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Chester Canal Projects: Part II

BY EDWIN A SHEARING

The 1770—1 Scheme

Despite the set-back early in 1769 when the initial scheme for a canal from Chester to join the Trent & Mersey at Middlewich apparently failed to gain Parliamentary time, it seems there were promoters ready to support another attempt. *Adams Weekly Courant* of 20 March 1770, and three subsequent issues, carried an advertisement under the heading 'Chester Canal Navigation' to the effect that a general meeting of the 'present subscribers' and others willing to promote the undertaking would be held at the Pentice on 23 April 'to consider the proper method of carrying the Plan into immediate Execution.' An account¹ from Samuel Weston covering the period April to July 1770 shows him to have attended the meeting on 23 April, the first item being 'Expenses for Myself and Horse 3 Days attending ye meeting 11s 2d.' Evidently Weston had been commissioned to undertake a new survey, or perhaps a recap on the Brindley one, for the next item, dated 25 April, starts with 'Set out from Astmoor to Middlewich to take the Survey', followed by sums for Victuals and Drink for ——— men at places between Middlewich and Chester including 'Minshall', Barbridge, Highwayside, Beeston Brook House, and Tarporley. Cash was paid to a number of men 'for telling the Landowners Names' from Boughton to Waverton, Tiverton, Lea Green Bridge, and Middlewich. The survey itself involved payments to Thos Kelsall for 5 days chaining (6s 0d), to Joseph Leathwood for staff-holding 31 days (£2 7s 6d), to Thomas Morris for the same (£3 7s 6d). 'For myself Levelling and taking the plan and finishing it, 38 Days at 10s 6d per Day — £19 19s 0d.' Vellum books and paper cost £1 6s 0d. With 'Mr Morris's bill for Gauging the Water at ye Summit (£4 7s 0d)' and a few other items including advertisements the total came to £49. The bill from Thomas Morris dated 16 July has also survived, showing that he and Weston went 'to Surve the Watter at Eaton Brook', thereby locating a source planned for water supply.

A paper recording 'Rise and falls taken on the Survey', dated 13 May 1770, and another of 'An Estimate of the Intended Canal from Chester to Middlewich', undated, neither signed, appear to relate to this survey. The places named show the intended course to have been from the Dee at Boughton Ford via Christleton, Beeston Brook, Tilstone Mill, Ben(n)ions Farm, Page's Wood, Towns Green, Wettenhall, and Lea Green to Middlewich, while there was a 'Reservoir or Bason', unlocated, and a 'Rivulet' from Eaton to supply the 'Bason'. The estimate of £32,399 included 31 locks (£6944), 'Arching and banking over the Valleys' (£5220) and 68% acres of land (at 30 years' value £4 per acre, £8250). The route envisaged at the Chester end differed from subsequent proposals in that the canal was to leave the Dee about 1 mile above the causeway weir, at Boughton, rising by about 98 ft to a 'green field of Ralph Done's SE of Crislington'. From Christleton the line was similar to that eventually adopted as far as Tilstone Mill Pool, with a rise of 40 ft. The summit level, approximately 63 ft higher, was reached near Bennions Farm, the site of which has not been specifically identified but seems likely to be close to the present Rookery Farm (SJ577605). This section involved a sharp change in direction, NNE from Tilstone, before resuming a more easterly course along the valleys of the Wettenhall and Ash Brooks to cross the River Weaver near Twelve Acres Farm in Wimboldsley and thence to Middlewich.

A general meeting of subscribers was advertised for 2 July 1770 in the *Courant* of 19 and 26 June, but the outcome appears unrecorded. A polemical letter

extolling the benefits to be gained by the proposed canal and hinting at covert opposition took a front page column of the *Courant* on 20 August. Elsewhere in the paper an advertisement announced 'The Subscribers some time ago having failed of success, all Noblemen, Gentlemen, Merchants desirous of carrying on the undertaking are requested to meet at the Talbot in this City on Friday 31st inst. at 11am to open a subscription'. An accurate survey of the course of the intended canal 'capable of being made at a very moderate Expence' was to be produced and if carried out the canal would 'not only turn out to the Advantage of the Subscribers but also be of greatest utility in preserving and promoting the Trade of the City, Middlewich, Nantwich, Tarporley and adjacent Parts and of great Advantage to Land Owners' £100 was the minimum subscription and novices were instructed that the cash would be called for by distinct payments of 6–10% at a time 'and as the work will probably be 3 or 4 years in completing, the last payment will scarcely be called for till that time.'

Regular minutes of proceedings were commenced with the meeting on 31 August,² which agreed proposals to apply to Parliament for an Act for a canal from Chester to join at or near Middlewich with the 'Canal now carrying on from the Trent to the Mersey', a reminder that work on the T&M had not yet reached Middlewich. Capital was to be not more than £40,000 in £100 shares, with powers to raise £10,000 more. The *Courant* of 4 September, advertising a further meeting on 7 September stated that the Subscription had been opened 'with great Spirit and Unanimity', nearly £20,000 being subscribed. At the next meeting a committee of 13 was appointed from subscribers of not less than £500 each, amongst whom were James Folliott, Hugh Speed, John Chamberlaine, Walter Thomas, Thomas Griffies, Alex Denton MD, and John Rogers, members who maintained a long and active connexion with Chester Canal business. On 14 September the committee came up with the apparently novel suggestion that the canal should be made along the north side of the City to join the Dee 'at or near the sluices.' Weston was to report between alternative routes via 'Beach Pool' (Bache Pool, formerly at SJ404682), rather a long circuit to the north, or via Northgate, with estimates; he was also to show on the plan the course of the brooks whence the water supply was to come and to re-survey the course of the canal objected to by Mr Corbett of Darnhall. The latter could not be varied 'consistent with the levells', but on 28 September it was resolved that the canal should be carried along the north side of the City near to Northgate. This is the course which is shown, together with the rest of the line described above, on an undated printed plan endorsed with numbers from 1–125 identifying landowners through a Reference Book. The overall length is given as just under 21¾ miles; lockage is not stated. An 'Aqueduct for supplying the canal with water' intercepts a number of brooks between those flowing from Tarporley and 'Coal Brook' (Cote Brook).³ 500 copies of 'Observations' or 'Remarks' relating to the canal were to be printed and sent out to subscribers and others and it is probable that these pamphlets reproduced the Reference Book; no copy has so far been located. A draft Bill was to be prepared, consents of landowners sought and Mr Longbotham employed to look over the course and report any improvements possible. Meanwhile there was the unresolved problem of getting agreement to a junction at Middlewich. Chamberlaine and Thomas attended a T&M meeting at Trentham on 16 October without recorded result but the subscribers' solicitors were asked to approach 'all gentlemen likely to attend the next T&M meeting with votes' to support the Chester cause. There was some suggestion to defer application to Parliament but it was decided to proceed if a majority of landowners' consents could be obtained in time. Widdens & Potts at this stage declined to continue as their solicitors and William Turner (of Warrington?) was appointed.⁴ A meeting early

in December decided that Hugh Oldham, the Manchester surveyor, should be asked to re-survey the course with all speed; it is doubtful whether either Longbotham or Oldham came to do this, as in the outcome Thomas Yeoman was brought in to give supporting evidence to the Commons Committee.⁵ On the motion of Chamberlaine, the City Assembly consented to the path of the canal through and under Corporation land outside the northern section of the City Wall after consulting the engineer John Golborne, who advised that there was no probability of the Wall or the Northgate being damaged if the line of the canal was kept 4 yards distant.⁶ Finally, while official support was given by affixing the Common Seal to a petition to Parliament 'for promoting the design of the subscribers', the Corporation was to be indemnified for all expenses incurred.⁷

The petition for 'a canal from the R Dee at Chester to or near Middlewich, there to communicate with the said intended canal between the River Trent and the River Mersey in such manner and with such Powers and Provisions and under such Regulations and Restrictions as to the House shall seem meet' was received in Parliament on 31 January 1771 and referred to a Committee.

Supporting petitions were received from Dublin on 2 February and that from the City Corporation on 11 February, while a petition from the T&M proprietors on 12 February, claiming that 'such a canal would materially affect their property, without a probability of its being productive of any essential advantage to the public', prayed that their case be considered against the Bill. Wilbraham Bootle, one of the Chester MPs, reported from the Committee on 26 February:—⁸ Thomas Lane, secretary to the River Dee Navigation Committee, gave evidence that for the want of inland conveyance by water the advantages of the improved navigation could not be fully enjoyed.

Samuel Weston, 'an engineer', produced a plan for the proposed canal which might be completed for the estimated cost of £38,650. In cross examination he seems to have had rather a rough time — he had been 'an engineer' for three years; his experience had been as a Staffholder and Leveller in Brindley's employ, he had levelled for the Chester gentlemen about two years ago and had undertaken cutting on the Leeds canal, of which he had made 'near four miles set it out and did the whole.' He had no experience of the expense of locks, nor anything of that kind, except making Culverts or Arches of 3, 4, or 6 ft. He had never been employed in making locks or bridges, of which 27 and 37, respectively, would be necessary. 120 yards of tunnelling was involved, 18 ft high and 9 ft wide, passing under a house in Chester — he had no experience in that work. He had never carried any navigation over a river, yet an aqueduct 100 yards long and 60 ft above the River Weaver and another with about 200 yards of banking 30 or 40 ft above the River Walling (now Wheelock) were required. A mill would be destroyed by taking its water but although the owner had consented, the cost had not been agreed. Asked whether he had ever been employed in valuing land, he had not, but had followed farming. He had made the estimate without assistance but was acquainted with the value of land and considered his a fair valuation at 30 years' purchase, and Mr Brindley's agents had acquainted him with the cost of making locks. Thomas Yeoman, engineer, gave supporting evidence — he had been employed in making several navigations; he had looked over the estimate and thought Mr Weston had taken great pains and understood the subject. While he was not acquainted with the prices of materials and labour in that part of the country, if they were as he was informed then the work could be done for the prices set out in the estimate. He had, however, not seen the ground where the canal was to be made and had never carried on any works under ground. John Lingard produced a map of the proposed navigation with a 'Field Book' and

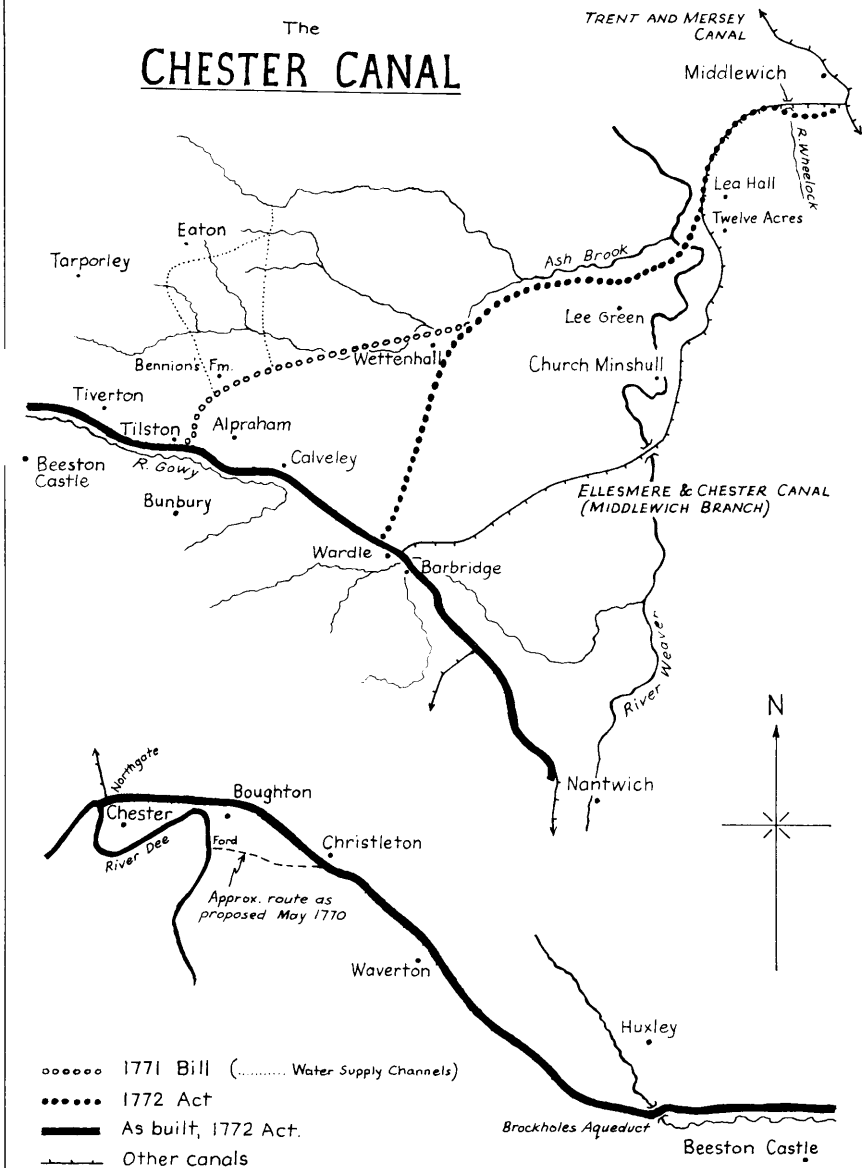
informed the Committee that the owners of 14 route miles of the land required had consented.

