

PART I - BALLARAT HORSE TRAMS:

In 1885, the City Council asked leave to construct a tramway, but the Government was slow in granting the concession. Messrs. Thompson and Moore of Adelaide made the most favourable offer. The Council desired a cable system, but it was found, on inquiry, to be expensive. Then a cable line from the City to the Gardens was proposed, with a horse service to Soldiers' Hill and Ballarat South, but the suggestions were not carried out. In September, 1886, Edward Thompson obtained the concession and delegated the power to a Company. On 3rd. October, 1887, the deed was signed by Messrs. Collard Smith (Mayor), and Cr. C. C. Shoppee on behalf of the Council, Messrs. W. Smith, Henry Core, W. Brown (Secretary) for the Company, which contained 32,000 shares at £2 each. Directors elected were Messrs. H. Cuthbert, H. Core and W. Smith. The contract was let to Edward Thompson of Adelaide, for a horse drawn service.

Five acres of land were purchased and twenty cottages of four rooms each for the drivers and stablemen were erected; also a stable 230' x 58' for the accommodation for 100 horses. The shed for the trams still stands for the present day electric cars, but has had much reconditioning. It is stated that ship carpenters helped to build the depot.

The first rail was laid on the 18th October, 1887, and six miles of track was put down in 6 weeks. 1,000 tons of rails were ordered at £7.10. 0 per ton. Fifteen double deck tramcars were used for a start. The first line to be put down was around the Lake from Grenville Street, Via Start Street West and Ripon Street. Then followed Ballarat South to Rubicon Street Via Skipton Street, to Soldiers' Hill Via Lydiard Street North, and on to the Lake Via Macarthur Street, and along Drummond Street South to Skipton Street and Darling Street. Horse trams did not enter the old Town Council of Ballarat East territory, which commenced east of Grenville Street. (The Town Council became part of the City Council in May, 1921). Ballarat East wanted their own tram system, and on 25th June, 1888, conferred with Mr. Wilson of the firm of Proth, Ellison & Coy., Electrical Engineers, who had the contract for the battery electric tramways in Bendigo. With the Mayor and Councillors, he inspected the various routes and gradients, and was very favourably impressed with the prospect. He considered there a grand opening for electric tramways in Ballarat East, and said he could see no difficulties in the gradients, much steeper hills than that in Victoria Street having been surmounted in other places. The Town Council were highly elated with the interview, and were sanguine as to the outcome when tenders were called for. Alas! The elation was not justified by events, even if it may actually have been by the position at the time, and Ballarat East had to wait for its electric trams.

The cars running in Ballarat City were the Stevenson, American pattern, built by Duncan and Fraser of Adelaide, but they were put together at the Wendouree Depot. They were built of ash, elm, tern hickory and Hauri, with special stairs back and front. Each car seated 44 passengers. The first horses were driven overland from Adelaide, and the men with their families who came to operate the system. Mr. R. T. Moore was Manager, Peter Giles (Foreman) and later Manager, Charles Ruffle (Secretary).

The conditions required were - Trams to run from 8.00 a.m. until 11.00 p.m.; services to be of 15 minutes' to 30 minutes' maximum; fares 3d. for 3 miles, and on a basis not to exceed a 1d. per mile.

On the 21st December, 1887, the formal opening took place. Three hundred ladies and gentlemen were invited by Mr. & Mrs. R. T. Moore (six cars were provided, to make the first trip. The start was witnessed by a large crowd of spectators. Cabmen organised a counter demonstration and drove along in procession in front of the trams with various placards on their cabs. Some delay occurred by trams getting off the rails, but the Gardens were eventually reached. The banquet at the Gardens was catered for by C. McIntyre. The Chairman, Cr. Collard Smith (Mayor), members of both Houses of Parliament, Mayors and Councillors of Ballarat, Ballarat East and Sebastopol were present. Cr. Claxton proposed "Success to the Ballarat Tramway Company" and said it was a red letter day. On the return to the City, a few more derailments occurred.

The actual start was made on the Monday (Boxing Day), 26th December, 1887, but only three trams were in service and naturally were packed. On the 28th, four trams were running and the system worked more smoothly. The trams were painted yellow and drawn by 3 horses. The cars were 12 feet in length (2 had 14 feet body frames) and their tare weight was 3½ tons. Seating capacity was 44 passengers. The doors opening into the saloons were manufactured by J. M. Jones Sons, Tram Builders of Westtroy, N.Y., U.S.A. The builders' plate, made of copper, had the firm's name cast on both sides. This plate, oval in shape, was fitted in the centre of the door.

