the inspecting officer who was led to conjecture that 'undue velocity was used'.

An immediate investigation was carried out by Sir Frederic Smith, Lt. Colonel, RE, the Inspector General of Railways. His report, dated 25 December 1841, contains a number of recommendations particularly concerning the carriages in which the 'poorer class' had travelled. Not only bad the carriages lacked spring buffers which would have ameliorated the impact, but also:

The Third-Class carriages have seats 18 inches high, but the sides and ends are only two feet above the floor, so that a person standing up, either when the train is unexpectedly put in motion or stopped, is, if near the side or end in great danger of being thrown out of the carriage, and those sitting near the sides are also in danger of falling; besides which, the exposure to the cutting winds of winter must be very injurious to the traveller, who, if proceeding from London to Bristol, often remains exposed for ten or twelve hours, a great part of which is in the night-time.²

Sir Frederic's final comment was reserved for the Company's propensity to place its third-class carriages in goods trains:

I beg to observe that in my opinion passengers should not be carried with heavy luggage trains, for, independent of other objections to this system, the danger is increased by means of arresting the progress of the train, not being in due proportion to its weight³.

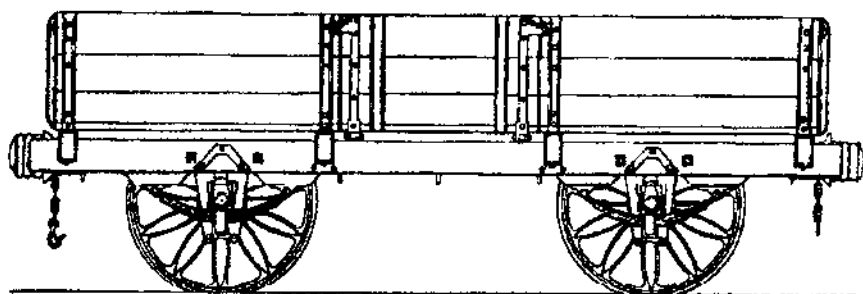
Such was the impact of the news of this accident that the Board of Trade was prompted to look into methods employed by companies in conveying third-class passengers. This was accomplished by means of circulars sent to railway companies, eliciting responses to a series of questions. The circulars were signed by Samuel Laing, the Law and Correspondence Clerk to the Board of Trade, and read as follows:

In consequence of the recent accident on the Great Western Railway, the Lord of the Committee of Privy Council for Trade have thought it their duty to ascertain whether proper precautions are taken to ensure the safety of the poorer class of passengers upon railways generally. I am therefore directed by their Lordships to request that the Directors of the . . . name of company. . . will furnish them with answers to the following questions:

1. By how many and what description of trains in the course of 24 hours are third class passengers taken?
2. At what hours do such trains start, at what speed do they travel, and how long do they perform the journey?
- 3 What is the construction of third class carriages? Specifying....
 - a) Whether provided with springs and spring buffers the same as other passenger carriages?
 - b) Whether closed, partly closed, or open?
 - c) Height of framing or panelling at ends and sides?
 - d) Whether any partitions in the body of the carriage, and if so, their height and position?
 - e) How many passengers each carriage is constructed to carry?
 - f) Whether there are seats for the passengers, and if so, how arranged?
 - g) Where third class, or other passenger carriages go with the trains partly composed of luggage wagons, are such carriages placed before or behind the

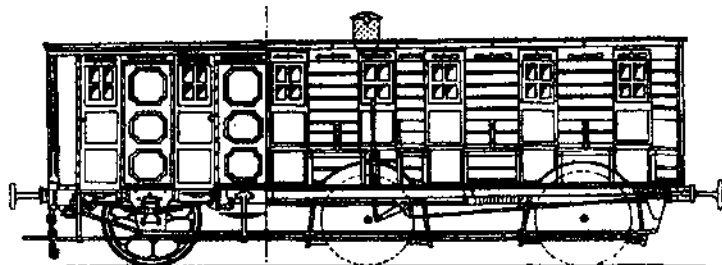
luggage wagons, and is such position invariably preserved, or is it altered according to the weight of the train, and other circumstances

A selection of Returns which the Board of Trade received is given below, with appropriate sketches as submitted by certain helpful companies. The Returns furnish an insight into the methods by which individual companies conveyed their third-class passengers who were, after all, the most numerous, and by inference, the way each company regarded the 'poorer class'. It is significant that the Great Western Railway, upon whose line the accident had occurred, failed to send a Return. More will be mentioned about the GWR and its response to the accident towards the end.

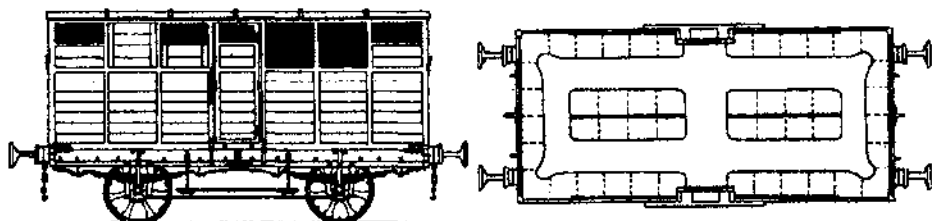


Third class 'carriage' 1840

A Third-Class GWR 'carriage' of 1840, mounted on four of Losh's wrought iron wheels. The dimensions of the 'carriage' were 17 feet long 8 feet 1 inch wide, at the bottom, and 8 feet 3 inches wide, at the top. The sides and ends were 2 feet 8 inches deep, and 2 inches thick. Despite the strength derived from their thickness, the sides and ends were inadequate to prevent passengers falling out when losing balance during rough train movements. It will be noticed that the 'carriage' did have leaf springs; not seen are the draw-bars which incorporated spiral springs to eliminate snatching. The 12 inches diameter solid buffers were covered with a layer of leather.



Great Western Railway iron-plated brake-third carriage for Parliamentary trains



Parliamentary third-class carriage, South Eastern, and London and Brighton Railways, 1845.

Arbroath & Forfar Railway

Its third class passengers were taken by from trains from each terminus, every train carrying goods as well as second- and first class passengers. Speeds varied from 15 to 20 mph. Most the third-class carriages were provided with springs and spring buffers, and those that were not were being quickly altered. Some the Company's third-class carriages were open, others closed. The open carriages had framing or panelling at the ends and sides, about 3½ feet in height. Amazingly, such carriages were designed to hold 80 people. Seats were provided which were arranged so that the passengers sat back-to-back. Such carriages were always positioned behind the luggage or goods wagons. This was a BoT recommendation and one in which the Company had complied. Most of the passengers who travelled by this railway were third-class in character.

Birmingham & Derby Railway

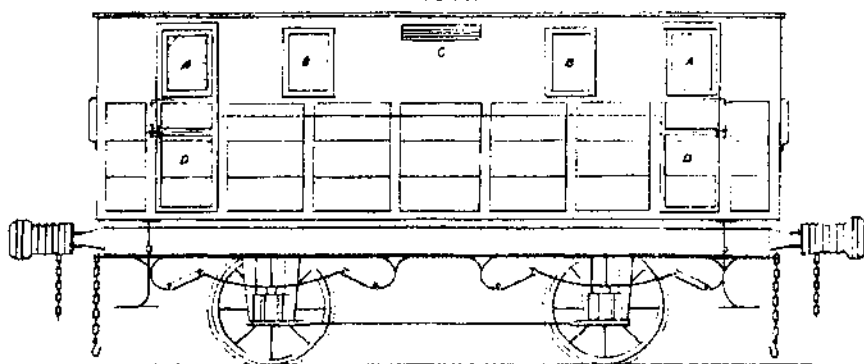
Two trains carried third-class passengers from Birmingham, and three from Derby: in all cases, by ordinary passenger trains. The Company's carriages were provided with springs and spring buffers. All were entirely open, the height of the framing being 3½ feet. No partitions were constructed in the body of the carriage, thereby enabling each vehicle to carry about 35 persons sitting. When more than two goods wagons were occasionally sent with the passenger trains they were placed in front of the passenger carriages; when not more than two, they were placed 'according to circumstances', a comment open to interpretation. Average speeds were about 28 mph.

Chester & Birkenhead Railway

Before the date of the Return (6 January) this Company had for a few months being running four classes of carriages: first, second (closed in and covered), third (with seats, but no cover), and fourth-class, or 'stand-ups'. These latter were railed wagons without seats. All four classes were sent by all trains with the exception of mail trains, namely, six times a day in each direction, including stops, at speeds of 20 mph. All the carriages, with the exception of the 'stand-ups' had spring suspension and spring buffers. The third- and fourth-class carriages carried about 50 persons. Small quantities of goods were sent with the passenger trains (there were no goods trains), and such goods vehicles were placed in front or behind, 'according to circumstances'. The third-class passenger invariably found himself at the head of the train, behind the engine. To placate the BoT, the Company stated that it was discontinuing the use of open carriages with seats, that is, its third-class vehicles.

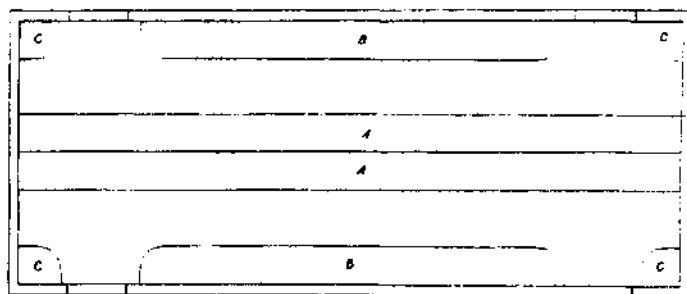
Eastern Counties Railway

Fourteen daily trains conveyed third-class passengers. The carriages were provided with springs, tram springs, and buffer springs, consistent with its first and second class vehicles. There were two types of third-class carriages: one with open rails, the other with solid panelled sides, 3 feet in height all round. No top covering or roof was fitted to either. The carriages varied also in their internal arrangement: one, two, and three divisions, 3 feet high, dividing up the floor space either transversely or longitudinally. Obviously, experimentation was the order of the day. Whatever the arrangement, the carriages were designed to seat 30 to 40 passengers. It was normal to place a truck with springs between the engine and the passenger carriages.

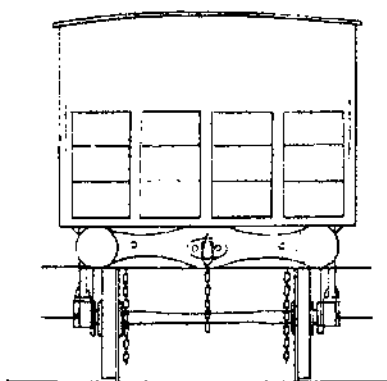


SIDE ELEVATION

FIG. 2.



PLAN.



TRANSVERSE SECTION.

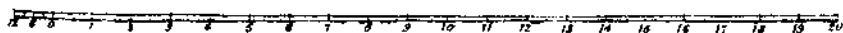
FIG. 1.

- A A. the glass in each door to slide up and down
- B B. two glass in each side window
- C. a ventilator
- D D. 2 doors in each side opening inward and fastened with a Spring latch and drop screw

FIG. 2.

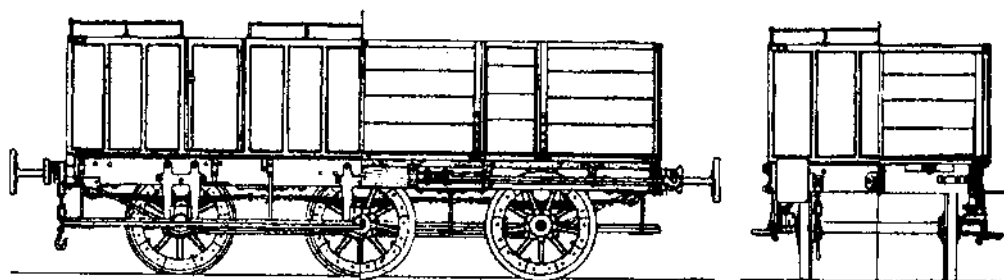
- A A. 2 seats down the centre of carriage for 12 passengers each
- B B. 2 seats down each side of carriage for 8 passengers.
- C C C. corner seats for 1 passenger each

SCALE OF FEET

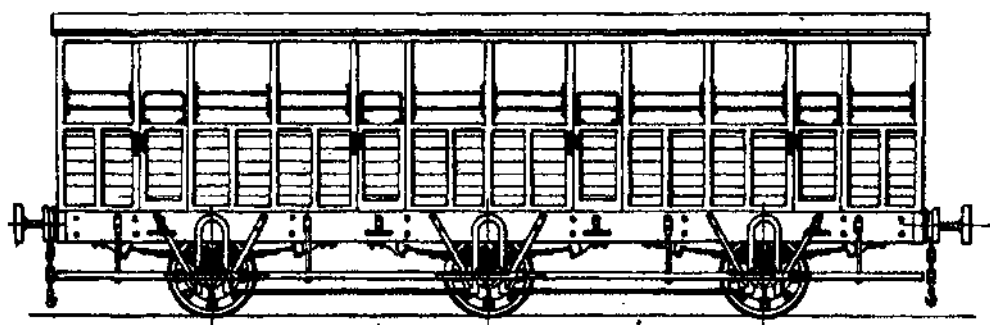


Manchester and Leeds Railway

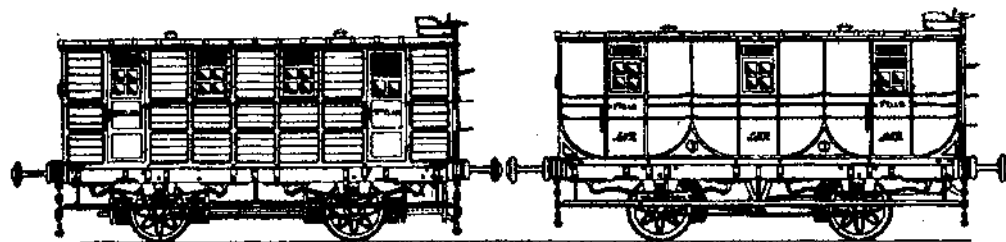
Third Class Parliamentary Carriages for 44 Passengers.



A South Staffordshire "Stanhope" on Joseph Beattie's composite iron and wooden wheels. This specimen, like many, has hundreds of holes bored in the floor.



Fourth-class carriage for the Edinburgh and Glasgow Railway with four "compartments" and composite wheels.



Third-class carriages on the Leeds and Thirsk Railway during the late 'forties. The right-hand example was probably a conversion.

Grand Junction Railway

Third-class passengers travelled by a mixed train, which comprised first, second and third-class carriages, once daily, at an average speed of 17 mph. The carriages had the same springs and buffers as those of the superior class, but were open at the sides, with no covers, but with a framing 33 inches high at the ends, and 30 $\frac{1}{4}$ inches high at the sides. There were two partitions in each carriage which was built to carry 24 seated persons. The GJR could boast that its passengers never travelled in carriages as part of a goods train.

London & South Western Railway

Unlike the GJR, this Company conveyed its third-class passengers by adding carriages to goods trains, of which there were two each way, daily. These carriages were with an open frame, and a body of similar size and dimensions as its second-class carriages, complete with springs and buffers. The open carriages had panelling at the ends and sides, 2 feet 11 inches in height. Three framed partitions divided the carriage into three compartments, each carriage capable of accommodating 24 persons sitting. The positioning of the third-class carriages was quite different from that of other companies, and it is appropriate to quote the Company's own description:

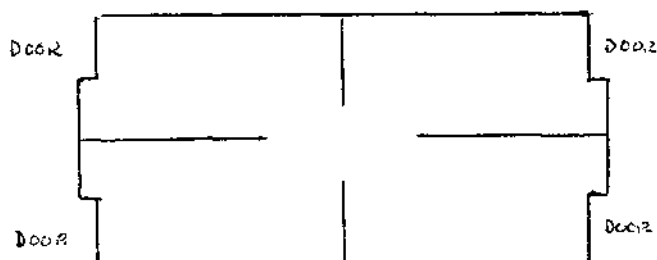
The passenger carriages are placed next to the goods' wagons destined for the distant terminus, the goods for the intervening stations being attached behind and consequently by this arrangement, which is not altered during the journey, the position of the third-class passengers is central, or nearly so.

London & Birmingham Railway

At the date of the Return, all the third-class carriages had no springs or spring buffers but it was intended that alterations were to be made so as to assimilate these carriages with other classes of vehicles. The carriages were open, having side frames 2 feet 8 inches high and 2 feet 11 inches at the ends. Each carriage could accommodate 24 passengers, although it was not stated whether seats were available or not. There was one down and one up train per day, carrying third-class passengers, at an average speed of 25 mph. Goods were not conveyed with passenger trains; under special circumstances, empty carriages and trucks were placed behind the engine, not after the carriages bearing passengers. The Company stated that it had erected at Roade, for the exclusive use of third-class passengers, 'a spacious stone building, where they may remain under shelter during the hour which they stop there, and obtain suitable refreshment'.

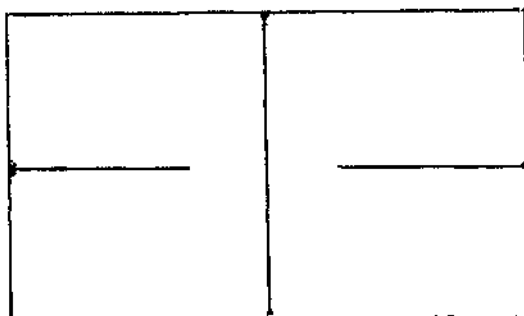
Manchester & Birmingham Railway

There were twelve trains each way between Manchester and Stockport, each one carrying first, second, and third class passengers. The third-class carriages had springs and spring buffers, were open, with a 3 feet 3 inches high framing, with iron rails and supports 1 foot above that. Sixty people were calculated to travel in a carriage without seats, the general arrangement of which can be seen in the sketch.



Midland Counties Railway

Two trains each way (per day?) between Nottingham and Derby included third-class carriages. These were open with springs and spring buffers, and a framing of 3 feet 9 inches height all round. The carriages were divided by rails (as shown in the sketch) and were to carry 60 persons, all standing, as seats were not available on those trains running on the Midland Counties' lines. Those trains connected with the London & Birmingham, and North Midland lines did have seats. No passengers were conveyed with goods trains, except between Leicester, Nottingham and Derby where luggage wagons were occasionally attached at the front of trains next to the engine.



North Midland Railway

Each day the Company carried third-class passengers on one of its four trains, travelling at average speeds of 25 mph up hill, and 35 mph down hill. The open carriages were fitted with springs and spring buffers, with side and end panels 2 feet 8 inches high from the floor. No partitions divided the interior of the carriages which were designed to hold 40 passengers. Seating provision seemed generous with 'seats round the carriage, and two seats, back-to-back, lengthwise in the carriages, leaving a clear road across between the doors and all round the carriage'. Luggage wagons were added to one train only, this being placed next to the engine.

Preston & Wyre Railway

This Company's passenger trains always comprised first, second, and third-class carriages, that is, they were mixed. Goods trains were not permitted to convey passengers. All the Company's carriages had spring suspension, and spring buffers. Its third-class carriages were of the open type, with strong side and end panelling constructed to a height of 3 feet. To effect greater safety, strong rails were fixed inside

each carriage, 'to prevent the pushing or pressure of the passengers against each other'. Without seats, the third-class vehicles could carry 60 persons.

It was noted earlier that no Return was received by the Board of Trade from the Great Western Railway. As a result of the Sonning Cutting accident the BoT made two recommendations which the GWR (and other companies) should carry out namely that of increasing the height of the carriage sides and ends to a minimum of 4 feet 6 inches, and the fitting of spring buffers. Sir F Smith's report was followed by an interchange of letters, although the Inspector General let his subordinate, Samuel Laing, take responsibility for these. His first letter, dated 30 December 1841, and Charles A Saunders' reply, dated 1 January 1842, are reproduced below.

Sir,

In reply to your letter of the 29 December, I am directed, &c, to express their satisfaction at find that the Directors of the Great Western Railway Company intend to afford to third-class passengers the protection of spring buffers, and an increased height of framing, and that they are anxiously engaged in considering what other measures can be adopted to contribute to the security of passengers of that class. Referring to the late melancholy accident which occurred on the 24th instant, and to the other accident announced in your letter of the 22nd instant by which a third-class passenger was thrown out of the carriage in which he was riding, it appears to their Lordships urgently demanded by a due regard for public safety that the additional height to the framing of third-class carriages should be given without delay, and that if the new third-class carriages are not completed, some temporary protection should be fitted up in those which are dispatched in the interim. Referring also to the accident of the 24th instant, and to the evidence of the Company's officers at the inquest, from which it appears unquestionable that the practice of sending third-class passengers by heavy luggage trains is attended with considerable additional risk, whether such passengers are placed next to the engine or at the end of the train their Lordships would suggest to the Directors the desirableness of making, if practicable, some arrangement by which third-class Passengers may be conveyed in a manner which does not expose them to any additional danger.

