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JOURNAL OF THE RAILWAY & CANAL HISTORICAL SOCIETY

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Contents

EDITORIAL	342
HYDE WHARF, THE PEAK FOREST CANAL <i>B. Lamb</i>	343
QUEEN'S PARK, CREWE <i>P.J. McCarthy</i>	354
WARDEN STATION <i>H. Paar</i>	356
THE FALL OF BARENTIN VIADUCT <i>D. Brooke</i>	363
THE CYRENAICA RAILWAYS <i>R. Gras</i>	367
A LITTLE MORE BORLEY <i>A. A. Jackson</i>	376
THE LIFE AND TIMES OF AN AIR HOSTESS <i>M. Battersby</i>	378
THE RCHS PHOTOGRAPHIC COLLECTION	381
THE KATMANDU TO HITAUROU ROPEWAY <i>S. Barber</i>	384
BOOK REVIEWS	386
CORRESPONDENCE	396
CHARLES HADFIELD MEMORIAL ISSUE	402

Editorial

Following the record 100-page issue of the Journal last March, this edition is somewhat shorter. However, it is venturing overseas with the articles on the Barentin Viaduct, the Cyrenaica Railways and the request for information about the Katmandu to Hitauru Ropeway, and takes wing with Miriam Battersby's recollections, as communicated to the Air Transport Group.

Hyde Wharf,¹ The Peak Forest Canal

BY BRIAN LAMB

On the Parliamentary Deposited Plan of the Peak Forest Canal,² the plot, number 18, that was six years later, to be '... set out ... and fenced off for the use of the Company a wharf in Hyde,' was listed as being owned by George Hyde Clarke and leased to Joseph Oldham. Plot 19 was the road from Denton to Mottram³ the present day A57 Manchester to Sheffield road, Plot 20 was also listed as owned by George Hyde Clarke, leased to Joseph Oldham and in 1796 was the site of the main shaft of Hyde Lane Pit,⁴ then being sunk under the direction of Thomas Brown, who was Clarke's colliery manager.

In Hyde in 1794 there were 185 inhabited houses with a population of approximately 1,050 persons, the 'main' road from Manchester, Hyde Lane, was a causeway between two wide margins of grass with ditches on either side. In winter it was almost impassable due to water and mud. The Lord of the Manor, the Hyde Clarkes, in 1759, repaired Hyde Lane and bridged various streams, dedicating them for public use. By the time the canal was built the road was in a reasonable state of repair, allowing the horses with their associated carts and wagons to service the few mills then built and working. The canal acted as a magnet and drew in people and industry along the line of canal, hence the need for a wharf.

One of the contributing factors in completing the canal from Ashton Junction⁵ to Hyde Lane was the anticipation of coal from Clarke's pit being boated by canal to Ashton and Manchester. Cutting was continued at a pace for the canal to be opened to Hyde in time for this trade and income.

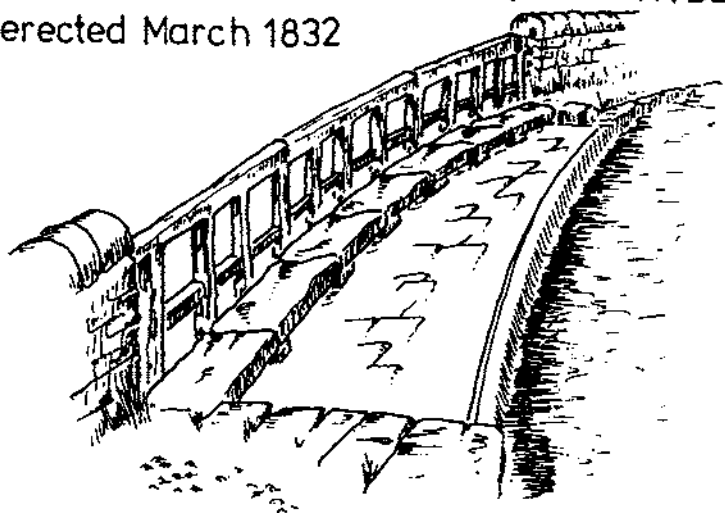
Thomas Brown, as Outram's resident engineer on the canal, was also involved in partnership with Martin Wright in lime burning, coal pit management and ownership of pits. From May 1798 to October 1801, Wright and Brown were allowed £42 '... as compensation for services to the (Canal) Company in collecting Tonnages.' From this it may be assumed that the canal, from Ashton Junction to Hyde was open and operating from May 1798.

In 1795 with the canal building, the Navigation Inn⁶ was erected close to the Hyde Lane bridge, mainly to supply drink to the 'navigators' involved in digging the canal and later, once the canal was opened, as an overnight stop for passengers travelling from Manchester to Whaley Bridge on the passenger-boats. An upstairs room at this inn was used for township and public meetings as well as for the Trustees of the Manchester and Hyde Turnpike road.⁷

With Clarke's Hyde Lane pit producing and boating-out coal, and the convenient Manchester to Hyde road close by, the Canal Company in June 1800 requested Benjamin Outram, Samuel Oldknow, John Malletieu and Mr Lees '... to set out and direct to be fenced off for the use of the Company a Wharf in Hyde near to Godley Brook Aqueduct⁸ and a suitable road thereto.' This wharf was across the canal from Wright and Brown's Lime Works and north of the Godley Brook, with access from the (present day) Dukinfield Road. The wharf when built had 85 yards of wharf along the canal, including a winding-hole to the east, the whole area comprising about 6,650 sq. yards.

This first wharf at Hyde was surfaced with limestone and gritstone 'chatter' with a simple fence round its boundary. It catered for the Company's requirements for the next 24 years, with some additions, including a small house for the wharfinger, a small secure warehouse and a small hand-crane for loading/unloading heavy goods. The bulk of such goods would be coal, lime, limestone, gritstone, flags, timber, cotton bales

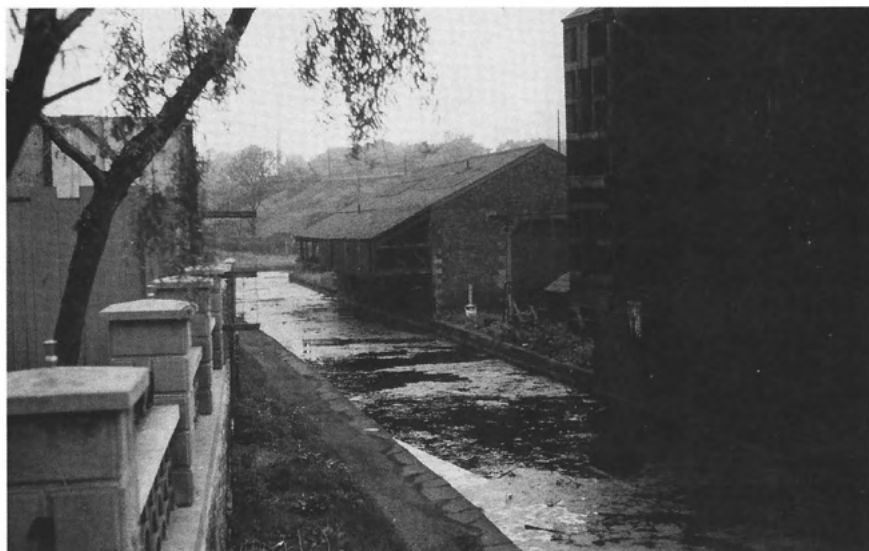
SIDEBOTTOM'S WASTE WEIR, HYDE
erected March 1832



and bolts of woven fabrics. In 1824 the Canal Company offered to purchase from George Hyde at the wharfland occupied by the Company and land adjoining '... about 8,000 yards at a yearly rent of 1d per yard'⁹ Hyde Clarke was also to lay out a street,¹⁰ 12 yards wide with a footway either side 2 yards wide, the Canal Company were to maintain the whole. A further area of land to the south, 40 yards by 20 yards, was purchased from William Shaw in February 1825. On this latter piece was erected, in 1828, a three storey brick warehouse with a covered canal-side loading way for boats and a wharf crane erected. Along Hyde Lane from the canal bridge to the 'Navigation Inn' the Canal Company also had an access road to the 1828 warehouse made.

The original Hyde Lane bridge over the canal was narrow and restrictive with the canal horses adding to the congestion by having to be unhitched from the narrow boat, walking up a towpath ramp, crossing the Turnpike Road, and regaining the opposite towpath to continue hauling the boat.

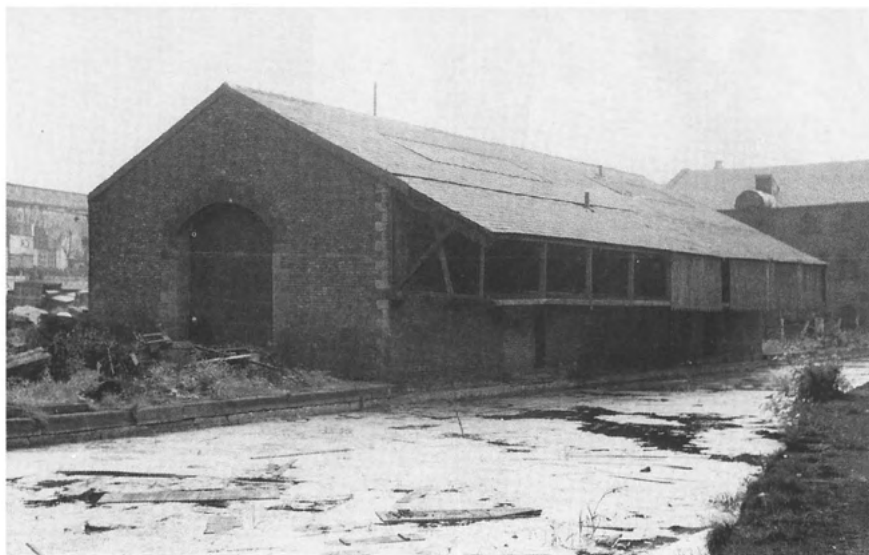
Captain Clarke RN, Thomas Brown and Thomas Ashton, acting as Turnpike Trustees (and as Canal Committee members), approached the Canal Company to have a turnover bridge erected south of the Hyde Lane bridge, which the Trustees proposed to widen from 12 feet to 33 feet if the Company would make the proposed bridge. As it would benefit both concerns the Company agreed and in 1833 the turnover bridge we see today was first used. A tunnel study of the bridge today shows the original stonework (though 21 feet as opposed to the 12 feet given in the Proceedings) with brick arches on either side.¹¹ There was also visible over the north arch a steel beam



Looking north from Hyde Lane bridge on 6 June 1965 with the 1828 warehouse at the right and the 1989 'new' warehouse at the centre. Both warehouses at this date still had covered canal loading ways.



6 June 1965, looking south east across the canal towards the 1828 warehouse and showing the covered canal side loading way and the 'cat-head' on the north side of the warehouse. Note the small semi-circular windows that were a typical feature of canal and river warehouses at that date.



6 June 1965, looking south east across the canal at the 1859 'new' warehouse with the full length canal side loading way. This warehouse had large doors at either end and skylights – the 1828 warehouse is at the centre right.



6 June 1965, looking east across the canal at the only (at this date) surviving cantilever gib crane in a nearly complete and operational state, but without its cargo chain. This crane carried three notices, one showed 'GCR C285' and was the Great Central Railway crane inventory number, with the other notices giving weight and use restrictions.

with the date '1884' cast in but this was concreted over in 1986 as part of a renovation programme by Tameside County Council.

Hyde Wharf was an important wharf on the Peak Forest Canal and it may have become even more important had a scheme for a canal to connect the Sheffield-Chesterfield-Cromford and Peak Forest Canals come to anything. In 1824 a letter from Joseph Haslehurst, engineer to the Unstone Colliery, Chesterfield, proposed such a scheme. Later in the year a Mr Skelton and a Mr Remington attended a Peak Forest Canal Committee Meeting with Plans and Sections of an (updated) proposed scheme to connect the Sheffield Canal with the Peak Forest Canal at Hyde. They also had a copy of a report by Telford,¹² which was read to the meeting. The proposed junction with the Peak Forest Canal was to be between Wharf Street and Hyde Lane (SJ99.94389506) and virtually on top of the present-day change bridge entailing a complicated bridging of the 'new' junction.

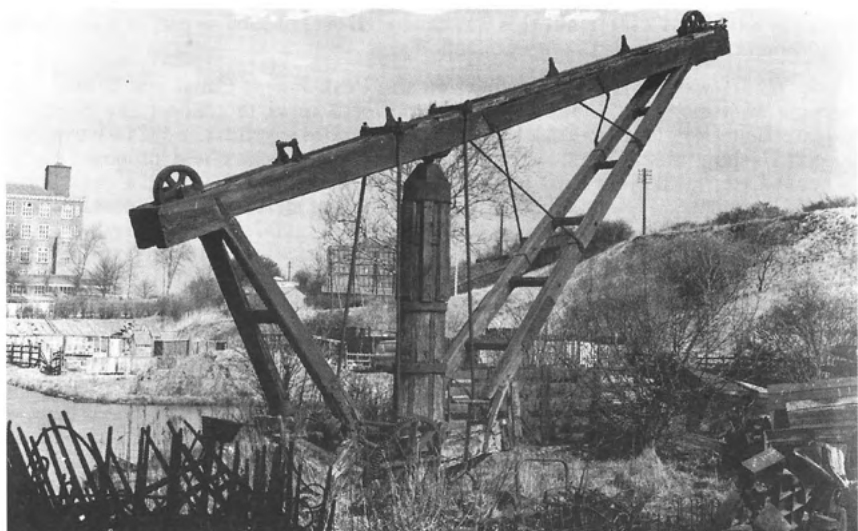
A short triangular winding-hole for boats cut into the east bank at the south end of the 1800 wharf, was lengthened by 30 yards as far as Edwards Street in August 1831, this was for '... the further accommodation of the Traders going to and from the Wharf,' on land rented or leased from Capt. Hyde Clarke RN and eventually purchased from Edward Hyde Clarke by the Manchester, Sheffield & Lincolnshire Railway. The street along the eastern side of the land was named after Edward Hyde Clarke.¹³ A number of streets in this area were named after other members of the Clarke family when it was later developed for housing and industry.

Just prior to the Hyde Lane bridge modifications, John Sidebottom in 1832 requested to be allowed to use the waste water from the canal and was allowed to build, at his own cost but under the direction of the Company's engineer, a waste weir. The location of this weir was 230 yards north of Hyde Lane bridge and was directed to flow into the Wilson Brook in which he held the water rights. The waste weir was unusual on the Peak Forest Canal, instead of being covered over with large flag stones, it had a lowered cobbled towpath allowing the horses to walk through any waste water from the canal. To allow pedestrians to cross 'dry-shod' there was a simple two bar fence with a narrow stone walkway raised above the cobbled horse surface. This weir was still in use up to 1976 when the realignment of the canal to accommodate the M67 Hyde By-pass was built with a new tunnel,¹⁴ Throstle Bank Tunnel, taking the canal in a more north-south alignment.

Up to 1834 there was only a rudimentary fence or wall along the towpath between Throstle Bank and Hyde Lane bridges, a distance of 340 yards. To make the towpath more secure and to define the Company boundary, a more secure and substantial wall was erected during the May 1834 stoppage.

The trade of the canal at Hyde was becoming too much for the wharf capacity there and in May 1833 additional land was purchased from Captain Clarke RN '... for extending the Wharf in Hyde in such addition extending in length from George Street to the brook and from the Company's present wharf land to Edward Street. This area of additional land, 11,000 yards, was offered by Captain Clarke RN for a rent of 1d per yard.¹⁵

The putting-in of the two cranes at Hyde, the wharf crane adjacent to the 1828 warehouse and the heavier cantilever gib crane by the branch to Edward Street, is not recorded. The cantilever gib crane, up to 1970, carried a Great Central Railway inventory plate numbered 'GCR C285', this was of brass and secured by two brass screws. The local vandals first destroyed the gib boom then set fire to the stump, leaving only the metal securing bands around the upright. The mechanism was noted and saved for use on any similar crane requiring restoration. Of the wharf crane by the warehouse only the ground level pivot hole and the upper triangular securing wooden



17 March 1968, looking north at the only virtually complete cantilever gib crane (inventory GCR C285) on the canal. This view shows the centre post with iron bands, the front and rear support arms with the main cantilever arm with two cargo chain carrier wheels and the chain running bracket(s). The gears and operating mechanism were still in situ.



17 March 1968, looking south at the three-storey 1828 warehouse loading way access doors with the 'cat-head' still complete under the arched cover. The small notice board at the lower left carried an LNER warning notice. Note the small semi-circular windows.



12 April 1968, looking north at Hyde Lane (now Manchester Road) change-bridge built after representation by the Trustees of the Hyde Turnpike in 1834. The building at the left was the former office of the Hyde Lane and later Hyde and Houghton, Colliery, 1795 to 1889.

bracket now remain, the rest disappeared many years ago. An interesting notice was still to be seen in 1972, though torn and weathered in a glassless notice frame was still headed 'LN and ER'. It detailed safety points to be taken when operating the cranes and that any accidents were to be reported and entered into the Accident Book.

The Company were offered a further area of William Shaw's land by Mr Miller, the Mortgagee, in May 1842. In September the offer was declined and the land was later sold or rented to erect a row of terraced houses, numbers 16 to 26 with the access roadway to the 1828 warehouse preserved between numbers 20 and 22, along Hyde Lane. They were demolished in 1970 and opened-up the south aspect of the 1828 warehouse which was later refurbished and converted into offices, the wharf on the north side was used as a car park.

