ROADS AND ROAD TRANSPORT

HISTORY CONFERENCE NEWSLETTER

February 2001

Issue Number 24



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CONFERENCE MATTERS 21st October 2000 SYMPOSIUM 2000

The Symposium was held at the Museum of British Road Transport, Coventry, on Saturday 21st October, in conjunction with the University of Salford, European Studies Research Institute and the Centre for Contemporary History and Politics. Our thanks must be expressed to Dr. Corinne Mulley for help in organising this event, and in particular to Kevin Hey for much behind-the-scenes preparation

Some forty delegates attended the Symposium which sought to explore the effects of the 1930 Road Traffic Act on road transport in the twenties and thirties of the last century, under the general title of Lessons from History for Transport Policy and Practice. 1918-1939.

The proceedings were introduced by Dr.Corinne Mulley, and Professor John Hibbs gave the first paper, entitled *The Bus Industry, a Drama in Three Acts.* The "First Act" was indeed the period under scrutiny, the second and third dealing with the (tragic) events which were to follow on up to the present day. Dr. Martin Higginson then examined the competition between buses, trams and cars. He showed how the motor car first stood out as a competitor to public road transport in the thirties and discussed what lessons could be learned from the failure to control it an an early stage. The final paper of the morning session was given by Kevin Hey, who discussed the way in which road transport was regulated before and after the 1930 Act.

The meeting resumed at 1.30pm when Bruce Maund spoke on the unforeseen consequences of the 1930 Act. It proved a boon to lawyers as road service licences (which required periodic renewal) and which involved the niceties of joint operation and the crossing of various boundaries were contentious, and few passengers realised that some of the money they paid in fares was required to pay for litigation to enable the bus to carry them to their destination. The last paper was given by Rev. Richard Buckley, whose theme was the financial issues which influenced the decision to replace tramways (or not) in Britain, with particular reference to Sheffield.

After tea, delegates were invited to speak from the floor. Various speakers pointed out the ways in which municipal operators or the large bus companies tried to restrict the activities of other operators. Derek Jones referred to the pre-1930 method used by

internation (both operating and non-operating) to

in order to protect their own operations or interests. One way to avoid this restriction if a licence was refused was for the bus operator to arrange for a terminus on private ground, and issue return tickets to passengers (i.e. only those holding returns could use the bus out of the restricted area).

Some towns made it a matter of policy to restrict incursions by private companies (Liverpool and Birkenhead versus Crosville were cited). Some of the larger companies treated smaller operators badly: for example David Holding gave the example of Ribble and Northern General, who worked a summer service in conjunction with Wright's of Nenthead, but who ignored the Wright's-only winter service in their publicity. A further example quoted was that of Hants & Sussex, which suffered from the pressure put upon it by Aldershot & District, Hants & Dorset and Southdown.

Tramway issues raised were how Rotterdam tramways survived, but in the form of feeders to the Metro (R. de Boer), how Yorkshire Traction paid dearly for its take-over of the Dearne District Tramways (R. Atkinson), how the London conversions to trolleybus from tram were influenced by the lower wage rates of tram/trolleybus staff (Ian Yearsley), and how the tram fleet in Sunderland was largely composed of secondhand cars which all reached 25 years old more or less at the same time. Was this chance, or a case of planned obsolescence ?

With regard to the car versus public transport issue, two interesting examples were mentioned. At Sheffield and Wolverhampton, where in the former city the centre was badly damaged, there were plans drawn up whilst the war was still current for ring roads. In Sheffield this raised the issue of whether trams should be incorporated into the scheme or not, but in Wolverhampton, much to the anger of the transport manager, it was proposed to restrict public transport to the ring road and only allow private cars to enter the city centre.

COVER STORY Warrington Bridge, circa 1930

Warrrington bridge was opened in two stages in 1913-1915. The bridge deck is made of re-inforced concrete and was initially paved with ashphalite blocks, some of which can be seen between the tram rails, but by the date of the photograph the shoulders of the bridge appear to be resurfaced with tarmacadam. The left foreground shows stome setts the crossing appear to have been recently repaired, the reason being either worn rail or damage to the surface from the passage of heavy vehicles, such as the tar lorry and trailer (TE 5679) coming from the right (A50).

About to turn right is the North Western Road Car Company's Tilling-Stevens on the Warrington to Northwich route, DB 5268 was new in 1929 with Brush bodywork. To the right of the picture is a tramway feeder pillar, from which cables stretch to the Latchford route (right) and the Stockton Heath route (left).



COACHWORK BY BRISTOL TRAMWAYS by Allen Macfarkane (A4 hardback, colour cover, 176 pages, published by Millstream Books, 18 The Tyning, BATH, BA2 6AL, 1999, £20. ISBN 094897552-0

This is a sumptuous book, worth every penny of the £20 it costs to buy. It depicts in black and white photographs accompanied by authoritative captions and text every type of bus body produced by the Bristol Tramways & Carriage Company at its Brislington body works (on the same site as the tram depot and the Motor Carriage Works which built the Bristol bus and lorry chassis).

As well as giving such a complete record of every bus body built (every single type is illustrated bar one) the early chapters reveal much of the ethos of the Bristol tramway undertaking. The body works began by assembling the Milnes trams of 1900, and indeed six cars (nos.86, 233-7) were constructed new in 1920 to the original 1900 design, and later further older cars were reconstructed. Once the tram system had been established, the Company turned as early as 1904 to building buses for routes which went out of town.