Sir,

Your letter of the 30th instant will receive the most careful consideration of the Board of Directors. In the meantime I have the pleasure to inform you that the Directors had ordered luggage-trucks with higher sides and ends to be temporarily fitted up for the conveyance of passengers in the third-class, and that such trucks have been in use ever since Tuesday the 28th ultimo.

Charles A Saunders, Secretary.

This was a rare compliance with the recommendations of the Board of Trade. Yet despite the assurances given by the GWR Directors, third-class travel on this Company's lines continued to be fraught with the same unpleasant if not dangerous mode of travelling, even after the Railway Regulation Act of 1844. The GWR could always argue that printed on its 30 July 1841 timetable was the terse statement that 'The GOODS TRAIN PASSENGERS will be conveyed in uncovered Trucks by the GOODS TRAINS only, and 14lbs of LUGGAGE allowed for each'. The poorer class had no choice when dealing with a monopoly.

References

- 1 E. T. MacDermot, *History of the Great Western Railway 1833 -1863*, Vol 1, Ian Allan Ltd.
- 2 Report of the Officers of the Railway Department to the President of the Board of Trade, 1841 xxv.191- 1842 xli 13.
- 3 Ibid.

Deaths of the engineers.

BY JOHN RAPLEY.

There is a common belief that many of the early railway engineers died quite young, at least by modern standards, worn out prematurely by their exertions and the arduous nature of their profession. There is some truth in this and the 'Great Triumvirate' of Brunel, Locke, and Robert Stephenson were all dead before sixty. However, taking a sample of about three hundred of the better known railway engineers born between 1745 and 1845 and, bearing in mind the average life expectancy of the period, the railway engineers formed a remarkably long lived profession. Generally the locomotive men seem to have survived longer, perhaps because more of their working hours were spent under cover. None the less the rigours of the footplate had to be faced and George Mackay Miller (1813 – 1864) of the Great Southern and Western Railway of Ireland died prematurely from a chill caught when riding on an engine.

There were other risks too in riding on engines. Alfred Jannistreet Jee (1816 – 1858) and his brother were thrown off an engine in Spain, when the ground gave way and both died. Jee had been resident engineer under Joseph Locke and responsible for the massive timber viaducts at Etherow and Dinting on the Manchester and Sheffield line and went on to supervise the driving of the first Woodhead Tunnel. A very promising career was thus cut short at the age of 42.

A child born in 1840 could, on average, expect to live only forty years. Even by the end of the century life expectancy had increased by only another eight years. A very high rate of deaths in infancy and childhood, which affected all classes, explains why so few could hope to attain the Biblical three score years and ten. Life in the Middle Ages has been described as 'nasty, short, and brutish' and for the poorer industrial workers of the mid-nineteenth century little had changed. Although many of the railway engineers rose from very lowly beginnings, they became, if they were not born as, members of the middle classes and enjoyed higher standards of living and consequently healthier lifestyles. This may well account for the rather surprising fact that, of 304 engineers studied, no less than 165 attained the age of seventy or more and eleven survived into their nineties, although none attained their century.

There was little blue blood in the engineering profession but George Granville William Leveson Gower, third Duke of Portland (1828 – 1892) was the outstanding exception. Probably the only professionally qualified fitter and engine driver to have been educated at Eton, he was a pupil of J. E McConnell at Wolverton. He was a Director of the London & North Western Railway for forty years, a Member of the Institution of Civil Engineers, and owned and drove two locomotives. He had his own private station and engine shed

near Golspie on the Highland line, which served the needs of his northern home at Dunrobin Castle.

Sir Robert Elliott-Cooper, KCB (1845 – 1942) died at the age of 97 after a long and distinguished career as a consulting engineer. Up to the age of 85 he retained Chairmanship of the Engineering Standards Association Commission on steel bridges. In Victorian times many companies did not fix an age for retirement and engineers soldiered on as long as they were fit and sometimes longer. Patrick Stirling (1820 – 1895) outstayed his welcome on the Great Northern Railway, and finally had to be asked to resign at the age of 75. Tragically, he died only eleven days later, possibly of a broken heart.

This was also said of Sir Thomas Bouch (1822 – 1880) by *The Builder* in its obituary. When Bouch appeared before the Commission of Inquiry into the fall of the Tay Bridge, he showed signs of premature aging. He was suffering from a chronic heart condition, and increasing deafness. When, in his minority report, Henry Rothery, Chairman of the Commission, described the bridge as badly designed, badly constructed and badly maintained, and when a few days later the North British Railway Company dismissed Bouch as their consulting engineer and finally cancelled his scheme for a bridge over the Forth, he was a broken man. He retired to his country cottage, caught a chill, and in a few days faded away. Although only 58 years of age he had lost the will to live.

There were other tragic deaths, including George Jackson Churchward (1857 – 1933) although he falls slightly outside the period. He retired as locomotive engineer of the Great Western Railway in 1921 but, at the end of 1933 and suffering from deafness, he was crossing the lines at Swindon to visit the works when he was knocked down and killed by Number 4085 Berkeley Castle. A less well known engineer was Joseph Armstrong Jnr. (1856 1888) also of the GWR, who was killed by a goods train at Wolverhampton at the early age of thirty one when walking along the line. His father, Joseph Armstrong Snr. (1816 – 1877) was also unfortunate. The post of locomotive engineer to the GWR, in charge of 13,000 men, proved too great a strain. Begged by his friends and family to take a holiday, he finally gave in but died on his way to Scotland at the age of 60.

Considering the loss of life among railway servants, the engineers were on the whole fortunate, but even the greatest were not immune to accidents. Robert Stephenson (1803 – 1859) nearly met an early death at Conway in August 1848 when his carriage was left standing on the running lines and was run into by an express. Although he was knocked nearly unconscious he survived. The Chester and Holyhead Railway, like many of the period, was somewhat careless of passenger safety, even that of their engineer-in-chief. Only two of the early engineers are on record as having been killed when travelling as passengers. One was Thomas Grainger (1794 – 1852). He had a distinguished career as a railway engineer in Scotland before moving south to Yorkshire where he masterminded a number of major works. He met his death at the early age of 58 in a collision between two trains near Stockton on Tees, where the Clarence Railway joined the Leeds Northern.

The second engineer to die in an accident was Massey Bromley (1846 – 1884), locomotive superintendent of the Great Eastern Railway. The son of a clergyman, he was unusual in having an Oxford MA degree. In July 1884 he was one of twenty four passengers killed in a derailment at Bullhouse near Penistone. The cause was a broken crank axle on the locomotive. The locomotive remained on the rails while the rest of the train fell down an embankment. This accident led to the only recorded suicide of a railway engineer. Charles Reboul Sacré (1831 – 1889) was the locomotive engineer of the

Manchester, Sheffield & Lincolnshire Railway, and took the Penistone accident very much to heart although in no way was he to blame. However, he had allowed himself to be pressurised by the autocratic Chairman, Sir Edward William Watkin, to accept the Smith non-automatic vacuum brake, which was cheap but unreliable, and he knew that this had made a minor accident into a major disaster. He resigned in 1855, accepting a position as consultant to the Company but lost all interest in life and shot himself four years later, an innocent victim of Watkin's ruthless and dictatorial style of management.

It is certainly true of Brunel and Robert Stephenson that they ruined their health by overwork. As a young man Brunel had a strong constitution which was displayed during the construction of the Thames Tunnel but the problems arising from the building and launching of the Great Eastern steamship finally broke his health and he died at the age of 50, a few months after the completion of his finest bridge, the Royal Albert Bridge at Saltash. In Stephenson's case, he was somewhat delicate as a child, and he too drove himself unmercifully. Unfortunately, as even Smiles had to admit and as his friends knew only too well, he revived his flagging energies by the use of drugs and spirits. After 1850 he was forced to cut his workload and his death at the age of 55 came after many years of declining health. Joseph Locke (1805 – 1860) also died at 55 while on holiday and quite suddenly, from natural causes. Although he was noted as a prodigious worker in his younger days, he had the good sense in later life to take six weeks' holiday each year in Scotland, where he relaxed with country pursuits .

John Fowler (1817 – 1898) was probably the greatest and certainly the richest of the Victorian railway engineers and ran the largest consultancy practice of the century. Despite this workload he lived to 81, spending much time each year on his two Highland sporting estates. He did not retire until the age of 73 after completion of the Forth Bridge. Patrick Stirling's predecessor as locomotive engineer of the Great Northern Railway was Archibald Sturrock (1816 – 1909) who enjoyed field sports and spent the last forty two years of his life enjoying his favourite pastimes, dying at the age of 92. Life on the Great Northern must have been healthy, for Richard Johnson (1827 – 1924) spent forty nine years with the Company, becoming chief engineer in 1861. He retired at the age of 69 and spent twenty seven years in retirement until his death at the age of 96.

Overwork was an ever present problem which must have shortened the lives of many engineers. Thomas Longridge Gooch (1808 – 1882) was almost a slave to the Stephensons. It is recorded that in twenty years he took only three days holiday (for a honeymoon) and by the age of 42 he was forced to retire on health grounds. However, he was more fortunate than many, and lived on for another thirty three years, engaged in charitable works.

Less fortunate was Charles Heard Wild (1819? – 1857). He worked for Robert Stephenson as a draughtsman and later on the Chester and Holyhead Railway. He prepared the design calculations on which the first Warren girder bridge at Newark was based. He also did calculations and later worked as Resident Engineer on the building of the Crystal Palace and became chief engineer when it was enlarged and re-erected at Sydenham. There Brunel took over and rebuilt Wild's two great water towers. A combination of ill health and overwork drove Wild to a nervous breakdown and he went abroad to recuperate but died in an asylum a year or two after his return.

Terence Woulfe Fianagan (1819 – 1859) a pupil of Charles Vignoles, was responsible for many lines in Lancashire. He might have gone on to great things, but fell a victim to wet

conditions and exposure while working on the Southampton to Fareham line and died at 40. Charles de Neuville Forman (1852 – 1901) is best known as the engineer for the West Highland line, opened in 1894, but he was also responsible for building many other Scottish lines. Too many for the good of his health, for overwork led to an early death at 48. Benjamin Hall Blyth (1819 – 1866) who founded the firm of consultants Blyth & Blyth in 1854, in association with his brother Edward, was consulting engineer to the Caledonian Railway and others, but within twelve years he was dead from overwork at only 47. The firm he founded still exists in Edinburgh as Blyth & Blyth Associates.

While Thomas Gooch worked himself into the ground in the service of the Stephenson, Frederick Swanwick (1810 – 1885), who followed Gooch as secretary to George Stephenson, similarly endured long hours, often working twice around the clock. He too was burnt out by the age of 40 but lived on to 75. Although the Stephenson were frequently hard taskmasters Thomas Elliot Harrison (1808 – 1888), best remembered as resident engineer for the High Level Bridge at Newcastle and the Royal Border Bridge at Berwick, rose to become Chief Engineer of the North Eastern Railway, and worked up until the time of his death at nearly 80. Edward Tyer (1830 – 1912) was an eminent signalling engineer, who introduced the tablet system used worldwide, took out his last patent two years before his death at 82. Another of the great names was Sir John Hawkshaw (1811 – 1891) engineer of the Severn Tunnel, who had a consultancy practice rivalling that of John Fowler, and did not retire until 77.

Dugald Drummond (1840 – 1912) might have enjoyed a longer life had it not been for his cantankerous nature and fiery temper. Notorious for his blistering tongue, he scalded his leg and neglect led to gangrene, followed by amputation and death. A famous name among locomotive engineers, and greatly feared by those under him, he played a leading part in the early development of the 4-4-0 locomotive. A similar scalding accident during trials of his 4-6-0 locomotive design befell David Jones (1834 – 1906) of the Highland Railway but he survived this, only to suffer a severe injury to his other leg in a motoring accident. Another remarkable character was John Chester Craven (1813 – 1887) locomotive superintendent of the London, Brighton & South Coast Railway. He was a man of considerable ability but formidable temper, and strongly opposed to any form of standardisation. When pressed to reduce the number of locomotive types, he refused and resigned.

Accidents and excessively long working hours, coupled with exposure to wind and weather, carried off a number of engineers but more than half survived into their seventies. Seventy six reached their eighties, and thirty nine survived to eighty five. By the standards of the day Victorian engineers seem to have been a remarkably hardy race. No doubt they needed to be.

Author's note

Most of the above material has been gleaned from John Marshall's *A Biographical Dictionary of Railway Engineers*. A treasure trove of railway history, it has unfortunately long been out of print. A new and expanded edition is long overdue, and, with Ottley III safely launched, it seems to be a project which the Society should consider in the near future.

Edward Watkin, Mark Huish and an Unremunerative Branch Line

The Rugby and Leamington Branch

BY DAVID HODGKINS

There are many who believe that old railways, like old soldiers never die, but there are others who are puzzled why many branch lines were built in the first place, as it is hard to imagine that they were ever an economic proposition. Jack Simmons has pointed out that a large proportion of the mileage constructed in the last quarter of the nineteenth century comprised branch lines which were either a liability or were never in any financial sense an asset. Often they were undertaken for strategic reasons: to occupy ground that might otherwise fall to a competitor, or to placate a district, or an influential set of customers.¹ More recently R. J. Irving has emphasised that the information necessary to appraise profitability of branch lines was not demanded and typically not kept.² He went on to establish that in 1897 the North Eastern Railway's branch network was in the red, though there clearly was a social return. Six of the seven NER branch lines with a capital of £2,155,000 were losing £30,000 between them in 1897. Similar analysis is scarce, but in the early 1890s ten branches of the South Eastern Railway, costing £1,873,000, showed losses on working after interest payments, though only the Lydd branch lost more than 6% and only the Hoo and the Rochester more than £10,000. The total loss was £80,700.³

The problem was clearly greater in the last quarter of the century. Railway companies tended to build first those lines for which there was a strong economic case. Nevertheless the unprofitable branch line was not a creature of the 1870s to 1890s. There were earlier examples and in some cases companies were well aware of the risk they were taking in going ahead. This article describes the attempt of Mark Huish, the General Manager of the London & North Western Railway, to prevent the building of one such line, which George Carr Glyn, the chairman, told shareholders, 'was merely a local improvement, called for by the inhabitants, and almost too small an affair to occupy you with'.⁴

The management of the LNWR under Huish has been the subject of detailed analysis by Terry Gourvish. He has drawn out the ways in which Huish sought to achieve operating efficiency, while never enjoying supreme command because of the role of directors, who were active in both policy making and executive action and who more easily exerted influence because of the LNWR's committee structure.⁵

In 1846 the new LNWR was well on its way to establishing itself as the premier line. It had a quarter of British railway traffic receipts and accounted for an eighth of the 2,960 miles of railway then open. Its capital was considerably greater than that of any other railway company or indeed any other joint stock company in the United Kingdom. Nevertheless its management was faced with major problems in the years immediately after the Railway Mania, caused by the depression from 1846-9, the restraint on its rates included in the company's own Amalgamation Act and the construction of competitive lines sanctioned in 1845-6. The latter meant that the capital it had to service rose from £16 million in 1846 to £29 million in 1851. While the LNWR continued to be profitable, it could not maintain its dividends at the high level reached by its constituent companies before the amalgamation.⁶

The LNWR's policy was to control expenditure incurred on the various lines in progress, both those under its direct control and those of subsidiary companies. In this it was much assisted by its centralised committee structure which extended to branch lines, many of which were still under construction. To obtain more systematic control the management of such lines was concentrated as much as possible. One instrument of control was through the secretaryship of either the relevant LNWR committee or the board of the subsidiary company. The young Edward Watkin undertook such roles. His railway career had started when at the age of 26 he was appointed as Secretary of the then separate Trent Valley Railway and continued with the LNWR following the London and Birmingham's purchase of the Trent Valley. As far as subsidiary lines were concerned he worked mainly in the Midlands but combined his duties on branch lines with the secretaryships of various operational and policy committees at Euston though he himself continued to live in Manchester until 1848.

In November 1846 Watkin became Secretary of the LNWR Committee responsible for the Rugby to Stamford, Rugby to Leamington, and Coventry and Nuneaton lines for which the LNWR had obtained parliamentary authority earlier in that year. Like many similar committees it consisted of a number of LNWR directors, initially John Ellis, F. S. Head, J. F. Ledsam, Captain Richard Moorsom and Edward Tootal, but Robert Benson also played a part. This was an influential group. While Head from Northampton seems to have merely represented the local interest, Ledsam from Birmingham was chairman of the LNWR Works Committee, and Ellis from Leicester was also on the board of the Midland Railway and was to succeed George Hudson as chairman in 1849. In 1848 Moorsom from Birmingham was placed in charge of the LNWR's Committee of Investigation which produced a series of reports setting out proposals for reducing costs and was later to be the deputy chairman and very briefly chairman of the LNWR. Tootal, a Manchester textile manufacturer who increasingly concentrated on railways, had been the man force behind the Trent Valley Railway and was probably instrumental in introducing Watkin to railways. Benson had yet to move from Liverpool to London, but was influential on financial matters and was to serve as deputy chairman in the 1850s.

Watkin was later appointed Secretary of other railways in the South Midlands: the Buckinghamshire, the Coventry, Nuneaton, Birmingham and Leicester, and the Northampton and Banbury. Some of the lines he was associated with proved to be unnecessary. Created in the heat of the boom in 1845-6, in the succeeding colder climate they were not proceeded with. Some were entanglements where the LNWR was anxious to reduce its financial exposure, but others were lines which, if not in themselves essential to the company, were part of the wider strategy of maintaining hegemony in areas where it already ruled and of attacking adjacent districts, then often still devoid of railways rather than letting them fall to rival companies of which the strongest at that time was the Great Western.

The LNWR had opened a line from its main line at Coventry to a station called Milverton at Leamington in 1844.⁷ Although its route from London to Leamington via Coventry was shorter than the route then proposed by the GWR via the Oxford and Rugby to Fenny Compton and then by the Birmingham and Oxford, the LNWR proposed to meet this threat by extending the branch from Milverton to Leamington itself while there were several schemes for a line from there to Rugby. In the event the LNWR's short Milverton to Leamington extension was authorised in July 1846 and a Rugby and Leamington Railway in August. The LNWR held £160,000 of the capital of the latter line, but having

guaranteed 5% on the remaining £188,000 decided that it was worth buying up the shares at a premium of 25%.⁸ Though in its prospectus the advantages of the Rugby line were seen largely as connecting Warwickshire and the west with East Anglia, it was its claim to shorten the route from Rugby and therefore from London to Leamington which attracted the LNWR, as well as the need to keep out the GWR at a time when the competitive struggle was exacerbated by the gauge wars.⁹ The LNWR's proposal for a line from Tring to Aylesbury, Bicester, Banbury, Fenny Compton, Worcester, Stourport and Wolverhampton had been rejected when the Oxford and Rugby was approved. The line was therefore of strategic importance to the LNWR, particularly because of the place Rugby occupied in the partially developed railway network of the late 1840s. Rugby was then not only the junction for the Birmingham and Trent Valley lines of the LNWR, the Midland Counties line from Rugby to Leicester was part of the most direct route from London and the south to Derbyshire, Yorkshire and the North East. In addition the Blisworth to Peterborough line provided an alternative route from London to Peterborough to that of the Eastern Counties from Shoreditch. The Oxford and Rugby would therefore provide a through route to the southern counties via Oxford for the lines focussing on Rugby.

