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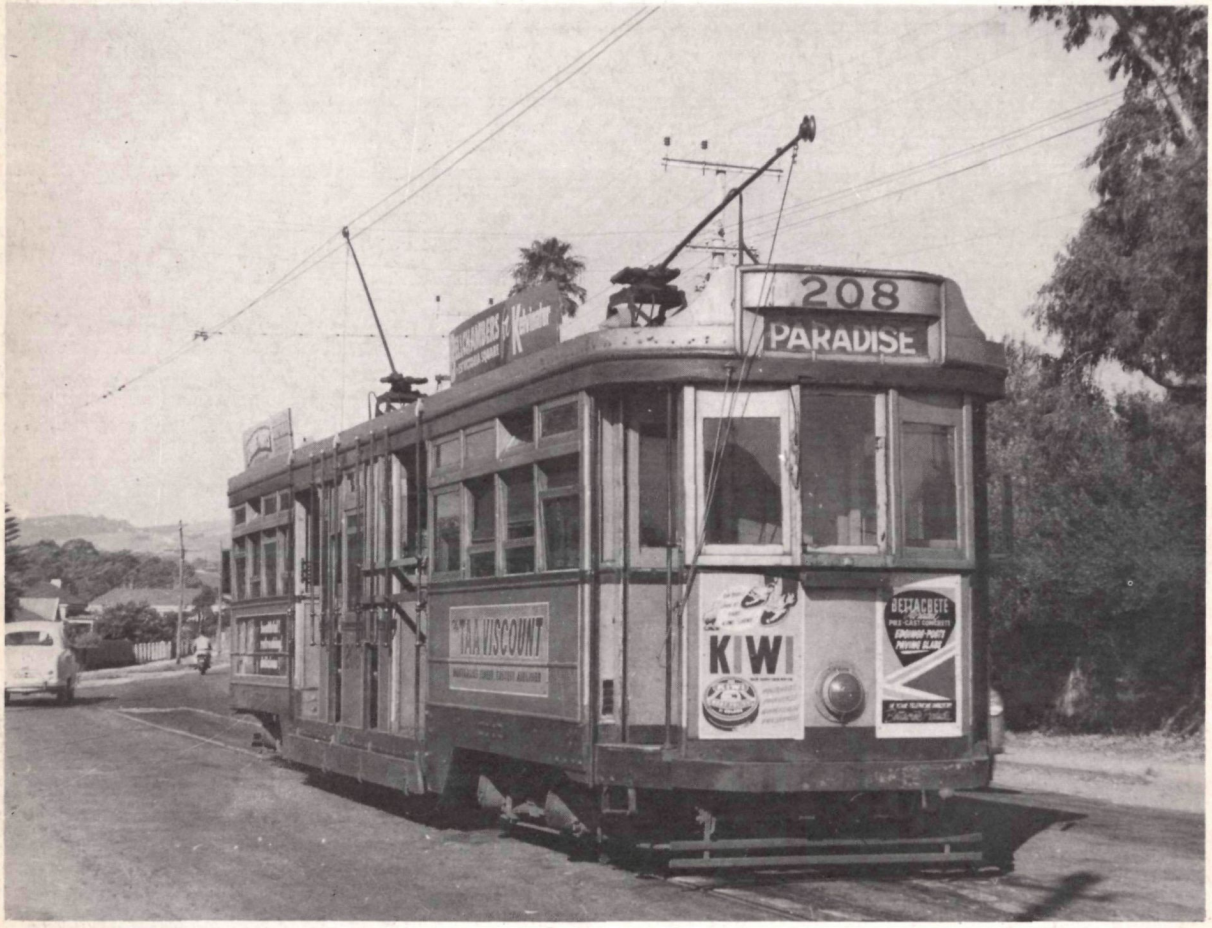

DESTRUCTION OF AN ASSET - SOUTH AUSTRALIA

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FRONT COVER: *F 208 waits at Paradise terminus in January 1958, ready for the return trip to Adelaide. The destination sign still shows the outbound destination for the benefit of the photographer.* - Late K. Train

Comment . . .

In our twenty seventh year of publication it is indeed rewarding to find our philosophies, at last, being recognised as acceptable and workable.

On the practical side, the last few years have seen rapid growth in the tramway museum movement in Australia; the modernization and extension of the Melbourne tramway system; there are other indications, at this stage perhaps inconspicuous, that Adelaide will extend and that some new tramway systems may be inaugurated in the forseeable future if feasibility studies reach maturity.

On the theoretical side our aspects of Industrial Archaeology have already contributed to a unit of study in the Batchelor of Arts Course at Sydney University.

From 5 April until 21 June 1978 foundation SPER member Ken McCarthy was responsible for the organisation and seven of ten lectures in a WEA course on Industrial Archaeology conducted at Wollongong University. Its success was best illustrated by the fact that the 22 students enrolled in the course maintained active membership throughout with an average attendance of 18.

During June, Ken addressed classes at Sydney University, as a visiting lecturer, on the Industrial History of the Illawarra Region and he has been invited to deliver a similar treatment of Newcastle during September.

It has often been said that man is not interested in yesterday until it is the day prior to yesterday and then it is often too late....we are grateful that our elder members were active before it was too late and that we have preserved material for the future *National Estate.*

On Wednesday 9 August 1978 the NSW Minister for Planning and Environment, the Hon. D.P. Landa LLB MLC, received a deputation from the Port Kembla Chamber of Commerce accompanied by the local member, Mr. Eric Ramsay, MLA for Wollongong, concerning the revitalisation of the Port Kembla shopping centre which has suffered badly from the establishment of the Warrawong drive in shopping centre nearby.

Government support and some financial backing is sought for the scheme which has as its three main points the establishment of a supermarket complex; a pedestrian mall with a tramway connecting with parking and other areas; an industrial museum.

DESTRUCTION OF AN ASSET

SOUTH AUSTRALIA

Compiled by K. McCarthy

This second section of the brief series "Destruction of an Asset" traces the decline of the Adelaide tramways during the post World War II period. Unlike Sydney, the Adelaide authorities retained one segment, the Glenelg tramway, which operates for much of its length along off-street reservation. In recent years this has been revitalized and could well be the Phoenix which will rise again from the Adelaide "tramway ashes" to form the nucleus of an urban rapid light railway system for that metropols.

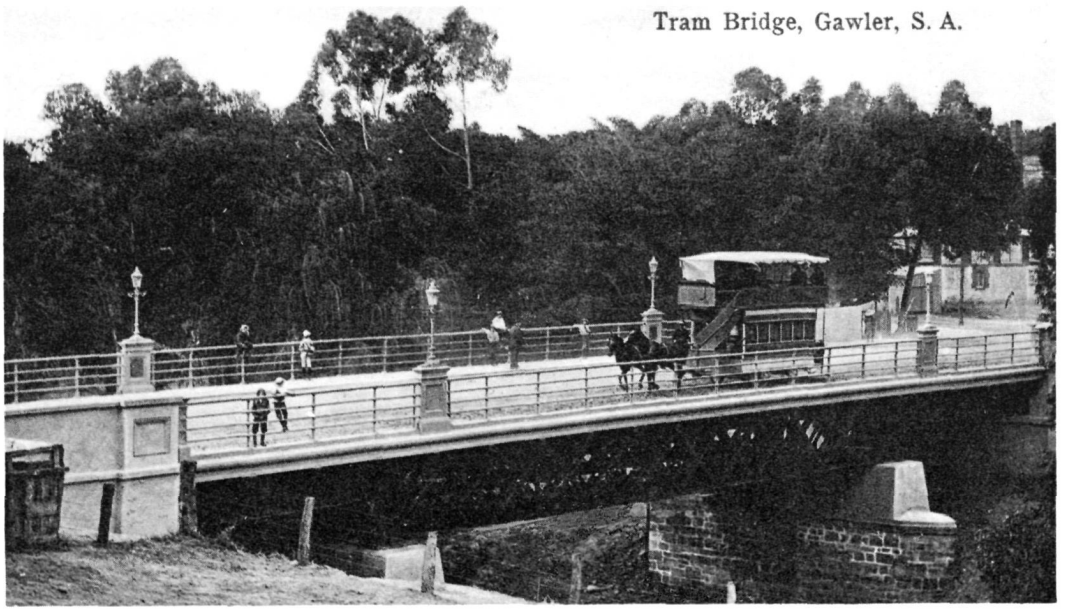
At the turn of the century Sydney was well known for its puffing steam tramways, Melbourne for its network of efficient cable cars and Adelaide for its horse lines. Brisbane was also well served by its horse operated tramways, but that Queensland capital was a pioneer in the electric traction field and the entire conversion of the horse lines was initiated in 1897 and completed eleven months later.

Adelaide, on the other hand, persisted with horse operation on the main city routes until 1909 when the conversion to electric traction was belatedly launched. The isolated Port Adelaide horse tramway was not electrified until 1917 while the other isolated horse tramway pocket, which served the terminus of the Glenelg railway, was abandoned in 1914.

Horse drawn railways were introduced in South Australia as common carriers in December 1853 when the nucleus of the railway system serving the Victor Harbour - Port Elliot - Goolwa - Strathalbyn area opened. Before being replaced by conventional steam trains in 1885, this system's rolling stock had expanded into a large fleet of approximately 104 goods and 13 passenger vehicles. The early passenger cars were clumsy contrivances built to railway dimensions, but in 1879 three conventional horse tramcars, one imported from Stephenson of New York the other two from Brown Marshall of Birmingham, were operating on this 77 mile long network.

The Strathalbyn system was built to the state railway gauge of 5ft-3ins and over the years the

ABOVE: Currie Street Adelaide in the 1920s with B class 34 in the foreground.
- Postcard



Double deck horse tram on the SAR Gawler tramway. This 5'3in gauge line operated from 4 February 1879 until 16 May 1931. - Postcard

South Australian Railways made a policy of operating feeder lines through sparsely populated areas with horse traction. The main horse tramways worked in this manner were:-

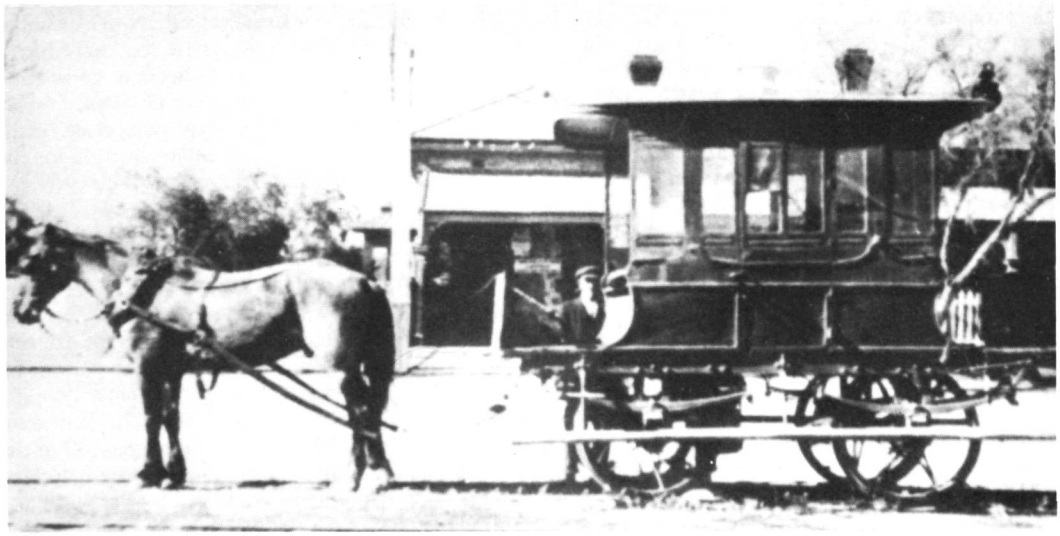
Gawler	5'3" gauge 1½ miles	1879-1931
Moonta	5'3" gauge 6 miles	1876-1931
Port Broughton	3'6" gauge 10 miles	1876-1929 (Goods until 1942)
Victor Harbour	5'3" gauge 1 mile	1895-1956

Electric traction won its first trial in Adelaide in January 1889 when the double deck battery tramcar sponsored by the Julien Electric Coy. through the Australian Electric Tramway Coy. with Mr. M. Bullimore as principal, worked along the Henley Beach tracks of the Adelaide and Hindmarsh Coy. horse tramway. These trials did not prove to be an economic success but on October 5th 1899 the "Australian Mining Standard and Industrial Review" reported that a company, sponsored largely by the Westinghouse group, was to embark on the Adelaide electrification immediately. This proposal, and others, did not reach fruition, but in 1907 the Adelaide Municipal Tramways Trust was established with Mr. William Goodman as Engineer, and later, Manager and this body launched the successful electric system in 1909. This undertaking continued to serve Adelaide for almost 50 years and a small eight mile segment, the interurban line to Glenelg, still survives.

The Adelaide horse tramway companies had constructed their tracks to the standard 4ft-8½in gauge, the size later adopted by the Tramways Trust. The 5ft-3in gauge isolated Port Adelaide to Albert Park horse tramway, however, was converted to standard dimensions, electrified and extended to Largs, Semaphore and Rosewater in 1917.

The Adelaide electric tramways expanded with the growth of the city and by the early 1930's the system consisted of 76 route miles with an additional 7 miles covered by the isolated Port Adelaide lines, all served by 311 passenger cars. The inability to connect the Port Adelaide lines with the main system by a Glenelg type interurban operation along the centre reservation of Port Road was mainly responsible for the Port tramway being closed in 1934. Opposition from the South Australian Railways, who operated a suburban line close by, private omnibus competition and the poor financial climate in the early 1930's were also contributing factors. The Tramways Trust finally linked Port Adelaide with Adelaide by electric traction on April 3rd 1938 when the new trolley bus system expanded along the Port Road.

