

ROADS AND ROAD TRANSPORT

HISTORY CONFERENCE NEWSLETTER

October 1999

Issue Number 19



Society Officers

President: Professor Theo Barker
London School of Economics

Chairman: Prof. John Hibbs O.B.E.
University of Central England
Perry Barr
Birmingham B42 2SU

Secretary: Gordon Knowles
7 Squirrels Green
Great Bookham
Surrey KT23 3LE

Treasurer: Roger Atkinson O.B.E.
45 Dee Banks
Chester CH3 5UU

Research Coordinator: Ian Yearsley
97 Putney Bridge Road,
London SW15 2PA

Newsletter Editor: Ron Phillips
16 Victoria Avenue
Grappenhall
Warrington WA4

In This Issue

- | | |
|-------|---|
| Cover | A special pantechnicon chassis based on the Leyland Tiger bus chassis, type GTS4, and known as the Llama. For a fuller description see <i>Newsletter 15</i> . |
| 2 | Conference Matters - September 1999 Meeting |
| 3 | Road Transport in Literature - by Ian Yearsley
<i>Report of presentation at the September meeting</i> |
| 4 | Letters and TV Report
<i>Riding on buses and the Great London Fog</i> |
| 5 | Oral Evidence - the Voice of a Bus Driver 1926-39
<i>Memories of a Warrington bus driver</i> |
| 7 | The Companion to British Road Haulage History
<i>Details of the project and sample entries</i> |
| 9 | Road Passenger Transport by Gravity
<i>A unique form of transport in Madeira</i> |
| 11 | A Load of Rubbish
<i>Refuse transportation over the 20th Century</i> |
| 15 | Subsidised Convoys
<i>World War I lorry convoys and their organisation</i> |
| 16 | Images of the Twentieth Century
<i>Peace and war transport in a small French town.</i> |

CONFERENCE MATTERS

The 16th Business Meeting of the Conference was held on Saturday 18th September 1999 in the Starley Room of the Museum of British Road Transport in Coventry. Our continued thanks are extended to the Museum for permission to hold our meetings in this central location. 14 members were present, and apologies were received from 17 others. It was unfortunate that this meeting clashed with an important annual event held by one of our Corporate Members.

The Chairman, Professor John Hibbs, reported on recent correspondence he had had with regard to the transport papers held by the C.I.T. at Portland Place and their continued preservation, a letter he had written to "The Times" in connection with a misleading caption on an illustration of an early taxi, and the apparently passive role played by Corporate Members in the affairs of the Conference. He had been assured by post, and this was supported by opinions expressed around the table, that the corporate bodies were satisfied with the work done by the RRTHC.

Professor Hibbs went on to discuss the arrangements for the forthcoming Symposium, "Getting into Research" and mentioned various museums in the West Midlands area to which he had sent publicity material. He sought the opinion of conference on the suggestion that a Colloquium, to be held in the Autumn of 2000, be organised jointly with Kevin Hey, of the University of Salford. The subject would be the inter-war years 1919-1939, and the momentous changes in road transport which occurred therein. It was generally agreed amongst those present that John should follow up this suggestion. With regard to the Symposium scheduled for 23rd October, Ian Yearsley announced a minor change to the programme in that Richard Clarke of the TMS would be making the presentation on oral history and not himself. It was agreed that a "reminder" slip be enclosed with the Newsletters to be posted the following week.

Professor John Armstrong now reported on progress made with the Companion to British Road Haulage History. He stated that a draft contract had now been received from the Science Museum, and that this would be signed subject to some minor adjustments. The earlier draft index had now been expanded and copies were available for inspection. He invited suggestions for further topics, and asked for volunteers to write on subjects as yet not allocated a writer.

From the floor, it was suggested that those working on the project should have material for display at the forthcoming Symposium. It was further agreed that this edition of Newsletter should have a

section devoted to the Companion (see centre pages). Topics discussed briefly by those assembled were the role of the clearing house in providing transport firms with "back loads", and current practice by foreign hauliers in this respect, and the recent development of high speed tractors, capable of hauling loaded goods trailers at up to 40 mph.

The Editor of Newsletter regretted that issue number 18, dated "Summer 1999" had been delayed due to family circumstances until September. The next issue (this one) would be available for collection at the Symposium on October 23rd and would be posted the following week to members not present at that event.

Improved photocopying hardware and the use of a laser printer in the production of Newsletter now ensured that we could look forward to the regular inclusion of clear illustrations. To mark the millennium, the Editor invited the membership to write a short article about a significant development in road transport during the 20th Century, or to submit two photographs illustrating this. The Editor's choice appeared on the back of issue 18.

Ian Yearsley, Research Coordinator, spoke of recent developments regarding photographic copyright. There had been no changes in the law, but magazine and book publishers were becoming more responsible in paying fees due to copyright holders. He revealed that a display of historic model trams had recently been put on permanent show at the Aston Manor Transport Museum (West Midlands).

With regard to transport related documents held by the PRO and not selected for permanent preservation, Ian reported that there had as yet been no result of a meeting held with the PRO to ensure that such documents be offered to other bodies. It was anticipated, however, that an index of items covered by the "Omnibus Magazine" since inception would soon be available.

Tony Newman asked if any further progress had been made in putting the data contained in the shorter Smithie's List onto computer, as he was now in a position to offer the services of his daughter to progress this work. Those concerned agreed to follow up this offer with all speed.

Proceedings were adjourned for lunch at 12.30pm, after it had been agreed that the AGM and next business meeting should be held on Saturday, 19th February 2000, at Coventry.

The programme for the afternoon consisted of three presentations. The first, by Ian Yearsley, was on the topic of road transport as portrayed in literature. He explained that this interest had its origins in the will of the late John Price, which allowed him to choose 25 books from John's library. He chose 25

fiction titles. Ian's talk is reported in full in the right hand column. John Price had embarked before his death on making an anthology of tramway allusions in literature, and his unfinished work was now in the Library at Crich.

John Hibbs made the second presentation. He chose two documents upon which to comment. The first, entitled "And the Last Shall be First" dated from September 1933, and was the appeal made by the M.T.Co. of London against the restrictions placed upon its well established coach services between London and the Thanet area by the Traffic Commissioners. This leaflet, and the issues raised by it, will appear in the next Newsletter, number 20.

Secondly, John presented a pamphlet issued by the Passenger Vehicle Operators Association (PVOA) entitled "The Truth about Nationalisation of Buses & Coaches" This dated from March 1950, and it argued strongly against Government takeover of municipal and company operated bus services, and the suggested "levelling" of fares between rail and road, and between London and the provinces. It was clear that many socialist controlled town councils were against the takeover of the local transport undertakings, and Ian Yearsley pointed out that such fears could well have been the result of the poor level of compensation paid to municipal undertakings subsumed into London Transport in 1933.

The final presentation was a lengthy one made by Roger Atkinson, entitled "Taxes on Locomotion", which dealt with the subject of taxation imposed during the 19th and 20th centuries on road vehicles and motive power by a series of Chancellors.

Roger's paper will appear in full in the next issue of Newsletter, together with a resumé of the numerous points raised from the floor. If you wish to know why the Ministry of Health made loans for road improvements, what a Crown Stamp Exchange Ticket was, or wrestle with the complexities of Section 85 of the Finance Act 1910, do not fail to read this fascinating presentation, complete with illustrations.

