

Asst. Mgr.

WIRELESS REPORT.

DRAFT

28th May, 1926.

You were told a fortnight ago of the interesting procedure followed in constructing our tramways, and I now have pleasure in giving you some information of the running of the service which is operated to-day. Before the service can be provided, some system of control is necessary to insure its efficient operation, and I will, with your permission, outline briefly, which I shall have to do in view of the short time at my disposal, the organization that takes care of the running of the cars. At the head of the running staff is Mr. Young, the Assistant Manager who was associated for many years with the cable company. Then under him are three superintendents who each have charge of a separate district. They control the service and see that it is operated satisfactorily. Next come the Depot Masters. They have charge of the working of the Depot, the issue of tickets, and receipt of cash from the conductors' staff. Each line is in charge of a Traffic Inspector who is responsible for the regular running of the cars and the maintenance of the service on his line. Before the cars can be run, he must, of course, have men to man them, and this will be a convenient place to refer to the practice followed in the Employment Department. There is an Employment Officer who interviews all applicants for drivers and conductors, and selects those, when vacancies occur, whom he thinks will make suitable traffic men. For drivers and conductors, the age limits are not less than 23 nor more than 35 years of age on entering the service. Those who are suitable are required to pass

the Board's Doctor as to physical fitness and general suitability for the work, and after being passed into the service the medical test is repeated periodically to insure a standard of physical excellence being maintained. After passing the Doctor, those taking work as drivers, are sent to a training school attached to the Hawthorn Electric Depot. At this school, the men are given a course of instruction in electric car driving and the braking and other equipment which is used in service. They are then drafted to the several Depots and put in charge of qualified drivers for actual driving practice on the road under traffic conditions. This occupies a period of about nine days. During this driving practice reports are made to the instructor as to the progress of the student driver, and when the Officer in charge of the road is satisfied that he is able to take charge of a car he returns to the Hawthorn School and is examined by the School Instructor. If found proficient he is allotted to a Depot and their work is supervised on a follow-up system for a period of 6 months, to insure that the probationer is driving satisfactorily. The gripmen on cable cars are taken in hand by a Special Instructor who passes them through a course of training which differs from the training for electric car driving only in respect to the different mechanism used on the car. The driving practice on the road is practically the same and as the cable service is going out of use I will not burden you with the ^{details} ~~ennumbrances~~ of this part of the training system, except to say that when any cable lines are converted the gripmen are sent to the Hawthorn School to undergo a course of training before being put in charge of the electric cars.

It speaks well for the work of the cable men when I tell you that those who were attached to the Brighton Road and the Esplanade Cable Depots were one day throwing their weight on to the grip levers, and telling passengers to mind the curve, and the next day were operating big electric cars that would respond to the slightest pressure of the hand. The whole of the men at the Hanna Street Depot with the exception of a few, due to changes in staff, are old cable men who were attached to the Esplanade and Brighton Road Depots.

Conductors are schooled in the work of collecting fares and running the cars, but are not required to go through the drivers' school at Hawthorn unless they are transferred. ^{to Driver staff.} Having prepared the men for the work, you will be interested to hear how the service arranged.

Cars operated on each route of the system are fixed on the basis of the passenger movement. This movement is ^{Continually changing as} subject to a change in the case of ^{the opening of} new lines and ^{also} on existing lines. Periodical checks are taken and the service adjusted in accordance with the information obtained on these checks. You will fully appreciate the difficulty experienced in adjusting the service to a condition of traffic which varies over ~~such~~ wide limits. Apart altogether from the seasonal changes, the affect of winter and summer, and the bright, wet and dull days, there is a daily variation influenced by a number of factors. There are, as you know, two peaks, morning and evening. The morning peak occurs between 7 and 9 and the evening peak which is much more acute is between 5 and 6. At these periods the number of cars in service is in some cases, 100 % more than the cars

in service at other times of the day, and it is then they are much overcrowded for a short space of time. People will take the first car that comes along, whether there is accommodation or not. If one had an endless belt of cars, ^{one} ~~ex~~ section of the belt would be overloaded at peak load times no matter what arrangements were made to overcome this. Apart from these, the traffic on Monday - washing day I am told, is less than on Wednesday when the theatres give afternoon performances. On Friday evening there is the shopping, and on Saturday the football, cricket and the beach, according to the time of the year, to alter the flow. There is no route in the city on which the traffic is approximately the same throughout the week or the year. The most carefully planned arrangements are disturbed by the weather. A shower of rain has a marked influence on the passenger movement. It must not be thought that once a timetable has been fixed for a certain line that that is the finish of the business. Far from it. We watch every movement in the flow of traffic. Periodically a check is made. Each line is taken in turn and officers skilled in the work of checking the passenger movement are stationed at suitable points along each route from early to late cars and for a period sufficiently long to get a knowledge of the habits of those using the particular line. If investigation shows that the timetable should be amended, a new roster is prepared. The roster governs the work of the drivers and conductors, and its compilation is a work of science. The roster clerk has a nice interesting job; solving cross-word puzzles without the aid of a dictionary or an atlas is easy compared to their task. Somebody once