Traffic and trade operated to and from the Hyde Wharf quietly for the next sixteen years during which time the Peak Forest Canal Company was leased to the Sheffield, Ashton-under-Lyne and Manchester Railway, which within a few days of its Act for leasing the canal being passed, became the Manchester, Sheffield and Lincolnshire Railway. Under the MSLR the Peak Forest Canal continued to operate with the parent Company trying to transfer traffic to the canal. Some of this traffic included a passenger boat service, using specially built passenger boats and operated under licence by Boulton of Stalybridge. These boats ran from Ashton and Dog Lane, Dukinfield to various points along the Peak Forest and Macclesfield Canals until they were withdrawn by Boulton as not being economical. They were still, after this, run by other operators, one of whom had a cork-leg, which he used during one trip to fend off his freshly painted boat from being damaged, causing one of his female passengers to faint. One of the stopping points on these trips was Hyde Wharf, where passengers were dropped-off and taken on. Another story, related by Joel Wainwright,¹⁶ of Marple,

states that it was often quicker to walk from Ashton to Marple as the boat at these stopping-off points was held up with the Captain going ashore to hunt out the passengers, and the passengers going ashore to hunt out the Captain - usually in a local hostelry.

Narrow boats were still operating along the canal plying goods to and from Manchester and from other parts of the north west and the Midlands. The majority still carried lime and limestone from Bugsworth with coal as a back-cargo. Hyde Wharf in 1859 under the Railway leasing was found to be in need of more secure warehousing and the 'new' warehouse was built in that same year. The date of the building is cleverly shown on the warehouse but it takes some time to locate, should you not know where to look. The writer can only suggest is visit is made to seek out the date.

A year prior to the building of the 'new' warehouse, the Sheffield and Midland Joint Railway was extended from Hyde Junction to Hyde Central station, situated adjacent to the canal and with it a large goods yard was established. This should have seen the demise of the wharf at Hyde but it was still holding its own, up to and beyond 1914. It was only between the two world wars that its demise set in, with road traffic in competition with both railways and canals, and more flexible than either. With the Railway amalgamations of 1923 and the lack of inter-rail rivalry, the need for the Great Central Railway (formerly the MSLR up to August 1897) to gain access into London & North Western and Midland Railway territory was no longer important. Hyde Wharf after 1945 was mainly used as an engineers' wharf and by 1950 was looking run-down, as were many other canal wharfs at that time and it was never to recover any of its former prestige. Up to 1975 it was used as an iron foundry with piles of scrap metal where coal, limestone and other goods were stacked or stored.

One major development that has taken place and radically altered the wharf has been the construction of the M67 Hyde By-pass to re-route Sheffield traffic through Hyde town centre. It was built between 1974 and 1976, and opened in 1977, although the success of the by-pass was not what had been hoped and nowadays it is used fairly lightly. Its effects on the wharf at Hyde, however, was quite drastic. Not only was Throstle Bank or Bowlers bridge (1796-1977), and Sidebottom's waste weir both totally destroyed, but in order to carry the M67 across the canal, the canal was realigned and a tunnel, 230 yards long built. Hyde had an opportunity to celebrate a new tunnel and a new length of canal but it was ignored and community pride was left to wither.

Only in the last fifteen years has the area been tidied up and the 1828 warehouse been restored as offices and the wharf as a car park. No doubt some cruisers and hotel boats will moor up at Hyde Wharf but not many people will be able to tell them what was once there.

HYDE WHARF ... Note

The Alan Godfrey Ordnance Survey reduced sheet (Cheshire XI.1) HYDE 1897 shows Hyde Wharf and the surrounding area in some detail.

REFERENCES

- 1 Hyde Wharf. This is the 1800 wharf and was later developed to the south towards Hyde Lane bridge. SJ99.94389518.
- 2 The Deposit Plan was surveyed and drawn-up by Thomas Brown, Outram's assistant and Resident Engineer. The Peak Forest Canal Act is 34 George III. cap 26 of 28 March 1794.
- 3 This was part of the Manchester to Hyde Turnpike Road, Act 58 George III. cap

6 of 1818 and extended to Mottram by Act 3 and 4 William IV, cap 18 of 1833.

- 4 Hyde Lane Pit, main shaft, was sunk by George Hyde Clarke in 1794 to mine the New Level Seam at 800 feet. The pit was closed in 1902 after an underground explosion below Haughton Green village in the Two Foot Level at 560 feet. The pit at this time was owned by J. W. Sidebottom, MP for Hyde and his brother J. Nasmyth Sidebottom.
- 5 Ashton Junction is 2 miles 550 yards from Hyde Lane pit. SJ99.93509836.
- 6 The 'Navigation Inn' now renamed the 'Cheshire Ring', was originally sited half way between the canal bridge and the 'Navigation Inn' and adjacent to the Hyde Lane access road to the 1828 warehouse (not then built). It was erected in 1794 and its first landlord was Thomas Ashton. Present location SJ99.94389510.
- 7 see 3. above.
- 8 Godley Brook Aqueduct, takes the Godley Brook below the canal at this point, then is named Wilson Brook and supplied water to Kingstone Mills. SJ99.94399525.
- 9 8,000 yards at 1d per yard is equal to a yearly rent of £33.6.8d.
- 10 This was Canal Street, giving access from Hyde Lane. Opposite to the 'Navigation Inn' was the 'Swan Inn' and alongside the 'Navigation Inn' were 5 terraced houses.
- 11 The formation of the bridge is as follows (from the north end) 9 ft. brick; 15 ft. brick; 21 ft. stone; 12 ft. brick; 6 ft. brick; 2 ft. gap and 18 ft. change bridge. Some of the brick courses are in header bond, an unusual use of this bond and may only be half bricks to reduce the cost, and also in stretcher bond with one course very low down as a header course.
- 12 Telford's 'Report on the Canal from Sheffield to the Peak Forest Canal at Hyde.' Derby Mercury, 17 November 1824 and Peak Forest Canal Committee Minutes, February 1825. The junction with the Peak Forest Canal at Hyde was that area between Hyde Lane and Wharf Street. SJ99.94399505.
- 13 Edward Hyde Clarke, 1815-1874, Solicitor and second eldest son of Capt. Clarke RN and Ann Joyce of Whitchurch.
- 14 Throstle Bank tunnel, built between 1974-1976 and water let-in on Monday, 20 December 1976.
- 15 11,000 yards at 1d per yard is equal to a yearly rent of £45.8.8d.
- 16 Joel Wainwright 'Memories of Marple' published MTD Rigg. (1989 of 1899) page 41.

Queen's Park, Crewe

BY P. JUSTIN MCCARTHY

Readers familiar with the RCH Handbook of Railway Stations will know of Queen's Park (Caledonian) and Queen's Park (West Kilburn) London and North Western Railway, but there is another Queen's Park, without rail connection but with considerable rail connections. It lies west of Crewe town centre and south of the Crewe works of ADTranz (main entrance at NGR SJ 68795582). It is well known as a 'Gift to the Town' from the LNWR, even though, supposedly, a blocking move against the GWR, the exact arrangements are less well known.

By kind permission of Mr Riddell Graham, Head of Legal and Property Services for the Borough of Crewe and Nantwich, I have recently been privileged to examine the original of a memorandum on the provision of Queen's Park, which was eventually incorporated in the minutes of the then Crewe Borough Council Parks Committee on 19 July 1888. Below, I give an abridged version of the document: 'The following is a record of particulars as to how the New Park at Crewe was acquired and other information relating to the same'.

Alderman F.W. Webb was elected Mayor on 9 November 1886. He gave a luncheon to the Corporation at which he stated that he had long desired that the town should have a park. The London and North Western Railway would give part of the Coppenhall Hayes Estate and lay out a park, making a new road from Wistaston Road to West Street and round the outside of the park (now Victoria Avenue and Queen's Park Drive).

Webb would approach other landowners for land, whilst a portion of the Corporation's old filter beds would also be required. The intention of the LNWR was to form a circular park with a 36 ft road about a mile in circumference around it. (In fact, the park is slightly elliptical.) It would have two lodges, gates leading from the new road and a bandstand. With the help of friends, Webb hoped to provide a pavilion or kiosk.

The trustees for Colonel Meredith of Pentrebychan Hall gave 3a, 3r, 37p, 27y, and Mr E.W.D. Broughton gave 4a, 3r, 10p, 11y, south of Wistaston Valley Brook. The LNWR contributed 28a, 0r, 37p, 27y, and obtained powers in their 1887 Act (50 & 51 Vic, S58) to lay out a public park or pleasure ground as if purchased by the Corporation under the Public Health Act of 1875.

The work was carried out by the LNWR. The park was dedicated to the public on 4 July 1887, the 50th anniversary of the grand opening of the Grand Junction Railway, by Sir Richard Moon, Bart., Chairman of the LNWR who was enrolled as the first Honorary Freeman of the Borough. The Council petitioned Her Majesty in Council to call the park 'Queen's Park', which she did in a letter of 6 December 1887.

The formal opening was on Saturday 9 June 1888, by Field Marshal, Commander in Chief, HRH the Duke of Cambridge, KG. A clock tower and drinking fountain were erected by subscriptions from LNWR employees and unveiled by Driver Middleton of Birmingham, on completion of 50 years' service.

List of subscriptions to the pavilion (in pounds)

J. P. Bickersteth	10	Hon. C. N. Lawrence	5
R. Brocklebank, Jnr.	10	W. Lowther, M.P.	10
W. C. Brocklebank	10	Miles MacInnes, M.P.	5
P. H. Chambers	10	Ernest Moon	5
G. Crossfield (Dec'd)	100	Sir Richard Moon	25
Arthur Earle	5	J. B. Morgan	5

A. Fletcher	10	Lord Stalbridge	20
H. R. Greg	5	O. L. Stephen	20
J. M. Hethington	5	F. W. Webb	100
Hon. A. Holland-Hibbert	10	F. S. Wolferstan	5
T. H. Ismay	20		

This, then, is the formal story of how Crewe got a park. It is still a very worthwhile amenity, notwithstanding the cuts in local government expenditure in recent years. Perhaps the really interesting question is 'Why was it done?' Or was it really just Victorian philanthropy after all?

Warden Station; Was it ever, and if so, Where?

BY HARRY PAAR

One day in August 1992 the writer was standing on the road bridge at Warden, Northumberland, looking across the South Tyne to the fields and beyond. There, at the road junction, is the Boatside Inn, behind which passes the line of the former Newcastle & Carlisle Railway. A pleasant enough sight, but it seemed that there would be no mysteries to be probed here; the N&CR was a very early public steam railway opened in sections between 1835 and 1838, was for a short time the second longest railway in the country, and has two reliable histories plus an account in Tomlinson to its name.

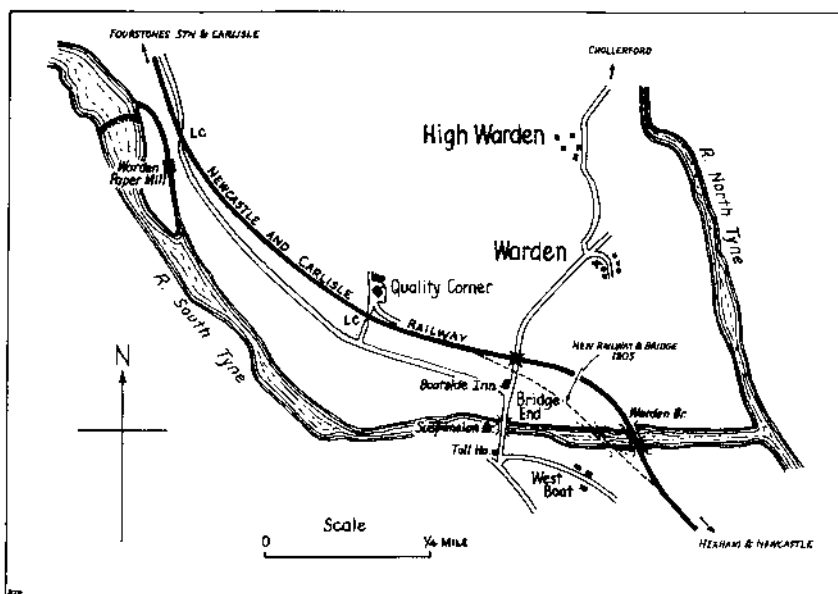
Yet was there no station hereabouts, at a major river crossing, with the small village of Warden nearby? If so, there were no signs extant, and the next day, in Hexham Library, maps going back to 1860 revealed no hint of a station at Warden - so much for intuition. Some weeks later, at home, the thought recurred. Clinker's *Register* was consulted, and there it was; WARDEN, a passenger station only, which last appeared in *Bradshaw* in June 1848, and had not been shown in four issues between May 1844 and July 1847.

This discovery was welcome as suggesting that intuition had been right, yet unsatisfactory because such a fleeting appearance clearly required explanation. An idle thought had escalated to a minor mystery, but it was possible that secondary sources alone would provide an adequate answer - one more case of hope triumphing over experience. MacLean's book, compiled according to its title page from official reports, documents and records, appeared to be the most promising secondary. This stated that

During the construction of the bridge across the Tyne at Warden in 1836, the line from Haydon Bridge terminated at Quality Corner and a station was established there from which tickets were issued to passengers. It continued in use as a 'halt' for passengers until replaced by a permanent station at Fourstones.¹

This seemed plausible, for similar things happened on other lines where a bridge or a tunnel was not ready on time, although the wording 'from which tickets were issued' seemed awkward, because if the station was provided only because the bridge was not completed (as implied) the issuing of tickets there would have been very secondary to the transfer of passengers from rail to road vehicles and vice versa. We may note for future reference that MacLean also said (p. 71) that Warden bridge originally consisted of three stone piers with wooden platforms two feet thick to the top of the rail, with timber truss spans of 50 ft. and that this bridge was burned in 1848 and replaced by C.I. arched rib spans resting on the original stone piers.²

From above it now appeared reasonably certain that a station had existed, and the question had become, "What was it like and for how long was it open?" Yet, thinking again, the affirmation seemed less sure. The first section of the N&CR had been opened to public traffic on 10 March 1835, from Blaydon in the east to Hexham. The extension from Hexham to Haydon Bridge, approaching completion, was seven and a half miles long, Warden being on it, about two miles from Hexham. Carlisle lay some 34 miles west of Haydon Bridge, and although work was going on along this section, nothing was yet ready for opening, although the stretch at the Carlisle end was approaching readiness. We are asked to believe that passengers would proceed from Hexham for two miles, take to the road to cross the South Tyne, join another train somewhere near Warden for a five mile run to Haydon Bridge and there take to the road



again for the long haul to Carlisle. Would three transfers have been worth their trouble, for a few weeks at most?

It was time for another witness, and Tomlinson's work on the North Eastern Railway was indicated.³ This book was not to hand, but a casual visit to a large bookshop produced a copy of the Tomlinson reprint, easily checked on the spot; unethical maybe, but a clear saving of £40. Tomlinson was much more reticent on Warden than MacLean was to be 33 years later, for he said only "The first class tickets from Carlisle to Warden (an old station east of Fourstones at a place called Quality Corner) were printed on buff paper..." The location of Quality Corner had to be established and no such place appeared on the modern small-scale O.S. One of the few sensible things done in Hexham Library had been the finding of an address for the local history society, and Tom Corfe of the Hexham L.H.S. settled the matter almost by return of post - Quality Corner, now the site of Quality Cottages, is about 700 yards west of the original Warden Bridge site.

The first edition of the 25 in. O.S. in the B.L. Map Room gave a detailed picture of the area in 1860, the railway and bridge, a pair of cottages at Quality Corner (so named), the road bridge which was then of the suspension type - but no hint of a station, past or "present".

A re-examination of MacLean produced a reproduction of a block of six paper tickets for journeys from Carlisle to Warden, first class, fare 6s3d, dated 1836. This seemed to put the station firmly back on the agenda, but the tickets were virgin, proving only that there had been a serious intention to have such a station - nothing more. Of course, if one could be found which had been used ... Shortly afterwards Ronald Thomas produced an identical paper ticket for Warden - again unused; yet another was eventually traced, but it too was unused.

The extension from Hexham to Haydon Bridge was opened on 28 June 1836. The western section, from Carlisle as far as Greenhead, soon followed on 19 July, leaving a long gap between Greenhead and Haydon Bridge which was covered by horse-drawn road coaches connecting with the trains until the railway was completed, enabling the grand opening throughout to take place on the anniversary of the battle of Waterloo on 18 June 1838.

The other N&CR book available made no mention of Quality Corner or Warden, not surprisingly as MacLean had given a detailed account of the early years, and the new author had to update the history by over a century.⁴ This exhausted the main secondary sources and the enquiry had to be taken to a new level. A list of N&CR sources from the R&CHS Index keeper was already to hand. Here were riches indeed, held at Kew, Newcastle, Carlisle and Manchester, but some were too early, some too late. The greatest potential was held by Carlisle City Library, where there is a collection of documents, official reports, photographs, press cuttings and so on. Fortunately, a search in Ottley's Bibliography indicated a promising substitute in the shape of Bell's great collection of similar material collected between 1848 and 1850.⁵ This is in the L.S.E. Library, three large volumes being devoted to the N&CR. Yet this bulk only produced a single clue to Warden; a printed waybill dated 1836 lists the stations from Haydon Bridge to Newcastle, including Warden but as, like the tickets, it is unused, it is again of no value as evidence that such a station existed. Bell also produced a piece of negative evidence, a copy of Scott's *Railway Companion* (1839 ed.) which gives a detailed description of the N&CR route. Mention is made of the small intermediate stations as well as the principal ones, so that "the Free Stone station" (i.e. Fourstones) appears - but nothing for Quality Corner/Warden. Bell's collection includes scores of official reports and press announcements, and the absence of any further reference to Warden was discouraging.

The best secondary sources had only provided a story which lacked conviction and a large selection of official reports and contemporary press material had only established that the company intended to have a station at Warden. The thinness of MacLean's 'temporary station' story and the fact that the statements could mostly be deduced from the blank tickets, left the case for Warden station very weak indeed. The only avenue left was the N&CR records, which fortunately survive in abundance at the P.R.O. Kew.