LETTER TO THE EDITOR

Sir,

The New Times, London-Guildford stagecoach (Newsletter 18). There was a revival of stagecoach services during the 1890s-1900s operated by wealthy 'driving' enthusiasts for those who wanted to relive the golden days of coaching - a forerunner of today's preserved railways. The name *The New Times*, the fact that there was only one service per day, and the 3.10 am start all suggest that the timetable reproduced refers to one of these. As the service operated from the Guildford end, the local history library at Guildford may well have more details.

Grahame Boyes, Richmond.

CONFERENCE PRESENTATION

Road Transport as portrayed in Literature by Ian Yearsley

A record of the presentation at the meeting
of 18th September 1999

The author C. Hamilton-Ellis set himself the task of writing "boys' romances". Apart from his first such, set in the period of the American Civil War, his writings were well researched, and contain much accurate detail of railway practice. One, "Who wrecked the Mail?" is set in Spain, another in Australia, yet another deals with railway sabotage in Scotland, and a fourth with the period of stagecoach to railway transition. Entitled "Dandy Hart", it describes the change from coaching to railways and how it affects the Hart family, one of whose sons became a railway mechanical engineer.

Similarly accurate observation of road transport, in this case steam and electric tramways, is to be found in the works of Arnold Bennett (set in the Potteries) and Howard Spring (set in the Manchester area). Another author, Freeman Wills Crofts, who although by profession a railwayman (being before retirement at 50 the Chief Asst. Engineer of the LMS(NCC) in Northern Ireland) wrote accurately of a number of different transport modes. He wrote over fifty detective stories in which his Inspector French investigates crimes which involve in one way or another, movement by road, rail, sea and air.

"The Cask" is a tale of a body carried hither and thither by horse-drawn cartage and cross-channel ferry between London and Paris. "Twelve-thirty from Croydon" includes a girl's eye view of a trip by Imperial Airways from Croydon Airport to Paris. Bad weather intervenes, and the aircraft is forced to land at Beauvais. There is much detail of early check-in procedures and the interior arrangement of the plane. "The Cheyne Mystery", involving rail and ferry trips to Belgium, and "Inspector French's Greatest Case", which is set on ocean liners, were published in the fifties by Penguin Books, as was "Sir John McGill's Last Journey", which involves the author's "home" territory of railways in Northern Ireland. It is a "time-table exercise" involving the Stranraer - Belfast ferry and its connecting railways. In all there were 33 tales of Inspector French (of which Ian has read seven). The books may still be found in second-hand outlets.

R.F. Delderfield based many works on road transport. Amongst his titles are "God is an Englishman", "Theirs was the Kingdom" and "Give us this day". The Swann saga is a trilogy of novels about a nation-wide haulage company (based on Pickfords). Some works of this author have been turned into TV 3

dramas. Ian concluded by pointing out that none of the British trade journals had ever included serialised fiction, whereas their American counterparts had.

Ian's choice stimulated many memories from the floor. Grahame Boyes pointed out that there was also a significant amount of literature concerning the lives of canal people. John Hibbs nominated the works of J.H. Bensusan, which dealt with the Essex marshland carriers. His works were highly regarded, and his papers are now kept by the University of Essex. He also recalled the long running TV series "The Brothers" which dealt with the fictional family business of Hammond Transport. Some of the episodes had been published in paperback.

Others mentioned C. Dexter, "Last Bus to Woodstock", R.D. Blackmore "Cripps the Carrier" and Bernard Ash "Silence for His Worship". The latter tale of a London carrier successfully surviving the transition from horse to motorised traction is believed to be autobiographical. Hitchcock's film "Frenzy" was cited as having very good scenes of transport in the (old) Covent Garden Market.

Further titles provided by Grahame Boyes (from R&CHS sources) are a series of short stories by H.B. Marriott Watson on the life and fortunes of "Gallop Dick", sometime gentleman of the road. Another set of stories of the coaching era, including such titles as "The Strange Passenger by the Night Mail" were written by "Thormanby" (W.W. Dixon). "Jinny the Carrier" by Israel Zangwill is a lighthearted novel about a female country carrier in rural Essex, set in 1851-2, and "Bus Stop" by Georgina Horley is a novel written in 1955 about a passenger boycott in protest at the poor quality of London bus services.

LETTERS TO THE EDITOR

Sir,

I have been reading Roger Atkinson's presentation (*Newsletter 18*) regarding the stigma of bus travel. This is, of course, no new thing, and probably goes back to the beginning of bus travel. I can quote a fictional example from Ch. XIV Dorothy L. Sayers' *The Unpleasantness at the Bellona Club* (1928, set in London). A character is talking to Sayer's series detective, Lord Peter Wimsey.

"I...went down to Charing Cross - how do you think?"

"By bus?"

"Not quite as bad as that. By Underground."

I feel some other literary references pointing in the same direction could be found.

Philip L. Scowcroft, Doncaster

LETTERS TO THE EDITOR, continued

Sir,

At the end of his presentation "The Social Stigma of being an Enthusiast" (*Newsletter 18*), Roger Atkinson asked 'Will all the improvements....remove the social unacceptability of the bus?'

Mr. Martin Ballinger, Managing Director Go-Ahead Group, speaking on 10th September 1999, said that he was seeing signs that bus travel was not necessarily the preserve of those who had lost their driving licences or are somehow deprived, and that it is no longer regarded as the transport of the last resort. (The Daily Telegraph 11th September 1999).

Roy Bevin, Chipping Campden.



THE GREAT LONDON SMOG OF 1952

Channel 4 featured the Great London Smog of 1952 in its programme in the 'Secret History' series screened on 28th September 1999, alleging that the four days of thick fog killed 12,000 people

Although a programme about government expediency and complacency at heart, there was a heavy helping of pure nostalgia, and plenty of scenes of public and private transport. Although the fog was mainly composed of smoke from domestic fires, it was pointed out that London's last trams were taken off the streets in the Summer of 1952 (the "smog" came down on Friday 4th December) and that over 8,000 diesel engined buses were pumping their fumes into the thick mixture which even penetrated indoors, causing some theatres and cinemas to close down. Ironically, the three great central power stations at Battersea, Southwark and Kingston, which provided some of the "clean" power, were also major contributors to the problem.

We saw scenes with trams, buses (STs, STLs, RTs and one single anachronistic shot of an RM with "Arriva" vinyls), L.C.C. Daimler ambulances, men with flares leading the way, and posters announcing "Fog Service in Operation" We learned of the great fogs of 1873, 1880, 1893, that Claude Monet came to London to paint the fog, that the most recent less damaging fog was in 1991 (180 deaths caused), but curiously little was made of the former contribution made by the railways and shipping. Transport does cause pollution, there is a lot of transport in London, and future deadly mixtures could be made denser by as many exhaust pipes as there used to be chimneys

ORAL EVIDENCE THE VOICE OF A BUS DRIVER 1926-39

Ron Phillips listens to a recording made about 25 years ago by a former Warrington bus driver.

Having collaborated with Roy Brook to write a new history of Warrington's trams, I was intrigued when told of the existence of a tape recording, made just over 20 years ago, by a former bus driver with WCT in which mention was made of the tramways. The recording, one of several, was in the possession of the former driver's daughter, and had not been heard before by anyone outside the family.

Recently I was given the opportunity to hear the tape. It contained no surprise revelations, but did give a number of facts concerning personalities, and corroboration of some assumptions; for example, that tram drivers kept to the same route.