The public were requested to load up at the Post Office, as in those days the out-bound trams used the north side, while the south side track was used by City bound trams. On the Gardens route, loops were View Point, Dowling Street, Gardens, and Alfred Street. The tram services supplied in the main were ½ hour Grenville Street to Ripon Street; half-hourly either way to the Gardens. The hour-and-a-half service via the Convent and 15 and 45 minutes past the hour via the Boatsheds. The Gardens via Sturt Street West ran east of the convent into Wendouree Parade, Via Morrison Street. At that period, the land through which Hamilton Avenue now runs, was private ground owned by Lady Hamilton, who, years after, offered a strip of land to the City Council so that a public street could be made. A half-hour service was provided in Macarthur and Lydiard Streets with a single car. A Branch stable for exchange of horses was located in the spacious yard of the Princess Royal Hotel in Macarthur Street, and later moved to Creswick Road. The Ballarat South services were 20 minutes, via Skipton Street, and along Drummond Street south a single deck car ran a shuttle service every half hour.

The Rubicon Street service, and later Sebastopol, commenced at the Town Hall (Armstrong Street). The route was extended from Rubicon Street to Queen Street, Sebastopol, in April 1893.

At first, a lot of opposition to this extension was offered, but that was later overcome and the trams went through every 20 minutes from 7.30 a.m. until 10.00 p.m.

The depot lay near the Royal Mail Hotel, in South Sebastopol. On the 9th October, 1909, a fire destroyed the depot, together with 13 horses.

The Managers, during the horse regime, were Messrs. Moore, Giles, Fay, Milner, Hodgetts, and Cunnow. Mr. Walter J. Dunstan, as Accountant, handled the last business for the horse tram Company, and as chief Accountant, carried out similar duties for the Electric Supply Coy. of Victoria. Mr. Dunstan also served with the S.E.C. as Office Manager, at Wendouree Power Station before he retired in 1946.

The maintenance of the horse tramway was a considerable job. There were always at least 50 horses at Wendouree, and they were well cared for. An 8 m.p.h. schedule was fixed, but in actual practice, never exceeded 6 m.p.h. There were 4 grooms, each having a personal supervision of 12 horses, and each brought his own pairs to and from the trams. Each tram had not more than 2 runs per day, excepting on extra busy days, such as Railway Picnic, Easter, Christmas, etc., when all reserves were utilised. The horses were worked in teams. They were rubbed down constantly, and open boxes for sick horses were provided. The length of service averaged seven years, a notable exception being "Queen" who worked for 13 years. Each horse had its name painted above its stall. Four trams ran daily on the Gardens route, one hour per trip. The time table was amended to 8.30 a.m. first, and 10.00 p.m. last car in later years.

The lighting system consisted of two kerosene lamps fixed into a glass case in opposite corners of the saloon, and a large headlight which was strapped to the forward upstairs rail and carried round by the driver at each terminal change.

The drivers did not adhere rigidly to uniform. During the long winter months, they had need for warm and waterproof covering. Drivers were issued a whistle with which they warned other road users.

The wages of married men were 36/- per week, with a cottage, while the conductors received 24/- per week. It was the practice for men to work throughout with ½ hours for lunch and an hour off again for tea,

a day off once a month. The employees numbered about 50. The conductors wore uniform, the cap being the old pill box style.

Fares were collected by hand, and tickets issued, then came "receivers", bell registering, carried by the conductor, with a chute to receive the coin inserted by the passenger. Later, tickets arranged in wallets were re-introduced; fares as stated did not exceed 3d., but sectional tickets 8 a 1/- were greatly used. In winter, fresh straw spread on the floors provided some warmth.

The trams were patronised by all classes of people, bicycles were priced beyond the ordinary person's means, and private conveyances were not so convenient - harnessing up, etc., took time.

During the winter, the small saloons were crowded, and the open upper-deck seats cold and deserted. It was different in the summer when people always chose to ride "up above". Extra horses assisted the trams from Grenville Street to the Post Office. The hill driver would return with his horses to repeat the work. There were no centre poles, horses being controlled by hand; a strap fixed to the breechings was a restraint against fractiousness, and the hand brake was effective.

The tramway cottages were built in Gregory Street, west of Depot, and were known as Tramway Row, and were also noted for their neatness and their gardens.

At Sebastopol, the depot functioned almost independently of the main depot, but before electrification of the Lake section, all requirements came from Wendouree Stores. The old portable chaff-cutter engine was kept very active, especially before Christmas & New Year holidays. It is estimated that 1,000 bags of chaff would be cut to carry over that busy traffic season. Almost 50 bags would be sent to Sebastopol twice a week.

The loading, particularly on Saturday nights (shopping night) was heavy on the city - Sebastopol line, and a top deck conductor was required. He collected the fares on the upper deck and front stairs and platform, then joined the passing tram at South Street loop to go out with the next load. An extra car was allotted for this heavy night's traffic. There were loops near South Street, Latrobe Street, Rubicon Street, and near South Star Mine. The blades were kept in position with blocks of carriage spring rubber - simple and effective then.

