ROADS & ROAD TRANSPORT HISTORY CONFERENCE

NEWSLETTER No. 1 November 1991

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INTRODUCING THE ROADS & ROAD TRANSPORT HISTORY CONFERENCE

How better to begin the first issue of this Newsletter than with an account of the events leading up to the formation of the Roads & Road Transport History Conference - both for the historical record, and for the benefit of readers not already aware of its pre-history?

Its genesis can be traced back to discussions within the Railway & Canal Historical Society and an opinion survey of its members. A significant proportion of the membership declared a wish to widen their interests, to encompass other modes of transport that had operated in association or in competition with canals and railways. There was a view that too much transport history concentrated exclusively on one particular transport mode, without considering its relationship to other modes.

The separation between railway and road transport history is the most striking example. How many authors of railway branch line histories, for example, cross the divide and chronicle the rise of the competing bus and road haulage operators that led to the demise of the railway?

Within the field of road transport history itself, coverage is very uneven. At one end of the scale, the history of tramways has been extensively documented; but at the other end, it seems that students of the road haulage industry (what subject has greater significance in twentieth century economic history?), or of pre-twentieth century road transport, can be counted on one hand.

Yet for those wishing to broaden their interest, there is a problem of how to start. Where are the sources for information and research? How does one identify others with a similar interest, with whom to exchange ideas?

The outcome of these deliberations was an invitation from Professor John Hibbs to a number of individuals with varied interests and society affiliations, to attend a meeting in November 1987 at the City of Birmingham Polytechnic. It was there agreed that there was a need for a number of initiatives to encourage the study of roads and road transport history as a whole, and that a standing committee representing the various interested societies should be established to discuss ways of taking them forward.

At the next meeting it was agreed that the new venture should establish itself by mounting a national conference under the title of *The Roads & Road Transport History Group*. The R&CHS offered to undertake the administrative arrangements under guidance from the committee.

The conference, held on Saturday 16 March 1991 at Coventry Polytechnic, was attended by 78 delegates, including two Omnibus Society members from Sri Lanka and South Africa. Condensed versions of the papers presented at three of the four sessions are printed in the following pages. The concluding session took the form of a discussion, led by Professor Theo Barker, on road-rail freight competition, with valuable contributions from the audience, which included the venerable Charles Dunbar. In the course of this session, Richard Storey, Archivist of the Modern Record Centre at Warwick University, made a plea for more active work in searching out records of road haulage for preservation and hauliers for interview, and the compilation of a database on operators, using the voluminous information provided by the trade press as a starting point.

At the end of the conference, it was acclaimed to have been a great success and an event worth repeating periodically. With this encouragement, the hitherto informal committee decided that the group should now be formally constituted, with a change of name to *The Roads & Road Transport History Conference*. A draft constitution has been prepared for ratification by the founder members at the first business meeting of the R&RTHC. The Conference's objective has been defined as "To promote, encourage and co-ordinate the study of the history of roads, road passenger transport and the carriage of goods". Full (corporate) membership will be open to transport museums, libraries, etc., as well as to societies, but individuals will also be welcome to join as non-voting associate members. Subject to approval at the first meeting, Gordon Knowles has agreed to be Secretary.

THE NEXT NATIONAL ROAD TRANSPORT SYMPOSIUM

The acting committee has already initiated proposals for a second all-day symposium. The Tramway Museum society has agreed to host it at the Crich Tramway Museum, provisionally on 6 November 1993.

THE NEWSLETTER

Circulation of useful information is seen as a primary means of achieving the Conference's object. The acting committee has, therefore, decided to institute the publication of this newsletter, initially twice yearly. The Editor hopes to commission the occasional short, perhaps provocative, article to open our eyes to neglected fields of study. However, he earnestly requests contributions from readers; for example:

- notes on collections of historical material and recent acquisitions;
- details of research projects in progress;
- requests for information;
- new publications, particularly those of a more obscure nature which might otherwise not come to readers' notice;
- forthcoming events;
- anything which other readers might find useful.

Corporate members will be responsible for distributing the Newsletter within their own membership, as they see fit.

LONDON CARRIERS AND COACHMEN IN THE LATE 17TH CENTURY:

a condensed version of the paper read at the 1991 conference by Dorian Gerhold

It was once thought that road transport before the turnpikes was so unreliable and expensive that it was used when absolutely unavoidable, and that the roads were virtually impassable in winter. Research over the last twenty years has shown, on the contrary, that there was a widespread network of carrying services by waggon and packhorse long before turnpiking, and that people often chose to use them, even over long distances and when water transport was available, because their greater speed and reliability were worth the extra cost. By the end of the 1650s there was also a substantial network of stage coaches, centred on London.

Two lists of London carriers and coachmen published by Thomas De Laune in The Present State of London (1681) and Angliae Metropolis (1690) form a unique source for examining this early road transport. For each service they state the town carried to and from, the carrier's or coachman's name, whether packhorse, waggon or coach, the inn used in London, and the days in and out of London. They are the only lists prior to 1786 which give coachmasters' names, and using the names of about 600 carriers and 214 coachmen it is possible to gain access to other types of record, notably probate inventories and Chancery proceedings.

Each list records about 345 carrying services a week, and every English county except Cornwall, Cumberland, Northumberland and Durham had some, as did Flintshire and Monmouthshire. Packhorses were by no means the dominant form of carriage, since about half of all services were conducted by waggon. Some services, such as Thomas Morris's weekly Exeter to London packhorses, are particularly well recorded in Chancery proceedings. Because Morris quarrelled with his innkeeper at Bridport, five months of their accounts survive in full, for August 1687 to January 1688. They show Morris sending usually eight or ten but occasionally as many as 14 or as few as six packhorses to London every week. They also show how regular the service was; sometimes the packhorses arrived a day late, but they never missed their weekly journeys, despite part of the account falling during the winter. Three similar accounts for other carriers, all using waggons, demonstrate similar regularity.

The size of firms is best measured by their stock of horses, for these were by far a carrying firm's largest cost. Horse provender alone accounted for about two-thirds of total costs. The horse dominated the economics and operating practices of carrying firms, and indeed of all horse-drawn transport. Probate inventories show that long-distance carriers by packhorse typically had about 15 horses available per weekly journey; no doubt they could also hire extras when needed. An example is John Yeates of Holmeskales, one of the four Kendal carriers, possessing '13 horses with their furnature for the roade' (worth £80) in 1686. The four carriers conducted successive journeys, each setting off every four weeks and covering about 26 miles a day. Short-distance packhorse carriers generally had fewer horses - from four to eight in the recorded examples. Waggon users tended to have a single team and waggon for each weekly journey, such as Henry Harwood of Aylesbury's six horses and a waggon in 1689. There were, however, some larger firms, particularly in cloth towns, such as one with 39 horses and six waggons at Trowbridge in 1709.