James Folliott and John Chamberlaine, merchants, gave evidence severally that 13 ships, of 90–250 tons, were constantly trading between Chester and Dublin. Trade with Ireland was important to the port of Chester, but improved inland communication was necessary to preserve and develop it; a canal to Middlewich would serve this purpose and a link with the T&M would be of great value. Goods from the south of England, such as bales of cloth and silk that were now sent by land carriage, would be boated to Chester more cheaply than to Liverpool by 1s 6d per ton, the distance being 15 miles shorter. Trade between Middlewich and Chester would be about 20,000 tons per annum and would increase traffic on the T&M. Canal transport would reduce the cost of coal from Flint and Staffordshire in the country along the line. A canal from the Trent to the Mersey and none to Chester would ruin the City as it would carry away all importations and the Irish trade, a view held when the T&M had first been proposed (c.f. Part I). Questioned about the utility of a canal from the Dee to the Mersey, Folliott said that while the distance was only eight or nine miles, it would be out of the way to all parts but the north, to which trade was no more than $\frac{1}{10}$ or $\frac{1}{12}$ part of the foreign trade of Chester. The promoters only wished to preserve the city's trade and they would be quite willing for the T&M proprietors to undertake the Chester Canal themselves. John Latham, Surveyor of the Port of Chester, was convinced that without the proposed canal the navigation of the Dee would be greatly hurt as there would be no importation to Chester but for the inhabitants themselves.

The First Reading was on 4 March 1771; a petition from Northwich opposed the project as injurious to the town and without public advantage, suggesting instead a canal from the Dee to the Mersey near Ince. Petitions in favour of the Middlewich line were received from Burslem with Newcastle under Lyme, Middlewich, Nantwich, and other parts of Cheshire, and from North Wales before the Second Reading on 9 April, after which, with amendments from the Committee on 22 April, the Bill got its Third Reading on 24 April and was passed to the Lords.

The record in the Journal of the House of Lords is unfortunately not very informative. Chamberlaine and Yeoman gave evidence for the Chester subscribers, Hugh Henshall for the T&M and John Seymour for the Middlewich petitioners. From the questions posed, it appears that the Duke of Bridgewater had proposed a canal from Chester to Ince and that the sticking-point was the junction with the T&M – 'the power of the Bill of breaking through the banks of the Grand Trunk.' The Bill was rejected on the Second Reading, 2 May 1771. The next day the subscribers agreed to a call of 2s 2d% to be paid to Walter Thomas by 10 May to defray expenses. The accounts were finally to be settled by a meeting on 30 August.

The CHESTER CANAL



RJO

The 1772 Act

The 1771 Bill had no sooner been lost than the 'Subscribers to the late intended canal', meeting on 13 May, 1771, adopted proposals to open a new subscription to apply to Parliament. While the affairs of the old body were being wound up, support for this further attempt was being rallied and the initial general meeting was held on 13 September, when a Committee of 13 members was appointed, amongst whom were those most active in the previous one. The first resolution was that a branch from the intended canal to Middlewich should be made from Tilstone Heath to Nantwich. This idea had not been recorded previously, and while no reasons were adduced, encouragement of the salt industry at Nantwich may have been hoped to afford some compensation for the reverse that had to be conceded over a junction with the T&M at Middlewich. Samuel Weston was to make the necessary survey and Dr Denton, Messrs Rogers and Chamberlaine were to inspect the country beyond Tilstone Heath and give their assistance. A public meeting was held at Nantwich on November 22, but perhaps without quite the looked-for support, for a letter was to be written to Mr Yoxall, thanking the inhabitants for their intentions but the Committee could not agree to their terms.⁹ On 12 December, Samuel Weston was instructed to prepare a field-plan for Parliament, and a week later he was to call on the landowners through whose property the proposed deviation was planned 'to obtain their consent and to shew such as chuse the course of the intended canal and also to get the Petition signed by the several gentlemen residing within a moderate distance of the canal'.

At about this time a plan of the proposed route was published, the floral title cartouche inscribed 'Surveyed by T Yeoman & S Weston, 1771', together with an undated but contemporary pamphlet with field reference numbers relating to the plan, with landowners' names and route lengths of properties involved.¹⁰ The new plan, crudely drawn, shows a similar line to that of the previous one from Chester as far as Tilstone Mill, whence a more southerly course was to be followed to Wardle Green. The rise from the Christleton level was said to be 61 ft, a total of 170 ft 10 in. above low water in the Dee. The new summit level was to be approx. 40 ft lower than in the previous scheme. The Middlewich line was to turn away northwards to rejoin the earlier route near Wettenhall. with four locks falling 40 ft and an overall distance of $23\frac{3}{8}$ miles, while the Nantwich branch continued on from Wardle for some $3\frac{3}{8}$ miles on a level, just under $18\frac{1}{8}$ miles from the Dee. Yeoman's close involvement seems doubtful. A larger version of the same plan, on parchment at 2 in. = 1 ml., inscribed 'T. Weston del.', was signed by Fletcher Norton, Speaker of the House of Commons, 27 May 1772, 'in accordance with the Act of Parliament for making the same.'¹¹ It may be observed that several of the field-plans at 20 in. = 1 ml. are similarly inscribed 'T. Weston del.'¹²

Once again the Common Seal of the City Assembly was affixed to a petition to Parliament for promoting the canal, and this time the Mayor was to pay £100 out of the Treasury towards defraying the expenses of the application 'in case it should not succeed'.¹³ The petition, for a canal from the Dee to or near Middlewich and a branch from near Wardle Green to or near Nantwich, was received by the House of Commons on 27 January 1772. Significantly, nothing is said of actually joining the T&M. At the Committee stage¹⁴, evidence was given by William Griffith of the importance to the Port of Chester of canal communication with Middlewich and Nantwich. Samuel Weston, now described as a Surveyor, produced his plan. It is a pity that the examination is not recorded in detail. The Subscribers' minutes¹⁵ show some anxiety lest the Duke of Bridgewater should bring in a Bill for a canal from Chester to Ince and mention a meeting with the Duke in which Turner and Chamberlaine had to agree to with-

draw from seeking powers for an actual junction with the T&M 'on which condition his Grace was pleased to promise that he would not oppose our Bill.' Initially, the agreement was for no other separation than the bank of the 'Trunk', but evidently either the Duke had misgivings or the Staffordshire proprietors were not satisfied with this condition, and the Act contains an extremely restrictive clause prohibiting the Chester Canal from crossing the Middlewich — Nantwich or Middlewich — London roads or approaching the T&M canal closer than 100 yards without permission of the Proprietors and of the Duke of Bridgewater. At what point this clause was introduced is not clear; the Bill passed through all its stages apparently without difficulty. Lords' agreement was announced on 11 March 1772 and the Act (12 Geo.III c.75) was given Royal Assent on 1 April 1772. An inauspicious date for a start.

The Chester Canal Sequel

The present papers represent an attempt to clarify the origins of the Chester Canal lines; the tribulations of the construction period were too many to be discussed here, but an outline of subsequent developments, so far as route-planning is concerned, seems desirable to complete the story. The first Engineer to be appointed was Samuel Weston, and he had hardly begun ordering up materials and equipment before he was instructed to 'survey the country from Brewers Hall Marsh (across the Dee from the foot of the Northgate locks) to Gresford and thence to Cae Gidog bridge'.¹⁶ On 31 July 1772 he reported a practical course for a canal 'to or near coal mines and lime rocks in (that) neighbourhood.' Nothing more is recorded of the estimate requested for making this canal, but one might speculate whether Richard Whitworth's *Serious Hints* had not been altogether forgotten. Much the same route formed part of the Ellesmere Canal Company's original proposals for a canal from Shrewsbury to the Mersey in 1793, again not to be realised.

Weston had been paid off by January 1774 (including his bill 'for levelling in Shropshire' — one wonders where, and what for?), to be succeeded in May by Thomas Morris, the Liverpool engineer who had worked with Brindley on the Bridgewater and had helped Weston with the earlier Chester scheme. Work was in progress towards Wardle Green (with a cutting said to lower the summit level by two locks) and the canal was about to be opened from Chester as far as Beeston when Morris was instructed (7 April 1775) to make a field-plan for yet another route to Middlewich, from Wardle Green via Minshull. Whose idea it was is not mentioned. In September 1776 it was resolved to apply to Parliament for powers to adopt this alternative, while at the same time seeking authority to raise desperately needed extra funds.¹⁷ Morris told the Parliamentary Committee that the new route would save over £7,000, but no other advantages are recorded.¹⁸ Further economies of about £20,000 in construction cost were later proposed by making the Middlewich line with 7 ft instead of the 14 ft locks as so far built¹⁹ but on 2 April 1779 it was decided that after the canal had been finished to Nantwich it should 'rest in that state one year or until an order of any other General Meeting to the contrary.' The branch to Nantwich was completed in August 1779, and with that the project did indeed rest, for nearly 46 years, before being revived by the Ellesmere and Chester Company, formed in 1813 by the union of the two constituents. With the promotion of the Birmingham and Liverpool Junction Canal, Telford was requested by the E&C to examine the maps and specifications of the Parliamentary line from Wardle Green (later to become Barbridge Junction) to Middlewich, to 'report his opinion and advise upon the expediency of executing the said line.'²⁰ The powers for taking the necessary lands granted by the 1777 Act were still live, no term having been

placed upon them, and the only legislation necessary was for effecting the actual junction with the Trent & Mersey. However, a minor diversion was proposed near Middlewich, and this was included in a new Act which was largely concerned with the general consolidation of the many Acts of the Company.²¹ This gave an opportunity for restating the clauses authorising the Middlewich line and specified the dimensions of the locks, which were to be identical with those of the lock of the T&M canal next below the junction (i.e. Middlewich Top Lock) and with the lock on the 100 yd-long Wardle Branch the T&M was to construct to make the actual junction.²² The real price of the concession was a swingeing toll amounting to 9d to 10½d per ton for traffic passing through the Wardle Branch, as compared with the 1½d to 3d per ton mile for the various classes of goods on the E&C canals.

Under Telford's general direction, what had now become the Middlewich Branch was constructed by the contractor W. A. Provis, with Alexander Easton as Resident Engineer. Opened to traffic on 1 September 1833, it is 9 miles 62 chains long, making the overall distance from the Dee at Chester to Middlewich 25 miles 67 chains.²³ The goal of the Chester projectors had at last been reached, but the importance of the completed lines lay no longer in stimulating the declining Port of Chester but in providing links in the new transport routes from the West Midlands to Ellesmere Port, the rapidly expanding Port of Liverpool, and the industrial conurbation of Manchester, while affording also an alternative route for Potteries materials and products. After all the changes of plan, the Chester Canal to Nantwich as it is today follows substantially the course surveyed by Samuel Weston for the 1772 Act; part of the route, that from Christleton to Tilstone Mill, could possibly derive from the Brindley survey of 1768/9. The Middlewich branch from Barbridge Junction as far as Twelve Acres Farm in Wimboldsley follows essentially Thomas Morris' line of the 1777 Act. Onwards towards Middlewich the length to Stanthorne is Weston's, although again it may derive from Brindley, while the final 1560 yards to join the T&M Wardle branch is Telford's responsibility.

REFERENCES

- 1 Chester City Record Office, TAV 2/55
- 2 Public Record Office, Kew, RAIL 816/2. The greater part of this volume concerns the 1772 Company; the 1770–71 proceedings, to 30 August 1771, start at what is now the back, 'upside down'.
- 3 *A Plan of the intended Navigable Canal from the City of Chester to Middlewich*, Scale 1 in. = 1 ml. Engraved by R. Murray, Chester, n.d. but late 1770 or early 1771. CCRO, QRP 1. Copy also in the Salisbury Library, University College, Cardiff.
- 4 PRO RAIL 816/2, 21 November 1770. The Potts partnerships at Chester subsequently enjoyed a long association with the Ellesmere, Ellesmere & Chester, and the Shropshire Union Companies, through to at least the end of the nineteenth century.
- 5 Thomas Yeoman. For biographical information see E. Robinson, *Annals of Science*, 1962, Vol 18, (4), 195–215; conveniently summarised in M. Handford, *The Stroudwater Canal*, 1979, 123–8. (The Chester connection is not noticed.)

- 6 CCRO, Minutes of City Assembly, AB4.282, 17 January 1771; AB4.284, 25 January 1771
- 7 CCRO, AB4.285, 31 January 1771
- 8 *Journal of the House of Commons*, 1771 Vol. 33
- 9 PRO RAIL 816/2, 29 November 1771. William Yoxall was a contemporary Nantwich attorney.
- 10 *A Plan of the intended Navigable Canal from the City of Chester to Middlewich and of the branch from A to Nantwich*. Scale 1 in. = 1 ml. Surveyed by T. Yeoman and S. Weston, 1771. Engraved by R. Murray. Accompanied by *An Explanation of the Plan of the Proposed Canal* Chester, Printed by J. Monk. Copy in the Salisbury Library, UC Cardiff.
- 11 *A map or Plan showing the Course of the Cut or Canal from the R Dee. . . . to or near Middlewich and Nantwich in the County of Chester*, T Weston del. Scale 2 in. = 1 ml. With Reference Book. CCRO, QRP 1
- 12 A series of 'Field Plans' of about 1774 at a scale of 20 in. = 1 ml., numbered 1 to 9, from Cow Lane, Chester to Nantwich. No 7, Horton's Mill to Tilstone Mill, is missing. British Waterways Museum, Stoke Bruerne.
- 13 CCRO, AB4.289, 17 January 1772
- 14 *JHC*, 31 January 1772
- 15 PRO RAIL 816/2, 22 January, 1 February 1772
- 16 *ibid*, 10 July 1772
- 17 PRO RAIL 816/3, 19 August, 11 September 1776
- 18 *JHC*, 17 March 1777
- 19 PRO RAIL 816/3, 13 October 1777
- 20 PRO RAIL 826/4, 3 January 1825
- 21 7&8 Geo. IV c.102, 21 June 1827
- 22 7&8 Geo. IV c.81, 14 June 1827
- 23 PRO RAIL 623/64, SUC Distance Tables (c.1908)

Quotations from original documents that formed the basis for both papers have been reproduced by courtesy of the Chester City Record Office. It is a pleasure to acknowledge the helpfulness of the Keeper of the Salisbury Library, University College, Cardiff and of successive Curators of the British Waterways Museum, Stoke Bruerne, in making available contemporary plans for study and special thanks are due to the *Chester Observer* Group for privileged access to early files of the *Courant*.

