UndergrounD

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A DISTINGUISHED NEW MEMBER

The Committee are honoured to be able to announce that during the past few weeks Mr J.P.Thomas, M.I.E.E., has accepted Honorary Membership of the Society, and that Mr Thomas was duly elected at the November Committee Meeting.

During a long and distinguished career, J.P.Thomas was for many years an Officer of the Underground group of companies, and later General Manager of London Transport Railways; while he held his various posts, he had considerable influence on the growth of the underground railway system in the metropolis, the efficiency of which has become acknowledged all over the world.

Now living in retirement in London, Mr Thomas takes a very great interest still in the development of underground railways everywhere, and has already made some most useful and thoughtprovoking comments on the future of our Society. We are pleased and proud to number Mr Thomas as one of us, and wish him long and enjoyable membership.

AN AFTERNOON AT CLAYDON E.J.S.Gadsden

A grey Sunday afternoon last April found Chris Gooch and myself heading deep into rural Buckinghamshire, from the Metroland of today to that of a quarter of a century past. The weekend motorists left far behind, we climbed through the Chiltern ridge and were soon threading the narrow streets of Aylesbury. Ten miles of winding road brought us to the old market town of Winslow, with its many bow fronted windows. and here we diverged onto the minor road to the Claydons. This is the country made famous by the "Verney Memoirs", but perhaps better known to railway enthusiasts for having no less than five railway stations within a two mile radius of the villages - another accomplishment of the family. We passed the sadly decaying Metropolitan outpost of Verney Junction, and a few minutes later turned up the drive to Claydon House. We were greeted by Sir Harry Verney, who kindly conducted us on a tour of his ancestral home, often described as one of the finest country houses in England, with its sumptuous

interior decorations. It was built in competition with Stowe, the home of the Dukes of Buckingham, and it was not until the mid-nineteenth century that the two families were associated with each other, when they jointly embarked on considerable railway developments in the area.

On the terrace overlooking the great estate, Sir Harry recalled his years as a director of the Metropolitan.

"Before becoming a director I once attended a stormy meeting of the shareholders. Everybody wanted to speak, and when I got up, they said 'Who are you?'. I said 'Verney, and I own all the land round three of your stations.' Good heavens, he must be a multi-millionaire - Liverpool Street - Euston Square? No, the three stations were Grandborough Road, Winslow Road and Verney Junction. It is tru enough, I did own all the land around there.

I was a great friend of one of the directors, Francis McLaren, who was a Member of Parliament and son of the Chairman. He arranged for me to speak, and I learnt by heart an immensely technical speech showing what a vast knowledge I had of railway matters, and of the Metropolitan Railway in particular.

Later on I became a director, and I think what impressed me most was the extraordinarily friendly relationship with all the staff. Being one of the smallest railways at that time, we all knew each other, all down the line. I travelled each day from Grandborcugh Road, and was always the first passenger in the Pullman Car, quite often the only one on the train as far as Aylesbury. The stationmaster was always waiting to welcome me, with a red carpet in theory, not in practice. It was a very punctual train, never, never late.

The board meetings were always interesting, as we all knew a good deal about the railway, and what interested re most was the question of punctuality, and it was an stonishing fact that almost all the trains were dead on time; but if a train was unfortunate enough to be two ninutes or more late, it was reported to the board - and the list got shorter and shorter, hardly ever did a train dare to be two minutes late! I think it was really due to R.H.Selbie, our brilliant General Manager; and oiling the wheels in the background was a splendid man called W.F.Smith, who kept us all good tempered. Those board meetings were some of the happiest days of my life. Those were the days." Although originally a child of the Great Eastern, by 1890 the London, Tilbury and Southend Railway was becoming a serious competitor. In 1899 the GER opened their Southend branch. This opening sparked off violent competition between the two rivals.