Mention of "South Star" recalls the mines and the pay days. When those days arrived, sovereigns became abundant, and the miners, particularly the younger men, appeared to gain much pleasure in offering sovereigns for their fares - of course, a conductor's cash became exhausted, and names had to be obtained. In one instance, the conductor made a last desperate round up of money, and, getting possession of another gold piece, took the remaining fares from one tenderer. Some excitement and amusement followed. The conductor was threatened with all sorts of reprisals, but there was not much gold offered thereafter.

Every Sunday morning, Church trams ran. The Church Special from Sebastopol left the Borough at 7.30 a.m., and came through Drummond Street South into Sturt Street as far as Dawson Street. Later, via Skipton Street to Snows (now Myers). A special was provided on the Gardens line also.

On the Drummond Street South line, a single deck tram run daily from 9.00 a.m. until 6.00 p.m., giving $\frac{1}{2}$ hour service. It has been stated that this single deck tram was converted in 1888 to a Julien's system of storage batteries. There were 96 cell storage batteries, each cell measured 6"x6"x10", arranged in boxes and placed on trays, 12 to each tray, giving sufficient energy for 50 to 80 miles. In its first trials, which were along Drummond Street, a speed of 12 m.p.h. was obtained; the date being 12th October, 1888. The second trial was on the 15th October, 1888, when a run to the City via Sturt Street was held. These trials were successful, but nothing became of it. The car was stored at the Darling Street Depot. This depot was in Darling Street on the South East corner location, and in 1905, moved to Sebastopol. It was necessary for Sebastopol to supply fresh horses for the Drummond Street line by various procedures. A lad would mount one and lead another, returning from Darling Street with horses to be spelled. At other times, the Sebastopol tram driver would bring a third.

Rail and general track cleaning was part of the daily round. The roads for ordinary traffic were nothing like those today, and the tram track suffered in consequence. A water pipe was run to the rails at the corner of Stuart and Drummond Streets, on the north side, and washed the rails cityward, considerably aiding the progress of the horses up hill. At each stop, a spare conductor had this job of track attention.

Storms made a lot of trouble for the trams, large sections of the track being covered with gravel and silt. Clerendon Hill (Lydiard Street North) was a noted bad place, even three horses having a struggle to make headway.

The destination signs were large metal plates carried on the upper deck railing, while a long painted board was fixed to the sides between the two decks.

Twenty four (24) horse trams were the total number in fleet, all being double deckers with one exception - it being a single deck saloon car.

The administration office of the Company was first in Camp Street, later removed to Armstrong Street (next to Town Hall) where the electrical and receiving departments were housed.

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Much of the above horse tram history from notes supplied by the late Inspector James.

PART II - THEORETIC TRAMS:

In 1885, the first Power Station was opened with a tiny plant of only 25 h.p. This was located in Dana Street, where MacRobertson's Warehouse now stands. Nine years later, the Dana Street plant was increased to about 100 h.p. The plant was frequently added to in order to meet the growing demand for electricity, but by 1904, the resources of this little power station was seriously overtaxed. It was then that the Electric Supply Coy. of Victoria financed with English capital, bought the franchise, and on the 23rd. August, 1904, the foundation stone of an up-to-date Power Station was laid by Cr. R. Pearse, Mayor of Ballarat, and Cr. W. D. McKee, Mayor of Ballarat East, on the site in Wendouree Parade, previously occupied by "Fry's" Flour mill; parts of the mill's massive bluestone walls continue to form part of the Power Station structure. Concurrently with the purchase of the electricity supply, the new Company bought out the old horse trams and proceeded to instal the electric overhead trolley system.

The original plant put down in the new power station in 1904, consisted of direct current generators driven by reciprocating steam engines, and had a total capacity of 900 kilowatts. In 1913, the plant was enlarged to 1,200 kilowatts. By 1924, the demand for electricity had again exceeded the capacity of the plant, and it was decided to change over to alternating current machines driven by modern steam turbines. These were installed in 1925, and had a capacity of 3,300 kilowatts.

During the boom period 1925-1928, the demand for electricity increased rapidly, but the activities of the Electric Supply Co. were somewhat curtailed, due to the fact that the date was approaching when the franchise under which it operated the undertaking, expired.

The Electricity Supply Coy., sold out to the State Electricity Commission in 1931, but the Company continued to operate on behalf of the State Electricity Commission until the 30th June, 1934.

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Electric trams first ran in Ballarat on 18th August, 1905. Twelve cars were available, and were gradually increased to 20 in 1906, and to 23 in 1912.