Watkin took over the Secretaryship of the Rugby Committee when preparations for construction of the Leamington line were still under way. In December he was asked to prepare the advertisement for tenders for the construction of the line for the approval of such members of the committee, 'as may be in London tomorrow'.¹⁰ The tenders ranged from £231,000 to £344,000, and the contract was awarded to George Knight for £262,000. In his capacity as secretary of various LNWR committees Watkin organised systematic information for management on a range of topics on an ad hoc and regular basis. On the Rugby Committee he quickly instituted a system of reports to the Committee, with weekly returns from the solicitors of deposits paid for land and of conveyances awaiting completion, and weekly returns of payments to be made. He worked closely with the engineers – Charles Liddell on the Rugby and Stamford line with whom he was to be closely associated on the Metropolitan and the London extension of the Manchester, Sheffield & Lincolnshire, and R B Dockray on the Leamington. There were tenders too for the enlargement of Coventry and Rugby stations, another responsibility of the Committee, that of Cubbitt being accepted for Coventry. An offer from Robert Stephenson to do the engineering work on the Rugby and Leamington, and Coventry and Nuneaton lines at £400 a mile was accepted. The contractors probably had a tough time from Watkin. Dockray thought him unnecessarily suspicious in thinking that Cardus had colluded with the successful contractor by giving him alone information from a geological examination.¹¹

By mid-1847 questions were being raised as to the speed with which the three lines could or should be completed. Watkin produced reports on each. The Stamford line competed with the LNWR's Northampton and Peterborough line for through traffic but in the rich and somewhat populous district local traffic would be good. Nevertheless the Committee could see no reason for pushing forward the works vigorously. Work on two of the contracts was suspended until the spring of 1848, though this caused serious problems for the contractor.

Watkin wrote that it was otherwise with the Rugby and Leamington where the forecast expenditure was already at £470,000, £20,000 above the Parliamentary estimate, £135,000 of which had already been spent. It would hardly bring any additional traffic.

There was competition from the Oxford and Birmingham and the Oxford and Rugby, and the latter would run parallel for the last ten miles into Rugby. The Leamington line passed over a high and thinly populated country, and the gradients were of an unfavourable character. Completion would be possible by October 1849, but the time of opening must be a matter of policy only since considerable loss would in all probability be at first sustained in working it. Watkin suggested that the last ten miles of the Oxford and Rugby from Southam into Rugby might be abandoned and a short branch made from Southam to Birdingbury on the Rugby and Leamington where the junction between the broad and narrow gauge might be placed. However although the contract for the Oxford and Rugby had been let in the autumn of 1845, and work had started on the line from Oxford to Fenny Compton, it was proceeding only slowly. As a start had not been made on the section from Fenny Compton to Rugby, there was no prospect of the line reaching Southam in the near future.

Financial pressure was increasing and in late October 1847 the LNWR's General Finance Committee told Watkin that funds could not be provided at the current rate of expenditure and that the expenditure should be distributed up to 1851, and as far as possible all payments should be stopped. But when the contractor, George Knight, was called in he pleaded that he had £13,000 worth of materials unused, the value of his plant etc in work was £23,000, and he had cash and bill liabilities for £11,000 with a further £6,000 committed for timber and sleepers. He needed at least £6,000 a month or he would be ruined. According to Dockray he had the whole of his capital tied up in this contract to which he was devoting himself exclusively. He was asked to come up with an offer based on postponement of completion until 1851. At the next meeting a more detailed plan was agreed by the Committee. It was too late for abandonment, as the land had been mostly paid for and there was a risk of litigation but a prudent rate of progress would bring completion in March 1850 with payments of £6,000 a month, (£4,000 on works and £2,000 on materials). A start on the stations need not be made until after completion. Delaying it to 1851 would bring a loss of £35,000. A new agreement was made with Knight who was able to secure that if the contract were not resumed in full vigour after six months he should be compensated.

This did not end the discussion. Although in February 1848 the Committee was set on the smallest possible outlay on the Rugby and Leamington, the discussion about precisely what should be done was adjourned to await estimates from Benson and also the General Manager's views, which Watkin sought.¹² Mark Huish's lengthy reply is of considerable interest in indicating the problems facing railway managers with commitments from the Mania, and shows how early in the history of railways branch line problems began. It is worth reproduction in full:

Euston Station
February 10th 1848

Dear Sir

I am favoured with your letter of the 7th January¹³ enclosing the following extract from the Minutes of the Rugby and Leamington Committee.

"A discussion as to the Leamington Line and the propriety of arresting its further progress took place – and was adjourned until the next meeting in order that the Committee might have before them the particulars (as to probable loss by opening and working the Line) which had been prepared by Mr Benson and the General Manager as also Captain Huish's opinion upon the question."

In obedience to the above instructions I proceed as briefly as possible to state the views I have been led to entertain on the matter under consideration.

It is certainly a very important one not only as involving in itself a large expenditure with doubtful results but as raising a more extended inquiry in regard to the policy of prosecuting various other branches and extensions which undertaken at a moment of general excitement and possibly on deficient data, may on further investigation prove to be useless at least, if not detrimental to the permanent interest of the Railway.

In thus expressing myself it is not, of course, my wish to impugn the policy which under different circumstances dictated the original plans, surrounded by a host of competing projects, and forced suddenly to decide on schemes which perhaps insignificant in themselves might if suffered to remain independent, have in the then temper of the times, formed the nucleus of serious inroads into the property of the London and North Western Company, the Directors had little choice but either to submit to a certain loss or to run the risk of seeing powerful rivals established within the districts already covered by their lines.

It must not moreover be forgotten that when the line to which you have directed my attention, was first brought under the notice of the Directors, it stood in an imposing position as regarded (sic) the country beyond Leamington.

Various railways between that town and Gloucester were then before the Public and the Line to Rugby seemed to form a natural link in the chain of communication between East and West instead of the isolated branch in which it now presents itself by the abandonment of those schemes .

A period of unexampled speculation and enterprise has, however, been followed by an extensive distrust and apprehension of even the soundest undertaking and the opportunity of calm reflection and careful reconsideration which has thus been afforded, deepened as it necessarily must by the distressing state of the times, enables us now to approach the subject with a degree of attention and thought which it would have been vain to expect during the heat of the Parliamentary campaigns in which this and similar bills were passed.

Nor has the time which has elapsed since the Acts were obtained been unfruitful in events which tend to throw light on the great questions of supposed protection against competition and the relative value of direct lines between great foci of Traffic with more circuitous communications.

Much of the excitement engendered by the Gauge Wars has died away or been softened down by the depreciation of Railway property which has recently taken place, and the question of protecting the existing resources of a company has become one, more of a simple pecuniary calculation than that of exclusive possession which until very lately we were all accustomed to consider identical with the best interests of a Railway. Competition has become inevitable: no line is now secure from it : the value therefore¹⁴ of fresh branches undertaken for the purpose of meeting that competition (is) one of grave importance because the remedy may be worse than the disease: in other words the cost of defence may and I feel satisfied will in many cases exceed the loss against which it was intended to guard.

Daily experience shews that the shortest line is not necessarily either the most convenient for the traffic or the most favoured by the Public.

Indeed if one were to judge by the results we have already obtained we should be apt to fall into the opposite extreme of undervaluing the straight line. It is manifest, however, that other and more powerful elements than directness of route affect the question at issue – These elements I take to be *price, convenience of trains, habit* and locality of Termini.

Any one of these I suspect will be found more powerful in directing the stream of Traffic than the saving of a few minutes in performing the journey, but taken together will certainly determine the Traveller in selecting his road. Thus we see that the Cheltenham traffic with London still comes via Birmingham to a considerable extent, notwithstanding a detour of 38 miles. The bulk of the Peterboro traffic with London prefer the Blisworth road to Euston Square than over the Cambridge line to Shoreditch though a few miles further; and more than half the Preston traffic with Manchester proceeds by the Parkside route although 7 miles longer in a distance of only 37 miles the fares being the same in both the last cases. Of the Trent Valley I say nothing, altho' I suspect that if the public feeling were tested the verdict would be in favour of the longer journey by Birmingham.

Now if directness of route does not necessarily secure the traffic of a district how stands the case of the Rugby and Leamington Railway?

The present distance between London and Birmingham via Coventry is 106 miles. By the Rugby and Leamington it will be 97. By the Buckinghamshire lines $96\frac{1}{4}$ and by the Rugby and Oxford and Birmingham lines 105 miles. The rivalry therefore between the London and North Western and Great Western Lines will inevitably arise whether the Rugby Branch is cut or not: the only difference being that by the new Line the competition will be a little more favourable for the London and North Western Railway Company.

The Chairman well observed at a public Meeting that when combination was practicable, competition was impossible and no one supposes that any real or lengthened traffic¹⁵ would take place for the Leamington traffic to London. It would as usual form a question of discussion and settle down into a joint traffic in certain defined proportions. It is not begging the question to suppose that that proportion might be as in the Eastern Counties Case, a moiety to each Company; but in order to take the most unfavourable view of my argument – I will suppose that $\frac{2}{3}$ ds of the Passenger traffic will be lost to the London and North Western Company by being diverted through Oxford to the remote and inconvenient station of the Great Western Company at Paddington.

Now by the return which I beg to enclose you will see that the entire traffic of passengers between London and Leamington for the half year ending 31st Dec last, was £10,658.7s.0d and taking the usual proportion for the weaker half year, this would give about £17,000 for the entire Passenger traffic. The parcel traffic may add at the outside another £1,000. The merchandise business is very small in bulk, though extremely valuable in kind. The freight to the railway is under £5,000 a year. Distance it need scarcely be observed has no influence on Goods traffic – price and convenience of delivery rule it exclusively, and the London and North Western Railway Company being better situated in these respects than the Great Western

there is no fear of our not always securing half the traffic.

The question then stands thus

Passenger traffic including parcels	£18,000
Loss 2/3rds	£12,000
Merchandise	£5,000
Loss 1/2	£ 2,500
Total Loss.....	£14,500

between London and Leamington, the only traffic which the formation of the Oxford and Rugby Line can effect.

Were this loss to be prevented by the formation of the Rugby and Leamington Line the question might still be an open one, although even then the price at which the protection would be purchased would be excessive but I submit that the more direct line by Rugby though it may determine the proportion of traffic to be assigned to either party, cannot affect the principle of some division and consequently the amount of £14,500 must not be considered as a sett off against the cost of making maintaining and working the Rugby and Leamington Branch – Probably the only difference would be that the London and North Western might obtain half instead of one third of the Passenger traffic say £3,000. So far therefore as an effective means of securing the Leamington traffic I am of opinion that the new Line will utterly fail.

Allowing however for the sake of argument that it be otherwise, what is the cost at which the £14,500 is to be protected

The Rugby and Leamington Line I am informed will cost £600,000 and cannot to a moderate calculation be worked for less than £10,000 per annum. We have thus at once a certain annual burden entailed on the concern of £40,000 for the problematical security of £14,500 which if my reasoning is correct, would be nearly as well protected by the advantage of Station, number of trains and price, (which latter is always under the control of the Directors) by the present Coventry route.

This £40,000 per annum must therefore be nearly if not quite a dead loss unless provided for by local traffic, or new sources of revenue. Nor must it be forgotten that to meet the £40,000 deficiency an additional gross revenue of at least £70,000 a year must be taken. Whence is it to be derived? It is a larger sum than could be lost by the Broad Gauge at Birmingham and Wolverhampton.

With regard to the local revenue of the line I believe I am not wrong in setting it down as nil.

I am told there is not even a village on the line itself.

The only remaining point from whence any traffic could therefore be drawn is the Stamford and Rugby Line. This must be a mere trifle as the district is purely agricultural.

On the above reasoning and figures therefore, I can come to no other conclusion than that every shilling laid out on the prosecution of the Rugby and Leamington

Railway, will be absolutely lost, and that the sacrifice of all that is already spent would be better than proceeding with the Line. The loss will doubtless be heavy but further outlay will but increase it.

Is it necessary, however, that the amount already expended should be sacrificed? I hope not. The questions with the Great Western Railway Company must shortly I conclude admit of adjustment and I am informed that the greater part of the Expenditure already incurred might be made available for them. This of itself is worth some sacrifice to arrange.

I forbear however to dwell upon this point, or to enter into other questions which naturally grow out of the discussion into which the Committee have now entered. I must apologise for the length of this letter. I have endeavoured to condense it and have omitted many strong points which bear on the general question, but I have ventured to write plainly because I feel strongly that it is very important for the Directors carefully to reconsider every measure not yet completed and that not with preconceived opinions, but on the facts as they stand discarding the impressions of the past and being guided solely by a regard to the future financial prosperity of the concern.

Yours faithfully

Mark Huish

Edward Watkin, Esq

Secretary – Rugby and Stamford Committee.

The six LNWR directors who were members of the Rugby Committee which considered Huish's letter, (Benson, Tootal, Moorsom, Ledsam, Head, and Ellis) were not as radical as Huish. They thought it was expedient to continue the works on the smallest scale of outlay which could be agreed with the contractor, but left the general question to the consideration of the Board. Huish then recommended to the LNWR Board that, if practicable, the line should be abandoned. The Board was inclined to this view. Glyn promised to communicate with the Commissioner of Railways, who had already been formally asked to extend the time for the completion of the works to which they had agreed, to ascertain whether in conformity with Lord Redesdale's motion of last Session the Company might be released from the necessity of proceeding with the line. Any such approaches were apparently unsuccessful.¹⁶ No order to abandon the project emanated from Euston.

The six months' agreement with Knight was allowed to continue and when it expired in May, the Board's instructions were requested. The LNWR's Construction Committee decided that it was not expedient to increase the rate of expenditure on works and so the limit of £6,000 a month remained. In the summer of 1848 the possibility of a mixed gauge was seriously considered and Dockray reported on the engineering works affected including the adaptation of bridges and the viaduct in Leamington. The directors themselves inspected the line at the end of July and then asked for an estimate of the cost of widening the viaduct to take two broad gauge lines. Dockray reported that the parapets of the bridges were with the exception of the viaduct at Leamington the only works which would be affected by such lines. The Committee did not ask for these changes to be made: the cost of alterations to the viaduct was larger than they had expected.¹⁷

In October in response to a request by the LNWR Board Watkin suggested that costs might be substantially reduced and he was asked to prepare another report on the cost of the line and the liabilities already incurred. Watkin said £205,000 was needed to

complete the line as planned. He presented the Committee with three options: to stop, which might cost a further £90,000 in liabilities and compensation, net of any sales of unused rails etc, but on a rough estimate save some £150,000 in construction and plant costs; to suspend the work for the winter and resume at the smallest possible rate of progress in the spring of 1849 which would save £50,000 over the next six months, but initially cost £3,500; or to reduce the rate of progress and not complete the line before April 1851 for £118,000, cutting the cost by £87,000, by omitting the proposed central station at Leamington and the intermediate stations, making the line single for 14 miles, and reducing the quantity of ballast. An arrangement with the GWR would alter the whole matter, and running costs would be cut if the line were worked as a loop with the Leamington to Coventry branch. An arrangement with the GWR was by no means out of the question. In April the LNWR Board had been prepared to give up their own line through Leamington in Parliamentary negotiations on the Birmingham and Oxford Bill.¹⁸ The GWR was beginning to feel the financial effects of its push into the West Midlands and was faced with competition from the London & South Western Railway. The depressed economy and a steep fall in share prices also encouraged all three companies to consider their mutual interests and in the autumn of 1848 they began discussions which led to a proposal for amalgamation. The move came to nothing as the LNWR wanted seats on the united board proportionate to the company's size. There were however some discussions with a view to a common line through Leamington, and the GWR making use of the Rugby to Leamington line.¹⁹

The Town Commissioners of Leamington complained about the delay in completing the line to Rugby, and in February 1850 under the aegis of Lord Brooke a memorial was sent to the LNWR board. The Board said that the immediate completion of the line was subject to the negotiations with the GWR, though the Oxford and Rugby line from Fenny Compton to Rugby had been abandoned in 1849²⁰. In the event no arrangement was possible with the GWR for a line through Leamington. Work on the Leamington and Rugby line was therefore resumed in the spring of 1850, some small economy being made on the viaduct at Leamington. By August Watkin informed the Committee that Huish favoured an early opening²¹. The line was eventually opened on 1st March 1851, with Marton as the only intermediate station. It was agreed that one would be built later at Birdingbury if the landowner provided the land and paid for the approach road. Later a station was constructed at Dunchurch. Knight claimed £11,700 in settlement of his account reserving his position on a further claim because the branch was single line and for delay generally. Watkin and Dockray then persuaded him to accept £8,723 in final settlement.²²

No evidence has been found to establish whether Huish was right in his assessment of the line's prospects though as the Oxford and Rugby was never completed, to that extent the LNWR by filling up the district succeeded in excluding the GWR from Rugby. The purpose of this paragraph is only to summarise its subsequent development, not to assess its success or failure in any detail. By the end of 1852 the Birmingham and Oxford had opened so putting Leamington on a through route from London to Birmingham. The LNWR then began to plan a station at Leamington Spa Avenue which was opened in February 1854, and 10 years later a spur was built to connect the LNWR and GWR systems at Leamington. In later years the LNWR's ambivalence towards the Rugby and Leamington line continued. The line was doubled in 1882-4, and in 1885 there were 7 down and 8 up passenger trains, the majority through from Birmingham to Rugby or vice versa. In the previous year the Kenilworth Junction to Berkswell line was opened giving the LNWR access to Birmingham from Leamington without running via Coventry. In 1888

a line was opened from Weedon, on the main line south of Rugby, to Daventry and in 1890 it was agreed to extend this to Marton on the Rugby to Leamington line, thereby cutting out Rugby. Though described in guide books as an alternative and more direct line between Leamington and London, through workings were only possible with difficulty as there was no direct link with the main line at Weedon until 1918. The new branch also had a sharpish curve and stiff gradients, and by no means made the older line redundant. Indeed from July 1909 to December 1912 the Rugby and Leamington line was used to provide through services from London especially by means of slip coaches and also in the reverse direction to an extent that somewhat belied Huish's predictions. A return Birmingham express ran non stop from Leamington to Willesden, and times were comparable with those obtained on the GWR route via Oxford. This was an attempt by the LNWR to secure the London – Leamington traffic before the opening of the GWR's direct line to Birmingham with the completion of the Ashenden to Aynho link in July 1910. This gave the GWR the upper hand in services to Leamington, though the LNWR provided a more limited through service via Rugby until 1932.²³ The Rugby to Leamington branch not only survived Huish's attempted abortion, but a passenger service continued until 1959, outliving that on the Weedon branch by nine months. In May 1966 the line from Marton to Leamington was closed though for some years freight workings to the Long Itchington cement works continued.

References

1. Jack Simmons, *The Railway in England and Wales, 1830-1914*, 1978, pp. 103-9
2. R. J. Irving, The Branch Line Problem in British Railway History, The Financial Evidence from North-east England, *Journal of Transport History*, (3), Vol 14, 1993, pp.27-44
3. Public Record Office, RAIL 635/393, for details of capital expenditure on the lines of the SER; *The Economist*, 5 November 1895 for figures of losses, apparently obtained from the SER.
4. Quoted in Rex Christiansen, *Regional History of the Railways of Great Britain, VII, The West Midlands*, 1973, p. 147
5. T.R. Gourvish, *Mark Huish and the London & North Western Railway, a Study of Management*, 1972, especially p. 181
6. M.C. Reed, *The London & North Western Railway, a History*, 1996, pp. 39-41
7. In fact then between Warwick and Leamington. C.R. Clinker found that the name of this station changed nine times in 110 years – *Railways of the West Midlands*, 1954
8. RAIL 410/20, LNWR Board minutes of 12 September and 10 October 1846
9. RAIL 1149/122, Prospectus of the Rugby, Leamington and Warwick Railway
10. RAIL 410/506, 10 December 1846
11. From R.B. Dockray's Diary, ed Michael Robbins, *Journal of Transport History*, (3) Vol 7, 1965, pp.114-5
12. PRO, RAIL 410/506, Minutes, 18 November and 10 December, 1846; 22 February, 13 May, 9 and 20 September, 27 October and 9 December 1847

13. Probably 7 February is intended as the minute quoted below is that of the 1 February. The text of the letter here reproduced is that of the copy to be found at RAIL 410/506, minutes of 16 February 1848
14. 'thereof' in the original
15. 'Traffic' is presumably a slip for 'competition'
16. Public Record Office, MT 13/9, Railway Commissioners minutes 675 and 709, 25 and 28 February; RAIL 410/20, 11 March 1848
17. RAIL 410/506, 1 and 8 June, 3 and 8 August 1848
18. RAIL 410/506, 12 October 1848; RAIL 410/20, 15 April 1848
19. Reed, p 55 and E.T. MacDermot, *History of the Great Western Railway*, 1927, 1, pp.307 and 312. The GWR's shares fell from 146 to 95 from July 1847 to July 1848 and the LNWR's from 184 to 120.
20. RAIL 410/506, 11 October 1849; RAIL 410/21, 14 February and 9 March 1850
21. RAIL 410/506, 11 October 1849 and 12 August 1850
22. RAIL 410/282, 13 March 1851
23. Christiansen, pp.148-9

From the RCHS Photographic Collection No. 11

Print RAC 108/109

Two views from the Ray Cook collection. Both had been labelled as GWR stations, Steens Bridge and Rowden Mill. They are not these places, but show some resemblance to another view in the collection labelled Shirdley Hill (LYR). Shirdley Hill lay on the line from Southport, running south to join the CLC line at Hillhouse junction. There is a similarity in station style and the general state of dereliction. If you can identify the locations or provide information about the views, please contact Stephen Duffell, Hillcroft, Ford, Shrewsbury, SY5 9LZ, or telephone 01743 851154 (weekends), or 01625 514828 (office hours), or e-mail Stephen.Duffell@ctl.astrazeneca.com.