One of the greatest problems of the Tilbury's operating department was the small accommodation at their London terminus, Fenchurch Street, which was leased by the Great Eastern from its owners, the London and Blackwall Railway. Partly as a result of this, in 1897 a line joining the Metropolitan District Railway to the LTS was proposed. This line was promoted by a nominally independent company, the Whitechapel and Bow Railway, and was to run mainly in shallow tunnels from Whitechapel to Campbell Road Junction, just west of Bromley station. This line was opened on the 2nd June 1902, and on the same day that part of the Metropolitan District line from Whitechapel to Vallance Road Junction was transferred to the Whitechapel and Bow. The services provided over the new route relieved the Tilbury line of much of its local traffic.

They did, however, severely overload the two tracks from Bromley to East Ham, where most of the District trains terminated though some ran through to Upminster. Almost as soon as the line connecting the two railways was complete and the through services were running, the Tilbury obtained powers to provide two extra tracks on the Northern side of the existing lines. These were opened as far as Fast Ham in 1905; the same Act as authorised the guadrupling also authorised the electrification of the new tracks, and electric trains commenced running to East Ham on the 20th August 1905. The steam operated service to Upminster was withdrawn on the 30th September of that year. The section to Barking was not opened for nearly another three years, electric services being extended to that station on 1st April 1908. The late opening of this last section was due to the first of Barking's several rebuildings. Level crossings were abolished and the station was enlarged.

During 1902 the control of the District passed to the Underground Electric Railways Co. under Charles Tyson Yerkes. Current was provided (and still is) from the Lots Road Generating Station, Battersea.

As a result of a successful excursion run during the summer of 1909. a joint service was commenced 1st June 1910 from Ealing Broadway to Southend-on-Sea. This service, which was electrically .36 hauled as far as Barking, and eventually had special rolling stock, ran until the 1st October 1939.

The history of the District/LTS services was rather uneventful until the 1930's. During 1931-32 the line between Barking and Upminster was widened to give four tracks. New stations were provided, on the new tracks only, at Upney, Heathway, Elm Park and Upminster Bridge. Extensions to existing stations consisted of providing new platforms and moving the station buildings to new premises on the road overbridges - except at Becontree.

Most of the new and rebuilt stations are on the same pattern. The entirely new ones are simple island platforms which do not affect the track layout except for an increase in the distance between the tracks. On the platforms there are the minimum of buildings, there only being a waiting room and associated facilities. The ticket offices in all except one case, are on the overbridge; the way from the ticket office to the platform is a covered slope. This approach provides for a free flow of people at rush hours.

The exception among the new stations is Upminster Bridge; the line here is above road level and crosses it at an oblique angle, just east of the station. Here the station platform is the same as the others, but the ticket office is at ground level and alongside the road. The way from the platform to the road is by a steep staircase and a short subway.

The stations where there were already LTS platforms were rebuilt with an island platform (similar to that which I have just described) between the down main and the westbound District lines. A new platform was provided on the eastbound District line. These new platforms were connected to the ticket office, as was the existing up main platform, by an overbridge.

The old station buildings on the up platform were converted into offices. At Upminster, similar modifications to those already described were carried out, but one extra platform was provided and electrified. This, however, was not regularly used by LT trains, except at rush hours, until 1956. Before this time it was used by the BR push-pull train that used to run on the Romford line until this service was dieselised; after 1956 this train used a brand new platform built on a spare line to the north of the station. The District electric service to Upminster commenced on the 12th September 1932.

Beyond Upminster station the LT tracks were not very extensive, until 1958, when the new Upminster Depot (actually situated in Cranham) was opened. This was built on spare land at one time partly occupied by the LTS steam depot and some sidings. The depot is approached by faree tracks, branching at the yard end into three fans of sidings, some of which are shed roads. The shed is used for normal cleaning and maintenance of stock, but no major overhaul or repair work is carried out. For the external cleaning of stock, washing plant is provided on the two southernmost depot access tracks. At present there is plenty of siding room on the depot, and some of the sidings have been used recently to store redundant F stock before scrapping.

EDITOR'S NOTES

The article by Stephen Bissell, on The Eastern Extension of the District Railway, is an extended version of one which originally appeared in the September 1963 Issue of Railway Express, and is reproduced by kind permission of the Editor.