The routes available for traffic on the opening day were as follows :-

Grenville Street (City)	to	Gardens	via	Convent.
"	"	"	"	" Ripon Street.
"	"	"	"	Gregory Street, in Lydiard Street North.
"	"	"	"	Stawell Street, in Victoria Street.
"	"	"	"	Gladstone Street, Mt. Pleasant.
"	"	"	"	Macarthur Street, via Drummond Street North.

The electric trams were given a secret trial run during the previous night to the opening date, but the drivers clanging the gongs so much soon brought the people out of their beds and in night attire. They formed a guard of honour around the Parade. The new system was officially declared open next day (the 18th August, 1905), in the presence of a large and representative gathering headed by Mayors J. M. Barker (City), and J. R. Elsworth (Town Council), and accompanied by the Minister of Mines (Mr. J. McLeod). Messrs. H. Scott Bennett, M.L.A., and Mr. J. Y. McDonald, M.L.C., and many others. The visitors were welcomed by Mr. Ben Deakin (Manager) at the Power House, and here the Mayors each started an engine, and the Minister the third, and there was much speech making. Then a procession of new cars was made up, No. 1 heading the line. Mayor Barker was at the controls under the guidance of Mr. Geo. Laurens, who had a similar task at the opening of the Bendigo electric tramways, two years previous. The trams were gaily decorated with flags. As the line of cars was coming down Camp Hill (Sturt Street) opposite the "Courier" Office, the brakes on the last car failed, and it crashed into the one in front. The windows of both cars were smashed, and the occupants who had been sitting in state, made the quickest exit compatible with the dignity of the occasion. However, not much harm was done, and the procession went on into the Town of Ballarat East, and up Mt. Pleasant and the Orphanage, and then returned to the City Hall, where the customary "sumptuous repast" was waiting them, together with quite a lot more speeches. The opening ceremony was a great success.

The trams seated 32 and 36 passengers. Out of the 24 horse trams, twelve were converted to electric cars, the conversion being done by Duncan & Fraser, who had built the cars in the first place. The horse trams were lengthened at both ends, and these portions became the open smoking compartments and the drivers' cabins. These 12 cars received the Nos. 1, 4, 6, 10 to 18. They seated 32 passengers. Eight of the other horse cars were retained for use as trailers to the motor cars. Several were also transferred to Bendigo for similar use.

Six small saloon electric trams were purchased from the Sydney Tramways in February, 1905, and these were also converted to a similar pattern to the 12 rebuilt Ballarat cars. Of the six Sydney cars, three of them were the first electric trams to be used in Sydney. Their numbers were 1, 2, 3, of the North Sydney system and were built in U.S.A. by Stephenson. The Ballarat numbers allotted them were 2, 5, and 7. It is interesting to note that they had their trolley pole base fixed on one side of the cars instead of the usual centre of roof, when they arrived. After alterations in Ballarat, the poles were fixed in the usual place. The other 3 Sydney trams were the N.S.W. Tramways "C" class 4-wheelers, and very similar to the abovementioned trams. These were Nos. 14, 15, 16, built by Hudson of Sydney and became our Nos. 3, 8, and 9. The ex-Sydney trams had a longer saloon and seated 36. All the 18 cars (Nos. 1 to 18) were equipped with new Brill 2LE trucks and driven by 2x30 h.p. motors controlled by Westinghouse 90M controllers, except No. 7, which had Westinghouse F.L.F. Tare weight of car being 10 tons.

In 1906, two open summer cars were built by Duncan & Fraser and received the Nos. 19 and 20. They were open cross seaters ("toastracks") and carried 40 passengers seated. The trucks are said to have been re-conditioned "Peckham" from the ex. "C" class Sydney trams. The summer cars had 2x35 h.p. motors and W.H. 90M controllers. Weight of car unloaded 9½ tons. The trams were painted red and white with blue scroll work, the car numbers appeared inside the trams at first, but after 1911, the numbers were painted on the aprons and sides of each car. About 1913 onwards, Nos. 1 to 18 had Ballarat Tramways painted in blue and gold on the rocker panel above the trucks. Trailers were painted chocolate and yellow. The lighting of the trams was provided by a circuit of five 16 c.p. 100 volt carbon filament lamps. These carbon lamps became brittle through vibration, and required many replacements. Two circuits were introduced later and were used for destination sign illumination. Each tram was provided with a hurricane lamp for emergency and a tool kit was part of a tram equipment.

The cars were equipped with a magnetic track brake for emergency purposes. It was a powerful braking agency, and the passengers well knew when its application was necessary, and the tram suffered usually by its severity, while the responsible party escaped. The trailers were used on every special occasion to a great advantage, and were popular with the public. It has been said that the electric tram motors drew the additional burden without any difficulty.