At first, of course, the vehicles built were for the Company's own use, but after the First World War, in order to keep production flowing, Bristol began to sell its chassis and bodies to outsiders, both companies and municipalities. In the thirties the Bristol marque became known for economy and reliability, and the H and J series chassis, followed by the K and L series, formed the basis of a twenty year long production period of sturdy and easily maintained buses. The bodyworks (unlike its parent tram company) was constantly upgrading its designs, and there were soon numbers of customers re-ordering the Bristol made bodywork, which was not always mounted on Bristol chassis.

As the decade ended, the works was engaged on the melancholy task of producing double deck buses layed by the outbreak of war. In the post-war period the bodyworks concentrated on rebodying vehicles whose coachwork had suffered from wartime neglect, both from the Bristol fleet and those of others using Bristol chassis.

In 1948 the BT&CC came into the British Transport Commission, and couild no longer supply customers which were not also nationalised. The bodies of this period were built both to the bodyworks' own designs or were copies of the well known Eastern Coachworks designs.For a brief period, there was also a connection with Lydney Coachworks, an associate of the Red & White Group. Finally, the demand for bus bodies fell, and the works turned to the construction of cabs and bodies for a series of Bristol lorries for British Road Services. Production at BBW (Brislington body works) finally ceased in 1955, although the adjacent building continued to construct Bristol bus chassis for another decade or more.

How can the author have produced such a brilliant book? I commend the reader to the Preface, in which Allen Macfarlane reveals the help given to him by numerous experts in the Bristol fleet and the other operators of Bristol vehicles. This book is well researched, well checked, and well written. If only all transport books were the same. ARP

A CENTURY OF COACHING ON EXMOOR

by Michael Hawkins and Roger Grimley (Exmoor Books, 1998) ISBN 0 86183 450 X Hardback 144 pages. Cover price £17..95

The authors regard Exmoor as a unique part of the country, and the development of its public transport, centred on Minehead, Lynton and Lynmouth, in the same light. Taking a broader view, one could at least look on the Lake District, the hinterland of Llandudno, the Ring of Kerry, the Giants' Causeway, Deeside (Ballater, Braemar, Balmoral), and even the Rinns of Galloway, as having discovered their potential for tourism at approximately the same period, and aimed at a clientele of similar affluence and hardiness. Because this is a good book that does justice to the transport arrangements of the North Somerset and North Devon resorts, one aches for a standard with which to compare it. The only example that I can point to is surprisingly similar in its format, construction and informativeness : Coaching Times & After by Henfrey Smail (Worthing Art Development Scheme, 1948). The Exmoor book tells of the slow penetration of the area by the railways, and due to terrain too difficult for unreliable motors, the survival of stage coach connections to the railheads. This

dust cover shows a four-in-hand stage coach meeting a Karrier motor charabanc in a country road in a context where both vehicles, and the state of the road itself, were legitimate, and not the stage set of a badly anachronistic costume drama. There was a period of transition from horse to motor that lasted for several years, which many histories, concentrating on the development of the motor vehicle, ignore. The railway came; the stage coach went. The motor charabanc came; the wagonette went. But not instantaneously. In the summer of 1914, a charabanc trip from Minehead could have meant either Staddons' brand-new Karrier, or Ernest Stoate's horse-drawn conveyance.

There are two photographs in the book of Minehead station : one with coach, omnibus, brake and charabanc, all horse-drawn; another c. 1920, with a taxi, two saloon buses and two open charabancs, all motor, but still also a small horse-drawn omnibus. With the horses, one is drawn into a vocabulary nowadays unfamiliar. Yet one recognises that modern word "subsidy", when the Great Western Railway, seeking to lure passengers from the London & South Western route via Exeter and Barnstaple, by 1890, was paying the Tally-Ho stage coach ten shillings per trip for a twenty week season, to provide a service over bad roads and high moorland, between the GWR station at Dulverton and the resort of Lynton. The LSWR, by contrast, hoped that you would choose to travel, in a little more comfort, by its trains to Barnstaple, and thence to Lynton (but still covering that last leg by stage coach).

Stoate's Char-a-banc Trips. 2 ROM NAVIENNEX MENERALENES H) H) 10 £ ł C a Q Agent.

[Not from the book] An illustration of a Stoate charabanc excursion ticket of June 1914.From

The book progresses to the motor age, and we learn of bus plus admission tickets to the Cosy Cinema in Minehead, and a good deal about the touting for custom for the day and half-day coach excursions among the families, who would, of course, not be day-trippers, but would be staying for a full week at the resorts. I personally learned that the petrol pump came into being as late as 1920. Did you really buy it at the chemists by the can before that ? But it is the late survival of the horse as the primary motive power, and the detail provided, that gives the book its distinctive interest. RA

NORTH WALES TRANSPORT by Jim Roberts (approx 7ins x 10 ins, softback, colour cover, 160 pages, published by Sutton Publishing Ltd., Phoenix Mill, Stroud, Glos. 1998, at £10.99.

This is a compilation of generally well produced photographs on good quality paper covering bridges, horse drawn vehicles, trams, motor vehicles, ships and railways (broad and narrow gauge) in N.Wales.

Few of the pictures were taken after 1950 (we must mention the picture of a Bristol Lodekka and a Llandudno & Colwyn Bay tram as one of them) and many are familiiar having first appeared as picture postcards. That should not put you off, for there are as many "new" pictures, and as there are over 200 nicely produced and well captioned photographs for the price, it is worth the money. The selection of early motor bus views, some Crosville, but an equal number of long deceased independent operators reveals how the buses of this area relied on tourism for their trade.

