

IN THE DAYS OF THE "CABLES." Slack hour views of cable trams in Bourke street (left), and Elizabeth street. At busy periods three times the number of cars seen above would crowd the same scenes. The Bourke street cars ceased service only eight years ago, being

replaced by buses. Now authority has been received to construct electric tramways to supplant these buses. Clock tower in both pictures is the G.P.O. Cars seen crossing Elizabeth street are the Collins street lines. Pictures circa 1910.

Salute To The Cable Tram

The Story of a Remarkably Successful Street Transport System

It was with genuine dismay that those erupting Melbourne Show crowds heard the sad news that Saturday night of October 26, 1940, People at home, listening to their radios, were equally affected as though they had suffered a real and personal loss. The many who lived along the scene of the event made haste to reach a convenient vantage point.

ON that night, at 9.30 during the usual traffic lull, the Melbourne and Metropolitan Tramways Board had, without notice in order to avoid disruptions and risk of accidents to revellers, withdrawn from service, forever, the last remaining cable tramways still operating. Rosters for the rest of the night were taken up by a fleet of 45 double- and 26 single-deck buses.

News travels fast, however, and sizable crowds were on hand in the city to give the last Northcote and Nicholson street cars a well-deserved farewell and as many as could get a foothold on the cars helped make those last journeys an occasion for historical record.

For more than 50 years the pleasant, clean, reliable and quiet little cable cars had rendered

Melbourne-ites a street passenger transport facility unequalled in this country, by a unique system of operation on a scale unparelled anywhere.

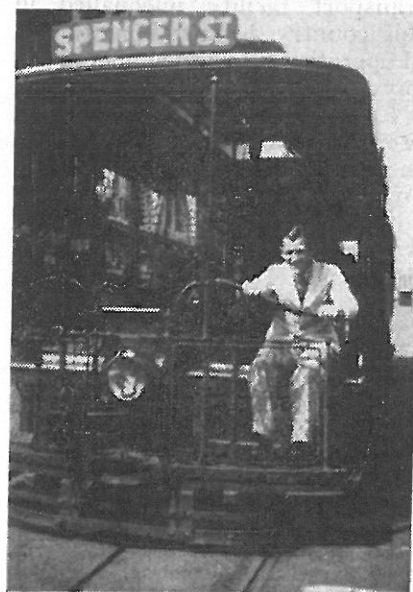
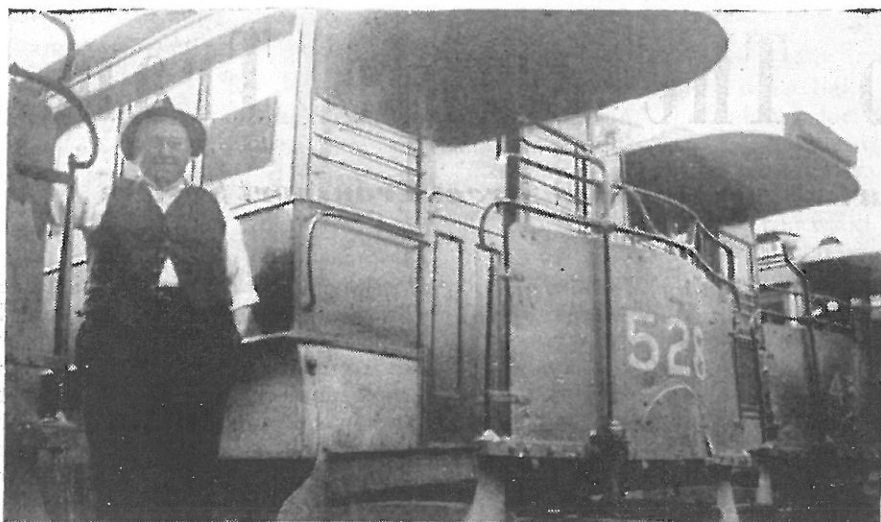
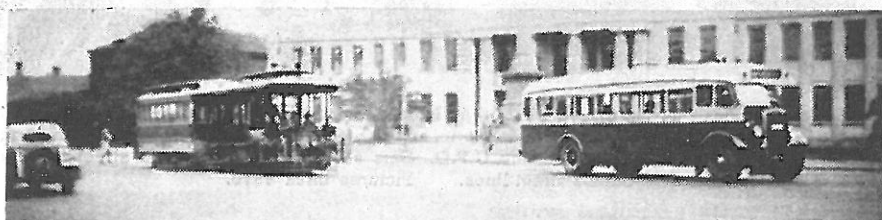
Every citizen, we imagine, had promised himself one last ride on the "old cable" as the cars were affectionately called, and had, no doubt, expected that the Board would have done the honourable thing and set a date, giving all the opportunity to ride the rocking dummy for the very last time.

