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THE COACHING STOCK OF THE METROPOLITAN RAILWAY

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Robert Harvey Burnett, appointed Locomotive Superintendent in 1864, introduced detail improvements in successive batches of the 'rigids'. Twenty carriages ordered in 1866 received steel tyres and a redesigned suspension wherein the outer wheels had truly radial axleboxes, and long spring shackles and scroll irons; the wheelbase was standardised henceforward at 6'0" + 16'0" + 6'0". This order, which was numbered 73-92, is also notable as being the last to be constructed with the original square-topped compartment doors. The introduction of the round-topped door in 1867 reduced its liability to damage in the event of its being opened in the tunnel.

Here be it observed that the panels and quarter-lights on the right hand side of 'guards' doors were hinged from floor to cant-rail to form a double luggage door. With the advent of the round-topped door, a curved extension was incorporated in the free side of this second door to match to it. This peculiarity was to be found in all Metropolitan stock constructed prior to 1898. The District also used the double door, but cut it short below the top-lights, which remained a fixture.

Dissatisfied with his radial axleboxes, which were expensive to produce, and tended to bind, Burnett next turned to an arrangement resembling a two-wheeled Bissell truck wherein two arms, attached to axleboxes which moved quite freely in the horn plates, were connected to a common pivot centrally positioned above the inner axle, the scroll irons and swing trucks being used as before.

Unfortunately these radial designs proved to have infringed the patent rights of W.Bridges Adams, who had to be paid £585 agreed damages in 1871. In consequence Burnett did not perpetuate the radial features, but allowed the outer axles complete freedom of movement under the customary swing-truck suspension, the horn plates acting merely as stops in case of derangement.

Burnett himself built only twelve carriages with this arrangement before his abrupt dismissal in 1872, by which time there were 180 carriages, of which 154 were of the eight-wheeled non-bogie type.

Other innovations deriving from his chieftainship were Louis Sterne's pneumatic buffers (1867) and Wilkin's and Clark's carriage brake (1869), an early self-acting form of the chain brake later developed in conjunction with Francis Webb of the London & North Western Railway. Finger boards (still in use on the 1927-31 Watford stock), were provided in the same year, to obviate digital crushing by a hastily slammed door.

J. Tomlinson, Jnr, who succeeded Burnett, introduced the Pintsch high-pressure oil gas system in 1874-6. A considerable economy in operation resulted, in that a single charge was sufficient for a full working day, whereas the old low-pressure system had capacity for three hours only. The same period saw the general adoption of the Smith simple vacuum brake, the Metropolitan being the first company to equip their entire stock with this brake.

Smoking accommodation was provided from September 1st 1874, although both underground companies were exempt from the general obligation under the 1868 act to provide such. The last 3rd class carriage and the composite in each train were usually selected for this purpose, and in 1891-3 the first class smoking compartments were fitted with Laycock's 'torpedo' air extractors.

When the District undertook their own workings in 1871, a proportion of the stock became temporarily redundant, and no additions were made until 1879. Successive extensions to Pinner, the completion of the Inner Circle and the East London connections necessitated the provision over the five following years of 121 new vehicles. Notable was the provision of a separate luggage compartment in some of the Harrow line stock. Full-width double glazed doors with horizontal panelling were fitted, the arrangement being G.L.3.3.3.3.3.3. One of these bodies, believed no. 212, survives as a store at Aylesbury.

No new 'rigids' were built subsequent to 1884, Following the Armagh accident of 1889 the automatic vacuum brake was adopted in 1892, but the passenger alarm signal was never provided on this stock. In the years following electrification, with some exceptions to be mentioned later, the majority was

scrapped, although some of the later vehicles were sold to minor lines, where they survived for many years.

BANK HOLIDAY AUGMENTATION OF THE CIRCLE LINE

On the day before a bank holiday weekend, there is always a heavy interchange of passengers between the London main line stations, many of which are served by the northern section of the Circle line. To avoid overcrowding, an increased service has to be provided on the section, and this is provided in two ways. On the District Line, trains on the Wimbledon/Putney Bridge - Edgware Road service are extended round the Circle to Aldgate; and on the Metropolitan Line, extra trains of Hammersmith & City stock are run, these being diverted round the Circle to High Street Kensington or South Kensington at the western end, and to Aldgate at the eastern end, of their runs.