The Managing Committee minutes were selected because that was where the smallest detail required would be found. Most of 1835 was taken up in completing the first section opened, where stations and much else had still to be built. It was not until April 1836 that the Committee looked at the ground wanted for a 'depot' at Warden, ordered it to be taken and told their engineer John Blackmore to supply the solicitors with a plan and estimate so that the landowner, Nicholas Leadbitter, could be made an offer. However, trouble was clearly anticipated as, in the case of refusal, application was to be made to have the value determined by a jury. Leadbitter was opposed to the railway and had registered as a dissenter to the bill by which the N&CR secured its Act.⁶

In June 1836 the Committee was appointing agents for the various stations but it deferred any appointment at Warden which, however, appeared in a fares list. On 14 June it was decided to go ahead with printing the fares list, tickets and waybills, which explains the existence of the items mentioned above and shows that the Committee was determined to have a station at Warden.

When the extension to Haydon Bridge was opened on 28 June the matter of the Warden land was not settled and soon letters and petitions about a station were arriving. The Committee decided to recommend to the next Board meeting a station at the

Fourstones (colliery) pumping engine. The Board confirmed this on 16 September; on 5 November they had second thoughts but stuck to their guns – Fourstones it was to be. The Committee resolved on 13 December “that the guards have notice that the stopping at Warden and Allerwash is to be discontinued and that in future passengers will only be set down and taken up at the station at the pumping engine and that handbills be issued and boards put up to apprise the public”.⁷ Probably Fourstones station did not become fully operational until 1 January 1837 since Francis Thorburn’s appointment ‘to attend the Fourstones station’ was confirmed by the Board on 10 January, effective from the 1st. His salary was £45 p.a. plus £5 for a house until the station house was built.

Fourstones was a second choice, to avoid a troublesome landowner, but it was a sound location for there was an active colliery there and limeworks were being developed. Warden could only offer a small village, and, some distance up-river, a paper mill dating from 1763 which could hardly be reckoned as a large source of traffic since for many years after the railway was opened its owner did not deign to have a siding connection.

It is clear that in the earliest years there was no station at Warden, only a short-lived stopping place, with another at Allerwash. Neither is there any mention of the late completion of the bridge – indeed in March 1836 it was reported as being nearly complete – or of the early opening to Quality Corner and, with the degree of detail found in the Committee minutes it is inconceivable that such events could have left no record. It seems significant that there is nothing in MacLean’s chronological account of the construction period about this temporary arrangement; this occurs only in a catch-all chapter headed ‘Various items...’ based on a variety of sources which are stated except for the Quality Corner episode.

So it seemed worth considering if there had been a temporary station at Warden at some other time, for some other purpose, which had become confused with the opening period. The only known incident which could have provided the need appeared to be the Warden bridge fire of 1848, and in the light of this it became important to corroborate the statement in the Register concerning a Warden station in that same year.

At the British Library the microfilms of *Bradshaw’s Monthly Railway Guide* were examined for N&CR entries, beginning with March 1842. For several years only the principal stations were shown, the minor ones (such as Fourstones) being omitted. Sample months were checked – ten in 1842, two or three in each of 1843 to 1847, and eight in 1848. The short-list of stations appeared, with minor modifications, up to and including June 1848. In and after July 1848 the list was expanded to include the intermediate stations, but there was no mention of Warden. This being an important point, some weeks later the microfilms were checked again, to see if some microscopic footnote had been missed, but both tables and station index remained silent on Warden. The entry in the Register had perforce to be set aside as evidence.

The search now concentrated upon establishing details of the fire at the bridge, but to enable a rapid search of company records and local newspapers, a more precise date was required. The weighty *Times* index was mute, as was a local chronology.⁸ Even the *Annual Register*, to which usually railway accidents were as meat and drink, yielded nothing from its index for 1848, but a short search under other headings led to a long account of the burning of the Usk railway bridge at Newport in May which carried a note concerning the destruction by fire of Warden bridge in July, and this was near enough.

The minute books, so detailed in the earlier period, seemed to hold out the certainty of success. Unfortunately that was the very time when George Hudson made the N&CR an offer it could not refuse – a guaranteed 6% on its capital in return for a lease of its

railway. The offer was made in the name of the York, Newcastle & Berwick Railway, which worked the line from 1 July 1848. Hudson appointed James Allport as manager of the railway on 7 July, although the N&CR Board minutes record the appointment as "by the Directors". The YN&BR refused to ratify the lease, leaving Hudson as the sole guarantor. The Hudson/Allport regime lasted for 18 months; the working ceased on 31 December 1849 and was taken over again by the N&CR on the next day.

The minute books of the companies concerned for this period are not a pretty sight, hastily and often illegibly written, meagre on detail and mostly concerned with financial matters, all clear signs of the Railway King's hand. Not surprisingly, perhaps, there is no mention of a trivial matter like the burning of Warden bridge; after all, it was no concern of the directors, being a matter for the lessee and his manager. Thus the enquiry was forced to the last line, the local press, which fortunately proved as informative as the company records had been useless.

Four newspapers were called up at Colindale Newspaper Library and the *Newcastle Courant* for 28 July 1848 carried a full report, as follows:

Yesterday forenoon, between 10 and 11 o'clock, the railway bridge, constructed of wood, at the West Boat, about two miles west of Hexham, was discovered to be on fire. On the first alarm, the most prompt exertions were used by the villagers adjacent to the line, and an express sent off to Hexham for the engine; but so rapid was the progress of the flames, that before the arrival of the engine four out of the five arches which constitute the entire bridge were consumed. This unfortunate accident has, for the present, temporarily stopped the through passage of the line, but passengers &c are conveyed as far as the bridge, where omnibuses are waiting to convey them across a suspension bridge, at the West Boat, about 200 yards higher up, where, joining another train, they proceed. This occasions only a delay of half an hour, which, however, is generally made up in the speed of the trains. The cause of the accident is at present unknown, but it is conjectured to have originated by a cinder falling from the engine of a coke train which crossed the bridge shortly before the fire was discovered.

The 'express' which was sent to Hexham for the fire engine was almost certainly a mounted passenger. The account in the *Newcastle Chronicle* for the same date differs in a few details; it locates the bridge at Warden (West Boat is a hamlet on the south side of the road bridge deriving its name from the ferry which crossed the river before the first road bridge was built), the fire-raising engine was said to be that of a luggage train (i.e. a good train), the woodwork was coated with tar, and when the mail train from Newcastle, which left that place about an hour after the luggage train, arrived at the bridge, the woodwork was completely destroyed. "The passengers can be conveyed by omnibus across the river by the chain bridge ... a train being in readiness on each side. As the stone pillars on which the bridge was erected are uninjured, the wood-work will in a few days be sufficiently restored to allow of the passing of the trains as usual."

These accounts clearly indicate that on the day following the fire the omnibuses were already in use, leaving no time for the erection of temporary platforms which, in any case, would have been required on each side of the bridge. From the speed with which new wooden spans were expected to be erected, it seems unlikely that any platforms would have been needed, and with Hudson in charge it was even more unlikely that such luxuries would have been countenanced anyway. Beyond doubt, however, is the fact that, even if an entry for a station at Warden in June 1848 can be found in a timetable, it cannot be held to have been made for use after a fire at the end of the following July, advance planning being one thing, clairvoyance another.

This leaves the matter of Quality Corner, the site named by both Tomlinson and MacLean for the 'station' of 1836. It was certainly a good place to drop off those wishing

to get to Warden village or West Boat, because it had a short lane leading to the main road and there was no railway embankment or cutting to impede their progress. The place existed before the railway, being shown and named on the plan deposited in Parliament before the railway company secured its Act; this plan was dated August 1828.

To add some colour to the supposition that Quality Corner was the site of the short-lived Warden stopping place, it was worth trying to establish if the railway was involved with any of the dwellings there. The writer cannot say if the house or cottage(s) shown by a simple dot on the deposited plan, was purchased by the N&C Company. The book of reference does not mention a property to be acquired there and it is not numbered on the plan. The line ran very close to it, and there are indications that its pre-railway access was disturbed and altered when the line was built.

The Census returns are housed in the basement of the Public Record Office in Chancery Lane and are readily accessible on microfilm. In 1841 only one railwayman lived at Quality Corner, viz. George Kenwick (or Keswick), a railway labourer. By 1851 there were two - William Adamson, a 16 year old 'Rail-boy' and Rowland Newland, a 'Rail' labourer. The several other people living at the Corner at both Censuses had non-railway occupations, so it seems unlikely that the dwellings were railway properties. Nevertheless, Quality Corner remains the most likely site for the stopping place, for the line climbed onto an embankment as it approached the bridge.

This investigation, carried out sporadically over a period of three and a half years, has achieved the writer's purpose, although more could probably be done. From the standpoint of research, two points may be noted. Probably all the research could have been done much nearer the site, in Newcastle and Carlisle, with the exception of the company records at Kew which were vital for the events of 1836. The other point is the amount of work required to validate the essential particulars of one small station, alleged to have existed in reliable books, on at least one historical railway map and in modern station lists.

REFERENCES

1. John S. MacLean, *The Newcastle & Carlisle Railway, 1825-1862*. 1948, p. 63.
2. In fact the original bridge had four piers, not three, being shown thus in Carmichael's engraving in *Views on the Newcastle & Carlisle Railway, 1836*, and on the 25" O.S. plan surveyed 1860. It appears to be certain that the rebuilding with cast iron spans did not take place until after the N&CR had resumed control of the line, because a year after that event, on 8 January 1851, the N&C Board resolved that 'the bridge at Warden was to be immediately restored'.
3. W.W. Tomlinson, *The North Eastern Railway: its rise and development* [1915].
4. G. Whittle, *The Newcastle & Carlisle Railway*, 1979.
5. Septimus Bell (compiler), *Early British Railways: a collection...* N&CR, Vols. I-III. In the LSE, British Library of Political and Economic Science.
6. N&CR Managing Committee minutes, ref. RAIL 509, PRO, Kew, and documents attached to the deposited plan in the House of Lords Records Office.
7. Fourstones station was approx. 2 miles NW of Warden Bridge and Allerwash hamlet is approx. one and a quarter miles west of Fourstones, with Allerwash Hall half a mile beyond it.
8. T. Fordyce, *Local Records ... in Northumberland ...* 4 Vols. 1866-1876.

Footnote by John Boyes

I think that it is of peripheral interest that Scotswood Bridge now, I believe, disused which was built by the N&C Ry across the Tyne between Scotswood and Blaydon was also destroyed by fire on 9 May 1860 supposedly from ashes or cinders dropped from a goods engine. The bridge was also of timber construction. Like Warden Bridge it was opened without Government inspection as the Railway Inspectorate had not been established so there had been no checks on their construction, and it is extremely doubtful whether there was any subsequent inspection prior to the 1848 fire at Warden. So far as Scotswood Bridge was concerned there was an inspection on 9 May 1860 as a result of pressure from the Admiralty.

The Fall of Barentin Viaduct, 10 January 1846

BY DAVID BROOKE

'About six o'clock on Saturday morning,' reported a Paris newspaper, 'a fearful noise - aroused the inhabitants of Barentin. The twenty-eight pillars [i.e. piers] which supported the arches of the viaduct fell one after another, and almost instantaneously.' No-one died but if 'those enormous pillars had not providentially fallen as they did (in a straight line), had they fallen but a few yards to either side, a great number of persons must have been entombed, whilst in their sleep'.¹ The destruction of railway viaducts, usually as a result of inferior workmanship and materials, was not a rare event in the history of railway building. The 1840s also saw the collapse of these structures at, amongst other places, Knaresborough (1848) and Congleton (1848) and on the Stalybridge Branch of the Manchester, Sheffield & Lincolnshire Railway (1845). Nevertheless, for the partnership of contractors William Mackenzie and Thomas Brassey, the fate of the first Barentin Viaduct was the most dramatic single event to occur during 10 years' work in France.

In May 1843 Mackenzie and Brassey completed their first major assignment in France with the opening of the Paris & Rouen Railway between the Paris & St Germain line in Colombes, Paris, and the south bank of the Seine opposite the City of Rouen. Their task had been accomplished in a little over two years and was a highly successful demonstration of the application of British railway contracting methods. It was also the first French component in the creation of rail communication between Paris and Channel ports and thus the improvement of connections with London. Attention now turned to a line between Rouen and Havre. Although the Paris & Rouen had entailed building four bridges over the Seine and several tunnels (the longest being Rolleboise, c. 1 mile, 1,300 yards), natural obstacles on the Havre route posed even greater problems and the first contract on the line, the Rouen and Barentin, was especially demanding. It began with Eapulet Bridge over the Seine and in the following 14 miles involved a total of two and a half miles of tunnel under Rouen, a substantial tunnel at Pissy-Pôville (1 mile 800 yards) and viaducts at Malaunay and Barentin. This final 'work of art' had 27 arches, a length of 1,640 feet and a maximum height of 112 feet; its dimensions thus slightly exceeded those of a contemporary viaduct, Digswell, at Welwyn on the Great Northern Railway. The plans, specifications and descriptions of the first Barentin Viaduct indicate that its piers were set on concrete foundations followed, for twenty-one piers, by masonry bases; above that level everything was in brick. The unusual and perhaps questionable feature of its design was the rejection of entirely solid piers in favour of those with interiors containing four 'chimneys' or flues measuring 101 x 90 cm throughout their height in order to reduce their weight. This design, which was also used for Malaunay, obviously had the approval of Joseph Locke, the railway company's engineer, and, under the French system, his opinion must have been endorsed by the State civil engineering administration, the Ponts et Chaussées. The estimated cost of the Rouen and Barentin Contract (£525,118)² was over half that of the entire line to Havre.

Mackenzie and Brassey obtained this contract in October 1843 by negotiation with Locke, and work from Maromme to Barentin proceeded steadily through 1844 and 1845 under two experienced agents, John Jones and Miles Day. James Guthrie obtained the subcontract for the masonry bases of the piers. In contrast to his supervisory practice during the building of the Rouen line, Mackenzie gave these men a very free hand and visited the Havre contracts on only twelve days in 1845.³ His attention in that year had turned to railway promotion and, in particular, was focussed on obtaining the

concession for laying the track of the Orleans to Tours line.

The collapse was followed by much speculation and several enquiries. Frissard, a leading inspector of the Ponts et Chaussées, immediately began an investigation and the Minister of Public Works set up a Commission of Enquiry which appears to have found no explanation. The most useful action taken by the agencies of the French State was the inauguration later in 1846 of a programme of experiments to test the stability of not only a strengthened Malaunay Viaduct and the new Barentin but also the third and longest viaduct on the line, Mirville, near Bolbec.

According to his diary, Mackenzie's immediate reaction on receiving news of the fall on Monday, 12 January, was:

Mr Illiedge informed me that on Saturday last Barentin Viaduct fell to the ground a heap of Ruins - fault Bad Mortar, we told Mr Locke Mortar was bad and proposed to use Hydraulic for Mortar and bear half the expense of the extra, he said he would allow nothing but we were quite at liberty to use it if we pleased the result is now to be seen.⁴

The following day with Brassey he met Locke, who 'looked sad and was low in spirits', and a visit to the site on 18 January confirmed Mackenzie's opinion concerning the mortar: 'Bricks good mortar infamous,' he commented.⁵ The specifications for the contract stipulated that throughout the work the acceptable constituents of mortar were common lime and sharp river sand; hydraulic lime, which as a result of containing more clay than did common, was much harder and resistant to water had to be used only for concrete work. The railway press speculated that the crucial damage to the mortar had been done by a sharp frost followed by a sudden thaw at the time of the collapse. The mortar may have been weak but, as Mackenzie believed, the bricks were not and in the following Spring gangs of men had the task of cleaning bricks recovered from the ruins for use in the new viaduct.

Locke's verdict on the matter came in his report to the Rouen & Havre Company General Meeting of October 1846⁶ which took place shortly after the first locomotive passed over the new viaduct. The significant weakness in the structure, he said, came from the state of the masonry base of Pier No. 5. Cracks had appeared in the bases of several piers but the fissures in two sides of No. 5 were especially conspicuous and, although they did not appear to be getting worse, they had been regularly inspected as a precaution. The validity of this interpretation, he claimed, was shown by the fact that 'All the arches fell in the two directions towards the pier No. 5. And this is a sure indication that the two arches adjoining it were the first to yield.' In relation to conjecture concerning another explanation, he believed that insufficient ballast had been loaded on the track to cause the catastrophe. Thus:

According to these circumstances, the fall of the viaduct must be attributed to the mason-work in stone, forming the base of the pier, for, as far as we can form a judgment, there has never been any other apparent cause.

Nevertheless, the suspicion remains that a design which may have given only a small margin of strength and the use of inferior mortar played a significant part in the loss.⁷

Mackenzie and Brassey immediately accepted responsibility for what had occurred because, as they admitted, in order to accelerate construction they had persuaded Locke to build the bases of the piers in stone when he planned to use brick.⁸ This confession won them widespread praise and, whether it was their intention or not, deflected attention from Locke's role in the matter. Within a week of 10 January, the assistant engineer George Neumann and the architect William Tite were drawing up plans for a new viaduct - this time with solid piers. Further, the new Barentin and the

strengthening of the Malaunay Viaduct were made special assignments of agents John Milroy and George Goodfellow, respectively. Malaunay was reinforced by bolting plates onto the surface of the piers⁹ and, amongst several precautions, the bases and heads of the forty-eight piers of Mirville were enlarged. Mackenzie did not blame any of this employees for what had occurred, although in general, as his diary shows, he was never reluctant to comment on their deficiencies. Altogether, the matter appears to have caused him less anxiety than did the discovery in the same period of financial losses at the partnership's iron works at Pontaudemer.