This tramway closure and the trolley bus extension did not mark the finish of tramway expansion in South Australia. Rails and equipment salvaged from Port Adelaide enabled the Fullarton route to reach Springfield in 1937, the Hilton tramway to be extended to Richmond in 1939, the Kilkenny tracks



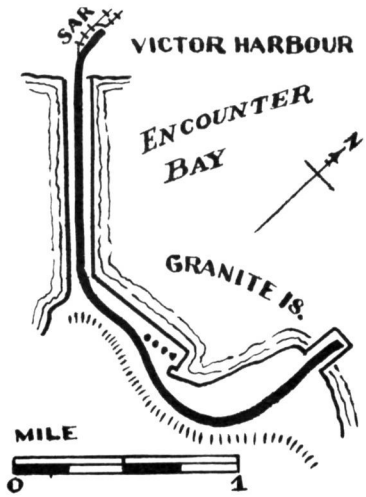
South Australian Railways 3'6in gauge horse car on the 10 mile Port Broughton to Mundoora tramway. This is one of the two original cars provided at the opening on 11 March 1876. Passenger services ceased in 1924 and the line closed to freight traffic on 3 August 1942. - K.Magor Collection

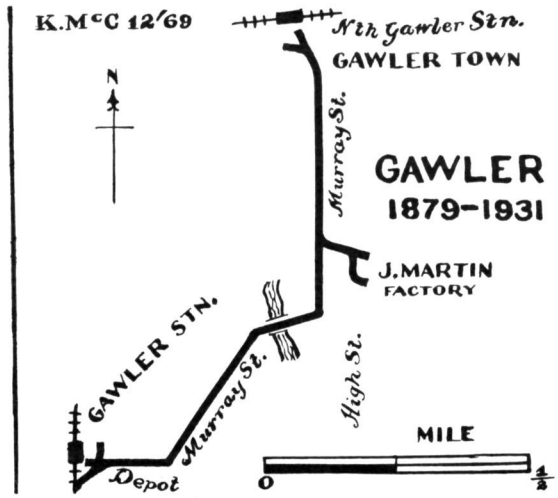
to reach Cheltenham in 1942 and the Marryatville line to arrive at Erindale in 1944. One closure took place on the main Adelaide system in 1939 when the last half mile of the Keswick tramway was truncated to Wayville West due to highway reconstruction and bus extensions taking place along the outer end.

The initial Adelaide electric tram fleet consisted of 170 cars:-

	Total	Built
"A" type 4 wheel California combinations.	70	1908-9
"B" type 4 wheel open cross bench	30	1909
"D" type 8 wheel half saloon, half closed cross bench	50	1910-12
"E" type 8 wheel half saloon, half open cross bench	20	1910-12

Engineer-Manager Mr. W. Goodman (1872-1961) had been employed in the electrical section of the Sydney tramways during 1897-1900 when





electrification of the steam lines was launched. He next carried out pioneer work on electric tramways in Dunedin, New Zealand, as Noyes Brothers representative, before reaching Adelaide in 1907.

As a result of his influence, many early tramcars in Sydney, Adelaide, Wanganui, Dunedin, Christchurch and the suburban Trusts in Melbourne displayed similarities, while the colour destination symbol system also appeared in the above cities as well as on the Prahran and Malvern Tramways Trust's cars.

To cater for tramway expansion prior to World War II the Adelaide passenger fleet grew to 312 cars. The 170 vehicles mentioned earlier being joined by:-

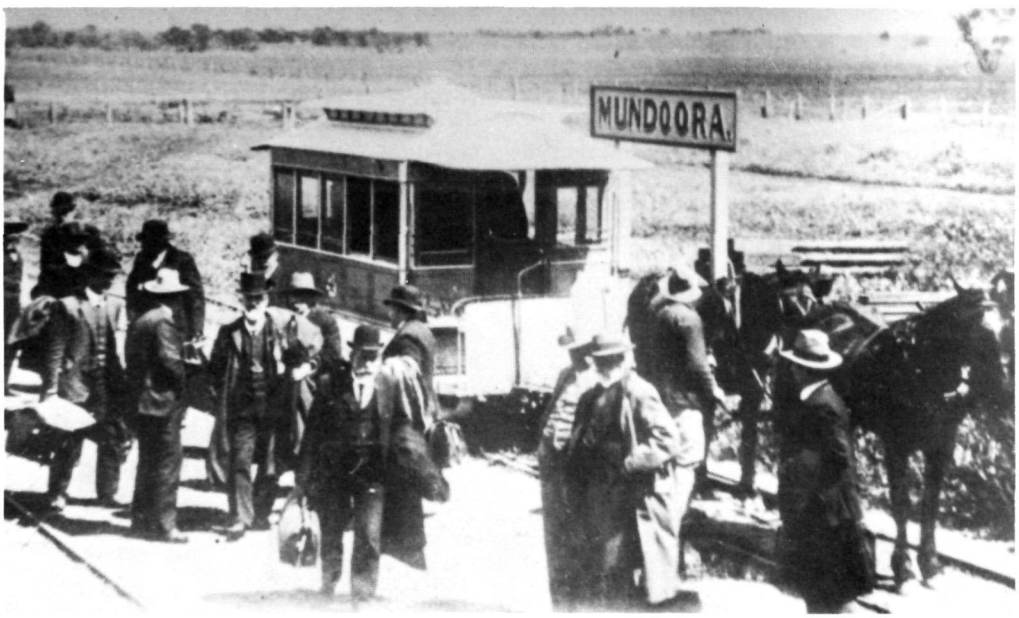
	Total	Built
"C" type 4 wheel California combinations.	20	1918-19
"F" type 8 wheel drop centre saloons	50	1921-25
"G" type 4 wheel Birney safety cars	4	1924
"D" type 8 wheel ex Melbourne	4	1927
"F1" type 8 wheel drop centre saloons	34	1925-29
"H" type 8 wheel interurban saloons	30	1929

The closure of the Port Adelaide tramway released the four Birney cars which were sold to Geelong while three of the "A" types were purchased by the Ballarat tramways. In 1929 "B" 38 was converted to a flat top freight car for the Glenelg tramway construction, otherwise the initial Adelaide trams lasted throughout the entire life of the street tramway system. Second generation replacement vehicles were never obtained.

In 1917, however, 21 "B" type open cross bench cars wee converted to the California style for the Port Adelaide tramways, these were reclassified as 18 to the "A1" and 3 to the "A2" design. In 1936 the half open "E" types were fully enclosed to form an end loading saloon style while the unconverted "B" trams along with some "A1" and "A2" cars, were stored, and some sold after 1936.

To provide a greater passenger/crew ratio during the World War II manpower shortage period, 62 "A" and "A1" trams were permanently coupled into 31 two car sets from 1940. The last were withdrawn in 1950 by which time some 30 of the group had returned to single unit operation and the remainder withdrawn from traffic. By 1948 the official statistics for the undertaking indicated that 80 route miles were operating, served by 279 tramcars.

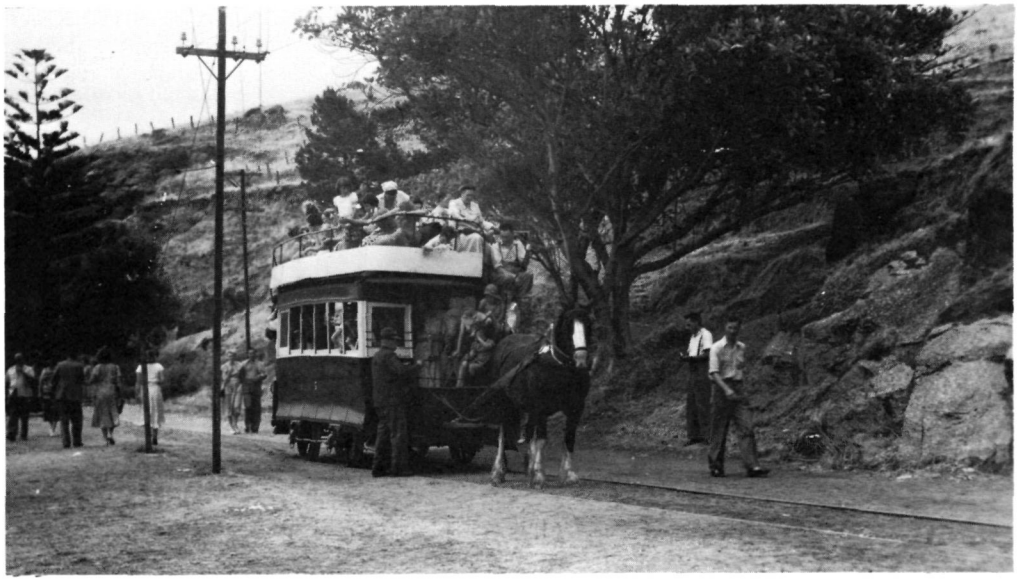
This then was the situation in Adelaide after World War II. During the 1920's Mr. W. Goodman had designed a standard Australian grooved rail of 102 lbs weight suitable for all undertakings, but the price quoted by the BHP Steel Works in Newcastle was far from competitive with overseas costs. By 1945 rails were unavailable from overseas



Single deck horse car no. 4 on the SAR Port Broughton to Mundoora tramway at the Mundoora terminus. This car operated from 1894 until 1924 and was a replacement for the original stagecoach like vehicles. -K.Magor Collection

A1 class car 64 at the Semaphore terminus, at the jetty, on the Port Adelaide system, cira 1929. An important passenger ship landing point in earlier years, Semaphore was also served by a railway branch which shared a length of the main street with the tramway.
- K.McCarthy Collection

Jetty Road Largs with an A2 class car operating on the Port Adelaide system. The three A2 cars were rebuilt from crossbench B class cars.
- Postcard



SAR 5'3in gauge horse tram 5 on Granite Island, Victor Harbour. - Postcard, J.E. Thompson Collection

markets so the Australian Iron and Steel plant at Port Kembla contracted to roll this 102 lb section rail to enable the Australian tramways to reconstruct war worn tracks and to make planned extensions. Approximately 10,300 tons of rail was ordered consisting of Adelaide 2,500 tons, Brisbane 1,000 tons, Hobart 800 tons, Melbourne 5,000 tons and Sydney 1,000 tons.

Most Australian tramways planned for new rolling stock manufacture after World War II. Melbourne and Brisbane continued construction of the SW6 and 400 type cars respectively, Sydney planned a repeat order for 250 pre war designed "R1" cars, of which only 100 wee eventually constructed, while Hobart workshops built further end loading saloon units from time to time. Adelaide, however, had not received a new tramcar since 1929 so could not rapidly produce more cars from an "off the shelf" design. Some design work had been carried out in 1939, however, on a large impressive tramcar with front and centre doors, suitable for high speed interurban operation, but also designed for rapid loading at frequent stops on inner suburban routes. The decision was reached in 1947 that design work and the stock-piling of parts for 40 of these new trams would take place, the initial batch would be used to replace some of the 1909-12 veterans. Due to post war shortages the design work proceeded slowly, but a workshop annexe at Hackney depot was constructed in anticipation of these trams being the first of a continual stream of new vehicles.

At Victor Harbour the horse tram operation continued into the post World War II period. Author Kim Bird in the work "South Coast Limited" relates how horse traction was retained on the causeway and jetty between Victor Harbour and Granite Island after the general conversion of the Strathalbyn railway to steam loco operation in 1885 but from 1910, light steam locos were able to work this freight service as well. In 1895 a horse drawn tramcar was introduced for passengers and tourists on the 1 mile, 5ft-3in gauge railway to Granite Island and this service continued until 1956.

"South Coast Limited" reveals that the following double deck tramcars were employed at Victor Harbour:-

SAR No 7 built 1879at Victor Harbour	1895-1931
MTT No25converted 4'8½" to 5'3"	1910-1929
SAR No 5 built 1883	1931-1956
SAR No 6 built 1883	1931-1955

In later years the tramcars operated in the December to May tourist season as a popular attraction and during every second winter were towed behind a rail motor to Islington Railway Workshops for routine overhauls.

The Victor Harbour tramway ceased operation after the 1954-55 summer season due to the need to rebuild the causeway linking the mainland with the island. As tracks would not be relaid, press reports indicate that the two tramcars were sold for £10 each.