At the time of going to press, details of services to be run on the Friday before Whitsun 1962 are not available, but London Transport expect them to be similar to those which operated on the Thursday before Easter 1962. Those services were as follows:

District Line Putney Bridge to Aldgate; a fifteen minute service ran, with the first train leaving Putney Bridge at 12.29 p.m., arriving Aldgate 1.07 p.m., and the last leaving Putney at 2.44 p.m. arriving Aldgate 3.22 p.m.

In the opposite direction, the first and last departures from Aldgate were at 1.12 p.m. and 3.27 p.m. respectively.

Metropolitan Line This service was more complicated, but was also a fifteen minute one basically. The first train on the outer rail was at 1.04 p.m. from High Street Kensington, arriving Aldgate 1.30 p.m., and the last to Aldgate left High Street at 3.04 p.m. arriving at 3.30 p.m.

After this time, additional trains ran from High Street to Whitechapel at 3.23 p.m., 3.55 p.m. and 4.14 p.m., and one to Plaistow left High Street at 3.48 p.m.

In the reverse direction, the first trains were the 12.51 p.m. from Aldgate and the 12.44 p.m. from Barking, arriving at High Street 1.18 p.m. and 1.33 p.m. respectively. Some earlier trains ran from Edgware Road to High Street, where all terminating trains reversed via Triangle Sidings.

Although the service before Whitsun may not be exactly as that above, anyone wanting to try some unusual London Transport workings will find something similar in operation.

METRO-LAND

John R. Bates

'Metro-Land' - what a halcyon picture the word conjured up to the City dweller a generation ago - rolling Chiltern country, redolent with mellow beechwoods; the lush valleys of the capricious Chess and Misbourne; the Chalfonts, Missenden, and other romantic towns and villages; breath-taking prospects northwards across the verdant Vale of Aylesbury; noble parklands like Great Hampden and Shardeloes. A right noble heritage indeed; a countryside bearing the roots of England in its fertile soil.

Between the wars the Metropolitan Railway (or Metro, as it preferred to be called) sought to exploit the natural advantages of the landscape which it regarded peculiarly its own by a picturesque stream of leaflets, posters and hand-books which for sheer charm of presentation have never perhaps been equalled. Hand-in-hand with this went an astute policy of estate development carried on through its subsidiaries, the Metropolitan Railway **Country Estates** and **Surplus Lands** companies. The favoured house seeker in the suburbia which lay beyond Baker Street was offered 'country homes' from £500 and upwards, on easy terms, with fast and frequent trains to town - or to the heart of rural Bucks and the Chiltern country if he decided to travel in the opposite direction. When coupled with an enterprising fares policy it was perhaps small wonder that the poster which bespattered the railway hoardings - not to mention the legend inscribed on the carriage door handles - exhorting home-seekers and passengers alike to 'Live in Metro-Land' met with such a ready response, as testified by the rustic villas which soon appeared everywhere along the line of route from Wembley to Watford, Kingsbury to Kenton, at Hillingdon and Harrow Garden Village. There was nothing slapdash about them either; like the line itself the estates were well laid out and the houses soundly constructed. They are indeed eagerly sought after today, at four or five times the price - or more. The plan was not merely to build houses but to design self-contained neighbourhood units with shopping centres, open spaces and other amenities - even golf courses.