RAC 108



RAC 109

From the R&CHS Photograph Collections No. 9 Print JGS247

(Reproduced on page 82 of July 1999 Journal)

The footbridge, platform shelter and lamp standard are all of Great North of Scotland designs, and the station is Rothienorman, photographed from a Macduff train on the branch from Inveramsay. The line closed to passenger traffic in the early 1950s. No date has been suggested but other Scottish views in the J G Spence collection were taken around 1935.

My thanks to Tim Edmonds, John Miller, John Edgington and Keith Jones of the GNSR Association for their help in identifying this view.

Coach Services in Cheshire, 1834

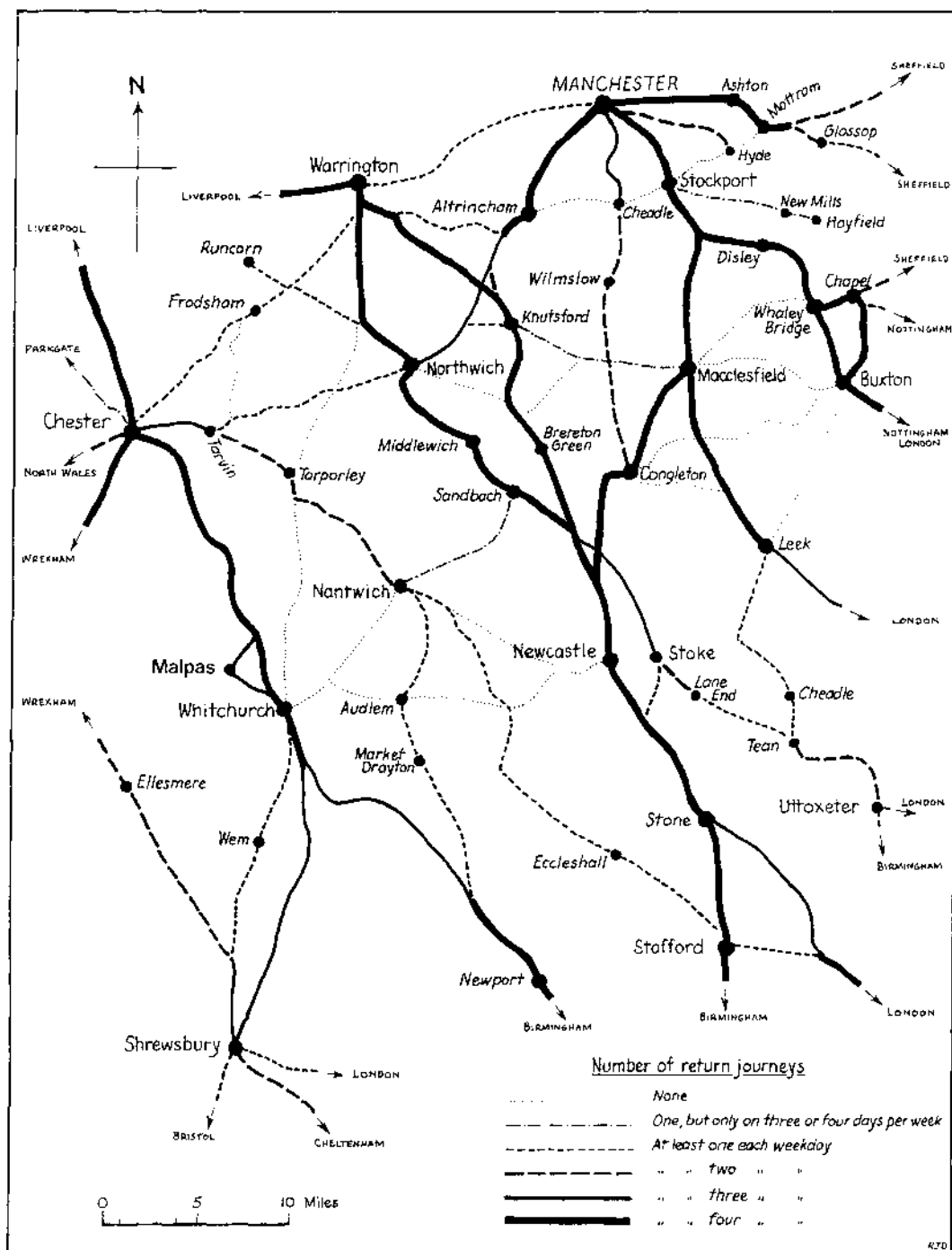
BY ALLAN BRACKENBURY

Recently I purchased a copy of "Pigot & Co's Commercial Directory for the county of Cheshire 1834"¹. This book has something to say about each town in the county², and lists the gentry, tradesmen and services for each. The services include coaches, carriers, and (where applicable) conveyance by water. From the details of coach services given, it is possible to assess their extent in Cheshire just before the arrival of railway competition. Sixty-six named coaches appear in the book and there are a further twelve, mostly on short journeys, labelled merely as a 'coach', occasionally rising to 'market coach', or falling to a humble 'car'. It would be tedious to go through them all in detail and indeed Pigot is not completely accurate³. Perhaps different towns had been updated at different times in the year?

There are however several observations worth noting. One is the fact that coaches ran at all hours of the day and night and so passengers were evidently accustomed to start/finish their journeys at unsocial hours. Even the isolated inn at Brereton Green (it is still isolated now) had southbound⁴ coaches calling at 8.30 pm, 9.15 pm, 11.30 pm, and 2.45 am. London was the predominant destination, with Birmingham coming a good second. Curiously no Cheshire coaches went further north than Liverpool or Manchester. Another interesting fact is that most coaches ran seven days a week, presumably to public approval. Yet only a few years later the emerging railway companies scandalised the nation with their villainous "Sunday trains". While this suggests a whiff of hypocrisy, could it be that the opposition to railways' supposed desecration of the sabbath was encouraged, or even initiated, by road interests?

There was one regular-interval coach, – a half-hourly service between Stockport and Manchester. All other coaches ran only once a day. Presumably if there was demand for more than one coach, another would start up, maybe taking a different route. Occasionally two – or even three – coaches travelled together. Three started together on the Manchester-Sheffield route via Ashton and Mottram, but then one took the new Snake turnpike via Glossop, while the other two kept to the traditional route over Woodhead. In the other direction apparently they all met up at Mottram to travel onward together. Another new turnpike linked Hyde and Mottram, creating a more direct route between Manchester and Mottram, but none of the coaches ventured this way. About a dozen coaches, usually on short routes, were less frequent than once every weekday; usually they ran on just three days of the week.

Ten coaches carried the proud title 'Royal Mail'. No other name was used more than twice: those that did appear twice were 'Bang-Up', 'Champion', 'Express', 'Fair Trader', 'Hero', 'Magnet', 'Nettle', 'Rail-way', 'Red Rover', 'Rocket', 'Tally-Ho', 'Umpire', and 'Velocipede'. Neither 'Rail-way' coach had any link with a real railway (except possibly in Manchester), as one went from Manchester to Birmingham and the other was one of the Manchester-Sheffield coaches over Woodhead. Of the other names, 'Peveril' went through the Peak District and 'Potter' to the Potteries. Curiosities were 'L'Hirondelle' (Liverpool-Cheltenham) and 'Erin go Bragh' (Liverpool-London). Each name must have represented several individual coaches, especially on long-distance routes, in order to have enough vehicles to provide a daily service in each direction.



Cheshire Coach Roads in 1834 also showing roads of adjacent counties used by Cheshire Coaches

Detailed routes of coaches

One coach ran from Northwich to Runcorn to meet the Liverpool steam packets⁵. All the others ran from/to three major centres – Liverpool, Manchester and Chester. They can be analysed as-

- (a) **Long Distance**, where a return journey could not be made in a single day.
- (b) **Outward**, timed so that merchants could leave town in the morning, do business at the coach's destination, and return home the same day.
- (c) **Inward** (or 'commuter') coaches, timed so that travellers could go into town in the morning and return home the same day.

	Liverpool	Manchester	Chester	Total
Long Distance: London:	10	6	2*	18
Birmingham:	3	6	0*	9
Others:	5	8	1*	14
Outward:	2	3	1	6
Inward:	0	23	7	30
	20	46	11*	77

*In addition, 8 of Liverpool's long distance coaches passed through Chester.

The difference between Liverpool and Manchester in the number of inward coaches seems striking, but it needs to be borne in mind that both would undoubtedly see several inward coaches from Lancashire, and the nearest part of Cheshire to Liverpool was then thinly populated, – and across the Mersey.

Liverpool

London The ten coaches had ten different routes! Three went *via* Chester (and presumably a Mersey ferry), three *via* Northwich and four *via* Knutsford. One of the Chester coaches was routed *via* Malpas, Whitchurch, and Newport: another is just described as "*via* Wolverhampton" and the third went a long way round *via* Malpas, Wem, Shrewsbury and Shifnal. One Northwich coach went through Stoke, Uttoxeter, Burton and Leicester. The other two took the more direct way through Newcastle and Birmingham, then normally *via* Oxford, but once a week *via* Coventry instead. The four Knutsford coaches continued *via* – Newcastle and Birmingham; Stoke, Stone, Lichfield and Birmingham; Newcastle, Lichfield and Coventry; Newcastle, Lichfield and Tamworth.

Birmingham The three routes were – Chester, Nantwich, Audlem and Newport; Northwich and Newcastle; Knutsford and Newcastle.

Others Three went to Cheltenham, two of them together *via* Chester, Shrewsbury and Bridgnorth. The other's route was Knutsford, Newcastle and Leamington. One coach went to Holyhead *via* Chester, Holywell, Abergele and Conway; the remaining one went to Bristol *via* Chester, Wrexham, Ellesmere, Shrewsbury, Ludlow, Monmouth, and presumably another ferry.

Outward At that time there was a ferry across the Dee from Parkgate to Flint. One of the Liverpool coaches went to Parkgate to meet the ferry. The other coach went over the ferry and on to Holywell.

Manchester

London Five of the six coaches passed through Derby. Three were routed *via* Macclesfield and Leek, the other two *via* Buxton and Bakewell. The sixth coach went *via* Macclesfield, Congleton and Birmingham.

Birmingham Four passed through Congleton; two *via* Cheadle and Wilmslow, and two *via* Macclesfield. One coach was routed *via* Altrincham and Knutsford; the other went *via* Macclesfield, Leek, Cheadle, Uttoxeter and Lichfield.

Others Five coaches went to Sheffield and three to Nottingham. For Sheffield, two went *via* Mottram and Woodhead, one *via* Mottram and Glossop, and two *via* Disley, Chapel-en-le-Frith, and Castleton. Two of the Nottingham coaches were routed *via* Buxton and Derby, the other went *via* Chapel, Tideswell and Chesterfield.

Outward One went to Liverpool, *via* Altrincham and Warrington. The other two went to Chester, but as both ran only on alternate days, between them they provided a single daily journey, *via* Altrincham, Northwich and Tarvin.

Inward Home towns were, clockwise, – Glossop (1+1*), Hyde (2+1*), Stockport, New Mills*, Hayfield(2*), Bullocksmithy⁶, Buxton (3), Macclesfield (2), Cheadle, Wilmslow*, Congleton, The Potteries, Nantwich*, Altrincham, Northwich and Chester. (* = only 2-4 days a week). Some journeys were quite lengthy: the Chester coach (*via* Frodsham and Warrington) commenced at 5.30 am, Nantwich's (*via* Sandbach and Altrincham) left at 6.00, and Congleton's at 6.30. The Potteries coach ran from Lane End, in the area now called Longton, and went through Stoke, Congleton and Macclesfield.

Chester

London One coach was routed *via* Wolverhampton, the other went *via* Nantwich, Eccleshall and Lichfield.

Other This went to Bangor, three days a week, *via* Abergelle and Conway.

Outward This coach went *via* Wrexham and Chirk to Welshpool.

Inward Two came from Shrewsbury, one *via* Malpas, the other *via* Ellesmere and Wrexham. One from Oswestry was routed *via* Chirk and Wrexham. The other four ran three days a week or less. One was from Macclesfield *via* Knutsford and Tarvin, and there was a Saturday coach from Malpas. The other two ran only in summer, to Parkgate, and to Ruthin.

Most of the coach journeys are shown on the attached map, which reveals which were the trunk routes of the day. Because of the dominance of London and Birmingham traffic, some turnpike roads which went against the grain carried no coaches at all. In a few cases Pigot does not make clear the exact route taken. I have assumed Stockport-Buxton coaches took the Long Hill route unless 'Chapel' is mentioned in the book. A few coaches from Chester went straight to Wolverhampton or Shrewsbury; I have assumed

that these went the most direct way, via Whitchurch. For most of the trunk roads, I suspect that there are fewer bus services now than coach services then.

References

1. Reprinted in 1982 by Neil Richardson 88 Ringley Road, Stoneclough, Radcliffe Manchester M26 9ET. ISBN 0 907511 12 0 £3.50
2. Stalybridge is omitted, as it is regarded as dependent on Ashton-under-Lyne, which presumably is included in a similar directory for Lancashire. Similarly New Mills and Hayfield (Derbyshire) are treated as offshoots of Disley and Included with Cheshire.
3. For example, some coaches are "Sundays excepted" at some towns but not at others. Twice a coach had a different name at one town on its journey and I spotted nine timings that were obviously inaccurate. There are inconsistencies between Stockport and Disley, with a few Derbyshire coaches seemingly calling at one but not the other.
4. Times of northbound coaches at Brereton Green are not given.
5. In summer months it competed with a packet boat on the Weaver from Weston Point to Northwich, which also met the packets from Liverpool.
6. Bullocksmithy changed its name to Hazel Grove on 26 September 1836. I suspect that the name Bullocksmithy was only of relatively recent origin, perhaps a name applied in the turnpike era to describe a stopping place, and which later was used for the town that emerged out of three villages, – Bosden, Norbury and Torkington.

The Last Train From Paris – June 1940

BY HUGH J.COMPTON

'The last time I saw Paris her heart was young and gay', but this lyric is in sharp contrast to that which pertained in June 1940, for by Monday 10 June the Germans had entered Rouen and were in process of crossing the Seine on which Paris stands. To Mr A.M. Newbold, the Southern Railway's General Agent in Paris, the outlook from his offices at 12 Boulevard de la Madeleine, was indeed grim. Banks and Passport offices were closing that day for the final time and everybody seemed to be making for a Paris station in the hope of getting trains away from the rapidly advancing Wehrmacht. The time had, therefore, come to evacuate his offices, which they had occupied since 2 January 1934 when the Southern Railway assumed responsibility for all the British Railways operations in Paris¹. As there was little likelihood of any mainline trains leaving Paris, he decided on Tuesday 11 June to cease the issue of any through tickets to England telling passengers to purchase same at the port. Thomas Cook and other travel agents had by this time already ceased operations so having reduced the office commitments he now turned his attention to the evacuation of his own staff. As a first step he sent a member to Montparnasse station, the exit point for journeys to south west France, who reported back that because of the crush of people he was unable to get near the station. The time had therefore come to 'Pull rank' and see the SNCF officials concerned and get

something arranged. With this in mind, he went to their offices in the Rue de London and saw Monsieur Jean Goursat, the Director of the Central Movement Services who arranged to place at his disposal a special train to St. Malo at 21.00 on the Wednesday. Not only would this convey the Southern Railway office staff, the 75/100 British subjects who were still in the City as well as the Vice Consul and any of his staff who wished to make use of this facility. The British Consul General was kept fully informed of the day's events and even asked the SR to provide emergency funds – 30,000 francs which was readily done.

It was one thing to have procured a train, but how were the intended British passengers to get to the train and board it at the Montparnasse station? So, using his influence he managed to obtain Sureté escort which would leave from outside 19 rue de Lisbonne at 16.30. He told his staff and other passengers to take the smallest amount of luggage giving preference to food, because the advance of the German Army necessitated a circuitous route and the journey time could well be in excess of 25 hours. In fact the train did better than expected arriving alongside the quay at 18.00 on Thursday 13 June. What was the situation like in St Malo, for an insight read "Trampled Lilies" by Lady Fortesque published in 1941. It was not surprising that SR staff had been collected from every part of France were quickly put to work in the Port office. Alas it was very much a case of all the eggs in one basket, hence the considerable congestion at the port. It would have been quite easy to have hived off the Channel Island working to/from Jersey, to Granville which had been used by the SR for excursion working especially as the SS 'Autocarrier' was working in the area and was to use the port regularly after the end of the War.

Unfortunately for the SR a number of their passenger ships had been requisitioned and the only ship available was the aged SS 'Hantonia' (1912). She had last sailed for Southampton on 9 June with 493 passengers, 12 cars and 55 tons of cargo². So with time taken to effect a turnround (remember we still expected the French to hold the line) it was not surprising that she did not arrive back till the morning of 17 June, when 114 passengers disembarked and 39 tons of cargo was offloaded. Unlike the situation that had existed at certain other French ports, the Harbour Master and his staff performed quickly and efficiently all tasks that came their way, so much so that by 20.00 686 civilians and 300 soldiers had embarked including all the SR staff of any nationality who wished to leave, plus 67 tons of cargo and a car. Only six wagons of 'groupage' traffic were left behind, plus three others of hoopwood, a lift van and eleven cars. Of greater importance to the SR was the fact that Mr Newbold brought back with him all the accounts, cash (including 44,688 francs from the Paris office), ticket and dossiers from both the Paris and St Malo offices. Furthermore he made arrangements to pay all salaries irrespective of where they worked, up to the end of the month and similarly pay all outstanding Brokerage, Pilotage and Custom charges. The 104,502 francs in the No.2 Agent's Account at the Societe Generale Bank was more than sufficient to meet these commitments without having to draw on the 1,877,010 francs held in the No.1 Account at St Malo of the Comptoir National d'Escompte de Paris bank. As the SS 'Hantonia' under Captain Mason moved away from the quay at 20.30 and out through the entrance lock just thirty minutes before the ebbing tide would have precluded their use, passengers who leaned over the ship's rails would have been pleased to see that the Admiralty had risen to the occasion by providing a naval escort and following representation in the right quarter Air Marshall A.S. Barratt from his office on Jersey had instructed Hurricane fighter sqdns 17 & 501 from the Island base to provide suitable air cover. For their part the SR had provided a ship which was degaussed so she could operate in places where

magnetic mines had been laid and if all these defences failed there were Lewis guns on the upper deck³. What people did not realise was that the British Consuls and their staff from Le Havre and St Malo were also aboard as well as those from Paris mentioned earlier.

At the time when the Paris office was being closed consideration was being given to opening an office in Spain's Barcelona. In January D.W. Ashworth had paid a visit there ostensibly for holidays, so when the need arose to reduce the office staff in Paris, he was advised to take more of his annual leave and travel to Spain on 10 June in his car with his wife and child. Events moved quicker than the Authorities had expected so when the matter was raised at the Continental Traffic Manager's meeting on 24 June, it was decided not to proceed with the proposal. It seems that the service would have operated from Stonehouse Quay, Devonport to which the SR staff from Folkestone harbour had been transferred on 31 May following the fall of Boulogne on 25 May⁴. Ashworth used his initiative and proceeded to Lisbon in Portugal and following representation to Wagon-Lits the SR arranged for £100 to be cabled to him by Thomas Cook & Son Ltd to cover his journey home to England which he effected on 20 August. His wife and daughter arrived back much much later as they had to wait till 9 December when seats became available on a B.O.A.C. 'C' class Flying Boat. After taking into account the £100 he was still out of pocket to the tune of £45.45 and this amount was paid by the SR. He, for best reasons known to himself, declined various posts which were offered and instead was granted leave of absence without pay for the duration of the War as from 15 November 1940. The railway appreciated that when their staff left France in a hurry there was no chance to pack and therefore they recommended to the Railway Executive that grants be paid for the loss of personal effects etc on the basis of £20 for a single man, £40 for a married man and £10 for each child. This proposal was agreed by the Executive on 27 September. However it was also suggested at the meeting that members of staff should register their household and personal effects left in France with the British Chamber of Commerce in France (Paris office) now temporally located in England and to assist, the railway would pay the appropriate registration fee of £1. It was also realised that married men may have had financial difficulties when setting up home in England and therefore to tide them over the SR made a loan available of up to £150 free of interest.