De Laune seems to have had more difficulty tracking down the coachmen. Nevertheless, he did record 214 of them providing 420 services a week. Short-distance services predominated and only 119 were to places more than 40 miles from London. Unlike the carriers, who always resided in or near the principle town served in the country, there was no clear pattern among the coachmasters. Some coaches, such as the Exeter coach, were at times wholly owned by Londoners, whereas others were wholly owned by people from the country destination. Even at this early stage, many innkeepers ran coaches, and carriers were often involved too.

The most important difference between carrying and coach services was that the coachmen were seeking to go faster. Raising the speed of horse-drawn transport beyond the optimum two miles an hour was extremely expensive, especially on poor roads and in winter. Consequently, speeds were not at first particularly fast. The Exeter coach seems to have been typical in covering about 44 miles a day in summer, though there were also some 'flying coaches' which covered more miles in a day by means of longer hours on the road and occasional change of horses. It is not true that coaches ran only in summer, as has often been stated, but flying coaches ceased flying and other coaches relaxed their timing - in the Exeter case from four days in summer to six days in winter. High costs and unimpressive speeds limited the growth of services. Not until the roads were sufficiently improved to bring down the costs of greater speed would the number of coach services substantially increase.

Research is continuing on the carriers and coachmen of 1681 and 1690 with the intention of republishing the two lists with an extended introduction.

[Footnote : Dorian Gerhold's Road Transport in England before the railways : Russell's London flying waggons has been accepted for publication by Cambridge University Press.]

RECENT TRAMWAY RESEARCH:

a summary of the paper read at the 1991 conference by Winstan Bond

The author said that tramway research is now resulting in better written and more widely focused publications. Many of these deserved a wider audience than tramway enthusiasts. For instance, the history of Leeds was being published in several volumes by Jim Soaper. Not only horse, steam and electric tramways, but also horse omnibus lines, carters and local railway services were considered and illustrated with bar charts and other graphics showing the frequency of service from 1835 onwards.

Recent research in the USA by academics is very interesting. There are two main trends. The politics of urban transport showed how business elites backed trams, then transferred their allegiance to the automobile and more recently in some cases to rapid transit systems. The effect of the tram on the dynamics of suburbanisation is also covered by numerous academic works.

In the UK, however, the norm is for town planning histories to treat the effect of the tram lightly. For instance Gordon Cherry in *Cities and Plans*, a 300-page book published in 1988, states that "tramway electrification helped marginally" in spreading commuter distances. Even those not particularly interested in trams would possibly be puzzled to find that a once major and dominant mode of public transport helped only marginally in spreading suburbanisation.

The author looked at the need for the separation of the place of work from the home in the late 19th century. The author illustrated this with quotations from bodies such as the National Housing Reform Council in 1903 showing that they regarded the establishment of electric tramways, radiating from the centre and extending in all directions beyond the boundary of the district, as being an essential tool in bringing relief from overcrowding.

The author then showed by statistics the effect of the tramway by the increase in journeys per head of the population after they were electrified and longer and longer penny fare stages introduced.

As a refinement, the author showed graphs demonstrating how the American five cent flat fare with a free transfer, as compared with the UK penny stage fare, appeared to enable cities to develop beyond their former city limits.

The author called for further detailed research into specific districts showing how the introduction of horse and later electric tramways affected the pattern of suburbanisation.

[Winstan Bond is Treasurer of the Tramway Museum Society.]

BUS HISTORY - THE NBC COMMEMORATIVE VOLUME AND THE NBC ARCHIVES:

a summary of the paper read at the 1991 conference by John Birks

The problems of producing an account of the life of the NBC from 1968 to 1989 were outlined together with the solutions applied.

The fact that the NBC was being wound up and its companies sold - in which process the editorial team were also engaged - resulted in only a very short time being available, some two years for the four members of the team to complete the task. To meet this situation it was decided to produce a commemorative volume which would be a quarry of facts, utilising where possible definitive NBC sources, as for example the submissions to the NBC Board which led to the development of the Double Deck Rapide Express service network and the development of the minibus. It was considered that insufficient time had elapsed to enable a definitive perception of the NBC to crystallize, for which the passage of time provides the essential ingredient.

However, one great advantage which the team possessed was the ability to divide the work between them once the basic structure of the book had been agreed. Thus the first three chapters which trace the origin of public ownership in road passenger transport, relationships with central government and local authorities, and other operators was undertaken by one member of the team. While this was proceeding the remaining members (3) were completing the chapters dealing with :- Financial Performance; Organization and Structure; Operations; National Products - Express Holidays and Travel Agencies; Staff and Trade Unions; Engineering and Properties. One member, who had extensive responsibilities for privatisation, was responsible for the final chapter which dealt with this matter, together with de-regulation of bus services.

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Another advantage which the team enjoyed was the ready response from both serving and former NBC officers and others in the PSV industry and government to be interviewed on matters with which they had been concerned in the life of the NBC's history. Some fifty interviews were thus conducted.

The availability of established works of reference, and agreements from authors and publishers for quotations to be included in the text, was of great value. During the compilation of the book we became aware of the need not only in our work, but generally, to widen the context of transport history by reference to political autobiography and even party manifestos.

The need to publish financial and operating statistics and to cover the lives of the 219 subsidiary companies by noting the changes in their ownership and title was admirably met by the work of our team member, the late Keith Dickie, and, from the wider world of enthusiasts, by the researches of Michael Dobbs.

Whilst accepting that there was nothing new in joint authorship, as evidenced by the history of Midland Red by Gray, Keeley and Seale and by the history of the National companies by Crawley, MacGregor and Simpson, it was suggested that this approach, together with that of interviewing appropriate personages, could be promoted by the Roads & Road Transport History Group to put the history of the road passenger industry in a wider social, economic, and business setting. This suggestion could, perhaps, best be approached in the manner adopted by Michael Freeman and Derek Aldcroft in their Atlas of British Railway History.