Corrections to Part 1

- p. 100 1.10 for wanted read warned*
p. 101 1.15 for Ashmoor read Astmoor
p. 101 para. 2 of text, 1.12 delete to consider proposals for making a
and read to enable the promoters to make
p. 102 1.8 for £5.14.4 read £5.14.3

Water supplies to the Kennet and Avon Canal (with especial reference to its eventual re-opening)

BY ALAN RICHARDSON

The principal water supplies to the Kennet & Avon Canal (Bath to Newbury) are:

Pumping from the River Avon at Claverton

The Seend Feeder

The Crofton Supplies, which can be pumped to the summit.

For many years the canal's owners have considered the canal to have inadequate supplies. This view is also taken by K.R. Clew in his book *The Kennet and Avon Canal* (page 171) and by the Kennet & Avon Canal Association (see below).

The canal was nationalised together with the Great Western Railway (its owners since 1852) and was incorporated into the Docks and Inland Waterways Executive on 28 February 1949. ¹ The D&IWE immediately commissioned M.H. Hawkins, Professor of Geology in the University of Reading, to report on the prospects of obtaining an increased water supply at Crofton. In his report ² of 26 May 1949 he reaches the following conclusions:

1. The natural springs in the Upper Greensand supplying Wilton Water are of no great volume, but are likely to maintain a fairly constant output (except during extreme drought).
2. Little additional water could be obtained from these springs, and not much could be done to increase the storage in the reservoir (Wilton Water).
3. The best prospect for an increased supply would be to sink a borehole into the Middle Chalk near Crofton pumping station.

During the 1950s the condition of the canal deteriorated, and the D&IWE attempted to abandon the navigation. Meanwhile the Kennet & Avon Canal Association campaigned for the complete restoration of the canal. Gradually the restoration viewpoint became official policy, and correspondence took place between F.G.B. Clayton (Engineer for British Transport Waterways, which took over the canal in 1955) and P.H. Ogden (honorary engineer to the Kennet & Avon Canal Association). In October 1961 they issued a final joint report³ on the anticipated water-supply problems of a re-opened canal. On analysis this report unfortunately proves to be based upon six assumptions.

1. The existing Crofton supply amounts to only 600,000 gallons per day during dry weather (based on a study of pumping records, but assuming that during dry periods all available water was pumped to the summit).
2. A new source at Crofton could provide 3,500,000 gallons per day.
3. Losses due to evaporation and leakage amount to 60,000 gallons per mile per day.
4. The Seend Feeder can supply 250,000 gallons per day.
5. Traffic demands of
 - 40 locks per day for 2 months
 - 20 locks per day for a further 2 months
 - 4 locks per day for the remaining 8 months.

6. The Crofton and Seend supplies are the only sources of water between Bradford Lock (30½ miles west of Crofton) and Brunsdons Lock (9½ miles east of Crofton).

Based on these assumptions, the report then gives the following figures:

Daily Water Demands (Summer)

Evaporation and seepage	40 x 60,000 = 2,400,000 gallons
Bradford lockage	20 x 67,000 = 1,340,000
Brunsdon lockage	20 x 55,000 = <u>1,100,000</u>
	<u>4,840,000</u>

Daily Water Supply (Summer)

From Wilton Water	600,000
From new Crofton borehole	3,500,000
From Seend Feeder	<u>250,000</u>
	<u>4,350,000</u>

Annual Quantity to be pumped at Crofton

60 days at 4,100,000	246,000,000
60 days at 3,500,000	210,000,000
245 days at 1,461,000	<u>357,945,000</u>
	<u>813,945,000</u>

or say 814,000,000 gallons, of which the new source will supply 3,500,000 gallons per day for say 3 months.

During the period 1965 to 1970 inclusive I was employed by the British Waterways Board as assistant to their Water Engineer at Gloucester, and was myself involved in investigating the water supplies of the Kennet & Avon Canal. First priority was to measure the Crofton supplies. This was done by making minor alterations to the canal byeweirs at Crofton to divert all water into one channel, and building a measuring weir across that channel. These measurements confirmed Mr Hawkin's opinion that the springs maintain a fairly constant output. It was found that the flow from the springs could be expressed by the formula

$$Q_t = Q_o k^t$$

where Q_o = flow on day nought

Q_t = flow after t days

k = recession constant

k proved to be approximately 0.98.

This means that the flow from the springs reduces every day to 98% of the previous day's flow. The effect of this is that, in the absence of appreciable rain, the spring yield will halve in about 30 days. Thus a flow of 4,000,000 gallons per day will have decreased to 2,000,000 gallons per day after one dry month, and to 1,000,000 gallons per day after two dry months. This also means that the minimum yield of the springs can be accurately forecast several months in advance. In the first three years of measurement the Crofton flow varied between 12,000,000 gallons per day and a minimum of about 1,300,000 gallons per day.

A further measuring weir was constructed at Wootton Rivers bottom lock to measure the flow from the summit to the 'long pound' (Wootton Rivers to Devizes, 15 miles). As details of the quantity of water pumped to the summit were already available, this enabled the summit losses (or gains) to be determined.

A visual inspection of the canal identified several other sources of water, as follows:

A fair-sized stream enters the canal at Froxfield, and the Crofton supplies would only be required to make up evaporation and leakage losses for 4 miles eastwards.

The summit level has no dry-weather supplies (other than water pumped at Crofton), but receives wet-weather drainage from a considerable area of land. This means that evaporation and leakage losses are made up from this source in wet weather and in winter the summit even has surplus water to supply the long pound.

A very small but spring-fed stream enters the canal below the second lock down at Wootton Rivers.

A considerable area to the north of the canal, including Wootton Rivers village, drains to the canal above the bottom lock, but the dry weather flow is nil.

Directly opposite this, on the south of the canal, is a spring-fed stream with a reliable flow. Water has been obtained from this source, but no formal diversion structure exists. However, when in flood, the stream overflows its banks and unwanted water then enters the canal.

The next water supply worth a mention is a small spring-fed stream at Devizes Barracks. This is the cause of the 'scour' mentioned by K.R. Clew (*The Kennet and Avon Canal*, p. 145).

The net result of these sources is that, for much of the year, evaporation and seepage losses between Crofton and Devizes are met without pumping at Crofton. In dry periods the quantities pumped at Crofton (with the diesel and electric pumps) have rarely exceeded 350,000 gallons per day. This gives a loss of 20,000 gallons per mile per day (assuming 17½ miles from Crofton to Devizes). This figure agrees well with the measured summit losses (Crofton pumped quantities minus the flow at Wootton Rivers bottom lock). A further important consideration is the exceptional depth of the canal. Throughout its western section the Kennet & Avon was built with 6'–0" on the lock sills.

Incidentally the draught (lock sill to byeweir) at Wootton Rivers top lock is also 6'–0", which conflicts with the view that the summit was built deeper than other pounds.⁴ However, the byeweirs at Crofton top lock are about one foot higher than those at Wootton Rivers. This ensures that water pumped to the summit must flow westwards and not return down Crofton locks.

On the assumption that 3'–6" draught is adequate for pleasure boats (it was not unusual for commercial boats), then the top two feet or so of water in the canal pounds can be regarded as reservoir storage. Over the length between Crofton and Devizes this amounts to over 100 million gallons, compared with the 5 or 10 million gallons of storage in Crofton Reservoir.

In late 1970 I carried out calculations, based upon measured flows over two years, to determine whether the water supplies were sufficient for pleasure boat traffic.

I made the following assumptions:

1. The Crofton supplies are not needed for seepage and evaporation east of Crofton (an optimistic assumption).
2. The seepage and evaporation losses between Crofton and Devizes bottom lock are the same per mile as the measured loss on the summit. Measured water gains on the summit are taken as a zero loss for the canal.

3. No water is wasted in locking operations. (This could be achieved by employing full-time lock keepers at Crofton and Devizes, and by fitting electrical contacts to sound an alarm if lock paddles are not fully closed).
4. Equal traffic at Crofton and Devizes.
5. Crofton water is not needed to supply the canal west of Devizes bottom lock. If Seend Feeder supplies proved insufficient during drought this could result in a drawing down of these canal pounds also (but they are 6'-0" deep).

I based my calculations on the measured lockage at Lapworth top lock for 1969 and 1970 (this was the busiest lock for which I had traffic details). I concluded that the canal had adequate water supplies — providing that the canal itself was used as a reservoir. An interesting point is that the lowest water levels were reached in October or early November, well after the main boating season. With commercial traffic, a water shortage occurred in December 1837 with draught restricted to 3'-4".⁵

The calculations were repeated using traffic figures of double the Lapworth lockage. In this case the canal reached 2 feet below weir in late August. In addition, assuming that this restricted draught did not restrict traffic, the winter supplies at Crofton were sufficient to refill the canal ready for the following summer.

I therefore concluded that the present water supplies are sufficient to re-open the canal. Pleasure boat traffic could eventually outstrip the water supplies, but by then many years of operating experience would assist in the planning of improved supplies.

Any water shortage due to exceptional drought are likely to occur at the end of the pleasure-boat season (September or later), and will not therefore be serious. Knowledge of the recession constant for Crofton springs will also enable at least one month's warning to be given of water shortage. The comment has been made that the drawing down of canal pounds by as much as 2' would be ecologically unacceptable. However, the rate of draw-down would rarely exceed 2" per week, and in most years a total draw down of one foot would suffice.

In order to re-open the canal with sufficient water for heavy pleasure-boat traffic I consider that the following works would be necessary:

Between Bath and Semington water supplies should be adequate (from Claverton pump and the Seend feeder). If there was excessive use of Bradford lock, an exceptionally deep one, then a small backpump could be installed. The Seend feeder would need to be fully used. This would involve clearing silt from the whole length so as to minimise the water gradient and prevent weiring to waste at the intake sluices. To avoid the need for manual operation of these sluices in flood times the intake will need completely rebuilding to include a considerable length of waste weir.

Devizes locks need maintaining in good condition to minimise gate leakage. Good supervision of lock usage will be essential. It should be possible to install electrical contacts on lock sluices to operate an alarm if they are not closed properly.

For many years the water level in the 15-mile pound from Devizes to Wootton Rivers has been held down by 2', to 4' on the lock sills. In order to use the 100-million-gallon storage capacity of this pound the banks would need to be made watertight up to the 6' level, and the pound dredged. After at least 30 years of low water-levels the problem of leaking banks could well prove considerable. At present there is only one short waste weir on the whole pound. This is completely inadequate, and flood water can only be controlled by the manual operation of sluices. Several new long overflow weirs therefore need to be constructed. This lack of weirs is probably the main reason that the water level has been kept so low.

At Wootton Rivers it is desirable to control the spring-fed stream to prevent unwanted flood waters from entering the canal and, if possible, to obtain a dry weather supply from the stream.

Lastly, at Crofton additional pumping capacity is needed. This could be increased in stages as traffic builds up but, eventually, a capacity of at least 5,000,000 gallons per day would be required. For comparison, the existing electric pump will deliver 1,000,000 gallons per day, and each steam pump 1,000,000 gallons per 8-hour shift.

East of Crofton it would again be necessary to ensure that water is not wasted by leaking gates or careless lock-usage, especially at times when all available water needed to be pumped westwards.

With the above works carried out, I concluded that the canal would be able to handle considerable traffic, especially if narrow-beam boats are encouraged to pair up in the locks. No additional water supplies would be necessary.

After leaving my employment with British Waterways in 1971 I lost close touch with the canal restoration proposals. However, I recently (1982) read an article in the *Butty*,⁶ the magazine of the Kennet & Avon Canal Trust, which reveals current thinking on water supplies. The article by J. B. Taylor, Senior Assistant Engineer (Water) to British Waterways at Gloucester, outlines proposals for a greatly-increased abstraction from the River Avon at Claverton, and a series of back pumps to supply the whole length between Bath and Crofton.

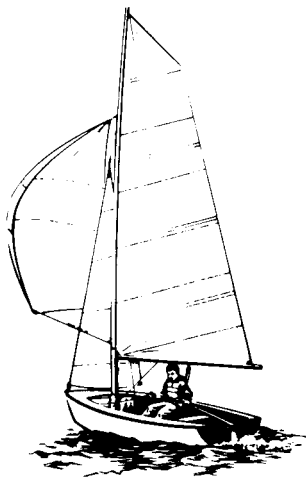
Analysis of the backpump capacities reveals that a canal water loss of about 100,000 gallons per mile per day has been assumed (five times my figure). No allowance has been made for the storage capacity of the canal pounds, and a traffic figure of 30 locks per day over the summit has been catered for. The cost of electricity for this scheme will, at 1984 prices, amount to about £4,000 per year standing charge and at least £300 per day with all pumps in full use. This is a cost of £10 for a boat passing the summit.