For all his efforts Mr Newbold was given a gratuity of £100 together with the post of Assistant Manager in the Western District office of the SR at Exeter Central station.

The offices in Paris were taken over by the German Press Censorship Bureau on 18 June, but what of the remaining staff, who was to pay them? When the British left Paris, the American Embassy kindly agreed to look after all our interests. Knowing of this arrangement the Assistant General Agent, P.C. Durrant, who had been left behind with ten staff, found life very difficult. So on 15 September writing from his residence at 18 rue de L'Aube, Bois Colomnes (Seine) on SR paper, he sought assistance from the American Ambassador at 2 Avenue Gabriel, Paris. In it he pointed out that they had received no pay since June and they had found it practically impossible to find work even of a temporary nature.⁵ It must have been very galling for him as the SR No.1 General Account in the Lloyds & National Provincial Foreign Bank held 1,031,658 Francs, but it could only be drawn upon by the Chief Cashier or Agent both of whom were in England. Knowing this he thought that perhaps some arrangement could be made to pay the salaries through an American authorisation. The Americans for their part did what was expected of them and wrote to England, although how the letter travelled is not known

but presumably via Spain and Portugal. Eventually it landed on the desk of the Under-Secretary of State for Foreign Affairs, who on 26 November 1940 wrote to the SR's General Manager at Waterloo. In his letter he said that the use of the American facility for the remission of funds was not agreeable, but suggested contact be made with the Trading with the Enemy Branch (Treasury/Board of Trade) at Imperial House, Kingsway, London WC2. This problem had already been partially tackled in England when on 9 August they had agreed to the Paris office's salaries and wages being placed into a special suspense account. Contact was indeed made with the Trading with the Enemy Branch who replied quite favourably on 17 March 1941,

In principle this Branch is prepared to view your proposal with sympathy. I find, however, some difficulty in devising a method of financial assistance to these employees which does not place at the disposal of the enemy valuable foreign exchange.

If it is in your power to operate an existing franc balance in France, I am prepared to approve and despatch written or cabled instructions from you to the appropriate person in France who is in a position to draw on any such existing franc balance.

The SR's Accountant now came into the frame when on 1 April 1941 he said 'If it is decided to authorise Mr Durrant to draw cheques on the No.1. Account Paris, then the bank would require the Directors' authority for this to be done'. In the meanwhile staff in Paris were still not being paid so Mr Durrant had communicated with Germano Serrao Arnaud, Transport Agents at Lisbon saying that the SNCF had agreed to obtain funds. As to whether this came about the files do not reveal. One can gauge the size of the problem, for ten staff were left behind in Paris, not forgetting the thirty other staff from the offices at Boulogne, Brussels, Ostend, Calais, Cologne and Basle. It seems he had got a verbal agreement from the SNCF to pay 50% of their salaries/wages in the event of this arrangement meeting with the SR's agreement. Alas the SR's Chief Accountant stated that the Company's money could be claimed by the Government if this type of scheme was initiated and instead proposed that payment be made in the form of an *ex gratia* allowances to the staff and dependents, but even this proposal did not find favour. Therefore advice was sent that Mr Durrant should be told, whilst there was no possibility of arrangements being made to pay them anything on account of their salaries whilst hostilities continued, a note should be taken of their salaries normally due to them and that sympathetic consideration would be given to each individual case on their merits after the War and there the matter rested till after the cessation of hostilities.⁶

Eventually on 30 January 1946 the Staff Committee of the Railway Executive ordered that the staff of the Paris Office should receive monies etc on the following basis:

- (a) Continuity of service should be recognised and consequently
- (b) Continuity of membership of the appropriate Superannuation Funds.
- (c) Remuneration received from the various sources to be made up to the level of railway salaries which would have been paid had the Paris Office continued to function. For this purpose basic salary and British Railways' War advance to apply.

This was duly done and on 20th February the Secretary of the Paris office control committee advised the Railway Executive that £5603 had been paid out in wages and £498 had been paid into the Superannuation Fund. Initially the former office had been occupied by the American Red Cross (Rainbow Corner) and whilst arrangements were being made for their return to the railways a temporary office under the control of Mr

Durrant was opened at the Gare St Lazare.⁷ Eventually on 1 April 1946 the old offices at 12, Boulevard de la Madeleine were re-opened with A.M. Newbold as General Agent and P.C. Durrant as Assistant General Agent, great was the gathering on 16 April over which Sir Eustace Missenden OBE, the SR's General Manager presided for this was *entente cordiale* at its best! Amongst those present were R.H Duff Cooper, DSO, the British Ambassador, Monsieur Lemaire the SNCF's General Manager and Sir Charles Henderson, President of the British Chamber of Commerce in France.⁸ Thus was the SR back in business.

In writing this article I am greatly obliged for access to files still in the custody of the British Railways Record Centre and for the great assistance rendered by Gyles Longley former President of the British Chamber of Commerce in France, Marie-Noelle Polino of the Association pour L'histoire des chemin de fer en France , A.P. Lambert of the SR's Chief Shipping and Continental Manager's Office at London's Victoria and Cyril Edwards formerly of the British Railways Paris office.

References (Public Record Office – PRO)

1. PRO ZPER 17/8 London & North Eastern Railway Magazine 1934.
2. PRO RAIL 655/71 S.R. Marine Dept statistics
3. PRO MT 59/1273 Ship defences
4. Charles Clinker collection – Brunel University, UXBRIDGE
5. PRO FO916/2594 Railwaymen in occupied countries
6. PRO AN2/472 Staff in enemy occupied territories.
7. Southern Railway Magazine August 1945
8. Ibid. May 1946

The Welsh Harp Reservoir

BY ALAN H FAULKNER

Under its original Act of Parliament¹ the Grand Junction Canal Company was granted wide-ranging powers to obtain the water supplies it was going to need and these included the right to take water from rivers and streams encountered or near to its proposed line and to build reservoirs and feeders.

At the southern end of the canal one of the earliest works was the building of a reservoir at Aldenham in Hertfordshire between Bushey and Elstree. It was completed in November 1795, was supplied by several streams and fed via the river Colne into the canal east of Rickmansworth. A second reservoir was built just north of Ruislip in 1810 and initially it fed into the canal at Norwood but in 1816 a feeder was built to run to near the Uxbridge Road bridge at Southall on the Paddington branch canal.²

What was to become one of the most important sources of water for the canal in the London area, and particularly for the busy twenty-mile Long Level from Cowley to

Norwood and Paddington, was from the river Brent. As early as 1803 a reservoir was planned near Hendon but in that October the project was deferred on cost grounds. Six months later a feeder was being promoted to run from the Brent at Kingsbury southwards through Willesden to join the Paddington branch at Lower Place. Again nothing was done but in 1809 the water situation was becoming pressing and negotiations began to buy the land for the 3 $\frac{1}{4}$ -mile circuitous feeder and it was soon in service.

This was the position in 1812 when an Act³ was passed authorising the construction of the Regent's Canal from the Grand Junction at Paddington to the river Thames at Limehouse. The Grand Junction imposed strict conditions to prevent the new canal drawing any water at Paddington and, after a fruitless exercise to develop a 100-acre reservoir at Finchley, the Regent's Canal Company built a pumping station to draw from the Thames at Chelsea with a pipeline through Hyde Park which was intended to supply water to its canal at Paddington.

In the meantime the Grand Junction had started to supply parts of Paddington with water under the powers of an 1811 Act⁴ and a separate company, the Grand Junction Water Works Company (GJWWC), was set up to develop this sideline which soon became an important business. The water was drawn from the canal at Paddington but it seems its quality led to complaints at times.

As a result in 1819 the GJWWC entered into an agreement with the Regent's for an exchange of water whereby the GJWWC purchased the Chelsea pumping station, the pipeline and the right to draw water from the Thames in return for passing over to the Regent's the right to draw water from the Grand Junction. The agreement was enshrined in an Act⁵ which authorised the Grand Junction to supply the Regent's via the Long Level from Aldenham, Ruislip and any other reservoirs that might be made in future. The Act also confirmed its powers to make further reservoirs and feeders in Middlesex.

Another Act⁶ in 1826 amended the water exchange agreement, regulated the level and depth of water in the two canals and laid down when the Regent's could draw water through the stop lock at Paddington. This Act effectively gave the Regent's control over the supplies that fed the Long Level including Aldenham and Ruislip reservoirs and the Brent feeder.

The idea for a reservoir on the Brent had featured in the 1819 water exchange agreement and the plan was revived in 1826 but the Grand Junction declined to contribute to the cost and the Regent's finances were too stretched at the time for it to consider going ahead alone. Instead the headbank at Aldenham reservoir was raised to increase its storage capacity and the Brent feeder was cleaned out to increase its effectiveness.

Matters came to a head in the autumn of 1833 following a lengthy drought. There had been no supply from the Brent feeder for a long time and the Regent's was put to considerable expense in having to buy water from the GJWWC and the West Middlesex Waterworks Company. At the end of September the company decided to avail itself of the Grand Junction's powers to purchase the land necessary for a reservoir to be built where the two branches of the Brent – the Silk Stream from the north and the Dollis Brook from the east – met in low ground to the west of the Welsh Harp public house on the Edgware Road in Hendon.

James Morgan the company's engineer carried out a survey and drew up plans for a 47 acre reservoir capable of holding 1,400 locks⁷ at an estimated cost of about £8,000. By

the middle of January 1834 Morgan reported the reservoir had been staked out on the ground and negotiations opened with the landowners – these included All Souls College at Oxford, Christ's Hospital and the Borough of Wandsworth. George Trumper, a land agent, was appointed to act for the company in negotiating for the land, the anticipated price being around £90 per acre.

It was not until September that Morgan submitted his detailed plans for the reservoir, by now increased to 69 acres and to hold 2,100 locks⁸. He calculated it would be filled three times a year and provide 6,300 locks or eighteen per day. The plans included a bridge to take Cool Oak Lane⁹ leading from the Edgware Road to Kingsbury, the construction work being estimated at £2,374. Tenders were sought and the successful bidder was William Hoof of Hammersmith whose offer of £2,747 was accepted after some negotiation. Work was underway by the middle of November when Francis Sapte, the company's treasurer, agreed a £11,000 loan to finance the project, the costs being assessed at £7,710 for the land including compensation to tenants, £2,750 for the headbank, brickwork for the overflow weir, ironwork for the sluices and the excavation, puddling and resoiling, leaving £540 for contingencies

By the end of December 1834 the foundations for the main and side walls of the weir were complete, a third of the excavation, embanking and brickwork had been carried out and an initial £500 payment made to Hoof. A month later more than half the work had been finished but now Morgan suggested that the embankment should be raised to enable the reservoir to hold a further 1,000 locks in the future if this was needed. The work could be done fairly cheaply for £500 as all the materials and equipment were on site and the company agreed, but decided against purchasing any more land as the likely cost of up to £4,000 could not be afforded at the time.

The embankment was finished by the end of April when iron grooves for stop planks were installed on the weir to enable the reservoir to hold up to 2,100 locks. Two weeks later the company decided to forego paying a dividend to reduce the amount outstanding on the treasurer's loan. On 1 July John Drinkwater, the company's deputy chairman, visited the site and found the work virtually complete apart from a few minor matters but it was not until the end of November that Hoof's final account was settled – he was paid £3,435 in all.

With copious rains in the autumn the reservoir filled for the first time early in November when 400 to 500 locks a day were running to waste down the river Brent as well as sixty going down to the canal by the feeder which had been adapted to be supplied directly from the new reservoir. Morgan recommended removing the stop planks through the normally wet winter as a safety measure thus reducing the capacity to 1,300 locks.

Despite the opening of the reservoir, several land purchases had not been finalised and arbitrators had to be engaged to reach agreement; one of the last to be resolved was with Colonel Hay who was paid £1,687 in June 1838 for his land that had been taken.

Although James Morgan had resigned as the company's engineer in September 1835, he continued to take an active interest in Brent reservoir and in December 1836 he suggested increasing its capacity by raising the headbank still further and purchasing additional land. As the water supply position continued to be difficult he was authorised to investigate and soon put forward various options. In April it was decided to go ahead with the most ambitious which involved buying another sixty-six acres and more than doubling the capacity of the reservoir¹⁰. Morgan estimated the land would cost £6,600,



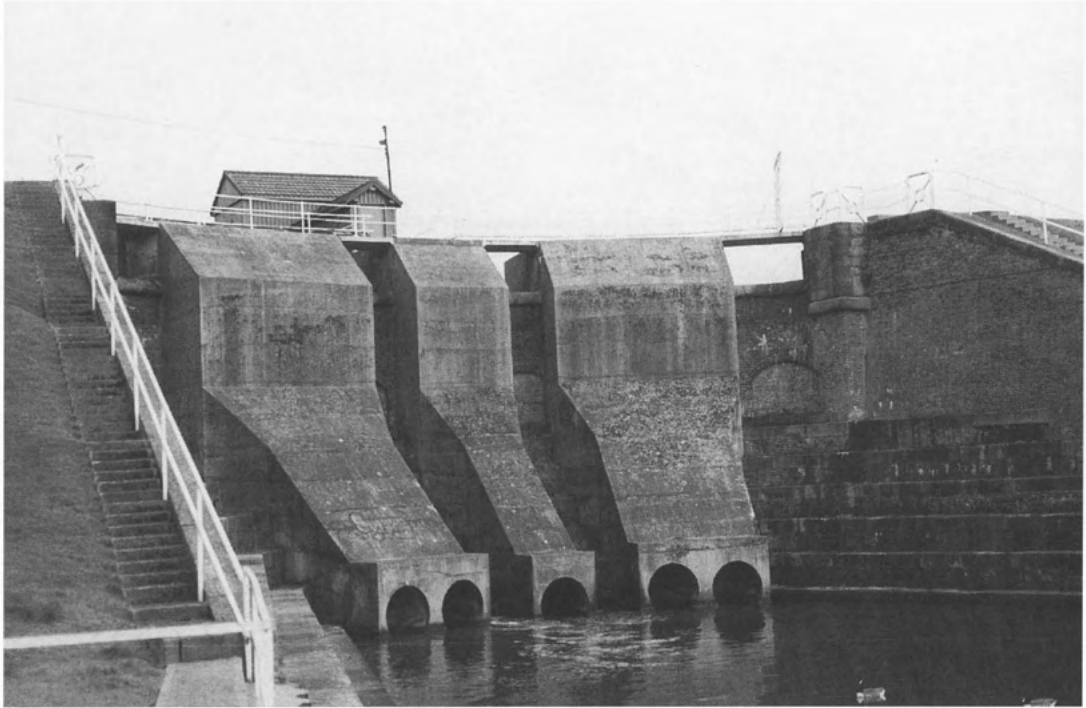
The Welsh Harp dam about 1890 showing water being released through the original sluices along the crest of the weir. (Brent Council, Cricklewood Archive & Library)

raising the headbank £1,400, heightening a bridge taking the Edgware Road over the Brent £150, compensating the Welsh Harp Inn at the north-west end of the bridge £500 and altering Cool Oak Lane bridge £100, making a total of £8,750.

William Hoof was approached to carry out the enlargement but the Commissioners of Metropolitan Roads first needed to give permission for the alterations to the Edgware Road bridge. Initially they insisted on some onerous conditions but these were dropped on the company agreeing to pay them £200. Meanwhile Hoof's offer to raise the headbank and alter Cool Oak Lane bridge for £1,324 and to alter the Edgware Road bridge for £800 was accepted and work started at the end of July.

A temporary road was needed to take the Edgware Road during the bridge rebuilding and it was also found necessary to protect the Old Welsh Harp Inn from flooding from the increased height of the water. All this took longer to carry out than expected but all the works were completed on 15 December. Latterly it had been supervised by Charles Lee, as Morgan's health was deteriorating and he had to withdraw from any further involvement.

Difficulties arose over purchasing the land, some of the owners being reluctant to sell unless forced to do so. Negotiations were in the hands of James Trumper, who had taken over his brother George's business, and some became protracted. Several landowners had been involved with the original work; for instance Colonel Hay agreed to sell more land at £90 per acre provided he could have a boat on the reservoir. Prices varied considerably, some as high as £128 per acre but most were much lower, the Borough of Wandsworth agreeing at £100 per acre.



The dam on 11 February 1999 showing the changed appearance brought about in 1936 by the installation of the syphons which were encased in concrete. (Alan Faulkner)

There were also claims from tenants to be considered such as Robert Flurry, tenant of the Welsh Harp Inn, who sought £550 for damages but settled for £300 which included his interest in nearly two acres of adjoining land. Many claims had still not been settled by the middle of 1839 when it was reported that since 1833 £24,202 had been spent on the works at the reservoir but an estimated further £7,700 was likely to be needed. With these higher costs, the treasurer had to be approached for a £4,000 loan but this was repaid in February 1840. Payments for land were still being made in 1846.

Hoof's contract had involved a considerable amount of extra work including the building of an auxiliary discharge for flood water costing £700 – he was paid a total of £3,414. More modest was £17 to James Garsham for providing cast-iron posts to mark out the boundary of the company's property.

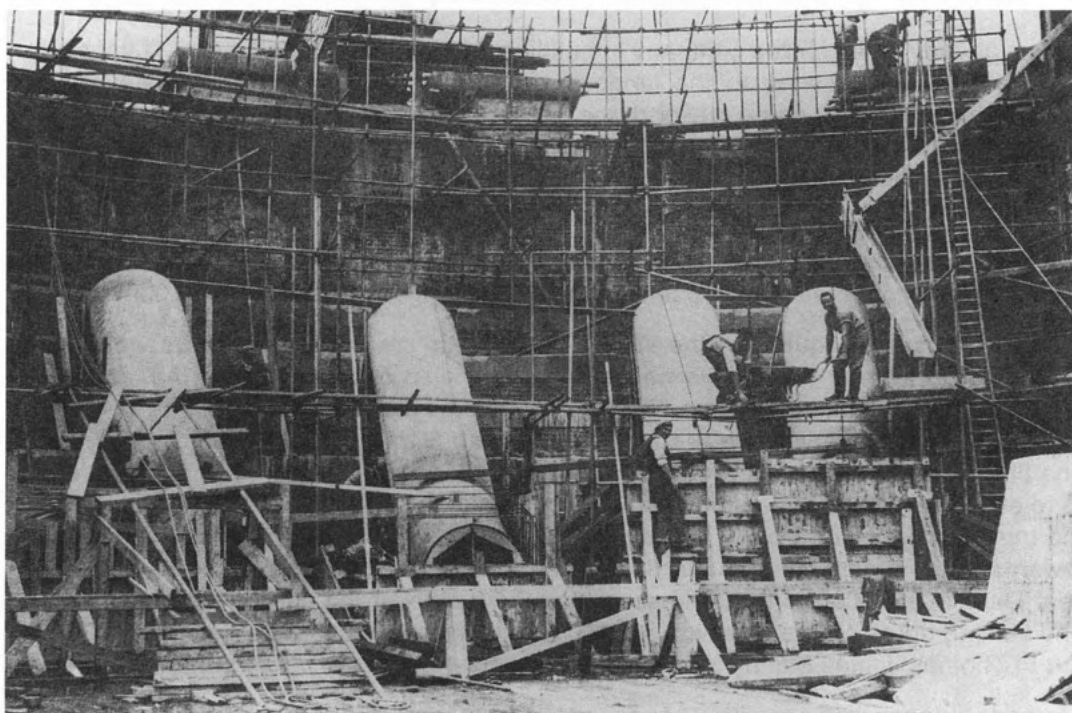
The enlarged reservoir filled for the first time on 29 November 1838 but some leaks were discovered in the wing walls necessitating some strengthening work. Some cast iron sluices and stopcocks were also provided to enable waters to be discharged at flood times. These measures were insufficient to prevent the auxiliary weir giving way on Sunday 17 January 1841¹¹ as a result of heavy rain and a rapid thaw after a very hard winter. The main weir and headbank held but a tidal wave of water swept down the Brent valley into the Grand Junction Canal near Brentford causing several deaths, sinking many boats and barges, and causing considerable damage. The company was involved in several inquests but refused to pay compensation. The auxiliary weir was quickly repaired at a cost of £603 using eight thicknesses of brick and the reservoir was full again by the end of February.