The writer, as a small child, formed a strong attachment for the gaily-coloured cars, and the song of the cables in the slot below the road was music to the ears of every cable car admirer and user.

If you were not too big to obstruct his view the gripman (or driver), who handled the levers,

"gripped" the cable or applied the brakes, had no objection to small fellows of six or so standing right in front of the dummy from which spot small eyes could see right down the one-inch wide aperture and watch the greasy cable whizz along when the car stopped, only to seemingly come to a halt as the gripman got the car moving to the speed of the "rope." And when you grew up a little there was the exhilarating feeling of importance when the gripman "lost the rope" or the car had to be stopped on a dead section and all hands, including yours, secured a hold on the side of the car and pulled or pushed the vehicle to a section where the cable could be re-engaged.

All children took more than a usual interest in the cable cars because of the opportunities for fun which they presented. By the time a lad could run at eleven miles per hour he had joined the "whip behind" fraternity who loved nothing better than to steal rides on the rear of the car while the conductor was collecting fares



MIDDAY in Collins Street (top) around 1910. Tram in foreground is bound for Port Melbourne. Notice absence of motor vehicles. Scene looks east above Queen Street. Twenty-nine years later (second top) modern buses were ousting the cables. Car shown is going to Johnson Street Bridge, Collingwood. Bus is a M. & M.T.B. Leyland. Date April 15, 1939, the last day of the cables running on that line. Above: Trailer cars at Clifton Hill depot after the Bourke Street lines had ceased, date February, 1941. Left: Favourite seat of cable riders in front of dummy. Grip mechanism extended through centre slot to cable about 2ft. below. Gripman is obscured by the shadow behind front seat passenger. This picture was taken by the Editor in November, 1932, in Bourke Street at Swanston Street intersection.

on the dummy. And if you saved tickets, the no-cash-value type that fluttered from the conductor's coat tunic to be punched every time a fare was collected, well there was always a stack of them tempting even good boys in a readily accessible pigeon hole on the back platform.

Loved by the Children

THE best fun was the "cable chase." All you needed was a foot or so of rag ripped into tails, a cigarette tin, and a couple of feet of string to which the rag and tin were tied at opposite ends. The 18-inch manhole covers spaced along the track every 30 feet or so were immediate signposts to sites where humming, fixed wheels, supporting the cable in the tunnel under the road, offered a likely starting mark. The rag and string would, during intervals between the coming of trams, be pushed down through the slot and Presto! almost at once the rag would be caught around the cable and zoom . . . off went the tin, screeching along the top of the slot at 11 m.p.h., closely chased by numerous youngsters. Whoever managed to catch the tin won the game, but many tins careered on.

Except for the minutes lost when the engine house attendants would stop the cables to mend a break or stranding, or remove said rag, the cable trams of Melbourne gave a faithful service which no person who grew up in their day will ever forget.

The cable tramways of Melbourne operated along the five principal streets of the city, viz., Flinders, Collins, Bourke, Swanston and Elizabeth, and radiated to the nearer suburbs. The 46 double-tracked route miles were made up by 18 different services with an average of about three miles in length.