The text of Sir Harry Verney's reminiscences, in the article by Eric Gadsden, is a transcript of the recording made for a meeting of the Society at Pinner on 3rd May 1963.

Corrections

In the ninth chapter of The Rolling Stock of the Metropolitan Rai lway, by K.R.Benest, in the November Issue, the rate of acceleration given in lines 8 and 9, p.125, should, of course, read "one foot per second per second". Your Editor apologises for not being in a fit state to see double!

In the article on the Metropolitan Line summer service, which appeared in the August issue, the reduction to four cars on the Uxbridge service, referred to on p.92, line 19, related to the midday off-peak period only Saturday excepted, and up to 5.30 p.m. on Sundays. Also, on the same page, line 27, the two trains cut back to start at Baker Street, should have been given as the 3.59 p.m. Moorgate-Watford and the 6.43 p.m. Moorgate-Uxbridge. For these corrections we are indebted to our member "Met Commuter", who has also contributed the following notes on the Summer Service this year - the delay in publication has been editorial (due to shortage of space).

UNCOUPLING AND UNADVERTISED TRAINS - MET SUMMER TIMETABLE 1963 "Met Commuter"

Arising out of the article in the August issue (as corrected this month), one could comment further on the Met Line off-peak uncoupling during the Summer Service this year, and the following are some of the points which spring to mind:

On Sundays, the Amersham trains were full-length until the 12 noon ex Baker Street, inclusive, then 4-car until the 6.30 p.m. inclusive.

On Mondays to Fridays, after the 8.35 p.m. Baker Street -Watford, all Amersham and Watford trains were 4-car except the 10.20 and 12.15 Baker Street - Watford. This discrepancy was caused by the fact that set no.113 did not divide, with one 4-car unit going into one of the Watford sidings, which is what happened to half of no.116 in the morning (the other half ran through the mid-day period as no.416) - the basic cause of all this was of course that the Watford service off-peak needs an cdd number of sets (seven). With the Amersham and Uxbridge services, four and six sets were needed for the off-peak trains.

There were a number of unadvertised passenger trains which were cancelled if for any reason it was decided to run 8-car trains all day; the following have been noted:

SX 9.15 a.m. Rickmansworth-Amersham (continuation of 8.30 train ex Liverpool Street).
8.08 p.m. & 8.38 p.m. Watford-Wembley Park
8.23 p.m. Amersham-Harrow (non-stop from Moor Park).
Sun 4.57 p.m. & 6.12 p.m. Wembley Park-Watford.
5.22 p.m. & 5.57 p.m. Wembley Park-Uxbridge.

There was also a train on Sunday nights at 11.30 Uxbridge to Harrow, arr.11.49, which connected with the last train to Baker Street (the 11.31 ex Watford), and why this was not advertised it is difficult to understand.

EXTENSION OF PROGRAMME MACHINE SIGNALLING

Automatic junction working by programme machine on London Transport's District and Piccadilly Lines is now being extended; on the night of Saturday/Sunday, 5/6 October 1963, an installation was brought into use at Turnham Green, to control the junction between the Ealing and Richmond lines of the District. Before the end of the year a further installation will come into use at Hammersmith to control movements of District and Piccadilly Line trains between fast and slow tracks. and also train reversing movements. The fast (inner) tracks are usually used by Piccadilly trains and the slow (outer) tracks by District trains. Programme machines have been in use on the District Line for three years at Parsons Green and Putney Bridge and, from last year, at West Kensington also. All these machines are, or will be, under remote control from a central room at Earl's Court. In general, signals and points on the ground have been left undisturbed and only the method of control has changed. TURNHAM GREEN

Turnham Green station lies at the junction between the Ealing/ Hounslow and Richmond routes of the District Line, and the passen-

ger train services for these routes provide most of the traffic. There are occasional freight trains to and from the LT system by way of the London Midland Region tracks which join the Richmond line at Acton Lane Junction. These trains run over the eastbound fast line to a refuge siding east of Turnham Green, where they are held for a vacant path in the District eastbound service. Automatic working is provided for the Richmond line junctions only, as the freight trains run on "when required basis".