There is a picture at the top of Snowdon

before the railway was opened, when ladies ascended on the back of ponies, pictures of the Trefriw pleasure steamers which sailed up the River Conwy to a destination which today is only reached by road. There are pictures showing hotel omnibuses, a two-horse bier for "off-road" use, and a 10 seater motor wagonnette at Rhyl, offering six-penny. rides in the new fangled horseless novelty vehicle of the day. This book in particular reminds one of the variety of transport in the first half of the 20th century, and, the nice thing is that a lot of what is depicted in this book is still there, although sadly little of the road borne transport is to be included in that statement. One omission is that there are no pictures of the municipally operated summeronly "toastrack" buses at Llandudno

Matters Arising.....

Gibraltar (Issues 21/22)

Below is reproduced a further ticket which has come to light and which bears witness to the tourist traffic generated from Gibraltar Airport to the Costa del Sol in Spain before this traffic was centred on Málaga.

Dating from 1957, and entitled "BEA Road Service" it is on white card torn from a pad. The operator retained a paper top-copy, so although the ticket is marked "Original" it is in fact a copy ! The true original was presumably marked "Copy"

It carries the name of the road service operator, Gibraltar Motorways, the BEA agent M.H.Bland, whose stamp also appears, and was issued 19/4/57 for a return journey on 2/5/57....clearly at the start of a two week holiday. It also bears the address of the Gibraltar Motorways office in Torremolinos. The cost of the journey is not shown, as the ticket was issued against Coupon 604/723945 - 46.

(Ticket from Ron Phillips collection.)

News from the 21st Century

100 Years of Transport

The fanfare for the year 2000 has long died away, and now that 2001 is here there is no doubt that we are in the 21st Century. Next year, four municipally owned transport companies are known to be planning to celebrate their Centenary Year in some way. These are Bournemouth, Cardiff, Chester and Warrington. The latter two are co-ordinating their plans in order to hold a joint event in June 2002, but will celebrate their individual "birthdays" prior to this.

The irony is that the towns which had the grandest networks, the most famous managers, the most innovative ideas will never celebrate their now defunct civic transport systems. There was a time when one could pick up a photograph of a town centre and (to the surprise of bystanders) name the town by identifying it from the shape and style of its municipal buses and trams. No longer so, but.....a recent TV broadcast by the government minister for Education & Science showed an indistinct townscape adorned by a Sheffield Supertram. Still in the grey livery, of course !

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Some thoughts on Early Omnibuses by Ron Phillips and Roger Atkinson

This item was scheduled as a follow up to some thoughts on horse bus design in the previous issue, but in the meantime the British Post Office announced the issue of special postage stamps in May 2001 to commemorate the "150th anniversary of the double deck bus." The Post Office, it seems, had taken the date of 1851 to be that of the "invention" of this type of vehicle, although this date cannot be taken as the date of the first bus which carried passengers "inside" and "outside" Roger writes:

In General Support of the Date:

"In 1850, several attempts were made to improve the style of omnibuses, with the result that in January 1851, the knife-board omnibus became general. It was not, however, like the knife-board omnibuses which we still see occasionally, for it carried only nine outside passengers. Two sat on either side of the coachman, and the other seven on an uncomfortable seat, about a foot high, running the length of the omnibus. They climbed up at the back, on the right hand side of the door, and sat with their faces to the road. There were no seats on the near side, but occasionally, when passengers were numerous, the conductor would permit men to sit there, with their legs dangling down, over a little rail, in front of the windows. But he always extracted a promise that if they smashed the windows, they would pay for them. That was a very necessary precaution, as the glass was not of the substantial description now in use." (1)

Earlier examples of the Double Decker

Charles E Lee, in "The Horse Bus as a Vehicle" (2) offers several examples of the use of the roof for the conveyance of gentlemen passengers earlier than 1851. (at page 5): 'An Omnibus' from a painting by James Pollard in the London Museum. The first vehicle is one of Wilson's famous 'Favorite' line, shown in the mid-eighteen-forties with a second row of passengers arranged behind the driver.

(at page 6): "By 1845 many of the newer buses had curved roofs, and at rush hours or on holidays male passengers often clambered on to these sitting back to back on the apex of the curve 'something after the fashion of a batch of Undertaker's men going to a country job' as Alfred Crowquill wrote in November 1845" There is an accompanying picture of a bus newspapers — captioned "London bus conveying stockbrokers to the City during the Railway Mania in November 1845"

(at page 7): Illustration of "Improved omnibus introduced in April 1847, with a clerestory roof which provided longitudinal roof seating"

at page 8): Illustration 'The Last Omnibus' at Richmond in May 1847, showing roof passengers overhanging the sides.

The significance of 1851

This was the year of the Great Exhibition, and the building of the Crystal Palace to house the Exhibition in Hyde Park. It was a great stimulus to additional bus services. In May of that year, the first issue appeared of The Illustrated Omnibus Guide, (3), listing a great array of omnibus services. These included several to points 20 to 30 miles distant from London, and a question (unanswered) does arise as to whether the vehicles on these services of two to three hours duration were truly "omnibuses"; although that to Hadley and Barnet, from The General Post Office, is specifically titled (Mail Omnibus). Many of them, including the Hadley and Barnet, quoted different "inside" and "outside" fares, clearly indicating that they carried "outside" passengers. By contrast, only one inner London service - but a very important one --- quoted differential fares. This was Camden Town to and from Hungerford Market, working every four minutes from 8 minutes past 8 in the morning to 11 at night, with fares of Inside 3d, Outside 2d.

