

5. Metropolitan and Provincial Tramways.

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While Melbourne has a history of almost 100 years, and early pioneers have long since passed to their rest, it is nevertheless true that many people still living remember the beginnings of organized transport. To Cobb and Company belongs the credit. Who the "Co." were is not known, but Cobb was a citizen of the United States who imported coaches and drivers alike from the land of his origin in 1852. Like all pioneers he had his imitators. His prestige was such that apparently anybody who started a coach service called it "Cobb's Coaches," or some similar variant. So that "Cobb & Co.'s" coaches were running even in New Zealand. George John Watson, for instance, who became starter for the Victorian Racing Club, owned a coach or two in his early days.

As in all modern cities, the development of Melbourne has been greatly influenced by the means of transport. A rapid increase in population has followed each development in the transport art. First there were coaches plying between the city and such suburbs as St. Kilda, Prahran, Carlton, North Carlton, and Hawthorn, and then the first railways to Port Melbourne (1854), St. Kilda, and Brighton. The presence of the railway explains why some of the oldest houses in the Metropolitan area are to be found within the Brighton municipality, and partly explains the early development of the city to the south instead of to the north. People followed where transport led. Naturally, development was slow while land was being cleared and swamps were being drained, but, as roads were constructed, more and more coaches appeared; soon it became obvious that some organized effort would have to be made to give coherence to go-as-you-please methods.

In 1869, the Melbourne Omnibus Company was formed. Three years later it was wound up voluntarily to make way for the Melbourne Tramway and Omnibus Company, the intention of the latter concern being, as the name suggests, to include the construction of tramways within the city and suburbs amongst its activities. The latter proposal took 13 years to fructify. Several years were spent in discussing what new form transport should take. More years passed before Parliament enacted the legislation necessary giving the company power to lay down tramways with the consent of the municipalities interested. That point having been reached, and thirteen municipalities having expressed their agreement to the laying down of tramways, a Tramways Trust was formed, the members of which were appointed by those municipalities. The Trust members numbered 18. Of that number seven were appointed by the Melbourne City Council.

Having decided to adopt an underground cable system, the Trust in the exercise of its powers had to raise the funds necessary to pay for the construction of the tracks and engine-houses. Under the provisions of the Act incorporat-

ing the Trust, the latter was under the obligation to complete the proposed work of installation by the end of 1883. As a matter of fact, the work was carried out with two years to spare. When the tramways tracks were completed, the Trust gave the company a lease for 32 years as from the 1st July, 1884, when the liability for the interest on the loans raised for the construction of the tramways was commenced. In return, the company, as its share of the bargain, had to find the capital for the necessary rolling stock, and for the equipment of the lines and engine houses. Annually the company had to pay to the Trust the interest upon the loans, together with a sum sufficient for a sinking or redemption fund to redeem all the Trust's debentures at maturity. Finally, it undertook, on the expiration of the lease in July, 1916, to hand over the tramways in good working order to the Trust or its successors. The arrangement worked to the satisfaction of all. The company realised handsome dividends for its shareholders, the municipalities concerned got the trams they desired, and the people were supplied with the transport they required.

On the 11th November, 1885, the first cable tramway—that to Richmond—commenced running, and an interesting fact in this connection is that the cable car which inaugurated the service, No. 1, has completed more than 1,000,000 miles in operation and can still be seen on a Saturday afternoon proudly conveying its load to a football match. The various lines were opened to traffic in the following order:—

Richmond	...	...	...	November 11, 1885.
Fitzroy	...	...	...	October 2, 1886.
Victoria Street	...	...	...	November 22, 1886.
Clifton Hill	...	...	...	August 10, 1887.
Nicholson Street	...	...	...	August 22, 1887.
Brunswick	...	...	...	October 1, 1887.
Carlton	...	...	...	December 21, 1887.
Brighton Road	...	...	...	October 11, 1888.
Prahran	...	...	...	October 24, 1888.
North Melbourne	...	...	...	March 3, 1890.
West Melbourne	...	...	...	April 1890.
South Melbourne	...	...	...	June 17, 1890.
Port Melbourne	...	...	...	June 17, 1890.
Windsor	...	...	...	October 27, 1891.