Recognising that not all enthusiasts are activated by the wider horizons of the political, business and social aspects of the road passenger transport industry, and conscious of the fact that many are driven by their enthusiasm to pursue the more general approach to company history with its emphasis on rolling stock, services, depots and personalities, it was suggested that a joint enterprise by interested members from the appropriate railway, tram, trolleybus, and bus societies could be undertaken to produce a history of the British Electric Traction Company (BET), whose centenary is rapidly approaching in 1996.

A further plea contained in the address drew attention to the need for an "Ottley of the bus industry" (A Bibliography of British Railway History by George Ottley).

The talk concluded with an account of the archiving of the NBC HQ and Regional Office papers that have been lodged with the Public Record Office (PRO). An account was also given of the work of the Kithead Transport Trust at Droitwich which has archived many of the papers of the subsidiary companies of NBC and also some of the material from the NBC which did not qualify for passing to the PRO. A final plea was made that the Roads & Road Transport History Group should take steps to ensure in this computer age that adequate safeguards were being taken amongst the supporting societies to preserve the bus history of tomorrow.

[John Birks is Chairman of the Kithead Transport Trust and a member of the Omnibus Society and R&CHS]

THE R&CHS BIBLIOGRAPHY PROJECT

A literature search is usually one of the first steps to be taken when starting any historical study. Where they exist, subject bibliographies are therefore one of the most useful research aids.

The bibliographies specifically related to road transport history are:

 BALLEN, DOROTHY. Bibliography of road-making and roads in the United Kingdom. London: P.S. King, 1914. pp. xviii,281. [Studies in economic and political science, Bibliography no. 3.] An extensive bibliography of both books and periodical literature,

including Parliamentary publications other than Local Acts. Includes some material on road traffic.

 HIBBS, JOHN. The history of the motor bus industry: a bibliographical survey. Journal of Transport History, new series, vol. 2 (1973-4) pp. 41-55

270 books and articles listed in appendix.

Books on tramways published up to 1980 are comprehensively listed in

OTTLEY, GEORGE. A bibliography of British railway history. 2nd edn. London: HMSO, for Science Museum/National Railway Museum, 1983. pp. 683. ---Supplement. 1988. pp. 544.

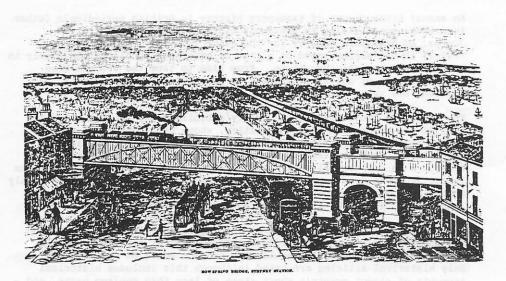
An annual bibliography of transport history in British periodicals (other than those specialising in transport history) was published in the *Journal of Transport History* for the years 1950-78. For the years 1950-73 it was supplemented by a list of government publications likely to become of historical importance. From time to time the *JTH* has also included lists of university theses on transport history subjects, covering the years 1911-80.

The Railway & Canal Historical Society's bibliography project began in 1985 at the suggestion of George Ottley, whose bibliography of railway books, pamphlets and theses has long been indispensable to railway historians. However, the project covers inland waterways and road transport as well as railways, and periodical literature as well as books (about 300 periodicals are regularly scanned). This wide coverage is only possible because it is a cooperative project, involving some twenty individuals, including a couple of non-R&CHS members.

For books and pamphlets, the aim is comprehensive coverage, maintaining the standards set by George Ottley. For periodical articles, however, selectivity is essential otherwise the project would be unmanageable. Only historical articles are noted (although this includes historical accounts of recent events); short items of less than one/two pages, and "lightweight" articles derived from material already published, are omitted.

An annual bibliography has been published in the *R&CHS Journal* each year since 1985. The Road Transport section from the bibliography for 1990 is appended. Earlier material has also been collected and it is hoped that a cumulative volume covering the years 1981-90 will be published in due course. For the occasion of the Coventry conference, the R&CHS produced a small number of typescript copies of a 38-page Preliminary Bibliography of the history of roads and road transport from the medieval period up to c. 1900, extracted from the project's computer files. Although far from 'comprehensive, it is the most extensive bibliography of twentieth century books and articles on this subject so far published.

Any reader who feels able to assist with the road transport bibliography is invited to contact Grahame Boyes (address on page 1).



A railway or road? The Commercial Road Stoneway opened in 1830 from West India Dock to Berner Street (now Henriques Street), Whitechapel. The "rails" were 18 in. wide granite slabs, with a 4 ft horse path of granite setts between. The engineer was James Walker, with G.P. Bidder as Superintendent of Works. This illustration of the Stoneway passing under the Bow Spring bridge of the London & Blackwall Railway at Stepney is from the Illustrated London News, 1851.

SECTION D ROAD TRANSPORT

DB ROADS AND ROAD TRANSPORT AT PARTICULAR PERIODS

DB1 Pre-history and Roman

- 848 COLES, J.M. and B.J. The Sweet Track date. Antiquity vol 64 (1990) pp 216-20. Somerset Levels trackway dated by dendrochronology to 3806 B.C.
- 849 EDGE, RON. Old Wirral highways and the ancient Birkenhead Bridge 3000 B.C. Highways & Transportation vol 37 no.4 (Apr. 1990) pp.31-3.
- 850 MARSHALL, ALISTAIR. Possible Roman/medieval road at Fulford. near Withington, Gloucestershire. Trans Bristol & Gloucestersh Arch Soc. vol.107 (1989) pp.210-17.
- 851 THORNTON, ARTHUR. The Roman road between the forts at Ambleside and Kendal. Trans Cumberland & Westmorland Antiq & Arch. Soc. vol.89 (1989) pp.37-40.

DC ROADS AND ROAD TRANSPORT IN PARTICULAR REGIONS OF THE BRITISH ISLES

DC1a England-Southern England

852 DALE, A. The great road to London from Tewkesbury. Gloucestersh. Hist. vol.2 (1988) pp.10-11.

DC1b England-South West region

853 HOUGHTON, ANDREW. Before the Warminster bypass: the story of our local roads. Warminister Hist Soc., 1988. pp. 96. Chiefly turnnikes.

DC1d England-West Midlands region

854 BOWES, J. P. The old Banbury to Warwick road, with particular emphasis to its usage during the English Civil War 1642-1645. Cate & Cockherer vol. 11 (1988-) pp. 113-15. Identification of its roate.

DC1h England-North West region

855 YEADON, H. Early development of the motorway system in the North West. Highways & Transportation vol.37 no.4 (Apr. 1990) pp. 19-21.