Knifeboard and Garden Seat

The illustrations opposite are taken from a Spanish source, and dated as they are 1860 for the much more sophisticated Garden Seat and 1850 for the Knifeboard suggest that the former displaced the latter. Is this known to be so? Certainly horse-trams were built with knifeboard seating (even electric cars at Southhampton) at a later date than 1860.

Knifeboard seating on motor buses is rare in Britain, although found abroad. An early form of "low-bridge" bodywork is found in the twenties, with outward facing bucket seats arranged herring-bone fashion down the centre of the upper deck. An example is illustrated in the TPC book "South Wales Transport" by A.A.Townsin and Chris Taylor, page 13. A modern example is known of in Spain, a 1960 Leyland Atlantean chassis with double deck tourist coach body had such outward facing seats: perhaps suitable for city tours.

(1) Omnibuses & Cabs Their Origin & History by H.C.Moore (Chapman & Hall 1902) pp 63-4

(2) The Horse Bus as a Vehicle by Charles E.Lee (BTC 1962)
(3) The Illustrated Omnibus Guide, May 1851 (reprinted for



Coal Gas Propelled Buses in Wallasey by T. B. Maund

Bruce Maund has submitted the following item, which is an extract from his history of Wallasey transport, for publication in *Newsletter*.

Wallasey Corporation was anxious to promote the sale of compressed gas as a fuel for road vehicles. The technology had been developed early in the century, and three tramway systems, Trafford Park, Neath and Lytham St. Annes(the latter until 30th July 1920) had been successfully operated with this fuel. During the 1914-18 war, the London General Omnibus Co. had developed a sophisticated high-pressure system (2,000 or 3,000 psig) with substantial compressor and storage instalations in depots at Hendon and elsewhere: large numbers of buses were converted.

However, many thousands of vehicles running on gas in London and other locations were suddenly restricted about the end of 1917 by a government regulation restricting the sale of gas for traction because of a serious shortage of carbonising coal. Despite the equally serious shortage of motor spirit, the gas was urgently required for other war work. Interestingly, one application of gas traction in this period was at Morecambe, where a petrol driven tram was equipped with gas bags, and therefore became a fourth instance of a gas driven tramway in Britain.

From the early 1930s several municipalities became interested in selling gas for traction, among them Birmingham, Chesterfield, Lincoln and Rotherham. The Chesterfield Tube Co. made considerable progress in the design of high-pressure tubular bottles and a neighbouring company, Bryan Donkin, sold a large number of compression plants, essential equipment for high pressure gas filling stations.

Limited range and added weight were discouraging factors and many operators lost interest after a time. In France and Germany there were national policies to maximise coal as an all-purpose fuel and there were scores of filling stations in industrialised Germany for buses and commercial vehicles until the mid-1940s.

Enthusiasm in Wallasey for town gas as a fuel for motor vehicles originated in 1934 and, over a period of about 18 months the Corporation Gas De-

F.N.Booth, Chief Assistant Engineer. The gas was carried in two 6ft. sealed cylinders carrying 350 cu.ft sufficient for 12 miles. A demonstration for councillors, using a 1930 Leyland TD1, no.58, was held on the 29th May 1936 and further experimental work was authorised. In February 1937 Wallasey Corporation was authorised to borrow £1,000 for gas compression equipment and recharging facilities were installed at the Gas Works in Gorsey Lane, which was passed by routes 10 and 11. Bus 58 had only two gas storage cylinders, neccessitating 24 calls at the Gas Works daily to recharge, occupying at total of 40-50 minutes in one day. It was also very slow. On 4th August the same year, Gas Journal reported that the Motor Bus Committee had decided to discontinue experiments with a gas propelled vehicle until new and improved equipment became available. The problem was that the cylinders were so heavy that the vehicle exceeded the legal unladen weight and the MoT was disinclined to make any concessions. Bus 58 was converted back to petrol operation and withdrawn from service in March 1938 together with five others of the same age.

Under war conditions, relaxation of weight restrictions was possible. Normal high pressure cylinders were now virtually unobtainable and eventually some marine cylinders were found that could be adapted. However, they were unsuitable for the normal 3,000 lbs high pressure but could be approved for a working pressure of 1,800 lbs. They were 7 ft 10 ins long and about 1 ft 9 ins in diameter, weighing 8³/₄ cwt. The capacity was 2,100 cu ft, the equivalent to eight gallons of petrol, with a range of 30-35 miles. A drawing of the General Layout of Equipment for Conversion to Gas Propulsion of bus no.86 (a 1933 Leyland TD3) is dated 28th December 1939.

It was proposed to remove the front staircase(1) and place the cylinder upright in the stair well, encased in a three-ply cover. Unfortunately, the bus could not pass the tilt test so, on 11th January 1940, the battery blocks, weighing 3 cwt 1 quarter were moved to the nearside front entrance step and cased in, and a 50 lb auxiliary gas cylinder fitted to the nearside. On 17th January this was replaced with a 110lb cylinder with a capacity of 100 cu ft (another report says 350 cu ft) to counterbalance the weight. The extra weight was now almost half a ton. The vehicle was passed by the MoT certifying officer at Edge Lane, Liverpool on 19th January 1940, and put to work on route 10 which passed the Gas Works in Gorsey Lane, where the gas was topped up every second trip (about every two hours). The recharging occupied 21/2 minutes.