At the end of 1891 there were 41 miles of cable line in operation. The total length of the ropes in motion under the various roads was about 95 miles.

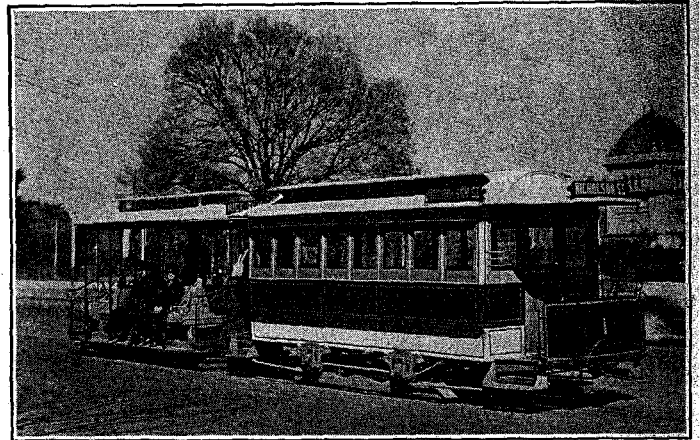
The design of the cable system as a whole, and in its detail parts, reflects the greatest credit upon its designer, the late Mr. George Duncan. That the method of construction was sound is shown by the fact that, except where converted to electric traction, the original tracks, engine houses, cars, and depots are still in use. All equipment, including engines and boilers, was designed and built in Melbourne.

The system differed from most of the previous cable systems in that the rope was placed to one side of the tunnel instead of being directly below the centre line of the track. Lines entering the city from the north had the rope on the right side, while those entering the city from the south had the rope on the left. Consequently, while it was possible to route through from north to south, through routing in any other directions was restricted. As a rule, most of the engine houses operated three ropes, the length of which varied from 16,000 to 33,000 feet. Each route had its own set of cars, distinguished by a coloured dome on the dummy and coloured lights on the trailer, the route numbers being painted on the dash, so that interchange of rolling stock, except in emergencies, was not the practice. The speed for which the system was designed was 9 miles an hour, but it was ultimately raised to 11 and 12, and on some lines 13 miles an hour. As the cars ran at frequent intervals, the citizens of Melbourne enjoyed an excellent transport service. The annual tram mileage, which was 4,000,000 in 1886, had reached 15,000,000 when conversion was started.

Space is not available for a detailed description of the grip, or the many devices for dealing with the ropes, curves, and intersections. Those interested in the design, however, are always welcome at the power house at the corner of Gertrude and Nicholson Streets, where they can be taken beneath the track and see the grip in action below the road.

The cable tramways were received with enthusiasm. At first they were looked upon as a wonderful novelty; it was many years before they were regarded with hilarity by the visitor from overseas. It was not long, however, before suburban municipalities to the south of the river began to realize that their expansion would depend to a large extent upon the provision of a fast, modern transport system. Malvern Town Council was the first to move, and that it did so was due largely to one man, Mr. Alexander Cameron, who subsequently became the first Chairman of the Melbourne and Metropolitan Tramways Board at its inception in 1919, a position that he still holds. He saw how settlement was encouraged and increased by the presence of a tramway, and he had read, also, that in other parts of the world the cable system was looked upon as out of date, and that the overhead electric system was better in all respects. In season and, his opponents said, out of season as well, he advanced his ideas. The Victorian Railways electric tram from St. Kilda on the 7th May, 1906, and the North Melbourne/Essendon Electric Light and Tramway Company on the 11th October of the same year, prevented him realizing his ambition, that Malvern should be the first with electric traction. The North Melbourne/Essendon line operated under a delegation order from the then Councils of Essendon, Flemington and Kensington. Five years later, the Prahran and Malvern Tramways Trust, formed by the Councils of Prahran and Malvern, joined a year later by St. Kilda and Caulfield, and latterly by Hawthorn and Kew, opened its first lines on the 30th May, 1910, with Mr. Cameron as Chairman. That was the beginning of the excellent system which, conducted with courage and imagination, resulted in such a remarkable growth in the municipalities south of the Yarra in less than a quarter of a century. Naturally the older towns, Prahran and St. Kilda, had not the scope for development possessed by Caulfield and Malvern; but what the tramways meant to the latter places will be evident when it is pointed out that in 1910