First Service Opens

SOME years before the cable trams were mooted, a Mr. Frank Clapp, an American, founded the Melbourne Omnibus Company with a number of gaily-coloured horse-drawn vehicles called the "Broadway stages." He followed the establishment of the San Francisco cable lines with great interest and sought authority to introduce them into Melbourne. In 1883 the Tramways Act was passed and a Tramway Trust, formed by 12 metropolitan councils, was authorised to construct tracks and engine houses, and

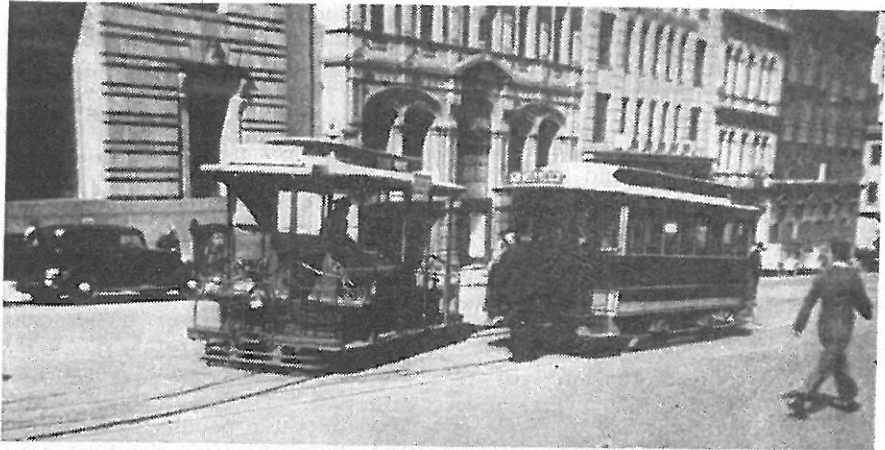
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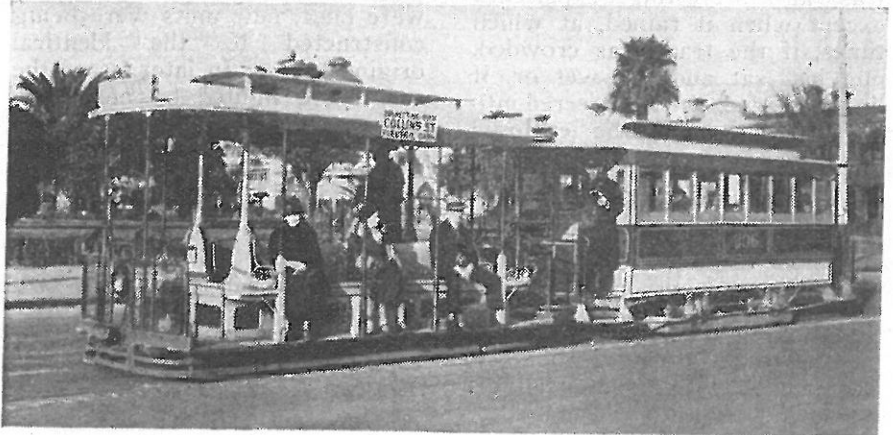
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CABLE CARS IN MARKET ST., Melbourne, right, top (May, 1937) showing the method of running the dummy to the front at termini. This South Melbourne service, which previously ran along Collins Street, was truncated at the city end when other cable routes in Collins Street were electrified. Second top: The standard type of cable car used on 16 routes. In 1923 there were 554 of this type. Below it is shown the special bogie type used on the Brunswick line. Two standard-type trailers were joined to make the first of this type.