Horse car 5, however, was repurchased by the kiosk owner at Victor Harbour for the 1955-6 season

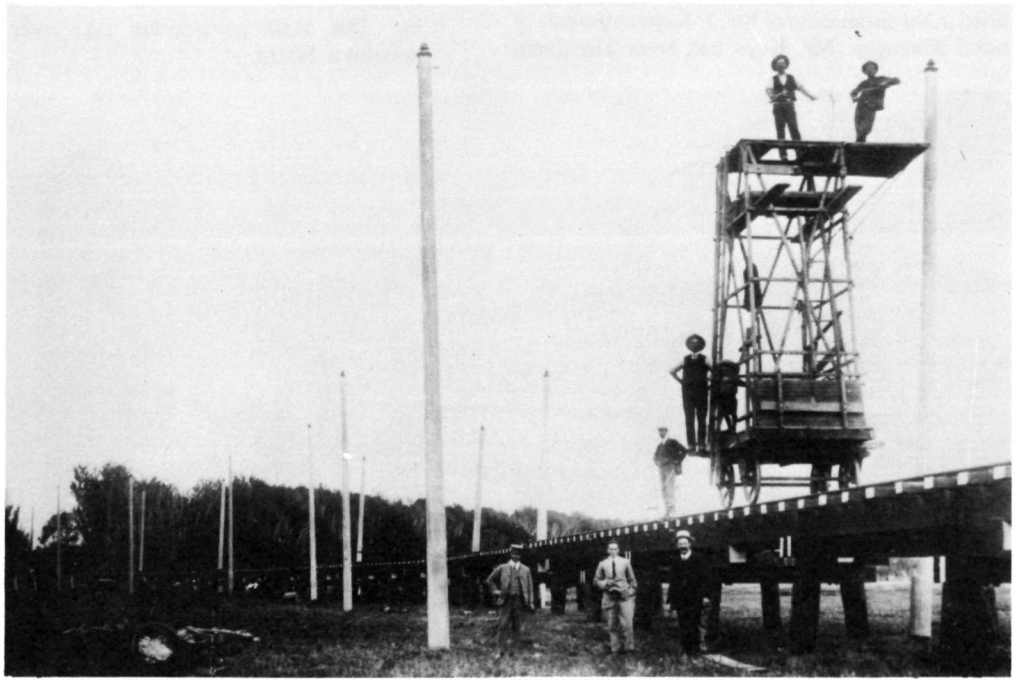
where it was operated on the island tracks isolated beyond the causeway. The removal of these rails during 1956 prevented any further tramway activity, so car No. 5 was placed on display as a relic, but soon disintegrated at the hands of vandals and the effect of the weather.

Horse car No. 6 was placed on similar display outside a service station near Clare, north of Adelaide where it gradually deteriorated. Local proposals to purchase this tramcar for restoration did not meet with success, but an American offer was successful and the horse car departed for U.S.A. in 1971. The Victor Harbour tramway was operated privately on a contract basis to the South Australian Government Railway, but the State Government of the day could not see that the tourist value of the line could justify the cost of relaying the rails on the rebuilt causeway. A so-called "tramway" service continues along the route to this day but it consists of a tractor drawing rubber tyred trailers.

The first major post World War II project carried out in Adelaide was the duplication of the Cheltenham tramway between Croydon and Kilkenny in 1947. Span poles were erected for a tramway extension beyond the Prospect tram terminus towards Kilburn while some preparatory work was carried out beyond the Henley Beach Extension terminal towards Grange. These two extensions did not progress beyond this stage of preparation, for during November 1950, the Engineer and General Manager, Sir William Goodman retired, after occupying that position for 43 years. From that point onwards the gradual destruction of the Adelaide tramway assets occurred.

Sir William had been knighted in 1932 for his services to public transport as well as his work on other public service committees and Trusts in South Australia. Born in England in 1872 he experienced a long and fruitful life. In the immediate post World War II period he was called upon to report on the future of the Launceston and Dunedin Tramways in Tasmania and New Zealand, where trolley buses later replaced the tramways as a result of his advice. Although the Adelaide street tramways closed in 1958 he did live to see the retention of the Glenelg interurban tramway. He died on February 4th 1961, just 21 days before the closure of the last section of the Sydney tramways, the electrification with which he was closely associated some 62 years before. He was spared the pain of seeing the destruction of his other major contribution to the Adelaide transport scene, the large trolley bus system, which closed suddenly in 1962.

The Municipal Tramways Trust consisted of members representing the State Government of the day and the city and suburban councils of Adelaide.



The overhead line crew erecting the wires on the Reeds Beds viaduct at Henley Beach in 1909. - Searcy Collection

While public passenger transport systems operated at a profit this arrangement was satisfactory, but with the removal of petrol rationing during early 1950, the private ownership of motor cars underwent a phenominal growth, causing the Tramways Trust's trams, trolley buses and omnibuses to operate at a loss for which the constituent municipalities were responsible.

Mr. C. Moyes, who had been associated with the Tramways Trust since its establishment, took over the reigns from Sir William Goodman in 1950. Material for the new "H1" tramcars continued to be stock-piled, while work on the construction of car 381, the first of the batch, continued as a prototype sample. Preparatory work continued on the Grange and Kilburn extensions, so the Trust continued to follow the patterns initiated by Sir William.

The construction of a city loop traversing Franklin and Morphett Streets in the area to the north west of Victoria Square was undertaken, this being available for use from February 9th 1952, providing a more convenient terminal for the heavy Show Ground traffic. The rearrangement of the tramway intersection of Currie-Grenfell Streets with King William Street from May 25th 1952 enabled the city ends of tram services to Kensington Gardens and Magill to the east and Henley Beach and Richmond to the west to be through-routed. Mr. Moyes retirement after only 13 months in the senior position of the Trust resulted in the promotion of Mr. J. Keys to the role of General Manager. Mr. Keys had been associated with the Tramways Trust since the close of World War II.

"H1" tramcar 381 entered regular traffic in February 1953. Externally this vehicle was most impressive, but inside, non-reversible bus seats were fitted as an economy measure instead of the more comfortable planned fittings.

The new manager released the sad tidings that, by the end of the 1951-2 financial year, the Trust would have exhausted its reserves and the councils making up the Trust would be responsible for the growing public transport deficit.

A committee of enquiry, set up after the retirement of Sir William Goodman, released a report early in 1952 recommending the Trust in its original form be abolished.

The main items in this 33 point report relevant to this brief article were:-

a. Local authorities should operate the system and it should not operate at a loss.

b. The present method had failed, because it had not ensured that the Trust members should have experience or the capacity necessary to administer the undertaking.

c. The operational authority should be reconstituted in the following possible ways:-

i. As a differently constituted Trust

ii. Hand over the operation completely to local councils.

iii. The State government take over and appoint a Board.

H1 381, the last tram built for Adelaide and the only one of its class, loads at Glenelg during its return to service for the Centenary Celebrations. - M.McAulay

Adelaide maximum traction bogie car, D class 128, bound for Victoria Square, in King William Street in 1956.

iv. The undertaking could be handed over to private operators.

d. Metropolitan transport should be paid for by the users and not be a burden on the ratepayers and taxpayers.

e. The Trust has allowed the General Manager to largely assume its function as a policy maker.

f. The increase in fares had increased revenue but had caused a loss in passengers.

g. The tramway is susceptible to loss of patronage to private vehicles.

h. There has been too much emphasis on fare increases and not enough on internal economies.

i. The neglect to replace old vehicles had caused considerable increases in maintenance charges and these cars were unattractive to passengers.

j. The decision to build 40 new "H1" type tramcars was a grave mistake.

k. There had been insufficient delegation of responsibility by the General Manager to senior officers.

l. Obsolete vehicles had been used during the off peak periods while newer rolling stock had stood in depots only to emerge during the peak loading periods of the day.

m. Running time proved to be only 50% of the paid time for platform staff.

n. Accumulated losses between 1946 and 1952 had reached almost £1,000,000 of which amount reserves only covered £400,000, the balance being made up with loans.

From February 3rd 1953 a new Board took over control, being a Government appointed group of 5 persons, three of whom, Messrs. Young, Watson and Parsons, had been members of the old Trust. These gentlemen were appointed to the new body for a period of four, three and two years respectively. The two new members were the Chairman, Mr. A. Barker, Managing Director of Kelvinator (Aust.) Ltd., and General Manager of Chrysler (Aust.) Ltd., appointed for five years, and Mr. Scaman, Treasury Economist and Financial Adviser to the then Premier, Sir Thomas Playford, appointed for one year.

The State Government promised to assist the new Board with grants totalling £1,180,000 over the next five years, while some reduction was required in the

wages bill, which had grown to 70% of the total expenditure at that stage.

A possible short term answer to these problems became clear. The wages bill could be cut by the use of one man vehicles, where ever possible, and this would result in the replacement of trams with diesel buses. The chassis of "H1" car 382 was cut up for scrap, some new motors for the cancelled tramcars were used to remotor the Glenelg interurbans, while the rest of the stockpiled material was disposed as scrap.

The last term of the old Trust, during 1952, was classed as a caretaker period, while the investigation outlined above proceeded. During this period the planned Kilburn and Grange tramway routes and the partially erected Largs North and Rosewater trolley bus extensions were abandoned. The thirty trolley bus chassis on hand for service improvement and new routes received locally built bodies and entered service during 1952-3, but by using some overhead components from the conversion of the Glenelg tramway from catenary to span wire suspension, these electric vehicles were able to replace trams on the Erindale, Burnside and Linden Park routes. The trams ceased operation on May 24th 1952 and after a transition period of motor buses, trolley buses reached Linden Park in October 1952 and Burnside and Erindale in May 1953.

Between 1953 and 1956 all the interurban "H" cars and some "F" and "F1" trams received a cosmetic new image when they were repainted in the new overall silver with red lining scheme used on most trolley buses and omnibuses at that time.

Little time was lost in the implementation of the suggestions released in February 1952. Tramway conversion to diesel bus operation was launched in October 1953 when the Glen Osmond and Findon tramways closed. There was some lack of co-ordination with suburban councils concerning the strengthening of main roads to take the buses, so the initial conversion timetable was not always followed. The first conversion had been planned for the Kingswood tramway, but this was not carried out until July 1955. Buses took over the Showground working in September 1955 while Hyde Park and Walkerville North lines ceased in November 1955. The outer suburban branch tramway which traversed scenic rural areas from Magill to Morialta Falls followed in March 1956.

Conversion dates were naturally, controlled by the frequency of new bus deliveries. In February 1957, however, enough new vehicles were on hand to enable the Currie-Grenfell Streets lines, to Richmond, Henley Beach, Kensington Gardens and Magill to be closed. The interurban "H" cars surplus to the requirements of the Glenelg tramway had been employed on the long Henley Beach to Kensington Gardens working, so the replacement buses were

AEC double deck trolleybus 417, on display in Victoria Square during the Centenary Celebrations, 11 June 1978. - M. McAulay

certainly not considered an improvement in that area.

The southwestern lines to Wayville West and Colonel Light Gardens with the northern Enfield route operated for the last time in December 1957. The Colonel Light Gardens tramway operated on off-street reservation parallel with the Glenelg interurban, forming a quadrupled section of track in the Goodwood area, so this conversion threw a considerable amount of traffic onto public thoroughfares, as the outer end of that line was also along grassed locations.

The end of street tramway operation in Adelaide was in sight when the north eastern tracks to St. Peters, Paradise and Mitcham closed in July 1958 together with the southern and southeastern lines to Mitcham and Springfield. Only the long north western line to Cheltenham remained, and this ceased on November 22nd 1958 when "F1" 269 made the final trip along King William Street to the City depot.

The conversion of the Adelaide tramways to bus and trolley bus operation resulted in the progressive withdrawal of the elderly tramcars. The California "C" cars were removed from their final limited peak period operation with the October 1953 closures but were retained for emergency trips until the Royal Visit of Queen Elizabeth II in March 1954. These were the last 4 wheel cars in passenger service as the last of the "A" type had been withdrawn in 1952.

By 1956 the "D" class vehicles were only used throughout the day on the St. Peters line, but their use, together with the remaining "E1" cars, was extended to other routes during the peak periods.

These maximum traction trams were retained for special workings until March 1958 when Queen Elizabeth, the Queen Mother visited South Australia. Their withdrawal left the larger "F" and "F1" cars for the fast shrinking street routes and the "H" type interurbans for the Glenelg tramway.

The Glenelg line remained after 1958, connecting Victoria Square with The Bay, working from the City Depot. By 1956, personal observation seemed to indicate that the Glenelg working was being allowed to run down. Trams were being forced to stop at the numerous level crossings, thus increasing the journey time, while the 27 year old vehicles were showing signs of their age. Official policy seemed to be that this tramway would close shortly after the street lines. The closure of the rest of the undertaking also isolated the interurban cars from the Hackney Workshops. Cars needing major maintenance had to be taken by road to visit these workshop facilities.

By 1966, however, signs of change had appeared. A new terminus in Victoria Square was constructed to replace the former balloon loop facilities, new waiting sheds appeared along the line, while the grounds on each side of the tramway reservation were tidied to create a new image. By 1970 the State Government acknowledged that the tramway would be kept for an indefinite period and during 1971 the first of the 26 remaining "H" type tramcars used on the line entered the workshops to be extensively rebuilt and overhauled. Since then, tramcars have been progressively withdrawn from traffic and taken to the Hackney tramway and Islington railway shops for this treatment, re-entering traffic in the original, red and cream livery.

Concurrent with this metamorphosis, automatic boom gates and private car parks have been installed at crossings and major stops along the interurban line, thus Sir William Goodman's creation is again operating with an efficiency which would possibly have met with his approval.

Although an official statement has yet been released, rumours in Adelaide suggest that the State Transport Authority, which took control of Adelaide's urban transport system on December 8th 1975, is considering the purchase of new light railway cars to eventually replace the "H" 's which are now approaching their half century of operation.

Two F class cars stand at the Richmond terminus, Adelaide, on a cold wet day, 29 August 1956. That typical feature of Adelaide, the Stobie pole is much in evidence. - B.J. Parle

VALENTIN PURREY
AND HIS STEAM CARS

by Dr. J. Brenot of Bordeaux

Since the Rockhampton Tramway articles appeared in "Trolley Wire" (6/72, 8/72, 12/72, 2/73 and 8/73) and in the Australian Railway Historical Society's "Bulletin"(6/74, 8/74, 9/74) interest has been generated in the activities of the manufacturer who built the Rockhampton Steam Trams, V. Purrey of Bordeaux. Rail enthusiast, Dr. Jean Brenot of Bordeaux, with whom we have been in contact for some time, produced a detailed article in the French railway magazine "Ferrovia Midi" in February 1975 dealing with the products of V. Purrey, and it is this account that we present to you now.

