

6 copies

WIRELESS TALK.

J. D. BARTON (Staff Officer), MELBOURNE & METROPOLITAN TRAMWAYS BOARD.

MELBOURNE STREET TRANSPORT - No. 2.

In our first talk on this subject we covered the pre-bus days and the foundation of the Melbourne Tramway and Omnibus Company. In the year that the first Tramway Bill was put before the Victorian Parliament, 1872, the Company was operating on six routes, viz :-

- Spencer Street Station to Brunswick Street, Nth. Fitzroy.
- Hobsons Bay Railway Station
now Flinders Street to Cnr. Johnston & Hoddle Streets,
via Carlton.
- " " " " " to Cnr. Johnston & Smith Streets,
viz Fitzroy & Collingwood.
- " " " " " to Simpsons Road (Victoria Street).
- " " " " " to Hotham (North Melbourne).
- Bourke Street (Opposite
Royal Arcade) to Hawthorn Bridge, (Richmond.)

Twelve years later (the year the building of tramways was started), omnibuses were running on the following altered and new routes -

- The Brunswick St. route had been extended to St. George's Road.
- " Smith Street " " " " Queen's Parade, Clifton Hill.
- " Hotham (Nth. Melbourne) " " " Flemington Road.

The additional routes were :-

- Flinders Street to Brunswick.
- Bourke Street to Brighton Road (St. Kilda.)
- " " to Cnr. Chapel Street & Dandenong Road, Prahran.
- " " to Emerald Hill (South Melbourne.)
- " " to Sandridge (Port Melbourne.)

and a small type of bus (known as "Pill-boxes") was run on the Moonee Ponds and Northcote routes, connecting with the main bus lines at Flemington Road and Queen's Parade, respectively.

When the cable tram lines were opened, but buses released were used to open up other districts and in the late 80's the Esplanade,

Rathdown Street, Church Street, (Richmond), and East Brunswick routes constructed to the Company. This Act finally became law on 12th October, 1883.

Street and Dandenong Road between Chapel Street, Prahran, and Glenferrie Road, Malvern.

TRAMWAYS TRUST and its first meeting was held on the 4th March, 1884.

The last of the bus lines (East Brunswick) closed down. The Act had left the question of motive power open,

on 3/4/16, eight weeks prior to the tramway system being taken over Section 22 of the Act reading :-

by the Tramway Board.

any power used on the tramway should be moved by animal power or by means of stationary engines with endless runs running under the road or by such

I told you a few minutes ago that the first Tramway Bill "thought fit."

was introduced into the Victorian Parliament in 1872. What a storm of protest was raised in the various municipalities. Public meetings were called and deputations waited on the Government, the Company, and Mr. G. S. Duncan who had been appointed Engineer to

Street railways operated by horses had been in use in America for fifteen years and in England for twelve years. Steam operation had been tried in many places but ruled out. The first cable tramway in the world was put down in San Francisco in 1873 and proved very profitable.

In 1881 a conference of the municipalities concerned discussed a basis on which trams could be introduced in Melbourne. As a result a new bill was introduced into Parliament on 31/5/82 and was referred to a select committee of the House for report.

This Bill provided that the Company was to construct

tramways under the supervision of a Tramway Board, but while the matter was before the House it was decided that it would be preferable to have the Tramways constructed by a body directly representing the municipalities concerned, and give this Trust power to lease the lines so

had not completed its arrangements for raising the money required and constructed to the Company. This Act finally became law on 12th October, 1883.

The Municipalities interested formed THE MELBOURNE TRAMWAYS TRUST and its first meeting was held on the 4th March, 1884.

The Act had left the question of motive power open, Section 22 of the Act reading :-

"All carriages used on the tramway should be moved by animal power or by means of stationary engines with an endless rope running under the road or by such other motive power except steam locomotives as may be thought fit."

The Trust, therefore, had to settle with the Company as to the system to be adopted. As a result, Mr. Clapp, the Chairman of the Company, and Mr. G. S. Duncan who had been appointed Engineer to the Trust, visited all the main tramway systems in America and elsewhere. On their return and report as to the result of their enquiries, it was decided to work most of the lines on the underground cable system, the exceptions being the lines to South, Port, North and West Melbourne, where, owing to the numerous curves, it was considered that horses would have to be used. The Kew and Hawthorn extensions were to be operated by the same means. The mileage under the different kinds of construction was given as follows :-

Cable lines	...	33 miles,
Horse "	...	16 miles,
TOTAL		49 miles.

AND the estimated cost of construction was about £1,000,000.

The Act previously referred to provided that the whole of the lines had to be completed by 12th October, 1888. The Trust

had not completed its arrangements for raising the money required and agreed all. In fact they read quite "Gilbertian". The Trust proposed an agreement was, therefore, entered into with the Company by which the to carry one of the drains along its natural watershed in Albion Street Company was to construct on behalf of the Trust the Richmond line. to the east of Sydney Road. The Council refused and insisted on the The Company agreed to charge the Trust the actual cost only, which was drains being taken via Albion Street east. After a lot of bargaining to be repaid on the loan being floated. the Council agreed that alternate tenders should be called for, and if

There are many items of interest in the early reports of the East drain cost more than the West they would pay the difference, the Tramway Trust. From the very commencement of operations in connection with the laying down of the tracks, great difficulties were met with swamp the whole district. Tenders were then called and it so happened in the alterations necessary to gas and water mains, and the alteration that the West scheme was to cost more than the East one. The Council to drainage. All the authorities concerned in these matters appear to at once decided that the drains to be built to the East and so it was.