There are three programme machines at Turnham Green, as follows:-

- No 1 dealing with the eastbound trailing junction on the local line.
- No 2 deals with the eastbound local traffic through Turnham Green station and is concerned primarily with the regulation of eastbound local trains.

No 3 - deals with the westbound facing junction. Because of the distance between Turnham Green and the supervision room at Earl's Court - some three miles - the cost of independent wires in the control cable would be prohibitive. To avoid this the slow scan system, as already provided between

Leicester Square and Morden on the Northern Line, has been installed. This scanning is applied in five distinct pulses to a 127-wire cable so that a total of 635 channels is available for the control and supervisory circuits. The scanning system is developed on electronic semi-conductor and magnetic devices and the absence of mechanical contacts and relays results in high reliability and speed in operation.

HAMMERSMITH

Hammersmith is a through station with signalling facilities for crossing trains from fast to local tracks, and vice versa. These facilities are in regular use in the late evening and early morning when Piccadilly Line trains use the local tracks between Hammersmith and Acton Town.

There is also a lay-by siding between the eastbound and westbound fast tracks east of the station, which is used during the midday offpeak period to reverse Piccadilly Line trains approaching from the east and terminating at Barons Court (the station before Hammersmith). It can also handle similar reversals for both District and Piccadilly Line trains, but using the eastbound fast platform at Hammersmith; these movements are only carried out in an emergency. All these movements will be controlled by the new installation when completed before the end of the year. There will be seven programme machines at Hammersmith, and it was originally intended that they should be allocated as follows:-

No 1 - eastbound local traffic to eastbound local or

eastbound fast tracks.

- No 2 eastbound fast traffic from eastbound local or eastbound fast tracks or lay-by siding.
- Nos 3 & 6 time regulation of westbound fast and westbound local trains respectively.

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- No 4 westbound fast traffic to westbound fast or westbound local tracks.
- No 5 westbound fast trains from Barons Court along the westbound fast track or into the lay-by siding.
- No 7 trains from westbound local or westbound fast tracks entering the westbound local platform.

However, during November, some modifications were made to the installation, affecting the numbering and function of the machines. To avoid confusion, as many machines as possible were left with their existing numbers before the modification of the scheme, so that, although there are still only seven machines, the numbers run up to 8, as follows:-

- No 1 eastbound local traffic to eastbound local or eastbound fast tracks.
- No 2 eastbound fast traffic to eastbond local or eastbound fast tracks or lay-by siding.
- No 3 westbound fast trains from westbound fast line or lay-by siding.
- No 4 westbound fast traffic to westbound local or westbound fast tracks.
- No 5 westbound fast trains from Barons Court along the westbound fast track or into the lay-by siding.
- No 7 trains from the westbound local or westbound fast tracks entering the westbound local platform.
- No 8 trains from both eastbound platforms and lay-by siding.

INTERLOCKING MACHINE ROOMS

New interlocking machine rooms have been provided at Turnham Green and Hammersmith in connection with the new signalling work, the Turnham Green room being located west of the station between the two fast tracks. It houses a 24-shaft interlocking machine and its associated electronic control unit, together with the safety signalling equipment and programme machines. Hammersmith interlocking machine room is east of the station, at street level, and is sited in a position which will not be affected by the extensive Town Planning developments which are planned for the area. It is equipped with a 36-shaft interlocking machine, electronic control unit, safety signalling apparatus and programme machines.

The distance between Hammersmith and Earl's Court is just under $l_2^{\frac{1}{2}}$ miles and there would be no economy in providing a scanning system. The supervisory circuits will be carried by two 217- and one 127-wire cables.

EARL'S COURT CENTRAL SUPERVISION ROOM

The existing temporary supervision room at Earl's Court has been extended to take the equipment relating to Turnham Green and Hammersmith. A new development in connection with the route setting circuits and signalling indications is the use of magnetic amplifier switching, which eliminates all mechanical contacts in circuit functions.