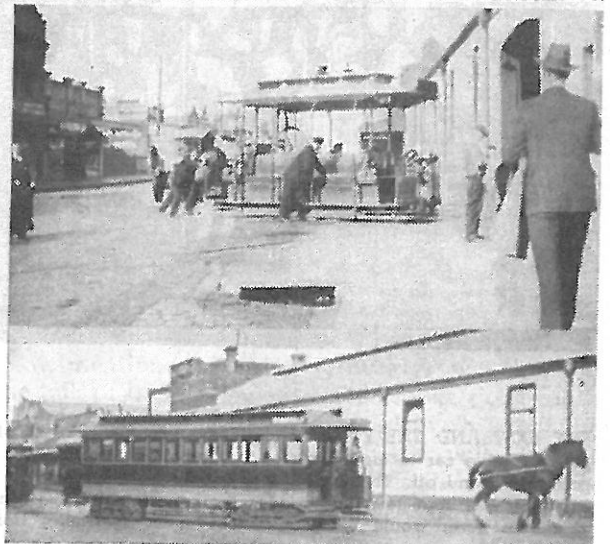
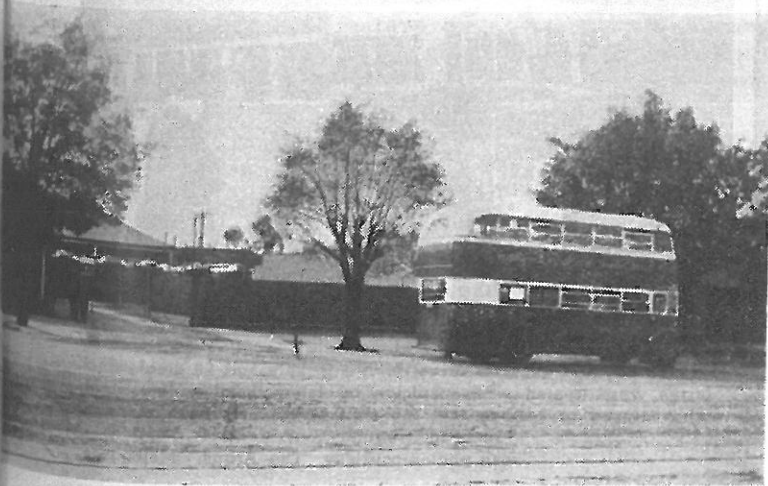
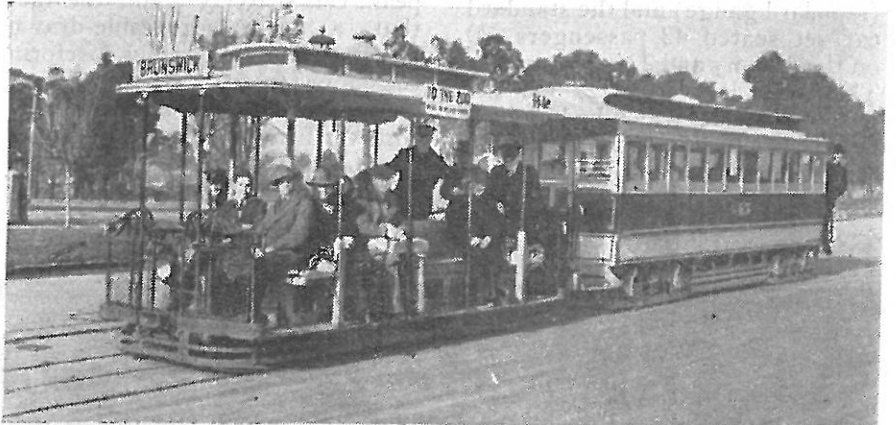


lease these to the reconstructed Melbourne Tramway and Omnibus Co. for a period of 32 years. The company was required to build car sheds and rolling stock and operate the system. The first 20 cars were imported from America, also some "gripmen." These cars and crews opened the first line completed between Flinders street and Richmond on November 11, 1885.

At first the cable was operated at a speed of six m.p.h. (the same speed as the horse buses) to enable gripmen and passengers to become accustomed to the new form of travel. In a guide issued in the 1890's was stressed the agreeable motion of the new trams and the fact that passengers did not have to be disturbed by the thought that some tired horse was groan-



CLOSING SCENE of a half-century of service. Behind the double-decker bus (below) is the yard of the Clifton Hill car shed four months after the last cable lines were closed. Cars were kept serviceable for some time in case war conditions deprived buses of fuel. At far right (below) is a Brunswick set being run into the depot. Manpower pushed the light dummies and Dobbin hauled the heavier bogie cars. Later a tractor hauled both. Notice the grip lever in the dummy. The grip has been drawn up from the cable tunnel through a special road trap before car was coasted into the shed. Brunswick shed photos from W. H. Larsen.



ing under the heavy weight for their comfort and convenience. Other delightful points emphasised were the cleanliness of the cars and their exhilarating speed. The normal speed of the cables later was about 11 m.p.h. and this was increased towards the end to 13.4 m.p.h. The average speed per hour, including stops, was nearly 10 m.p.h., a figure not improved upon by some of our electric services to-day.