A horse tram ran for a couple of weeks on the Mount Pleasant line owing to a short section not wired, but the line at that time terminated at Gladstone Street. Considerable local weight caused the tramway authority to continue the track to Cobden Street.

Stores were supplied from the Power Station Stores Department, and conveyed to the depot by means of a truck drawn behind a tram on the Ripon Street line. The last time the writer saw this conveyance was about the middle of 1935. A line for the above purpose was built from the Ripon Street line into the power station yards (Wendouree Parade frontage). This spur line was pulled up when Ripon St/View Point line was relaid and re-sleepered around about 1937/38. It was on this line that the last Gardens tram was stabled for the night, and it would be the first car out next morning. It was known as the Power House tram; unfortunately it is not known when this "service" ceased. Horse trams still ran in Skipton Street to Sebastopol, and along Drummond St. South to Darling Street. From 1907, two electric trams ran to Darling Street from the City, giving a 15 minute service, and during 1911, the electric system advanced to Rubicon Street with a tram every 20 minutes. The horse line in Skipton Street was eliminated in 1909, but for some years afterwards a single horse tram ran between Sebastopol and Rubicon Street, where passengers changed trams.

During the changeover period, and whilst the lines were being relaid beyond Darling Street in Skipton Street South, the passengers were conveyed over the area by means of horse drawn drags and wagonettes. A wrangle over fares held up the decision on the electrification of the Sebastopol line beyond Rubicon Street. It is interesting that during this period, the man who guided the conversion of the tram service, Mr. Benjamin Deakin, suggested that trackless trolley trams could be used on the Sebastopol run. He felt that they might be a possible solution to the fares dispute, which hinged on the higher installation and overhead cost of the line in comparison to the other shorter runs. Finally, all difficulties were resolved, and in 1913 horse trams said 'good-bye' to Ballarat - at least as far as the tramways were concerned. However, the old 60 lbs. rail had not been replaced with a heavier rail during conversion, and much of the original rails are still in use today. In 1912, three large semi-closed cross seater trams were purchased from Duncan and Fraser, and these are the only electric trams that have been entirely new to run in Ballarat. They had "Brush" trucks, equipped with 2 x 38 h.p. motors, Thompson and Huston B4900 controllers. These three trams were numbered 21, 22, 23, and were known as the "Sebastopol" type. They had cross seats with a centre aisle, and seated 40 persons. At one time, centre seat pieces were fitted across the aisle to the cross seats, but they were only used in the fine warm weather. Later, these seat pieces were done away with altogether. These trams were always used on the Sebastopol line, mainly to Rubicon Street only. Under heavy loads, the axle boxes continued to break from the truss bar, costing the Company as much as £300 per year. The breakage was later overcome by fixing a cap over axle and axle box horns. The idea was invented by the local foreman and has since been copied by other tramway systems.

In 1907, an English water tram was imported and built by Brush. It was used up to 1918, and then stored outside until 1925, when it was scrapped.

It was on the 14th April, 1913, when the Sebastopol line was opened for electric trams. A four tram programme was introduced, and this table ran and served from April, 1913, to August, 1937 - 24 years. A 20-minute service to Sebastopol from 7.00 a.m. until mid-day and from 12.00 Noon to 8.00 p.m. a 12 minute service given between the City and Rubicon Street, and 24 minutes between each beyond, reverting to the morning schedule again from 8.00 p.m. to 11.00 p.m.

In the course of time, and after much outcry, the unsheltered motorman was provided with weather shields. No. 10 was the first tram to be so fitted, but on one end only for experiment in 1913. The old "goose neck" brake handles had to be altered for inside use. It was some time before the rest of the cars were so equipped. While the brake handles were altered like the rest, the two summer cars (Nos. 19 and 20 were not fitted with weather shields).

A good deal of new ideas were introduced during 1913/14, and became necessary when the fare box system came into being in June, 1913, making the cars a one man system. Conductors were always used on the two summer cars as well as on Nos. 21, 22 and 23. This required alterations to the trams by having gates hung at each entrance and "ENTER FRONT END" notices were printed on them. The open ends (smoking compartments) had the seats arranged for interior riding only and the long steps replaced by a short hinged type. Drop signs showed either "PAY AS YOU ENTER" or "PAY AS YOU LEAVE" procedure.

From 1905 until about 1912, the destination signs were only metal plates hung over the aprons in front of the driver. Then came square 4-sided revolving boxes placed on the canopy, and with "bulls eye" glass night colours. About 1921, this gave way to a revolving linen sign in a square upright frame and glass slides over the top, changeable by sliding across to an aperture.