It is interesting to compare these backpumping proposals with the only length of canal in Britain where backpumps on a similar scale have ever been installed — the London to Birmingham route of the Grand Union Canal. Here there are back-pumps at every lock between Braunston and Northchurch (48 successive locks). When this route was busy with commercial traffic, most of these pumps were used only as a last resort to prevent the complete closure of the canal in droughts. This occurred, on average, about once every 10 years. However, in the drought of 1976, with only pleasure boats using the canal, it was closed to traffic.⁷ As the backpump capacity was more than sufficient to recirculate lockage water this indicates either bad wastage of water, or a reluctance to use the pumps due to the cost.

It will be interesting to see if the Kennet & Avon Canal fares any better if the backpump scheme is adopted.

REFERENCES

- 1 K.R. Clew, *The Kennet and Avon Canal*, David & Charles, Newton Abbot 1968, p. 146
- 2 Herbert L. Hawkins. Report on the prospects of obtaining an increased Supply of Water at the Crofton Pumping Station. File copy at British Waterways, Dock Office, Gloucester.
- 3 F.G.B. Clayton and P.H. Ogden. Final Report on Water Supply to the Kennet and Avon Canal. File copy at British Waterways, Dock Office, Gloucester.
- 4 K.R. Clew, *op. cit.*, p. 69
- 5 K.R. Clew, *op. cit.*, pp. 92, 93
- 6 *The Butty*, No. 98, December 1982
- 7 *Waterways World*, September 1976, p. 19



The Railway Acts of Parliament of 1885

BY A. L. BARNETT

The following is a summary of the Acts of Parliament relating to railways in Great Britain passed one hundred years ago. Wherever possible, modern names of junctions and locations are used; parliamentary descriptions by parishes can be very misleading. It has not been possible to consult Deposited Plans for the proposed railways, and if mistakes have been made the author would be grateful if they are pointed out. Approximate mileages are given which should help the reader to appreciate the extent of the project. To avoid repetition, the date of Royal Assent is given at the end of the appropriate section. The Chapter number of Local and Personal Acts is given in Roman figures, but for convenience Arabic numerals are used here.

Except when an asterisk (*) is used, the word Railway(s) should be added to the words in capitals to complete the company's title. To save space, well-known railways are referred to by initials, and initials are generally used in subsequent references to other companies. The Acts were consulted in the Archives Department of West Yorkshire County Council in Wakefield, and thanks are due to the Archivist and her staff.

ABBREVIATIONS

Abd.	Abandon
Amalg.	Amalgamation
A.P.	Additional Powers
Auth.	Authorised
Br(s)	Branch(es)
c.	chapter
Conn.	Connection or Connecting
Cons.	May construct
Devn.	Deviation
Extn.	Extension
Extn. Time	Extension of time for purchase of land or completion of line.
F.P.	Further Powers
Inc.	Co. incorporated
Jn(s)	Junction(s)
Jt.	Joint
m.	miles
M.L.	Main Line
R.P(s)	Running Power(s)
R(s)	Railway(s) or River
Sdgs.	Sidings
Stn.	Station
V.P.	Various Powers
W(T)A.	Working (Traffic) Arrangements

EASTERN & MIDLANDS. c. 3. Extn. time for rs. auth. Lynn & Fackenhams Act, 1882. May abd. r. auth. L.&F.R. Act, 1880. Appointment of receiver auth. E.&M.R. Act, 1883, is repealed.

48 VIC. 28 APRIL 1885

SKIPTON & KETTLEWELL (Abd.) c. 14. Co. (inc. 1880) to be abd.

TILBURY & GRAVESEND TUNNEL JN. (Abd.). c. 21. Co. (inc. 1882) to be abd. L.C.&D. (Capital). c. 23. May issue £600,000 Preference stock and £155,556 Debentures.

48 VIC. 21 MAY 1885

ELHAM VALLEY. c. 38. Improvement of line. May raise further £15,000.

NORTH CORNWALL. c. 39. Extn. time.

DORE & CHINLEY. c. 44. Cons. Dore South Jn. Curve, $\frac{1}{4}$ m. Devns. No. 1 and No. 2 of Totley and Cowburn Tunnels, $5\frac{1}{4}$ m. and $2\frac{3}{8}$ m. Mid. R. may subscribe £100,000.

EAST LONDON. c. 45. May subscribe further capital to the Whitechapel Jn. R.

LLANGAMMARCH & NEATH & BRECON JN. c. 48. Extn. time for rs. auth. 1882.

SOUTHPORT & CHESHIRE LINES EXTN. c. 53. Further capital, £80,000 on mortgage, £20,000 Debentures. Agreements with C.L.C., M., M.S.&L. and/or G.N.Rs.

ISLE OF AXHOLME. c. 54. Inc. capital £88,000. Tramway auth. by Isle of Axholme and Marshland Tramways Order to be abd. Cons. from Haxey, G.N.&G.E. Jt. R. to Crowle, M.S.&L.R. $10\frac{5}{8}$ m.

48—49 VIC. 25 JUNE 1885

L.B.&S.C. (V.P.). c. 67. Co. may abd. lines at Keymer and Shoreham, auth. 1879 and 1882. May guarantee interest on stock of Brighton and Dyke R.

CHARING CROSS & WATERLOO ELECTRIC (Abd.). c. 71. Co. (auth. 1882) to be abd.

G.N. (V.P.). c. 76. May abd. r. auth. 1880 at Shipley (Derbyshire). Cons. Woolsthorpe to Denton, $2\frac{3}{8}$ m; additional line at Colwick, $\frac{5}{8}$ m.; Ilkeston to Heanor and conn. to Nutbrook Colliery $3\frac{1}{2}$ m; Pudsey to Cutlers and Broad Lane Jns. $2\frac{1}{4}$ m.

GUISELEY, YEADON AND RAWDON. c. 77. Inc. Capital £25,000. Cons. from Guiseley to Yeadon $1\frac{1}{4}$ m. R.P. to Guiseley, M.R.

LATIMER ROAD & ACTON. c. 78. Extn. time for r. auth 1882.

CATHCART DISTRICT (Extn. of Time). c. 79. Extn. time for rs. auth. 1880.

DIDCOT, NEWBURY & SOUTHAMPTON (Extn. of Time). c. 81. Extn. time for rs. auth. 1882.

HULL BARNLEY & WEST RIDING JN. R. & DOCK. c. 82. Extn. time for rs. auth. 1882. May abd. r. auth. 1880. Cons. new alignment at Cudworth, $\frac{1}{2}$ m. Cons. joint goods sds. with M.R. at Cudworth.

LYDD (V.P.) c. 83. Devn. between Loose and Sutton Valence. $6\frac{5}{8}$ m. S.E.R. to sell Loose Valley R. (inc. 1877) to Co. with extn. time.

M.S.&L. (A.P.). c. 84. Cons. West Leigh to Atherton and Tyldesley, 3m, devn. at Abram, $\frac{7}{8}$ m. May subscribe £100, 000 to Blackpool R. Purchase of Sheffield Victoria Hotel confirmed.

RHONDDA & SWANSEA BAY. c. 85. Extn. time.

LONDON, TILBURY & SOUTHEND. c. 86. Abd. conn. to Metropolitan Outer Circle R. May carry mails on Co's steamers.

LANARKSHIRE & AYRSHIRE. c. 87. C.R. may subscribe £150, 000 to be primarily applied to cons. of r. to Ardrossan and Ardrossan Harbour.

L.&N.W. c. 88. Cons. Weedon to Daventry, 4m.; devn. of M.L. in Northamptonshire, $\frac{5}{8}$ m.; jn. at Bootle between L.&N.W. and L.&Y., replacing jn. auth. 1882, 6ch.; extn. time for Denton and Saddleworth rs., auth. 1879.

MET. c. 89. Cons. Chalfont & Latimer to Chesham, $2\frac{1}{2}$ m.; devn. between Amersham and Little Missenden, $5\frac{3}{8}$ m., and extn. time for Aylesbury & Rickmansworth R., auth. 1881.

MID. (A.P.). c. 90 Cons. from Ancoats Goods br. to Ancoats Jn, L.&Y., $\frac{5}{8}$ m.; Bedford & Northampton R. amalg.

PLYMOUTH, DEVONPORT & SOUTH-WESTERN JN. c. 92. Extn. time for various rs.

G.E. (G.P.) c. 93. Widenings in Essex, Middlesex, Cambridgeshire and Suffolk; may abd. certain auth. rs. and tramways.

L.&Y. c. 94. Cons. Pendleton to Agecroft, $2\frac{1}{8}$ m.; Hindley to Pemberton, 3m.; Horwich Fork Jn. to Horwich Loco. Jn. $\frac{1}{2}$ m.; Farrington Curve Jn. to Moss Lane Jn. $1\frac{1}{8}$ m.; Farrington Curve Jn. to Farrington $\frac{7}{8}$ m.

48—49 VIC. 16 JULY 1885

SELBY & MID-YORKSHIRE UNION. c. 111. Extn. time for rs. auth. 1879, 1882, and 1883.

LONDON & BLACKWALL. c. 114. Widenings and improvements. Additional capital.

SOUTH-WESTERN (V.P.). c. 118. Widening of bridges etc.

N.B. c. 119. Cons. Abbeyhill to Lochend Jn, $\frac{1}{4}$ m.; Thornton West Jn. to Thornton Central Jn, $\frac{1}{4}$ m.; Partick Jn to Hyndland (first stn.) $\frac{5}{8}$ m.; widening and devn. of Sighthill br.; Montrose Harbour br. $\frac{1}{4}$ m.; diversion of M.L. north of Berwick $\frac{3}{4}$ m. C.R. to have R.P. from Sighthill Jn. to Cowlares Jn. N.E.R. to have R.P. over new line at Berwick. Co. may improve offices at Waverley and the North British Station Hotel. Kelvin Valley and Edinburgh Suburban & Southside Jn Rs. amalg. with Co.

ST. HELENS & WIGAN JN. c. 121. Inc. Capital £210,000. Cons. St. Helens to Lowton St. Mary's. T.A. with Wigan Jn. R and/or M.S.&L.R.

48—49 VIC. 16 JULY 1885

NORTH WALES NARROW GAUGE RS (Extns etc.). c 134. Cons. Dinas to Carnarvon Harbour 3m. Bryngwyn stn to drumhead of incline at Bryngwyn Quarries, as existing r. is capable of being used only for goods and mineral traffic $2\frac{1}{8}$ m. May raise further £28,000.

SOUTH-EASTERN c. 137. Cons. from Cheriton Arch stn. (now Folkestone Central) to Folkestone Harbour, $1\frac{1}{4}$ m.; widenings in Kent and Surrey. Devn. of East London R. at New Cross stn.

REGENT'S CANAL CITY & DOCKS. c. 138. Co. (inc. 1882) may raise additional £660,000.

ALEXANDRA (NEWPORT & SOUTH WALES) DOCKS & RAILWAY. c. 139. Cons. r. from Alexandra Dock to Newport Dock $7\frac{1}{8}$ m. May make jn. with lines of Tredegar Wharf Co.

GLYN VALLEY TRAMWAY (*). c. 140. Cons. from Llansantffraid Glyn Ceiriog to Treeiriog $3\frac{3}{8}$ m. Pontfaen to Chirk, $1\frac{5}{8}$ m.

BARRY DOCK & RS. c. 141. Cons. from Biglis Jn. to Cogan, $3\frac{3}{4}$ m. May appoint three members to the Cardiff Pilotage Board.

STRATFORD-UPON-AVON, TOWCESTER & MIDLAND JN. c. 143. Cons from Towcester to Easton Neston $2\frac{3}{8}$ m.

NORTH LONDON. c. 144. Widening and sdgs. in conn. with Columbia Market, Bethnal Green. May raise additional £50,000. L.&N.W.R. may subscribe.

G.W. c. 147. Cons. Barnstaple, loop to L.&S.W.R. $1\frac{3}{8}$ m.; Brynmenin to Tynycoed Jn $\frac{1}{4}$ m; Neath to Cadoxton, jn. with Swansea & Neath R. $\frac{3}{4}$ m. (bridge over R. Neath to be opening span). Extn. time for Helston R. (auth. 1880). Helston R. may raise additional £6,000. G.W.R. may raise further £300,000.

WIRRAL. c. 149. Cons from Bidston to Hawarden and Sealand, jns with Chester and Connah's Quay br. of M.S.&L. $15\frac{1}{8}$ m.; Oxtton to Prenton, $\frac{3}{8}$ m. May raise further £360,000. Arrangements with M.S.&L.R.

WREXHAM & ELLESMERE. c. 150. Inc. Capital £180,000. Cons. from Wrexham to Ellesmere, $12\frac{3}{4}$ m. Joint stn. at Wrexham with Wrexham, Mold & Connah's Quay R.

48—49 VIC. 31 JULY 1885

BAWTRY & TRENT RAILWAY & DOCK (Abd.). c. 153. May abd. rs. and dock.

LYNTON. c. 154. Inc. Capital £83,000. Cons. from Filleigh to Kentisbury, $10\frac{3}{4}$ m.