The cable tram consisted of a dummy and a trailer car, and riding on the dummy at any time was an interesting experience except when it rained, at which times, if the tram was crowded, one just sat and got wet or, if lightly loaded, one transferred into the protection of the enclosed trailer car. (See pictures.)

By 1891 the system was complete, with 43 miles of double track, 10 engine houses powering 26 ropes (as the cables were called) and 15 car depots. Another undertaking also built a line from Northcote to Preston, about 2½ route miles with its own engine house and rolling stock, etc.

The gauge used was 4ft. 8½in. (standard gauge) and the standard car set seated 42 passengers, 20 on the dummy and 22 in the trailer. The crush load was 72. On the Brunswick line, which had no hills or curves, shorter trailers seating 16 were coupled on to the standard set to cope with early morning

“workmen’s” crushes and later all these trailers were rebuilt into long bogie trailers (see picture).

The only time these heavier cars were used on any other line was on “fight” nights at the West Melbourne stadium, when a few were used as specials on that line. They carried a licensed crush load of 122.

At its peak the system owned 612 trailers (58 bogie type) and 592 dummies, a total of 1,204 vehicles, including the Northcote cars. So well-designed were the cars for their peculiar conditions that, 37 years after the first cars were built, new units were being constructed to the identical original plans. In later years the cars were lighted by electricity from batteries. In 1924 the average number of complete trams in service daily was 484, returning average receipts of approximately 1/7½ per tram mile, from an average of 10.4 passengers per mile. That year there were 3,292 employees on the payroll.

Mass Transport Feat

THOSE who had never visited Melbourne before 1923-1925, when the cable system was at its peak, can scarcely credit the fact that a series of cable-drawn street tramways could perform the major street transport requirements of a city of a million people for over nearly half a century and those who were privileged to see the system in operation were soon

won over by the convenience, cleanliness and frequency of the service. Just how well they did the job is best illustrated by the fact that in 1923, a peak year for the cables, the number of passengers carried was 156 million, a figure not exceeded by the electric trams, even when later running in four of the five streets mentioned, until 1939, and only then with all the outer merged electric services thrown in to the total.

The cable trams of Melbourne gave to that city an exclusive character not evident in other Australian cities. There was an air of serene graciousness, of unhurried purpose and dignity which was unmistakable. True, the clanging bells, the cords of which the gripmen tugged at furiously at main intersections, proved a novelty to visitors at first, as did the hum of the running cables below the road surface, but soon one became so unconscious of them that it was only after midnight when the cables ceased running that a strange silence smote the conscious mind.

The main reason for the great success of the little cars was their frequency. Nobody ever worried about missing a tram because there was always another a few minutes hence, except on the Cinderella line, West Melbourne. The courtesy and neat attire of the tram crews were proverbial. Most were

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THE LAST AND THE FIRST. Nine-thirty p.m., October 26, 1940, the last cable car to turn a wheel in Melbourne left the city to a boisterous send off. The intention to substitute buses on that date and time was kept secret, otherwise the car, of which the dummy is shown here, would have been lost under swarming hordes.

The 45 Leyland gearless drive double-deckers and 26 single deck buses were treated with suspicion by later travellers that night, who refused to believe that the switch-over had been made at such an irregular hour.

These photos courtesy "The Argus," Melbourne.



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Salute to the Cable Tram

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well-known to regular travellers on their particular lines.

One could write a book upon this remarkable system, but in this Anniversary Issue we can merely content ourselves with a few passing facts and figures. As far as is known the Melbourne cable system was the largest of its kind in the world. San Francisco, where the cable idea was born and flourished (see special references in this issue) had less than half the number of cars in service.

conversion of the system to electric traction, because the inflexibility of the cable system prohibited extensions to meet expanding traffic requirements.