Publication of the whole tape in this society's Newsletter would not be appropriate, instead I have selected parts relevant to WCT, and other matters regarding transport, omitting parts concerning local or family history. As the tape is essentially autobiographical, I have included parts I feel necessary to show the background of the man and the times in which he lived. Notes are used to explain certain references, and I have used a third person format, with just a few direct quotations, in order to condense the story.

EARLY LIFE 1905-1926

Arthur Reddish was born in 1905 in Yorkshire. The family lived near Penistone. In 1912 they moved to Warrington, having been advised by a relative that Folly Lane Post Office (and general store) was for sale. Money to purchase the business on behalf of the family was put up by a cousin from the Midlands (1). The family chattels were brought by road over the Woodhead Pass on an icy day in February 1912.

The Post Office earned Arthur's parents 35/- per week, but to this was added the income from the general goods which included patent medicines, and Arthur's mother soon became "the uncrowned doctor of Folly Lane". Arthur recalls the day in August 1914 when the First World War was declared. He and his elder brother were awakened by voices and banging in the shop below their bedroom, and crept down to see what was happening. All reservists had been told to report to the nearest Post Office, where "they had their pay books stamped, were given 2/9d and told to report to Orford Barracks". (2)

In May 1918, Arthur took the entrance exam for the Warrington Secondary School, which he passed (as had his elder brother William). His father was

against his second son continuing in education, and arranged a job for him at Longford Wire Company. Arthur duly started a menial job, no more than carrying buckets of coal to fuel the office fires, and after three days he refused to go back. His place at the Secondary School had already been re-allocated, so he was found another job with a blacksmith.

He spent a couple of happy years in that trade, but was advised about 1921 that demand for blacksmiths' skills was dwindling, and he would be better to change career. He subsequently took several jobs in manufacturing, but this was affected by the slump in trade, and by 1926 he was out of work.

BUS DRIVING 1926-1939

One day in the autumn of 1926 he was in the Warrington Liberal Club, where he met an Alderman of the Borough. Hearing that Arthur was out of work, this gentleman told him that some new buses were on order (3) and he would have a word with the Tramways Manager about offering him a job. After a while, Arthur received a letter (4) inviting him "to call at the Tramway Office at his earliest convenience". He duly did this and after a very brief interview he was told to start work. He was invited to collect a bag, ticket punch and a supply of tickets, and to "shadow" the conductors on the various routes, helping out as required. (This, in the light of today, seems a very strange way to start a career in public transport. However, in those days the period of Christmas and New Year was a very busy one, when car miles and revenue were high, and extra help was welcome.)

In January 1927, Chief Inspector Quinn, the man in charge of platform staff, told Arthur that the Manager wished to see him. In the privacy of the office, Arthur was informed that questions had been asked as to how he had come to get a job with the



Chief Inspector Quinn of Warrington Corporation Tramways, the most senior uniformed official of the undertaking, responsible for all traffic staff. (WBT 5

Tramways Department. He would therefore have to go home and await the outcome of the next meeting of the Tramways Committee. "Does anyone know that Alderman T. spoke to me about you?" "No, sir." He was ordered to say nothing to anyone, and in due course was called back to work as a bus driver, despite only limited driving experience in a bull-nose Morris.

The small bus operation of the Corporation thrived, and in 1931 the first closure of a tram route took place, when Leyland TD1s took over the Stockton Heath route. Three month's later, the tram service to Longford, always the 'Cinderella' of the network, was abandoned without direct replacement. Arthur Reddish put pen to paper and wrote "An Epitaph" for the line (see below) and showed it to the Manager, succeeding in raising a smile from one who was normally very dour. Others thought it worthy of a greater audience, and it was published in the Warrington weekly papers, and also "The Liverpool Echo", but the one who was least impressed was the regular driver of the Longford tram, John Henry Cook, who had spent many years driving an open-top, open-fronted car on an almost level and completely straight line, cut off from the other tramway routes of the town. JHC "knew every man, woman, child, cat and dog" on his line, and was "a bit of a ranter" and "always ready to break into any conversation." (5)

Arthur seems to have been approved of by the Tramways Manager, as one day in 1932 he was asked to drive "the first bus to Grappenhall". The Stockton Heath route was to be extended westwards to Walton and eastwards to Grappenhall. The special trip was made to meet the Tramways Committee to choose a suitable terminus and turning point. The bus met the

EPITAPH

Now the old Longford Tram is going for scrap
There'll be folks that say they don't give a rap,
But Cook's Tours have been a boon and a blessing,
To those who were bent on some secret carressing.

It starts on its journey, goes ramblin' along,
Grumbling and growling like a bullock in song.
Off flies the trolley - floats in the air,
Taxi men shout, pedestrians stare,
And strangers will ask, "How does this tram run?"
Once every fortnight, and sometimes for fun.

Some notable people look down as it passes -
King's Head, Lord Rodney and Delooze's sly asses,
But when it has gone there'll be more than one
Who'll lament the great loss of this old rocking hoss,
For there's no overcrowding, there's no need to book
... .. John Henry Cook

Committee, and the driver met his future wife! It was on the visit to Grappenhall to find a suitable place to turn the buses (a piece of ground was rented for a few years until the route could be further extended) that it was realised that some trees would need cutting back. Arthur's future wife happened to live in one of the houses whose trees required surgery!

NOTES

- (1) The cousin later became Sir Halford Reddish, Chairman and MD of Rugby Portland Cement.
- (2) Orford Barracks situated about one mile away from the Post Office.
- (3) Leyland Leviathans had just been delivered, in replacement of Tilling-Stevens petrol electric open-toppers, but the fleet had not been increased.
- (4) The letter is still extant, dated 17/12/26.
- (5) Until 1931, the buses and their crews seem to have been separate from the tramway staff so that JHC may have resented a poem penned by a busman.

The tape reinforces other evidence that both vehicles and crews kept to the same routes. Arthur Reddish is said to have worked with the same conductor, George Whittle during his time on the buses.



Car no.7 on the Longford route, or "Cook's Tour" as described above. JHC at the controls, circa 1931.

THE COMPANION TO BRITISH ROAD HAULAGE HISTORY

The Conference initiated work on this, the first comprehensive reference work on this important subject after the 1996 Colloquium and 1997 Symposium, both on the subject of road haulage.

It is being compiled under the auspices of the Conference: There is a sub-committee of five, under the chairmanship of Professor John Armstrong. The work will be published by the National Museum of Science and Industry.

The need for this book

In their study of *The Rise and Rise of Road Transport, 1700-1990*, Theo Barker and Dorian Gerhold showed that 'Road transport, more important than ever in the 1990s, was always the most important transport mode' in this country, but they also highlighted the uneven attention that the subject had received from historians. Whereas there is an extensive literature on the development of passenger road transport during the twentieth century, very little of substance has been published about the history of what is arguably, a more significant contributor to Britain's economic progress during this period - the transport of goods by road. The aim of the *Companion* is to fill this gap in a manner that will be of value to all who have an interest in the history of the road haulage industry, whether as academic or amateur historians, as professionals in the industry (past or present), as students of transport, or as enthusiasts.

Scope and format

The *Companion* will cover the whole range of topics and themes that make up the history of road freight transport in Great Britain, across the fields of business, economic, legal; administrative, technical and social history. The time-frame will be the twentieth century, from the very beginning of the motor transport era and the subsequent slow transition from horse drawn transport to a cut-off date at the end of 1999.