DC4 Ireland

856 JENKINSON, KEITH A. Exiles in Ulster. Bradford: Autobus Review/Iruh Transport Trust, 1990. pp. 72. Many photos. Second hand buses sold from Britain for use in Northern Ireland since 1942.

DC5 Isle of Wight

857 P.S.V. CIRCLE. Fleet history of Southern Vectis Omnibus Company Limited. Pt 1, 1921 to 1960. 2nd edn. London, 1990. pp.63.[12] pl. Typescript. [Publication 2PK10.]

DD ROAD ENGINEERING

DD2 Road construction and maintenance; tunnelling

- 858 DOUGHERTY, HUGH. Doon below the watter. Statt Mag. n.t. vol. 134 (1990-1) pp. 145-50. History of the Glasgow Harbour Tunnel, opened 1895. Road vehicles were transported by lifts between the surface & the tunnel.
- 859 GOODING, BRIAN. R. Dingle & Sons, contractors, Stoke Climsland, Cornwall. Old Glory no.7 (Mar-Apr 1990) pp. 36-40. Road making contractors.
- 860 WHITEHEAD, R.A. The roadmakers. Vintage Commercial Vehicle Mag. vol. 5 (1989-90) pp.130-3,176-9,224-7, vol.6 (1990-1) pp.65-7,94-8,164, vol.7 (1991-2) p.4. History of road construction techniques aince mid-19th cent

DD3 Architecture and design: bridges, viaducts, tollhouses, milestones

- 861 JAMES, J.G. Some steps in the evolution of early iron arched bridge designs. Neucomen Soc Trans. vol.59 (1987-8) pp.153-87.
- 862 JAMES, J.G. Thomas Paine's iron bridge work 1785-1803. Neucomen Soc Trans. vol 59 (1987-8) pp.189-221.
- 863 MARKWICK, A.T. Brannon's bridge at Axmouth. Devon Arch Soc Proc. no.46 (1988) pp.153-6. Early concrete bridge, built 1877.
- 864 McKEAGUE, PETER. Girtford and Biggleswade bridges. Bed/ordsh Mag. vol.22 (1989-91) pp. 12-14. Two 18th cent. bridges built by the Biggleswade to Alconbury Hill Turnpike Trust and the Commissioners of the Ivel Navn.
- 865 McKEAGUE, PETER. Tempsford bridge. Bed/ordsh Mag. vol. 22 (1989-91) pp. 72-5. Bridge carrying the Biggleswade to Alconbury Hill Turnpike over the Ouse Navn.
- 866 McKEAGUE, PETER. Radwell, Felmersham and Oakley bridges. Bed/ordsh Mag. vol.22 (1989-91) pp.100-3. Three stone arch bridges over the R.Ouse, 1766-1818.
- 867 McKEAGUE, PETER. Bedford bridges, old and new. Bedfordsh Mag. vol. 22 (1989-91) pp. 165-8. The 1813 bridge & its predecessor over the R.Ouse.
- 868 McKEAGUE, PETER. Turvey bridge. Bed/ordsh. Mag. vol. 22 (1989-91) pp. 206-9. Medieval bridge over R. Ouse.
- 869 McKEAGUE, PETER and COOK, MARTIN. Stafford bridge. Bed/ordsh.Mag. vol.22 (1989-91) pp.228-30
- 870 NEALE, JOHN. Longstanding bridges around Launceston. Old Comutal vol. 10 pt 10 (1990) pp. 497-502. Brief details of selected road bridges.

DE ROAD ADMINISTRATION

- 871 ENGLAND, RALPH W. John Howard, road expert. Bed/ordsh Mag. vol.22 (1989-91) pp. 246-53. Parish road surveyor at Cardington 1764-5, & Commissioner of the Bedford-Hitchin-Girtford Bridge Turnpike 1757-85
- DF1 Turnpike trusts (See also nos.853,865.)
- 872 BARFOOT, JAMES. An investigation of an eighteenth-century Montgomeryshire turnpike and its origins. Montgomerysh Collns vol.77 (1989) pp.73-80. Machynlleth-Aberystwyth road.
- 873 BOYES, JOHN. Trouble at the Stag Gate. Essex Countryside vol. 38 (1990) pp. 18. The Epping & Ongar Turnpike Trust in the 1790s.
- BOYES, JOHN. A season for the Bald Faced Stag. Essex Countryside vol 38 (1990) pp.61. 874 The Epping & Ongar Turnpike Trust in the early 19th cent.
- BUCHANAN, B.J. The turnpike roads: a classic trap? JTH 3rd ser vol.11 no.2 (Sep. 1990) pp.66-72. 875 A critique of paper by J.Ginarlis and S.Pollard - see entry no.26.
- COX, CHRISTOPHER. Turnpike roads in the Stroudwater area in the eighteenth century. Gloucestersh. Soc. for Indl 876 Arch Jnl 1990 pp. 14-25.
- 877 LOWE, M.C. The turnpike trusts in Devon and their roads: 1753-1889. Devonsh Assocn Reports & Trans vol. 122 (1990) pp.47-69

DF ROAD VEHICLES AND ROAD VEHICLE ENGINEERING

878 BOULTON, JIM, with PARSONS, HAROLD. Powered vehicles made in the Black Country. New edn. (n.p.) Black Country Soc., 1990, pp.112, 103 illns. Short accounts of 58 vehicle manufacturers, mainly of motor cycles & cars, but incl.9 bus & lorry builders.

DF2 Steam powered vehicles (other than trams)

879 MARRIAGE, JOHN. National steam. Essex Countryside vol. 38 (1990) pp. 4-5. Short history of Clarksons Ltd, Chelmsford, manufacturers of steam buses.

DF3-4 Motor powered goods and passenger vehicles

- 880 BALDWIN, NICK. The illustrated history of Seddon Atkinson trucks & buses. Sparkford Haynes, 1990. pp.128. Many illns. [A Foulis motoring book.]
- 881 BALDWIN, NICK. A.E.C. in the '30s. Vintage Commercial Vehicle Mag. vol.6 (1990-1) pp.46-9,124-5.
- BALDWIN, NICK. The Burford story. Vintage Commercial Vehicle Mag. vol.6 (1990-1) pp.103-5,126-8,165 882 Biographical account of Henry George Burford (1867-1943), motor vehicle engineer/manager. Incl.Milnes-Daimler Ltd (1902-14) and H.G. Burford & Co. (1917-35), manufacturers of buses & lorries.
- 883 BALDWIN, NICK. Ryknield: an almost forgotten make. Vintage Commercial Vehicle Mag. vol.5 (1989-90) pp. 206-8. Ryknield Motor Co. Ltd, lorry & bus chassis builders, Burton upon Trent, 1903-10
- 884 BOOTH, GAVIN. A decade of change at Alexander. Buses year book 1991, pp. 59-74. William Alexander bus body designs, 1980-9.
- BROWN, STEWART J. The world's best-selling double-decker. Buses year book 1991, pp.43-58. 885 History of the Leyland Olympian bus.