TAFF VALE. c. 157. Cons. Roath Br. Jn. to jns with Bute Docks R, 5m. May raise further £300,000.

METROPOLITAN OUTER CIRCLE (Abd.). c. 163. Abd. rs. auth. 1882 and 1883.

EVESHAM, REDDITCH & STRATFORD-UPON-AVON. c. 174. May create debentures, £20,000.

CARDIFF, PENARTH & CADOXTON-JUXTA-BARRY JN. c. 175. Inc. Capital £150,000. Cons. Penarth to Barry (not to cons. last $\frac{1}{2}$ m. if Barry R. built line auth. above, but Co. to have R.P. over it) $6\frac{1}{4}$ m.; br. at Grangetown, $\frac{3}{8}$ m.

DILCOT, NEWBURY & SOUTHAMPTON (Money). c. 176. May issue Pre-preference Stock, £359,450, at 5 per cent.

RHYMNEY. c. 178. Cons. conn. at Bute Docks $\frac{1}{4}$ m. May raise further £20,000 capital.

SCARBOROUGH, BRIDLINGTON & WEST RIDING JN. c. 181. Inc. Capital £648,000. Cons. from Seamer to Nafferton, $16\frac{5}{8}$ m. and from Driffield to Market Weighton. $13\frac{1}{4}$ m. T.As. with N.E.R.

WESTON-SUPER-MARE, CLEVEDON & PORTISHEAD TRAMWAYS (*). c. 182. Inc. Capital £60,000. Cons. from Weston-super-Mare to Portishead. Bridge over R. Yeo may be road bridge and co. may take tolls for its use. Gauge 4ft $8\frac{1}{2}$ in. and co. may use steam power. May carry Mails. T. As. with G.W.R.

PORTPATRICK & WIGTOWNSHIRE RS. (Sale & Transfer). c. 184. Rs. to be sold and vested in L.N.W. Mid, Cal. and G.&S.W.R. Cos. 'Portpatrick & Wigtownshire Jt. Ctee' to be set up. Portpatrick & Wigtownshire Guaranteed Stock, $3\frac{1}{2}\%$, to be created. R.Ps. to L.N.W. and Cal. Rs. from Dumfries to Castle Douglas. R.P. to Mid. from Carlisle to Gretna and R.P. to L.N.W. from Carlisle to Dumfries, via Lockerbie.

EAST USK. c. 187. Inc. Capital £72,000. Cons. from Jns. with G.W.R. near Newport to Uskmouth, $4\frac{5}{8}$ m. Agreements with G.W.R.

MANCHESTER SHIP CANAL (*). c. 188. Cons. Branch rs, from near Walton Viaduct, L.N.W., $2\frac{3}{4}$ m.; from near Partington stn. C.L.C., $\frac{1}{4}$ m.; from Barton, $\frac{3}{8}$ m. Deviation rs.; of M.L. of L.N.W. at Walton Viaduct, $2\frac{1}{2}$ m. to be part of L.N.W.; of Birkenhead R. at Walton Viaduct. $1\frac{5}{8}$ m., to become L.N.W. and G.W.Jt.; of L.N.W. at Latchford, $2\frac{1}{2}$ m., to become L.N.W.; of C.L.C., Partington to Cadishead, $2\frac{3}{8}$ m. and Flixton to Irlam, $2\frac{1}{2}$ m. Junction R. Acton Grange Jn. to Walton New Jn, $\frac{1}{2}$ m., to become L.N.W. and G.W.Jt. Parts of existing rs. to be vested in Canal Co.

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SHANKLIN & CHALE. c. 192. Inc. Capital £60,000. Cons. from the Isle of Wight R. to Chale, 6m. R.Ps. to Shanklin.

COLNE VALLEY & HALSTEAD (Arrangement). c. 194. New board to be elected and receiver discharged. May raise further £50,000 at 5 per cent as mortgage.

MERSEY. c. 198. Cons. from burrowing jn. at Liverpool to jn. with Mersey Docks & Harbour Board R. at Waterloo Docks, $1\frac{1}{8}$ m.; from Birkenhead to Jns. with rs. of M.D.&H.B. at Birkenhead Docks, 1m. Passenger subways at James St. Liverpool and Hamilton St. Birkenhead. May raise further £660,000.

WORCESTER & BROOM. c. 200. Inc. Capital £180,000. Cons. from Claines to Bidford, jn. with Evesham, Redditch & Stratford-upon-Avon R., $16\frac{1}{2}$ m.; conn. to G.W.R. north of Worcester, $\frac{1}{4}$ m. Stratford-upon-Avon, Towcester & Midland Jn. R. to have R.Ps. The Co. and the Evesham, Redditch, Stratford-upon-Avon Jn., the East & West Jn., and the Stratford-upon-Avon, Towcester & Mid. Jn. Rs to have R.Ps. over the Evesham, Redditch & Stratford-upon-Avon R., the East & West Jn. R., the Stratford-upon-Avon, Towcester & Mid. Jn. R. and over the G.W.R. from the junction to Shrubs (sic!) Hill stn. W.As. with the East & West Jn. and Evesham, Redditch & Stratford-upon-Avon Jn. Rs.

14 AUGUST 1885



Book Reviews

FORGOTTEN RAILWAYS: CHILTERN AND COTSWOLDS (second edition) by R. Davies and M. D. Grant. 256 pp. 25 maps in text and one folding map. 31 plates. Published by David St. John Thomas and distributed by David & Charles, Newton Abbot. ISBN 0 946537 07 0. £9.95.

The first edition of this book was reviewed for the Society in July 1976 and the caveats then made remain valid. For the second edition the authors say that they have aimed to revise the text and gazetteer to the situation as they found it in mid-1983; however, errors pointed out in 1976 have not been corrected and only by close comparison with the first edition will other changes be found. Regrettably, the authors still omit from the gazetteer old buildings of the Wycombe Railway in High Wycombe itself, an interesting survival from the broad gauge era, although it has yet to be established whether they were part of the original passenger station for the town, which was not on the site of the present station as the gazetteer suggests. The disused viaduct in the centre of High Wycombe is also omitted from the gazetteer. Mention could well have been made of the large amount of land occupied by the LNWR in Aylesbury, much of which was given over to osier beds and a basket works, a forgotten railway requirement. The date quoted for opening Stratford (SMJ) station is an obvious inconsistency and although it appears to have been taken, like so much else in the book, from the work of others, it does not agree with the local newspaper. Those who already have the first edition seem unlikely to derive much from obtaining the second. Others, who may have only specific interests in the area covered, are advised to examine critically the chapters concerned before buying. JOHN NORRIS.

NARROW GAUGE RAILWAYS OF THE BRITISH ISLES by P. B. Whitehouse and J. B. Snell. 160 pp. 140 half tone illustrations, 16 maps. David & Charles. ISBN 0 7153 8523 2. £10.95.

This is primarily a collection of photographs, and what a splendid collection it is, all but a handful dating from the working days of the various lines, as opposed to those of dereliction or recent resurrection. Reproduction is almost invariably of high quality. Only an occasional elderly faded photograph points to the difficulties the compilers and publishers must have overcome. There is a laudable lack of old favourites, and a wealth of unfamiliar and evocative ones of the railways in operation. The Whitehouse/Camwell shots of the Tralee & Dingle cattle specials are superb, but your reviewer was equally pleased with the ones of the elusive Manifold Valley, which show not only locomotives and rolling stock but also railwaymen, passengers, and the countryside the line traversed. The passage of time is also brought home when one realises the not-so-young forest behind Halesworth station has replaced the Southwold Railway scene on p. 44.

The text appears subordinate, but one is forced to the conclusion that it is not subordinate enough, for it hovers uneasily suspended between the enthusiast market and a serious attempt to contribute to the history of transport economics and management. One wishes it would come down on one side or the other, preferably the former. 'Prologue' includes a magnificent account of a 1934 journey over the Welsh Highland and a hilarious one to accompany the Tralee & Dingle pictures. But Chapter 1 is a less successful attempt to develop theoretical concepts. The book also fails to decide what to include and what to exclude. It might have been better to have stuck to the public railways. To venture into the

industrial and private really needs another volume (which would have been an excellent idea). So there are numerous good pictures and references to the Padarn, but none to the Chattenden & Upnor, a reference to the claylines of Purbeck but none to the cement lines of Kent. Incidentally, there is a very good section on financing the Irish narrow gauge, but little on train working.

There are a few factual inaccuracies. 'After 1865 no further broad gauge systems were established anywhere in the world' (p. 33) — what of San Francisco's BART? Waterhouses is a substantial village, not 'hardly detectable as a place' (p. 50). A visit in 1937 left your reviewer with an indelible impression of decay and neglect on the Londonderry & Lough Swilly in contrast with the authors' 'The Lough Swilly kept its railway to the bitter end in apple pie order' (p. 112) which appears below a shot of a ghastly six wheeler.

But a volume such as this cannot please all the readers looking for more and more of their favourite line, or the carping critic. This one will please most of the people all the time. It is to be bought, pored over and savoured. It is also a source book for the historian. H. P. WHITE.

THE RAILWAYMEN by R. S. Joby. ISBN 0753 80109. 166 pages. 15 half-tone illustrations. David & Charles. £7.95.

The railwaymen ought to be more interesting than the machines and the dates upon which the lines and stations were opened and closed. This book is not about the railwaymen of today but it is not a history either. It was probably not written for the historian but for the general railway reader. Those whose reading has hitherto been mainly about locomotives will find the book absorbing but historians may well be disappointed. There are a number of quotations from letters and other memorials of early railwaymen with no sources stated. One would have liked to have known, for example, where the statement that Karl Marx applied for a job on the Great Western Railway comes from.

There are chapters about station and office work, the way railwaymen used to live, the works towns, train crews, railwaymen at war, union matters, and others. Readers with a special affection either for the Great Central Railway in the London area or for the railways of Norfolk will particularly enjoy the many anecdotes from those areas which are used to flesh out the text. More illustrations would have been nice. In a book about railwaymen one would have expected to see fewer ordinary views of trains, stations, and shed scenes. Some of the captions assume encyclopaedic knowledge of railways, others none at all. Generally the captions seem to have been ill-considered. The caption to one picture of a porter draws our attention to a somersault signal which is said to be characteristic of the Midland and Great Northern Joint Railway. This has nothing to do with railwaymen and, in any case, the signal is almost invisible in the photograph as reproduced.

The book is well written, interesting to read, and puts together a lot of newly-published and diverse recollections about the lives of railwaymen in the works, on the trains, and in the stations. Recollections of a fireman working out of Hitchin northwards on the Great Northern main line and the story of an accident on the Brecon and Merthyr are memorable. MARTIN BARNES.

BRITISH CANALS, AN ILLUSTRATED HISTORY, by Charles Hadfield. 7th ed. 367 pp, 38 plates, 44 figs., 17 maps. David & Charles, Newton Abbot, 1984. ISBN 0 7153 8568 2. £12.50.

The first edition was published in 1950, four years before its author played a key role in founding the R&CHS. Now in its 7th edition, this seminal work has become a much grown-up version of the original; there are substantially the same chapter headings but with an extra one covering 'Transformation Scene', extended to bring the story up to 1983. The canals of Ireland have been included since the 5th edition, so the title might perhaps be more properly 'Canals of the British Isles', the generic name given to the series of volumes recording in greater detail canal histories on a regional level, to which the book may be deemed an introduction as well as affording a general synthesis.

The author has succeeded in distilling the results of a lifetime's interest into a single eminently-readable volume. Wide-ranging research into primary sources and a critical mind make for a high standard of accuracy; here is no armchair journalist writing up a commissioned story. In the Preface to *Introducing Canals* (1955) Hadfield wrote, 'I only know that life is satisfactory for me when my feet are on a towpath and I can see a canal before me . . .'. This natural affinity, coupled with experience arising from involvement on the British Waterways Board and a pragmatic approach, result in a balanced account covering all aspects of inland waterways, from promotion through construction and operation to maintenance and restoration, trade and economics, pleasure cruising, and freight services. There is a select bibliography, particularly valuable for its inclusion of the last three decades. The reviewer, having used successive editions over many years for reference purposes, has read the new one through as a continuous narrative, with enjoyment, and has been reminded thereby of the wider background of which his own localised special interests should take account. Comparisons, too, with earlier editions have shown how meticulously the author has revised the text throughout, whether in the light of new research or perhaps to clarify a point.

However, Homer nods occasionally. It would now seem accepted that Brindley's Harecastle Tunnel took no longer than nine years to complete rather than the eleven quoted, while there seems something odd in the description of the newest locks on the Weaver as being in tandem with the larger of the earlier pairs — a slip for in parallel? The page references to the Series Index and the Bibliography given at the head of p. 338 require revision. These are but minor quibbles.

'Transformation Scene' shows up the revolutionary changes in inland waterway carrying that have occurred between the writing of the 1st and 7th editions. Narrow boat days are over and the small-gauge canals now form an accepted amenity system while freight traffic is rapidly developing with low profile coasters on near-estuarial waters and their connexions, providing links with European ports. Economic and transport historians and canal enthusiasts owe a great debt of gratitude to Charles Hadfield for producing this pioneer work in the first place and for following it up so assiduously. EDWIN SHEARING

A CHRONOLOGY OF THE CONSTRUCTION OF BRITAIN'S RAILWAYS
1778–1855 by L. James. 120 pp. A4 size. 31 illustrations. 11 maps. Ian Allan Ltd. 1983. ISBN 0 7110 1277 6. £10.95.