There is almost certainly no one individual who alone has either the time, or the range and depth of knowledge, to produce such a work. The format that is proposed - an alphabetically arranged encyclopaedia similar to the acclaimed *Oxford Companion to British Railway History* - will allow the expertise of a large number of contributors to be drawn upon.

The outline plan indicates that the *Companion*

will comprise some 600 articles (plus cross referenced headings) varying in length from 100 to 2000 words, making 250,000 words in total. It is proposed to include about 200 line illustrations and photographs. The projected publication date is 2002.

The themes to be covered

These include-

- Growth of road freight transport.
- Structure & organisation of the haulage industry
- Role of government in peace and war
- Regulation and nationalisation
- Definitions of terms
- Road network development
- Road transport cost trends
- Competition and collaboration -
(with rail, water and air transport)
- Statistics
- Haulage companies
- Haulage operations
- Parcels services
- Logistics
- European links
- Traffic classes
- Trade associations and professional institutions
- Relationship to other modes
- Vehicle types
- Vehicle technology
- Construction and use regulations
- Vehicle manufacturers
- Environmental impact
- Pressure groups
- Employment
- Trade unions and industrial relations
- Legislation
- Safety and accidents
- Biographies of key figures
- Military transport
- Culture of the industry
- Bibliography

Appeal for Contributors

To make this project a reality we need a large number of authors, some from a background of historical research and others with the knowledge that comes from years of professional involvement in the industry. If you are willing to contribute towards any of the themes listed on the previous page, or think of other themes that should be included, please contact the editorial committee.

The address is:

Professor John Armstrong,
Thames Valley University,
St. Mary's road,
Ealing
London W5 5RF

c-mail: john.armstrong@tvm.ac.uk

On this page and opposite are two sample entries for the Companion.

Entry "D" is a sample biography of an individual who contributed to the industry, in this case one who left behind some considerable writing.

Entry "M" is a sample history of a vehicle manufacturer.

These entries may be followed by brief source notes in the final version. It is intended that all entries will be read by "referees" with knowledge of the particular subject dealt with.

These are printed here in order to encourage you, the members, to either volunteer to write similar items on subjects you feel well versed in, (see list on the previous page) or to carp and criticise and write to John Armstrong and his committee and explain how you feel the items (and other similar) should be improved.

There is also a need for suitable photographs and other illustrations. The precise way in which these will be included is not yet settled (i.e. in separate sections, or scattered throughout the volume placed adjacent to the subject or subjects they illustrate.) The preference of the Committee is for "working" photos, rather than manufacturer's posed pictures, as seen on the cover of this issue of Newsletter. Lorries, for example, should be seen being loaded with or already loaded with typical cargos (for the type of vehicle, or the owning carrier). If you possess or know of such photos, particularly unpublished ones, please inform the committee.

The heading "other" materials covers such as printed bills of lading, hauliers promotional literature, even old style letter headings. To make the Companion intrinsically worthwhile, good quality illustrations are essential. They are also essential in attracting buyers for the book when it eventually goes on to the bookseller's shelves.

Please consult the list of topics on the previous page (have we missed any?). If you feel you have a contribution to make in the first instance contact John Armstrong or any other member of the Committee.

Clearly, the Companion will not be able to cover every subject in depth, but we do wish to ensure that all relevant topics are mentioned, and by the use of the index and bibliography, readers will be guided to wards more information on their chosen subject.

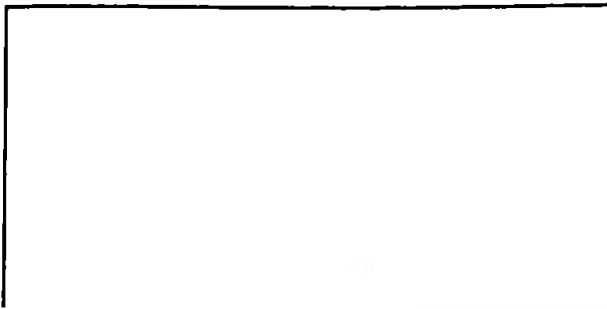
D

Dunbar, Charles Stuart (1900-93) transport manager, organiser, writer and consultant. Transport management and journalism were the two themes of Dunbar's long working life and each produced results on which his lasting reputation rests. These were respectively his foundation, and service as the first chairman, of the National Conference of Express Carriers, and two of his published works, *Goods Vehicle Operation Principles and Practice for Students and Executives* (1949, 1953) and *The Rise of Road Transport 1919-1939* (1981).

Beginning as an editorial assistant, Dunbar spent most of the 1920s as circulation and transport manager of various provincial evening papers. After three and a half years with the Birmingham & Midland Motor Omnibus Co. he started Red Arrow Deliveries, based in Birmingham, but aiming "to provide a nationwide service by road for parcels and 'smalls'".

When Dunbar set up the National Conference of Parcels Carriers in 1937 (renamed the National Conference of Express Carriers in 1938), he brought to it a wide range of practical transport and business experience, organisational skills, and a network of road haulage contacts from Red Arrow operations. Dunbar saw the need for the organisation of parcels carriers in the context of the government's intention that there should be a rates structure for road goods transport. It was vital to ensure that the special organisational features of parcels traffic were taken into account when a rates structure was fixed. An additional complication was the railway companies' "Square Deal" campaign of 1938. In this connection, the National Conference also included some railway-controlled firms. Indeed, James Paterson of Carter, Paterson became its president. It was important for the protection of express carriers' interests that their Conference was firmly in place before World War II further complicated the organisation of transport. After the War, the NCEC became one of the Functional Groups of the re-formed Road Haulage Association.

By mid-1941, Dunbar had become manager of the smalls department of Hauliers Ltd., moving to the Ministry of War Transport and other official posts, including the inter-Allied European Central Inland Transport Organisation to 1947. He then embarked on the career of freelance writer and consultant, interrupted by an official post with the Commonwealth Development Corporation, 1950-2. Dunbar was the first editor of *Buses Illustrated* and editor of *Passenger Transport*, 1961-3. *Goods Vehicle Operation*, a very practical manual when current, now a valuable



as an inside view of the industry of its time. The rise of road Transport is one of the few authoritative, detailed works on the consolidation years of the industry. Dunbar's surviving papers, in particular as chairman of the National conference, are available for research in the modern Records Centre of the University of Warwick Library, Coventry.

RAS

M

Maudslay Motor Co. Ltd of Parkside, Coventry was established in 1902, initially as a car manufacturer; commercial vehicles were offered from 1903, but for a time the firm concentrated on its more profitable car production (which ceased in 1923). New 30 cwt and 3 ton lorry designs appeared in 1912, and the latter, with a 40 hp engine, was produced to War Office Subsidy specifications and manufactured by both Maudslay and Rover in World War I. Passenger chassis, including the advanced SF40 of 1934, were increasingly important between the wars, although during the thirties the firm's output dwindled, and a major outside shareholder, O.D. Smith (a Birmingham builder) was brought in to pull the company round. This he did, with the aid of designs by Siegfried Sperling, a refugee Austrian from Graf und Stift. Sperling was for a period interned in the Isle of Man, but rejoined Maudslay, from which he retired in 1953. World War II delayed the introduction of a new range of heavier cvs announced in 1939, with the exception of the "Mogul" and the "Militant", which were produced for civil and military use respectively (the 1,000th "Mogul II" came off the assembly line in Feb 1948). Amongst cv customers from as early as 1907, the GPO Stores (later Supplies) Department is worthy of note: local patriotism in the West Midlands may have helped Maudslay's order book (from such as GEC, Stoke Works; Hurst & Payne Ltd.; ICI Metals Ltd.; Tan Sad Ltd.) During the War, Maudslay bought a 400 acre estate at Great Alne near Alcester, subsequently to be the site of their sole factory.