To ensure better control for the future a cottage costing £229 was provided close to the northern end of the dam to enable a keeper to live on site and Hugh McKenna was then appointed at £1.05 per week. As an added precaution William and Thomas Stewart's tender for a new waste weir was accepted in August 1842 at £1,695; the work being completed by the end of January 1843.

The company was still not satisfied with the adequacy of its reservoirs and in October 1848 it attempted to purchase thirty-seven acres of land adjoining Brent reservoir at auction, but its limit was exceeded. There was a meeting on site in June 1850 when William Radford, the company's engineer, was asked to report on the possibility of enlarging the reservoir again and in October the decision was taken to try and add another 5,000 locks at an estimated £24,611.¹² This would be achieved by extending northwards along the Silk Stream to Colin Deep Lane and eastwards along the Dollis Brook.

James Rendel, engineer to the river Lee Navigation, was called in and gave his full support to the plans but such a major extension needed Parliamentary sanction. In December 1850 a Bill was promoted and this was passed in June 1851, the Act¹³ costing £855 and Rendel being paid £155 for his services. The works included further heightening the Edgware Road bridge and raising 370 yards of the road on either side by four-feet to prevent it being flooded; specific conditions being laid down as to how all this was to be carried out. With the use of boards on the main overflow weir it was intended to raise the level of the reservoir six-feet giving a depth of just over thirty-four-feet at its deepest point.

On 21 April 1852 John Jay's tender of £9,937 was accepted to carry out the work; he



Work underway installing the syphons up against the downstream side of the dam in 1936. (Waterways Archive, Gloucester)



To enable the syphons to be installed the water level in the reservoir had to be lowered for a few weeks. The sluice house is little altered today. (Waterways Archive, Gloucester)

having already acted for the company in building a hydraulic engine house at Limehouse. Notices were then issued to the landowners affected but almost immediately it was decided that without going beyond the limits of deviation allowed in the Act, the headbank could be raised still further to accommodate a further 450 locks, the cost being some £1,700 which included the purchase of another eight to ten acres of land.

During the winter the weather was very wet which delayed the work but by the middle of 1853 the reservoir could hold another 1,000 locks and by the end of the year construction was virtually completed with capacity up to the envisaged maximum of 10,000 locks.

Amongst property acquired in the enlargement of the reservoir was the freehold of the Welsh Harp Inn from William Harrison Ashby who also owned much of the land in the angle between the Silk Stream and the Brent. It seems alterations were carried out to the inn before the company advertised the 'New Welsh Harp' for letting in December 1853. The first tenant proved unsatisfactory and in February 1857 the sheriff had to be called in to evict him. His replacement was William Perkins Warner¹⁴ who went on to develop the inn, making it into a very popular venue. In 1871 the company contributed £2,000 towards further improvements Warner was carrying out and in 1876 he signed a new 21-year lease at a £1,000 rent. At the same time he took over the sporting, boating, fishing and skating rights on the reservoir at £100 a year; these rights having originally been let out to Thomas James Maltby from Michaelmas 1844 at £52.50 per annum.

Warner's tenancy was not without incident, the company having to write to him about the explosion of a torpedo in the grounds of the inn on the night of 2 April 1877. He died in 1889 but his widow continued to run the inn until the lease expired in June 1898. It was

then let for a fifty-year term at the same rent to Alfred Probyn who paid the company a £7,000 premium. In the First World War Probyn erected workshops and hangers and used the reservoir for sea planes to take off and land. Early in 1930 Probyn assigned the lease to the Meux Brewery Co. Ltd. which went on to erect a boat house and slipway. In the following year the brewery purchased the freehold of the inn from the company for £24,000 and also leased the sporting rights for £25 annually.

In 1883 the War Office approached the company to use the reservoir for testing torpedoes but without detonating them. Terms of £600 for five-and-a-half days a week for seven months each year for five years were agreed but at the end of 1884 the War Office decided to make other arrangements and paid the company £300 compensation for the legal expenses it had incurred.

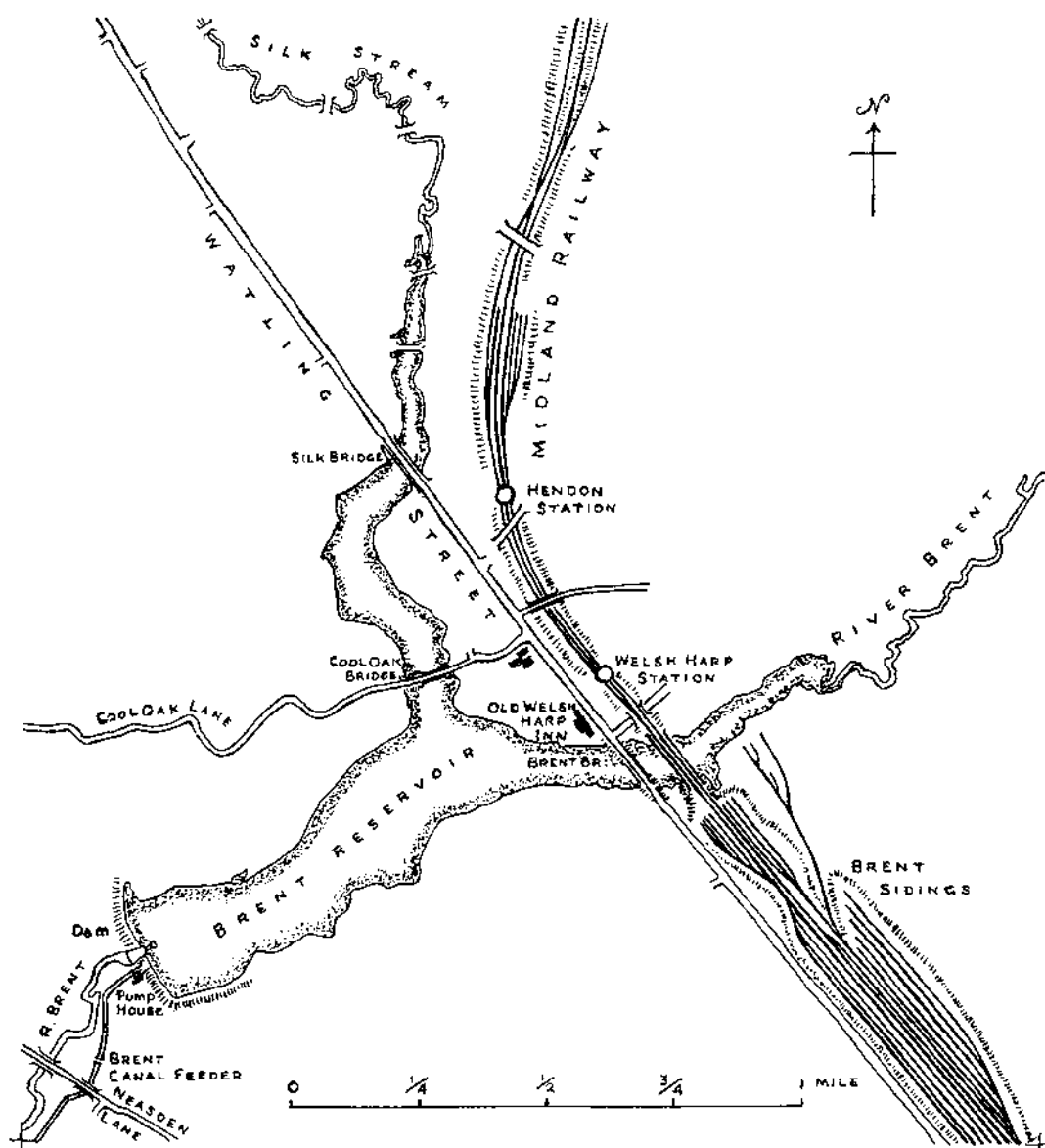
In September 1861 Edwin Thomas, the company's engineer, recommended sinking a well near the dam of the reservoir to tap springs and augment the supply to the canal. It was estimated over 1,600 locks could be obtained each year and £777 was authorised to cover the cost of the well and the pumping machinery. The well was sunk, Gwynne & Co. installed a pump, but the yield proved disappointing. It was cleared out in 1921 and test pumping followed, but again with poor results. Another two test bores up to 50-feet deep were made at the end of 1935 but with no better results.

Another development was when Bernard Baker, engineer of the Midland Railway's London extension, approached the company about routing the new line across the reservoir east of the Edgware Road. Plans for the viaduct were approved in July 1865 and the line was built by contractor Joseph Firkbank, the company supplying him with water from the reservoir for brick-making purposes. The railway opened a short-lived station at Welsh Harp in 1870 principally to serve the popular Welsh Harp Inn and the reservoir ¹⁵.

From the 1890s the company was having to deal more and more with Middlesex County Council over, for instance, selling land to widen the Edgware Road, or agreeing work to straighten both the Silk Stream and the Dollis Brook, or building up low-lying land by tipping for it to be used for building in due course. The council claimed the company only had a right to flood water and not to the normal daily flow of the river, a claim the company firmly denied

After the First World War the land reclamation work accelerated and the company became increasingly involved in managing its extensive estate around the reservoir, such as developing the infrastructure with roads and sewers and fitting out the arches under the Midland Railway viaduct in Adrian Avenue. In turn this led to considerable industrial development by tenants, many of whom went on to buy their freeholds in the 1930s, and to sales to house builders. This all led to a gradual reduction in the size of the reservoir down to its present 144 acres and confining it to the west of the Silk Stream and Brent bridges on the Edgware Road.

In 1930 the Reservoir (Safety Provisions) Act was passed and this led to the Brent reservoir being inspected in 1933 by W J E Binnie ¹⁶ of consulting engineers Binnie & Partners. At the time the main weir could be built up with stop planks by nearly 3-feet to get the reservoir full. The inspector was unable to agree this was a safe practice and recommended the level be kept down. In 1938, however, the company decided to install five iron syphons by the sluice house. The work ¹⁷ was undertaken by Holst & Co. Ltd and was completed on 21 November, two weeks ahead of schedule and earning the contractors a £50 bonus. The syphons were set at different levels and were designed to



The Welsh Harp Reservoir at its greatest extent. Land reclamation work has since confined the reservoir to the west of the Edgware Road. (Edward Paget-Tomlinson)

come into operation one-by-one as the water level rose above certain marks until all five were syphoning. The weir was then built up to its full height.

In practice it was found that when the syphons operated the whole headbank shook and it was decided to keep the level down so that they were only needed in an emergency. This was a prelude to the Second World War when, as an air raid precaution, the water level was lowered still further to reduce the risk of flooding. To replace the water otherwise not available to the canal, Middlesex County Council agreed to the company taking a supply from the river Colne through new sluices at Cowley lock.

Today the water level in the reservoir is normally maintained some 3½-feet below the crest of the overflow weir. It is now controlled by electrically-operated sluices in the sluice house with stand-by hand-operated emergency gear ¹⁸. The sluices are three-feet wide and six-feet tall but it is only in extreme conditions that they both have to be opened fully. Waste water is allowed to escape down the course of the Brent and hence to the Thames, a distance of just over fifteen miles, with the supply to the canal being regulated by two valves located at the end of the tunnel driven into the dam.

Whilst much reduced in size ¹⁹, the reservoir is still an important amenity in west London. The whole area has been designated as a Site of Special Scientific Interest whilst the reservoir is much used for fishing and sailing besides continuing to maintain a back-up supply of water to the canal.

I must record my grateful thanks to Roy Jamieson at the Waterways Archive at Gloucester, to Edward Paget-Tomlinson, for their help in preparing this article and to the British Waterways Board for allowing me to visit the reservoir sluice house and to Mr Barry Fuller for showing me round.

References

- 1 33 Geo. III c.80 – Royal Assent 30 April 1795.
- 2 The Paddington Branch was authorised by an Act of 35 Geo. III c.43 which was assented on 28 April 1795.
- 3 52 Geo. III c.195 – Royal Assent 13 August 1812
- 4 51 Geo III c.169 – Royal Assent 15 June 1811.
- 5 59 Geo. III c.111 – Royal Assent 22 June 1819.
- 6 7 Geo. IV c.140 – Royal Assent 31 May 1826.
- 7 The standard “lock” measure is 56,000 gallons of water – enough to fill a standard Grand Junction 14-feet wide lock.
- 8 Regent’s Canal Company’s report to shareholders – December 1834.
- 9 In the early years the canal company’s records often refer to this as Cool Duck Lane but its present name has been used here.
- 10 Regent’s Canal Company’s board minutes – 26 April 1837 (Public Record Office ref.: RAIL 860/34).
- 11 Jackson’s Oxford Journal – 23 January 1841.

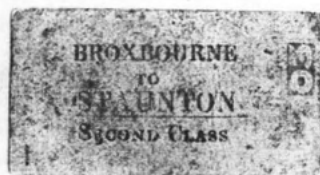
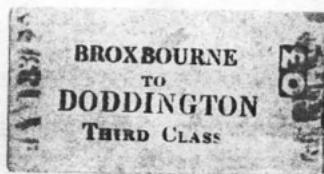
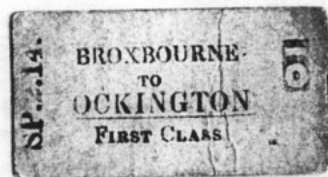
- 12 Regent's Board minutes 29 October 1850 (RAIL 860/42). The Deposited Plans are held in the London Metropolitan Archives collection – Ref. MR/UP/360.
- 13 14 & 15 Vic. c.32 – Royal Assent 5 June 1851
- 14 Details about Warner and the inn are given in the Wembley History Society's booklet *"The Welsh Harp Reservoir -1835 to 1985"*
- 15 The station opened on 2 May 1870; it closed on 1 July 1903 probably following the work to quadruple the line.
- 16 Binnie's report covering all seventeen of the company's reservoirs was dated 5 February 1934.
- 17 The contract was awarded on 22 July 1936 at £4,424 and was to take no more than four months, which included five weeks work on the reservoir side. An extra £642 was authorised on 4 November to extend the headbank wall and to repoint some of the brickwork.
- 18 'Waterways' (British Waterways staff magazine) – September 1960. In the early 1990s these controls were automated with an additional stand-by electrical supply and as a further precaution a back-up diesel generator being provided.
- 19 The immediate post-war capacity of the reservoir was 8,352 locks.

Request for Information

I am trying to find some information as to why three intended names for Eastern Counties Railway stations were never actually put into use.

These were printed as destinations on a number of Eastern Counties tickets that were found at Broxbourne station, never issued, but apparently retained for testing the dating press. These are ; Doddington, Staunton and Ockington.

Were these intended for stations, or names changed prior to opening? If the latter, the most likely names on opening would be; Wimblington, Long Stanton and Oakington. Can any member assist with definite information? J. BRITTON



Correspondence

Railways and Inn Signs

The explanation for inns named 'Narrow Gauge' in Neath and Merthyr may lie not in colliery railways, as Philip Scowcroft surmises, but railways that he dismisses (*Journal* No. 174). Both towns were served at one time by broad gauge lines, and to broad gauge believers this was the standard! It is therefore quite possible that the inn names refer to the 4' 8½" 'narrow' gauge. Knowing the date when the names originated, and the location of the inns in relation to the different lines, might shed some light on this.

I think that this article only brushes the surface of an interesting subject, and perhaps we can hope for a more detailed survey and analysis. As a suggestion for another category to examine, what about inns with railway names that are not at a railway location? On a recent visit to North Yorkshire I noticed a Station Hotel in the village of Hutton Rudby, which is unusual because there has never been a station there. Perhaps there was a connecting road service to one of the nearby stations at Sexhow, Potto or Trenholme Bar. T. EDMONDS

Paddington Station, 1833-1854

On page 33 of the Society's new publication with this title, the author, Michael Tutton, says in connection with the temporary terminus '...Biddle attributes to Brunel the first ever use of ornamental valancing on the platform awnings', citing my *Victorian Stations* (1973) as the reference. What I wrote there on page 48, saying that this characteristic feature may be attributed to Brunel, was 'The first station illustrated with decorative valancing was probably Ealing, followed by Maidenhead.' No mention of Paddington. G. BIDDLE

Cyril T. Boucher, 1910-1998

I should like to add a few words to Ian Moss's heartfelt and heartwarming tribute in the July 1999 *Journal* to the late Dr Cyril Boucher, who came to my rescue long years ago. I still have the fondest recollection of his typically prompt and selfless response to a cry for help from a much younger and relatively inexperienced fellow-member of the fledgling Society. In August 1958 having but recently succeeded Gordon Biddle as Honorary secretary I attended a week-long summer school in York entitled 'A History of Railway Architecture in Britain', organised by what later became the Institute of Advanced Architectural Studies. During discussion, it was suggested that any future courses should include canal, as well as railway, architecture. The organisers agreed any the following year they announced another summer school, 'A History of Railway and Canal Buildings', in the planning of which I somehow became involved.

At a very late stage, I was dragooned into undertaking to give the Sunday evening lecture, open also to the public, on 'The Architecture of Canal Buildings'. Though not in itself impossible, this was truly a daunting prospect – especially as I did not have any slides! With what in hindsight I now recognise as downright cheek, only a few days before the deadline, I contacted Cyril (whom I knew only slightly), explained my problem, and asked for his help. Now, he might have replied "I'm sorry it's not convenient". He could, but never would have said "Get lost". Instead immediately, and without any scruple whatsoever, he put into my hands his magnificent set of illustrations (over 50 precious 3¼" x 3¼" glass slides in a wooden case), nearly all of them featuring

his own fine photographs and immaculate drawings of waterway scenes and canal structures (principally Rennie's, of course!), entrusted me with his notes, and sent me on my way with his kindly blessing. Cyril was of immense help – indeed, without his generous help I would have been sunk and it was a real privilege to use his pictures and at that time pay public tribute to their originator as I now humbly do so again, forty years later, by honouring his memory in gratitude and affection.

In closing, it is a pleasure to record that when the next similar summer school was held two years later, in August 1961 the organisers had the great good sense to invite Dr Boucher himself to present that particular lecture, which he did with his own distinctive blend of modesty and authority, appearing that year with such other notable speakers as L.T.C. Rolt, Michael Robbins and the inimitable Professor Henry-Russell Hitchcock.
M. BERRILL

P.S.: A minor correction is needed in the first main paragraph of the Obituary. Dr Boucher's change of address to Marple was listed in the October 1955 issue of the society's *Journal*, not the *Bulletin*, which was not started until January 1959.

Cast Iron Railway Arches

I was interested to read the contribution by Stanley Tyson in the July Journal. Stanley and I have corresponded on bridge matters in the past, and I sent him some additional material on Stamford Bridge in case he should wish to add a postscript. However, it is his wish that I should write to you direct.

The line through Stamford Bridge was part of the York and North Midland Railway, with George Stephenson as engineer-in-chief. The resident engineer at Stamford Bridge was John Cass Birkinshaw (1811-1867), Robert Stephenson's first articulated pupil after his return from Columbia, and the son of John Birkinshaw of Bedlington, inventor and patentee of the wrought iron fish-bellied rail.

It is reputed to be the oldest remaining cast iron arch railway bridge (as distinct from tramway or narrow gauge) and has a clear span of ninety feet. This claim may be doubtful since the Royal Commission of 1847 listed sixty cast iron arch bridges with spans in excess of forty feet. Ref. PRO. MT 8/1. The contractors for the abutments were Jackson and Bean, and Gilkes, Wilson and Co. of Middlesbrough supplied the ironwork (and may well have designed and erected it.)

The design of the bridge was of sufficient interest to be recorded by William Humber in the 1857 edition of his book 'A practical treatise on cast and wrought iron bridges and girders'. The description is accompanied by two excellent and detailed drawings, Plates 11 and 12. Apart from the official Listing, the bridge has been recorded by the Institution of Civil Engineers' Panel for Historical Engineering Works, and is described in 'Civil Engineering Heritage, Northern England' under Ref. HEW 526.

For biographical details I am, as always, indebted to John Marshall's invaluable 'Biographical dictionary of railway engineers'.