The author sets out 'to provide a definitive and chronological guide to the actual physical growth of the British railway system'. Each successive year is dealt with as follows: the various concerns opening lines appear in alphabetical, not chronological, order – each with sub-headings, Incorporated, Route, Opening, History, and Bibliography. The maps show the development of the system in successive periods; they are clear, neat, and represent much thought.

It is unfortunate that the author sees fit to eulogise in two separate places in his first pages a work which was described by the late Charles Clunker as probably the most inaccurate railway book ever published, but the two references – perhaps in keeping with the subject – do provide two versions of both its title and its author's name.

Under 'Incorporated' rigid adherence to format leads to some strange entries, e.g. 'Earl Carlisle's Wagon Way. Incorporated; Not Incorporated' (p. 9). The Middleton Railway was not incorporated by the Act of 1758 (p. 12). Brandling was the builder and owner. The Aberbeeg Tramroad is said to have been incorporated on 3 June 1792 (p. 14) but it seems that this is a reference to the Monmouthshire Canal Co.'s Act, and similarly with other early lines built in association with canals. Not all railways were built by incorporated railway companies and perhaps the heading 'Authority' would have been more accommodating.

Under 'Route', the Kington Railway is said to have reached Burlinjob 'near the present Stanner station' (p. 13), but this closed in 1958. The South Wales Railway did not join the Bullo Pill Railway at Hagloe Farm near Awre (p. 63), the line concerned being the Gloucester & Dean Forest Railway. On the Hereford, Ross & Gloucester Railway it is not correct to refer to 'Longhope (previously Hopesbrook)' (p. 70) because these stations were about a mile and a half apart. The Marple Tramway (p. 9) was a temporary line used while canal locks were being constructed, but no mention is made of the contemporary Blisworth Hill line, twice as long, built pending completion of the canal tunnel.

Under 'Opening', the small sample of post-1830 dates checked against reliable sources proved to be generally accurate, but the earlier lines in particular need mention. The first section of the Severn & Wye Railway to be opened was not from Mierystock to Bishopswood wharf in 1812 (p. 12) with continuation to Lydney in 1813 (p. 13); according to company records a section northwards from Lydney was being used in mid-1810, while the line to Bishopswood was not indicated as being in use until 1814, and was then still incomplete. Some opening dates are limited to the year, 'precise date uncertain', examples being the Plymouth & Dartmoor, for which Kendall gives 26 September 1823, the Kington, for which Clunker gives 1 May 1820, and the Festiniog, for which Boyd gives 20 April 1836. He also states clearly that the FR was not, as it is here claimed, the first narrow gauge railway in the world (p. 23). On the opening year of the Rumney Railway historians are divided between 1826 and 1836. The author chooses 1836 but Gordon Rattenbury confirms that this is too late: the bridge at Basseleg is dated 1826, and there is documentary evidence to show that a part of the line was in use by 1828 and that it was complete by 1831. In the case of the Heck Bridge line we are told in one place (p. 15) that it was never complete or opened and in another (p. 86) that it was opened throughout in 1826. The Stratford & Moreton Railway opening is given as 1826 (p. 15). John Norris has established the date as 5 September, with 11 February 1836 for the

Shipston branch. The maps in this book omit the line after 1845, but it was at work well beyond 1855.

The 'History' sections provide fertile grounds for errors — sometimes gross ones, e.g. 'The railway (SER) amalgamated with the LCDR in 1899 as the South Eastern and Chatham Railway Companies Managing Committee. This latter company was absorbed by the SR in 1921' (p. 36). Apart from the facts that the two companies did not amalgamate, that the Committee was not a company, and that the SR did not exist in 1921, there seems to be little wrong with the statement. The Seghill Railway is said to have been opened from Seghill to Blyth, 4½ miles, for mineral traffic on 1 June 1840 and for passengers in August 1841, and subsequently incorporated into the Blyth & Tyne Railway (p. 32). On p. 45, however, the Blyth & Tyne was opened from Blyth to Seghill, 4¼ miles, on 3 March 1847, no mention being made of the Seghill Railway, which according to Tomlinson and others ran from Seghill colliery south to the Tyne, while Blyth is roughly the same distance in the opposite direction.

Sometimes the condensation of quite complex history has led to incorrect or misleading statements, for example in the cases of Bailey's Tramroad, the Severn & Wye, the Newport, Abergavenny & Hereford, the Hay, and Lord Carlisle's Railways. There are many minor points, e.g. the South Wales Railway did not amalgamate with the Bullo Pill Railway in 1847, but purchased it in the period 1849–1853. The Richmond & West End Railway (p. 44) is not mentioned in H. V. Borley's *Chronology*, H. P. White's *London Railway History*, or the Index to L&P Acts. There was a Richmond Railway. Closure dates are frequently given, although they are hardly relevant in view of the book's title. This has also led to errors, e.g. the Aylesbury Railway is said to have closed to passenger traffic 2 February 1963 (p. 27), whereas Clinker's Register and the contemporary *Railway Magazine* both give 2 February 1953.

The 'Bibliography', it is said, 'is not intended to be comprehensive, but merely to indicate where further information can be obtained'. However, as the jacket suggests that the book 'will be a prerequisite for the historian' we might expect that reference would be made to the fullest researched and most accurate works. There are about 550 references distributed through the text, many of course identical. Some 34% are to either the *Regional History* or *Forgotten Railway* series, 17% are to MacDermot or Wishaw, and the rest to a fairly limited number of other works. There appears to have been an unhappy habit of relying far too much on works which, by virtue of their large catchment area, cannot give much detail about any particular subject, and elsewhere of picking the least satisfactory of two or more alternatives. For example Mr Thomas's books on the London & Greenwich and the Liverpool & Manchester lines are ignored, likewise Mr Messenger's Caradon & Looe work, Mr Marshall's High Peak and Mr Rattenbury's B&A Canal studies. The Kendal & Windermere bibliography consists of the note 'This is a line which has been neglected by historians' — thus Mr Mellentin's account (1980) is dismissed for a duck. Messrs Webb and Gordon on Lord Carlisle's Railways (RCTS 1978) is also overlooked. Some references which are quite sound are rendered less so by quoting their first edition years. Notable, if minor, omissions from the lines recorded include the Pentewan Railway and the Poldice Tramroad, both of which have a slightly better claim to be considered parts of the British railway system than Herne Bay Pier Railway and the Heck Bridge line, both of which are included.

The author does not seem to have been at home amongst the various terms used to describe track forms. Had he been so, the Kilmarnock & Troon Railway would not have been 'laid initially as a wooden plateway', 'The Middleton and Leeds

Plateway' would have retained its traditional and accurate title of Middleton Railway, and the description of the Rumney Railway would have stopped short at 'The original line was a plateway' without the addition of 'designed to carry vehicles with either flanged or flat tyres'. The term Tramway, used rather freely in this book in the titles of early lines, was rarely if ever used in contemporary documents, e.g. The Carmarthenshire Railway or Tramway (p. 10) was titled Carmarthenshire Railway or Tramroad in its Act.

There are some spelling errors — Boxmore for Boxmoor (p. 24), Chesterfield for Chesterford (p. 71), Whylam for Wylam (p. 8), Parr for Paar; Sirhowey appears nine times in one entry (p. 10), not only in the company title but in two reference titles quoted, both of which use Sirhowy. The system of showing the year of incorporation and of first opening in the form 1853/1838 is useful but it is tedious in the extreme to repeat this every time each company is mentioned; for example in 12 pages the GWR is mentioned 18 times in a subsidiary way but in all but one case the years appear, and fifty pages and sixty years later the reader is still having drummed into him that the GWR was incorporated in 1835 and first opened in 1838.

This book would have benefited greatly from a pre-publication reading by a railway historian (or better, several), a wider knowledge of the available literature, and advice from those with specialised knowledge — their absence has robbed the work of much of the lustre one would have expected of it. More could be written, but this will suffice to indicate that the book cannot be regarded as definitive. Nevertheless, it is a major compilation; much of it is correct, but a reference work has to be right in almost every particular — like Caesar's wife it must be above suspicion. I recommend that members see the book and communicate corrections (with verification) to the author as he requests, so that he can incorporate them into a subsequent edition or the continuation volume he envisages. In the meantime, it can be used as a first-pass review of the system's growth, or as a general guide to the period. HARRY PAAR

THE EXETER CANAL by Kenneth R. Clew. 112 pp. 255 mm x 190 mm 15 plates, 16 text illustrations including maps and plans, Index and List of Subscribers. Published by Phillimore & Co. Ltd., Shopwyke Hall, Chichester, Sussex PO20 6BQ, in 1984. ISBN 0 85033 544 2. £9.95

In producing this book the author has succeeded admirably in setting out, in its true context, the long and somewhat troubled history of navigation on the River Exe, the development of its associated canal — short and rather insignificant though it may seem — and their relationship with a projected system of West Country waterways only short lengths of which were ever built. However, John Trew's first short canal, no more than 3110 yards long, cut in 1564, set the pattern for our canal system. It was the first artificial waterway to make use of the pound lock, to overcome a mere six feet difference in level, and this has ensured for it a position unique in the history of our canal network.

Although control of the canal remained under local government for some four hundred years, various episodes in its history seem to demonstrate the timid and indecisive approach to management that was a recurrent theme in so many contemporary undertakings — the self-inflicted eclipse of Bristol as a major port being a good example.

The canal was cut through geologically poor country and soil erosion was a major problem, coupled with the consequently insecure foundations of the few engineering structures, yet no single person had the authority to take immediate remedial action when a failure occurred. This resulted in the waterway being closed repeatedly for long periods, a state of affairs which bedevilled the canal throughout its commercial life and was not improved by the coming of the railways. The fact that a 'ready made' solution has come to the rescue, namely the upsurge in interest in museums, industrial archaeology and pleasure boating, will hopefully ensure for the canal and its environment a more secure future than seemed possible towards the end of its commercial career.

This book reviews the vicissitudes that beset the Exeter Canal in a very readable manner and will surely become a recognised work of reference. Considerable research must have been carried out by Ken Clew and those who assisted him in so many ways, and the result is a credit to all concerned. It must surely find a place on the bookshelf of any serious canal historian. C. P. WEAVER

CANALS — A New Look. Edited by Mark Baldwin and Anthony Burton. 195 pp. 35 plates. 29 illustrations. Phillimore & Co. Ltd., Chichester. ISBN 0 85033 516 7. £15.

This book is an anthology of canal and waterway studies, with contributions by seven different writers. It is described as studies in honour of Charles Hadfield, and it naturally begins with a biography of that distinguished canal historian. It has the merit of being factual rather than adulatory, but here as in most cases the subject loses nothing by this treatment. A bibliography of Charles Hadfield's writings, principally on waterways but in many other fields also, follows. The author of the above, Dr Mark Baldwin, also contributes a bibliography on European Cruising 1833–1939, and one on British Canals 1623–1950, extending to sixty pages. Your reviewer has never attempted a compilation such as the above are, and they all, but particularly the last, strike him as astonishing productions, with a code indicating where each book listed is located.

The other authors are —

- Chapter 1 Canals in the Landscape, by Anthony Burton.
- Chapter 2 Engineering on the English River Navigations, by A. W. Skempton.
- Chapter 3 Push-Towing — Past and Present, by David Edwards-May.
- Chapter 4 British Pleasure Boating on the Continent (1851–1939), by P. A. L. Vine.
- Chapter 5 What is Conservation?, by Peter White.
- Chapter 6 Waterway Restoration: Public Money, private muscle, by Roger Squires.

The above contributions being on disparate subjects cannot readily be compared, and one or another will be preferred according to the reader's special interests, but all can be recommended as being written by experts in their fields. A few minor mistakes must always be extracted to prove that the reviewer has read the book. On p. 12 referring to the Oxford Canal, Marc Brunel and Charles Vignoles are given as the engineers responsible for the shortening of the Oxford Canal. Both I. K. Brunel and Charles Vignoles gave reports, but they were both paid off and not further employed. The scheme was designed and carried through by Sir William Cubitt, later the engineer of the Great Northern Railway.

Referring to figure 12, the canal in Leamington was never part of the Grand Junction. It was the Warwick & Napton, and later became for a few years one of the eleven canals owned by the Grand Union Company.

The 35 plates illustrate the different articles and with them make a complete, attractive and informative book. CYRIL T. G. BOUCHER

THE RISE AND FALL OF THE SEVERN BRIDGE RAILWAY 1872-1970 by Ron Huxley. 172 pp. + xii. 64 photo illus. plans, map etc. Card covers. Alan Sutton, Gloucester 1984. ISBN 0-86299-120-X. £4.95.

The Severn Bridge Railway was about five miles in length from Sharpness to Lydney, and its main feature was the bridge itself, as the author says, the first and only major railway bridge to span the River Severn. It was one of this country's great bridges, though not so well known as many others, the route on which it was situated being a relatively minor one. It had features in common with the first Tay bridge. As Harry Paar says in the introduction, whereas the Tay failed structurally and quickly the subject of this work failed commercially and protractedly.