While the new Barentin was in the course of construction, engineers of Ponts et Chaussées applied their programme of stringent tests to every bridge and viaduct on the line, including that over the Seine and Rouen. This process initially consisted of loading them with sand and gravel, and Malaunay Viaduct finally withstood a weight of approximately 2,000 tons for 6 weeks without weakening. Next, dynamic forces were applied through rollers and very heavy locomotives travelling at c.20 mph.¹⁰ All came through this multiple trial unscathed but, during a visit to Mirville in February 1847, Mackenzie had some disturbing thoughts after seeing:

the Rolling weights going on with 4 Engines abreast 2 upon each road with 25 behind each two Engines - running backward and forward about 20 Miles Pr hour up to tonight they have run 84 times across, and have to cross yet 116 times more in all 200 - The Viaduct is very weak and vibrates a great deal thus far all is safe - I wish it had been much stronger.¹¹

It is evidence of the apprehension felt by the company and investors at this trial that daily reports on the state of the viaduct were sent to the Paris Stock Exchange.¹²

In addition to its rebuilding work, the partnership applied to Locke for compensation. A letter to the Directors of the Rouen & Havre Company in October 1846 claimed that reconstruction had cost 1,342,000 francs (c.£53,150) and added the specious argument that, if their claim was accepted, this additional expense to the company would be partly offset by a commitment to the original arrangements to pay the contractors an additional 255,000 francs for an early completion of the line.¹³ With the assistance of Locke, compensation of approximately £20,000 was finally awarded.¹⁴

The destruction of Barentin did not delay the opening of the Havre line by more than about six months¹⁵ nor did it prevent Mackenzie and Brassey from obtaining further work in France, some of which was under French chief engineers. Ahead lay their role in the completion of the lines from Amiens to Boulogne and Orléans to Bordeaux and, after Mackenzie's death in 1851, Brassey's contribution to the Lyons and Avignon. Nevertheless, it did damage their reputation in a minor way encouraged a growing body of opinion in France, which expressed itself most violently at the time of the 1848 revolutions, that British influence in French railway affairs, whether in construction or finance, was not essential and should be curtailed. Criticism of their workmanship might have been more strident if the lines built by the Ponts et Chaussées had not contained defects. In the Autumn of 1846 the Orléans to Tours and Orléans to Vierzon lines proved most vulnerable to flooding by the Loire.

Although two arches at its eastern end were destroyed by bombing in the Second World War, the second Barentin Viaduct has withstood the test of time and today carries frequent, heavy and fast-moving traffic of the S.N.C.F.

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1. Quoted in the *Illustrated London News*, 17 January 1846.
2. Based on an exchange rate of 25.25 francs/£1; this rate is used throughout this article.

3. There is no evidence concerning the time spent by Brassey on this line.
4. *Diary of William Mackenzie*, 12 January 1846, the Mackenzie Collection, Institution of Civil Engineers.
5. *Ibid*, 18 January 1846.
6. *Herapath*, 14 November 1846, pp. 1435-7.
7. The most comprehensive retrospective attempt to explain the fall appears in G. R. Burnell Ed., *Supplement to the Theory, Practice, and Architecture of Bridges*, John Weale, London 1850. This claims that the type of stone used in the bases of the piers (chalk) and the mortar were inherently too weak to resist the weights imposed on them. In addition, the flues in the piers should at intervals have had their sides tied or bonded, in the same way as Nature strengthens a reed or cane, in order to prevent buckling.
8. *Railway Record*, 14 February 1846, p. 178.
9. *Diary of William Mackenzie*, 23 January 1846; an entry on 20 May 1846 refers to the piers being reinforced by cast iron cramps.
10. *Railway Record*, 12 December 1846, p. 1319, and *Herapath*, 14 November 1846, pp. 1435-7, and 23 January 1847, pp. 90-1.
11. *Diary of William Mackenzie*, 23 February 1847.
12. *Railway Times*, 2 January 1847, p. 14.
13. Letter Mackenzie and Brassey to the Directors of the Rouen & Havre Railway, 29 October 1846, *Mackenzie and Brassey: Letter Book, Rouen & Havre and Paris & Rouen, 17 July 1846-49*, pp. 66-8. This letter is in Brassey's literary style.
14. Favrin to the Directors of the R&HR, 3 March 1847, *ibid*, p. 99. Favrin was Mackenzie and Brassey's secretarial agent in Paris.
15. The rebuilding of Barentin from a heap of ruins in 10 months is evidence of the exceptionally high standard of the contractors' staff.

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The Cyrenaica Railways – A case of railway archeology

BY R. GRAS

Introduction

A small railway enterprise existed between 1914 and 1966 in Cyrenaica, the east of the present Great Socialist Peoples' Libyan Arab Jamahiriya, better known as Libya. The story of this railway line reflects the turbulent colonial, wartime, and post-colonial history of the country. The writer of these pages happened to be in Benghazi,¹ and took pleasure in digging out the almost forgotten past of the Cyrenaica Railways. This turned out a challenging task, as primary sources such as archives and libraries are either not available or inaccessible for the general public in the present Libya. A lot of the information contained herein is therefore from field observation,² from the spoken word and from literature sources found outside Libya.

History

The first railway in Cyrenaica dates back from the Turkish occupation before 1912. During this period Bengasi flourished as a commercial centre, and reportedly a small railway existed in this city.³

The Italians invaded Libya, their claimed 'Fourth Shore', in 1912 for the first time, but the occupation of Cyrenaica was initially only peripheral. Nevertheless, railway lines were considered an integral part of the colonisation. In 1913 twenty km of narrow gauge railway line was constructed between Bengasi and Benina, and this first portion was opened on 20 September 1914. In 1916 the extension from Benina to Regima went into operation.⁴ After the First World War the Italian occupation was extended. The construction of the project railways was resumed, albeit with difficulty due to the guerilla warfare by the Libyan Senussi resistance in the Gebel Akhdar (Green Mountains) in the Bengasi hinterland. The Bengasi-Soluch line, on the relatively peaceful coastal plain, was constructed intermittently with the Bengasi-Barce line. Finally the lines Bengasi-Barce and Bengasi-Soluch were opened on 9 and 17 November 1927 respectively (Figure 1). Only in 1932 the military restrictions in Cyrenaica were lifted, after the defeat of the Libyan resistance and execution of the leader Omar-el-Mukhtar. The Italians under Mussolini founded a colonial economy in Cyrenaica, one of the most wet and fertile agricultural areas of Libya. A farming settlement was established around the village of Barce (presently El Marj), in the relatively wet hillside area of the Gebel Akhdar. The principal crop was wheat, exported for consumption in Italy. Cyrenaica was to become the granary of Rome in Mussolini's plans. In the area of Barce thousands of small farms were built. Apart from the economic goal of opening the hinterland in the Gebel Akhdar, the rationale for the construction of the Cyrenaica Railways was military, to aid the repression of the resistance who dominated in the mountains.⁵

The initial plans called for extension of the Barce line to Derna, and the Soluch line to Agedabia. The Cyrenaica Railways were thus intended to be part of a larger system along the coast of Libya, connecting Bengasi with Tripoli, the 'Translibya'. An even more tentative plan, the 'Transsahara', connected Bengasi with Chad following the traditional caravan route through Jalu.⁶ The ambition for a North African railway was revived during the Second World War by the combined Italian-German forces, and is still alive with the present government of Libya. Plans for a normal-gauge railway, involving cooperation with either Tunisia or Egypt, are intermittently being published, although nothing has materialised to date.

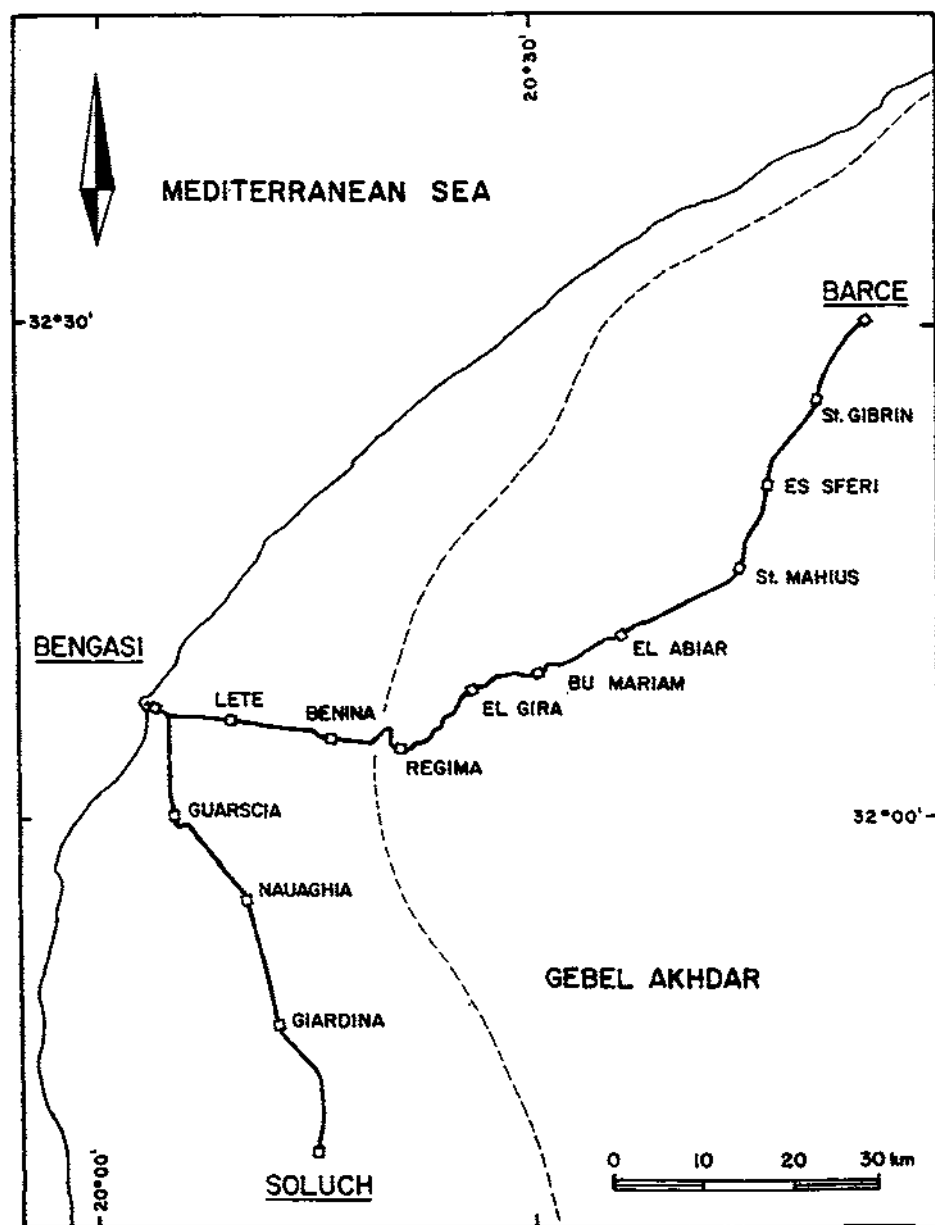


Figure 1. Map of the Cyrenaica Railways.

Cyrenaica was the scene of heavy battles during the Second World War. The city of Bengasi itself was captured by the British forces on 7 February 1941, then bombarded and subsequently recaptured by the combined German-Italian Afrika Korps under Rommel (3 April 1941), only to be conquered for the second time by the British forces (25 December 1941), who were expelled after a short while, following a counter attack from the Afrika Korps (29 January 1942). Finally, Bengasi was evacuated by the defeated Germans and Italians for the advancing Allied forces on 19 November 1942.⁷ The Cyrenaica Railways played a minor strategic role, as the emphasis of the battle operations was on mobile forces, and the decisive battles were fought out to the east of Cyrenaica, in Marmarica and Egypt. However, the German-Italian forces transported 512 tonnes of military supplies and vehicles destined for the front at El Alamein, between Bengasi and Barce in October 1942.⁸ The Italians sabotaged the track of the Barce line during their retreat for the advancing British forces in 1941. Hence the Cyrenaica Railways survived the war crippled. Operation remained suspended until 1947, when the Company was placed under British Military administration and was opened to traffic once more.

When the Kingdom of Libya was established in 1949 the Cyrenaica Railways were operated by the government under the responsibility of the Secretary of Communications. The final chapter of the history of the Cyrenaica Railways started with the closure of the line Bengasi-Soluch in 1964-65. In 1966 the operation of the Cyrenaica Railways was finally abandoned and the tracks were dismantled. The antique and obsolete rolling stock most probably ended up on the scrapyard. By 1960 the discovering of large oil fields in Libyan Saharan desert had drastically changed the economic landscape of Libya, and road transport fuelled by cheap petrol took over the task of the Cyrenaica Railways.

Rolling Stock

Twenty-four steam locomotives are known to have worked the two sections of the Cyrenaica Railways. Most were switched intermittently from Tripolitania, where an equally modest railway operation took place, consisting of three short lines around Tripoli. The locomotives were also sporadically exchanged with the narrow-gauge railway system in Sicily.

The steam locomotives were twelve 0-8-0Ts built by Schwartzkopf in 1908-1912, five 0-4-0Ts built by Hanomag in 1912-13, and seven 2-6-0Ts built by Saronno and O.M. Milano in 1912-14 (a smaller version) and by Saronno in 1922-27 (the larger version). Some of the Schwartzkopf 0-8-0Ts are known to have been 'streamlined' and armourplated for wartime protection.⁹ The Saronno and O.M. Milano locomotives are known as series 301. Locomotive 301-33 was transported to Benghazi in July 1942 to assist the wartime transport requirements, and a photo exists of this locomotive being offloaded in the Bengasi harbour.¹⁰ To add to the complexity, four 0-4-4-0T Mallets were transferred from Eritrea and were later confiscated by the British War Department. These Mallets were built by Reggiani in 1933. Two of these were known as Eritrean Railways No. 441-201 and 441-101, the first one being poppet-valved, and the second piston-valved. Also originating from Ethiopia (Eritrea), but diverted during the Second World War, were three 2-8-2+2-8-2 Garrets built in 1939 by Ansaldo.

On the Soluch line steam traction took place with the Saronno 2-6-0T locomotives from 1912-14. Often an extra tender was carried in the desert environment. In 1965 these locomotives, by this time reported as obsolete and inefficient, could haul a train of a maximum of five wagons in the flat terrain of the Bengasi-Soluch line.

In the postwar years passenger service on the Barce line was done with a long railcar built in 1952 with 56 seats capacity. Memories of this railcar, which was reported to be in a derelict state, still exist with the older population of Bengasi and Barce. A journal

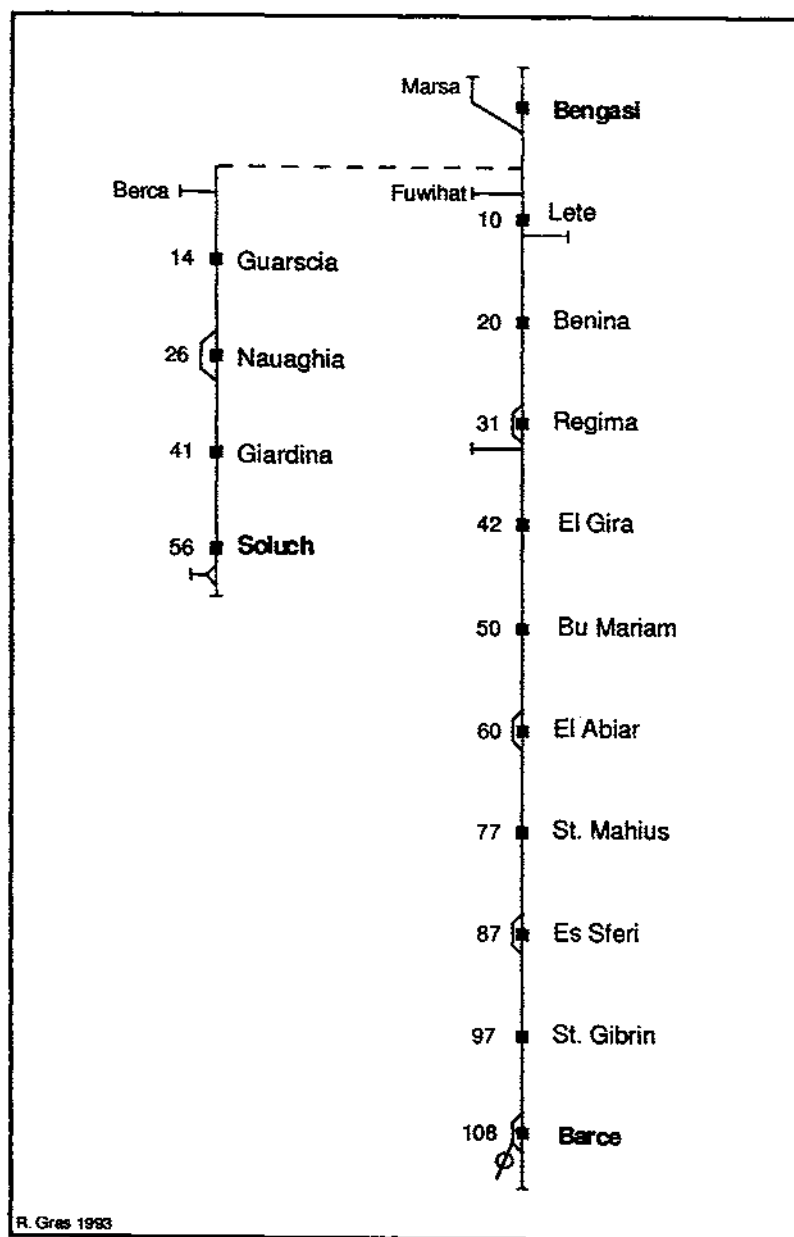


Figure 2. Diagram showing railway lines and stations.

published in 1962 states that post-war operation took place with two diesel locomotives originating from 1939.¹¹ These were Henschel locomotives operating during the Second World War between Tubruck and El-Alamein, abandoned by the defeated German army.

Stations and Railway Track

The Cyrenaica Railways were built during the Italian occupation of Libya, and for this reason was laid with the Italian 950 mm narrow-gauge. This unusual gauge is believed to have evolved due to the wrong assumption that meter-gauge is measured from centre to centre, instead of between each rail.

The total length of the Cyrenaica Railways was 164 km, single track (Figure 2). The main lines were the 108 km Bengasi-Barce line and the 56 km Bengasi-Soluch line.¹² Branch-stations were at approximately 10 km intervals irrespective of the presence of a village or settlement of any kind, demonstrating the rigid planning of the Italian colonial development. The total 164 km line inevitably had to have 17 stations. However, as early as in 1940 it appears that the trains did only stop at the more important stations,¹³ although all stations remained staffed.