Caulfield had a population of 11,000 and Malvern 13,000. To-day Caulfield has a population of 76,000 and Malvern 47,000, and the revenue of the municipality of Caulfield is now exceeded only by that of the cities of Melbourne and Prahran.



Cable Tram No. 1—Dummy and Trailer.

In April, 1916, the Melbourne, Brunswick and Coburg Tramways Trust commenced operations. The Fitzroy, Northcote, and Preston Tramways Trust, and the Footscray Tramways Trust, were formed later, but never operated independently, the construction of the lines being completed by the Melbourne and Metropolitan Tramways Board in 1920 and 1921, respectively.

Upon expiry of the lease of the cable tracks to the company in 1916, the Cable Tramways Board under the chairmanship of Mr. Colin Templeton came into existence. That was but a temporary expedient designed to fill in the gap between the end of the lease and the formation of a Tramways Board for the Metropolis as a whole. That Board, under Mr. Alexander Cameron, was constituted in 1919, and on the 1st November the cable tramways passed into its possession, the electric tramways following on the 2nd February, 1920. Parliament gave the Board authority to convert the cable tramways to electric traction, and charged it with the duty of preparing a general scheme of tramway development, realizing that a complete and unified system was more likely to result from expert investigation than from an agglomeration of schemes independently devised to meet merely local conditions.

A Royal Commission, appointed in November, 1910, had reported in favour of the conversion of the cable system to an electric system with overhead wires. In a report made after full investigation of the subject in the course of preparing the general scheme, the Board set forth the reasons leading it to propose the conversion of the cable system.

Although the Standing Committee on Railways approved the general scheme, considerable opposition in other quarters was displayed, and therefore, it was not until 1924, that conversion operations commenced. In the interval, one large workshop for the building, repair and maintenance of the rolling stock, instead of the existing small, scattered shops, was being constructed at Preston; extensive track renewals had to be put in hand; the small,

single-truck type of car, suitable for the suburbs, but not for routing through the city, had to give place to large, modern trams; and gradually the power distribution system was improved so that it is now given through automatic sub-stations controlled from one centre, the supply being obtained from the State Electricity Commission of Victoria.

The dates upon which the electric lines were opened to traffic are as follows:—

Victorian Railways line, St. Kilda	...	May	7, 1906.
North Melbourne and Essendon	...	October	11, 1906.
Prahran and Malvern	...	May	30, 1910.
Melbourne, Brunswick and Coburg	...	April	27, 1916.
Fitzroy, Northcote and Preston	...	April	1, 1920.
Footscray	...	September	6, 1921.
West Brunswick	...	July	19, 1925.
South Melbourne	...	October	31, 1925.

Another tramway within the Metropolitan area was that which ran between Doncaster and Box Hill between the years 1889 and 1896. It never came within measurable distance of fulfilling the high hopes of its sponsors, and after a chequered and spasmodic career ceased finally in May, 1896.