In 1948 Maudslay and Crossley (qv) joined AEC (qv) in Associated Commercial Vehicles, which marked the beginning of the end of Maudslay as a distinct marque. (the AEC 7.7 litre diesel engine had already become a predominant Maudslay power unit.) After 1955 Maudslay vehicle production was restricted to bonneted specials and AEC dump trucks, which were not suitable for AEC's production lines. The Castle Maudslay workforce actually increased with axle production, special version AEC engines and outside work, but in 1972 Leyland (qv) which had taken over ACV in 1962, sold Maudslay to the American axle producer Rockwell International.

RAS

ROAD PASSENGER TRANSPORT BY GRAVITY

Gravity traction (one speaks of the pull of gravity, hence traction seems to be correctly used here) was used quite extensively by funicular railways (for goods and passengers) and even some conventional railways. The Festiniog Railway is the prime example, with a gentle falling gradient from quarry face to port which allowed loaded trains of slate to coast for many miles. Empty wagons could be hauled back up by animals, later machines.

Rarely has gravity travel been used on roads, and one form of it, coasting in a motor vehicle, is deemed illegal, although of course all cyclists use gravity intermittently on most journeys. A true form of gravity passenger transport, however, thrives on the island of Madeira.

Madeira is a volcanic island, essentially a long ridge of volcanic rock, some 2000 feet high, in mid Atlantic Ocean. The uplands trap clouds, which fall as rain all year, creating a delightful climate capable of producing abundant crops. The island became an important staging post for shipping, and a number of Britons took up residence in the 18th century in connection with the sea trade. One Briton is credited with the invention of a form of sledge for the transportation over land of heavy items. The runners were able to slide easily over stone ridges created in the steep streets of the island's capital (Funchal) and other small ports. Instead of building flights of steps, with risers at ninety degrees to the steps, the Madeiran version had risers inclined at about one hundred and twenty degrees, so that a sledge would slide down or be pulled up easily.

Level streets were paved in a similar fashion to the steps, using small stones taken from the beach, so that these too gave a smooth passage to the sledge runners. The stones were usually quite small, and were often arranged in patterns. Some such pavements still exist in Madeira in narrow alleyways and pedestrianised streets.

Transport between towns was mainly effected by sea, otherwise on foot, on account of the gradients. The rich had the choice of ponies, or hammocks slung between two poles and carried by two or three men. In Funchal, another Briton introduced a lightweight carriage (carro) with a wicker-work body supported on springs which were attached to runners. Such could traverse the flatter streets along the shoreline or some of the gentler gradients. These carros

were the equivalent of handsome cabs on Funchal's streets, and were numerous enough to need to carry registration plates. These vehicles were pulled by a pair of bullocks, the driver walking alongside. They were sufficiently successful to a) kill off an animal drawn tramway and b) to survive as a tourist attraction into the 1970s. Their eventual demise was due to pressure of motor traffic on the roads and the loss of the cobbled surfaces which were essential to a friction free passage.

In 1891, a Scot opened the first hotel (now Reid's Palace Hotel) and the gentry of Europe began to take winter holidays in Madeira. A steam worked rack railway, known as the Mount Railway, was constructed from an eastern suburb of Funchal to the village of Monte 550m (1650 ft) up and about 4 kms from the town terminus. From here, a street tramway under railway ownership led to the steamer pier, the cars being hauled by mules. The railway was the first example of organised public land transport on Madeira, and was created essentially for tourists. Two hotels were constructed at Monte, and steamboat passengers (many en route to and from southern Africa) were encouraged to purchase tickets embracing a tram ride, a train ride, and an hotel meal at Monte. Equally, those who chose to spend their holiday in the cooler air of Monte, could visit Funchal by rail.

There were limits to this, hence the railway saw an opportunity to increase railway travel by allowing some local men to provide a service of *carros de cesto* (basket cars), each capable of holding two or three passengers, to slide down a cobbled path on the east side of the railway track. These lightweight cars, essentially a bench on runners, braked by two men holding retaining ropes who ran alongside, or behind, or rode at the rear like postillions, provided a thrilling downhill ride of some length. The four kilometre drop

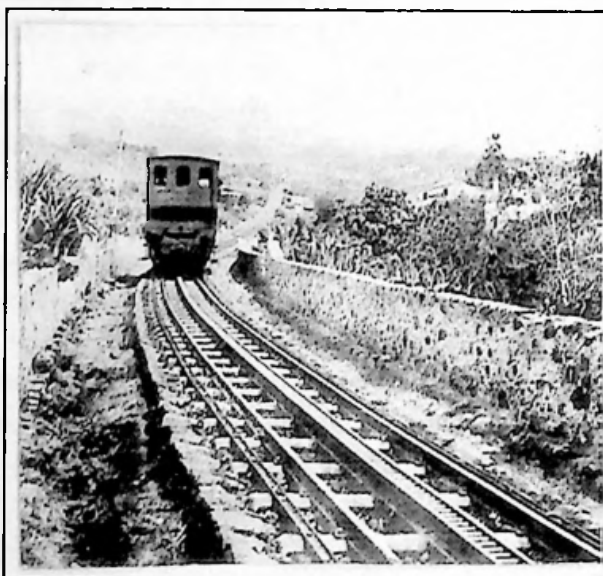
in ten minutes or less was so exciting that many wanted to try it again, thus putting another fare into railway coffers. The price for such excitement was pitched at about four times the train fare, and one third of the cost of a day's stay at a good hotel.

The railway flourished, although the tram line fell victim to the cab-like bullock sledges. In 1912, the Mount Railway was extended higher up the mountain to Terreira da Lucta, where a grand chalet-restaurant was built...this could cater for train-loads of tourists. The basket car run was extended to the new terminus, but a break of journey was made at Monte. The service was curtailed during the First World War, but was then revived until the 1939-45 War, when hostilities brought tourism to an abrupt halt. The railway was closed down and was lifted.

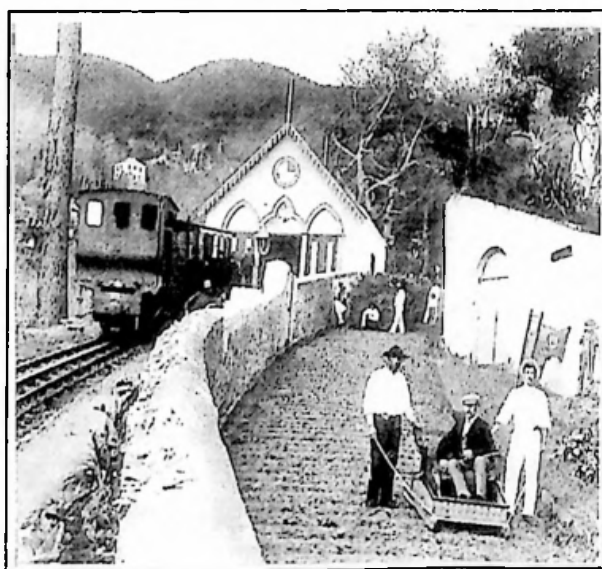
That should have been the end of the basket cars, but the memory of the railway and its ancillary "sledge run" was such that the basket cars took to a new route when post-war tourism had been re-established. The lower part of the railway track was turned into a thoroughfare known as "Train Street" (Rua do Combóio) with several lateral lanes also named after the railway. It was given a modern tar macadam surface. The basket cars therefore took to a lane, running east of the former railway track, still paved in the older cobblestones and which ended in the same part of Funchal, one block away from the railway station. This lane has now been re-surfaced with tar, which slows down the progress of the sledges and creates enough friction to heat the runners almost to burning point.