The talus allows the track to be traced in the landscape, and often present roads to follow the previous track. Along the old track one may find meter-gauge sleepers and occasionally other construction materials left behind, enough to arouse the enthusiasm of a railwayman in a trainless country. Also some bridges and railway cuttings can still be recognised. However, most conspicuous are the former stations, which stand out in the landscape due to their uniform Italian classicist architecture.¹⁴ Particularly when standing in isolation, such as the stations of Sidi Gibrin and Staz. di es Sferi, the architecture is of considerable merit (Figure 3). Only surprisingly few of the former stations have been demolished, mostly they have been put into alternative use.

The line Bengasi-Barce took a route straight from the harbour of Bengasi over the coastal plain towards the east in the direction of Benina, the present international airport. The main station of Bengasi opened in April 1916, was said to be of great architectural merit,¹⁵ but is not present anymore. This station was located near the city centre on the present Abdul Nasr Street, in an area of land claimed from the inner salt lake or sahbka.¹⁶ In the harbour a port siding existed, as well as some administrative offices, one of which later housed the British School. In the east of the present city of Bengasi the rural station of Lete still exists, opposite the previous Royal Military Academy, and its currently used as a small cement works. The track follows the present day motorway and climbs with a maximum gradient of 20 promille towards the terrace on which Benina is located. After Benina, at approximately 120 m elevation, a slope with a maximum gradient of 25 promille led to Regima (290 m). The trains took this obstacle presumably with considerable effort along a zig-zag route up the escarpment. Up on the escarpment in the village of Regima a siding connected a former ammunition storage. From Regima the track followed a curvaceous route through rolling landscape with small villages, mediterranean forests with pine, juniper and cypress, and agricultural areas. The route went through the village of El Abiar up to the terminus Barce. The Italian colonial village of Barce was severely damaged by an earthquake in February 1963,¹⁷ and has since neither been demolished completely, nor reconstructed. The monumental station of Barce is still present in reasonable shape, though presently inhabited by squatters. In Barce the locomotives could be reversed by means of a turning table. A small freight station was located opposite the power station nearby the terminus.

The train would stop at the following stations, with the presumed names in Italian spelling, and the currently used transcription in brackets: Bengasi (Benghazi), Lete,



*Figure 3. Former station of Sidi Gibrin, near El Marj, Cyrenaica, Libya.
Photo by R. Gras 1993.*



*Figure 3. Former station of Sidi Gibrin, near El Marj, Cyrenaica, Libya.
Photo by R. Gras 1993.*

Benina (Brina), Regima (Al Rajmah), El Gira (Gabr el-Gira/Gabr Jirah), Bu Mariam (Sidi Salih), El Abiar (Al Abyar), Sidi Mauis (Sidi Mahyus), Stazione di es Sferi, Sidi Gibrin (Sidi Jibrin), and Barce (Al Marj). In Regima and Stazione di es Sferi trains coming from the opposite directions could cross. An Italian touristic guide from 1940 reports that the trip from Bengasi to Barce took two and a half hours. The same journey in post-war years took four hours, with a wholly appropriate average speed of 27 km/hr.

Three short branch lines existed in the area of Bengasi. One was close to the station Lete, the only branch-station preserved with a different, more grand architectural style (Figure 4).¹⁸ This line presumably played a connection with the former palace of King Idris, which later on became the Military Academy. Another line diverted from the Soluch line towards the El Berca area. A third line, just outside Bengasi in the Barce direction diverted towards the Fuwihat area in the southern part of Bengasi. These latter sidings may well have served military purposes.

The line Bengasi-Soluch is largely through agricultural area between Bengasi and Guarscia, and through gravelly desert area from Guarscia towards Soluch. The track follows a central route on the coastal plain south of Bengasi, projected with a view to develop the agricultural area. South of the present suburb of Berca the line crossed the Wadi-al-Qattarah. In Guarscia the track made a wide S-turn in a trench dug into the limestone bedrock towards the present Hawari Road, connecting the present Bengasi with Soluch. In Nauaghia the railway station is currently in use as a police station. In Giardina the old station is still present, although the typical facade of the station has been modified. The unappropriately grand terminus of Soluch has presently been decorated with scenes from Libya's revolutionary history. In Soluch the steam locomotives could be reversed with a triangle-track. Stations on the Soluch line thus were the following: Bengasi (Benghazi), Berca, Guarscia (Al Qwarshah), Nauaghia (An Nawwaqiyah), Giardina (Jardinah or Al Khadrah), and Soluch (Suluq).

In 1940 the trip from Bengasi to Soluch would have taken 'approximately two hours'. When questioning an elder citizen from the present Bengasi about this, he said it would have been faster to walk. The train would stop also between stations, to pick up family members and cattle, and discuss the latest news.

Company Economy

Very little is known about the operation of the Cyrenaica Railways in the pre-war years. Only from 1932 to 1940, from the defeat of Omar el Mukhtar till the Second World War, Cyrenaica saw relative peace, and could the planned colonial development of the region go ahead.

The timetable of the Cyrenaica Railways in the post-war era offered five passenger trains per week; on the Barce line were three services per week, and on the less busy Suluq line a twice weekly service. On the Barce line only direct trains were in service. No information on the frequency and tonnage of freight trains is available.

In the post-war years the Cyrenaica Railways saw a rapid decline in the state of the rolling stock, and was operating with a heavy yearly deficit. In an economic survey of 1965 it is concluded that the highly unprofitable business results more from inefficiency than from lacking demand in rail transport.¹⁹ The services to Barce were in demand and well appreciated, especially in winter times, despite the appalling condition of the used motorcar. A stunning 85% of the yearly expenditure of the Cyrenaica Railways was on personnel costs. The low fares and freight charges were well below actual costs, and dated back from the British Military administration. The personnel of the Cyrenaica Railways in 1965 consisted of 52 workers and one foreman in the workshop, 100 workers for maintenance and three station-heads in the main

stations and 16 employees in the branch stations. Therefore a total of 172 employees were responsible for the operation of five weekly services. A report wryly comments that 'a staff reduction of 30% would not be felt'.

The operation of the Cyrenaica Railways was terminated in 1965 because of the large investments required to modernise the line and rolling stock, the high yearly deficits, and last but not least the rapid advent of motor transport, fueled by the newly discovered wealth from the oilfields in the Libyan desert. One may think of the Cyrenaica Railways as a footnote, albeit a fascinating one, in the recent history of Libya. In today's Libya the traces of this railway are still there to be found by the observing traveller.

NOTES

1. Transcription and spelling of Arabian names is an unresolved dilemma. The current transcriptions widely in use (e.g. Benghazi) are English, whereas Libyan authorities use 'Banghazi' and the Italians used 'Bengasi'. Wherever this paper deals with the Italian colonial history, the former Italian transcription has been preferably utilised. The name Cyrenaica Railways was used by the British administration.
2. Field-research into Libyan history is a matter that has to be approached cautiously, and photography out in the open should not be taken lightly. Field observations by the author were done between 1991 and 1994.
3. Information on the history and geography of Benghazi is found in Hadi M. Bulugma, *Benghazi through the ages*, (1972), Benghazi.
4. On the history of construction of the Cyrenaica Railways: Stefano Maggi, *Colonialismo e Comunicazioni. Le strade ferrate nell'Africa Italiana (1887-1943)*, (1996), Napoli, and Stefano Maggi, *Le ferrovie nell'Africa Italiana: Aspetti economici, sociali e strategici*, (1995) Working paper no. 18 Università di Siena. This first paper will appear in translation in *The Journal of Transport History*.
5. The history of the colonisation of Libya by the Italians fascists is treated in: P. del Boca, *Le guerre coloniali del fascismo*, (1991), Rome, and Enzo Santarelli, Giorgio Rochat, Romain Rainero & Luigi Goglia, *Omar-al-Mukhtar, the Italian reconquest of Libya*, (1986), London. These authors describe the overall plan of the Italian Fascist rule for the territory. Following the mass deportation of the local population of the Jebel, a virtually compulsory resettlement program was initiated in 1930. Large numbers of farmers, predominantly from the area around Rome, were emigrated to Cyrenaica. The Cyrenaica Railways were in itself a target for the Libyan resistance, and garrisons were set up to protect the Bengasi-Barce line in 1928. A personal account on the Libyan resistance in Cyrenaica is given in K. Holmboe, *Desert Encounter, an adventurous journey through Italian Africa*, 1931 (Reprint Darf Publishers Ltd., 1989).
6. These ambitious plans of the Italians were found in H. Schiffrers, *Libyen und Sahara* (1962), Bonn. Also Ethel Braun elaborates without reservation about the grand plans of the Italians with respect to the railways: E. Braun, *The new Tripoli - and what I saw in the hinterland*, (1914) (Reprint Darf Publishers Ltd., 1986).
7. On the 1940-1942 warfare in Cyrenaica: B. H. Liddell-Hart (ed.), *The Rommel papers*, (1953), New York.
8. Information found in: H. von Rhein, 'Von Tobruk nach El Alamein', *Lok-magazin*, (1993), pp. 309-18.

9. The data on the rolling stock is from: A. E. Durrant, A. A. Jorgensen & G. P. Lewis, *Steam in Africa*, (1981). The armourplating and camouflaging was said to be rather of psychological than practical significance.
10. This picture is reprinted in Von Rhein.
11. See Schiffers and Von Rhein.
12. Maps showing the Cyrenaica Railway are: Carta dimostrativa della Libia, scale 1 : 400 000, sheet 4, Bengasi and Cyrenaica, Sheet 6, Tolmeta Barce, scale 1 : 100 000, 1942.
13. As concluded from information in: *Italia Meridionale e Insulare ~ Libia, Guida breve*, III (1940). The Dutch writer Bob Sporry-Tadema reported the existence of a railway, but preferred to take the car when travelling from Bengasi to Barce in the fifties: B. Sporry Tadema, *Libya Felix*, (1957), Amsterdam.
14. The branch stations of the Cyrenaica Railways are simple but elegantly proportioned buildings in a classicist style, with a rectangular groundplan, one storey high with a flat roof. The facade, both front and back, is decorated with a tympanum. The platform side of the building has a roof, to protect the passengers from the hot sun. The ground floor contained an office, a central waiting room and freight room. A door in the front of the building led via the stairs to the stationmaster's apartment on the first floor.
15. Stefano Maggi describes the main station of Bengasi as one of the most elegant palaces built by Italy in the colonies.
16. Older postcards of Benghazi shows the station and hangars in the location of the present Tibesti Hotel, as viewed from the opposite side of the lake, as well as the single track along the outer harbour front.
17. A. S. Campbell, 'The Barce (Al Marj) earthquake of 1963'. In: F. T. Barr (ed.), *Geology and archeology of Northern Cyrenaica, Libya*, Petroleum Exploration Society of Libya, Tenth annual field conference (1968).
18. The architecture of the station at Lete is similar to the presently existing former stations of Janzur and Zuara, in Tripolitania; These stations were built in a more monumental style, with shady arcades around the building on the three sides not facing the platforms, and balconies under inclined roofs on all four sides on the first floor.
19. The economic aspects of the Cyrenaica Railways are treated in: Doxiadis Associates, *Transport in Libya*, (1965), Athens. The conclusions in this report provided the basis for the decision to terminate the operation of the Cyrenaica Railways.

Acknowledgments

I am indebted to my co-workers in the Arabian Gulf Oil Company of Benghazi, who I often dragged into field-excursions not without risk. Jim Wylie, a true explorer, and Frank van Overmeeren, a reluctant classicist deserve special mention. Jörg Bölsche and Pit Koberstein were always prepared to cover my retreat in case of trouble. Carolien van der Vorst greatly encouraged and assisted in the completion of this paper.

A Little More Borley

BY ALAN A. JACKSON

As editor of the Society's publication, the *Memories & Writings of a London Railwayman* (1993), I feel a certain obligation at least to place on record any further published items by H. V. Borley which may come to light. Perhaps not surprisingly, since he was residing at Ruislip in the period, I found two in a recently-acquired set of the Middlesex county magazines published under various titles between 1953 and 1967. In the April and June issues of *The Middlesex Monthly* George Peche¹ contributed an article entitled 'Some Strange Facts about Middlesex Railways', using 'dates supplied by the British Railways and London Transport.'

This did not escape the eagle eye. In the Autumn 1953 issue of the successor journal, *Middlesex Quarterly*, on page 24, a letter appears below HVB's name, correcting some of Peche's statements. This is of particular interest since Borley refers to a personal diary which has not survived and was no doubt the basis of many of the post 1914 dates quoted by him. The letter also elucidates the last days of St Quentin Park & Wormwood Scrubs station, in the process demonstrating the pitfalls of the 'on and from' method of dating closures, if by 'closure' one means the last usage by public trains services. It is worth reproducing in full:

In the interests of historical accuracy may I say that the branch of the District railway opened on 1st May 1883 terminated at the original Hounslow station which is now an omnibus garage; the disused railway embankment can still be seen. The line to Hounslow Barracks was opened 21st July, 1884.

The passenger service between Lower Edmonton and Cheshunt was withdrawn on and from 1st July 1919. I have seen one of the original notices.

The passenger service of the L&NER to and from Edgware was withdrawn on and from Monday 11th September 1939. I travelled on the last day of operation, Sunday 10th.

Between Denham and Uxbridge the passenger service was withdrawn on and from Monday 25th September 1939.

St Quentin Park & Wormwood Scrubs station was a timber structure and my diary states it was burnt to the ground by enemy action on the night of 3-4 October 1940. The last train to use this station was therefore on Thursday 3rd October 1940. To assist passengers as far as possible, tickets continued to be issued at this station, available by bus from Willesden, until 30th November 1940. In consequence, the date of closing is sometimes given as 1st December 1940.

The statement about Uxbridge High Street station requires comment. In his later chronology HVB records the closure of Uxbridge (High Street) as '1 Sep 1939 (actual), 25 Sep 1939 (official)', implying that the last day of public train service (it ran between Uxbridge and Gerrards Cross via Denham) was Thursday 31 Aug 1939 and that is confirmed by Peacock.² Withdrawal of a train service after traffic on a Thursday is somewhat unusual, but may be related to the fact that the evacuation of schoolchildren from London started on the following day, Friday, 1 September 1939. The 'official' date of 25 September 1939, as is often the case with such dates, seems to have no particular relevance to public train services.

Another letter appeared in *The New Middlesex County Pictorial* of March 1963, this time correcting the statements in an article on the Kensington & Richmond line by A. R. Brown published in the November/December 1962 issue. This is of less interest, since it merely rehearses information that has been published several times in recent

years.

NOTES & REFERENCES

1. Peche, a professional journalist, was the founder and first editor of this series of magazines.
2. Peacock, Thomas B., *Great Western London Suburban Services*, 2nd edition, Oakwood Press, 1978.

The Life and Times of an Air Hostess in the Mid 50s

BY MIRIAM BATTERSBY

Who would have thought that I'd be walking across the Egyptian desert at midnight, carrying bottles of milk in one hand and a lifejacket in the other. I certainly didn't.

So began some notes started in 1954 to detail my life as an Air hostess. I continued:

It all began when I answered an advertisement, together with 400 other hopefuls for the most sought after job in the world, certainly in that era anyway. After a fairly short interview, I heard that I'd been selected as one of the eight cabin staff required. I was told that we were an independent airline, part of Scottish Aviation who, as well as their scheduled services to the Scottish islands, also had a separate charter business at Stansted Airport in Essex. It was the latter that I was to join. Most of our contracts involved flying service personnel, their families, some civilians and entertainers to RAF bases abroad.

My initial training at Stansted, which incidentally was just a collection of Nissen huts in those days, consisted of learning about the aircraft - four engined Avro Yorks, the welfare and comfort of passengers and crew, emergency drills and safety precautions. There was just one air hostess to look after 45 passengers and 4 flight crew, who consisted of the Captain, 1st Officer, Radio Operator and Navigator. I also learnt how to make out a load and trim sheet which looked a bit like a cross between a medical chart and a logarithm table. Fortunately my first one didn't go through unchecked, otherwise the plane would have been flying in a permanent nose dive.

After a few days at Stansted, the new hostesses went to London to be fitted for their uniforms, a two piece suit in mid blue with a matching forage cap which sported a Scottish Airlines badge on a piece of tartan. The uniforms looked very smart worn with a white blouse and black court shoes. I couldn't say the same, however, about the WRAF uniform we were obliged to wear, for some political or military reason, before landing in the Egyptian Canal Zone. This involved officially enrolling in the WRAFVR and passing the medical, and then drawing a full set of blue and tropical kit from the Uxbridge RAF camp. I was pleased to be granted the instant rank of Air Quartermaster Sergeant, although the flying crew were made up to officer grade.

The last couple of weeks of my training were spent as a ground hostess at Stansted. This involved escorting the passengers off their transport and into the restaurant and from there through to Customs and finally into the departure lounge. There they would be briefed by the outgoing hostess regarding the flight, lifejacket drill and emergency procedures. This couldn't be done on the aircraft, as once the engines were started it was too noisy and most passengers had cotton wool in their ears by then.

My first flight was as a supernumerary under the wing of the chief hostess. We left Stansted for Malta at 10.14 one September morning, arriving at 16.44 (6.5 hours). We then changed crews and went off to our hotel while the plane continued on to Egypt with its new crew. The following day, we took over the plane which had left Stansted that morning and departed Luqa at 18.00, arriving at Fayid, Egypt at 23.19. We had a meal in the Officers' Mess while the plane was serviced and refuelled after which I briefed and embarked the UK bound passengers and we left Fayid at 01.30.

On this leg, however, something quite dramatic happened as I sat on my galley seat close to the front of the plane. The emergency escape hatch right beside me suddenly

disappeared and there was a gaping hole of about 4 ft x 3 ft with a view of the night sky and two engines. Rather than call the chief hostess at the other end of the plane, I went to the flight deck and told the Radio Operator. Within seconds, two of the crew appeared and somehow managed to lift the door up and in again on its hinges. It was then secured with some rope. I was highly relieved, as in my ignorance I had imaged the door sailing down to the Mediterranean! Arrival in Malta was at 07.00 where we slipped crews and went off to our hotel for 26 hours before starting our 6hr 35m flight back to Stansted the following day. I do recall having a rather bad cold and wondering at the end of the trip whether the job was really all that it was cracked up to be.