The conversion of the cable system to electric working as noted above, was started early in 1924 on the section of cable track in Swanston Street, between Lonsdale Street and Queensberry Street. This was followed in 1925-26 by the conversion of the St. Kilda Road, Fitzroy Street, High Street and Brighton Road lines. By carrying on the Brighton Road line to Elsternwick, the linking up of south and north by direct electric tramway communication was achieved, and it was then possible to travel from Elsternwick and St. Kilda to Coburg, East and West Preston, and East Brunswick, without changing vehicles. East Malvern, Glen Iris, and Camberwell also were connected directly to the city. The Toorak and Chapel Street lines followed, and then came Flinders Street, which gave through travel between the eastern suburbs and the city. On the conversion of Collins Street, several route changes occurred, the East and West Preston lines ceasing to run to the south, thereby reducing the congestion in Swanston Street, while the Mont Albert, Deepdene and Balwyn services were given the west end of Collins Street as their city termini also. During these conversion operations, transport on the routes affected was provided by a fleet of motor buses purchased by the Board. The work had just been completed and consideration was about to be given for further conversion operations, when the financial depression began to have a most serious effect on revenue, rendering further conversions impossible. They will be resumed early next year, when the Brunswick route will be dealt with. In the meantime, the trolley bus has been improved, and the Diesel engine bus has made its appearance in the traction field. Doubtless, in due course, buses will replace the cable trams on any routes on which the required service is not frequent enough to render electric tramways economical.

In one feature the Melbourne tramways are unique—they have provided a liberal endowment for successive Governments in the last 16 years. The merry game of making tramway passengers pay for all sorts of extraneous objects, such as a London loan, the Metropolitan Fire Brigades Board, the Infectious Diseases Hospital and the Licensing Fund, began when the Government of the

day seized the Cable Tramways Board surplus of £866,000 (less £100,000 paid over to the present Board) and paid it into the Melbourne and Metropolitan Loans Redemption Fund in order to facilitate a loan operation, continued when it took £60,000 out of the first year's revenue because it happened to be short of that sum for the purpose mentioned, and has prevailed ever since in annual sums ranging from £84,000 in the first nine months of the Board's existence to £118,000 in 1930. All told, in the last 16 years, the various Governments have collected £2,362,075 from the tramways—an enormous financial drain which no other tramway in the world has been compelled to face. The inevitable results have been slower development and dearer fares, from the point of view of the public, while from the domestic side there is the rankling thought that while the Fire Brigades Board, which has received £699,000 of tramway revenue, has a superannuation scheme for its employees, the tramway service has none.

When the Board was inaugurated, it took over 45.9 miles of double cable track, 45 miles of double electric track, 19.3 miles of single electric track, and 0.625 miles of double horse track (Royal Park). The horse track has gone long since, but 24.292 miles of double cable track remain, while there are now 106.747 miles of double and 7.796 miles of single electric track. Apart altogether from the task of turning a mass of isolated, unrelated systems into a coherent whole, the work of the Board expressed in terms of figures is impressive. To give a few of the more striking, more than £900,000 has been spent on conversions, £250,000 on duplications, and £680,000 on extensions. The Board has handled a revenue of approximately £29,000,000, the highest traffic year being 1927, when £2,487,573 was taken; has carried in the region of 3,145,000,000 passengers, and the vehicles have run something like 315,000,000 miles.

As indicated above, the Victorian Railways Commissioners commenced the operation of the St. Kilda Station—Brighton tramway in 1906. Later, the Commissioners built the Sandringham—Black Rock line and, in response to the usual claims by interested parties as to profits which would accrue, the Black Rock—Beaumaris extension. The Sandringham Council agreed to pay up to £2,000 annually for five years, any losses which might be incurred. During the five years the line remained open the Commissioners lost approximately £23,000. The line from Black Rock to Beaumaris was closed on 1st September, 1931. Litigation has been proceeding ever since. The Commissioners were successful in their action against the Council, and in April last the Council successfully defended its decision to strike a rate to cover the £10,000 claimed by the Commissioners. Both the St. Kilda—Brighton and the Sandringham—Beaumaris lines suffer from poor off-peak loading, a condition which is being accentuated by the renewed growth in private motor car registration.

Small electric tramway systems have been in operation in Bendigo from December, 1899, Ballarat from November, 1900, and in Geelong from March, 1912. These systems, started originally by the British Insulated Wire Company, Ltd., in Bendigo and Ballarat, and by the Melbourne Electric Supply Company in Geelong, are now owned and operated by the State Electricity Commission of Victoria. The single track mileage is 16.55 for Geelong, 13.236 for Ballarat, and 8.113 for Bendigo.