(to be continued)

The next edition of Newdletter will give more details of the present day operation of the basket cars and the bus route which has replaced the railway, and which still shows "Railway" on its indicator blind.



A train on the lower section of the Mount Railway, which is now a road. This early view shows the space on the right had yet to be turned into a sledge run.



A train at the top-most station awaits departure, as does a 'carro de cesto' with its two-man crew. Another 'carro' is seen leaning against the wall on the right.

A Load of Rubbish

by John Allen, MCIT

A paper presented to the Chester & North Wales Group of the *Chartered Institute of Transport* at Wrexham on 8th October 1998. The author is the Chairman of Jack Allen (Sales & Service) Ltd., waste management equipment specialists. This paper is published via the good offices of Professor John Hibbs and Ken Swallow, the Northern Regional Officer of the *Institute of Logistics and Transport*.

It is my intention in this paper to review the evolution of Refuse Collection Vehicles from the horse drawn cart to the sophisticated equipment in use today, and to look into the potential developments for the 21st Century.

The equipment can be broken down into individual elements as follows:

- a The Motive Power
- b The Chassis and Cab
- c The "box" into which the refuse is loaded

In many respects the developments in this field are a reflection of the changing life styles and expectations of the population over the last one hundred years. It is therefore sensible to work from the premise that further changes in this regard as greater public awareness of environmental issues occur will drive future vehicle design and operational requirements.

The main thrust of the paper is concerned with the Refuse Collection Vehicle body and how it has evolved to meet the expectations of a waste management industry charged with the responsibility of dealing with this element of social activity.

Victorian society desired to see an improvement in living conditions, particularly in urban environments and was not prepared to continue to accept the concept that rubbish, when it came to be discarded, should simply be thrown into the street. Thus local authorities were empowered in 1875 to remove household rubbish, and so the waste management industry was born. Within twenty years, the officers charged with this responsibility within local authorities had formed an association, for the purposes of sharing information, discussion of relevant topics, and the formation of best working practice.

These individuals, now operating in both the public and private sectors, became the specifiers and buyers of the necessary equipment to enable them to fulfill their tasks. A demand and whole new market

were created and equipment suppliers appeared to meet that demand.

THE MOTIVE POWER

In the infancy of the waste business, the only means of moving a piece of equipment was either manpower or horsepower. Men were required to move the rubbish from the dwellings to the cart, and horses moved the cart along the street and to the disposal site. There was a limiting factor on the size of cart that could be used, and as in other areas of the transport industry, a demand existed for more power. The internal combustion engine met this need, and from the 1920s was rapidly adopted, although horses were not ousted for another thirty years in some towns. Chesterfield has re-introduced a horse and cart for collecting refuse from its town centre market, in response to concerns over the environment in a key location.

Steam power never found a market in the field of refuse collection vehicles, but for a time successfully compete in the street cleaning and tanker fields, with the Yorkshire Patent Steam Tanker Company enjoying considerable success.

As demand grew for even larger vehicles capable of moving heavier and larger loads, the petrol engine was superseded by the diesel engine, which has continued to evolve in terms of power output, and reduced emissions and noise. It is now the main form of motive power for vehicles operating in this field.

Even with the major improvements in the operation of diesel engines, concerns still exist over their impact on the environment, and alternatives are being piloted in a number of locations. Electric battery powered vehicles are not new. Sheffield, for example, had a large fleet of such vehicles, charged by electricity produced in what was then known as a Refuse Destructor (today, a Waste Energy Plant). These were taken from use for two main reasons - the short range of operation and the weight disadvantage as a result of the heavy batteries carried.

Gas (LPG) powered vehicles have recently been offered by manufacturers, and despite their higher purchase costs are starting to make inroads into operating fleets. North Lincolnshire District Council specified their use when putting out to tender their refuse collection contract, convinced that the environmental benefits outweighed the cost.

What may the market demand tomorrow? The government's concerns over suitable waste management, the strength of environmental pressure groups and their influence at local level, coupled with the increasing awareness and concerns of the General Public about the environment and its future, may produce a market where "a whole life costing of vehicles" includes their cost to the environment. 16 11

future purchasing decisions were to be made in that way, then the current market leadership of diesel power could be challenged.

THE CHASSIS CAB

The driver's expectations of the type and nature of facilities to be available to him/her in terms of comfort and health and safety have evolved as employee's overall terms and conditions have progressed.

When the business started, the driver walked alongside the horse and led it from one collection point to the next. The day's work was governed by the capability of the horse to pull a given load, and the distance it could walk whilst collecting. (1).

With the arrival of mechanisation, the driver enjoyed the provision of a cab which provided protection from the elements for both driver and loaders, but little else when compared with today's expectations. The only heat available within the cab was provided by the engine, fine in winter, but a disaster in summer. Manually operated windscreen wipers, crash gearboxes, unsprung seats and harsh chassis springing were just a few of the discomforts to be tolerated.

Two manufacturers in particular recognised the needs of this particular market and developed "municipal; chassis" designed to meet them. Between them, Shelvoke & Drewry (S&D) and Dennis captured and held dominant market leadership. They were integrated businesses, providing chassis/cabs and refuse collection bodies in a single package.

The demand for larger vehicles driven by the need to increase productivity of both employee and vehicle led to the need to have substantial development budgets, and this introduced the main chassis manufacturers to the opportunity of new markets and therefore sales. Consequently the equipment in use came to be largely that provided by manufacturers that were servicing the road haulage market and not a stop-start delivery market. These chassis/cabs brought with them some benefits in terms of creature comforts but some substantial disadvantages, such as the height of the cab from the ground. In an industry where the driver has been expected to act as a part loader, the health and safety aspects of this are not insignificant. Handbrakes were essentially designed as parking brakes, and when they were being applied every few yards were not as reliable in service as elsewhere. Standard chassis widths and increasing wheelbases, whilst meeting the demand for larger payloads, overlooked increasing car ownership and demand for parking space in inner city streets of terraced houses. Neither are these chassis suitable for collection from rural areas, where access roads can be in many cases barely wide enough to cater for a motor car.

Some chassis makers have endeavoured

throughout the evolution of this market to recognise its uniqueness and have made attempts to meet the demands either in total or in part. Amongst them are Dennis Eagle (2), Seddon-Atkinson and Commer/Chrysler/Renault. Over the last few years a number of suppliers have brought to the market "low entry cabs" to counter what appears to be the ever increasing height of cabs on propriety chassis. Marshalls, Dennis Eagle and my own company, in conjunction with ERF, have products currently available to purchasers, with ours also offering an industry "first" of a central steering position. Likewise, manufacturers have been introducing narrow chassis to address the access issues in inner city areas and rural lanes, whilst at the same time ensuring that productivity issues are addressed.