The airline continued with this Stansted-Malta-Fayid-Malta-Stansted schedule for about five months before there was a change. Looking back over my log book for this period, I noted that one of our three Yorks, G-ANRC, crashed and burnt out on take off from Stansted (22 September 1954). We also landed at Marseilles to refuel on one homeward leg and due to other 'weather', we had at various times, put down at London Airport, Blackbushe (Camberley) and El Adem (Libya). This made for a little variety put played havoc with our schedules. Other items recorded in my log over this period were '... tail wheel jammed on landing', '... returned to Stansted 30 mins after take off - No. 1 engine US, and similar - No. 2 engine US'.

During these five months, I became quite *au fait* with the new job but it was hard work. The passengers ranged from the newest recruit to the very top brass, from mothers and children to children without mothers. From ENSA entertainers to the Arab Legion band who taught me to play the bagpipes on one flight. They were mostly well behaved although one oddly quiet young man, who I had carried from Stansted to Malta decided that on the next leg he would open the main door and fly back home on his own. He only managed to open the door about a foot before being hauled back in again. Apparently, when the Captain saw the red light come on, indicating that the door was open, joked 'I suppose some bloody fool's trying to jump out'!

Conditions could be quite difficult, especially in bad weather. We were not pressurised and mostly flew about 7500 ft altitude, which meant that when it was bumpy many passengers would be sick. Toilet facilities were of the Elsan kind and the galley facilities were somewhat limited. We carried two large urns of tea and coffee, 48 cold tray meals, sandwiches and biscuits, and we sold drinks and cigarettes if required. We also had two small electric hot jugs and a sink in the galley area. The metal cutlery and glasses had to be washed up but sometimes the passengers volunteered to do this to relieve the monotony of the flight.

I also had to make drinks and snacks for the flight crew according to their likes and dislikes. An air hostess's reputation amongst the air crew was often dependent on how well she looked after them, so that was quite important. We always stayed in the same hotels and spent our leisure time together, and then there were those seemingly never ending hours in airports waiting while some fault with the plane was being repaired.

After about five months, during which time we took delivery of more aircraft, we acquired an extra route, Stansted-Malta-Iraq (Habbaniyah)-Cyprus (Nicosia)-Malta-Stansted. The Malta-Habbaniyah leg was very long, about seven hours, but I liked Cyprus and 'Habby' was certainly better than Fayid. After a further six months on these scheduled, I noted that we flew to Aden via Malta and Wadi Halfa, and back via Khartoum and El Adem. The round trip took five days using the same aircraft and night stopping along the way. I remember Aden as being a real culture shock and very hot and sticky, but full of Far Eastern goodies to buy at a village called Crater. No major mechanical problems were reported over this period, just a seized engine and a sheared rod, but worse was to come in a few months time.

Before that, however, the airline had been asked to take some personnel out to Perth in

Western Australia. Two Yorks would be required and I was lucky to be selected as part of the crew of one of them. It was an 18 day round trip, night stopping along the route, which was via Malta, Habbaniyah, Karachi, Negombo, Changi, and Djakarta. Everything went to plan on this outward leg but when we landed at Djakarta the authorities were touchy about us carrying service personnel, even though they were in 'civvies', and we were virtually confined as prisoners in our hotel, which incidentally was one of the worst places I've ever stayed in anywhere. I imagine that we had been directed there.

However, Perth in January, even for just four days was superb and we made the most of it. We returned empty of passengers which was very restful for me, that is until we were over the Pacific, when I suddenly noticed one engine feathered, then another, and the third and fourth until the York started to dip and fall out of the sky. Almost immediately the engines restarted and I rushed into the flight deck to find out what was happening. 'It's OK,' said the Captain, 'we're just doing a bit of crew training while we're flying empty.' I told him never to do that again without telling me first. I was really scared.

My following three flights were back to the Middle East. On the third one which was routed Stansted-Lyneham-Malta-Nicosia-Abu Sueir-Malta-Stansted, we slipped crews as usual in Malta on the homeward leg. After arriving at our hotel at about 10.00, we went to bed for a few hours, only to be woken and told that G-ANSY, the aircraft we had just handed over to a new crew for its flight to the UK, had crashed shortly after take off with the loss of all on board. We were totally devastated by this news and because there had been some alteration in the crew schedules, we felt sure that our families back home would be thinking that they were the bereaved ones. I sent a telegram to my fiance asking him to let my mother know that I was all right but he had left home for the day, and hadn't heard the news bulletins. We later attended the funeral of the 1st Officer and his fiancée, the air hostess, and it was a very sad occasion indeed.

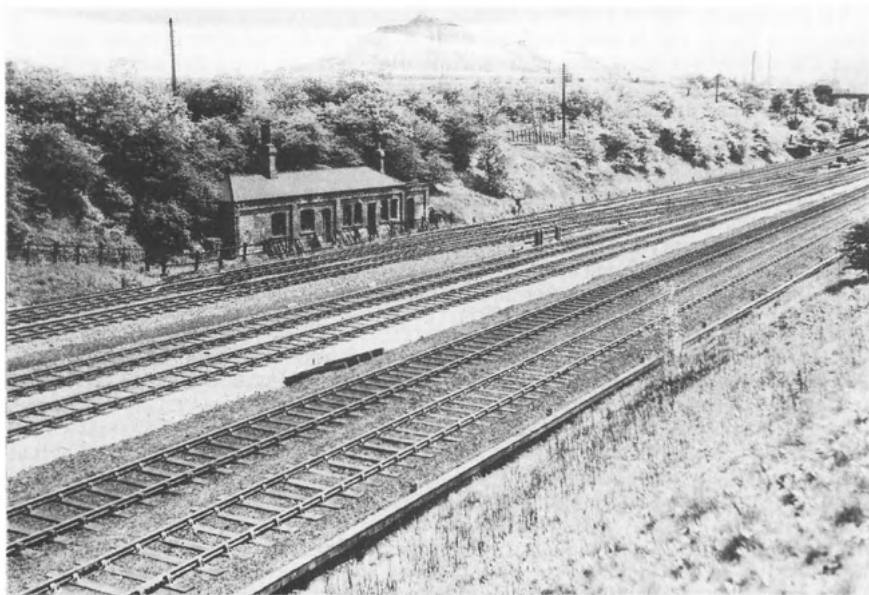
In February and March 1956 I made two flights to West Africa which were very interesting but on the second one I caught some bug and was so ill that the trip was never recorded in my log book. Maybe I had other things on my mind as I was getting married at the end of the month. So ended my flying career, a very happy and interesting two years which will stay in my memory for ever.

PS. The 'pintas' were for the Mess at Fayid. They looked forward to their daily delivery from England, instead of having to put up with the powdered and tinned variety.

From the RCHS Photographic Collection, No. 3.

Print RAC140

There are no details to accompany this print. If anyone feels they can identify the location, please contact Stephen Duffell, Hillcroft, Ford, Shrewsbury SY5 9LZ, or telephone 01743 851154 (weekends), or 01625 514828 (office hours).



RAC140 c RCHS

RAC 100

The location of this view is Ryhill Halt on the Lancashire and Yorkshire Dearne Valley Junction line, in Yorkshire. The line was opened by the L&Y to connect the nominally private (but L&Y controlled and operated) Dearne Valley Railway at Shafton, with the Wakefield to Goole line at Crofton on 6 March 1905. The Dearne Valley Railway was built to tap into the collieries of the West Riding that lay between Wakefield and Doncaster. Ryhill Halt opened (it was a rail-level halt throughout its existence) on June 3rd 1912, when the L&Y established a steam-railmotor service between Wakefield and Edlington. The passenger service ran for nearly 40 years, with the last passenger train on 9 September 1951. The Junction line closed to all traffic in July 1966.

The view is taken in a northerly direction looking towards Wakefield. The grid reference is SE390136.

On a personal note, having established the identity as Ryhill Halt, I showed the view to my mother-in-law. She was brought up in Ryhill and often used the halt for shopping trips to Wakefield in the 1930s, and up until closure for trips back 'home' from Lancashire.

My thanks to John Edgington and Dr Arthur Barnett for their help in establishing the identity of this photograph. Dr Barnett has recently visited the site, and reports that the cutting at Ryhill has been filled in and all but the parapets of the bridge buried.

RAC147

This photograph was of a former Midland Railway route that ran from Ashby-de-la-Zouche to Derby, and is the site of a former colliery and brickworks located between Lount and Newbold in Leicestershire (SK398194). Over the years this has been known as the Staunton Colliery and Brickworks, Staunton Colliery Sanitary Pipe and Brickworks, Leicestershire Colliery and Pipe Co. and Newbold Brick and Pipe Works.

The photograph was taken looking in a south-easterly direction, with the 'mainline' running to Ashby-de-la-Zouche to the right, and Melbourne and Derby to the rear of the photographer. The line to the left ran to the New Lount loaded sidings, and this formed part of a triangular layout, with the southern edge of the triangle comprising the New Lount empty sidings. The empty sidings connected with the mainline, out of sight around the right hand bend. After the junction with the empty sidings, the left hand line led on towards Coleorton and Swannington, with a short branch off this line to the New Lount Colliery (sunk in 1922).

The turnout in the centre of the view was worked from a Midland Railway 2 lever, covered ground frame, that was situated to the left of the photographer. When the line was a through route this was released by the single line tablet. A passenger service ran over the line until 22 September 1930, explaining the need for a facing point lock. The line was closed as a through route on 11 February 1949, and was severed just north of Ashby and again just beyond the New Lount empty sidings on 9 May 1955, traffic running to and from the Worthington (northerly) direction. By 27 November 1968 the single line and the siding were taken out of use, with the only traffic on the line running from the limestone quarry sidings at Worthington. The siding on the right was installed in 1890 for the Staunton Colliery and Brickworks, and the layout was altered over the years. There were two connections to the mainline. One is visible beyond the centre turnout and the other was behind the photographer, again released by the single line tablet. The photograph was probably taken in the late 1950s or early 1960s.

I should like to thank Mr Tony Overton for his most extensive reply that provided the basis for the above notes, and John Miller for his suggestions as well.

The aerial photograph was taken on 17 May 1948 from 16,600 feet. It shows the triangular layout of the railway sidings, with the mainline to Melbourne and Derby to the north and Ashby-de-la-Zouche to the west, with Coleorton and Swannington to the southeast. At least 10 circular kilns are evident in the factory complex, together with a large rectangular building and adjacent tall chimney to the north of the complex. Photograph RAC147 was taken from the trackbed to the southwest of the factory access bridge. Of interest are the white 'circles' in the field to the west of the factory. Are these evidence of former extractive processes, possibly coalpits!

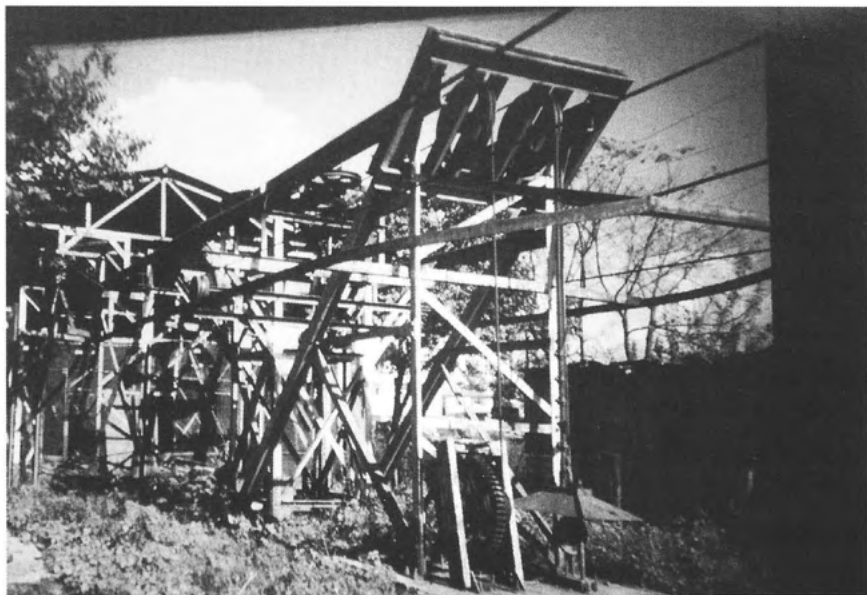


(Photo courtesy of C. G. Duffell)

The Katmandu to Hitauru Ropeway – A Query

BY STEVE BARBER

Could any members supply any information on the Katmandu to Hitauru Ropeway? The earliest reference I can find is from 'First over Everest' by Air Commander P. F. M. Fellowes and others which describes the 1933 Houston Mount Everest Expedition – "an overhead rope railway for transport of goods is in operation from Bhimpedi to Katmandu". In 1950 Maurice Herzog observed: "Looking up I saw huge cables going right across the valley and wondered if it could be a cable railway. So indeed it was, the longest in the world, I learned, measuring nearly thirty kilometres. It provisioned Katmandu and the surrounding neighbourhood, a population of some hundred and fifty thousand people." John Hunt used the ropeway to carry seven and a half tons of equipment in 1953 "... from road head in southern Nepal to the conveyor trays of an overhead ropeway on the last stage".



The Ropeway Terminus.

Katmandu was road connected to India during the seventies and obviously most trade is now done this way. However on a recent visit, I found the ropeway terminus and although not running at the time appeared to be operational. Around the site was a considerable amount of flat bottomed rail in use as fence posts. This is a mystery to me as, to my knowledge, no railway ever came to either Katmandu or Hitauru. Was there perhaps an abortive scheme? or were there some quarry lines feeding the ropeway?



The 1963 Plaque.

I enclose two photographs (unfortunately as they are copies of slides, the reprographics are not perfect). The plaque is dated 1963 with a US flag but my references predate this.

Book Reviews

THE HAY AND KINGTON RAILWAYS, Gordon Rattenbury and Ray Cook, 132 pp, 53 photographs, 10 drawings, 14 maps, soft covers, Railway & Canal Historical Society, 1996, ISBN 0 901461 19 9, £13.95.

This is a posthumous book by two stalwarts of the Society: Rattenbury contributed the text, Cook the excellent and detailed two-colour maps. The whole has been admirably edited by Paul Reynolds with extra maps, reconstruction drawings and photographs, and admirably produced. It is the tale of two plateways of the Welsh borders, the Hay of 1816-18 from Brecon to Eardisley and the Kington of 1820 from there to Burlingjobb, which carried coal and lime for fifty years before being swallowed by standard-gauge lines. With a combined length of 36 miles, they formed the largest end-to-end railway until the Grand Junction of 1837.

Most of the text constitutes a biography of the two railways from conception to death: detailed, authoritative, and a big advance on Charles Clinker's *Hay Railway* of 1960. As such, it forms an invaluable record. But it does verge on the dry and pedestrian, for the railways' careers were very ordinary, their finances barely viable, and a catalogue of their humdrum woes is not calculated to excite. It is the shortest chapter on operation and equipment, that contains (for this reviewer) some of the most interesting material: the likely presence of early bogie waggons, for instance, or the rare information that here the gauge of 3ft 6in meant 3ft 5in over the rail flanges. Would that this section were longer.

Would too that the railways were set in a wider context rather than treated as an isolated unit with little reference to comparable railways elsewhere. A photograph, for example, shows a cast-iron girder bridge on the Kington built, by implication, in 1821; but there is no hint that, if so, it was a pioneer of its kind. This said, however, the book is a historical record of permanent value. M. J. T. LEWIS

A RAILWAY MODELLER'S PICTURE LIBRARY, Chris Leigh, 256 pp, 300 x 200 mm, about 600 b&w photographs, boards, pictorial jacket with 13 colour illustrations, Ian Allan, 1995, ISBN 0 7110 2392 1, £29.99.

This photographic miscellany of railway infrastructure, mainly as it existed in early BR years, includes many fascinating and some unfamiliar illustrations arranged in an alphabetic sequence extending from Arches to Weighbridges. Some headings, eg Signs, contain enough examples to emphasise differences of detail. In contrast Bookstalls shows only a single 1964 design. Many photographs are dated, but possibly unreliably, as a repeated view of Brunel's Saltash viaduct is attributed separately to 1937 and 1939.

The inadequate title may not do the compilation justice: for the historian seeking information on traditional railway structures may pass it by, while the serious modeller will be disappointed to find only a single oblique view of most objects.

DENNIS HADLEY

LNER, Geoffrey Hughes, 160 pp, 295 x 220 mm, 172 b/w photographs, 13 colour, 3 maps, 9 appendices, index, boards, Ian Allan, 1996, ISBN 0 7110 1428 0, £19.99.

This is the third impression of a book first published in 1986. The author is a well-known LNER enthusiast - his *LNER 4-6-0s at work* was reviewed by the present writer in the *Journal* in March 1989 - and his enthusiasm and sympathy for the LNER is apparent throughout. He mentions that whereas the authors of two other histories of the company, Cecil J. Allen and Michael Bonavia, both worked for the LNER, his book is written from the outside.

The book contains 20 fairly short chapters: they describe events leading up to the formation of the company; the men who directed its affairs; its organisation and business record; engineering; passenger and freight services and rolling stock; locomotives; electrification; train and traffic control; shipping and docks; and public relations. Attention is given to the enterprise of the LNER, particularly the high-speed steam trains, the *Silver Jubilee* and *Coronation*. The physical and economic damage sustained by the railway during the Second World War is given full consideration.

This is a well-written book; the illustrations are carefully chosen and interesting. It is far from being a solid business history in that it deals with every aspect of the company and its constant battle to remain solvent. We are left in no doubt that government interference was at the root of the railway's troubles throughout the inter-war period, as we all know it has been since and is at its worst today. The nine appendices form a useful reference section, with names and dates of officers, numbers of employees of various categories, commercial results, revenue and expenditure, totals of rolling stock, names, details and dates of ships, docks and quays, and various other information. There is a full index.