Contemporary literature issued by the Company ranged from 'Country Walks' and 'Where to Live' to 'Metro-Land' itself, the most characteristic and best known of them all. This was published in frequent editions from 1919 to 1932, sometimes twice annually if the demand called for it, and comprised sections such as 'The Story of the Chilterns', 'Country Homes in Metro-

land', and 'How to get about London'. The series provides a valuable documentary record of the social background of the period and the delightful coloured plates which they contained illustrated the varied types of scenery to be found in the 'Metro' country. In addition they included a wealth of information relating to such things as season ticket rates, educational facilities, golf courses and places of interest - a veritable vade-mecum for the Metro-user. Special editions came out for the Wembley exhibitions of 1924 and 1925 (which caused a tremendous amount of extra traffic to accrue) and the Watford and Stanmore extensions of 1925 and 1932 both got special mention, as might have been expected. On the latter branch a system of Centralized Traffic Control was inaugurated for the first time in this country, whereby all traffic movements were controlled by a single box at Wembley Park; in this, as in other technical developments, the 'Met' was ahead of its time. It is a matter of irony that the 'Met' ceased to exist as a separate entity when its Empire had reached its greatest extent, - and in fact when further extensions were being planned. After its incorporation in the London Passenger Transport Board on 1st July 1933 the branches to Brill and Verney Junction were truncated and Quainton Road - once a busy junction station - almost ceased to exist. The Piccadilly Line has infiltrated to Uxbridge and the Bakerloo has taken over the Stanmore branch in its entirety - although the latter retains unmistakable evidence of its Metropolitan ancestry in such features as its high-level station platforms.

Now the 'Met' is once more in the throes of transition in the course of which it has become an entirely electrified and rather more compact component of the London Transport system. Although shorn of the remains of its once extensive domain beyond Amersham in this streamlining process it is possible to detect a new Metro-Land arising, phoenix-like, from the old. Gabled villas are again springing up alongside the line between Rickmansworth and Amersham, visual evidence that the erstwhile Metro country still retains its attraction for the homemaker. In a more prosaic age the posters are no longer with us - or perhaps there is no need for them; local agents report that whole estates are sold before a brick has been laid. But the password still remains, 'Fast trains to Town' has lost none of its magic ring - or if you are going the other way, a day return to 'Metro-Land' is a passport to Romance.

The above article is reprinted by permission of the Editor of Abbey National Review, where it first appeared in June 1961.

NEWS FLASHES

- NF 20 A total of 549 tube cars from the Central Line fleet have now been disposed of - 261 Motor Cars, 180 Control Trailers, and 108 Trailers.
- NF 21 A further consignment of tube cars has been despatched to Hereford. This left on 11/4/1962 and comprised - 3628, 3670, 3652, 3556, 3612, 3641, 3443.
- NF 22 Ref NF 5 - the new battery loco now being built at Acton is numbered L76.
- NF 23 O-6-OT L54 was cut up during the week ending 24th February 1962.
- NF 24 Ashbury coach no. 519, scheduled for preservation, was sent to the Relics Store of the British Transport Commission at Clay Cross, on 26/2/1962.
- NF 25 Work on extending the platforms at Blackfriars has now been completed. The extensions are 74 ft long, and are at the west end of the platforms; they will enable passengers to board the longer trains without using the catwalks at each end of the platforms as hitherto.
- NF 26 An armrest has been noticed on a tube car in Bakerloo Line service, which does not conform to the usual pattern rest; starting as a rest of normal thickness, it becomes three-tiered at the outer end. Further information would be welcome.
- NF 27 A Piccadilly Line train was derailed outside Oakwood station during the evening of 22nd April 1962, the first four cars leaving the rails. Apart from being shaken up, none of the passengers was injured.
- NF 28 The passenger interchange subway at Euston, between the City and Charing Cross branches of the Northern Line, has been closed from 29/4/1962. This is in connection with the building of the stairways which, in the reconstructed station, will lead to the first pair of escalators for the Charing Cross branch.
- NF 29 The new station entrance at Mansion House was opened on 21/5/1962; the former entrance had to be demolished because of road widening by the City Corporation.
- NF 30 A train of ex-Circle C/P stock was transferred to the District Line in early April 1962 for trial running.

WATERLOO AND CITY LINE Those interested in this line may like to have the following references to articles on the subject.
 Railway Magazine - Aug 1898, 181-187; Aug 1958, 517-524.
 Railway Gazette - 15th Nov 1940 - article on the re-equipment.
 Proceedings of the Institute of Civil Engineers, Vol CXXXIX, Part I, 1899-1900.