The industry has adopted other commonly available chassis developments, and these are now regarded as the standard minimum requirements. Automatic transmission, the latest sprung seating, automatic chassis lubrication, heating/ventilation systems and cab entertainment are some features that the modern driver expects.

A major design issue which has to be overcome with refuse collection vehicles is one of weight distribution between the axles, rather than the total legal payload. Since these units are loaded from the rear and the packing and lifting equipment is located behind the rear axle, coupled with the fact that the body is filled progressively from the rear, there is a potential to overload the rear axle. Front mounted cabs (i.e. doors ahead of the front axle) were developed to enable the weight distribution to be improved by allowing the total design of the unit to be moved forward.

How yesterday's walker/driver out in all weathers would react to the latest concepts and designs is impossible to answer. On balance, my own view is that any improvements that contribute to enabling a driver to perform his duties with maximum effectiveness, efficiency and safety must be beneficial to all road users.

THE BOX

It started as a cart behind the horse and could tomorrow evolve into a demountable ISO container. Along the way, bodies have undergone numerous changes. It is difficult to say whether these changes have led the market or whether potential developments in the management of waste has led to technological solutions being found.

Domestic refuse used to be heavy because its main components were dust and cinders. This waste, being largely non-compactable required effectively an air space into which it could be loaded. Bodies incorporated various devices to try and ensure that

the air space was effectively filled, an example of which was a manually retractable barrier plate. This involved the loaders having to access the body, via rear steps, and carrying the refuse to the front of the body and loading the refuse over the barrier plate.

As the nature of domestic refuse changed and lightweight packaging grew, the need to compact the refuse into the body to achieve sensible payloads became paramount. This led to the introduction of packing mechanisms, delivered through a variety of methods, to ensure maximum legal payloads and minimise the journeys to disposal points, thus achieving optimum use of labour and equipment. These included fixed and movable hoppers and continuous and intermittent packing arrangements. The ongoing developments in this field are evident, as the market still requires to ensure that the waste is compacted to utilise the vehicles' carrying capacity.

Wheeled bins are currently in vogue for domestic collections, but the concept of hinged lidded bins is not new. For the delivery of a "dustless collection system". Sheffield introduced a system before the outbreak of the Second World War, and reintroduced it in 1957. Birmingham also introduced the system during the middle and late 1950s. Both cities abandoned the method due to high labour costs, as the service was a full collect and return, not the low labour wheeled bin method, whereby the bin is wheeled out and back, in many cases, by the owner of the premises.

The use of these containers and their predecessors required the development of lifting devices to raise the bin from the road into the hopper of the vehicle body. These were originally largely mechanical devices involving the use of wire ropes, the Sheffield type made in Sheffield is an example. The modern day lifter is a sophisticated piece of equipment that is capable of fully automatic operation.

One of the proposals in the Government's consultation paper "Less Waste More Value" is the concept of charging for waste management services by the weight of waste produced by individual households. The modern lifting device can cope with this by the use of micro-chip technology, linked to a device on the bin, and connected to an on board computer. In these arrangements it is also possible for the bin not to be emptied, where the client has not paid outstanding bills, and also to refuse to empty a container which falls outside previously determined weight parameters.

What of the future? With waste disposal facilities becoming less in number and therefore involving greater travel from collection rounds, will there be a return to the relay system, i.e. as a vehicle is filled and sets off to the disposal point, another

arrives to ensure continuous operation by the loaders? Or will bodies become demountable to facilitate rapid changeover to an empty ISO box, again to achieve maximum operational efficiency? In the latter case, other changes to the body and vehicle design will be required.

Traditionally waste has always been loaded into the rear or side of the body depending upon the application. If the body becomes demountable then the lifting and packing devices need to be relocated. This opens up the possibility of loading domestic waste over the top of the cab with the packing mechanism located to the rear of the cab as part of that structure, and not the actual body. A further safety benefit could accrue from such developments, in that the driver would be clearly able to observe the loading of the vehicle, thus ensuring that the loaders were clear of the vehicle before driving to the next collection point. Currently it is common practice for vehicles to be fitted with closed circuit cameras to allow the driver to observe the loading cycle, and these could be dispensable with the front loading arrangement.

RECYCLING

The currently accepted waste hierarchy which is supported in the previously mentioned Government consultation paper is :

- Reduce
- Recycle
- Recover
- Dispose

In this context it may be reasonable to assume that the current low level of recycling activity in the UK of post-consumer waste will rise considerably over the coming years. Recycling has only reached high levels in the past where particular circumstances ap-

THE AUTHOR

John Allen's father, Lawrence John Allen, was a narrow boat builder who realised at an early age that the future of transport would be on the roads, and who started his own commercial vehicle body building business at the age of 24. John Allen Jnr joined his father at their Erdington workshops to learn his trade as a bodybuilder and coachpainter.

In 1967 John Allen obtained the Dennis dealership for the Midlands, and quickly gained an excellent reputation for Dennis sales and service. In 1970 he obtained the UK franchise for the Heil Company of America, the largest manufacturer of refuse collection bodies, and relinquished the Dennis franchise.

In addition to developing the sales of the Collectomatic body and a service and parts back-up, he subsequently formed Municipal Vehicle Hire Ltd. to hire municipal vehicles of all types. Currently, Jack Allen (Sales & Service) Ltd. supplies refuse vehicles, recycling equipment, vacuum tankers, gritters, street and runway sweepers, snow sweepers and blowers, and runway and aircraft de-icers.

plied, principally during the last World War, when raw materials were scarce and market demand was high. These circumstances do not exist today, but the principles of sustainable development and protecting the environment for future generations are starting to take hold. Government may see this as an area of policy that they would wish to pursue, thus creating an environment which stimulates waste recycling as a legitimate tax funded service.

Already in the UK there is limited evidence for this, with the introduction of the Landfill Tax, and the implementation of the EU packaging directive. Recycling systems fall into four categories - "bring" systems, multi-bin systems, kerbside box systems or mixed collections with sorting at a "dirty" Material Recovery Plant. Each of these have potential effects upon the type of equipment which will be required to collect the post-consumer waste.

Multi-bin systems have been in use in Europe, particularly Germany, for some years. Generally it does not require special vehicle bodies, simply a requirement that they can be washed internally, to ensure that the separately stored recyclable is not contaminated by other waste, which would reduce its market value and effectively destroy the reason for introducing this method for recycling.

There are some derivatives of this arrangement, whereby the wheeled bin has been divided internally, thereby requiring the householder to segregate waste into the specified fractions and place them in the appropriate compartment of the bin. This in turn required body manufacturers to build a product capable of handling such containers, and ensuring that the separated waste streams were stored independently of each other within the vehicle. Bodies were split either horizontally or vertically to meet the requirements of the container configuration, and located to ensure that the total capacity was utilised. This poses problems, a different waste fractions have different characteristics, and could lead to unstable loads due to weight distribution.

Kerbside box systems were introduced to the UK from North America, and require the householder to place recyclables into a plastic box put out on a specified day. Operatives hand sort the various fractions into hoppers in their vehicle. Another variant for use in areas of high rise dwellings employs wheeled bins for each of the different types of waste. In the future we may see a move away from the existing dominance of a single weekly collection of unsorted household waste to a combination of methods in which recycling is the dominant factor.

THE FUTURE

Three major influences will be:

14 (A) Legislation from the EU, where waste is seen as

a major issue, and how that is translated into UK law.