DF3 Motor powered goods vehicles

- 886 BALDWIN, NICK. Latil: pioneer of front wheel drive. Vintage Commercial Vehicle Mag. vol.5 (1989-90) pp.46-9
- 887 VANDERVEEN, BART H. (ed). Scammell vehicles. Repr. of 1971 edn. Nynehead. Roundoak Publing, 1990. pp.64. Photographic record of products of Scammell Lorries Ltd.
- 888 WELLS, MIKE. Levland's Kingston production. Vintage Commercial Vehicle Mag. vol.5 (1989-90) pp.126-9,182-5,204, vol.6 (1990-1) pp.4-5.45.

History of lorries manufactured at Leyland's factory at Kingston, Surrey, 1919-51.

- 889 WELLS, MIKE. The Thornycroft Trusty. Vintage Commercial Vehicle Mag. vol.6 (1990-1) pp.14-17,44,56-9,84-5,124,152-4,164-5, vol.7 (1991-2) pp.4-5. History of this lorry type
- 890 WELLS, MIKE. The B.M.C. models. Vintage Commercial Vehicle Mag. vol.6 (1990-1) pp.86-91. British Motor Corpn commercial vehicles, 1955-70.
- 891 WELLS, MIKE. Seddon rigid multi-wheelers. Vintage Commercial Vehicle Mag. vol.5 (1989-90) pp.214-19 Seddon Diesel Vehicles Ltd lorries, 1956-76.

DF4 Omnibuses and coaches

METRO Cammell Weymann: the demise of another great British manufacturer. Buses Extra no.63 (Feb-Mar. 1990) 892 pp 12-23

Brief history of this bus & coach body builder, 1932-89.

- 893 MILLAR, ALAN. The decline of the British bus. Buses year book 1991, pp. 27-42. Charts the decline of Britain's bus manufacturing industry
- 894 OKILL, R.D. Gilford memories revived. Vintage Commercial Vehicle Mag. vol.5 (1989-90) pp.228-9. Some historical details of Gilford Motors, bus manufacturers at High Wycombe, 1927-33
- TOWNSIN, ALAN. Bus profile: Routemaster. London Ian Allan, 1990. pp.96. Many photos, incl.32pp col. 895 History of the development of this London Transport bus type, incl. its use outside London
- TOWNSIN, ALAN. Buses from Basingstoke. Vintage Commercial Vehicle Mag. vol.5 (1989-90) pp. 68-73,209-11, vol.6 896 (1990-1) pp.9-11.85 History of Thornycroft buses.

DF6 Trams and tramway equipment

897 KELLY, NICK. The Wilkinson steam tram. Old Glory no 8 (May-June 1990) pp.40-3, no.9 (July-Aug.1990) p.49 Tram engines built to the design of Wm Wilkinson, Holme House Foundry, Pemberton, Wigan, 1881-96.

DG **ROAD TRANSPORT ADMINISTRATION AND OPERATION**

DG1 Transport of goods

- DG1a Animal-powered goods transport; drovers, packhorses, carriers (See also no.379.)
- ROR CLARK, EDWARD N. The cart horse on the quay, the story of the Liverpool cart horses, Garstang, Countryside, 1989 pp.48.
- 800 FIELD, VIRGINIA. The old drove roads & their drovers. Trans. Newbury District Field Club vol. 13 (1989) pp.6-13.
- 900 HUGHES, PHILIP GWYN. Wales and the drovers. With intrdn by Richard Moore-Colyer, Repr. of 1943 edn. Carmarthen: Golden Grove, 1988. pp.xxii, 104, col. frontis. 22 illns. The role of drovers in expanding social horizons & within the U.K. economy. Ch.4, 'Tolls and tracks' describes the drovers' routes into England.

DG1b Steam and motor transport road haulage

DEARDEN, S. Road freight transport: social cost and market efficiency. Royal Bank of Scotland Review no. 168 (1990) 901 pp.28-42.

Social & economic costs of road freight transport, with some recent historical content.

902 DEARDEN, S. Road freight transport: social cost and market efficiency. Royal Bank of Scotland Review no. 168 (1990) pp 28-42.

Social & environmental costs of road freight transport by heavy goods vehicle: U.K. experience in a European context, with some recent historical context.

GOODING, BRIAN. Thomas Wood & Sons Ltd. Old Glory no.10 (Sep-Oct.1990) pp.30-3, no.11 (Nov-Dec.1990) 903 pp.52-6

Engineers & general contractors of Crockenhill, Kent since 1861. Incl. their road making & haulage businesses.

- 904 INGRAM, ARTHUR. London's lorries: a pictorial review of road transport in the Capital during the '50s & '60s. Nynehead Roundoak Publing, 1990. pp.144. 285 photos.
- SANDERS, MAURICE. Characters of Wood, WurliTzer & Wesley: Maurice Sanders looks back. Baldock: Cortney, 905 1990. pp.x,186. Many photos.

Further stories of road hauliers, particularly in the round timber trade.

- 906 STOREY, RICHARD. A Kenilworth haulage firm. Kenilworth Hist. 1990 pp.7-9. H.& H. Transport Ltd in the 1940s.
- 907 THOMPSON, PETER. Sharing the success: the story of N.F.C. London: Collins, 1990. pp.224. Account by the company's Chairman of the development of the nationalised National Freight Corpn since 1972, the employee buyout in 1982, & the subsequent flotation of the private N.F.Co. on the Stock Exchange.
- 908 TUCK, BOB. Robsons: the history of the famous name in distribution. Nynehead: Roundoak Publing, 1990. pp.96. 150 photos.

History of Robson's Distribution Services Ltd, formerly Robson's Border Transport, haulage contractor of Carlisle.

DG2 Transport of passengers

DG2a Horse-drawn coaching

- 909 POOLE, R.A.K. Horses and coaching in and around Bridgnorth. Jackfield. Orchard Press, 1988. pp.10.
- DG2b-2d Omnibus, trolleybus and tramway operations (See also no.6.)
- 910 EYRE, MICHAEL and HEAPS, CHRIS. The Manchester bus. With addtl material by Alan Townsin. Glossop Transport Publing, 1989. pp. 384,fldg route map. Many photos. Detailed history of Manchester Corpn Transport motor & trolleybus services, 1906-69. With fleet list.