THE TIMETABLE

Saturday 16th June Visit to Neasden Depot and Works, LTE.
Limited Party - names immediately please, to the Secretary at 4 Southcombe Street, London, W.14.

Saturday 16th June Following the above visit, a Trip on a T stock train, if still running. This is an open event - everyone welcome; meet in the Booking Hall at Wembley Park - 1 p.m.

Sunday 15th July Visit to the Bluebell Railway. Bring the family and friends. This 5½ hour visit will give ample time to inspect the line, etc, also to visit Sheffield Park itself, a short distance from the station. The cost includes a fifty-minute ride on the train, inspecting the locos and museum, a good home made tea at 5 p.m., and free parking.

Send open postal order to total 5/- for each adult and 4/- for each child, stating at the same time if party rate from London would be required, to the Secretary not later than 30th June. Party Rate will be 15/- and 7/6d respectively, and will be arranged if found to be cheaper than Day Return fares. P.R. will be 7/6d for those under 16 and over 14 if 8 or more are travelling, so please state also if in this age group.

SOCIETY LIBRARY

The Librarian gratefully acknowledges donations received for the Library from Members, and will welcome further offers of any material suitable for inclusion. It is hoped to publish preliminary details of publications available, and the procedure for borrowing these in the very near future.

OTHER NOTICES

Biggleswade and District Model Railway Society are holding a National Open Competition in connection with their 1962 Annual Exhibition; the closing date for entries is 31st August and the exhibition is from 18th to 20th October. Sections in the competition are -

- I Locos constructed and owned by entrant - gauges 000 and 1
- II Coaches Vans and wagons - in the above gauges only
- III Ancillary subjects - trackwork, lineside buildings, scenic work, etc.

Entry forms may be obtained from J. Brook Smith, 34 Barnehurst Road, Barnehurst, Kent, or the Hon Sec of the Biggleswade Society - K.E. Dann, 9 The Fields, Lower Caldecote, Biggleswade Bedfordshire.

8 Exhibition of British Transport Models - open until 10th June - Bethnal Green Museum.

This exhibition, though mainly designed for children, and not including a great deal of London Underground interest, has on show a very fine collection of photographs of London's public transport - mainly road - mounted by the LTE.

A BRILL BRANCH SPECIAL

A special train ran for the inspection of the Brill Branch on Tuesday 23rd July 1935 - presumably the last inspection train on that line, to make the decision on closure. The train comprised B/3rd-Met Saloon-3rd/Brake, and ran as under:

12.38 ex Neasden Yard	arr Baker Street	12.51 empty stock
1.05 dep Baker Street	arr Rickmansworth	1.31 change loco
1.34 dep Rickmansworth	arr Quainton Road	2.07 Brill loco attached
2.12 dep Quainton Road	arr Brill	2.29 - 17 mins:
2.45 dep Brill	arr Quainton Road	3.02 Brill loco detached
3.07 dep Quainton Road	arr Rickmansworth	3.43 change loco
3.46 dep Rickmansworth	arr Baker Street	4.14
4.20 dep Baker Street	arr Neasden Yard	4.33 empty stock

If this timing was adhered to, the train must have maintained an average of 20 mph over the branch, and if crossing gates were not manned it must have got up to over 40 mph in between!

It may be noted that, on this day, the 3.12 Brill to Quainton Road was timed to run 12 minutes late, and the 3.35 railmotor ex Verney Junction was held at Quainton Road to connect with it.

EDITOR'S NOTE There are still a lot of blanks in the history of the Brill Branch, and still more in that of its offshoot the Kingswood Branch. Quite a lot of people are interested in this rural byway of the Underground, and they would like to see those gaps filled. If you have any information likely to be of interest, please write to the Editor at 62 Billet Lane, Hornchurch, Essex. Particularly wanted are definite dates of opening; dates of opening, closing and lifting of the Kingswood Branch - in fact anything about Kingswood is likely to be of interest as its history is rather obscure.

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