An article dealing with Purrey's then current achievements appeared in "Revue Generale des Chemins de Fer" during 1900, while recently two pictorial accounts have been featured in "La Vie due Rail" Nos 23 & 30 revealing still more about Purrey's products, including his *non rail, road vehicles. From this last mentioned* magazine it now seems certain that a 3ft 6in gauge Purrey steam tram was used at a coal mine in Tasmania, and the possibility exists that this was the fifth vehicle supplied to Rockhampton for the opening in 1909 when only four cars entered service. This Tasmanian tram was not fitted with a passenger body, but two side tipping hoppers. This then, could be the ballast steam motor car mentioned in reports as being employed in the construction of the Rockhampton system!

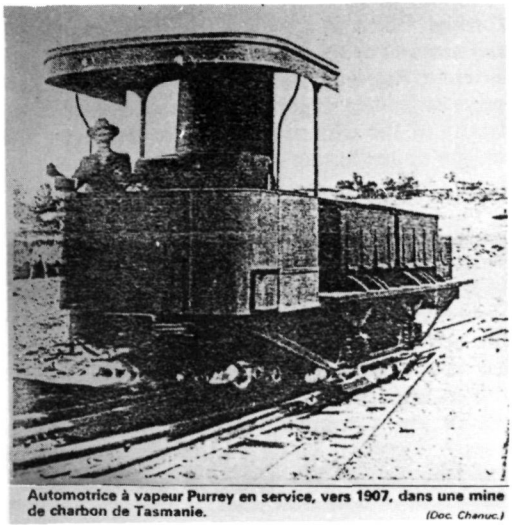
Dr. Brenot has been fortunate in having access to the Purrey family photo albums through the generosity of Mr. Valentin Purrey of Rue des Augustines, Bordeaux, the grandson of the tramcar manufacturer.

Considering that by 1909, Purrey could claim that a total of 500,000 horse power was being supplied by his steam cars then in service, it is sad to relate that none of his vehicles have been preserved in France or the antipodes; the incomplete relics rotting away in the Rockhampton district being possibly the last items existant. We were pleased to learn during March, however, that the mem bers of the Rockhampton Branch of the National Trust of Queensland, have started to collect these relics and their long term plans are to eventually rebuild a Purrey steam motor and operate it on special occasions along some of the tracks still in position in Rockhampton. . . .Thus 36 horse power of the 500,000 claimed in the trade catalogues so long ago will again be in operation!

Mr. John Webster, French teacher and retired High School Principal of Wollongong is sincerely thanks for the hours he spent in the literal translation of Dr. Brenot's article. Ken McCarthy has been responsible for the technical interpretations of this literal translation.

How many among us are acquainted with the works of Valentin Purrey? His name in the past, had a meteoric rise in association with railway growth, when at the turn of the century, he was able to devise a solution to the traffic and financial problems of the lightly patronized short branch lines.

M. Valentin Purrey, the creator of the Rockhampton steam trams. -L.Chanuc Collection



Automotrice à vapeur Purrey en service, vers 1907, dans une mine de charbon de Tasmanie. (Doc. Chanuc.)

A Purrey steam tram fitted with a ballast carrying body 'at a Tasmanian coal mine' cira 1907. - V.Purrey Family Collection

Valentin Purrey was born at Layrec (in the French district of Garonne) on May 19th, 1861; he studie commerce and/or chemistry courses at Bordeaux; he worked for the firm of Huyard, and then with the Carde (wheel wrights and coach builders). Next he travelled to Buenos Aires in South America, where he built a factory for the conversion of bones and offal which formed mountains around the large abattoirs of that city.

A yearning to return to his homeland caused Purrey to return to Europe again. In 1887 he found an outlet for his labours on the town tramway system of Barcelona in Spain.

During the following year, again in France, he carried out his military service obligation.(at the age of 27!) In the series of photos in the Purrey family album, his first workshop, in a cellar at Rue Bertrand de Goth in Bordeaux, can be seen where Purrey brought his system of steam propulsion to a practical working stage of development. A photo, which can not be accurately dated, shows a small truck carrying an automatic steam generator (boiler) feeding a two cylinder engine for eith stationary or mobile use.

This marked the start of development in this field, because Purrey soon moved to a larger improved workshop in the St. Augustine district of Bordeaux, but again, it is difficult to place a precise date on this transfer.

Suddenly this larger workshop on the Boulevard Jean Jacques Bose at Begles had to face up to a demand for Purrey's work. The caption found on one photo being "70 boilers under construction". The small Bordelais mechanic, who, at this stage, was restricted by limited means, was involved in the construction of a prototype self contained steam tramcar for the "Compagnie Generale des Omnibus de Paris" (C.G.O.). Purrey had only suggested a plan for the installation of his boiler and engine unit on an existing vehicle but was next confronted with the construction of anentire series of 86 steam tramcars for this Paris undertaking. If it is not clear whether the entire tramcars were manufactured in Purrey's Bordeaux workshop it is fairly certain that the engines, boiler units and, possibly, the chassis had their origins there.

And so the undertaking progressed. This basic vehicle pattern, mounted on wheels of standard or narrow gauge, grew bigger and at the same time chassis were being produced suitable for use as road lorries or buses. In addition, at this stage, we see Purrey's rail vehicles working in passenger railway service on routes from Le Buisson (in Dordogue province) to the Pilgrimage at Cadouin, while in January 1907, soldiers of the 144th Infantry Regiment visited the Purrey Workshops.

Valentin Purrey did not seem to be lacking in imagination as far as the utilization of his ideas and products. He inaugurated bus lines in the Puy de Dome and the Pyranees, with tickets similar to Zodiac discs, while he obtained publicity which could well still be identified as modern copy if it was not dated as 1909:-

"Mechanical Traction Material . . . . The Purrey System of self contained tramway units now amount to 500,000 horse power".

A list of products up until August 1909 is available: This amounts to 231 trucks and buses, 2 road rollers in use and 25 on order, 4 boilers for stationary industrial purposes of which one has been sold with a steam engine for driving a workshop installation, 190 tramcars, 41 self contained steam rail cars on the major railway networks and 1 traction engine.

The most extraordinary aspect of Purrey's undertaking was perhaps the geographical diversity of his cliental. Some of these self propelled steam vehicles were sold to Portugal, Italy and Sweden for use on the railway systems, the trams were sent to the Argentine and Australia, while motor trucks were known in Cuba, St. Petersburg (Leningrad) and even in Kouba in Siberia!

In the mean time the photograph collection shows a fire which damaged the paint shop of

the factory. These revealed a steam rail motor, 10 steam lorries and two buses in the plant. V. Purrey made the most of publicity concerning this plant fire as he pointed out that his acetylene lighting plant worked with satisfaction even after the conflagration.

The fire must have been felt in the company's balance sheets as the sequence of events reveals that it became associated with a financier by the name of Exschaw. A bankruptcy at the beginning of World War I permitted the business to be purchased by this Mr. Exschaw who continued production under the name "V. Purrey system". An Exschaw steam lorry is well remembered rusting on the Grave Quay at Bordeaux in 1938.

In the mean time V. Purrey did not give up. He set up a repair and maintenance business on the Boulevarde J. J. Bosc in Bordeaux opposite his old factory and one can still see the enamel plaque at this location.

He died in Bordeaux on July 14th, 1928.

If you revisit this locality you will find that a shed and offices have been bought by "Funeral Splendors" ("Pompes Funebres") another part has been demolished for the construction of the present buildings of the Pharmaceutical Branch of the Army. The rest is used as a garage for the vehicles of the Postal and Telegraph Department.

You can well imagine the workshop resounding to the hammer blows of industry and the growling or hum of the machinery belts and pulleys, in tune with the exhausts of the stationary compound Purrey engines which replaced the earlier simple expansion motors set up at the beginning.

A track with three sets of rails (for normal and narrow gauges = 4'8½" and 1 metre) encircled the property for the first working tests of the motors, while a turntable with four sets of rails (the above two gauges balanced on the pivot-K.McC) was located at the edge of the Boulevarde.

Photos indicate the delivery techniques followed at least on one occasion with the delivery of a railway vehicle. A temporary track was constructed out of the factory to enable a rail motor to be pushed to the tram tracks outside the works. (The tracks of the TEOB (Tramway and Omnibus of Bordeaux) were constructed to standard gauge.) The vehicle was manoeuvred onto a metal plate with the rear axle resting on a device with four parallel rollers. This enabled the vehicle to be turned through 90° and set onto the tram tracks. The rail motor was then taken as far as the Bordeaux-Brienne Railway Station of the Southern Railways of France which gave access to the railway tracks of the Company which ordered the unit on the opposite side of the River Garonne.

With regards to the following information due to the absence of formal, official documents, there are many uncertain features concerning the account of the railway items. A complete list of builders' numbers can not be found. With this in mind it is not claimed that the following details are a complete picture. We would be happy if readers could add to the accuracy of the material, or likewise, if they could inform the writer of contradictions.

Barcelone-Spain 1887

This was Purrey's first attempt, about which we cannot write with any great accuracy, to apply this steam system to tramways. A photograph exists showing an old horse tramcar, mounted on two axles, with a lantern (clerestory) roof, open end platforms, and centre saloon with three windows on each side. The car carries number 21 on the Barcelona to Ensanche Garcia route. On the front platform the driver holds the brake in his right hand and the steam regulator with his left, both in the shape of gooseneck crank handles. In the photo there is a black area under the floor at the rear of the car which would be the water tank while ahead of this is the steam motor unit. Behind the driver, and to the left of the car is a small, and very simple, boiler. To illustrate the cliche "a chip off the old block" we see V. Purrey and his father J. M. Purrey gracing the front of the small tramcar. Information can not be found in Bordeaux or Spain concerning this venture, but the foundation for further research is there.

Paris-Compagnie Generale des Omnibus (C.G.O.) 1897.

We find V. Purrey mentioned (the trade magazine) "Revue Generale des Chemin de Fer" (General Railway Review) during 1900.

The Paris General Omnibus Company (C.G.O.) launched an appeal concerning the construction of mechanical omnibuses in 1896. Due to the insolvency of the usual manufacturers of instantaneous boilers, the company accepted the offer of V. purrey to fit a boiler-motor unit constructed in Bordeaux, on a

One of the Rockhampton steam tramcars posed outside the Purrey factory in Bordeaux, France in the winter of 1907 - 1908 prior to dispatch to Australia. Temporary rails can be seen on the road to accommodate the 3'6in gauge.
Dr. J.Brenot Collection

carriage in service under the watchful eye of the company. The carriage was lent on August 14th 1897, while the project was subjected to trials between September 1897 and April 1898. This brought an order for a series of six self-contained steam trams to operate around the various lines in Paris. These initial tramcars entered service on July 1st, 1899 on the Louvre-Servres route.

In the meantime a new batch of 34 self contained steam trams were constructed jointly by V. Purrey and the Societe Lyonnaise de Mecanique et d'Electricite (Electrical and Mechanical Society of Lyon) permitting the introduction of steam operation on the following Paris tramway routes:-

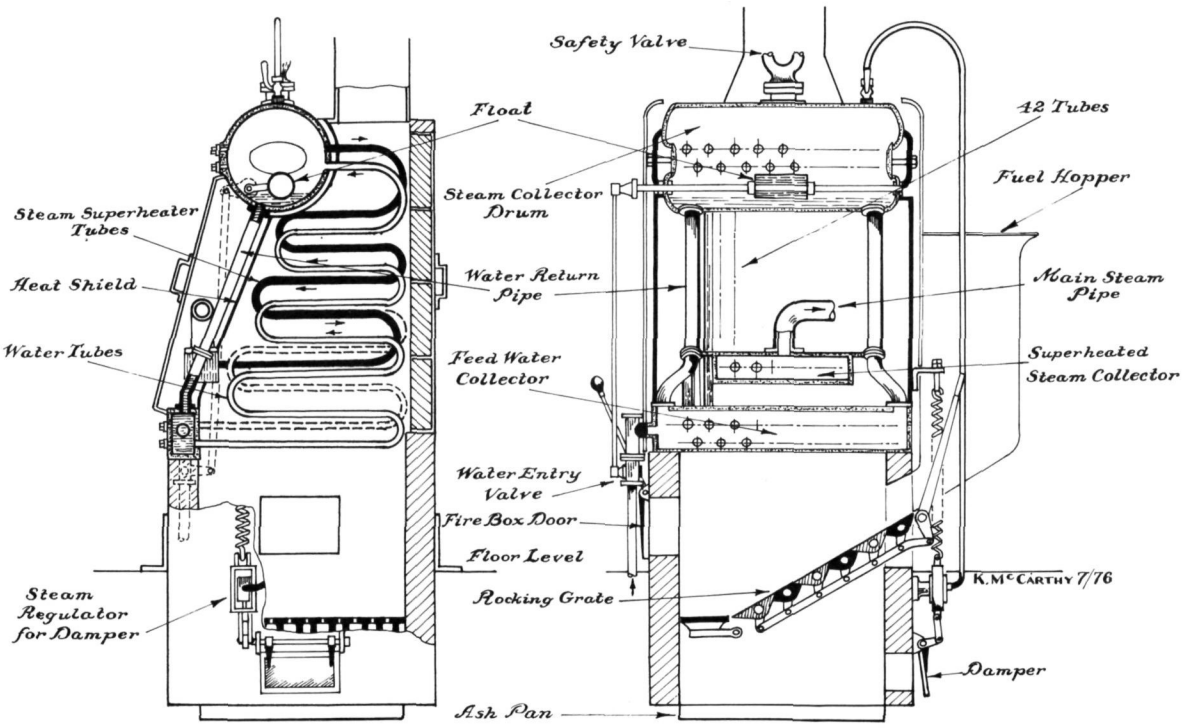
TL = Bastille-Porte Rapp – September 17th, 1900.
TP = Trocadero-La Villette – December 20th 1902
TD = Etoile-La Villette – December 30th, 1902.
TK = Louvre-Charenton – March 26th, 1903.
TM = Gare de Lyon-Avenue Henri Martin – July 18th, 1904.