911 HEALEY, KEN. Looking back at buses, trams & trolley buses around Manchester. Altrincham: Willow Publing, 1990. pp.72.

A photographic record.

- 912 HYDE, W.G.S and OGDEN, ERIC. Stalybridge, Hyde, Mossley & Dukinfield Tramways & Electricity Board. Glossop: Transport Publing/Manchester Transport Museum Soc., 1990. pp. 96. [4] col.pl. Many photos, tramway route map, bus fleet list. [British bus, tram & trolleybus systems, no. 12.] Cover title: S.H.M.D. Joint Board. A history, 1899-1969. The S.H.M.D. Joint Board operated trams & motor buses, and also owned trolleybus routes operated by Manchester Corpn.
- 913 P.S.V. CIRCLE. Fleet history of Halifax Corporation, Halifax Joint Omnibus Committee, Todmorden Joint Omnibus Committee, Calderdale Joint Omnibus Committee. London, 1990. pp.86, [12] pl. [Publication no. PB23.] Typescript. Tabulated details of trams, trolleybuses & motor buses.
- P.S.V. CIRCLE. Fleet history of Burton-upon-Trent Corporation, East Staffordshire District Council, Victoria 914 Motorways, Viking Motors, Wellings. London, 1990. pp.44, [12] pl. Typescript. [Publication PD18] Tabulated details of trams, motor buses & coaches.

DG2b Omnibus and coach operation

915 BIRKS, JOHN A. with BRITTAN, YVONNE, DICKIE, A.S. and BEETHAM, TONY (comp). National Bus Company 1968-1989: a commemorative volume. Glossop: Transport Publing, 1990. pp.xxiv,728. Many photos(16pp col.), tables, charts, appendices.

A major historical work, with 10 chronologies, & interviews with key personalities. pp.358-61, Tabulated details of 219 N B.C. subsidiary companies. pp 695-700, Details of sales of N.B.C. subsidiaries, 1986-8

1

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1.1

916 BRUCE, GEOFF. Bus handbook no.8: South west England. Harrow Weald: Capital Transport, 1990. pp.152. Many photos.

Brief details & current fleet list of each operator.

- 917 BURNETT, GEORGE and JAMES, LAURIE. Tillingbourne: the Tillingbourne Bus story. Midhurst. Middleton, 1990. pp. 160. 98 photos.8 route maps.
 - History of the Tillingbourne Bus Co. Ltd of Surrey, 1924-90. List of routes & fleet list in appendices.

A. A.

- 918 CHATBURN, RICHARD C. The Man of Enterprise. This England vol.23 no. 1 (Spr. 1990) pp. 70-1. History of Enterprise & Silver Dawn Motors Ltd, Lincolnsh. bus operators, 1914-27. Written by son of founder.
- 919 COBB, STEPHEN. Ipswich Buses: an illustrated history. Ipswich: Ipswich Buses Ltd, 1990. pp. 72. Many photos (incl. 32pp col.).

Brief history from Ipswich Corpn Tramways to Ipswich Buses Ltd, with current fleet list & list of former Ipswich vehicles preserved or still in use.

- 9201 CRAWLEY, R.J. and SIMPSON, F.D. The years between 1909 [and] 1969. Vol.3, The story from 1929: Western National [and] Southern National. Exeter: Calor Promotions, 1990. pp.264. History of Western National and Southern National Omnibus Cos.
- 921 DELAINE-SMITH, A. The Delaine: one hundred years of service to the public, 1890-1990. History part 2, 1983-1990. Bourne: Delaine Coaches Ltd, 1990, pp. 64. 65 photos, route map. Sequel to A. L. BAKER, The Delaine history 1890-1982. With fleet list 1919-90.
- 922 DOBIE, STUART and HOLDING, DAVID. Deregulation is O.K. Buses Extra no.63 (Feb-Mar. 1990) pp.5-11. O.K.Motor Services, Bishop Auckland.
- 923 DODSON, G.W.H. (ed). 60 years of service to Essex: Eastern National 1930-1990. Chelmsford Eastern National Ltd, 1990, pp.44, 49 photos.

Year-by-year summary of key events. With fleet summaries & lists of depots, garages & offices.

- 924 HARVEY, D.R. (comp). Midland Red in the western Midlands. Birmingham. Birmingham Transport Hist Group, 1990. pp.72. [West Midlands transport in pictures series.] A photographic record, 1920s-50s.
- 925 HIGGINSON, M.P. The efficiency of British urban bus operation and financing. Unpubl. M. Phil. thesis, C.N.A.A. (Polytechnic of Central London), 1988. Study of publicly owned bus undertakings, 1970-86.
- 926 JENKINSON, KEITH A. Shadows of West Yorkshire. Bradford Autobus Review, 1990. pp.56. Many photos (4pp col.). History of the former West Yorkshire Road Car Co. since its privatisation in 1987.
- 927 KAYE, DAVID. Southdown: the halcyon years. Buses Extra no.66 (Aug-Sep. 1990) pp.36-9.
- 928 KING, NICHOLAS. Bus handbook no.7: South east England. Harrow Weald Capital Transport, 1990 pp. 128. Brief details & current fleet list of each operator.
- 929 LACEY, PAUL. A history of the Penn Bus Company. Wokingham: author, 1990. pp.28,[16]. 26 photos, route map, fleet list. History of the Penn Bus Co.Ltd, bus operator of Penn, nr High Wycombe, formed 1920 & taken over by the

Thames Valley Traction Co.Ltd in 1935.

- 930 LACEY, PAUL. Thames Valley: the British years, 1915-1920. Wokingham author, 1990. pp.32. 30 photos, route map, fleet list. History of the Reading Branch of the British Automobile Traction Co. Ltd, precursor of the Thames Valley Traction Co. Ltd.
- 931 LITTLE, STUART. Glasgow buses. Glassop: Transport Publing, 1990. pp.81, iv col.pl. Many photos. [British bus, tram & trolleybus systems, no.10.]

History of the motor buses of Glasgow Corpn Transport and its successors.