(B) The UK Government policy as seen in the paper "Less Waste More Value", and guidance to local authorities on the production of recycling plans, clearly point towards increases in recycling and the use of products made from recycled materials. Planning guidance, the concept of the proximity principle for waste management, and the whole issue of the use of transport, all point out a possible future path to be taken by the present Government.

(C) Increasing public awareness of the issues caused by a throwaway society and a willingness to contribute financially and by direct action to help alleviate them.

With these factors in mind, where do we go from here? Waste minimisation and reduction are the "Holy Grail" but there is no evidence to suggest that at this stage that we will do much better than to arrest the increase in waste arisings. That said, how that waste is dealt with is another matter. One person's waste can be (and often is) another's raw material. Recycling and the recovery of value from post consumer waste I believe will happen. the exact timeframe is more difficult to predict, but already some local authorities are introducing imaginative schemes in this area. Will concerns about the impact of ever larger vehicles on the urban environment result in new developments? Will constraints be placed on size of vehicles and their source of power? As Chesterfield has identified a niche market for the return of the horse, will others search out similar opportunities?

It appears to me that there is an opportunity for both national and local government in the UK to use powers to intervene and shape the future Waste Management Policy, and thus proscribe the nature of the equipment that will be required to handle waste materials in the next Millennium.

NOTES

(1) See following item. Also, the Walker Brothers (Wigan) "Pagefield" system used horses for door to door collection and motor vehicles to convey full carts to the depot.

(2) Dennis Specialist Vehicles, Guildford, combined with the Eagle Engineering Co. Warwick to produce special municipal type vehicles.

SEE ALSO

R&RTHC Newsletter 12, "Transporting the Unmentionable" by Ron Phillips.

THE HORSE WORLD OF LONDON by W.J.Gordon, published in 1893 by The Religious Tract Society, 56 Paternoster Row and 56 St.Paul's Churchyard, London.

An extract from this work, (Ch.V., The Vestry Horse,) kindly furnished by Roger Atkinson, is reproduced on the next page. The work is clearly concerned with animal welfare, but gives a great deal of detail into how horse drawn transport was organised. The extract chosen deals with the horses employed to transport the refuse from Shrerlock Holme's London.

THE VESTRY HORSE

The thirteen hundred thousand cart-loads of refuse removed from London in a year require a small horde of about 1500 horses to deal with them, and of these more than half now belong to the vestries and district Boards of Works. What may be called 'the Municipal Horse' is a really good cart-horse. Any approach to 'the vanner' will not suit the vestries. His load varies too much, even with similar stuff, for any risks to be run. On a wet day he may have three tons behind him, including the vehicle; on a fine day the absence of the water will take hundredweights off the weight, to say nothing of the improvements in the state of the road.

Some of the vestry horses we have seen weigh over 18 cwt., and, though we have heard of a few heavier, we heard of none lighter than 13½ cwt., the average working out at 17 cwt. - rather over than under. Such horses are now all English, coming from almost every county, direct from the farmer or through the dealer, and with very few exceptions they are bought in their sixth year.

No foreign horse will live long in the London dust-cart; his feet will not stand the hard roads. He has been tried, and failed miserably, giving way in the forelegs, having strained the back tendons with the constant jar of his feet as he has plodded along on the granite, asphalt, or wood. And this has been particularly noticeable in the City service, where the only stretch of macadam is that between Lett's Wharf and Blackfriars Bridge, which is not in the City at all, although it leads to the City dust-yard.

A vestry horse must, above all things, be able to 'back'. When he is bought, he is tried and drilled in this backing, and he must keep his legs as he does so, for if not his career will be cut short by his having his feet run over, which is the commonest accident to which he is liable when standing in the London streets. The average working life in the vestry service is eight years; when they are sold out of it they fetch on average £8 if alive, and £1 18s if dead. But their death rate is not high.

WORLD WAR I 'SUBSIDISED' CONVOYS

by Roy Larkin

The outbreak of the 1914-18 War started the biggest 'subsidy trial' yet seen. Trials had been held since 1901, but the potential of the motor lorry in the theatre of war still had to be proven. Although plans existed of how to get lorries to France and Belgium, little else was in place for their daily operation. By January 1915, however, the columns were evolving a high degree of organisation by pragmatic means.

The role of the motor lorry, and indeed the B type bus, many of which were converted to single deck, was to ferry supplies from depots to the troops at the front line. Overseen by army officers, the columns were largely manned by civilians, the driver often being seconded with his vehicle.

A typical column consisted of about 100

vehicles. These were supported by two mobile workshops, various cars for the officers, and motorcycles for passing messages along the column. Each column travelled with empty lorries so that loads could be transferred from broken down or accident stricken vehicles with minimum delay, and was divided into two sections. When one was delivering supplies, the other section was reloading, oiling, greasing, servicing etc. at the depot. This system provided a daily service to the column's allocated troops, and prevented congestion at the depot. When loaded, lorries were assembled ready for the following day.

Each section was further sub-divided: the sub-sections named after the regiment or unit they served. Each sub-section had a lorry dedicated to carry drums of petrol, carbide, paraffin etc., one lorry carried the regiment's mail and another was responsible for the rations of its own column. The remaining lorries carried oats, hay and rations. Ammunitions were the responsibility of dedicated columns.

With several columns loading at the same depots, usually a railhead and direct from the trains, careful planning was needed to avoid congestion. Each sub-section left a holding compound, where the men were billeted, for the loading arewa at half hourly intervals. This meant that the supplies for some 2000 men and 2200 horses had to be loaded in 30 minutes, so that each fully loaded sub-section was leaving as the next arrived.

Initially the columns travelled en-bloc before separating for different regiments. The pavé roads were not built for this volume of traffic and soon deteriorated, so the columns adopted the same policy as for loading, and the various sub-sections began their journeys at timed intervals. The smaller convoys greatly sped up the rate of progress and slowed down the rate of deterioration of the roads. Fewer lorries passing, and with intervals between each convoy allowed road menders time to repair the roads on a continually ongoing basis.

The various sub-sections would run to a pre-arranged rendezvous with the supply officers for their own brigade. These officers then directed the individual lorries to their discharge points where they unloaded and returned to rendezvous with the rest of the sub-section before returning to base.

Often this final leg of the journey could not be completed until after dark, so the return to base was necessarily completed during the night. After a day driving, a night unloading, and driving, the cycle of loading began again. Day in, day out, the motor lorry and its crew proved its worth in keeping the troops at the front line supplied with provisions. Without the motor lorry the lot of the troops would have been even worse than it already was.

IMAGES OF THE TWENTIETH CENTURY

100 years of road transport - Peace and War



Normandy - west of Dieppe are the twin seaside towns of Le Tréport and Mers-les-Bains, just over 100 miles from Paris, and popular destinations for day excursion trains (*Trains de plaisir*, in French!). The tranquil scene before World War I shows a tramcar in Mers-les-Bains on the line to the Station. This type of tram was typical of those which served small French provincial towns.



A picture post-card produced locally during World War I and one of a series intended for sale to wounded soldiers convalescent in a hospital converted from an hotel atop the white chalk cliff at Le Tréport. It is entitled "Funeral of an English Officer - the cortège makes its way to the English Cemetery." The procession consists of a French brass band, the army chaplain, and motorised ambulances, although the second vehicle appears to be horse drawn, flanked by British bearers. Another card shows the ambulances drawn up alongside a British hospital train (*train sanitaire*) at Tréport Mers-les-Bains Station.

Post cards from Ron Phillips collection