Coloured enamelled square route plates came out also in 1913. They were carried on the upper front end of the cars and on the sides above the centre windows.

These route plates and night colours were done away with in 1934. The following colours were issued :-

Colour of Plate

Green
 Red
 Blue
 Blue with white centre
 White
 Yellow
 Green
 Red

Line

Gardens via Convent
 Gardens via Ripon Street
 Rubicon Street only
 Sebastopol
 Drummond Street North
 Lydiard Street North
 Victoria St. (called Orphanage)
 Mt. Pleasant

At night, the destination box would show same colour as route plate.

Up to about 1923, there used to be a time board near the present day waiting shelter in lower Sturt Street. On the board there was 8 clock faces each showing the time of the next outbound tram on each line. Above the clock faces was the route colour painted on.

About 1924, the tramways purchased their first and only bus. It was an "International" with a rear end loading, and purchased second hand from a Mt. Pleasant operator. It was first used on the Mount Pleasant run and later on Victoria Street. It was not used after 1926.

The wages paid at the commencement of the service were - Motormen 8d. per hour, then on the 18th February, 1906, 8½d., and on 23rd February, 1906, 9d. per hour. The conductors received 18/6d. per week, then from the 18th November, 1905, 21 per week. The conductors made a demonstration on Railway Picnic Day, 1906, and the trams did not run till late in the morning. Again in 1908, the conductors struck, but the trams were manned by various other employees. On 1st December, 1912, Mr. Justice Higgins presided at the Federal Arbitration Court and having heard evidence, the wage award was announced as - Motormen 1/1½d. per hour for a 52 hour week (13 days per fortnight); senior conductors, adults, 1/- per hour, and juniors 32/6d. weekly for 6 months, and then 36/10d. In addition, time and a quarter rates were granted for certain public holidays. One very disturbing event rather marred the good relationship between the Company and the tram men. That was the strike of 1922 (Thursday, 20th April, to 5th May, inclusive), mostly over the fare box system. It was referred to the Arbitration Court and Mr. Justice Charles Powers, after making a personal inspection of the work, decided that the fare box system might continue in a provincial City such as Ballarat.

In 1930, there was a great change, - Trams Nos. 10, 15, 18, 19, and 20 were taken out of service and sold. The writer remembers having a ride to the Gardens via Sturt Street West on a Sunday afternoon (February, 1930) in one of the summer cars. They were not seen after that. The body of No. 20 stood for some years in the Country Roads Board's Depot at Wallace. It was rumoured that during their last summer season, Nos. 19 and 20 had their "Peckham" trucks replaced with a Brill 21E type. Owing to the low car body frames, the 21E was not a success, as when the car was loaded, the wheels cut into the frames when rounding the curves.

The above five trams were replaced with a more modern stock from the Melbourne & Metropolitan Tramways Board. The first vehicle being M. & M. T. B. No. 108, and became No. 24 at Ballarat. It was the first tram to have air brakes in Ballarat. Four others of the same type arrived soon after carrying Nos. 110, 111, 116, and 115 which received the local 25, 26, 27, and 28, respectively. About this time it was decided to replace the "goose neck" brake handles on Nos. 21, 22 & 23 with a wheel type and the Driver was provided with a seat.

The next few years saw the end of Nos. 2, 4, 5, 6, 7, 8, 9, 11, 13, and 14. In their place, the M. & M. T. B. provided their single truck cars Nos. 82, 73, 69, 76 and 89 to become our Nos. 16, 29, 18, 19 and 20. At first, the 10 ex. Melbourne trams were not altered and were painted in the old Company's colour. Red with yellow rocker panels. By this time, all but one of the trailers had been sold. The exception being kept for the carriage of the tram crew's bicycles between the depot and the City Office. The trailer would be hitched behind a city-bound service car to Grenville Street, where it would be unloaded and then re-loaded with the evening shift's bicycles and hauled back to the depot by the next Garden's tram. This "service" worked until about 1934/35 when the trailer gave way to present day arrangement - i.e., by motor truck.

The last of the old-type trams lasted until 1935 (Nos. 1,3,12, 17,21 and 22). No. 23 was converted to a water scrubber car in 1934, and still does service. In March, 1935, No. 27 appeared in the old S.E.C. standard colours - dark green and cream - being the first car to be so treated. In the same year, S.E.C. took delivery of 4 further M.&M.T.B. trams Nos. 183,184, 186 and 189, being the ex. Hawthorn Tramway Trust's cars. (Actually, these cars were ordered for the Footscray Tramway Trust, but the M. & M.T.B. took over before the cars were completed, and allotted them Hawthorn Tramway Trust's numbers). The Ballarat numbers allotted to these 4 trams were, 30,31,32 and 33. No. 30 was the first of the "improved" type and first saw "light" as a special on 12th September, 1935. It was inspected by the S.E.C. Officers from Melbourne, Geelong, Bendigo and Ballarat.