- 932 LONGDON, A.P. Bus enthusiasts guide to Greater Manchester. Birmingham. D.J. Slater, 1990. pp. 33.[8] pl. Brief details of depots, bus stations, & operators.
- 933 MARSHALL, ROY. Merthyr Tydfil Transport. Buses vol.42 (1990) pp. 57-64. History of Merthyr Tydfil Corpn Omnibus Dept (renamed Merthyr Tydfil Transport at deregulation) 1924-89.
- 934 MARSHALL, ROY. Another departed Welsh municipality: Rhymney Valley/Inter Valley Link. Buro vol.42 (1990) pp. 162-6. History of Rhymney Valley District Council, later Inter Valley Link, bus operations, 1974-89.
- 935 MARSHALL, ROY. City of Portsmouth Transport. Buses Extra no.65 (June-July 1990) pp.40-7.
- 936 MARTIN, GAVIN. London buses 1929-39. London Ian Allan, 1990. pp. 144. Many photos. History of an important period in London bus development (incl. the creation of the L.P.T.B., the change from petrol to diesel engines. & the first London Transport standard designs). Appendices give tabulated details of vehicle purchase sanctions, annual fleet totals, and chassis & body codes & specifications.
- 937 MAUND, T.B. Crosville in Wirral 1939-1986. Buses Extra no.65 (June-July 1990) pp.5-12.
- 938 MILLS, G.R. Bus handbook no.6: Eastern England. Harrow Weald Capital Transport, 1990. pp. 144. Brief details & current fleet list of each operator.
- 939 MILLS, GEOFF R. Hedingham & District Omnibuses Ltd: thirty years of service 1960-1990: a pictorial survey. Sible Hedingham Hedingham Omnibuses, 1990, pp. 16. Pictorial update of Silver jubilee of service 1960-1985. With brief chronology & fleet list.

940 MORGAN, MIKE. Primrose Valley Coaches. Bases vol. 42 (1990) pp. 202-5.

- History of bus services of this N. Yorkh, bus & coach operator during the 10 years up to its takeover by East Yorkshire Motor Services in 1990.
- 941 MORRIS, STEPHEN. Review of 1989. Buses Extra no.64 (Apr-May 1990) pp.5-14.
- 942 OGDEN, ERIC. Shearings. Glossop. Transport Publing, 1990. pp 96. Many illns (8pp col) [British bus, tram & trolleybus systems, no. 14.]

-Abridged pprbk edn. Cover title: Shearings: an illustrated history. 1990. pp.80. Many illns (8pp col.). History of this Wigan-based national coach & bus operator & its predecessors.

- 943 P.S.V. CIRCLE Fleet history of Stevensons of Uttoxeter. London, 1990. pp.58, [16] pl. [Publication no PD17.] Typescript
- 944 POTTER, BILL and SANDERSON, STEVE. Bus handbook no.2: North west England. 2nd edn. Harrow Weald Capital Transport, 1990, pp.152. Many photos. Brief details & current fleet hist of each operator.
- 9451 REES, HARRY. On the buses. In p. in publ. J. [1990] pp. [2]. West Bromwich Corpn. 1928-69, based on personal experiences
- 946 ROBBINS, GEORGE. Bromley-Westerham-Reigate: the story of London Transport country route 401. Buses Extra no 67 (Oct-Nov. 1990) pp.39:47.
- 947 ROBINSON, JOHN. Warrington Borough Transport since deregulation. Buses Extra no.66 (Aug-Sep.1990) pp.40-6.
- 948 ROSKOSS, ANTONY. The RT in Bradford. Vintage Commercial Vehicle Mag. vol.6 (1990-1) pp. 18-19.45. Ex-London Transport buses operated by Bradford Corpn, 1958-69.
- RUSH, ANTHONY T. Beeston's buses: the rise and fall of a Suffolk operator. Vintage Roadscene vol.6 (1989-90) pp. 102-4.
 B.Beeston & Sons Ltd, East Bergholt.
- 950 SMITH, MARTIN. The Badger's tale. Buses vol.42 (1990) pp.113-18. Badgerline, of Avon County, since 1985.
- 9511 SNELL, P.J. Simpsons of Leaden Roding: a pioneer country busman. [2] Essex Bus Enthusiasts Group, 1990. pp.12.
- 952 TONGE, J.H. Fareham in 1951. Vintage Roadscene vol.7 (1989-) pp.28-31.
- 953 WARBURTON, STEVE and LITTLE, DAVID. Bus handbook no 1: North east England. 2nd edn. Harrow Weald. Capital Transport, 1990, pp.127. Many photos
- 954 WAYMAN, DAVID. Manchester area buses: looking back at S.E.L.N.E.C. P.T.E. between 1969 and 1974. Photos by John Fozzard. Sheffield: Sheff Publing, 1990, pp.60. A photographic record.
- 955 WELLER, MIKE. The history of Bristol-London express coach services. Vintage Roadscene vol.6 (1989-90) pp.85-90.
- 956 WISE, GRAHAM. The Bee Line: a profile of the Berks Bucks Bus Co. Ltd. Buser vol.42 (1990) pp. 69-75. History of the former Thames Valley & Aldershot Omnibus Co. Ltd (Alder Valley), particularly since privatisation in 1987.
- 957 WISE, GRAHAM. Reading Transport. Buses Extra no.67 (Oct-Nov. 1990) pp.4-13. A history.
- DG2d Tramway systems (See also no.252.)
- 958 BETT, W.H. and GILLHAM, J.C. Ed.by J.H. Price. The tramways of south-west England. Broxbourne: Light Rail Transit Assocn, [1990]. pp.52 (incl.covers). 62 photos, map.11 route maps, fleet lists, bibliogr. Kdapted from ch. 10 of Great British tramway networks, 4th edn (1962).
- 959 GLADWIN, DAVID. Trams on the road. London. Batsford, 1990. pp.128. 126 photos. A pictorial history, with introductory notes & anecdotes.
- 960 HALL, C.C. Sheffield single deck cars and car sales. TR vol.18 (1989-90) pp.136-57.
- 9611 HARVEY, CHARLES and PRESS, JON. Sir George White of Bristol 1854-1916. Bristol Branch of the Historical Assocn, 1989, pp.31. 3 photos, map. [Lecad history pamphlets, no.??.] With chronology of Bristol Tramways system 1876-1916.
- 962 HENLEY, N.F. The development of the tramcar truck with reference to Manchester. TR vol.18 (1989-90) pp.224-31,275-84.
- 963 HINCHLIFFE, BRIAN. Trams in trouble. Sheffield: Pennine Publis/Doncaster: Bond, 1990. pp.64. Photographic record of tram accidents.
- 964 IRWIN, CHRISTOPHER R. A nostalgic look at north-east trams since the 1940s. St Michael's, Lancash.: Silver Link, 1990. pp 64 (2pp in col.). Photographic record of Newcastle upon Tyne, Gateshead, South Shields, and Sunderland tramways, each with route map.
- 965 JOYCE, J. London's trams. London: Ian Allan, 1990. pp.48 Many illns. An outline history.
- 966 KEELEY, RAYMOND. Just around yesterday's corner: a contemplation of the tramways and other historic 'ways' in and around Stockport. Stockport: Foxline, 1990. pp.[80]. 167 photos, facsims, route map on inside cover. Cover title: Tramways and other historic 'ways' in and around Stockport. A pictorial history of the tramways, with occasional refs to other forms of transport.
- 967 LANGLEY, MARTIN and SMALL, EDWINA. The trams of Plymouth: a 73 years story. Bradford on Acon. Ex Libris Press, 1990. pp.127. 44 photos, 14 maps.
- 968 OPPITZ, LESLIE. Tramways remembered: west & south west England. Newbury: Countryside Books, 1990. pp.144. 153 photos, 5 maps. Brief histories of each system.
- 969 OPPITZ, LESLIE. Regency tramways. Old Glory no.7 (Mar-Apr. 1990) pp.28-30. Brighton tramways history.
- 970 OPPITZ, LESLIE. Rails in Reading. Old Glory no. 10 (Sep-Oct. 1990) pp.34-6 Reading tramways history.
- 971 PALMER, STEVE and HIGGS, PHILIP. Trans to the Tower. Blackpool. Lancastrian Transport Publics, 1990. pp.56. Many col.photos. Details of Blackpool's current tram fleet.
- 972 PERKIN, J.B. Taunton tramway relics. TR vol.18 (1989-90) pp.204-5.