The Double Decker Steam Tramway Units.

The first items for the Paris tramways were double deckers with a roofed top deck. The type of car in use on the Paris C.G.O. at this time had the motor units placed between the two axles with both motor units driving through individual chains.

The steam is produced in a multi tubular boiler (water tube type) located on the front platform with the "driver-engineer". Near at hand are located the controls needed to work the tramcar:-

1. A lever to control and regulate the entry of steam (to the cylinders).
2. A smaller one to opent he door to the ash pan.
3. A lever for reversing the car.
4. An air brake of the "Soulerin" system.
5. A hand brake.
6. Two sand controls. One for the front and one for the rear wheels.
7. A warning horn.



PURREY STEAM GENERATOR

In cases of emergency the conductor could, on the back platform, bring the car to a stop by opening the air brake cock in conjunction with sanding of the track.

The Boiler-Generator.

The water tubes are curved in snake like formations between the lower water drum and the upper steam drum vessel, the tubes being of 35mm external diameter. The steam passes to a second independent compartment of the bottom collector through parallel snake like tubes which superheats the steam. The top steam drum and the bottom water drum are also connected by two large straight tubes, screened from the furnace gases, which allows water to return from the bottom of the upper steam drum to the lower water vessel. This is enclosed by sheet steel and insulating material while the lower ends of the tubes exposed directly to the flames are protected by asbestos.

The fire box is contained within the sheet metal housing and lined with refractory bricks. The boiler is fired with coke stored in a side hopper, the bottom of which is inclined towards a sloping grate which is replenished automatically (by the motion of the tramcar), giving an even fuel layer on the fire grate. The capacity of the coke hopper allows the tram to travel from 20 to 25 kms.

The boiler pressure is regulated automatically by a spring loaded piston device which activates a damper door under the fire grate in the ash pan. When the steam pressure climbs above 12 kg/sq cm, the damper door is closed thus diminishing the rate of combustion, when the pressure falls below that figure the damper door is automatically opened.

Automatic replenishment of water is through a feed pump worked from the front axle of the tramcar or through a small donkey steam pump and water cock which returns the water to the water tank when normal boiler level is reached. The top drum is fitted with a float which controls the feed water entering the boiler. When the float ball falls below the normal water level a cock is opened allowing feed water to enter the bottom drum. When the float rises the cock directs the water back to the tank as mentioned above. When starting from cold the small donkey pump can be worked by hand.

The boiler components measure 2m high,

ABOVE: *Single deck Purrey steam car and trailer on the Trocadero to La Villette tramway at L'Arc de Triomphe, Paris, cira 1910.* - K.Magor Collection

1m wide and 1m in depth, the ash pan and part of the grate area being below the floor of the tramcar. Safety valves control the pressure to a maximum of 15 kg/sq. cm, but the steam tram motor can function in normal service with a pressure as low a 6kg/sq.cm.

The Steam Mechanism.

The motor consists of two parallel cylinders, 175mm in diameter and 162mm stroke. The engine casting has the cylinders, steam chests, cross-head guides and bearing beds for the main crank shaft all in one piece. The drive crank shaft has two cranks set at 90° with a chain sprocket wheel fitted at each end.

The slide valves in the steam chests between the two cylinders are controlled by eccentrics and wedges on the main crank shaft, between the cranks. Other than on complete reversal, the steam control entry to the cylinders is not variable, as the position of the eccentric reversing wedges on the main shaft cannot be regulated to give variable cut-offs. The main motor crank shaft turns at 208 rpm giving a service speed of 10 km/hour.

The motor unit is entirely enclosed in a casing as are the chains and sprocket wheels. The lubrications is carried out by cups on the cranks which lift oil from a sump onto the wearing parts. Transmission is through chains, two to the front and two to the rear axles. These are similarly enclosed, with two chains on the right and two on the left, which are lubricated with a bath of oil. The chains are made up with links, each with two axial rivets passing through the two flanks binding through a piece of sheet steel.

Dimensions of the Paris Double Decker Cars.

Length	= 8.68m	Width	= 2.00m
Height	= 4.75m	Wheel base	= 1.90m
Weight in working order			= 9.7 t
Weight on front axle			= 6.7 t

Total weight when loaded = 12.62t
Seating = 48 = 20 inside and 24 on the upper deck with 4 on the platform.

These trams performed with satisfaction. They were silent in operation, the chains were tightly sealed in covers which dampened the rattle of the mechanism! They did not have the evile smell as did the others (Serpollet cars). The exhaust plume through the funnel was not altered when compared with other manufacturers' steam trams, but the critics of this feature were quietened as the superheater diminished the visible exhaust steam, while the tight-fitting firebox door also helped the situation. Their weight of 12t was light when compared with the 16.6t for the Mekarski compressed air trams and the 19t for the accumulator - battery electric cars.

The passage of the tramcar along the tracks is extremely easy. The driver has only to open and close the regulator controller, everything else acts automatically, in contrast to the Rowan (self contain steam) car, for example, which needed the services of a veritable mechanic. The time to raise steam is very rapid; half to three quarters of an hour is sufficient between lighting the boiler and the departure under power.

Single Deck Tramcars. (C.G.O. Paris).

These were constructed immediately after the Paris double deckers as mentioned above, and similarly, the saloon bodies had 6 windows on each side with identical overall dimensions with the exception of the height = 3.63m and weight = 10t loaded. The interior arrangements were changed in as much as only 16 seats were provided inside in comparison with the 20 on the double deck vehicles, but 16 seats were provided on the back platform, this amounted to 32 in all, as against 48 in the earlier trams.

These two types accounted for a total of 86 steam units which occupied fleet numbers 701-786, and these were certainly occupied by these vehicles as for June 13th, 1912. (V.Purrey, however, reckons a total of 98 cars in his list of 1909).

The Serpollet Tramcars.

In their original form these units did not give entire satisfaction, but with the installation of Purrey boilers in place of the original steam generators, but retaining their original steam engine units, the performance of these vehicles were transformed. This alteration brought about three advantages:-

1. The weight was reduced as the Serpollet boiler weighed 2.57t.

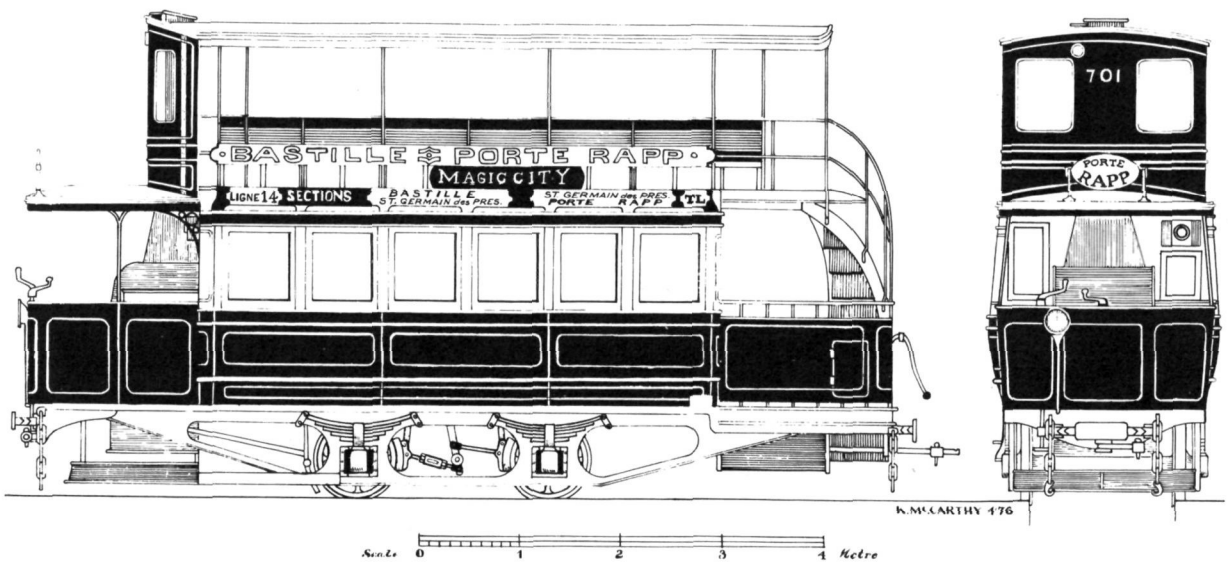
2. The superheater diminished the exhaust.

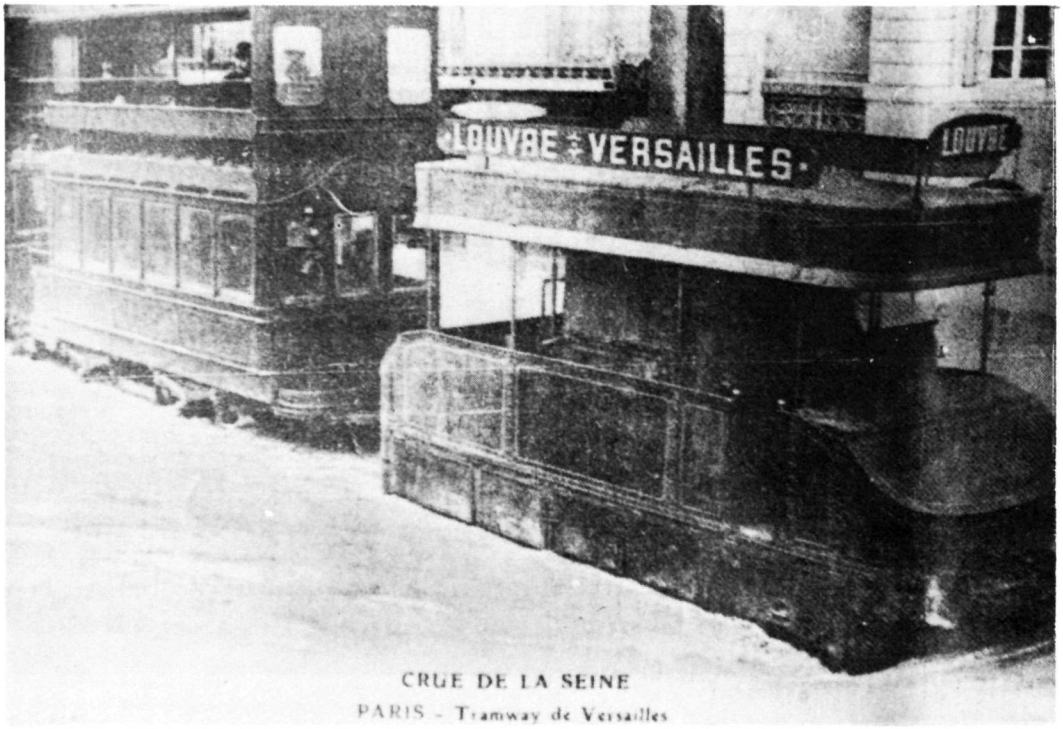
3. The time taken to raise steam was greatly reduced.

A total of 62 steam cars were so altered in Paris.

The Mekarski Locomotives.

These were double ended, boxlike, locomotives, the body being filled by clumsy bottles of compressed air and the tedious system required the air to be recharged at each end of the journey and sometime enroute, while there were difficulties in lubricating the cylinders, this trouble was overcome by replacing the bottles with a Purrey boiler of 19.8m^2 heating





Purrey steam motor and double deck trailer on the Louvre to Versailles tramway during the 1910 floods in Paris. This was originally a Mekarski compressed air motor converted to the Purrey steam system. - Dr. J.Brenot Collection

surface, but the original engine unit of two cylinders was retained. This permitted the removal of the centre axle, the two remaining being coupled on a wheel base of 1.80m. The addition of a centre chimney modified the metal body to resemble a salt and pepper shaker cruet. Part of the original air storage system was retained, that feeding the air brake, this being replenished at the terminus.

Length = 6.55m, Width = 2.12m,
Height to Chimney top = 4.70m
Weight = 11.5t, two directions of travel.

The 12 units which made up this series were so converted.

Further to this short account, one of these machines is noted in the Purrey album hauling a train of double decker trailers on the Louvre-Versailles route with the flood waters as high as the axle boxes. Written on the back in the hand of V. Purrey: "Paris, the inundation of 1910 - the only trams still in operation were Purrey's"

The Bordeaux-Camersac Tramway.

The success of the Paris tramcars and the publication of the article in "Revue Generale des Chemins de Fer" in 1900 attracted attention to the Purrey products and other tramways showed interest in the system. One motor car, during the delivery period of the Paris orders, was given a trial on the standard gauge tramway of Bordeaux-Camersac by the "Societe Generale des Chemins de Fer Economiques". The body and mechanical equipment were identical with the single deck motors of the C.G.O. in Paris. The one difference being that three large windows were fitted on each side of the saloon as against the six small ones on the Paris cars.

This scheme did not meet with success, the power of the engine was insufficient for the grades on the line, which could not be avoided because of the many valleys in the region. It is probably that this single motor was a Paris tram, possibly an early delivery of a further order.

Double deck compressed air tram 154 and trailer on the St. Michel et l'Eglise Bridge, Paris, on the Montrouge-Gare de L'Est route waiting for the surface contact electric tram no. 166, bound for Les Lilas, a north east section of Paris, to clear the crossing.
- K.Magor Collection

The D'Alcantarilla-Murcia (Spain) Tramway.