Thus, in 1925, 40 years after the first service was opened, the initial action was taken to close down this truly remarkable transport undertaking. Over the next fifteen years various lines were converted or wound up, sometimes in sections, until only the two routes in Bourke street remained. It was the original intention of the Board to abandon those services in March, 1940, in favour of buses, but the darkened war conditions and need to conserve motor fuels

DETAILS OF MELBOURNE'S CABLE TRAMWAYS

Service.		Date Opened.	Date Closed.	Route Mileage.	Route Colour.	Years
Richmond-Spencer St.	via Flinders St.	11.11.85	4.12.27	3½	Blue	42
North Fitzroy-Spencer St. (A)	Collins St.	2.10.86	26.10.30	3½	Yellow	44
Victoria Bridge-Spencer St.	"	22.11.86	26.12.29	3½	Red	43
Clifton Hill-Spencer St.	Bourke St.	10. 8.87	26.10.40	3¾	Red	53
Nicholson St.-Spencer St.	"	22. 8.87	26.10.40	3¾	Blue	53
Brunswick-Flinders St.	Elizabeth St.	1.10.87	26. 4.36	4½	Red	49
Johnston St. (B)	Swanston St.	21.12.87	15. 4.39	3¾	Red	52
Brighton Rd.-Queensberry St. (C)	"	11.10.88	29. 8.26	5	White	38
Prahran (B)	"	24.10.88	17. 4.27	5	Red	39
North Carlton (D)	"	21.12.88	1. 8.36	2¾	Green	48
Toorak	"	15. 2.89	17. 4.27	5	Yellow	38
North Melbourne (C)	Elizabeth St.	3. 3.90	29. 9.35	3	Green	45
West Melbourne	"	11. 4.90	20. 7.35	2¼	Chocolate	45
South Melbourne (A)	Collins St.	17. 6.90	25. 7.37	2¾	Green	47
Port Melbourne	"	17. 6.90	13. 3.37	2½	White	47
St. Kilda Beach-Windsor	St. Kilda Junctn.	27.10.91	27.12.25	2	Yellow	34
St. Kilda Beach (D)	Swanston St.	18.12.97	30. 9.25	4½	Green	28
Northcote-Preston	"	18. 2.90	26.10.40	2¼	Red	51

Notes: (A) Through-routed a few years before electrification. (B) Through-routed via Swanston St., 23/2/90. (C) Through-routed when Queensberry St.-Lonsdale St. section closed for extension into city of Coburg electric services. (D) Through-routed via Swanston St. on 18/12/97.

One of the appealing features about the cable cars was the distinguishing colour scheme used for each route—a legacy of the Broadway stage idea. The dome on top of the dummy, side strip boards and ends of trailer cars were painted in the colour of the route on which cars were permanently assigned and, superimposed on the colour, were names of the streets and suburbs served by the car. By night cars displayed route lights of corresponding colours.

That attractive feature remained until the Melbourne and Metropolitan Tramways Board took over in 1919, when a standard chocolate and cream scheme was introduced.

Beginning of the End

THE Company's lease expired on July 1, 1916, when they were placed under the control of a temporary body, The Cable Tramways Board, which lasted until the M. and M.T.B. took over the system on November 1, 1919. The Board presented a report covering a general scheme of future development of tramways in 1922, when it recommended the

forced the authorities to request the Board to continue as long as the remaining cables in service would satisfactorily perform their task.

It says a lot for the British manufacture of the particular cables that their normal life of 17 weeks was extended, by care on the Board's part, to 38 weeks, when the risk of a breakdown could no longer be taken.

And so, 53 years after the memorable day when the horse bus drivers swore at those "new fangled things," the last cars on the two last-remaining lines gonged their poignant swansongs as they rode the tired and familiar tracks, packed tight with well-wishers who sensed they were part of history in the making.