have "sat back" and, although they in many ways reaped substantial Another incident which cost the Trust something like benefits, no assistance was forthcoming. No doubt many of these £18,000 occurred in connection with the bridges over the Yarra at Bridge difficulties were brought about by the vital changes made in the Bill Road and Victoria Street. The Act provided that a space of at least 9 1/2 when it was before Parliament. The many safeguards imposed on a public feet must be left between the rails and the kerb at any point. Neither

Company would have been considered unnecessary had the draftsmen provided of these bridges was wide enough to give this space and it was, therefore, for a system of control such as the Tramways Trust which was composed necessary for the Trust to widen the bridges to complete the lines in of representatives of all the municipalities concerned. Under this accordance with the routes provided in the Act. The Key Horse line heading it may be of interest to note that the alterations to drains was completed to the Eastern side of the bridge in December 1887, but alone in Flinders Street, between Spencer and Swanston Streets, cost it was nearly three years later before the bridge was opened to carry over £3,600. In Simpsons Road (now Victoria Street) one of the most the trams to the East side.

serious drainage problems was met with. The surface drainage at the How many of the thousands who daily use the west end of intersection of Church Street together with the drainage from the tunnels Collins Street have noticed that the building line deviates in places had to be provided for. This necessitated the construction of a brick from a straight line. The laying of the tram line in this part was sewer of considerable size for a distance of about 1 1/2 miles. This just about completed when someone discovered that the lines were as such work cost £7,500/-/-. The drainage troubles at Brunswick however,

capped all. In fact they read quite "Gilbertian". The Trust proposed to carry one of the drains along its natural watershed in Albion Street to the west of Sydney Road. The Council refused and insisted on the drains being taken via Albion Street east. After a lot of bargaining the Council agreed that alternate tenders should be called for, and if the East drain cost more than the West they would pay the difference, but on no account would they allow the drainage to go West as it would swamp the whole district. Tenders were then called and it so happened that the West scheme was to cost more than the East one. The Council at once decided that the drain was to be built to the West and so it was.

Another incident which cost the Trust something like ^{more than} £18,000 occurred in connection with the bridges over the Yarra at Bridge Road and Victoria Street. The Act provided that a space of at least 9½ feet must be left between the rails and the kerb at any point. Neither of these bridges was wide enough to give this space and it was, therefore, necessary for the Trust to widen the bridges to complete the lines in accordance with the routes provided in the Act. The Kew Horse line was completed to the Eastern side of the bridge in December 1887, but it was nearly three years later before the bridge was opened to carry the trams to the West side. ^{the Trust gave}

^{Cable lines ... 41 miles.}
How many of the thousands who daily use the west end of

^{26 miles.}
Collins Street have noticed that the building line deviates in places. The following are the dates on which the lines were opened for traffic from a straight line. The laying of the tram line in this part was just about completed when someone discovered that the lines were as much

as 20 inches nearer one building line than the opposite one at King Street crossing. Property owners in the neighbourhood declared that the value of their buildings were thus depreciated, and the episode cost the Trust £1,200- in settlement.

An Amending Act which was passed in 1887 relieved the Trust of many of these obligations, and made provision for the corporations paying their share of the improvements in drainage, etc.

Another difficulty that the Trust had to face was an action commenced in June 1888 by a London Cable Traction Company for alleged infringement of patents. An injunction was also sought to restrain the Trust from putting down any more tramways and to ^{make them} pull up all that they ~~already~~ had already constructed. The case was eventually settled out of Court and the sum of £6,450 was paid for the whole of the Victorian patents in connection with cable tramways.

The routes set out in the Act of 1883 were varied and extended by further Acts while the lines were in course of construction. The experience gained in running the Richmond, Fitzroy, Victoria Street and Clifton Hill lines led to method of working on South, Port, North and West ^Melbourne lines being changed from horse to cable, and the schedule finally adopted by the Trust gave

Cable lines	41 miles.
Horse "	<u>5 miles.</u>
		<u>46 miles.</u>

The following are the dates on which the lines were opened for traffic :-

Richmond	11th November, 1885.
Fitzroy	2nd October, 1886
Victoria Street	22nd November, 1886
Clifton Hill	10th August, 1887.
Nicholson Street	26th August, 1887.
Brunswick	1st October, 1887.
Carlton	21st December, 1887.
Brighton Road	11th October, 1888.
Prahran	26th October, 1888.
North Melbourne	3 March, 1890.
West Melbourne	18th April, 1890.
Port & South Melb.	17th June, 1890.
Windsor.	27th October, 1891.

The length of wire rope in motion under the various roads when the system was completed was equal to about 95 miles. They varied in length from 16,000 to 32,000 feet. Their average life was less than twelve months and this will give us a total of 15,000 tons of wire rope used up during the Company's lease at a cost of roughly, $\frac{3}{4}$ of a million. *pounds* What has become of the worn out ropes. They were composed of steel wire with a breaking strain of about 60 tons. In the early days they were bought by a local agent, cut up into small coils and exported to China for nail making. Later, they were bought by a local nail manufacturer, but of late years their last resting place has been in concrete reinforcements, for bridges and viaducts. Many have also been used for suspension bridges in all parts of the States.