This project was something of a trial like the Camersac tramway. The drawings of the trams planned for this undertaking, which was in the administrative area of Murcia in the South of Spain, revealed that the proposed cars for the Alcantarilla tramway were single deckers, with three windows on each side of the saloon. Why this scheme did not reach maturity is unknown. . . . . .this portion of the line was never constructed.

This concludes the material available to date on Purrey trams designed for standard gauge systems.

Later sections of Dr. Brenot's article will deal with sub-standard (narrow) gauge tramway vehicles and steam cars used on the major railway undertakings.

BUS STOP LATE NEWS

The first Mercedes bus for the PTC with the new style body was demonstrated on Wednesday 26 July 1978. The bus, 1951, is one of the first order of 200. The new order for 550 have the same chassis but a larger engine. Seating capacity has been increased by one to 43. Longitudinal seats over the wheel arches have been replaced by back to back pairs. The blue and white livery has been modified with white side panels and the use of dark blue, first introduced on the two mini buses, has been extended.

OPPOSITE: *The PTC and SPER Bus Divisions meet at Willoughby Depot. Albion 615 and Atlantean 1001 with Leopards 1727 and 1755.*

PAGE 24: *Introducing a new look to the PTC is Mercedes mini bus 1225. The proposed introduction of an express service from Chatswood to the Warringah Area has brought the PTC into conflict with local private bus operators.*

BUS STOP

To commemorate the 20th anniversary of the closing of the North Sydney tramways, a bus tour over the former tram routes was held on Saturday 1 July 1978. A tour had previously been held in 1968 to mark the 10th anniversary. Of necessity a DGT bus, a 31 seater from North Sydney Depot was used. This time, however, the SPER 1937 Leyland half cab single decker, 275, was used, making a welcome reappearance after a number of years stored in Ultimo Tram Depot.

The route taken was from Wynyard to Lane Cove then to Chatswood, The Spit, Balmoral Beach, Athol Wharf, Taronga Zoo, Mosman Wharf, Cremorne Wharf, Neutral Bay Wharf then return to Wynyard. The bus performed very well on this trip which was enjoyed by all on board.

An open day was held at Brookvale Bus Depot on Sunday 17 October 1977 to celebrate its 25th anniversary. SPER Albion Venturer double decker 615, which was one of the Manly tramway replacement buses in 1939 was there on display, having operated a tour over the former Manly Lines on the previous day.

Following the success of the Brookvale function a similar, but larger scale celebration was held on Saturday 15 July 1978 to mark the 20th anniversary of Willoughby Bus Depot. Many vehicles, including privately preserved former Government buses were on display, as well as photos, uniforms and badges. The display was well attended and was visited by PTC Commissioner Lyndon, who is in charge of the Bus Division.

The vehicle display comprised:

Leyland TS7 Tiger Single Deck Bus	275	(green)
Albion CX19W Venturer Double Deck Bus	615	(red)
AEC Regal 3 Single Deck 31 seat Bus	2521	(green)
Leyland OPS2 Tiger Single Deck 31 seat Bus	2652	(green)
AEC Regal 4 Underfloor Single Deck Bus	2788	(green)
Leyland Royal Tiger Underfloor Single Deck Bus	3131	(blue)
Leyland Royal Tiger Underfloor Single Deck Bus	3395	(green)

Leyland Leopard Underfloor Prototype Bus	3520	(green)
Leyland Atlantean Double Deck Bus	1001	(blue)
Leyland Leopard Underfloor Single Deck Bus	1727	(blue)
Leyland Leopard Underfloor Single Deck Bus	1755	(blue)
Mercedes 0305 Single Deck Bus	1792	(blue)
Mercedes 0309D Mini Bus	1225	(blue)
Holden Utility, mechanics vehicle	CT102	(cream)
Volvo F86 Flat Tow Truck	CT082	(blue)
AEC Matador Tow Truck	CT152	(green)
Leyland Buffalo 3 axle Tow Truck	CT109	(blue)
Leyland Atlantean with engine cover open	1080	(blue)
Leyland Royal Tiger demonstrating washing plant	3180	(blue)
Leyland Royal Tiger over pit - rebuilt by apprentices	3291	(blue)
Albion SPC19W Venturer Double Deck Bus	2102	(green)
AEC Regent 3 Double Deck Bus	2516	(green)
AEC Regent 3 Double Deck Bus	792	(green)

Various mechanical parts were on display in the workshop. These had mainly been stripped down due to failure.

Buses 275 and 615 are from the SPER collection. 792, 2102 and 2516 are now privately owned. The Matador has been withdrawn and is the subject of sale negotiations for preservation. The Mercedes Mini Bus is the first of two purchased by the PTC for experimental cross country express services and is not yet in service. Its blue livery has been modified by the addition of a wide dark blue band.

The PTC vehicles were chosen to represent various classes and body styles or experiments. 2521 was the first 31 seater and 2652 the last with the first series body with double front destination boxes; it has been used as a tow vehicle. 2788 and 3131 represent the first series underfloors; 3131 being the last. 3395 is a second series underfloor in original condition; 3180 and 3291 are also second series vehicles. 3520 has a prototype body built by Chullora Workshops; the production Leopards differed considerably. 1001 is the first Atlantean. 1727 is a second series Leopard with experimental windows and drivers seat and 1755 is also a second series with the prototype transmission as used int he Mercedes of which 1792 is a typical example. It was however chosen as it has taken the number of the AEC double decker 792. Prior to 1948 the registered numbers of Government buses were 1000 higher than the fleet numbers. The two were made to coincide by adding 1000 to the fleet number. Thus 792 which was registered m/o 1792 became 1792. It once again carries the number 792 and is registered by a private operator as a bus with the plate m/o 792. (The 1000, 2000 and 3000 series m/o registrations are reserved for the PTC). 792 was the first AEC Regent 3 in Sydney and introduced the preselector gearbox.

Leyland 275, Albion 615 and AEC 792 operated on short trips from the depot during the afternoon. Mercedes 1792 did one trip to provide a contrast.

The vehicles on display represented a major cross section of the fleet that has been operated by the PTC and its predessors in Sydney and Newcastle. The day was an outstanding success and undoubtably similar functions can be expected in the future.

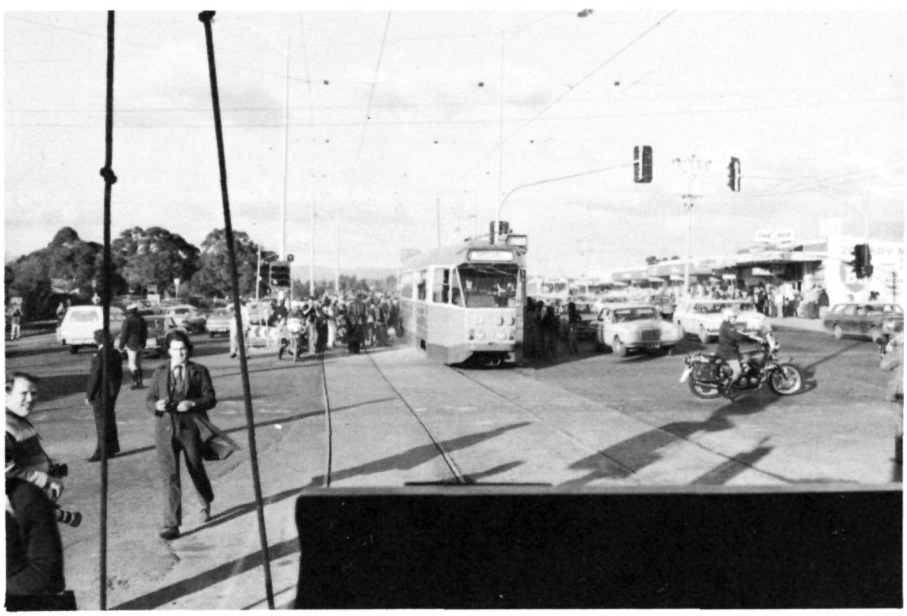
CITY SECTION

News of the Melbourne and Metropolitan Tramways Board

East Burwood Opened

The East Burwood tramway extension was finally opened by the Premier of Victoria Mr. R. Hamer, shortly after 3.30 pm on Wednesday 19 July. A function was held at a conveniently located reception rooms opposite Parer Street at the start of the reserved track section of the route. M&MTB Chairman, Mr. D. Snell, opened the proceedings and introduced the Acting Minister of Transport, the Hon. A. Scanlan, who spoke about the project. He then introduced the Premier, who in due course, officially declared the line open and invited guests present to adjourn outside to three waiting trams for the first official journey along the line. Mr. Hamer also quickly cut a white ribbon that was stretched across in front of the first tram and then boarded it. Three Z class trams were provided by Camberwell Depot, being numbers 23, 26 and 11 respectively. Several hundred people were present to see the trams leave for Middleborough Road and many more were along the route to the terminus. The journey was not a rapid one due to so many people and children actually being on the tracks. Some difficulty was experienced shunting at the terminus due to the crowd present. 23 shunted on its own and headed the procession on the return journey. However 26 and 11 shunted as a pair and so reversed their order. Each tram was crowded, indicating that many local residents boarded for the return trip. It was announced that for the four days from Thursday 20 to Sunday 23 July, no fares would be charged to passengers boarding along the extension in either direction and that outbound passengers would only be charged to the old terminus at Warrigal Road.

Regular service commenced the next morning with the first departure scheduled for 5.49 am from Middleborough Road. Z 58 was the rostered car and carried a modest load, many of them enthusiasts, to and from the terminus. Z 16 accompanied 58, then laid over at the terminus in case of any problems. There were no TV crews present at the terminus and 58 carried no streamers or placards, unlike SW6 857 a few days earlier, when the old terminus was eliminated and the new terminus for route 74 moved about 200 yards east to Somers Street. The committee of local residents which had campai-



Z 23, the first official tram to Middleborough Road, East Burwood, leaving on the return journey; as seen from Z 26, the second official tram.
- K.S. Kings

gned for the extension had arranged a special breakfast starting at 5.00 am on Wednesday 12 July from which participants adjourned to ride the first tram from Warrigal Road to Somers Street. The car was delayed for several minutes at Warrigal Road while TV cameras, spotlights and flashlights took charge. 857 was bedecked with streamers and placards and eventually continued its journey with quite a crowd on board. More film was exposed while 857 shunted and Z 11, as the second car, was present waiting to shunt as the SW6 departed. Scrubber 11W had been present from much earlier in the morning. The last car to use the old terminus at Warrigal Road had been Z 18 at about 6.40 pm the previous evening; subsequent runs terminating at the Hartwell crossover with new Volvo buses taking passengers to the terminus.

Twelve more Z class trams were moved to Camberwell Depot on the afternoon and evening of Wednesday 19 July to enable an all Z car service to be operated the next morning. Middleborough Road is designated route 75 (formerly allocated to the Hartwell crossover). W series trams rendered surplus were moved from Camberwell to Malvern, which assumed responsibility for ten runs on route 72 (City, Malvern Road, Burke Road to Camberwell). Several surplus W cars from Malvern Depot were moved to Preston Workshops for storage.

The first tram to actually reach Middleborough Road was scrubber 11W at about 12.45 am on Monday morning 17 July 1978. Late in the previous week, it had been decided to test the route for clearance and a loading gauge frame was hurriedly manufactured at the Civil Branch Yard at South Melbourne and attached to line marking car 233. On Monday night 17 July this car then ventured along the extension and found several places where items needed adjustment to permit the safe passage of passenger trams. Although a settlement was reached in the industrial dispute which delayed the opening for five weeks and this enabled the overhead wiring to be finished, the new substation at the corner of Burwood Highway and McIntyre Street could not be completed in time. The mobile sub station was therefore used to supply current for the extension.

The M&MTB arranged to issue special souvenir tickets to passengers on the three opening journey trams. A die reading 'M&MTB Souvenir Burwood Tramway Opening Extension' was inserted in the standard ticket machines used in the Z cars and conductors issued tickets to all passengers on boarding. During the four days of free travel, conductors issued tickets to all passengers from their machines, but the special dies were not used.

Opening of the Hawthorn Tramway Trust's line to Burwood on 10 June 1916. Car 18, later M&MTB N class 124, is standing in what is now Toorak Road at what is now Warrigal Road. - TMSV Archives

Z 58, the first regular passenger tram at Middleborough Road, East Burwood -- 5.47 am Thursday 20 July 1978.
- K.S. Kings

Trackwork

Work resumed in Swanston Street on 12 June and by 6 July most of the remainder of the Flinders Street to Lonsdale Street section had been completed. One block of track plus removal of the temporary crossover and reinstatement of the track remained to be done. The final realignment in Latrobe Street,between Swanston and Elizabeth Streets, in connection with the underground railway works, was carried out over the weekend of 10 and 11 June.

The next major relay commenced at East Kew on Monday 10 July, working westwards from Adeney Avenue to Ridgeway Street (along Kew Cemetery). The up track has been started, with temporary track being used. It is probable that the one temporary track will serve the relaying of both tracks, with a double slew in use for the second half of the job. That is, while the down track is relaid, down trams will use the new up track while up trams continue to use the temporary track. The curves in Royal Park adjacent to the railway station, outside the zoo, have been relaid recently.

Tramcars

The latest Z class tramcar to enter service is 97 in mid July. 98 and 99 are undergoing testing while 100 shouldenter service in the latter part of August.