t

12

- 973 RICHMOND, J.W. Sheffield route codes. TR vol.18 (1989-90) pp.196-204
- 974 WATSON, J.D. The tramways of the Hartlepools. TR vol.18 (1989-90) pp.256-74.
- 975 WORSLEY, STEVEN. The Ipswich horse tram depot. Indl Arch Review vol. 12 (1989-90) pp 145-52.
- 976 WRIGHT, JUDY-JOAN. Trammers: the story of tram horses. Vintage Roadscene vol.6 (1989-90) pp.96-9.

DH ROAD TRANSPORT LABOUR AND LIFE

٨., h

> 977 READ, S.K.O. Industrial relations in the road passenger transport industry: a political-economic analysis. Unpubl. Ph D thesis, Univ of Aston, 1989. British bus & tram industry, 1889-1988.

DH1 Biographical/autobiographical memoirs of road transport workers

PENNINGTON, F.P. Unofficial van boy. Vintage Roadicene vol.7 (1989-) pp.32-3. Tuff & Hoar contract work for the L.M.& S.Rly. 978

DK ROAD TRANSPORT AND THE NATION

- BEESLEY, M.E. Collusion, predation and merger in the U.K. bus industry. Jul of Transport Economics & Policy vol.24 979 (1990) pp.295-310. Since deregulation in 1985.
- 980 EVANS, ANDREW. Competition and the structure of local bus markets. Jul of Transport Economics & Policy vol.24 (1990) pp.255-81

Case studies of Preston, Lancaster and Stockton since deregulation in 1985.

- 981 HESELTINE, P.M. and SILCOCK, D.T. The effects of bus deregulation on costs. Int of Transport Economics & Policy vol.24 (1990) pp.239-54. Since 1985.
- TYSON, W.J. Effects of deregulation on service co-ordination in the metropolitan areas. Inl of Transport Economics & 982 Policy vol.24 (1990) pp.283-93. Since 1985.
- TYSON, W.J. A review of the first year of bus deregulation: report to the Association of Metropolitan Authorities 983 and Passenger Transport Executive Group. London Assocn of Metropolitan Authorities, 1988. pp. 28 1-A review of the second year ... 1989. pp [?].
- WHITE, PETER R. Bus deregulation: a welfare balance sheet. Inl of Transport Economics & Policy vol. 24 (1990) 984 pp.311-32.
 - Economic effects of deregulation (& competitive tendering in London) since 1985.

DK1 Road transport and society

985 JONES, ERIC. Commuting to work by bus: patterns in the Seiont valley. Trans Caernarconsh Hist Soc vol.50 (1989) DD.115-17.

DK3 Road safety; accidents

HASS-KLAU, C.H.M. The history of protecting pedestrians and residents from the effects of wheeled and motor traffic with special reference to Britain, Germany and the United States. Unpubl. Ph.D. thesis, Unit of Reading, 1989. 986

DK6 Parliament, government and road transport

DUDLEY, GEOFFREY F. Privatisation with the grain: distinguishing features of the sale of the National Bus 987 Company. Glasgow. Dept of Politics, Unit of Strathclyde, 1989. pp.41. [Strathclyde papers on government & politics, no.59.]

DK9 Road transport and the Post Office; road transport philately

988 ALLISON, D. A concise history of the G.P.O. J type 1950-1990, inc. JB/JBO. Glasgou: Enthusiast Publes, 1990. pp.48.

A pictorial record of Morris Commercial vans used by the General Post Office.

- STIRLING, DAVID M. Tramway stamps: City of Birmingham Tramways Co. Ltd. Private Post n.s. no.9 (1986-9) 989 pp.29-30.
 - For the newspaper delivery service operated by the company.
- 990 STIRLING, DAVID M. Omnibus parcel stamps: Burnett's Motors Ltd. Private Post n.s. no.9 (1986-9) pp.35-6. Parcel stamps of this Aberdeensh. company, 1935-52

DK11 Military road transport

991

FLETCHER, DAVID. Fighting lorries of World War II. Vintage Commercial Vehicle Mag. March of the Armadillos. vol.5 (1989-90) pp.189-91. Armoured lorries built at Wolverton Carriage Works. The Bedford Oka. vol.6 (1990-1) pp.68-71. Bisons and Beaver-Ells. vol.6 (1990-1) pp.178-9

DQ APPRECIATION OF ROAD TRANSPORT

DQ1 Preservation, restoration, museums, exhibitions

992 MUSEUM of Transport, Manchester: service since 1824. Manchester: Greater Manchester Transport Soc., 1990. pp 44 (incl.covers). Many illns, incl.col.

Outline history of Manchester tram, motor bus & trolleybus services, & description of the museum's collection.