The reviewer's only complaint is that the slim A4 format is unsuited to a railway history and precludes its being shelved with other railway histories, but this was no doubt the publisher's decision. JOHN MARSHALL

(Note: a discounted price of £16.99 is available for RCHS members who apply directly to Ian Allan.)

LONDON TRANSPORT RECORDS AT THE PUBLIC RECORDS OFFICE PART ONE, compiled by Peter Bancroft, 96 pp, laminated card covers, 29.5 cm by 21 cm, Nebulous Books, 11 Oliver Rise, Alton GU34 2BN, 1996, ISBN 0 9507416 3 9, £17.50 plus postage.

Researchers into the history of London Transport and its predecessors soon discover that the original sources are well distributed. It is fairly well known that the Greater London Record Office holds a vast quantity of company archives originating from the constituent private railway and tramway undertakings and the post 1933 authorities (all listed here). What is perhaps less well appreciated is that the Public Record Office also has many relevant items, whilst other papers (such as those of the former local authority tramway undertakings) remain in Local Studies Libraries and County Record Offices.

Peter Bancroft is anxious to dispel what he calls the 'myth' that all London Transport's records were reclaimed from the former BTHR repository at Porchester Road London, ending up at the Greater London Record Office. This, the first of a series of lists, sets out the classes and 'piece numbers' of an initial batch of some 3,700 files and other

items at Kew which contain material relating to London Transport and its predecessors. A broad indication of content is given, with details of the period covered. There is a very helpful introductory summary of the history of the preservation of the LT records which explains why so much material necessarily remains in the care of the PRO.

The compiler has begun a second volume, to be published in 1997/8, which will contain further listings of PRO holdings. Whether this concept can be carried further, to record relevant material held outside the PRO and GLRO may depend on others coming forward to help the enterprise. The task Peter Bancroft has set himself is a formidable one but this first volume demonstrates there can be no doubt as to his commitment. A considered appreciation must await eventual completion, which one hopes will include a very full index, to lead the researcher at once to those items which suit his particular quest; as the purchase of part one will discover, there is much unsuspected treasure in the PRO holdings.

In the meantime, possession of this first volume will give researchers most valuable assistance and inspiration in preparation for visits to Kew. The cover price is high but reflects the limited print run and the care which has been taken to produce durability.
ALAN JACKSON

THE BALLACHULISH LINE, Duncan Kennedy, 180 pp, 215 x 135mm, 16 b/w photographs, map, soft covers, House of Lochar, Isle of Colonsay, Argyll PA61 7YR, ISBN 1 899863 11 7, £10.95.

If you want a book full of dates, Acts of Parliament, source references, etc., this is not the book for you. But it is well written in lively English, with no irritating modern clichés, full of interesting information and thoroughly enjoyable to read. The author was a civil engineering pupil engaged in the construction of the railway from Connel Ferry near Oban to Ballachulish at the foot of Glencoe. Over the years all his original source material was lost, but he was clearly so engrossed in the work that his memory supplied all the essential facts about the construction, the men engaged on it, the methods used by the contractors and many other details not normally found in a book about a railway.

The tale is enlivened by many humorous incidents and by local history, yes, even a concise account of the Glencoe Massacre. The author's final chapter describes the run-down and closure of the line and the unseemly haste with which it was dismantled and he puts forward sound arguments for the retention of a branch such as this.

Unfortunately the illustrations are poorly reproduced. The only good one is an aerial view of the Connel Ferry bridge, in colour, on the cover, and another, black and white, in the centre block. Another photograph shows the bridge under construction. The book was originally published in 1971. In this new edition, an additional chapter at the end, by George Simpson, gives details about the trains, locomotives and camping coaches and about the closure of the line. JOHN MARSHALL

FURNESS RAILWAY 150. Written by members of the Cumbrian Railways Association, 64pp, 297mm x 210mm, more than 40 illustrations, six maps, soft covers, published by the Association and available from them at 15 De Braose Close, Llandaff, Cardiff CF5 2DH, ISBN 0 9519201 2 X, £5.95.

This is a comprehensive study of many aspects of the railway which served the west and south of what is now Cumbria. There are eleven chapters which include a good general history of the Company, Architecture, Tourism, Accidents, Rolling Stock and Locomotives. All are clearly and usefully divided by sub-headings except 'Architecture' which reads the worse for it. A chapter about the railway's traffics, especially freight, would have been interesting and might have been included instead of some of the detail about rolling stock, although much about it together with some social and commercial history (notably about Barrow) can be inferred from the book as it is. There is full, well presented, material about the company's shipping activities. The book is written by people who know and care about the area and its railways; it is good value. IAN MOSS

BON VOYAGE! Travel Posters of the Edwardian Era, Julie Wig, 14pp + 60pp plates, 276 x 250 mm, 60 colour plates, 13 + 13 b&w illustrations, pictoria soft covers, HMSO, 1996, ISBN0 11 440261 2, £9.95.

The sixty posters reproduced are among those registered at Stationer's Hall for copyright purposes prior to 1912. Most advertise railway companies, but shipping lines, travel agents and resorts are also represented.

Despite posters that can be pedestrian and overcrowded, the GWR is the most favoured, well ahead of the sometimes striking designs for the MR and varied productions for the London tube lines. The firms most strongly represented are Waterlow & Sons (24), Johnson Riddle (8), David Allen & Sons (6) and GWR (6). Artists include William Tomkin (9), Edward Sharland (8), John Henry Lloyd (5) and Alec Fraser (5). Who were they? Three women artists (all Waterlow) show, in their use of large areas of even colour, that they were more aware than some male counterparts of the requirements for a telling poster. DENNIS HADLEY

BLUEPRINTS FOR BANKRUPTCY, E. A. Gibbons, 218 pp, 230 x 175 mm, index, no illustrations, soft covers, Leisure Products, 11 Bedford Grove, Alsager, Stoke on Trent ST7 2SR, 1995, ISBN 0 9521039 2 3, £11.95.

This is the second edition of a book first published in 1993. It could be described as an ammunition store of missiles to hurl at the British government's policy on railways throughout the 20th century and in particular today. It mercilessly exposes government deceit and treachery and is made the more formidable by quoting all sources within the text and not hidden in a list of references at the end. A comprehensive index enables the user to locate anything quickly. It appears to be an example of 'desk-top' publishing; but it is well bound and does not fall apart with use.

It reveals that all through this century the government has deliberately placed obstacles before the railways and has given every possible opportunity to road haulage. We can read, for example, that the government had no intention of giving the railways

a 'Square Deal' in 1938-9. In fact it had every intention of not doing so but, knowing all along that war was inevitable, it put the matter aside until it took over control of the railways and then conveniently forgot it. Quotations are made from government files, now accessible in the PRO at Kew, which were kept secret for over 50 years. For example, Department of Transport file MT6/2604 concerning wartime sequestration of the railways, in which the last entry is dated 1940, was not released until 1991.

A list is given of 118 abbreviations which are scattered throughout the book and which are not always what we expect. POWs for example are not prisoners of war but private-owner wagons.

Those opposed to the present railway privatisation, and there must be many, will find much useful material to support their case. The book gives full support to the railway officers and those who run and maintain the railways. Their efforts, against difficulties imposed on them by politicians who think they know best, are not always appreciated by the public. The absurdities of certain safety regulations are compared with accepted dangers on the roads.

This is not a book for easy reading: the material is presented in a somewhat indigestible style, but it points to a new aspect of British railway history.

JOHN MARSHALL

LOST LINES: SOUTHERN, Nigel Welbourn, 128 pp, 225 b/w photographs, 29 maps, soft covers, Ian Allan, 1996. ISBN 0 7110 2458 8, £11.99.

Fifth in the series, this book follows a similar format to previous volumes. After introductory material there are short chapters about selected closed railways and associated port activities in an area covered by the former BR Southern Region. Text is brief and anecdotal and the sketch maps lack detail and clarity, but there are a few useful OS map reproductions. The photographic content is interesting and includes the lines in operation, surviving remains, posters and other ephemera.

THE NORTH LONDON LINE BROAD STREET TO PRIMROSE HILL, A PHOTOGRAPHIC JOURNEY, J. E. Connor, 60 pp, 102 photographs, 1 map, soft covers, Connor & Butler Specialist Publishers, 69 Guildford Road, Colchester, Essex CO1 2RZ, 1996, ISBN 0 947699 23 6, £7.50 (p&p £1.00).

A companion volume to the same author's *Broad Street to Poplar*. A brief history of the North London Railway is followed by a well-chosen and evocative selection of photographs, mainly of stations although tickets are also included. The quality of reproduction is generally acceptable and the captions are informative, although a few proof-reading oversights occur. A third volume, covering the Hampstead Junction line, is promised.

THE SOUTHERN THEN & NOW, Mike Esau, 256 pp, 295 mm x 220 mm, approx. 700 black & white photos, boards, Ian Allan, 1996, ISBN 0 7110 2464 2, £29.99.

This quite sumptuously produced album mostly portrays "then" as 1948-70 at some 330 locations over the full breadth of BR Southern Region, usually at or near stations. Photographic quality and reproduction of both "then" and "now" is generally high but, as the accompanying text is minimal and there is no cartographical work, readers must pursue their own analysis of the dated scenes. For a penny under three tenners, the purchaser gets a certain reference value as well as a powerful shot of nostalgia but attempts to use the book as a picture resource seem likely to generate a quite high degree of frustration since, although the selection is reasonably representative, the choice of such a wide spread of territory precludes anything approaching comprehensive coverage.

Short Reviews

STEAM SHEDS AND THEIR LOCOMOTIVES, Chris Gammell, 112 pp, 170 photographs, boards, Ian Allan, 1995, ISBN 0 7110 2395 6, £16.99.

A handsome book with many superbly reproduced colour photographs of steam in action in the 50s and 60s. It provides a useful summary of the steam sheds inherited by British Railways. The title is misleading as hardly any of the photographs are of steam sheds. The book falls between two stools as it is neither an album of steam locomotives nor a book of information about steam sheds. The closure dates are rather confusing as they are closure to steam dates - some are still open.

STEAM LOCOMOTIVES COMPARED, Terry Essery, 158 pp, about 50 photographs, about 50 drawings, boards, Atlantic, 1996, ISBN 0 906899 65 6, £18.95.

Not the ordinary photo album by any means. Early chapters explain selected technical aspects of steam locomotives with unusual clarity. The main chapters comment on particular classes of locomotive which the author worked with when he was a fireman at Saltley from 1950 to 1959. The comparisons are well brought out and the descriptions of the locos at work highly evocative.

INDUSTRIAL LOCOMOTIVES OF WEST GLAMORGAN, Martin Potts and Gordon Green, 258 pp, 64 photographs, 11 maps, boards or soft covers, Industrial Railway Society, 1 Clifton Court, Oakham LE15 6LT, 1996, ISBN 0 901096 90 3, £20.00 boards, £17.00 soft cover, both including p&p.

This is a painstakingly assembled catalogue of the steam industrial locomotives which worked in West Glamorgan. The main catalogue is ordered by site of work with useful details of dates of ownership and operation. The maps are particularly clear, even of the more congested industrial areas in the region. The photographs of locomotives are well reproduced and concisely captioned.

BRITISH RAILCARS 1900-1950, David Jenkinson and Barry C. Lane, 80 pp, 297 mm x 210 mm, more than 150 photographs, many line drawings, two tables, soft covers, Atlantic Transport Publishers, 1996, ISBN 0 906899 64 8, £9.95.

Most with an interest in Railways will know that there were self contained passenger vehicles variously driven by steam or internal combustion engine during the first half of this century; this book supplies the detail. Five chapters - one to define the subject the other four dividing it into steam and internal combustion, early and late, lead us neatly and logically through the history and to a conclusion that thus was the base laid for the continuing use of multiple units.

The illustrations are good and well captioned, though all but the keen searcher after detail (the preface says that the model maker is in mind) may feel that there is an overdose of rather similar pictures. There are tables of information about steam railmotors though not of the internal combustion vehicles. The book is exemplary in crystallising what might have been an amorphous bulk of information. IAN MOSS

LONDON'S UNDERGROUND, John Glover, 160 pp, A4 boards, numerous photographs and diagrams, Ian Allan, 8th Edition, 1996, ISBN 0 7110 2416 2, £16.99.

It is rare to meet a railway book dealing thoroughly with early history and then taking the story beyond the present day to all the technical and commercial possibilities of the future - yet this book does so with considerable competence. Described as the 8th edition it bears little resemblance to earlier ones dating back to 1951 and the present author is a transport consultant who knows the increasing problems faced by the London Underground system ranging from long forgotten rivers and other hazards threatening deeper developments to the commercial problems posed by safety considerations and unsympathetic governments. Highly technical but easily understood we learn of problems in a world where viability often seems to take precedence over passenger requirements.

End papers showing a good map of the whole system including BR lines would have been helpful and the statement on the Jubilee Line that 'on the edges of platforms, automatic doors will be installed for the first time in Britain' surely disregards the now inoperative MAGLEV line between Birmingham International and Birmingham Airport opened in 1984 and the shuttle train services at Stansted and Gatwick. But these niggles apart, this is a masterly book on a complex subject. The many photographs, mostly by the author, are of an exceptionally high standard.

JOHN DENTON

RACING TRAINS: THE 1895 RAILWAY RACES TO THE NORTH, C. David Wilson, 162 + xiv pp, 35 photographs, 2 pp of line drawings, boards, Alan Sutton, 1995, ISBN 0 7509 0886 6, £16.99.

The '95', the subject of the book according to the title, is discussed at pp 91-125 and in a few references elsewhere.

The introductory comments suggest that the '88' is covered as well and the first chapter is called 'The 88'. There is nothing about the '88' in that chapter, but there are a few paragraphs in the next.

The book is claimed to be the first to cover the races 'in their social and political context'. Those whose hackles have learnt to raise at the thrusting of expressions of this sort on to railway history will be presented with a good *exemplum* here, for the

practical import is that the rest of the book is a potted social history of British railways with, it is true, more attention to the position of locomotivemen (and high-speed running) than other matters, but all sadly sour, 'political', and humourless. At some points railways are left behind completely. Page 54, for example, tells us that 'much of the current malaise of British manufacturing industry can be traced back to attitudes and practices directly attributable to class membership...'

The publisher's information sheet sent with the book states that it is 'amply illustrated with engineering drawings and contemporary line etchings' and includes '50 B&W photographs'. There are in fact two pages of very basic line drawings of the locomotive types involved, a small drawing illustrating a tender water scoop and 35 photographs. Some two-thirds of the photographs are not evidently related to the purported subject of the book. The frontispiece is a very poorly reproduced recent view of the preserved Webb Coal Tank on the K&WVR.

Those interested in the events of the '88' and '95' may refer to the book by O. S. Nock on the subject. PETER KAY

CRUISING GUIDE TO THE NORTH EAST WATERWAYS, Ripon Motor Boat Club, 200 pp, numerous photographs, maps and drawings, Ripon Motor Boat Club, 101 St Winifred's Road, Harrogate, 1996. No ISBN. £12.00.

This is the latest edition of a guide which was first produced in 1934 as part of the handbook for the Ripon Motor Boat Club, one of the earliest cruising clubs on English waterways. It is very much more than a cruising guide, although it does appear to fulfil this function, with detailed maps and much useful navigation advice. Of interest to RCHS members, however, is the considerable coverage of history interwoven with the cruising information, much of which has been provided by our member Pat Jones. In particular, the guide provides histories of the Ure and Derwent Navigations which have not featured in individual historical studies elsewhere. Numerous items of historical material, such as unusual "bird's eye views" of the Ouse and Derwent are reproduced from the *Yorkshire Post*.

One shortcoming is perhaps the unevenness of coverage, which may reflect the distances between Ripon and some destinations. Thus the Ancholme, Hull, and Driffield Navigations are not covered by the detailed maps which cover the Trent and Ouse or by the less detailed maps of the Derwent and Market Weighton Navigations. Nevertheless, there is a lot of detailed description and discussion which does not appear elsewhere and this study brings earlier histories up to date. Given that it covers the Ure and the Derwent, which have a long history of leisure use, this book makes a very useful contribution to the history of pleasure boating. JOSEPH BOUGHEY

STEAMING THROUGH THE WAR YEARS. REMINISCENCES ON THE EX-GER LINES IN LONDON, Reg Robertson, 152 pp, 61 photographs, 8 maps, 3 drawings, 210 x 150 mm, boards, Oakwood Press, 1996, ISBN 0 85361. £9.95.

The author sets out to record the facts of his experience with steam locomotive working for future generations. He has succeeded precisely. He was a young fireman from late 1940 until 1948 so, to the normal hazards of the railway, were added those of air raids. The main theme is the footplate work and he provides us with a factual yet

gripping account of the job in the densely-trafficked London suburbs. He describes in great detail the crews' tasks; moving dead engines, coupling up, firing, maintaining water level, driving - even the tricks whereby a crew waiting in a line of trains at night to enter a goods yard could snatch a doze, after many hours on the road, without missing their turn. There are nice touches of wry humour, e.g. "with a poor steaming engine, the first valve to be turned off was the steam-heating cock" "unfortunately, red lights do not stop moving objects" and "whether you were Gidea Park, Chingford or Hertford bound, the tussle for steam and water was just the same". The many dramatic episodes are effectively described but with restraint - negotiating Channelsea curve tender first with a heavy train and a near empty coal bunker; the author's first trip through Silvertown tunnel; a near miss at Hackney Downs; an express engine with a frame so buckled that a driving wheel had sawed its way into the cab; and, frequently, night bombing, day bombing, V1s and V2s.

Another theme outcrops occasionally and in few words, but those so vehement that they disturb. This is the great gulf between management and officers and the rank and file. The former were "steeped in class distinction with no humanity ... in staff matters" (pp 116/7). The government and the public fare no better - "praise was the last thing railwaymen received during the war, either from the boss, the government or the public" (p 118). Possibly the isolation of the footplate fostered an embattled outlook which magnified such feelings, but they must have been very strong to have endured so robustly. Here is a subject for sociologists to examine whilst some of those concerned are still available to comment.