Six veteran W2 class tramcars are being decorated by professional artists at Preston Workshops. The scheme has the backing of the Ministry of Tourism, the Melbourne City Council and the Arts Council. Four cars are already in hand, with the first virtually completed. The designs are colourful and non conventional -- they could be described as pop art.

Design work for the next 100 new trams has reached an advanced stage. At Preston Workshops a full size wooden mock up has been built using the front of the model displayed at the last two years Royal Show. It is about two thirds the length of a car, thus allowing all aspects of these symetrical vehicles to be evaluated. The main exit doors have been repositioned to the centre of the car, thus being opposite each other. A supplementary single width exit door has been placed at the rear of the car, immediately in front of the glazed partition behind the (rear) drivers seat. Only a minor modification to this partition is necessary. The seating layout and location of the conductors desks have also been slightly changed.

Buses

The M&MTB bus fleet is now rapidly changing. The new Volvos are steadily making inroads into the domain of the old AEC Mk 3s and it is expected that the last 41 seater will run about the end of August. The last 32 seater could pass into history in December. Overhauls on the 1956 built AEC Mk 4s ceased early this year, while the 1964/6 built AEC Mk 6s will not receive any more major overhauls after those presently in hand. Tenders have been called for an as yet unspecified number of new buses.

★ Museum Notes and News

C.O.T.M.A.

News from the Council of Tramway Museums of Australasia

COTMA Chairman, Dr. John Radcliffe, has been negotiating with the STIB, Brussels, for some time for the purchase of 21E type trucks for several member museums. A SPER representative recently visted STIB and took the negotiations a step nearer completion. Subsequently John Radcliffe received a letter from Brussels making a firm offer on a number of trucks. COTMA members have been circularised the details and asked to place firm orders by early August. Preliminary enquiries some time ago indicated that six museums in Australia and New Zealand were interested in a total of 14 trucks.

With the 1978 Conference at Christchurch behind us, delegates have returned home to continue with their duties in their own museums and to carry out the decisions made at the conference. Some new matters arose as well as some existing items continuing. They will all help to make our museums better places for the public to visit and also better places in which members can carry out the necessary work.

ST KILDA . . .

Australian Electric Transport Museum

Centenary Operations Summary

Following the conclusion of the formalities of the Adelaide Street Passenger Transport Centenary, it has become possible to review the extent of operations by Museum cars and members. The AETM cars operated a total of 99 return passenger trips to Glenelg. Of these 69 trips were in regular public traffic and 30 were charter and special trips. Trips run by each car were:

F1	282	42
H1	381	29
G	303	27
A	1	1

In addition, car 282 made one scheduled run to Forestville and all cars made five scheduled runs to South Terrace except car 1 which made six. The cars operated a total of 2200 km(1375 miles) in regular and charter or special traffic and carried an estimated 13,950 passengers which is very high when it is considered that the seating capacities of cars 1, 282, 303 and 381 are 40, 56, 32 and 52 respectively. The load carried works out at 57.6 passengers per trip. Museum members worked 279 hours in moving the cars, preparing them for traffic at City Depot, 246 hours in traffic and bookstall operations and 56 hours in charter operations.

Above average winter rainfall leading to soft ground conditions at Morphettville and St. Kilda meant that the cars were still in City Depot at the beginning of August.

Museum Run With No. 1

Car no. 1 was given the freedom of the Glenelg line on the morning of Sunday 25 June 1978. STA officials turned the power on early and AETM member Jim Bourke who is also an STA motorman volunteered to take the car to Glenelg on a special run for AETM members and friends. Jim Waters acted as conductor and

Inspector in Charge Jock McEachern came in to supervise the trip. Guests included a number of City Depot officers and some former MTT employees who had helped with preparations for the Centenary. After numerous photo stops on the down trip, a champagne celebration was held at the Glenelg terminus to toast the success of the Centenary events. The up trip was notable for a dash in full parallel to pass the Cross Road and Marion Road level crossings in time to allow passengers to obtain a photograph of the first scheduled trip of an H car for the day. (Photographic stops had to be so chosen as to not foul level crossing track circuits.) A later stop was made on top of the Goodwood flyover. Although the time between leaving Victoria Square and return was over two hours, probably the slowest run ever made carrying passengers to Glenelg, the first trip of an A type car to Glenelg made a memorable close to the involvement by most members in the Centenary events.

282 Used To Open Shopping Centre

The final appointment for a Museum car was fulfilled on Tuesday 4 July when car 282 was used to take the South Australian Minister of Mines and Energy and Minister for Planning, the Hon. Hugh Hudson, to Glenelg to officially open the Bay Junction Shopping Centre. Other passengers were guests of A.V.Jennings Industies who had built the centre and chartered the car for the occasion. The centre is located at the corner of Jetty and Brighton Roads adjacent to the western end of the Glenelg line reservation and has chosen a symbolic drawing of an H car as its logo. Mr. Hudson, who is the driving force behind the proposed Modbury tramway, was a most appropriate Minister to ride in the car.

Relics Obtained

The Centenary resulted in a number of other relics being given to the Museum. Ron White, while supervising the display of car no. 1 in Victoria Square, was approached by a passenger who presented him with several unrecorded photos of the car being delivered from the body builders in 1908. Another surprise gift was an unusal seat and roofline frieze claimed to be from a horsecar. It was not readily recognisable until a study of old photographs showed that the items were quite clearly from one of the two Belgian saloon cars owned by the Parkside Tramway Company (See *TW* June 1978). A presentation case containing the scissors and part of the ribbon used to open the Port Adelaide tramways in 1917 by the Mayoress, Mrs. Sweeney, was donated by a descendant.

Leyland Returned

Leyland Trolleybus 488 has been placed on display at St. Kilda after its recent restoration at Hackney and makes an excellent addition to the bus collection. Prior to delivering the bus to St. Kilda, STA staff installed an EE410 motor which the AETM purchased from the Wellington City Council. The motor had originally been owned by the Christchurch Transport Board as part of its spare parts inventory.

Restoration Of Car 42

With four cars still at City Depot, further work on 303 has been deferred untilit returns to St. Kilda. Consequently the restoration team has turned its attention to car 42. The members at the AGM determined that this car, which has not been used since 1935, should be converted back from its present A2 form to its original B type toastrack design. Some initial dismantling of the centre saloon has begun. These parts will be stored in case it should later prove possible to secure either of the other two cars of the A2 class, both of which still exist in relatively sound condition.

Museum Committee Revised

At the Annual General Meeting of the AETM held in April, the positions of Vice President, Assistant General Manager and Operations Manager on the Executive Committee were replaced by three Committeemen positions. The requisite constitutional amendment permits the Executive to give advisory titles to these officers, thereby allowing greater flexibility in the allocation of responsibilities. Current Office Bearers are as follows, with advisory titles alloced by the Executive shown inbrackets:

President	J.C. Radcliffe
Secretary	C.J.M. Steele
Treasurer	J.W. Hoffmann
General Manager	M. Skinner
Committeemen	
Rolling Stock Mgr.	J.R. Pennack
Operations Manager	L.M. Fenner
Site Manager and Safety Officer	R.G. Magnussen
Appointed Officers	
Assistant Treasurer	R.T. Wheaton
Publicity and Roster Officer	R. White
Publications Officer	J.W. Hoffmann

A safety committee composed of Messrs R.G. Magnussen (Chairman), W.J. Burt and P.C. Keynes has been established.

PHOTO ON BACK COVER

GLENORCHY . . .

Tasmanian Transport Museum Society

Rail Connection

The ANR has given permission for the society to re-establish in a permanent form the rail connection between the railway system and the museum site. A temporary connection had been established in 1976 for the transfer of rail vehicles but was later removed.

The 320 ft track has occupied the attention of a relatively small group of members who have ballasted the formation, laid sleepers and spiked rail. A turnout has yet to be installed in a siding in Glenorchy station yard and some levelling and adjustment of the track carried out before it is put into use.

The Glenorchy Council, from whom the Museum site is leased, has approved a modification to the boundary enabling a railway fence to be relocated to allow direct access by rail to the museum.

Restoration

The restoration programme has slowed down in recent months due to the emphasis on site development. The only exhibit currently receiving attention is a 109 year old, former 5'3in gauge, four compartment, side door car, AB 1, built for Tasmania's first conventional railway, the Launceston and Western which was later taken over by the Government. This car was later converted into a fetlers camp.

The interior of the car has been gutted of all superflous fittings and windows removed to be reglazed and sealed where necessary. All exterior paintwork has been carefully removed revealing the original teak timber used in its construction, the durability of which is quite apparent. A primer has now been applied to the exterior and the roof recovered. A start will soon be made on replacing the internal partitions.

Hobart Tram 141

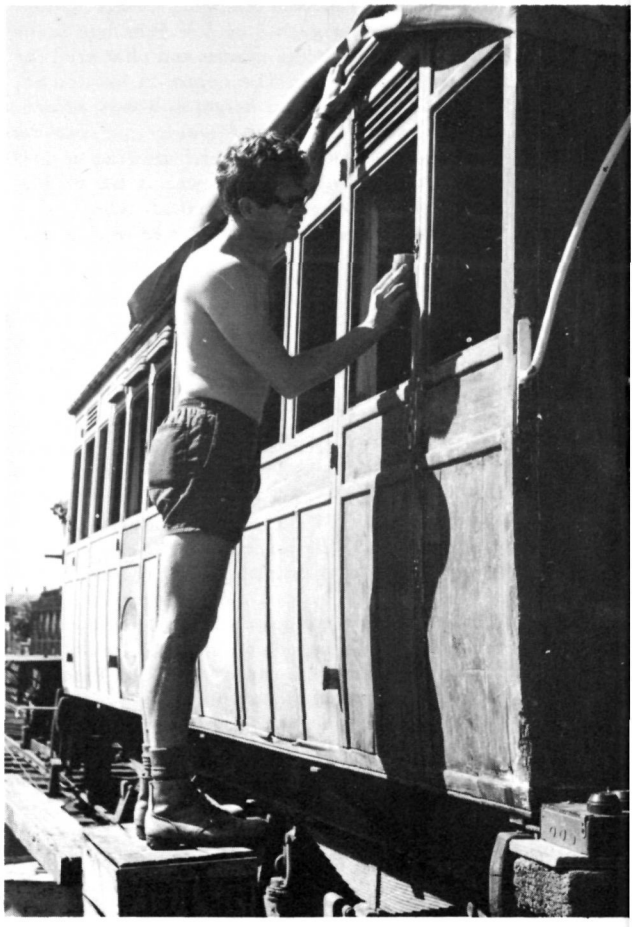
Following the demolition of a greater part of the Hobart railway roundhouse building which has housed this tram since 1960, it is now located in the railway yard shrouded in protective covering. It will be removed to the museum when the building is completed.

Museum Building

Plans for the first permanent building at the Museum site have been prepared and have received the approval of the local Council. The building will house the Society's electric transport exhibits including Hobart bogie tram 141, Hobart double deck car 46 (to be restored), Launceston four wheel car 13(to be restored) and two Hobart trolleybuses, 74 and 235.These vehicles are presently located in temporary covered storage or in the open.

The building will be 22 X 12 metres (70 X

Ex Launceston & Western Railway carriage AB1 receiving attention from TTMS member Wally Mounster. - D.H.Jones



40 feet), steel framed with colourbond wall clading, kliplok roof and aluminium framed windows. It is expected to cost in excess of $13000 (mainly for materials) and will be erected by society members with some professional assistance.

Excavations for the foundations have been completed and concrete was to be poured during July. Erection of the frame, which is currently being fabricated, will follow shortly after.

Excursion

To mark the last Saturday run by the *Tasman Limited* a large party of Society members travelled to Western Junction, near Launceston, on the northbound train and returned on the southbound train on 25 February 1978.

By this date the *Tasman Limited* was the only passenger train running in Tasmania, with the exception of a fortnightly railmotor service from Hobart to Parrattah. When the ANR took over the Tasmanian Railways on 1 March the frequency was reduced from six to three days a week. It ceased entirely on 28 July last.

Exhibition

The Society recently co-operated with the State Library of Tasmania to produce a largely photographic exhibition in the display area of Hobart Library, featuring the story of electric street transport in Hobart. The Society made available photographs and other tram relics which were viewed with great interest by the many visitors to the Library.

BYLANDS . . .

Tramway Museum Society of Victoria

The last weeks of July saw the radiax truck frame moved from outside storage into the workshop area to enable the installation of parts which have been overhauled and reassembled (as mentioned in last report).

Our visitor facilities have also received attention of late. An improved method of suspension is being tried out on the rubbish bins - as first installed these did not prove robust enough to withstand the operating methods of the visitors! If this version does not succeed a third type which is more time consuming to instal will be tried. Life member, Bern Hurren, who generously donated the three items of playground equipment some four or five years ago, has now given another slide; it is not as large as the first one, being intended for younger children. Our thanks to Bern, once again. The winter months are usually depressing for our Sunday crews at Bylands, being cold, sometimes wet and sometimes with relatively few visitors. Recent weeks have seen a pleasant change with the attendances improved -- even if the weather is the same!

The last social meeting on 12 July was quite successful, although the attendance was not as good as at the one when the raffle was drawn. Highlight of the evening was possibly the announcement that the Society had successfully negotiated the purchase of the virtually complete body of Geelong 9, one of the unique 'butterbox' cars.

No. 9, together with no. 2, has rested in a shed on a farm since the Geelong tramways closed in 1956. It has been used as a store with no alterarions being made to it. One end and side have been completely protected, while the other end has been partly protected. The remaining side in effect formed part of the shed and has weathered somewhat.