The bus could be changed over to petrol at will

not seem to have been particularly successful at first, probably because of the tremendous extra weight, but information is scanty. It was on loan for a month to Chester Corporation in June 1941, where it is known to have operated on gas.

In July 1940 it was announced that three more Wallasey buses were to be converted to gas propulsion and a charging point would be installed at the Seaview Road Depot. Manchester Corporation 942 (a Leyland TD5) had been converted and came to Wallasey during a gas conference, running on route 16 during July. However, Manchester was not impressed and 942 was converted back to diesel soon after. It is perhaps significant that only petrol engined buses were converted at Wallasey.

There was then a hiatus as air raid damage to the Gas Works interrupted experimental work. A report in a North Western Gas Board staff magazine many years later recalled the conversion of Karrier semi-toastrack no.11 to a mobile kitchen fuelled by gas for both propulsion and cooking, but it is not mentioned as gas propelled in any departmental documents. However, it was no longer a psv by this time. It was severely damaged by fire and, by early 1941 had been rebuilt as an Auxiliary Fire Service tender. It was parked on the upper floor of Seacombe Ferry car park and it was certainly not gas propelled at that time.

The order of events is now unclear. The gas department had been experimenting with crude naptha as a fuel, one lorry having been successfully converted. The Engineer reported to the Gas Committee on 20th August 1942 that a special licence had been received from the Ministry of Fuel and Power for use of the total output of crude naptha for the propulsion of motor vehicles. The special equipment for vapourising purposes and mixing liquid and vapour was developed by Mr. W.Baxendale, deputy general manager, and the Corporation had applied for a patent. In April 1942, the Council was told that 50 vehicles (cars, lorries and four buses) were running on gas. In June 1942, it was agreed to make a bus available for naptha experiments. It seems that the next two gas buses were Leyland TD4c nos. 35 & 47, but they did not have a front staircase so their equipment must have been stowed beneath the floor. Some records seem to indicate that this pair ran only on naptha, but they did not operate in this form for long as they needed a high fuel intake when starting from rest in order to overcome the inertia inherent in the torque converter transmission.

However, their heavy gas consumption called for more frequent refuelling than had been forecast, as their equipment comprised twelve cylinders which which potentially reduced the number of refuelling calls to eight of two minutes each. There were only three double deck buses in the operational fleet with crash gearboxes (TD2 no.77A and TD3 nos.86 & 87). In addition, TD4c no.20 was given the 6.8 litre petrol engine and gearbox from TD1 no.33 which had been retained after use as the Coronation tableau. All four were converted in 1942, though the position with 86 is not certain. Some records state that 20 and 77A ran on naptha and that 87 had periods on gas only and a gas-naptha mixture.

In 1942 Transport World reported that three buses being run on liquid fuel made from coal gas gave more miles per gallon than petrol. Gas was charged to the bus department at 3/- per 1,000 cu ft which was equivalent to 1/3d per gallon; the actual production cost had previously been quoted at $6\frac{1}{2}$ d. Unofficial records quote fuel costs per mile as:

-	-
Diesel	2.42d.
Naptha	2.63d.
Naptha & gas	2.94d.
Petrol	3.98d.
Gas only	3.99d.
Petrol & gas	4.54d.

On 30th July 1942, a joint meeting of the Motor Bus and Gas Committees agreed to convert the whole bus fleet. There were plans to install recharging equipment at the depot and at Seacombe Ferry, the idea being to run gas powered buses at peak hours only so that they would only need recharging on the road in an emergency. But there were no further conversions, probably due to the unsuitability of the torque converter and the non-availability of high pressure cylinders. Furthermore, despite the desperate petroleum situation, the government was unhelpful and insisted that gas should be used instead of petrol, not as an addition.

It is not known when gas and naptha propulsion was abandoned: the minutes of the Motor Bus Committee are strangely silent on the whole topic. Perhaps they regarded it as "Top Seecret", though there were several reports in the newspapers in the early stages. In October 1942 it was decided to supply surplus naptha to private motor owners who had obtained the necessary licences but, in January 1943, the Gas Committee asked the Town Clerk to press the appropriate government departments for the renewal of licences for the use of naptha as a motor fuel. Note:

(1) A number of Wallasey Corporation double deck buses had front staircases and doorways in addition the the normal open back platform and staircase. The front door was only used at Seacombe Ferry terminal to speed up the unloading of passengers bound for

Some Interesting Ipswich Tickets by Roger Atkinson

To accompany Johnn Hibb's Ipswich chronology, Roger has selected three tickets from his collection which illuminate another aspect of the town's road transport.

Ea 2396

This is a ticket of Ipswich Omnibus Service, said to have only started in 1898, and therefore a contemporary of the horse trams, but precursor of the municipal electric trams. The advertising on this $1\frac{1}{2}$ d ticket is for discount books of 60 x 1d. tickets for 4/-

The wording states these tickets are for "any penny journey", so they were not intended to be used in multiples for other values, but to encourage short journey riders. They are also advertised as being available from conductors One hundred years ago, four shillings.seems a lot of money to hand to a conductor. V 5853

An electric tram ticket with abbreviated title "IPSWICH CORPN TRAMS". The 2d. value shows it was a post April 1917 issue. The advertising also reflects the hard times which came towards the end of the First World War: in this instance it is for a consignment of dried peaches. For this announcement to be effective, there must have been little delay in printing and using up the stock of tickets.