With regard to the new format of the Journal, the larger page size is definitely a considerable improvement and to be welcomed, but it does seem a pity that advantage has not been taken to include extra text and/or photographs. With regard to the typeface, it is somewhat lacking in character and distinctly utilitarian, I would commend the Transactions of the Newcomen Society as a model to be emulated. At least your

advertiser, Onslows have not entirely broken with tradition. Since printing costs for the new larger page must have increased, this must surely be reflected eventually in subscriptions. In commercial terms, the amount of information per page is the same as before, but now costs more.

It will be interesting to see how the new layout copes with the annual bibliography since there is a case there for larger print although I make no personal complaint.

I appreciate that the cry for more material to be published may produce the usual Editor's anguished response – 'send me more material and I will publish it.' This seems a common problem with other Society Journals.

The work of honorary Officers is seldom appreciated by the silent majority of Members. So please do not feel that I am criticising for the pleasure of it. The Journal is the public face of the Society. J. RAPLEY

The Journal Format

Now that the new format of the RCHS *Journal* is established, may I be permitted a few observations. Naturally impressions on layout are subjective, but here are mine for what they are worth.

I can understand the desire to go to a larger (albeit somewhat non-standard in these days of A4 and A5) format partly to enable a larger type size to be used, but I feel that best use is not being made of the increased page area.

Typographically, legibility being determined by the number of words per line, I don't believe that this has improved in the new layout. I can't remember the recommended formula offhand, but I know that I still find it as difficult to 'follow on' from one line to the next. I believe this is not assisted by choosing a sans serif typeface; it is an established typographical fact that serif faces are easier to read – almost all books, newspapers and most magazines use serif faces. I would have thought that the use of a serif face set in two columns per page would make for a far more legible – and appealing – journal.

I also find the very bold 'standard' body type too bold for comfort. Its boldness means that there is hardly any difference between the body type and the 'bold' sub headings, making for unvaried – indeed visually boring – pages. The lack of a different size or style for footnotes (which do seem unconventionally large) does not help this, and the italic captions do not really stand out. The same applies to the book review pages where heading paras and text are not distinguished.

I hope the above is of some use in the panel assessing the members opinions of the new layout; not doubt we shall be reading some feedback (unless of course I am the only one to comment) in future issues.

Having said all that, I must add that the content is as fascinating and varied as ever, even if I am only interested in the canal half of the subject. My thanks to you for the immense efforts that I know must go in to every issue. H. POTTER

I write to support wholeheartedly the remarks made in Mr Horne's letter regarding the present format of the *Journal*. A call was made for suggestions regarding a format for a new style of Journal in the September/October 1997 Bulletin and I responded with

virtually every point made by Mr Horne. Having then recently retired from the editorship of another amateur railway historical publication where I introduced a number of changes; one of which was reverting from a sans serif typeface to a serif face which was well-received by the membership; I felt that this experience should be useful to the committee. I am pleased to find another 'with experience in these matters' has now made the same points. A sans serif face is not successful when applied to bulk text., the wide and thin stroke of the serif faces is much easier to read, thereby making the general and proof readers' task that much simpler. Type design, leading and line length are again important functions in the 'readability' of bulk text, these Mr Horne discusses in detail and I concur with his conclusions. Mr Horne closes with the remark 'I do think it has a less professional 'feel' for a learned work, but that is just my subjective view'. It is the writer's view also. M.J. HOUCHIN HUGHES

I have followed the correspondence on the new Journal with interest. In case you are taking a straw poll, I have to say that I subscribe to virtually all Mr Horne's observations. Additionally, I prefer the traditional presentation of blocks of references/notes in a smaller, lighter, and more compressed form rather than making them on a par with the main text. (which also saves space...) R. DEAN

I am astonished to read (somewhat belatedly) that some people do not like the new format for the RCHS Journal. I think it is a great improvement. It is nice to handle easy to read and is a worthy addition to my bookshelf.

To suggest, as one of your correspondents has done, that it is like a child's reader book is almost an insult. A similar page size was widely used for scientific journals, including *Proceedings of the Royal Society* no less, some may still use it but I am a bit out of touch now that I am retired.

And who, may I ask, is going to write and edit 'more to read' if you reduce the print size in the future. P. KNIGHT

Book Reviews

PADDINGTON STATION 1833-1854, Michael Tutton, 48pp, 224 x 249mm, 9 illustrations, 16 plans, card covers, R&CHS, distributed by Atlantic Publishers, 1999. ISBN 0 901461 20 2, £8.50 post free.

In their early years, the Great Western Railway directors were uncertain as to where to locate their London terminus, even a joint project at Euston was contemplated. This account begins by outlining the various schemes which culminated in the choice of Paddington and describes the steps necessary to implement the decision. Several plans show the chosen site and its surroundings. Details of its construction are scanty, but the Company account books give some information, and contemporary plans reveal the various proposals. Sketches, albeit with some artistic licence, show what was actually carried out. Another chapter deals with the station at work, with timetables taken from

MacDermot's *History of the GWR*. Mention is made of the installation of the electric telegraph, the first in daily use over a fairly long distance. Finally, the author describes the transition from the original station to the larger one of 1854. One appendix lists the owners of the land required as given in the Book of Reference while others give an Analysis of Construction Costs and Brunel's Estimates. An Index is included. This is a scholarly work, largely based on primary sources, and including some previously unpublished plans. The source references are given at the side of the text, as are the captions, which results in a few plans and illustrations having their captions on the far side of the opposite page. Older readers might prefer less blank space and a larger type face; certainly a magnifying glass will be needed for a close study of the timetables. These are but minor criticisms of an attractively produced book which fills a gap in GWR history. MICHAEL HALE

THE SCHULL & SKIBBEREEN RAILWAY, James I.C.Boyd, 280pp 210 x 150mm, 129 photographs, 19 maps and plans, index, boards, Oakwood Press, 1999, ISBN 0 85361 534 9, £22.95.

As we have come to expect of a book by James Boyd, this is exhaustively researched, well documented and well arranged. Having as he thought, thoroughly explored the railway on a bicycle in 1948, the reviewer could only marvel at the amount of detail collected by the author. It is interesting to learn that the 3ft gauge tramway was originally intended to extend eastwards from Skibbereen as far as Ross Carbery and Clonakilty and westwards beyond Schull to Crookhaven which would have made a system nearly 40 miles long. As it was only the 14 miles to Schull was built and completed in 1886. The shoddy, almost unworkable state of the line after opening, following sanction by the Board of Trade inspector Major General C.S.Hutchinson, who also sanctioned the first Tay Bridge, makes a grim story. As the author states: 'It seems that at every stage reliance was placed on those who proved untrustworthy or inadequate for the work to which they had been assigned.' It is astonishing to read of the amount of local opposition to the tramway, both to the line as built and to the extensions. The first chapter presents a history and description, with interesting early photographs, of the district through which the line passed. Subsequent chapters are concerned with the development of the Cork, Bandon & South Coast system and the branch to Skibbereen, the planning, construction, opening and operation of the S & S and its difficulties. Chapter 13 takes us on an imaginary journey from Skibbereen to Schull. It is followed by details of locomotives, carriages and wagons and permanent way. Besides 32 drawings of locomotives, coaches and wagons, and various diagrams, there are reproductions of notices, timetables, lists of fares and other minutia. Photographs are interesting and well reproduced, even those dating back over a century. The text is thankfully free of the irritating newspaper- style sub-headings which disfigure a number of railway histories. Source references are at the foot of the page to which they belong and do not have to be hunted out at the end of the book. We must be grateful to a publisher who does this. in appendix includes sections on sea-borne competition, mining, and block diagrams showing working costs, revenue and expenses. The index regrettably contains several large blocks of page numbers with no distinction between major and minor references which can be tiresome. So that photographs can be placed in the relevant part of the text, the book is printed on good quality art paper which makes it rather heavy at 1¹/₂ lb; but those for whom weight represents value should be

pleased. One is left with the conclusion that a short steam tramway must be about the most inefficient form of transport for such a sparsely populated district. We can only feel grateful to James Boyd for putting on record the history of this unfortunate undertaking in such an interesting and readable book. JOHN MARSHALL

THE HIGH LEVEL BRIDGE AND NEWCASTLE CENTRAL STATION, John Addyman and Bill Fawcett, 151 pp. A4 format, art paper, glossy card covers, North Eastern Railway Association, 1999, ISBN 1 873513 28 3, £9.95 or £10.95 by post from HLB Book Sales, 12 Beverley Road, Whitley Bay, NE25 8JL.

The two authors, a civil engineer and an architect, are known for their researches into the history of NER structures and are well qualified to write this 150th anniversary volume on two of Britain's most important and imposing railway monuments. The result is a high-quality book produced by the NERA on behalf of the High Level Bridge and Central Station 150 Committee. Colour photographs, drawings and paintings, many published for the first time, are excellently reproduced, as are the monochrome illustrations. The authors' skilled draughtsmanship is well in evidence, although it is a little surprising that some of the maps are somewhat let down by the hand lettering. A mistake in a caption and a few printing errors may be due to modern production methods.

But these do little to lessen the painstaking research and the lucid text which make this book more than an important record. It is also an example of how a high academic standard can be combined with readability, even in technical details, for the pleasure of the layman. Chapters cover the early history of railways on Tyneside, including Greenesfield station at Gateshead; the planning, materials, construction and subsequent maintenance of the High Level Bridge; the design of Central station and its history up to the present day; and short biographies of the four principal players: John Dobson, T E Harrison, George Hudson and Robert Stephenson. Their roles are analysed, some recent assertions are disproved, and the influence of Newcastle town council is demonstrated, together with that of the Newcastle & Carlisle Railway which paid for a third of the cost of the station and established its headquarters there. It is clear that Hudson was far from getting his own way. There are also contributed pieces on the famous diamond crossing and Central station signalling, together with appendices, extensive references and an adequate index.

In times of over-priced railway books of much less lasting importance, this one represents exceptionally good value. It is an important work about two of Britain's best-known historic railway structures. GORDON BIDDLE

SEVERN TRADERS, Colin Green, 179pp, approx. 150 monochrome illustrations, 6 colour plates, various maps and technical drawings, hard covers, Black Dwarf Publications, 47 High Street, Lydney, Gloucestershire GL15 5DD, 1999, ISBN 0 953 302 822, £26.95.

This is an exemplary book, a model for other authors. It explains the whole rich story of freight traffic on the Severn, its tributaries and connecting canals, in the estuary and the Bristol Channel and to the coastal ports beyond. It spans time from the Romans to the

present day but its heart is the history of the trows and of the men who built and sailed them. The chapter headings demonstrate an unconventional but interesting approach to written history 'William' the Tale of a Trow, Ports Harbours and Quays, The Origins of the Trow, The Trade of the Trows, The Builders and their Ways, The Life of the River and The Skills of the Trowmen.

At its height, the trade of the trows was impressive. It provided the essential export transport for the birth and growth of the Shropshire iron, tile and china industries around Ironbridge, for the Droitwich salt trade and the Forest of Dean coalfield. It provided the essential import transport for the huge area drained by the Severn basin – reaching quays far inland on the Wye and Teme as well as on the Severn itself to Shrewsbury and beyond. The author does not make the point, but it is striking how an efficient and large scale transport system developed over time and became important to a whole series of local economies without the panoply of modern commercial undertakings or the influence of any public investment or regulation. The trowmen not only bore the risks of tide, weather and traffic, they risked their own investment in building their trows and of innovating in their design.

The illustrations are a glory of the book. All well reproduced, they put the boats and their trade in an amazing variety of settings – some familiar but many not. Drawings showing the details of the boats and their equipment are contributed by the incomparable Edward Paget-Tomlinson. There are eight appendices including a useful glossary for readers who don't know a beamshelf from a bulwark. The bibliography is comprehensive and there are three indices, covering vessels, people and places.

Many of us can trace an interest which we have enjoyed for years to the first book about it which we chanced to read. Whether you are already interested in the Severn traders or not, obtain this book. MARTIN BARNES

DORSET RAILWAYS, Ted Gosling & Mike Clement, 128pp, 244 x 172mm, 213 photographs, coloured laminated card covers, Sutton Publishing Ltd., 1999, ISBN 0 7509 2001 7, £10.99.

This book is in the 'Sutton's Photographic History of Railways' series and it refers to Dorset as it existed before the 1974 boundary changes. It contains over 200 photographs including several interesting pre-grouping views. Two-thirds of the total are post-war, but few are later than 1975 when the Bridport branch closed.

There is a varied selection of station scene, expresses, local trains, locomotives, railway staff and lineside equipment. The most popular subjects are Lyme Regis, the Bridport branch, and the L&SWR main line: these take up half the book. Curiously the only map is Lewis Cozens' map of the Lyme Regis branch, which was mainly in Devon. A general railway map of Dorset would have been of value to readers. This book will appeal to people who have fond memories of Dorset railways in steam days. ALLAN BRACKENBURY

CUMBRIAN RAILWAYS, John Marsh and John Garbutt, 160pp, 245 x 172mm, 272 photographs, soft covers, Sutton Publishing Limited, 1999, ISBN 0 7509 2043 2, £10.99.

The authors state in the introduction that this is "multi-period train-spotter's view of Cumbrian Railways". It is a statement that is difficult to analyse and, on that count, a fair summation of the book. The first five chapters are a photographic survey of the lines of five of the pre-grouping companies that operated in what is now Cumbria. The remainder of the book is short sections on eleven closed routes within the same area. It is purely an illustrated survey with captions of varying length.

There are some fascinating shots such as that of a double-headed L&NWR express on Dillicar troughs. The use of postcards, with excellent reproduction, has widened the range of material. Road vehicles and steamers as well as accidents and special events, timetables and other documents are featured. The end product is a book that tries to do too much and, as a result, lacks cohesion and balance. As an example, Oxenholme, with nine photographs placed in no particular sequence is over represented whilst other stations are omitted. Illustration selection should have been more rigorous. On page 41 there are two shots of the same class of locomotive, on the same type of train, at the same location and on the same day. Some of the illustrations suffer from poor cropping and whilst those more elderly cannot be expected to reproduce well, some more modern ones appear dull and lifeless. The index is only of locations and it is surprising to find a regional survey without a map of the area covered. Railway publishing has progressed to the extent that it is no longer sufficient to put together an album of interesting photographs to achieve success. This album stands some way below the best. WILLIAM FEATHERSTONE

ARCHIVE, THE QUARTERLY JOURNAL FOR BRITISH INDUSTRIAL AND TRANSPORT HISTORY, Issue 22, 64pp, 62 b/w photographs, 4 maps, 2 drawings, soft covers, Lightmoor Press, The Archive Shop, 47-49 High Street, Lydney, Glos, GL15 5DD, June 1999, ISBN 1352-7991, £6.00 (subscription to 4 quarterly issues £26.00 from the publisher, including p&p).

This is a sample of a magazine now in its sixth year of publication. The major articles are about particular industrial concerns, but they all have a significant transport content. Speech House Hill Colliery and the Kirkleatham Iron Stone Company are covered in complete articles while there is part one of a series about the Royal Ordnance Factory, Thorp Arch. There is a short picture feature about clog sole cutting.

Transport is represented by picture-based material with descriptive and analytical commentary. These cover a tram at Treherbert, the broad gauge railway at Dawlish, one of a continuing A-Z series on sailing craft, and the last part of a series about London B-Type Omnibuses. There are four pages of letters and book reviews and, inside the back cover, a brief bibliography and source references.

The journal is printed on art paper and an outstanding feature is the quality of the photographs. Where originals are clear and sharp they have been reproduced to double-page size to show the details to full advantage and the 1874 photographs of the Kirkleatham ironstone railways are especially noteworthy. This is a well-produced journal, although the high quality of presentation is reflected in a high cover price. TIM EDMONDS

INDUSTRIAL RAILWAYS OF ST. HELENS, WIGAN & WARRINGTON PART ONE – ST. HELENS, C.H.A. Townley and J.A. Peden, 272pp. 53 photographs, 45 maps, Boards, Industrial Railway Society, (Available from Mr. S. Geeson, IRS Publications (SWWI), 1, Clifton Court, Oakham, Rutland LE15 6LT), 1999, ISBN 1 901556 10 7, £24.00.

More than the history of its putative subject- though very fully that. Well printed, well presented, clear illustrations, good maps! The book is the first of a trio but continues a series on the industrial railways of South Lancashire. Other volumes were enthusiastically reviewed in the Journal in 1995 and 1996. This book defines its historical and geographical limits and gives a summary of the canals and main line railways in its area. It is worth reading just for that. The bulk of the book – seven chapters – is devoted to great detail of individual small areas – sometimes single factories. All is well researched and fully referenced with doubt indicated where it exists. Mainly of interest to those who know the area, it is so well written, interesting and a model of its kind that it will appeal to others. One regret- almost nothing remains for easy public view. IAN MOSS

ISLE OF PORTLAND RAILWAYS, VOLUME ONE, THE ADMIRALTY AND QUARRY RAILWAYS, B. L. Jackson, 176pp, 210 x 149mm, 3 colour and 154 b&w illus., 27 maps, card cover, Oakwood Press (OL106A), Usk, 1999. ISBN 0-85361-540-3, £10.95.

This labour of love which leaves no stone unturned, relates much about Portland, its quarries, forts, dockyards and prisons, in addition to its railways. It even includes a monograph detailing the history of all steam road vehicles that ever turned a wheel on the Island.

The Merchants' Railway, built to bring stone down a self acting incline to Castletown pier, obtained its Act in 1825 and operated until 1939. No explanation is given for the unusual gauge of 4'6". The breakwater railway was another curiosity, comprising 7' gauge tracks on a wooden framework built out from the shore, from which stone was dropped to construct the sea defences. The railway from Weymouth will be dealt with in Volume 2, but the lines inside the dockyard and those serving the naval coaling station are described here, although the amount of traffic handled is not mentioned. Minor quarry railways are not forgotten with their routes reproduced on old maps.

Technical descriptions are not always adequate, a detailed knowledge of Portland topography is assumed and there are too many exclamation marks. More selective use of material, together with vetting by an editor from off the Island, might have produced a more satisfactory work for the general reader. An index is postponed until Volume 2. DENNIS HADLEY

STEAM AROUND WOLVERHAMPTON, Mike Hitches, 128pp, 243 x 172mm, 178 photos, 8 maps, 4 plans, soft covers, Sutton Publishing, 1999, ISBN 0 7509 2187 0, £10.99.

Another volume in the "Photographic History of Railways" series, it contains views at locations ranging from Four Ashes and Wellington in the north, to Stourbridge in the south and Great Barr and Spon Lane in the east, with the emphasis on Wolverhampton. After an Introduction to set the scene, there are sections on High Level and the L&NWR, Low Level and the GWR, The Midland Railway, Nationalisation, The Loco Sheds,

Stafford Road Loco Works and Modernisation. The subjects include stations, sheds, works, locos, trains and railwaymen. The photographs are generally well reproduced, with a few muddy ones, but their sources are not given.

Many of the photographs have some interesting features, but the overall selection gives the impression that the barrel has been scraped to fill the pages. For example, there are two views of No. 6000 at Swindon, two of a burnt-out carriage at Fordhouses and five of former L&NWR 0-6-0s (ex WD) at Stafford Road Works. The text and some of the captions have errors which indicate a lack of understanding of the complexities of the railway system of the district and the significance of past events. It is not history as R&CHS members understand the word. MICHAEL HALE

THE INDUSTRIAL CANAL, VOLUME 2: THE RAILWAY INTERCHANGE TRADE, Tom Foxon, 177 pp, approx. 70 photographs, approx. 50 maps and plans, soft covers, Heartland Press, 100 Frederick Road, Birmingham B33 8AE, 1998, ISBN 0 951 7755 61, £9.95.

The central proposition of this book is simple. The industries of the Black Country were well established before the railways came and most of the mines, iron works and factories had direct canal access. Consequently, if the newly arrived railways were to tap the trade, they would have to use the canals to collect and distribute their local freight traffic. So the railway companies built a series of interchange basins where boat could be brought alongside wagon and the load transhipped. The L&NWR and the Midland also used boats to penetrate the largely Great Western area beyond the Dudley hills. The total railway traffic handled by the BCN alone amounted to 1,208,363 tons in 1898, roughly 200 boat loads every day.

Tom Foxon describes the background to railway and canal development in the area before giving a detailed account of the history and activity of every railway interchange basin and boatage depot. Location was clearly important. He describes how the Midland suffered from its main depot at Great Bridge being below the Ryders Green locks and therefore having a two-hour disadvantage for traffic off the Birmingham level compared with the L&NWR.