The publishers acknowledge the assistance of two prominent GER Society members in preparing the book for the press and, doubtless, it was considerably enhanced thereby. There is hardly a letter wrong in the text and of errors this reviewer found only three. The sheds and shops at Stratford were on the north side of the main line, not the south (p 6), the North Woolwich branch did not pass over or under the River Thames at Silvertown, only under a water-course linking two docks (pp 28 & 29) and the K3 class engines were 2-6-0s, not 2-8-0s (p 121). The illustrations and maps are relevant, interesting and well reproduced. Everything adds up to an excellent book worth its price. HARRY PAAR

WATERWAYS IN THE MAKING, Edward Paget-Tomlinson, 120 pp, approx. 250 drawings, soft covers, Landscape Press, Kimbolton, Leominster, Herefordshire HR6 0HF, 1996, ISBN 0 947 849 03 3, £10.95.

This is a quite delightful book about the technology of canals, particularly the technology of building and maintaining them. The text is very clearly written with much well researched detail. Everything is covered - from locks and bridges to tunnels, lifts and inclined planes, aqueducts and reservoirs.

The glory of the book is the drawings. Edward Paget-Tomlinson's paintings of boats and barges are well known but, for this book he has prepared a huge number of beautiful and informative drawings of the features of the canals themselves, usually depicting how they were built or how they worked. For example, the processes of building embankments and digging cuttings are depicted and described and, far less well known, just how the ingenious lifts on the Grand Western Canal worked is made clear by a special drawing.

Amongst a wealth of newly assembled information, there are one or two items open to debate. Were the timber 'profiles' used by the setting out surveyors set the same height above the ground as the depth of the canal to be dug? It seems more likely that they were set a uniform height above the level at which digging was to stop. In this way the navy foreman could use a timber 'traveller' of this height to check whether digging had yet gone far enough. Herds of animals were driven along the beds of unfilled new canals as a cheap and quick way of puddling the clay lining - but there are indications that the animals were usually sheep not cows.

The book can be commended to every canal historian. By explaining and illustrating the practicalities of how the canals were built and how they worked so clearly and attractively, it puts the dates of all the acts of parliament and the other mainly documentary history into perspective. MARTIN BARNES

STEAM IN DEVON, Peter W. Gray, 80 pp, 190 mm by 240 mm, 81 colour photographs, boards, Ian Allan, 1995, ISBN 0 7110 2391 3, £10.99.*

(*but now advertised at a reduced price)

Another of the Ian Allan colour albums; well-reproduced views with intelligent captions in good English and free from typesetting errors. Peter Gray dedicated himself to recording the West Country railway scene in the 1957-64 period and his personal involvement (most of the views are his own) and considerable knowledge of Devon railway operations at that time, ensure that we get a proper meal for our money. From the wasteland forty years on, it becomes daily more difficult to believe that such a railway (and, indeed, such an England) ever really existed.

AN ILLUSTRATED HISTORY OF TRAINS IN TROUBLE, Alan Earnshaw, 176 pp, 273 mm x 215 mm, 300 photographs, soft covered, Atlantic Transport Publishers, 1996, ISBN 0 906899 69 9, £19.95.

An analytical description of over two hundred railway accidents in eight chapters dealing with successive time periods (e.g. the first is for 1825-68), except for one chapter on boiler explosions. This is a much revised version of the eight paperbacks of the same title published in the 1980s.

Addition and Correction

Review of *Steam in South Wales* Vol. 5. (RCHS Journal Vol. 32 Pt. 2 No. 164, page 153). Copies of the above book are available from the Welsh Railways Research Circle, c/o 22 Pentre Poeth Road, Bassaleg, Newport, Gwent NP1 9LL at £12.95 plus £1.50 post and packing.

Also, the WRRRC is selling *Brecon Forest Tramroads* for £6.95, although the covers still carry the price of £8.95.

Correspondence

Moving the Goods

I found John Armstrong's article on freight transport by rail and sea (*Journal* No. 166) very interesting, but I was surprised to see one of the illustrations.

The *King Edward* is famous as the world's first turbine steamer, and had a very successful career, completing 50 years in service on the Firth of Clyde before being broken up in 1952. However, she did not carry cargo and sailed only in summer, catering mainly for day excursion traffic. Turbine steamers were used on many coastal and cross-channel passenger services, but coastal cargo vessels were invariably powered by steam reciprocating machinery until the advent of the diesel engine. G. P. HAMMER

I hate to complain about the R&CHS *Journal*, which puts so much useful and interesting material on record, but I feel compelled to utter a moan about some of the illustrations in the March number. With all that white space around them, couldn't these postage-stamp size photographs (pp 247, 295-7, 334-8) have been made a little bigger?

I'm certainly not suggesting moving the *Journal* towards becoming just another 'photo-album' but if the illustrations are relevant and help the text it would be nice to be able to see them without a magnifying glass. HARRY JACK

I am writing to express my pleasure at seeing the Bristol Conference papers published today in the *Journal*. May I congratulate you on presenting these articles so admirably? It must have been a mammoth task. I found it particularly satisfying to see that you had managed to find room for the cartoon cover about the handling of animals in my paper. MURRAY HOUGHIN-HUGHES

Water Abstraction and Silting on the Gloucester and Sharpness Canal

I worked for British Waterways as assistant to the Gloucester based water engineer from 1965 to 1971, and became involved with the details of water supplies to the G&S Canal.

In 1963 agreement was reached between British Waterways and the Bristol Water Company for an abstraction at Purton (SO 695 038), near Sharpness, of up to 24 million gallons per day. This water was to be pumped from Purton to a new water treatment works near Littleton on Severn (ST 604 893). The treated water was then blended with other supplies and used as a domestic supply in the Bristol area.

The agreed charge was 3d per thousand gallons, this price to be subject to revision at intervals of not less than 3 years in line with the cost of living indices (3 separate indices were involved). The potential income was therefore about £300 per day.

Abstraction did not commence until about 2 years after the agreement commenced, due to the time taken to build and commission the necessary works.

In 1966 the price was revised in line with the indices, and the charge became 3.36d per thousand gallons. Similarly, 39 months later the price was increased to 4.04d.

By this time negotiations were under way for an increased abstraction - for a maximum of 72 MGD, with the first 24 MGD paid for at a high rate, and the excess quantities at a much lower rate. Once again the prices were linked to cost of living indices, but with only a proportion of the charges subject to variation.

The prices were calculated so that British Waterways still made a substantial profit even after taking into account the costs involved in pumping water from the River Severn, and in dredging the silt introduced. The charges were also based upon the assumption that all water abstracted at Purton would need to be pumped at Gloucester. In fact it appeared that, for a 72 MGD abstraction, only about two thirds would have to be pumped, the remaining third being obtained from the feeders (the rivers Frome & Cam).

Research into silt levels in the Severn had commenced about 1960, with British Waterways being assisted in this by the British Docks Board. A silt meter was installed in the river adjoining the pump inlet (SO 825 183) and linked to an automatic graph plotter in the dock side pump house. The silt meter consisted of a light shining through the river water onto a detector unit, with silt reducing the amount of light crossing the gap. The instrument was calibrated in parts per million of solids in the water, which could easily be converted into tons of silt entering the docks per hour of pumping.

By comparing silt meter charts with tide tables I found that the river water was relatively clean except when the incoming tide topped the nearby Llanthony weir and the direction of flow was reversed. Tests showed that the tidal waters always remained fresh (not salt), but were invariably heavily loaded with silt, the lowest silt level during a sequence of tides being immediately before the weir was overtopped.

I prepared monthly charts, for the pump attendant, showing the worst anticipated silt conditions in the river so that pumping could, as far as possible, take place only when the water was relatively clean. The present (1996) proposal to increase the pump capacity is presumably so that the increased pumping requirements due to the Purton abstraction may be met by pumping at a high rate when the water is cleanest (immediately before the weir is overtopped). Increased siltiness of the canal referred to in the letter from P. W. Abbott (*Journal* 163) is presumably due to the present limited pumping capacity forcing pumping to take place when the water is dirty.

To bring the apparently massive 72 MGD abstraction rate into perspective, lockage consumptions on the canal are as follows (dependant on river and tide levels):

Gloucester Lock	0.2 MG
Sharpness Lock	2 MG
Sharpness Tidal Basin	10 to 15 MG

Therefore commercial traffic, in the heyday of the canal, probably required about 40 MGD for lockage water. ALAN RICHARDSON

Floating Education

I was interested in the item in the *Bulletin* of November 1996 [Volume 32 No. 165] by Alan A. Jackson dealing with the education of boat children.

An increase in determination to educate the children of boat crews on our inland waterways was stimulated by the reformer George Smith, of Coalville, whose activities led to the promotion of the Canal Boats Act of 1877. This was followed by further legislation and eventually embodied in the Public Health Act of 1936. The earlier acts attempted to improve living conditions for those working afloat by defining a minimum volume of cabin accommodation which was to be provided for each adult or child and requiring boats to be registered with a riparian authority along their intended route for the purposes of inspection and education of the crew. This is the origin of the statement 'Registered at Rickmansworth [etc] 177 [etc]' which may still be seen at the head of the cabin side panel on many ex working narrowboats. (Note that Watford was not a registration district for canal boats and boats which are seen with high numbers attributed there are often mimicking the old system in displaying their modern British Waterways Pleasure Craft Index Number!)

Victorians, typically, rallied to the plight of those who needed neither reading or writing to carry out their every day activities and a number of mission schools were established. One may still be seen at Tipton on the Birmingham Canal and that at Brentford dates from 1904. Jack James referred to that at Oxford in a Television interview in the *Yesterdays' Witness* series. However, I do not believe it is true to say that these declined until after the Second World War.

The Grand Union Canal Carrying Company donated the wide beam transom-sterned barge *Elsdale* for use as a school. This was dedicated at Paddington Basin in September 1930 (see *Waterways World* February 1990). It was towed to Bull's Bridge Depot (where there is no lock, incidentally, but were drydocks) since there was a captive audience available there. The depot was described in June 1992 *WW*. It was the Grand Union's practise to collect empty craft awaiting loading orders in the London area at their large fleet which was built up in the mid 1930s. Crews were always in short supply for these boats and were certainly not allowed to hang around whilst the craft were docket for maintenance or repair. They transferred to a 'change boat' for the duration and were despatched to load the next cargo as quickly as possible.

This constant change over of craft and therefore children in the layby must have been the biggest headache for the teachers together with the wide range of ages and abilities in the single class. It became difficult to keep *Elsdale* afloat by the latter part of the war and she was lifted onto the bank immediately north of the drydock almost opposite the junction with the Paddington Arm. It was during that period that a scene for the Ealing Studios film *Painted Boats* was shot on board which well illustrates the difficulties of regulating the pupils involved.

Elsdale ceased to serve as the school at Bull's Bridge about 1960; certainly before the British Waterways south eastern narrowboat carrying fleet was disbanded in 1963.

Enlistment of boatmen in two world wars awakened them to the advantages of reading and writing (not to mention well paid tedium on factory production lines). The advantages of schooling for boatmen and several of the schools were well described in August 1994 *WW*.

Less accessible articles on the subject include those in the March 1952 issue of the Docks & Inland Waterways Executive's *Lock & Quay* which describes the setting up of a hostel at Erdington, which could accommodate boat children during term time in order that they might attend a local primary school. This, of course, separated them

from their families so that the latter could continue to travel with their boats and was viewed unfavourably by the parents as a result. Indeed, if I had to guess at the most frequently repeated reason why boatmen of my acquaintance left the cut I would suggest that it was to ensure that their offspring had the chance of some education. The hostel is further described in the July 1958 issue of *Waterways, Lock & Quay's* successor. I suspect that the scheme was instigated by Birmingham City Council as opposed to the British Transport Commission who published these two fine examples of self congratulation but I have seen no original documentary evidence to support my potential libel.

I hope that the foregoing will be of interest to members who would use the WW articles (photocopies of which are available at £1 from Reader Services, *Waterways World*, The Well House, High Street, Burton on Trent, Staffs. DE14 1JQ) as a starting point for much further interesting research.

EVAN CORRIE, Assistant Editor, *Waterways World*

Railway and Canal Memories

In the July 1996 issue of the Journal you published a further list of additions and amendments arising from Stanley Tyson's original list of Railway and Canal Memories. In this I pointed out that the name of the young man whose death in 1840 is commemorated on memorial in a Reading churchyard is stated as being *West*, but further confusion was then created by the next item. This was a letter from Adrian Vaughan (not an RCHS member, apparently) who recalled his father saying that this young man was run down by one of Brunel's locomotives and not blown off the station roof in a whirlwind. He also gave the young man's name as *White*.

This is at variance with the memorial, which seems more likely to be correct, although there is clearly the possibility of error, given the fact that the present wooden memorial is apparently the third to have been erected. The librarian responsible for the local history section in Reading library tells me that, according to the information she had readily available, the details on the memorial are correct but said that it might be possible to obtain verification by referring to a contemporary local newspaper. If the library staff undertook the search, a fee would be payable but if there is an RCHS member who lives in the area, perhaps he/she could solve the mystery? Is this something Mr Vaughan could do? As I am not a railway historian and only got drawn into this because I happened to have seen the memorial when visiting Reading, the question is of somewhat peripheral interest as far as I am concerned, but I hope the confusion can be cleared up. STANLEY A. HOLLAND

Railway and Canal Memorials

I believe that an error has crept into the *Journal*, p. 28. I do not think that there is a Nigel Gresley Close in Horwich. In Crewe, certainly, but not Horwich, so far as I am aware.

Also, I can add a few more reminders of Sir Nigel Gresley and his family:

Gresley Court, Acomb, York
Gresley Court, Potters Bar
Gresley House, Doncaster (Railway Offices)
Gresley House, Leatherhead (Private Offices)
Gresley Road, Keighley
Gresley Road, Sheffield
Gresley Way, March, Lincs.
Gresley Way, Peterborough
Gresley Way, Stevenage

There is also a road named simply 'Gresleys' in Ross on Wye, for which I can offer no reason, as so far as I am aware none of the family had any connections with the locality. Any explanation would be welcome.

I feel that a little more should be added to the note of Sir Nigel Gresley's grave at Netherseale, on p. 427. The burial ground also contains the graves of his wife, Ethel, and several members of the family. A fine specimen of oak overlooks the area, planted by Sir Nigel's father, as a sapling from the Boscabel oak in which Charles I hid from the Parliamentarians. Sir Nigel's gravestone bears the passage from Revelation 'Be thou faithful unto death and I will give thee a crown of life.'

Further, there are plaques in various places for earlier members of the family, notably the sixth baronet, also a Sir Nigel, in Bath Abbey. He is also recalled in Alsagers Bank, by a hostelry known as the 'Gresley Arms'.

And then there are Gresley Rovers FC, and many other applications of the name around Castle Gresley, in Derbyshire, but these do not commemorate Sir Nigel!

GEOFF HUGHES, Hon. Editor, *The Gresley Observer*, Journal of the Gresley Society

The New River Memorials at Great Amwell

I have been following the articles and letters on memorials to railway, and later canal, engineers. The New River is not a navigable canal but it is a transport system conveying the water it contains from the springs named into London. The Mynes also worked on the other canals so certainly merit inclusion. Sir Hugh Middleton is included for completeness.

Amwell Springs lie about two miles south of Ware along the New River in Hertfordshire. (OS Landranger Map 166 Ref. 372125). Here the New River opens out into a broad pool with several islands. The memorials stand on these. The main one is a large block of white marble inscribed on three sides. It is not possible to see the rear as access to its island is not permitted. Consequently the remaining sides were read through binoculars. Errors in the reading, especially the Latin may have occurred.

The centre panel holds the memorial to Sir Hugh Myddelton (spelling as on the stone) the prime mover of the enterprise which was opened in 1613. It reads:-

MS
 Hugonis Mydelton baronetti
 Qui aquas hasce feliciter
 Adspirante favore Regio
 in unber penducendas curavut
 opus immortal
 Homines enim ad deos
 Nulla.re. propitus accedunt
 Quam saluten dando

I can guess at the meaning of some of this but as my school Latin lasted only one year, over fifty years ago, I hope a more classically minded member of our Society will translate for us.

Facing down stream is a further tribute by Robert Mylne placed there in 1800. It reads:-

This humble tribute
 to the
 genius talents and elevation of mind
 which conceived and executed
 this imortal aqueduct
 is dedicated by
 Robert Mylne
 architect, engineer etc.
 AD MDCCC

Facing up stream is a short description of the aqueduct. There is no indication who wrote this or when. It reads:-

from the spring of Chadwell
 two miles west
 and from this source of Amwell
 the aqueduct meanders
 For the space of XL miles
 conveying
 Health pleasure and convenience
 to the metropolis of
 Great Britain

On another island is a flat upright block of white marble. On its face is a poem in praise of clean water. It reads:-

Amwell perpetual be thy stream
 Nor 'eer thy springs be lefs*
 Which thousands drink who never dream
 Whence flows the boon they blefs*

 Too often thus ungrateful man
 Blind and unconscious lives
 Enjoys kind heavens indulgent plan
 Nor thinks of him who gives

Note:- *fs is the nearest my typewriter comes to the old fashioned double 's'.

Just up the hill from these springs stands Amwell church. Just inside the gate of the churchyard is the Mylne family mausoleum. The two names of interest to us were engineers to the New River in the late 18th and early 19th centuries. Their plaques are lichen covered and difficult to read. You can make out Robert Mylne 1733 to 1811 and

William Chadwell Mylne 1781 to 1863. The state of these plaques raises the question should we, as a society, be campaigning for such things to be preserved. Note William's second name. Over the years many have lived over the shop, few have named their son after it. JOHN SCIVYER

Charles Hadfield Memorial Issue

It is intended that the March 1998 issue of the Journal will include appreciations of Charles Hadfield who died in August 1996. If you have any memories, anecdotes, or other material that you would like to contribute, please send it to Joseph Boughey, 14 Ripon Road, Wallasey, Merseyside L45 6TR.

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