A different type of tram arrived in February, 1936. It was a 4-wheel straight sill semi-closed combination car, being a "G" class M.&M.T.B. No. 152. (A former No. 2 of the Fitzroy, Northcote and Preston Trust). It first saw service as No. 22, but in November, 1938, it was re-numbered 29, when this number became vacant after the first 29 became the present day 17.

When the S.E.C. purchased the 4 "Birney" cars from Adelaide in 1936, after the Port Adelaide system closed down, the Birney trams were sent to Geelong and 4 ex. Melbourne cars were transferred to Ballarat from Geelong. The 4 trams sent were Geelong's 28, 27, 30 and 29, and became Ballarat's Nos. 11,12,13, & 14, respectively. They arrived in 1936.

In October, 1937, 3 similar trams were purchased from the Municipal Tramway Trust, Adelaide. They were the M.T.T. "A" Class Nos. 10, 69 and 92 and later, when repainted, received the following Nos. 21,23 and 22. It is interesting to note that they ran for some time sporting Adelaide's colour, and Nos. No. 69 was not repainted until early 1939. No. 21 was altered to the Ballarat "standard" type, but the other two had only minor alterations. No. 69 was decorated with paper flowers for the 1938 Floral Carnival, while No. 29 (ex. Melbourne "C" class) was done up for the 1939 Floral show. During its first day, 8 girl hostesses were on board - date being 2nd March, 1939.

For the Coronation of King George VI, No. 28 was decorated for the occasion. It ran for 3 days - 12th, 13th and 14th May, 1937, and was still painted red and cream.

During the last Coronation of Queen Elizabeth II, the local trams carried two flags mounted vertically fore and aft on the roof.

During the last war, the trams gave a good service and carried some huge loads. Owing to manpower shortage, lady conductresses were employed - the first being in charge of a tram was on the 13th September, 1942, while the last girl booked off on the 9th July, 1946. At one period, 23 conductresses were employed.

The first of the modern fleet to be written off was the ex. Adelaide car No. 22, which had an argument with an army car at the corner of Dana and Drummond Streets on 28th July, 1944. The tram was almost cut in two and 12 passengers injured. At first, it was decided to rebuild the car, actually, Mr. Lyons (Car builder) had parts ready for the rebuilding when the M.&M.T.B. offered their "C" class maximum traction bogie cars for sale. It was then decided to scrap the Adelaide 4-wheeler and purchase the bigger vehicle. The first bogie arrived on the Yellow Express road transport vehicle on the 19th October, 1945. The tram being No. 117, which saw service on the Hawthorn T.T. as their No. 11 and was one of the trams to open that system on the 6th April, 1946. No. 117 had two trial runs on Monday, 22nd October, 1945, and I was invited to be on board. This tram had its first public outing on the Sunday - 28th October, 1945. It did not receive its Ballarat number until December of that year when it came out as No. 22, being the 4th tram to carry this number. However, in 1952 it was renumbered 37. On the 24th October, 1945, another bogie tram arrived - ex. Melbourne No. 132 - becoming our No. 15. It went into service on 14th December, 1945.

In 1947, two further bogies were obtained from the Board. They were No. 137, which arrived on 22nd January, 1947, and No. 124 on the 28th February, 1947. No. 137 was first used on the Regatta traffic to View Point on 1st March, 1947, but carried no number, and it ran in that condition for some months. Folding gates were fitted to the end entrances.

Early in 1948, after a repaint and doors fitted instead of the folding gates, it was noticed in traffic with the number 34 (137 was Hawthorn's No. 31, first in service on the 30th September, 1918, while No. 124 was ex. Hawthorn T.T. No. 18, in service on 6th April, 1916). No. 124 was altered and repainted before going in local service as No. 35 in June, 1947.

With these 4 bogie trams in service, two of the old 4-wheelers (Nos. 23 and 29) were rarely used. No. 29 was last used on 14th March, 1948. It was scrapped on 3rd. September, 1950, and body sold on the 13th November, 1950. The total Ballarat mileage run was 98,416 miles. No. 23 lasted a little longer. It was painted gold bronze in December, 1950, and later fitted with a pick and spade painted silver and other decorations attached. It was the tramways' contribution to the Gold Centenary Celebrations 1851 - 1951. It made quite a stir when it first came out on 16th March, 1951, and ran daily until the Easter Monday 26th March, 1951. The car then stood in the Depot until August, 1951. Owing to power restrictions, the gold tram made only one appearance after dusk when it ran for about 2 hours in Sturt Street on Wednesday, 15th August, 1951. The final day was on Monday, 20th August, 1951, when a public holiday was held in Ballarat, and old 23 ran as a Special to meet Cobb & Co. coach at Victoria Street at 3.00 p.m. Its final run was when it left the city for the depot via Ripon Street at 4.00 p.m. The body was sold to Mr. T. Lyons of Navigator on the 20th April, 1952. No. 23 was ex. Adelaide 69, and went into service in Adelaide on 30th October, 1909, and built up a mileage of 632,958 and 131,546 miles in Ballarat.