The illuminated diagram is normally dark but lights up in red when a train is in section. This conforms with the practice already established at Leicester Square supervision room for the Northern Line. If necessary, a supervisor at Earl's Court can operate all signals and points at Turnham Green and Hammersmith by remote, push-button control.

The new installations have been designed and are being installed by LT staff under the direction of the Chief Signal Engineer, Mr R.Dell, O.B.E., M.I.E.E., M.I.Mech.E., M.I.R.S.E.

SHORTAGE OF UNDERGROUND STAFF

The London Transport Board, for long beset by staff shortages on their road services, are now beginning to suffer the same kind of trouble on the Underground. While giving evidence before the Transport Tribunal on 13th November 1963, Mr R.M.Robbins, the Chief Commercial Officer of the Board, stated that in the preceding few weeks a small number of trains had been cancelled, but during the week then current there had been a more substantial cut on the Metropolitan Line.

Met passengers have been only too well aware of the cancellations, which are making all travelling difficult in the Met area, and rush-hour journeys uncertain and uncomfortable. Many reports of cancellations, withdrawals and delays (affecting not only the Met trains, but also those of the London Midland Region out of Marylebone) are reaching the Editor. These could be listed in this article, or given as News Flashes, but there does not seem to be any stability in the situation at the time of going to press.

It is not intended to give details of the changes until the position becomes more stable, when a detailed report on the effect of staff shortages on the service generally will be printed.

E.J.S.GADSDEN; METROPOLITAN STEAM; London, 1963; Roundhouse Books; 44pp.inc.bibliography and appendices, and with 32pp.plates; 21/-. The Society can supply.

As the locomotives disappear from the lines, and the lines themselves disappear from the land, nostalgia for the Age of Steam increases. This is a book which is designed to bring back memories to the railway enthusiast and the Met commuter - memories of the days when the Metropolitan was a Railway in its own right, and not just part of a larger system. It succeeds admirably in its object, and can safely be recommended to anyone interested in the Metropolitan or in steam. There is a Preface by Sir Harry Verney, last surviving Director of the Metropolitan Railway Company, and this admirably sets the mood of the book; all classes of locomotive to work on the Met (with one minor exception) are included in the narrative and the appendices, and most of them are shown on one or more of the illustrations. These last are admirable, being mainly of engines at work, most are little-known pictures, and all are well reproduced on exceptionally heavy art paper. If the enthusiast is in any way disappointed, it will be because there is insufficient technical data given, either in the text or in the appendices. But it is clearly not the aim of the book to cover this aspect thoroughly, and any would-be purchaser who did not buy the book would be missing something very well worth having. Eric Gadsden is, of course, a member of the Society (as is Sir Harry Verney), and we congratulate Eric on his latest excursion into Railway History.

HUGH DOUGLAS; THE UNDERGROUND STORY; London, 1963; Robert Hale Ltd; 208pp.inc.maps, chronology, bibliography and index, with 12pp.plates; 21/-. The Society hopes to be able to supply.

As has been said before in reviews printed in these pages, all the books published on the railways of London in general, and those on the Underground in particular, have their own particular emphasis, and the good ones all have their own special value to the serious student. This is a good book, it is also an important one, and the reader has not read many pages before the particular importance of Mr Douglas's work becomes apparent. He enters into the story of how the Underground came to be built in a way that no other author has even attempted in recent years - if ever. This emphasis may be made clear merely by stating that the first third of the book is devoted to the period up to 31st December 1863; to have the amount of detail given here on the preliminaries which led up to the system is enough to make the book highly recommendable; add to that the fact that all this information is presented in a most readable way, and one has a work that will give a great deal of pleasure to many. Particularly interesting are the sidelights thrown on the characters who take the stage - Charles Pearson, Watkin, Forbes and many others - and the clear exposure of the crass stupidity of City men in the second quarter of the nineteenth century, who could all see that the City was strangling itself with traffic chaos worse than that of today, and yet resisted, almost with ferocity in some cases, all Charles Pearson's efforts to bring order to the scene by bold planning of railways in the area. The book brings the Underground story right up to the Victoria Line, but enough has been said to make its great value clear; the student of the Underground is going to benefit greatly by the enormous amount of research carried out by the author.