The cable trams marked an era. Said one, "They were **our** trams." Every citizen under 60 or so stood as small children, drinking in a wonderful world from the front of the dummy as the tram progressed, and had watched that fascinating, elusive wire cable through the slot. As they grew up, the male of the species had

"whipped behind" free rides on the back of the trailer. They had gone to school by them and if the grip-men lost the rope on a curve they all got off and obligingly pushed. And when courting days came along nothing could equal the windswept journey on the front of a dummy to St. Kilda Beach. Melbourne went to business and home each night by its cable trams, and the elderly blessed the low, easy accessibility and unhurried tempo they offered. The cars seemed ageless and when No. 1 (the American car; there were five of that number running simultaneously for years) was withdrawn in 1940 for location in the Museum, it had to its credit a total of 1,600,000 miles run and "plenty of life in the old dog yet."

This necessarily incomplete story has occupied more space than was originally allotted and

nothing can be said here of the fascinating methods by which the cables and the trams were operated. Recently an American firm published a book, "Cable Days In San Francisco." A fitting companion volume would be a complete factual and pictorial record of the Melbourne network, for it deserves an honoured place in the records of the Nation's rise to maturity. Already a wealth of data and material has been collected and, one day, we propose to publish such a book as a genuine tribute to that remarkable system of street passenger transportation. For the specified task of short-haul, frequent, convenient, reasonably rapid city and near suburban transport we believe the cable cars could still hold their place against the electric trams and buses by which they were superseded.

Farewell, faithful servants.

peak of their popularity.

In 1852 there arrived in San Francisco a Londoner, Andrew Smith Hallidie, who was destined to become one of the city's ablest citizens, and transport engineer. After three or four years mining and other activities he commenced the manufacture of wire cables, which he used for the working of inclined cable railways.

Now San Francisco is noted for its steep hills, and on one winter's day in 1869 Hallidie was present when a serious accident occurred to one of the city's horse cars. When one of the four horses slipped on the cobble stones the driver applied the brake so sharply that the chain broke and the car began to slip back, dragging the unfortunate fallen horses with it. As he assisted to release the mutilated animals he decided to work out a means by which such accidents could be prevented.

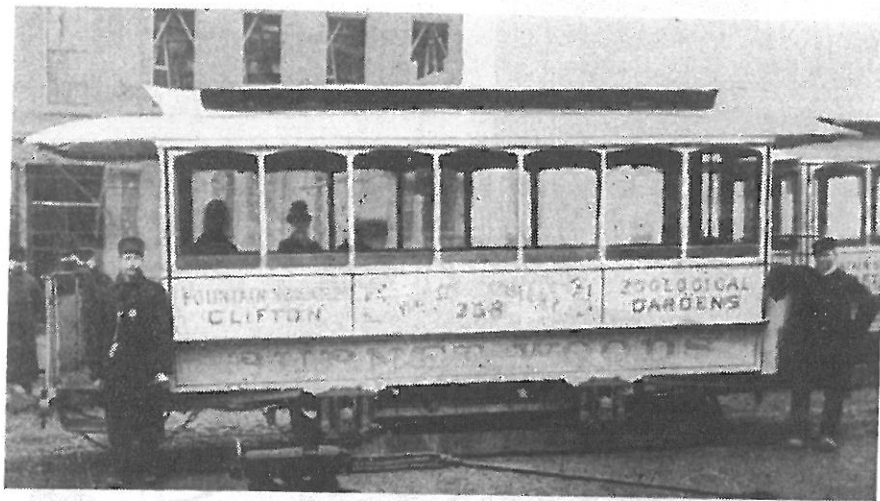
He undertook to apply cable haulage to the horse cars and in one year had solved his problem. The scheme called for an endless wire rope located underground between the rails, to which a car could be attached or detached as required. Two years passed before capital could be raised for the construction of an experimental line up steeply graded Clay Street.

At 5 o'clock on the morning of August 1, 1873, the last day before the franchise expired, a group of five men, including Hallidie, first heard the steam blowing off in the engine house to the accompaniment of the steady hum of the wire rope running through the long slotted tube between the rails.