Mr Huxley has presented us with a very thoroughly researched work which covers every aspect of the life and death of the undertaking. He commences with a chapter entitled 'The Schemes that failed 1810-1872', in which he describes the pre-history of the concern. It is interesting to note the number of proposals to get a railway across the Severn estuary, and that so many failed because of opposition by the Admiralty on the grounds of impediments to navigation. Considerable resistance was also forthcoming from the port of Gloucester, which envisaged a consequent loss of trade to and from the city.

He then goes on to relate the history of the construction, operation, modernisation, and ultimate demise of the bridge. The whole subject is covered in great detail from beginning to end. In particular, the engineering aspects are described as only an engineer (such as the author) can. Especially so are the findings which resulted from the trials of 'Castle' class locomotives over the bridge in 1956 with a view to upgrading the route for diversionary purposes. The ultimate dismantling is dealt with very fully, step by step.

Unfortunately some minor typographical errors have crept in, mostly mis-spellings. On p. 110 there is a slight confusion over the GWR route availability colour code. 'Uncoloured' and not 'yellow' engines were permitted to work over all routes.

The photographs, hardly any of which your reviewer had seen before, have reproduced well, bearing in mind the ages of many of them. The map is adequate, but a larger scale reproduction of the Severn Bridge Railway itself would have been an advantage.

This book is a valuable addition to the ever-increasing literature on the history of smaller railways and is highly recommended to all interested in the area. By present day standards the price is quite reasonable. NEIL PITTS.

THE CANAL BOATMEN 1760–1914 by Harry Hanson. 244 pp. 15 photo illustrations. 1 map. 1 diagram. Alan Sutton Publishing Limited, 17A Brunswick Road, Gloucester. ISBN 0 86299 067 X. £5.95.

The history of inland navigations is now well documented, mainly by the volumes in the *Canals of the British Isles* series edited by Charles Hadfield, but also with numerous studies of many – but not yet all – individual waterways. Relatively little has been published on topics. One thinks of D. J. Smith's book about the horse on the cut, J. H. Farrington's *Morphological Studies*, Avril Lansdell's *Clothes of the Cut*, J. D. Porteous's study of Canal Ports. On carrying companies and the inland trade relatively little material is available. For waterway engineering one has to turn back a century to Vernon-Harcourt's *Treatise on Rivers and Canals*. For every query one turns first to Paget-Tomlinson's *Complete Book of Canal and River Navigations*. His coverage is huge but the individual sections are necessarily brief (although very informative).

The last word will never be written on any subject, for history is alive, fed by additional facts and new analytical methods. Nevertheless, I suspect that it will be a long time before Harry Hanson's *The Canal Boatmen 1760–1914* is superseded. First published in hard-back by the Manchester University Press in 1975, the book has made a welcome reappearance in paper-back. Mr Hanson dug deep to prepare his MA thesis from which the book is adopted. The result is truly admirable. He destroys myths about the Gipsy origins of the boat people, the significance of the Number Ones, the drunkenness and immorality of the boatmen. He indicates the dangers of accepting uncritically Census of Population statistics.

The Canal Boatmen must surely be one of the new books that must be squeezed into one's Desert Island library.

I found it odd that in this new edition Mr Hanson makes no reference (at least that I found) to Mary Prior's *Fisher Row*, an account of the fishermen, bargemen, and canal boatmen in Oxford, published by the OUP in 1982, for she provides a rare localised insight into the lives of boatmen. Similarly, the bibliography refers to Gerard Turnbull's article on Pickfords in *Transport History* 1973, but not to his subsequent book about the firm, *Traffic and Transport*.

PHILIP DANIELL

LIVERPOOL'S HISTORIC WATERFRONT by Nancy Ritchie-Noakes. 192 pp. 220 x 275 mm Card covers with 141 illustrations (photographs, drawings and diagrams) and 2 maps. Published by HMSO 1984. ISBN 0 11 701188 6. £11.95

This book is based largely on a survey of Liverpool's South Docks (currently being developed by the Merseyside Development Corporation) undertaken by the Royal Commission on Historical Monuments and Merseyside County Council. It begins with a very full account of the development of the port and dock system, followed by a detailed account of each of the South Docks.

Other sections are devoted to Organization, Technical and Mechanical Aspects, and Buildings and Communications. Particularly useful are appendices which give statistical information on each dock in chronological order and a list of relevant Acts of Parliament.

Further research is also helped by the copious footnotes which relate the text to its sources. It is a most comprehensive work covering everything from warehouses

and other buildings to bollards and capstans. Railway and canal enthusiasts will be particularly interested in details of Duke's Dock, Manchester Dock, and Chester Basin, which were built as canal termini, the Dock Board's railway lines, and the Liverpool Overhead Railway.

Details of the rivalry between various railway companies in their bids for dock traffic and the development of the Leeds – Liverpool Canal and its terminus at Stanley Dock would have been interesting but this would have necessitated extending the scope of the book to include the North Docks – and the cost is already prohibitive to many. Nevertheless it is to be hoped that these details may eventually be covered in a second volume. S. ALASDAIR MUNRO.

THE RAILWAYS OF THE SOUTH YORKSHIRE COALFIELD FROM 1880 by A. L. Barnett. x + 132 pp. 75 photo illus. 22 maps in text, folding map. Railway Correspondence and Travel Society, 1984. ISBN 0 901115 58 4 £8.25.

There are few stories of railway development more convoluted than that of the opening-up of the South Yorkshire coalfield – here defined as an area with its extremities at Sheffield, Cudworth, Goole, Bawtry and Retford. This first detailed study of the region looks initially at abortive schemes of the mid 1860s and then begins in earnest with the formation of the Hull & Barnsley Railway. The 'scramble' of the early 1900s which culminated in the sensible formation of the various joint lines is analysed in depth, and the chronological treatment concludes with the opening of the Harworth branch as late as 1929.

Dr Barnett traces in workmanlike fashion the parallel development of the coalfield and the railways which served it. Company abbreviations and parliamentary machinations are not allowed totally to swamp the text, which includes welcome material on the personalities promoting the lines as well as such aspects as engineering features, accidents, the sparse passenger services and the obscure 'Paddy Mails'. There is also some charming minutiae as instanced by the objection of the Cyclists' Touring Club to the 1901 Wales & Laughton Light Railway on the grounds that the company should be compelled to carry bicycles on passenger trains!

Schemes which fell by the wayside receive almost over-generous attention, and it is here that the many maps really come into their own, separately depicting virtually every significant line as built together with associated proposals that did not materialise. The photographs are well chosen, and the book is produced to a standard which shows that society publications – once almost always dismal and uninspiring – can now more than hold their own with the offerings of their commercial brethren. DAVID JOY

THE SHEPPEY LIGHT RAILWAY by Peter A. Harding 32 pp. numerous photo illus., drawings, station plans and map. Published by the author at Mossgiel, Bagshot Road, Knaphill, Woking, Surrey. ISBN 0 9509414 0 9 £1.50 + 25 p&p.

This is the third book by Peter Harding on the lesser-known branch lines in Kent and it maintains the standards set by its predecessors.

The Sheppey Light Railway led a quiet existence. Having opened in 1901, it was just too late to be involved in the political warfare that characterized the activities of the LC&DR and SER before they joined forces under the aegis of the Managing Committee. It served the rural eastern part of the island and, as the author points out, after the last war, with improving road transport, it had unfortunately fulfilled its role. It closed completely in December 1950.

This book commences with a history of the railway, followed by a short chapter on Holman Stephens, who engineered the line. It then goes on to give a detailed description of the route with track diagrams and illustrations of all stations. There follow sections on motive power, rolling stock, train services, signalling, and closure. There is also a page of anecdotes entitled 'Life on the Sheppey Light' and finally a resumé of what remains to be seen — sadly, very little. The photographs are well selected and their reproduction is good.

Altogether a useful publication recommended to anyone with an interest in Sheppey or railways in Kent. NEIL PITTS

ALFORD & SUTTON TRAMWAY by George Dow. Card Covers. 32pp., 20 illustrations, 1 map, 2 diagrams. Published by the author. £1.80.

This is the second edition of a short book that was originally published by the Oakwood Press in 1947; in his Introduction, the author tells us that the First Edition retailed at 2/6d but can now be obtained for around £2.00. It is certainly a book that has deserved revival, since it tells the unique story of a country tramway which, in concept, anticipated the purposes of the Light Railways Act by over ten years.

The Alford & Sutton Tramway was opened in 1884 to connect Alford, on the East Lincolnshire line, with the coastal village of Sutton. It was a street tramway for the whole of its length, which rendered it an easy victim to the competing Mablethorpe loop lines; the Tramway ceased operation in 1889, after only five years.

This may appear to be a slight story but Mr Dow has made it a fascinating one, full of human detail and close attention to the facts. There are some outstanding illustrations of the locomotives and men, and the book finishes with some recent views of the line's route — all signs of this ill-fated project having been obliterated.

For its care, detail and spirit, this is a booklet to be recommended. A. GRAY

CANAL BOOKS: a guide to the literature of the waterways, by Mark Baldwin. 98 pp., 33 illustrations, card covers. M & M Baldwin (distributed by Shepperton Swan), 1984. ISBN 0 947712 00 3. £3.95.

A delightful book, treating all types of navigable waterway, that encourages the sins of envy and covetousness before it is open: the cover depicts bookshelves packed with volumes either never previously heard of, or else sought for years. More than 400 works are described or mentioned, and for most the current value is indicated — so in future bargains will be very hard to come by. (I suspect a printing error in the indicated price for the 1803 edition of Phillips. Are there others?)

For a more rigorous bibliography of twice the length the serious reader is referred to the forthcoming festschrift for Charles Hadfield, but *Canal Books* stands very well on its own. The principal topics include cruising & cruising guides, histories and engineering, boats and traffic, official publications, overseas waterways, and also fiction; in every section there are inevitably new discoveries.

A guide, as distinct from a bibliography, will be selective, but some oversights will be mentioned — a few because they seem surprising, and others because they are personal favourites. Taunt's guide to the Thames (mentioned) concludes with several canal itineraries. The most recent, oddly angled, biography of Robert Fulton is that by V. S. Virginskii (1963, translated 1976). We hear nothing of travellers who hitched lifts on working boats: two reports from the 19C have been reprinted in recent years; and Edmund Vale's *By crank & by shank* includes a journey along the GUC in May 1923.

Was there really a hiatus in books for children between Victorian tracts and the adventure stories of the 1930s? Alice T. Morris who in 1911 produced a picture story book called *Our holiday on a barge* would not normally be considered an innovator.

A section on 20C eccentrics would have been enjoyable: Eleanor Barnes (*As the water flows*) records her canoe trips in prose of undefinable shades of purple; and J. W. Herries (*Adventures in a coracle*) drifts down unnavigable rivers in a contraption made from egg boxes and balloon fabric, which is eventually swapped for a pearl of goodly price.

These comments are merely grumbles that an attractive book, with apposite illustrations, is not longer. As usual, Charles Hadfield (in the Foreword) has said it all already: 'Mark Baldwin has done scholars, librarians and enthusiasts great service; and I believe has enjoyed doing it'. DENNIS HADLEY

PASSENGER STEAMERS OF THE RIVER TAMAR by Alan Kittridge. 96pp, card covers, 97 photographs, 18 drawings, 1 plan, 1 map. Twelveheads Press, Chy Mengleth, Twelveheads, Truro, Cornwall. TR4 8SN. 1984. ISBN 0906294 10 X. £4.50.

The 24 miles from Plymouth to Weir Head make the Tamar our second longest river having passenger services which were started in 1823. Mr Kittridge tells the story of these, the people who ran and used them, and the boats (many built in local yards) which operated them.

Services to Foss Point, St Germans, Lopwell and Calstock, up the Rivers Tavy and Lynher and on Millbrook Lake show the extent of the use of waterborne transport. Racing to be first at a destination is not restricted to early railways. Here they raced to berth first at Plymouth. This led to faster steamers, navigational tactics, and the use of carrier pigeons despatched to Calstock to advise the 'winning vessel' and settle bets thereon!

This well illustrated and informative book covers the various river and ferry services in the Tamar Valley over 160 years. Details of fleet liveries, company fleets, and a specification of a Cremyll ferryboat are given in appendices. Interested readers can still travel on the river to Calstock, or across it by the ferries from Devonport to Torpoint and Cremyll. ALAN P. VOCE

SHORTER REVIEWS

TALES OF THE RAILS by Ernie Ross. Bristol Broadside, 110 Cheltenham Road, Bristol. 96 pp. Paperback £1.95.

This book consists of a number of short stories culled from the author's 40 years on the GWR, mainly as porter and guard. They are in the form of anecdotes, bringing to life the human side of railway life, but of little historical interest.

REFLECTIONS ON MUNSTER RAILWAYS, Limerick Museum, Limerick, Eire. 60 pp., card covers. IR£3.

This book is published by the museum in connection with an exhibition commemorating 150 years of Irish railways. It consists of articles about railways in the province, including some of the lesser-known ones, and a brief account of the railways associated with the construction of Ardnacrusha power station.

IRISH INDUSTRIAL RAILWAYS by Ian Biscoe. Published by the author at 21 Gatland Lane, Maidstone, Kent. 60p inc. p&p.

This is a new production which appears in the form of a journal, the second issue having recently been published. It covers a hitherto little written up subject and provides a considerable amount of information on the numerous industrial lines which have existed in Ireland.

SOLWAY STEAM by Stephen White. Caryl Press, 13 Bowman Street, Carlisle 40 pp. Paperback. £1.95.