Yi 3173

This time it is an issue of the Second World War. The name of the town has been removed from the printing block, hence "..... Corporation Transport Service" After Dunkirk, there was a great fear of invasion, particularly by Germann prachutists. A Removal of direction Signs Order was made in June 1940, requiring removal of signnposts and mileposts, and leaving to the discretion of Chief Constables the removal of other notices which might help invaders. By the middle of July, the MoT was having to appeal for restraint in some of the wilder excesses, which were more confusinng to the natives than any potential invader. No other locality, however, went as far as Ipswich, which erased the name even from its bus tickets.

The advertising is for Trolleybus Anywhere tickets, which were available on Sunday afternoons and evenings Monday - Thursday. Ipswich at the time did not operate municipal motor buses.



White Whi ell's Mil linu Barrach Corper Thead Fer Fella-toy Bloke Atra Ante-Tiekes P. Co.; Lut.; Lop



1234567 5 6 8 W CAL SEL 89



Ipswich Transport History	1879 Mani
some notes by John Hibbs	1880 Stear

At the September meeting, John Hibbs made a short 1882 presentation from "The Eastern Chronology" (1922 edition) printed and published by G.J.Boswell, of 1884 Ipswich, Suffolk. We are reprinting the parts of this which are relevant to land transport. 1595 1890 First stone pavement at Old Bell Corner. 1785 1891 Ransomes Orwell Works established. 1795 1895 Handford Bridge built. 1817 First stone of Stoke Bridge laid. 1818 Stoke Bridge destroyed in a flood, April 12th. 1819 Stoke Bridge rebuilt by Cubitt for £7,000. 1894 1821 Gas lamps first fixed in the streets of Ipswich. 1898 1844 Railway opened from Norwich to Yarmouth. Stage 1899 coaches ceased, Colchester & London, Nov. 11th. (Also Ipswich - London) 1901 1845 First train from Ipswich to Colchester. 1846 1902 First excursion on Eastern Union Railway. 1849 1903 Princes Street Bridge built. Railway opened from Ipswich to Norwich. 1856 Old Coach Office in Brook Street converted into 1905 Cullingham's Steam Brewery (later the Tollemache Brewery) 1860 New Railway Station opened. 1907 1863 Great Eastern Railway formed by amalgamation 1908 1866 Rail Goods Station opened. 1909 1871 Dock dues charged on all coal by rail for first time. 1913 1872 Railway accident at Kelvedon, October 17th. 1874 1914 Railway accident at Thorpe, 26 killed, Sept. 12th. 1877 Felixstowe Rly. opened May 1st, purchased by the GER in July 1887. Old Tide Mill at Stoke shifted by

hydraulic power

Manningtree railway accident, December 8th. 1880 Steam roller first introduced into Ipswich. Horse trams introduced from Cornhill to Railway Station, October 8th. Horse trams introduced from Cornhill to Brooks Hall Trials with new steam fire engine on Cornhill, Sept. 26th. Horse trams from Cornhill to Derby Road. Fatal traction engine accident at Fornham, June 16th. Bourne Bridge widened. GER abolished Second Class carriages. Cabmen's shelter, Cornhill, opened January 23rd. It was removed to Christchurch Park in May 1895. Tramcars ceased running from November 11th - 25th. Canham's buses commenced running, Nov. 13th. Handford New Bridge opened December 4th. Floating Bridge, Bawdsey Ferry opened Aug. 15th. Twelve motor cars visited Ipswich. Town Council decide to purchase tram system. The town's horse tramway system is taken over on November 2nd. First sod cut of the Mid-Suffolk Light Railway. Horse tram cars cease on June 6th: sale of cars and horses, June 11th. Midnight trial of electric cars on November 10th, service commenced November 23rd. GER motor buses commenced running at Shotley. Accident to the Cromer express at Witham, 10 killed, 20 injured. Rail disater at Grantham, September 19th. Mid-Suffolk Light Railway opened September 29th. First motor taxi cab on Cornhill cab rank. Strike at Diesel works, short duration, May 22nd. Dr. Diesel drowned on the crossing from Antwerp. First char a banc run from Ipswich to Felixstowe. Diesel works at Ipswich closed, June 28th. Horse commandeering in the streets by government,

August 8th.

1915

Diesel works re-operned by Vickers, Feb. 13th.

Easter Monday and Whitsuntide without excursions.

Women first employed on trams, May 26th.

Power Station damaged in storm. Trams stopped on August 16th.

1917

Tramway fares increaseed, March 31st.

First aeroplane completed at the Orwell Works. Thunderstorm stops trams on May 29th.

Horse .commandeering. on Ipswich .streets by the government, June 23rd.

1918

Tramway fares increased again, March 31st.

Corporation adopt proposal for 1,400 houses on the Hadleigh and Nacton Roads.

Giant Handley-Page aeroplane, Old Carthusian, took off at Martlesham for India.

1919

Closure of soldiers'buffet at the Railway Station, April 17th.

Winston Churchill visits town, June 26th.

N.U.R. railmen's strike, lasting nine days in Sept. 1920

New tramway routes adopted, February 1st.

Ex tram conductress found murdered, Feb. 7th.

1921

Norwich Road and Colman St. repaved. Miner's strike causes severe power shortage. No trains

at Whit. Aeroplane crash at Martlesham, two killed. 1922

Nacton Road - Branford bus service started, Feb. 9th Transport workers "beer boycot", February 20th.

Tram fares reduced between certain hours.

1923

Trolleybuses introduced in lieu of trams on Cornhill-Railway Station section, September 2nd. 1925/6

Complete replacement of all tram routes by trolley buses, mainly built by Ransomes and all of single deck configuration. Some of these vehicles lasted to the fifties, and were generally referred to as "trams" by the local population.