The Great Experiment

WITH the break of day a deep fog rolled in from the Golden Gate shrouding Nob and Telegraph Hills, and the bottom of the steep Clay Street was obscured in mist. Pushing the car to the brow of the hill Hallidie connected the cable and the car descended slowly into the mist. The bottom was reached without mishap and the dummy was turned on a small turntable in the street before making the ascent of the hill. The experiment had proved a success and the new cable era had commenced.

By 1883, there were six cable companies operating in San Francisco, having 20.02 miles of route, and the horse cars rapidly gave way to the faster cable cars. The independent companies were



VINE STREET CABLE CAR, San Francisco, 1890. This car was almost identical with the Melbourne trailer except that no dummy car was used. A completely different grip mechanism was worked from the platform on the right of the car.

Where Australia's Early Stage Coaches, Horse Buses and Cable Trams Originated

THIS year California is celebrating the centenary of the discovery of gold on the Pacific Coast, which is a reminder that San Francisco owes much of its early development from the lagoons of "Yerba Beuna" to the mineral wealth poured out from the Comstock and Mother Lodes, to what is now the leading financial centre of the Pacific Coast.

San Francisco also has an important place in the history of street transportation. As early as 1852

small horse buses started running and eight years later steam trams were running on Market Street and continued in this service until replaced by horse trams in 1867.

The horse car lines grew with the prosperity of the city and by the year 1873 eight companies worked 80 single-track miles. Feature of these old horse days was the distinctive colours used on each of the company's cars—yellow, blue, dark red, and so on. By 1873 the horse cars had reached the

merged into one concern in 1897, and continued in operation for many years. Before the turn of the century and following the efforts of Siemens and Halske and others a new form of transport came into vogue, the electric tramway, or street railway as the Americans called them, and the introduction of electric trams replacing horse and cable lines came rapidly and San Francisco followed the current trend, leaving only the cable lines operating on the steeply graded streets, considered too steep for electric operation.

In recent years most of these last-mentioned cable lines have

given way to buses and trolley-buses and to-day only the California Street line remains to retain the memories of seventy years of cable working and the faint nostalgia of the roaring days of the Embarcadero and the Barbary Coast.

Prefabricated Bodies

☆ Continued from Page 37

these parts can be erected into a skeleton framing ready for finishing by semi-skilled labour in twenty-two man hours for a double-deck framing, and in twelve

man hours for a single-deck framing.

The new technique involves no restriction on the actual design of a bus frame. While the prefabricated parts have been made from standard sections, they can be formed to various contours to meet coach-builders' ideas—the principle remaining the same. Apart from providing a bus body of strength and durability, the technique offers a number of other advantages, chief of which are: (1) A saving of 20 per cent. in weight as compared with similar wood framing, considerable economies in fuel consumption and tyre wear, and with reduced operating costs.

The design is offered to suggest the use of various sections and materials and must not be taken as suitable for road conditions in all countries. It is suggested that the operator or body-builder abroad should consider this design in the light of bad road conditions, over-loading, servicing facilities, and other local conditions. Steel tubes are used for the highly-stressed parts, such as pillars and Hiduminium extruded sections are used for other structural members, such as waist rail, cant rail, seat rail, etc.; this means a reduction in weight of approximately 20 per cent. over pre-war designs. Certain Hiduminium extruded sections are used as structural and finishing sections, thus eliminating timber.

The general design covers for standard sections, but these can be formed to various contours to suit customers' requirements, such as type of chassis, seating plan, front or rear entrance body, fixed or sliding roof. All skeleton parts are supplied complete with the necessary gussets, brackets, etc., ready for the body-builder to assemble. The framing is designed as a bolted structure, thus facilitating ease of replacement. Gussets are welded to steel members only, no welding being carried out on light alloy parts. High tensile bolts are used and these have proved highly satisfactory on bodies which have now been on the road for ten to twelve years. The framing is suitable for fixed, half-drop or sliding windows, but is not suitable for full-drop windows. Alternative designs can be offered to suit full-drop windows.

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