Several members formed a work party to the property on Saturday 22 July for the purpose of removing 9 from the shed and preparing it for transport. Jacks and tools were taken from Bylands and, together withsome very handy help from the farmer's two sons the car was outside after five hours work. A lot of hard work was initially required to dig holes, jack the car and insert some twelve feet lengths of 80 lb rail as traversing skids. One of the sons then used a tractor and wire rope to pull on alternate ends and skid the car side ways in line with the doorway, which unfortunately was at the far end of the shed. This was to no avail so the other son also tried with another tractor, but the car would not move. It was necessary to use short lengths of 4 and 5 in. pipe as rollers to achieve success.

This most distinctive and interesting exhibit was moved to Bylands on Tuesday 25 July. The body is temporarily resting on the truck from 218. It was cleaned inside and out over the following weekend and a trolley base and pole fitted give it a somewhat more correct appearance.

ALBION PARK . . .

Illawarra Light Railway Museum Society

Locomotive In Steam

The hard labours of six and a quarter years were rewarded when the ex CSR 2ft gauge tender loco 'Cairns' (Hudswell Clarke 1706 of 1939) steamed along the museum track at 4 pm on Monday 3 July 1978 for the first time.

The locomotive underwent a successful boiler inspection and hydraulic test on Saturday 1 July paving the way for the steam trials two days later. A repeat performance for a larger gathering of members on the following Saturday proved a failure due to steam exhausting straight through the steam chest on one of the cylinders. A trouble shooting inspection conducted during the following week revealed an old stud wedged under the D valve. This must have fallen down the blast pipe when a new front plate and seal were fitted to the smoke box at Albion Park.

On 15 July 'Cairns' steamed out of the loco compound at 2.45 pm and performed efficiently for the entire afternoon earning the admiration of members as well as the many visitors who were attracted to the scene.

DAVENPORT LOCOMOTIVE: No sooner had 'Cairns' left the compound than efforts returned to the 0-4-0 2ft gauge Davenport loco. The cracked main steam pipe, as mentioned in the last ILRMS report, has been brazed and this returned to the museum on 15 July. It will be machined and refitted in the near future and it is hoped to have two locos in steam by spring.

SHAY LOCO No. 2: The sides and front frames of the cab were bolted in position on 15 July, this will be followed by the construction of the cab wings across the footplate, the fitting of wall panels and the making of American style cab windows.

Water Supply

During June and July a separate ILRMS water supply was extended towards the Yallah station building. The first section of the main along Old Croome Road to a water column in the loco compound, was completed in time for 'Cairns' steam trials and during July the pipes were continued to the stationary engine area and the station building. The whole distance amounted to over 300 feet.

Around The Museum

During mid June a 150 tons capacity hydraulic press and compressor unit was received from Kaiser Refractories of Unanderra. This is a welcome addition to the growing store of labour saving devices being collected at the museum. At the same time a roof was extended over the fitters bench and vice beside the store shed at the stationary engine compound.

The steel frame of the new passenger car, details of which appeared in the last *TW* report, has been metal primed while one of the bogies has been removed from the vehicle for springing. Work on this vehicle is expected to proceed at an increased pace now that the major project of placing a loco in steam has been successfully achieved.

Hudswell Clarke loco 'Cairns' in steam at Old Croome Road, Albion Park on 15 July 1978.
- K.McCarthy

Sydney University Industrial Archaeology group at the ILRMS Museum at Albion Park on 2 July 1978. - K.McCarthy

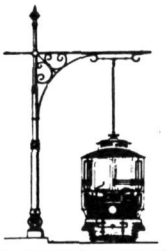
It is hoped that by early summer a routine of regular steaming and open days will be arranged. Readers and interested groups planning to spend a day in the Illawarra region during the coming summer period should contact the Hon. Secretary, Tony Madden on (042) 71 3707 for further details.

Visit By University Students

On Sunday 2 July approximately 25 students following an Industrial Archaeology unit in their Batchelor of Arts course at Sydney University, visited the ILRMS museum. Their excursion for the day entailed the investigation of the following industrial sites:

1. The steam block setting crane on the Eastern Breakwater at Port Kembla.
2. The small harbour at Shellharbour.
3. The Kiama Harbour, street tramway and Pikes Hill quarry relics.
4. The ILRMS museum at Albion Park.
5. The small steam sawmill site at Dapto.
6. The Illawarra Smelters site and railway at Kanahooka.
7. Wollongong Harbour and original town centre at Market Square.

LOFTUS . . .



South Pacific Electric Railway

Around The Depot

To help make body restoration easier, a bench has been constructed in the annex adjacto 4 road. As well, stores have been rearranged so work can proceed on LP 154 and F 393.

Eight columns of the steel portal frames for the first building on the new site have been moved into the depot for cleaning and painting.

Shelving is being installed in one of the LCL containers for the storage of fire protection equipment a small number of the road vehicle spares.

The substation has had some maintenance work carried out with the main transformer having been partially cleaned with the needle gun and protective paint applied.

To provide an indication when power is on over the depot tracks a cluster of lights is to be installed above each track. The first of these has been installed on 2 road.

Tramcars

LP 154 -- 80% of the exterior has been sanded and is ready for undercoating. All the seat slats have to be sanded back to bare wood and this is, as experience has shown, a very slow and boring job. The southern cab has been reassembled after rotten timer was replaced. R1 1979 -- Work continues on the interior with many parts now being reassembled. The wiring for the lighting has been renewed and one trolleybase is being overhauled.

99U -- After years of open storage, the frame of this Ballast Motor has suffered. This has not been helped by its many years at North Sydney with exposure to salt air or its years in the damp deadend tunnel at Wynyard. Work has started on lifting the deck and cleaning the frames with the needle gun. This will be followed by some coats of protective paint.

Buses

To mark the 20th anniversary of the closure of the North Sydney tramways, a tour was held on Saturday 1 July in the Society's preserved Leyland half cab 1275. This was followed two weeks later by the Leyland and the Albion double decker going to celebrations at Willoughby Depot. Fuller details appear in *Bus Stop* in this issue.

New Site

It appears that negotiatins for the right of way besides the old Princes Highway northwards towards Sutherland from the new depot site at Loftus station and the terminal area adjacent to site of the former steam tram depot are at last reaching a satisfactory conclusion. The first approach to obtain these areas was made in February 1971. The seven and a half years that have followed have seen unbelievable problems arise; the number of Government and semi Government bodies that had, or thought they had, an interest in the land exceeded all estimates.

With the future becoming more secure and ever mindful of being pushed to vacate the present site by the National Parks and Wildlife Service, preparatory work is being stepped up.

Board Of Directors

At the Annual General Meeting held on 30 June 1978 Bill Parkinson was elected to the Board. Two retiring Directors, Bob Cowing and Bob McKeever were re-elected. Dave Cooke, whose term also expired this year resigned in February and the casual vacany for the remainder of his term was filled by Vic Solomons.

The Board of Directors now comprises:

David Rawlings - Chairman
Robert McKeever - Deputy Chairman
Robert Cowing
Richard Jones
Peter Kahn
Phillip Parker
William Parkinson

Executive positions have been allocated as as follows:

General Manager	David Rawlings
Secretary	Richard Jones
Financial Director	Phillip Parker

SALE BY TENDER

The annual 'Sale By Tender' will be held at the Transport Club, Regent Street Sydney, on Monday 11 September 1978, commencing on or about 7.30 pm. All members are urged to attend and support the sale. Also turn out all your cupboards and find some more things to sell.

The depot pointwork receives some attention. Due to the long delay in relocating it is becoming necessary to undertaken some major work on the present physical plant.
- Peter Hallen

FERNY GROVE . . .

Brisbane Tramway Museum Society

July 8 saw a significant date celebrated by the BTMS. We are now ten years old and a dinner was held at the National Hotel to celebrate the anniversary. The Brisbane City Council was represented by a number of Guests including the Chairman of the Transport Committee, Alderman G.Thompson and the Manager of the Transport Department, Mr. C.Harding. Speeches retold events leading up to the demise of the tramway system and the formation of the society. Promises of yet more forthcoming assistance from the BCC were made. Both the President of the Society, John Hudson and a previous (and Foundation) President, Bill Daniells, thanked the BCC for their past generosity and their promises of further assistance. Some 60 members and guests had a most enjoyable evening.

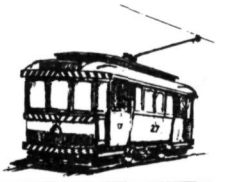
On 30 June 1978, the gates closed for the last time at the Milton Workshops, which for the last nine years since the tramway abandonment had been used for bus maintenance. Most maintenance is now carried out in the new facility adjoining the bus depot at Toowong. Coincident with the opening of the new shops, the BCC took delivery of the last of its 98 Volvos, no. 827. The BTMS were fortunate in that a large quantity of tram and other equipment was made available and with this offsite work completed, work parties have been directed back to Ferny Grove.

Work continues steadily in the substation. With no. 1 depot complete, roofing work continues on no. 2. This has advanced sufficently to allow the movement of cars in from the workshop in the near future.

The workshop building has been fully rebuilt and extended at the western end and work has begun on the eastern end. The store shed has been thoroughly re-organised and the result is gratifying. It will be much easier now to locate track and overhead equipment for projects about to be put in hand.

General site maintenance has been undertaken. The weather in Brisbane is currently at its best as far as outside work is concerned and it is hoped to make good progress over the next few weeks.

BALLARAT . . .



Ballarat Tramway Preservation Society

Maintenance

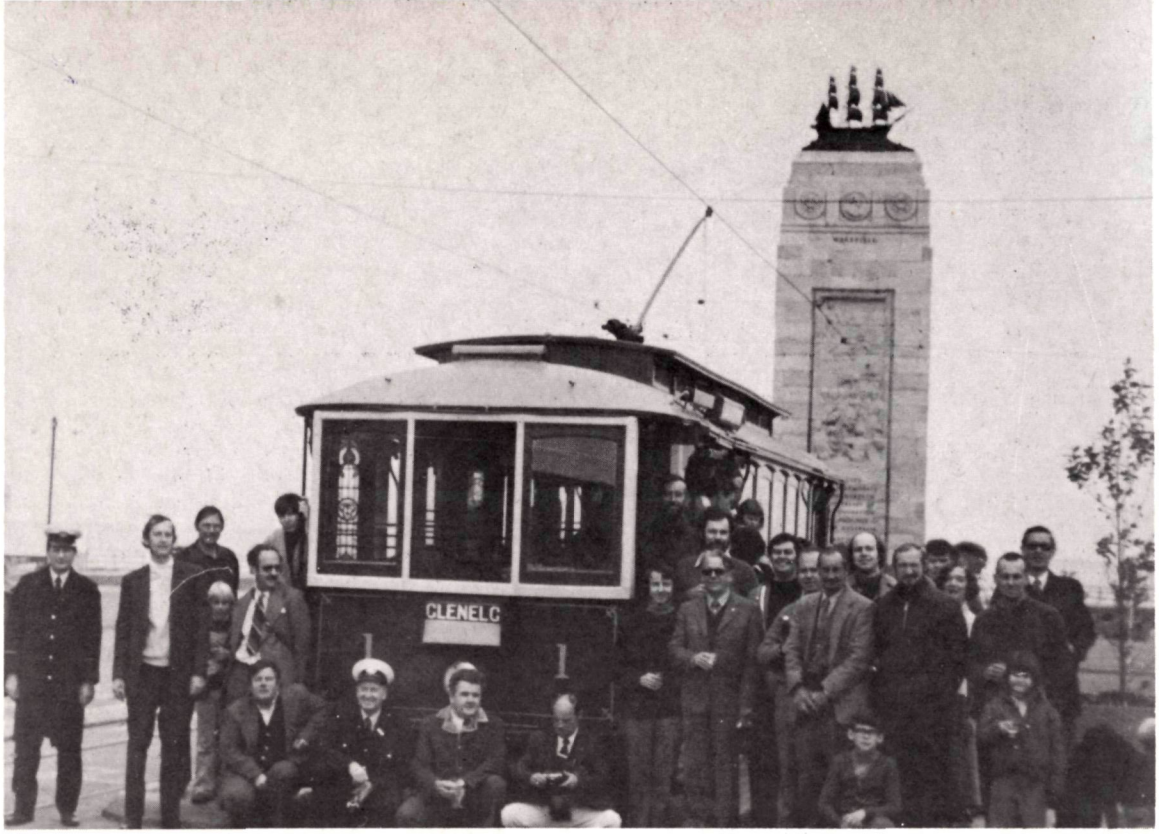
Tram 26 has been withdrawn from service due to fractures in a wheel. It will have to remain out of service for some time as the lack of working area in the present depot precludes the attempting of the various lifting tasks necessary.

Local member Dave Macartney has been repainting car 38 with our specially formulated Dulux paint. Some work is being carried out on the bodies of 35 and 121 at Bungaree by Gary Davie, Campbell Duncan and Graeme Jordan. Andrew Hall has been painting the roof of 14 at the depot.

The armiture for the motor for 38 is due to be collected from the local electrical contractor and replaced, thus making this car operable once more.

Depot Extensions

The perimeter foundations and cut off walls along with the two inspection pits have been completed for a total cost of $28,000. This amount of finance has been made available by the two for one grant from the State Government and our own Co-operative Loan Society. The present financial year will see the erection of the steelwork for the building and the laying of trackwork. The completion of this stage will allow the trams presently stored off site to be moved to the depot and will also make maintenance of the operating fleet easier.



Members and friends of the AETM celebrated the success of the Transport Centenary with a glass of champagne at Glenelg during a special run with car no. 1. 25.6.78

Burwood terminus, looking eastward over Warrigal Road, showing 'triple track' with the new extension laid but the old terminus reinstated due to industrial trouble.