1950

Ipswich Corporation introduces its first motor buses (AEC Regents). Up to this point, all routes were worked by electric vehicles.

1953

First abandonment of a trolleybus route.

1963

Last trolleybus, 23rd August.



IPSWICH, Cornhill looking west, from a coloured post card. The scene is in the early days of the electric trams and before motorised traffic had appeared on the streets. Note the rank of open carriages

MUNICIPAL POWERS by Ron Phillips

I had in my notebook a reminder to raise the subject of the powers of local authorities which sold out their undertakings to another (usually large regional company) operator, but which continued to influence the transport policy of the town in question. How did towns like York, Gloucester, Perth etc. wield their powers after having sold out their undertakings ? However, I leave that subject on the table for the time being, and take a look at the behaviour of one city council in particular, one which still is an operator today.

We usually believe that municipal authorities with transport undertakings acted somewhat like the Traffic Commisioners did post 1930, deciding who ran what, who stopped where, how much should be charged (vis a vis municipal fare scales) and what protection should be given to the town's own trams or buses. However, the case study below would suggest that the game was very much a pragmatic and local one, and that town councils made up the rules to suit themselves.

The Chester tramways undertaking functioned under the control of the Tramways Committee, whose duties were fourfold:

1) To superintend and control the tramways undertaking.

2) To carry out and execute the statutory and other duties and powers of the Council in regard to Tramways, except the borrowing powers and provisions in relation thereto, and such duties as are assigned to the Electrical Committee. (the latter was in charge of the overhead line).

3) To carry out and enforce the bye-laws and all rules and regulations with respect to the Corporation Tramways.

4) To examine all accounts relating to matters within the province of the Committee before the same are passed to the council for payment.

The duties listed above are fairly typical. At monthly meetings, the General Manager (or equivalent; for a while the Chester tramways were under the management of a "Traffic Superintendent") would report to the Committee on the running of the undertaking, and would implement any changes agreed by the Committee. All decisions were ratified by the next



IPSWICH, Stoke Bridge and Church, from a coloured post card. Stoke Bridge is mentioned in the text above. This East Anglian scene is very reminiscent of Amsterdam, where trams, churches, bridges and waterways may be found in similar juxtaposition. The tram has just crossed the bridge, despite the apparent lack of overhead wires. meeting of the city council. Let us now look at an instance of the Tramways Committee at work, considering a matter which was essentially outside their jurisdiction.

When the Corporation Tramways came into being, the track and cars of the Chester Tramways Company were purchased, but not the horse buses owned by that company. For a short time, the horse trams continued to run, then all cars and horses were sold a few months before the electric cars were ready to commence. In the interim period, horse buses gave a substitute service. This was probably opportunistic. The Corporation did not get involved with running (horse) buses.

However, in November 1907 the Tramways Committee gave "approval" to a horse bus proprietor, Mr. H. Aldred, to run a service to the Garden Lane district of the city. A second tram line had been opened the previous year, running east of the city, but now that all routes which were considered to have a sufficient population to support a tram service were in place, it seems the Corporation were happy to allow others to provide a passenger service elsewhere within the city. It was not, however, within the powers of the Tramways Committee to sanction such services.

Furthermore, Mr.Aldred soon found that the Garden Lane service was not viable, and withdrew it. The Tramways Committee resolved "that Mr. Aldred be requested again to try a service of buses for the district, the Committee being of the opinion that the bus service was inaugurated at an inopportune time of year, that sufficient publicity had not been given thereto, and that it would have been advisable to have tried the service for a longer period."

Mr. Aldred, in due course, replied to the Committee, "detailing the methods he had adopted in regard to advertising the running of a bus on the Garden Lane route, and regretting he could not for financial reasons undertake to run the bus again."

A strange case of a Tramway Committee urging an outsider to provide a service for no profit! The next instance is more professional, but is still an example of the Committee discussing things outside its terms of reference. Residents had, as they would from time to time, written to the Council requesting that certain districts should be provided with transport. The date is January 1915, and it was resolved "that the letters be referred to the Electrical Engineer and that he be requested to prepare a scheme for providing a motor bus service and to report thereon

to the Committee"

head line, probably because the Tramways Manager, Mr. Gardner, had been taken on from the horse tramway company and he probably had no training in matters electrical. The Electrical Engineer would be well known to the Tramways Committee, he would be familiar with the art of costing, and he had recently been involved with an experimental electric truck which had been tried out for refuse collection.

Three months later, he produced a lengthy report which discussed two options, a motor bus service and a service using a one-man electric bus. In the first intance he said a bus could be purchased by the Corporation or one could be hired from Crosville at 91/2d per car mile. He outlined two routes which could be worked inside a 45 minute period, and he calculated that 866 households (average 5 persons) could be served. The probable loadings would average out at 4.27 passengers per mile, and assuming a scale of 1d., 2d., and 3d. fares, the probable income would create a deficit of about £450 per annum. If enough residents (more than 20%) took out Season Tickets at £1.6.0., £2.12.0., and £3.18.0 respectively, then the service might pay. (Does anyone know of an instance of Season Tickets being used to guarantee a short urban bus service?)

The second option was based on the recent use in Chester of an electric truck, and on material about electric buses in service in Southend, South Shields and York. Using a 22 seat one-man operated bus on a shorter version of the routes than envisaged for the motor bus (the electric bus required time to recharge and was slower) would cost 6.79d. per car mile. The estimated revenue worked out at 6.3d., and the annual deficit was estimated at £35. The Committee held a meeting and resolved "that as the service cannot be run without loss, the consideration of the matter be deferred until the conclusion of the War." As the Corporation had no powers to operate buses, if they had decided to take up the electric bus option, would an electrically propelled vehicle have been allowed as a sort of trackless and wireless car?