This is another publication by Caryl Press and is the first serious study of the Silloth and Port Carlisle Railways. It traces the history of the two concerns from their origins to closure and is well illustrated.

BRITISH RAILWAY JOURNAL, Wild Swan Publications, £1.50.

This new publication has been launched to cater for those interested in the historical aspect of railways rather than 'modern image'. It contains some information on modelling. Issue No. 4 which is to hand contains articles on Symonds Yat station, GER 2-4-0's, LSWR steam railmotors, and GWR Clifton Down Auto trailers, illustrated with contemporary prints.

THE WISSINGTON RAILWAY by R. Dansley. Industrial Railway Society, 26 Lennox Road, Sheffield. 132 pp. No price quoted.

This is a very detailed history of the industrial line which joined the former GER Stoke Ferry branch at West Dereham. Full details of locomotives, rolling stock, sidings etc. are given.

TUNNEL END, Huddersfield Canal Society, 37 Edward Street, Oldham, Lancs 24 pp. 75p post free.

This is a short account of the background and history of the longest canal tunnel in Britain, which was completed in 1811 after 17 years in making. It played a notable role in the later construction of the adjacent railway tunnels. The booklet is well illustrated.

BRUNEL'S TUBULAR SUSPENSION BRIDGE OVER THE RIVER WYE. I. Waters (ed), Moss Rose Press, Chepstow. 32 pp., card covers., illus. £3.00.

A reprint of a pamphlet of 1856 the core of which is a description of the bridge from *ILN* 1852 with an account of the opening taken from 'Monmouthshire Beacon'. The introduction and postscript refer to other railway matters at Chepstow. Several old illustrations not in the original pamphlet have been added for this edition.

THE WORST JOURNEY IN THE MIDLANDS by S. Ilewellyn. Heinemann 1983.

An amusing book, by no means a history. It describes the author's passage from Llanidloes to Welshpool by canoe, thence in a rowing boat to Westminster via Worcester, Birmingham, Banbury and Oxford. The author was aware of the history of his route and reflects on it with refreshing humour — 'It is a reasonable bet that his Grace (Bridgewater) was putty in Brindley's hands, Brindley being a millwright of Scottish extraction who looks in his portraits as if he would have had no objection to taking his breakfast porridge frappé with barbed wire'.

METROPOLITAN ELECTRIC LOCOMOTIVES by K. R. Benest. £3.50. 180 pp. card covers. **UNDERGROUND** no. 13, **FROM QUAINTON TO BRILL. A HISTORY OF THE WOTTON TRAMWAY** by I. Melton. £3.00. 76 pp. card covers.

These two booklets have recently been published by the London Underground Railway Society. The former is the second edition of the work first produced in 1963. It covers the subject most comprehensively and brings the story right up to date. The second is a full history of the short branch line from Quainton Road to Brill.

Both are well researched, produced to high standards of accuracy and copiously illustrated. They are obtainable from the society at 26 Fishery Road, Boxmoor, Hemel Hempstead, Herts HP1 1ND.

NAMES AND NAMEPLATES OF BRITISH STEAM LOCOMOTIVES. no. 1 **LMS AND CONSTITUENTS** by A. Henley, Heyday Publishing Co. Kingsway House, 83 Crosby Road North, Crosby Merseyside 80 pp. £3.95 card covers.

This book details the names of all steam locomotives owned by the LMS including those of the constituent companies which continued in LMS service after Grouping. Well illustrated with photos of nameplates and of locomotives. There is also a comprehensive index of the names.

Correspondence

The Mexican Railway

Sir, — In a brief survey of chromo-lithography in *The Private Library*, Winter 1983, the author of an article on 'Collecting Colour-printed Books' remarks:

By the 1870s it was possible to produce a major work in Mexico, namely *Album del Ferracarril Mexicano*, 1878.

This sounds a most interesting book, particularly to admirers of the Fairlie locomotive. Has any member seen a copy? DAVID TEW

Research Materials

Sir, — From time to time members ask about the Society's research material. This was listed in *Journal* 27, No. 3 November 1981, pp 25–6. Generally that information is still correct, but with the following detailed amendments:

- 1) The former Society library material has been recorded in our Research Index.
- 2) The Baxter Collection of Maps. The indexing of the collection did not proceed. Michael Reading is looking into this job, and will welcome assistance from members in the area. The back-up references used by Bertram Baxter are still with Gordon Rattenbury; he has prepared a good index, and it is hoped to deposit the material in a more publicly accessible place shortly. The years have produced much additional authoritative tramroad literature, and it would be a task worthy of Tramroad Group members to update this index.
- 3) A collection of references to canal and railway photographic collections has recently been transferred to Hugh Compton, who intends to co-ordinate and amplify the information in order to assist members seeking illustrations for their work.
- 4) The Research Index. This, the most valuable reference asset the Society possesses, is in the charge of Geoffrey Knight (Research Records Officer) of 51 Amberley Road, Enfield, Middlesex EN1 2QZ. It now comprises approximately 9,000 cards 6" x 4" filed in four sections: Railways, Tramroads & Early Horse-worked Railways, Canals & River Navigations, and Miscellaneous. Within the first three groups the cards are ordered alphabetically by company or similar title. Enquiries are being made about copying the cards, possibly on microfilm or microfiche, or of putting the details into a data-bank, but there practical difficulties since many cards carry references on both sides and many are hand-written; there will undoubtedly also be considerable cost involved, and any member who can comment constructively on these problems should write to the undersigned.

N.B. New members may obtain copies of the *Journal* mentioned above, or photocopies of the article, from the Sales Officer, C. R. Thomas, 23 Beanfield Avenue, Green Lane, Coventry CV3 6NZ. Copies of the three Indexes to the *Journal* will give references to other articles on research matters; they are available from the same address. H. W. PAAR (Hon. Research Officer)

Metric Equivalents

Sir,—I am writing about John Denton's review of *Stephensons' Britain* in the July issue of the Railway and Canal Historical Society's *Journal*, and in particular concerning his comment on the 'publishers' paranoid insistence that the many dimensions each had to have its metric equivalent adjoining in brackets'.

It would seem rather to me that Mr Denton suffers from a paranoid anti-metricism: whilst I realize that probably the majority of readers will be at home still with miles/feet/inches/chains, etc., there must surely be a growing body of those who are no longer so. I for one, although in my mid-thirties, and admittedly living on the (fully metric) continent, am far happier with metrics; I frequently have problems, when reading railway books, in visualizing non-metric distances, especially chains, which terms I can vaguely remember from my school-days but which, to be quite honest, I would have to look up somewhere to understand.

As to providing a separate conversion table, this would surely greatly disturb the continuity of one's reading, having to refer to a table somewhere else in the book. I already find the practice, as used unfortunately by the *Journal* also, of putting notes at the end of a chapter or article, instead of at the bottom of the page, most distracting.

Lastly, what about the future (and future generations)? I understand that metrics are already being taught in British schools; will today's (or certainly tomorrow's) younger readers be even ABLE to understand non-metric units? And what will happen in, say, 50 or 100 years' time (as publishers and authors no doubt hope that their book will be around then still)? There is the risk that people will be completely unable to understand them.

I therefore welcome David & Charles' initiative, and sincerely hope that other publishers will follow it. L. DURHAM

The Kent & East Sussex Railway

Sir,—As records of the opening dates of the Kent & East Sussex Railway differ in modern publications, I arranged for contemporary records in Kentish newspapers to be consulted. I consider it advisable to put on record the following information.

Rother Valley Railway, opened Robertsbridge to Rolvenden (then called Tenterden) for goods 26 March 1900; for passengers 2 April 1900.

Opened Rolvenden to Tenterden Town, all traffic 16 March 1903. Name of Tenterden station changed to Rolvenden same date.

Name changed from Rother Valley Railway to Kent & East Sussex Railway 1 June 1904.

Opened Tenterden Town to Headcorn, all traffic 15 May 1905.

Members who have a copy of Clinker's Register of Closed Stations should amend date in Note 4268, page 179; 15.4.1903 to read 16.3.1903.

H. V. BORLEY

Books to come

Sir,—Mr Paar's interesting article on 'Books to Come' in the *Journal* for July 1984 prompts me to write and say that I am well advanced in research into the history of the Bishop's Castle Railway, using — inter alia — the sources mentioned. Much more material than is generally realised has survived for the BCR, and in addition to the pre-history of the line, its history can be dealt with in considerably more detail than it has been so far. The prolonged and repeated nature of the Company's struggles is quite remarkable.

I would add that I am helping Eric Tonks with research for a new edition of his *Snailbeach District Railways* booklet, and if anyone has unpublished material relating to either the SDR or the BCR I should be very grateful to hear of it, and would naturally refund any expenses. G. M. DAVIES

Sir,—Harry Paar's article 'Books to Come' in the July 1984 *Journal* was a very worthwhile exercise indeed, but perhaps I may presume to proffer another title. A 'Directory of Estuarine and River Crossings' would list the many ferries and 'ancient passages' that once existed all around the country, both near coasts and often well inland. Many existed until this century and now is an opportune time to record them.

One title that can be removed from the list — or at least marked as 'in preparation' — is 'The Bodmin & Wadebridge Railway'. Without being too immodest, I am sure that Mr Paar will be pleased to hear that I had thought of it already!

M. J. MESSENGER

Staggered Platforms

Sir,—In the letter from Mr H. W. Paar about the above subject he lists Cradley Heath as having staggered platforms.

A new station building and a new platform on the Up side (i.e. on the side of the line to Birmingham) were opened on 23 January 1984 (a week late). The new platform is on the west side of the level crossing. The one it replaced is on the east of the level crossing. H. A. LEE

Auctions

Sir,—I thought the members of the Railway & Canal Historical Society might be interested to know about Onslow's, a new firm of auctioneers holding specialist sales for collectors. Three auctions a year will be entirely devoted to the history of the Railways, the sales will contain Literature, Manuscripts, Maps, Plans, Pictures, Prints and Posters, Tickets, and Relics. They will be held either in museums or in places of related interest.

The first sale in 1985 will be in May/June at Brunel's Great Western Royal Hotel, Paddington, to celebrate his centenary. For further information about selling or obtaining a catalogue please write to Patrick Bogue, Onslow Auctions Limited, 123 Hursley, Winchester, Hants (0962 75480). PATRICK BOGUE

A Miscellany

The Evils of Water

When it met on 13 May 1845, the Traffic Committee of the Eastern Counties Railway was advised that 'The coke of No. 6 engine was being watered at this station [no doubt Shoreditch, the London terminus] today'. It was resolved that directions be given to the superintendent of the locomotive department to suspend the fireman with the engine if the orders prohibiting the watering of coke had been issued to him.

POOLE The omnibus which conveys the mails to the Junction was run into by another vehicle on the Hamworthy side of the bridge on Tuesday night, and disabled. Luckily, another trap from the London Hotels going to the Junction with passengers drove up just in time to pick up the mails and save the train. (*Western Gazette*, 12.9.1969 – 100 years ago.)

ILMINSTER During the past week men have been engaged in fixing the poles which are to convey the telegraph wires from the railway to the Post Office.

POOLE The railway works between Poole and Canford Bottom are progressing satisfactorily, and it is expected that the line will be opened in the course of next summer. The terminus will be in Seldoun Field.

SHAFTESBURY Mr George Carr Glyn, banker (brother of the Member for this borough) has been raised to the peerage. He will probably bear the title of Lord Wolverton, in association with the scene of his former active labours when Chairman of the London and North-Western Railway. (*Western Gazette*, 21.11.1969 – 100 years ago.)

200 years ago. We learn from Birmingham that on Monday the 6th inst. the inland navigator to that place was so far completed as to admit boats coming up to the town, for the first time, laden with coals. On this occasion the bells rang, the people kept holiday, and the banks of the canal were crowded with company, from morning till evening. The happy consequence of this noble undertaking is already felt in the reduction of the price of coals, from nine-pence to four-pence halfpenny per hundred. (*Western Gazette*, 28.11.1969)

100 years ago. TAUNTON Surveys are being made by the London and South-Western Company for a new line of railway between this town and Axminster. There is also talk of an endeavour being made – should this project be successful – to complete the Somerset and Devon line from Taunton to Ilfracombe. (*Western Gazette*, 28.11.1969)

100 years ago. WEYMOUTH In compliance with the terms of a memorial, the Great Western Railway Company have determined to erect on the Weymouth and Portland line an intermediate station, near the tunnel under the Wyke road. The spot was surveyed on Thursday, and the work is to be carried out immediately. (*Western Gazette*, 18.7.1969)

100 years ago. CHEDDAR The Cheddar Valley Railway was opened on Tuesday for public traffic. The Government inspector passed over the line on Friday, and expressed himself well satisfied with the substantial manner in which it had been constructed, and granted his certificate without any hesitation. The line, which is about nine and a half miles in length, passes through some beautiful scenery, and there is little doubt that the excursion traffic to the far-famed cliffs of Cheddar, will alone yield a very handsome revenue.

POOLE The branch line from CANFORD BOTTOM to the north end of POOLE, for which powers from Parliament were obtained so long since, has at length been commenced. It is generally expected that the line from POOLE to BOURNE-MOUTH (known as Mr WARING'S line) will be commenced in a few months, (*Western Gazette*, 8.8.1969)

(From A. M. Jervis)



All copy for the July *Journal* should be with the Editor by 15 March 1985 and must conform to the style-sheet published in the November 1981 issue. The top copy should be sent, not a carbon or a photocopy.

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