THE SOCIETY IN 1964

At the time of writing, the Committee in general, and the Secretary in particular, are engaged in compiling the Programme for the coming year - and it should be mentioned that help is also being given by some members of the Society who are not on the Committee. At the moment, there is very little actually finalised, but a great deal in hand which looks as if it will be successfully arranged before long. In the hope that plans materialise, some information is being released now, so that members may have some idea of what is being planned for them. But - please remember that most items are still provisional, and they do not, in any case, comprise the whole of the programme envisaged.

It has been said by members at various times, that they tend to forget meetings, because they are not held on a fixed night; so, by way of experiment, during 1964 the majority of evening meetings will be held on the second Friday of the month, and will usually be in the Meeting Room of Kensington Central Library. The meeting programme is not complete, of course, but it will get off to a very good start on 10th January with a talk by Alan A.Jackson, co-author of "Rails through the Clay".

Visits planned include a return one to the Science Museum, several more LT depots, two signal boxes (it will be a weekday evening visit to one at least of these), Spitalfields Sidings and Hoist, the disused station at King William Street, the Shoe buryness Military Railway, the old Channel Tunnel workings at Folkestone, a tour of Liverpool Street main-line terminus, and one of the new Training School. A Tour of the Northern City Line is planned, together with the possibility of other tours or brakevan trips, though these are not yet in hand. Another Family Outing is on the stocks too - for further information on these and other plans, please see The Timetable each month.

UndergrounD

This Issue of the Journal completes Volume Two, and despite bearing the number 24 it reaches its quarter-century also - for founder members will recall that there was a Preliminary Issue in December 1961. The Editor would not like the occasion to pass without expressing his thanks to all those who have praised, or suggested improvements to, the magazine. Criticisms have been very few (the Editor cannot understand why), but are always welcome. Lastly, the thanks of the whole $S\infty$ iety go to our Production Team, who still insist on anonymity as a condition of doing the job, for without them we could not have afforded anything like the present journal. This short note is the only "celebration" this month, but from January 1964 UndergrounD will have 16 pages per issue.

SOCIETY NOTICES

Obituary We regret to announce the death of Frank W.Fabb, of Highgate, one of our original Members, and our sympathy goes to his family and friends.

<u>Photographic Competition</u> One Prize only is awarded, as the number of entries was quite low, and this goes to David M.Hibbert for his entry "F Stock at Whitechapel, Shoreditch to New Cross train, 24th August 1963". The Judge, Mr H.P.Rouse, F.R.P.S., was much impressed with this entry, commenting that it could not be bettered. <u>Railway Ties</u> The Society can now supply the Roundhouse railway ties, price 18/6d each. At present GWR, LNWR, LBSCR & Midland are available, with GCR & GER coming soon; order as for books. <u>Books</u> should be ordered from R.E.Labrum, 134 Cranley Drive, Ilford, Essex, enclosing remittance with order - all orders post free.

THE TIMETABLE

Saturday November 30 to Tuesday December 10, daily except Sundays. A small Underground Exhibition at Pinner Branch Library, Marsh Road, Pinner, arranged with the Librarian by E.J.S.Gadsden and C.Gooch. Monday 9th December 7 p.m. in the Meeting Room, Kensington Central Library, Campden Hill Road. A Modellers' Evening, in the capable hands of Alan Cruikshank. Please bring your models, especially any part-built ones, for examination and discussion.

Saturday December 14 6 p.m. An Evening's Entertainment of Transport Interest, arranged by the Norbury Transport and Model Railway Club at St Christopher's School, London Road, (corner of Warwick Road), Thornton Heath. There will be colour slides, films, tapes and a quiz; we have been invited, and hope to enter a team in the quiz. Admission is free, and refreshments will be served.

Friday 10th January 7 p.m. Talk by Alan A.Jackson, co-author of "Rails through the Clay" entitled "From Charing Cross to Edgware". Saturday 18th January 10 a.m. Visit to new LT Training School, at White City. Names to Secretary at 4 Southcombe Street, London, W.14.