told a roster clerk about a chess champion who played in 20 matches simultaneously, blindfolded, and expected him to be imprisoned. ^{erred} But he wasn't, he knew something more difficult than that, he was at it all day long. Here's a few things he must bear in mind. He starts off with the knowledge that he can work a man 48 hours a week. That sounds easy enough, but he must not be worked more than $5\frac{1}{2}$ hours without a meal; his meal relief must not be ^{less than} 40 minutes, he must be found a car when his relief is finished, he must not be worked more than 8 hours a day - spread over 10 hours, he must have ¹⁰ ~~12~~ hours off duty before starting a new day, he must have a clear day a week off, and this must be a Sunday once a fortnight. Those are a few points the roster clerk has to bear in mind. A few more extras are put in to complete his happiness; there is a different timetable for Friday, Saturday and Sunday to the other weekdays, and he must not forget that a man must finish his day's work where he started it. No doubt you will be thinking that the man that could draw up a roster and observe all those conditions would be a wonder. Well he would be. It can't be done. No matter how the business is tackled you can't follow out all the rules, and as a result, the men get overtime and extra rates. In every pound we pay in wages to conductors and drivers there is 2/- penalty for going outside the conditions set down in the Industrial Agreement. But to return to the running staff and their duties. Before a car is run on to the road, the drivers report a few minutes earlier than the time at which the car leaves the Depot, and the Conductor is allowed a little longer in order to get his stock of tickets from the office.

The tickets are supplied in bulk to the several Depots of which I have told you there are 19 where they are stored for daily use. There is a stock of something like tickets always on hand. The tickets, you will have notice, are serially ^{or consecutively} numbered, and a complete check is kept of these for audit and identification purposes. After the day's work, the conductor returns to the office the unsold tickets and the ^{cash} case for all tickets he does not return. A record is kept of the series of tickets and the sales, and for years we can tell you when a ticket was issued and by whom.

The conductors have a busy time especially at peak load periods, and passengers can help to improve the standard of service by assisting the conductor when paying their fares. I would suggest that a passenger when tendering his fare should state clearly his destination and if possible tender the exact fare. Many misunderstandings arise between passengers and conductors as to the issue of wrong tickets, all of which can be overcome by a little mutual help. Some passengers will talk to their friends whilst offering their fares - leaving the conductor to guess what is wanted. This ^{tends to irritation} ~~makes for loss of temper~~ and subsequent complaints of wrong change, wrong tickets, and incivility. Let me give you an example of an experience of one of our conductors during the last Show when crowds of people were using the cars on the Maribyrnong River Route. A man from the country was travelling on a Show Grounds cars, and as he tendered his fare, the conductor asked, "Show", the passenger replied, "No, give me a ticket to my cousin's; I'm going there first".

Let me say something about speed. I am told that my message to you is carried by electro-magnetic waves which wing their way across space at 180 thousand miles per second or thereabouts. Our speed is not in this class. Let us compare our trams with those in other parts of the world. Our average speed is faster than that of services in other ^{Countries} parts of the world. In England the ^{speed} order is miles per hour, London County Council electric trams run at a speed of miles per hour, and some of the American at to miles per hour. In Melbourne your electric trams run at approximately 10.5 to 11 miles per hour. ~~This is the average speed and~~ includes the time during which trams are standing at the stopping places, as well as the delays at street intersections, etc, to pick up and set down passengers. This average speed may seem low, and every effort is made to increase it without of course running the cars at a speed in excess of what is reasonable having in mind the fact that they are running through the streets and not on a private right - of - ^{way} ~~way~~. The average speed falls quickly as the number of stops per mile increase. ^{the average speed decreases.} If the duration of the stop is made longer, [↑] Stopping places are therefore arranged to meet the convenience of the greatest number and the spacing between them is wider in the outlying districts and closer in the ^{busy} shopping centres. Passengers can help to increase the average speed of the service ^{by quick boarding + alighting, this} ~~which~~ means a saving in time to themselves. Probably a few don'ts will help to point the way.