The final instance occurred in the summer of 1915, again under wartime conditions. The Clerk of the Hoole U.D.C. wrote to ask if the Committee would be prepared to undertake the liability of half the guarantee (\pounds 250) for a bus service (to be operated by the Crosville Motor Company) between Chester and Hoole. The reply was "that at the present time, the Committee are not prepared to recommend the Council to subsidise a motor bus service".

Let us now look at the role of the Watch Committee in public transport affairs inside the city boundaries. The Watch Committee was primarily set Committee would see to it that its interests were safeguarded by lobbying the members of the Watch Committee (in any case, there were councillors who sat on both committees). The Chester Watch Committee found itself in charge of all things demanding licences, and these, of course, offered a source of revenue to the City Council.

For the record, the Watch Committee was in charge of licensing the following in 1914:

□ Storage of explosives and petroleum

Pedlars

- □ Chimney Sweepers
- Pawnbrokers
- □ Game Dealers
- □ Street Traders
- □ Performance of Stage Plays
- Cinemaphotography Exhibitions
- Locomotives
- □ Light locomotives
- Motor Cars
- □ Heavy Motor Cars
- Hackney Carriages
- □ Drivers of Carriages
- □ Porters
- □ City Guides
- □ Boating on the River Dee

The list is not quite complete, for they were called upon to approve of numerous miscellaneous events and activities from time to time, for example, carol singing.

With regard to road transport, the Watch Committee issued cab licences, and there was an annual inspection of cabs. One year about 100 cabs were made available for inspection (by an outside person), and only 60% were approved. The remainder were then reinspected on a subsequent nominated date, on which occasion a further 35% were passed. Motor cabs were also inspected with regard to the condition of the body, but it was the City Electrical Engineer who ruled upon the mechanical condition. A cab owner could apply for his annual licence once his vehicle had passed the inspection. It is not clear whether buses (classed as Hackneys) were subject to this inspection, but they were certainly submitted for initial approval if being used inside the city boundary.

A typical minute reads:

"That licences be granted as follows:

The Crosville Motor Co., Nos. CC. 1096 and DU.1560

Mr.W. Withers - FM. 230" - here there is no clear distinction made between buses and a motor taxi. The second bus for Crosville carries a registration which gives its origin as having been a Daimler chassis previously used for demonstration. Sometimes, a bus for Crosville is reported as being for use on a specific route. It is not very likely that buses were required to be permanently used on the same route or routes, although for a variety of reasons this may well have been so. What is likely is that when writing to the Watch Committee, the bus owner drew attention to the fact that he had a new vehicle because he had started to run a new service.

"RESOLVED- That the Crosville Motor Co. Ltd be granted a licence for a Motor Omnibus (FM. 937) for use between Chester, Ellesmere Port, New Ferry and Kelsall."

Dated April 1916, this entry is proof of the arrival of a new vehicle in the Crosville fleet, and that at the time the Company were still operating the Ellesmere Port, New Ferry and Kelsall services.

At the same session, the Committee discussed an issue related to the Local Government Emergency Provisions Act, 1916. Under the title "Taxation of Heavy Motor Vehicles" they decided that Chester should support recent suggestions made by the Association of Municipal Corporations relating to heavy motor vehicles and whether they should be subjected to taxation imposed locally for the damage they were likely to cause to roads. In fact, the Act (of May 1916, see *Newsletter 20*, page 7, article on Taxes on Locomotion by R. Atkinson) was used to tax motor bus companies for their use of roads inside the boundaries of local authorities who wished to impose the duty (it was **not compulsory**, but local authorities were not shy of Acts which allowed them to raise revenue).

Hence we next see Crosville having to submit in detail the route inside the city boundary which they would like to use for a new service, and the Watch Committee giving approval to the route and stating that, in accordance with the timetable submitted, that would represent x annual journeys over that route, to be charged at y pence a mile. Fare scales and stopping places were also a matter for regulation, as well as the route to be taken. The Watch Committee does not seem to have meddled with fare scales (after all, their charges tended to inflate fares), and it certainly refused to intervene on the matter of fares when a neighbouring authority complained of the fare scales on a route into Chester. However, the Committee did make changes to routes and terminal points, and wanted to know which stopping places would be used en route. Crosville replied that the stoppping places would not be made permanent until public demand had been established, which answer seems to have satisfied the Committee.

In the case of the trams, many request stops were abolished and other stops moved during the war at the request of the government, in order to effect fuel economies.

CHESTER CORPORATION TRAMWAYS

Frith's postcards capture ancient buildings and modern trams



THE CROSS represents the point at which the four streets representing the cardinal points meet. Tram 3 is about to turn south and head for Saltney, having come from the Railway Station in the first year of municipal electric trams (1903-1930) The car is of 3' 6" gauge to permit double track in the narrow streets, although outside the walls the roads traversed were quite wide fby the standards of the day.



EASTGATE STREET, looking toward the Jubilee Clock. The arch represents a break in the Roman walls which still surround the inner city. The picture was probably taken in 1903, as the conductor is wearing ordinary clothes apart from a pill-box style cap. The scene is virtually unchanged today, but in business hours there would be a much lorger throng of shoppers and tourists. You can still catch a bus from here to the General Railway Station.

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