This book is thoroughly researched with full references. The pictures and plans are fascinating and comprehensive. Although there is a mass of data about traffic, boats and dates, the book also conveys the character of the industry of the Black Country in its heyday. This is particularly valuable as there is now so little to see to remind us of what it must have been like. MARTIN BARNES

THE LYNTON & BARNSTAPLE RAILWAY YESTERDAY AND TODAY, P. Gower, B. Gray & K. Vingoe, 112pp, 206 photos, map, soft covers, The Oakwood Press, 1999, ISBN 0 85361 537 3, £8.95.

Opened in 1898 but terminating too high above the town of Lynton, the line was commercially no great success and it closed in 1936 before the advent of preservation societies to take it over intact. Today, however, with demolished viaducts and other obstacles it would be a massive task to restore it. But the temptation to try is great. It would be a wonderful tourist attraction and the photos in this book, excellently posed to

coincide with earlier ones, show that even owners along the line now living in its stations converted into private dwellings show remarkable enthusiasm for keeping many of its original features. This early narrow gauge light railway deserves to join the ranks of restored lines and this book, one of the best of the many 'then and now' publications, will greatly help those efforts to succeed at least in part. JOHN DENTON

ADLESTROP REVISITED, Anne Harvey ed., 116pp, approx. 100 monochrome illustrations, soft covers, Sutton Publishing, 1999, ISBN 0 7509 2289 3, £12.99.

This is an anthology inspired by Edward Thomas' poem of 1914, the one which begins:

Yes. I remember Adlestrop-

The name, because one afternoon

Of heat the express-train drew up there

Unwontedly. It was late June.

The anthology has to be read from start to finish because it contains so many varied contributions, each helping to build up the picture of the man, the poem, the place, the time, the station and the other people. Contributors include Betjeman, Hughes and everybody else who has written anything in response to the poem. There are drawings and photographs and more poems. There is an erudite analysis aimed at deducing exactly which train Thomas was in when it stopped in the heat at Adlestrop. There is a detailed account of the working of the station at about that time, there is the text of a radio play stimulated by the poem. There is a mass of material of interest and quality. To whom goes the credit? To Adlestrop station and its surroundings for being as they were? To Edward Thomas for writing the poem? To the editor and publisher for assembling this book? Obtain, absorb and decide. MARTIN BARNES

DURHAM RAILWAYS, Charlie Emett, 142pp, 253 b/w photographs, soft covers, Sutton Publishing Limited, 1999, ISBN 0-7509-2076-9, £10.99.

This is one of a series of photographic histories and comprises a four-page introduction and thirteen chapters of captioned photographs. Rather than providing a clear historical and geographical background for the pictures, the introduction is poorly organised and confusing. This means that anyone using the book as a source for the history of railways in County Durham will be disappointed. There are no maps to clarify development of the network or to locate the photographs, and no tables or genealogies to elucidate the bewildering array of companies and dates in the text. No bibliography is provided.

Photographs are not credited, but an acknowledgement to the *Northern Echo* suggests that all have come from that newspaper's picture library. Captions vary greatly in length but few are clear and accurate. Many pictures are placed out of context and there is little variety. Half the pictures in the chapter on the Stockton & Darlington Railway relate to the 150th anniversary events, mainly locomotives in the cavalcade, and of the 60 pictures in the chapter on the East Coast Main Line at least 15 are not in County Durham and 26 feature A4 locomotives. TIM EDMONDS

VICTORIAN AND EDWARDIAN HORSE CABS, Trevor May, THE MODEL T FORD, Jonathan Wood, 32 pages each, 55-70 photographs and other illustrations, card covers, Shire Publications, 1999, ISBN 0747804303 and 074780432 X., £2.95 each.

The Shire Albums, packing a formidable amount of text and illustrations into 32 pages, are excellent introductions to their subjects. All include selected bibliographies and "Places to Visit". London's horse cabs grew out of the earlier Hackney coaches and Sedan chairs soon after 1800 and, developed in two wheeled "Hansom" and four wheeled "Growler" forms, lasted for over a century until superseded gradually by motor taxis. The four wheelers were particularly valuable countrywide as feeders to railway stations. Cabbying was a trade with a few large operators in London or the provinces. Mr May outlines the type of men who ran the cabs, their welfare shelters and how the cabs were policed and controlled.

The Model T. Ford was the first mass produced car, over 16.5 million being made worldwide in 1908 to 1927, some 300,000 in England at Trafford Park, Manchester from 1911. Mr Woods' booklet is especially useful on the subject of Ford's English manufacture and marketing, not forgetting the commercial and, in 1914-18, military uses to which a Ford T chassis is well put. Their reliability, even in desert conditions, was legendary. T.E. Lawrence approved of them but he was never, as is stated here, in Mesopotamia. The commercial variants – trucks, vans, buses, charabancs and ambulances never suffered tax discrimination as Ford cars did here after 1921. PHILIP SCOWCROFT

THE WESTERHAM VALLEY RAILWAY, David Gould, 128pp, 210 x 150mm, 68 photographs, several maps and drawings, card covers, Oakwood Press, 1999, ISBN 0 85361 515 2, £8.95.

Westerham is about the same distance from central London as Woking or Gravesend. As it lies beyond the North Downs, direct communication is awkward, and Westerham's growth has been slow. Its railway followed the valley eastward and opened in 1881. Promoted locally, it was helped by the South Eastern Railway who thus kept out rivals. Westerham's railway was planned as a route to London. Thus it joined the SER main line at obscure Dunton Green, not at convenient Sevenoaks. It had a good passenger service and for some 30 years through trains to London ran for commuters. In the 1950s, when other Kent railways were being electrified, pre-grouping steam stock remained on the Westerham branch, whose service was reduced in 1955 and ceased altogether in 1961. Feelings ran high locally as Ernest Marples, the Transport Minister, had overturned the Tucc recommendation that the line be retained and it was rumoured that he planned a major road on its course.

This is a very good book that tells the life story of the railway from before birth until after death. Many details are provided of timetables, fares, coaching stock, engines and other changes over the years. There is a useful chapter about the preservation society which existed briefly after the line's closure. It was stronger and more wealthy than one might expect, as railway preservation was then a novelty. It was prevented from purchasing the line by Kent County Council. Today most of the Westerham Valley Railway lies under the M25 motorway. ALLAN BRACKENBURY

PIER RAILWAYS & TRAMWAYS OF THE BRITISH ISLES, Keith Turner, 80pp, 210 x 49mm, 3 colour and 82 b&w illus., 2 maps, card cover, Oakwood Press, (LP60), 1999, ISBN 0-85361-541-1, £6.95.

This enlarged and more handsome update of a 1973 publication retains the former Oakwood virtue of compacting much information into a small compass in a straightforward manner. It discusses only lines "constructed for the primary purpose of carrying passengers and their luggage from one end of a pier to the other", and does not consider steamer piers served by branches of the main railway system. Individual chapters on the history of nine piers and their railways are concluded by a brief mention of other minor lines, including a roller coaster.

Three lines have closed since 1973, one at Blackpool has opened, and Southend has been completely reconstructed. Meanwhile Hythe continues to convey passengers for the Southampton ferry in much the same way as for the past eighty years. Propulsion systems described include manpower, sails, horses, steam, cable and assorted electrical systems, which were usually converted to internal combustion when renewal was required.

There is an up-to-date Bibliography, but some references to the sources of information used would have been helpful. The Punch author who visited Herne Bay was Douglas Jerrold, not Jenold. DENNIS HADLEY.

THE KEMP TOWN BRANCH LINE, Peter A. Harding, 32pp, 43 b/w photographs, 8 facsimiles, 5 drawings, 4 maps, gradient profile, soft covers, Peter A. Harding, "Mossgiel", Bagshot Road, Knaphill, Woking, Surrey, GU21 2SG, 1999, ISBN 0 9523458 4 6, £3.00 (available from publisher p&p 25p).

This is an account of a branch only 1 mile 32 chains in length that was opened in 1869 to serve the eastern side of Brighton. In its heyday there were intensive passenger services but, after temporary suspension during the Great War, they fell victim to tram and bus competition and were withdrawn at the end of 1932. Goods traffic survived until 1971. An outline history fills nearly half the book, followed by descriptions of the route, locomotives and rolling stock, final closure and post-closure history. References are confined to some quotations in the text, mainly from newspaper, and a brief bibliography. Post-1950 photographs dominate the illustrations, including many of various special trains, but these are balanced by some fascinating early views, including two of the unsuccessful petrol railcars that briefly worked the line. Quality of reproduction is good and this unpretentious booklet offers excellent value for money. TIM EDMONDS

INDUSTRIAL LOCOMOTIVES OF GWENT, Geoffrey Hill and Gordon Green, 400pp, 210 x 147mm, 80 photos, 24 diagrams, Industrial Railway Society, 1999, 1 Clifton Court, Oakham, Rutland, LE15 6LT, ISBN 1 901556 08 5 (boards), 1 901556 09 3 (soft covers), £27.50 and £22.50 respectively, post free.

This is another of the IRS series of geographical handbooks giving details of all known locomotives that have worked at industrial sites in the area. Their origins, movements between sites and final disposal points are listed, with an indication, where necessary, of matters in doubt. Locomotives that were used on civil engineering contracts, those that

passed through the hands of dealers, and those preserved are included. A number of maps using three colours show site locations, and others give the layouts of more complex districts. Accounts of the development and decline of the more important sites makes the contents of interest to the industrial historian as well as the locomotive enthusiast. Three comprehensive indices of locomotives, locomotive names and owners help the reader to find his way around, but alphabetical order goes awry at times. The compilers are to be congratulated on producing a very useful work of reference.
MICHAEL HALE

STEAM: TALES FROM THE FOOTPLATE, Colin A. Maggs, 188 pp, 195 photographs, boards, Sutton Publishing, Phoenix Mill, Stroud, Gloucs, 1999, ISBN 0-7509-1769-5, £20.

This book is based on recollections of locomotive crews from the West Country, especially the LMS and Somerset and Dorset shed at Bath, and span the period from the 1st World War to the end of steam. It deals with cleaning and firing duties, the work of drivers, the author's travels over the S&D in 1960, push-pull working and crew's comments on some locomotive types. It is lavishly illustrated with black and white photographs. It includes some interesting photographs of drivers, firemen and other staff and of operating documents, letters, repair tickets, etc. There are rather a lot of pure locomotive or train photographs: rather less of these and more of human interest would have improved the book. The cover, with a steam hauled freight merging with the photographs of young firemen, is however, very imaginative and attractive. A very useful feature is that all the photographs are dated.

The book is like many such books, a series of reminiscences from the footplate, but is better marshalled and laid out than many which are shovelled together like a heap of coal. This book attempts quite successfully to put them in some order. It is well written and readable. **WARWICK BURTON**

ODD CORNERS OF THE GWR FROM THE DAYS OF STEAM, Kevin Robertson, 143pp, 165 photographs, 3 diagrams, boards, Sutton Publishing Limited, 1999, ISBN 0 7509 1940 X, £19.99.

An unusual book: the introduction speaks of difficulty of choice of subject which has been solved by producing "... a selective history of aspects of the company and its operations which... have been ignored by railway historians". Nine such topics are chosen. Potentially interesting is "Trackwork"- but it doesn't get beyond weed killing and might perhaps have been better with that heading. Similarly the section "Rolling Stock" barely mentions anything but camping coaches in its ten and a half pages of text – and four of those pages are lists of the origin and disposal of the coaches used.

The section on "Accidents and ATC" is detailed and throws much light on the Great Western train control system. That demonstrated in 1947 had different audible tones for yellow and double-yellow signals and stopped the train if they were ignored. There are a lot of direct quotes from letters and memoranda. The author might have been better summarising much of it and two whole pages which list accidents with dates and other details without analysis reads tediously.

Two thirds of the book is illustrations many of which are of unusual subjects of great interest: but there are too many of them. There is a lot of interesting and out of the way detail in this book. But who is it for? It would be lost on readers with no knowledge of railways: those seeking to broaden their knowledge would be as well served if it were slimmer and thus cheaper. IAN MOSS

THE RAILWAYS OF NEWARK-ON-TRENT, Michael A. Vanns, 256pp, numerous photos, maps etc, A5 boards, The Oakwood Press, 1999, ISBN 0 85361 532 2, £19.95.

In 1846, many years before St Pancras and Marylebone could give Nottingham a good service to London, the Midland Railway built its line from there to Lincoln to give access to the capital via the 'Loop Line'. But six years later the Great Northern built the 'Towns Lie', crossing the Midland at Newark on the level – which engendered acrimony. Only very recently have Lincoln line passengers been able to travel to Northgate, reverse out and call at Castle stations. Goods traffic continued to use the Trent for many years but eventually a joint line did link the two companies to serve the exceptional number of private sidings in the town. Passengers had no such facility until BR days. Development became enormously complex and this book explains it in great detail covering necessarily a wide area. There was a down bay at Northgate GN, for instance where down trains left in the up direction (Newark to Nottingham Victoria via Bottesford)!

All this can be fathomed with the aid of the excellent Clearing House map end papers and numerous large scale O/S maps, though the stranger to the area might be glad of a wider field in the latter or else a general map of Newark. That apart, the author's detail is quite outstanding and includes much on the industries in the area that were served as well as all aspects of railway operation. The book is a masterpiece of complicated research and is recommended. JOHN DENTON

Short Reviews

THE VALE OF NEATH LINE, Gwyn Briwnant Jones and Denis Dunstone, 221pp, 250 x 180mm, 342 illustrations (59 in colour), 26 maps and diagrams, boards, Gomer Press, Llandysul, Ceredigion SA44 4BQ, Second Impression 1999, ISBN 1 85902 446 7, £23.50.

Is it "gilding the lily" to add further fascinating colour illustrations to an already splendidly illustrated and told story? If so the reader is the beneficiary in this second edition of what is a definitive work. It is also a challenging example to line historians of the future both in terms of its meticulous research and the quality of its presentation. To have found correcting data on the Crumlin Viaduct, since the first edition, and only made reference to it in the new preface rather than incorporate it in the text is, perhaps, the only blot on perfection noted.

TOWPATH TALE, Arthur Truby, 64pp, 13 photos, 4 sketches, 2 plans, A5 card covers, Ratchup Books, 1999, 136 Sutherland Road, Cheslyn Hay, Walsall, West Midlands WS6 7BT, ISBN 0 904015 50 5, £3.50 plus 50p p&p.

The "tale" is really more than one, it is a collection of reminiscences by the author of his activities on and around Black Country canals in his younger days. The book was originally published by the Black Country Society in 1978, cost 50p and had 32 pages. The second edition has 64 pages mainly as a result of using a larger typeface, but there is also a system map, an extract from an OS map and an extra page on the Jubilee Colliery Tramway. A different selection of illustrations has been used.

CANAL RECOLLECTIONS, Julian Holland, 96pp, 248 x 182mm, 86 photos, card covers, Parkgate Books, 1998, ISBN 1 85585 396 5.

After an introduction giving a potted history of British canals, there follows a selection of photographs from the British Waterways collection, generally one to a page. The reproduction is good, and the captions are fairly lengthy with historical information. The subjects include people, boats, locks, lifts, bridges, tunnels etc, and range from the Basingstoke Canal to the Caledonian, but nothing in Wales. The price when publishing is not shown but at 99p remaindered, it is worth looking out for.

THE LAST DAYS OF STEAM ON THE EASTERN REGION, Eric Sawford, 138pp, 190 x 258mm, 263 monochrome photographs, hard cover with jacket. Sutton Publishing, 1999, ISBN 0-7509-1616-8, £19.99.

This nicely produced album contains an extensive selection of Eric Sawford's photographs, fully captioned and with a useful introduction. Coverage is mainly of the East Coast main line, with incursions into nearby parts of East Anglia and the east Midlands. Locomotives are seen in a variety of locations and condition; unusual subjects include *Brown Jack*, awaiting overhaul at Doncaster, *Green Arrow* alongside *Edward Thompson* and an impressive 3/4 front view of K3 2-6-0 No 61980.

THE LAST DAYS OF STEAM ON THE SOUTHERN: LONDON AND SOUTH WESTERN, Alan Postlethwaite, 144pp, 282 photographs, 1 map, boards, Sutton Publishing, 1996, ISBN 0 7509 1205 7, £16.99.

This book is an album of black and white photographs of steam trains in the L&SWR area between 1957 and 1964. The captions to the photographs are good and full and always include a date – a very useful feature to the historian. The photographs are generally good. Reproduction is not perfect with a rather muddy, matt finish, which one would not expect in a book of this price. The photographs, as in many books of this type, are much of a muchness. They are occasionally enlivened by one which stands out as, for instance, one showing platelayers armed with scythes cutting long grass. There is one map but it is rather crude. The book is divided up by lines and/or geographical areas, but as there is no contents list or index, it is not easy to find photographs of specific areas or locations.

ONSLOW'S

SPECIALIST RAILWAY, TRANSPORT & POSTER COLLECTORS AUCTIONS

ONSLOWS are pleased to announce an important auction of Railwayana and Railway Printed Material from the remarkable collection of the late C.W.M. Boyd-Wallis on Wednesday 24 May 2000 at 2.00 pm at the Carisbrooke Hall, 63 Seymour Street, London, W2 to include a comprehensive library of antiquarian and modern books, photographs, RCH and Airey's Maps, Timetables, Pre grouping books and publicity brochures published by the Railway Companies and a very good collection of Platform and Travel Tickets. **FURTHER ENTRIES ARE NOW INVITED** Enquiries and catalogue requests to Patrick Bogue at the Depot 2 Michael Road London SW6 2AD Telephone 020 7371 0505.

Onslow's also specialise in Motoring and Road Transport, Aeronautical, Toys, Fine Luggage, Maritime and *Titanic* Collectors Items.

For large consignments, name plates and important collections, special rates of commission can be negotiated.

For further information contact Patrick Bogue or John Jenkins.

**ONSLOW'S,
THE OLD DEPOT, THE GAS WORKS,
off MICHAEL ROAD, LONDON SW6 2AD
Telephone: 0171 371 0505**



PUBLICATIONS OF THE RAILWAY AND CANAL HISTORICAL SOCIETY

- Women and Children of the Cut**, by Wendy Freer
80 pages, 23 x 17.5 cm, 42 illustrations **£11.95**
- The Cabry Family: Railway Engineers**, by Brian Lewis
112 pages, 23 x 17.5 cm, 61 illustrations **£13.95**
- The Memories and Writings of a London Railwayman** (H. V. Borley)
160 pages, 23 x 17.5 cm, 60 illustrations **£16.95**
- The Light Railway King of the North**, by A. L. Barnett
112 pages, 23 x 17.5 cm, 84 illustrations **£11.95**
- The Military on English Waterways**, by Hugh J. Compton & Antony Carr-Gomm
100 pages, 23 x 17 cm, 31 illustrations and maps **£9.95**
- The Midland Railway; A Chronology**, Compiled by John Gough
392 pages, A4, 119 pages of maps **£19.95**
- The Hay and Kington Railways**, by Gordon Rattenbury and Ray Cook
132 pages, 23 x 17.5 cm, over 60 illustrations and maps **£13.95**
- The Stratford & Moreton Tramway**, by John Norris
56 pages, A5, 21 illustrations **£4.95**
- The Warwick Canals**, by Alan Faulkner
80 pages, 23 x 18 cm, 37 illustrations **£5.95**
- Early Railways between Abergavenny and Hereford**, by R. A. Cook and C. R. Clinker
96 pages, 23 x 18 cm, 32 illustrations **£6.95**
- The Northampton & Harborough Line**, by John Gough
112 pages, 23 x 18 cm, 37 illustrations **£6.95**
- The Melton Mowbray Navigation**, by M. G. Miller and S. Fletcher
48 pages, A5, 23 illustrations **£3.95**
- The Bristol & South West Union Railway**, by John Norris
28 pages, A5, 9 illustrations **£3.95**
- North Eastern Railway: Historical Maps** (Second Edition)
48 pages, A4 **£4.95**
- Chronology of the Railways of Lancashire and Cheshire**, by M. D. Greville
Revised Edition, 28 pages, A5 **£2.95**

Orders with cheques made payable to:

**Atlantic Publishers,
Trevithick House,
West End,
Penryn,
Cornwall TR10 8HE
(Tel: 01326 373656 Fax: 01326 378309)**

Post and Packing Free (Overseas orders only - add 15%)