The three last trams to arrive in Ballarat were also maximum traction bogies built for the ex. Prahran & Malvern Municipal Tramways, and they differed slightly to the ex. Hawthorn bogies, which were built much later. These 3 bogies were numbered 41, 42 and 35, which arrived on 1st May, 1951, 22nd May, 1951, 13th June, 1951, respectively. These additional cars made room at the depot somewhat crowded, so it was decided to lay a track at the rear of west depot road and store ex. M.&M.T.E. 35 on it.

No. 41 was the first of the 3 trams to be reconditioned, and it went out into service as No. 38 during October, 1951. Ex. 42 was the next to be attended to, and it came out as No. 39 in December, 1951. The last one was ex. 35 to receive an overhaul and a repaint, and No. 40 was the number it received, and noticed in traffic in May, 1952.

So much for the tram cars themselves, we now can deal with the track and service.

When the State Electricity Commission took control in 1934, a start was made in October of that year to recondition the tracks, which had got into a very bad state. The tracks only rested on blue stone blocks, and were held apart by tie rods. The first section to be reconditioned was the south track in Sturt Street from Lydiard Street to Pleasant Street, and then back to the start on the north side. This work meant sleepers the whole system and packing the ties with stone ballast, most of which came from Lethbridge Quarries. Quite a lot of the old grooved rails were replaced with 80lb. "Tee" rails, with an angle strip bolted on the inside to form the groove. A special oil road roller was made in Ballarat by Jelbarts, who also constructed another roller for the Bendigo system. The work of treating all routes took about 3 years to complete. During the reconstruction of the Main Road track, the crown of the street was cut down, and during the process, many gas and water service pipes had to be renewed. It was quite a mess! But Bridge Street was worse! This meant closing the street to ordinary road traffic and for a short time the two trams for Victoria Street and Mt. Pleasant came into the City as far as the Junction Garage. Both trams were parked overnight in Bridge Street. During this work of relaying and re-sleeping of Bridge Street tracks, both the Gas Coy. and Water Commission were busy renewing their pipes. The railways ran special ballast trains from Lethbridge, while Bendigo Tramways sent all their track equipment, including their oil roller, so that the work could be completed without delay. One could be forgiven for thinking a bomb had landed in the street.

At the ends of both Lydiard Street North (Gregory Street) and Victoria Street, the old tracks ended as a parallel sidings.

Thus :-

Perhaps they were to be passing loops, when and if the lines were extended. (Victoria Street was to be extended to the Railway Bridge, but nothing became of it).

In 1937, the Lydiard Street North line was extended from Gregory Street to Norman Street, a distance of 45.5 chains. The old parallel siding at the old terminus was pulled out and a new loop put down some yards further north. This section was opened on 28th August, 1937, at 11.00 a.m. The first car No. 32 was driven by Mayor J. Pryor, over the new section.

On the following day (a Sunday), new through routing was inaugurated and the elimination of the old city terminus at Grenville Street cut out a lot of traffic congestion. The new through routing of cars as follows :-

Victoria Street	to	Gardens via Sturt Street West.
Mt. Pleasant	to	Gardens via Drummond Street North
Lydiard St. North	to	Sebastopol
Lydiard St. North	to	Rubicon Street (Removed to Grey St.) (in recent years.)
City	to	View Point
City (Main Street)	to	Sturt Street West (afternoons only)

The basic service of 20 minutes' frequency for all lines was adopted, the exception being the View Point line, which I think was cut out altogether at that time.

Until April, 1946, the trams were operated as a one-man car during the mornings. From the 8th April, 1946, conductors were provided for each tram for the full period. Then on the 6th October, 1952, one-man operation was re-introduced during slack periods and each tramcar carried a yellow painted board with "Pay as you Enter" in black. One of the bogie trams, No. 38, has been altered to a one-man operation, as a trial, in early 1953.

The first lines to have the "Forest City" signalling (safeworking) equipment installed was Victoria Street and Mount Pleasant, followed by Bridge Street and the Gardens Route, all in 1937. Lydiard Street North and Sebastopol routes were done the following year. The only line not equipped with the colour light signalling is the View Point line from Sturt Street to Macarthur Street, but as this line is serviced by one car, it made it unnecessary to instal the equipment.

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