1. Dont hail the wrong car.
2. Dont keep the car waiting until you say goodbye to your friends.
3. Dont block the gangway.
4. Dont use the car for bulky luggage.
5. Dont rush the entrance when passengers are leaving.

A propos of saying goodbye. I am reminded of a case on the cable system when a lady was seeing her family of five safely on the tram. As they sat on the dummy she warned them of traffic dangers and then kissed them in turn whilst the conductor waited to start the car. She forgot, however, to salute her youngest. The conductor politely reminded her of this and she thanked him and at once proceeded to remedy the omission. The car reported late that trip.

Since the Swanston Street lines were electrified, the car movement through the street has been speeded up. It took cable cars at peak load times as much as minutes to run from Flinders Street to Lonsdale Street. The electric trams take minutes, so you see that by electricification we have increased the speed of the cars through Swanston Street by .

One of the chief causes for congestion is the increasing use of motor cars. We all know how this means of transportation has advanced. In the last 10 years, from 1915 to 1925 the number of motor vehicles, motor cars and cycles registered by the Police Department increased from to

. This is for the whole of Victoria, but the greater number is to found in Melbourne. Motor cars are the most wasteful in street space

occupied per passenger. A recent check was taken when it was found that ^{motor car occupied} each passenger ~~occupied~~ approximately ^{7 square feet of the road,} Compare with this a tram car ^{passenger who} which occupies ^{approximately only} a street space of square feet, ~~per passenger~~. It is even

suggested that the tram cars should not be allowed through the centre of the city. ^A ~~If this were done,~~ ^{also} the congestion would increase. Passenger would have to find their way on foot - congesting the footpaths, ^{+ and}

terminal points of the trams, whilst the street would be congested with motor cars occupying the space per passenger as shown above in excess of that required by tram passengers. On the basis of the greatest space for the greatest number, it would be a mistake for tramway passengers to surrender their rights on this important question of the use of the streets.

With the growth of our city street accidents are unfortunately increasing and collisions between trams and motor vehicles are more frequent than they were. Whilst I would not like to say that our men are the white-haire^d boys of the community, investigation does clearly indicate that the greater number of these accidents are due to motorists speeding from side streets into the main avenues at a rate which is in excess of what is safe. Another fruitful source of trouble comes from motorists running parallel with tramcars and turning sharply on to the track without allowing for the speed at which the tram cars are moving. During the last year accidents were recorded - an increase of over .

Accidents to pedestrians ^{have} ~~has~~ unfortunately increased also.

Notwithstanding all the publicity on this subject you will still find pedestrians, both young and old taking undue risks. People will not cross the streets at right angles, and after walking behind a vehicle going in one direction will step into the opposite traffic stream without a moment's thought. Passengers after alighting from tramcars do this frequently. They walk around the back of the car and on to the track of cars running in the opposite direction. It is a good practice to wait until the car which you leave, moves on, when you can command a view of the opposite

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moving traffic, if it is your intention to cross the road. ^{Passengers}
on the cars, too, help to reduce the accidents of boarding and alighting,
by keeping clear of the gangways, ^{at steps,} ~~giving the conductor a view of the steps.~~

Permit me to say something ^{thing} of the future development of your tramways. It has been freely stated that tramways are doomed and that motor buses are to take their place at no distant date. I can assure you that as one deeply interested in the transit requirements of the people I should be very glad to provide you with any means of transportation which you may desire (including wings for tramway experts). The problem of moving the people in great numbers resolves itself into the three factors of trains, trams and buses. Trains for the longer journeys and the greater mass transportation, ^{city and short distance traffic, and} street tramways for ^{trains} mass transportation, and buses for auxiliaries to trams and for the development of outlying areas. The cost of tramway track is a heavy burden and unless the density of population is sufficiently great the passenger movement at reasonable fares is not sufficient to bear the standing charges.

In a City like ours, which has plenty of space available for settlement, it would facilitate the opening up of the outer areas if ^{material} roads were made available sufficiently wide to permit of park tramways with light tramway tracks on a ballasted foundation and occupying the centre or some part of the road which is equivalent to a private right-of-way. Up and ^{down} ~~down~~ vehicular traffic would be provided on each side of the tramway. In the initial stages when settlement had scarcely begun, single track would be used which would be subsequently duplicated.

As the revenue came along to support the investment platforms on each side would be constructed. This system of operating tramways means the lowest capital cost the lowest running costs, high speeds, smooth running and freedom from accidents. By this means, we could provide for the City's expansion to boundaries which are at present impracticable on account of the length of time the journey from the terminal point to the city would take.

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