

TROLLEY WIRE



NO. 229

MAY 1987

\$4.00*

Registered by Australia Post — Publication No.NBH0804



593 RUNS IN BALLARAT

TROLLEY WIRE

AUSTRALIA'S TRAMWAY MUSEUM
MAGAZINE

No. 229 MAY 1987 Vol. 28, No. 2
* Recommended Price ISSN 0155-1264

CONTENTS

MELBOURNE CABLE CAR 593	3
STREET TRANSPORT IN NEWCASTLE	12
LEYLAND 295 TURNS 50	21
HERE AND THERE	23
MUSEUM NOTES	29

Published by the South Pacific Electric Railway
Co-operative Society Limited, Box 103 P.O.
Sutherland, N.S.W. 2232.

*The opinions expressed in this publication are
those of the authors and not necessarily those of
the publishers or the participating societies.*

Typeset and printed by Meulen Graphics,
Phone 649-8224.

Subscription Rates (for four issues per year) to
expire in December:

AUSTRALIA \$15.00
OVERSEAS \$18.00

All correspondence in relation to "Trolley Wire" and
other publishing and sales matters should be for-
warded to:

BOX 103 P.O. SUTHERLAND 2232

COPYRIGHT

EDITOR Bob Merchant
CO-ORDINATOR Bob Cowing
SUBSCRIPTIONS Norm Chinn
DISTRIBUTION Mal McAulay
Peter Hallen, Laurie Gordon

FRONT PAGE:

Sydney R class cars 1831 and 1739 stand outside Fort Macquarie Depot in September 1957. The depot was demolished to make way for the Opera House. R. I. MERCHANT

BACK PAGE:

Top: L/P 154 poses on the main line at the SPER's old Loftus site on completion of its repainting. R. I. MERCHANT

Bottom: V 214 stands outside the old Essendon Depot on 24 October 1986, during a tour to commemorate the 80th anniversary of the North Melbourne Electric Tramway & Lighting Co. Ltd. 214 and the depot both date from 1906.

S.J. VINE



The State Member for Woronora, Mr. Maurie Keane presenting a cheque for \$67,000 to Howard Clark, Treasurer of the South Pacific Electric Railway Co-operative Society at Loftus on 3 February 1987. The cheque represents the second and final instalment of a \$150,000 Bicentennial grant for the restoration workshop building now being constructed at the Society's new site at Loftus. The handing over is being recorded by a photographer from the "Sutherland Shire Leader".

N. L. CHINN

MELBOURNE CABLE CAR 593

By William F. Scott

An attraction of living in Australia is the experience of incredibly unusual discoveries in the least expected places. One such example is encountering an elegant Melbourne grip car parked in the roadway outside a dwelling house 211 miles (340km) from Melbourne, nearly half a century after cable car operation ceased in that city!

The saga unfolds from May 1965 when grip car 258 was discovered on a Box Hill North vacant building block. From here it was moved to East Malvern, then to Haddon where it resided for the latter half of the 1970's, followed by about a year at Clunes. The car was acquired by the Tramway Museum Society of Victoria in 1980.

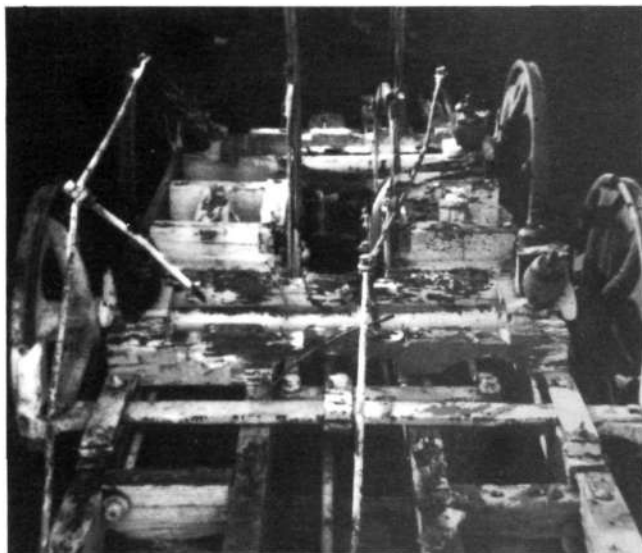
This was the period when TMSV members, Newton H. Williams and his father-in-law, were constructing the crossbench horse car 253 in Mildura. Newton had transferred the remains of grip car 258 from Clunes to Mildura, for reconstruction after the crossbench car was ready. However, meanwhile he had relocated at Swan Hill, so car 258 was moved there also.

Only the wheel sets, suspension, brake rigging, brake levers and decayed underframe of the car had remained! Therefore, the planned reconstruction would be a recreation rather than a restoration. Hence the car was to be numbered 593, the next vacant figure after



Cable grip car 593 residing on temporary track in Swan Hill during February 1987, outside the home of its builder, Newton H. Williams.

WILLIAM F. SCOTT



The remains of grip car 258 which were dismantled to provide the wheel sets, suspension and brake equipment as a basis for constructing car 593.

NEWTON H. WILLIAMS

that of the last grip car built by the Melbourne and Metropolitan Tramways Board in 1923.

Newtown secured donations of materials, mechanical components and equipment from two Swan Hill firms, Dunstones Industries, hardware suppliers and Lusty Engineering Pty Ltd, semi trailer manufacturers. Additionally, TMSV members Craig Coop and Robert Green assisted with finance progressively as construction proceeded.

Some original metal fittings were supplied by the TMSV, principally the cast iron stanchion bases and the couplings.

From these beginnings, Newton Williams built the Melbourne type grip car illustrated herein.

Newton erected a shed just large enough to take a complete grip car. He laid a track so that the car could be stored inside, though rolled out during actual construction.

The first act was to dismantle the wheel sets, axle boxes, and brake gear for sandblasting followed by painting. In their reassembly all nuts and bolts were replaced, as the originals were not serviceable.

Bodywork followed side and end elevation illustrations made by the Melbourne Tramway and Omnibus Company, in 1889.

As the plan was to have an operating car, a scheme had been created for running a cable car without a cable.



The remains of grip car 258 after sandblasting, painting and re-assembly in a new underframe for car 593.

NEWTON H. WILLIAMS



Cable grip car 593 well advanced towards structural completeness outside its shed at Swan Hill.

NEWTON H. WILLIAMS

At this juncture Newton's ingenuity and versatility had become apparent.

The general arrangement of propulsion devised was installation of a petrol engine under an end seat to drive an hydraulic pump to energise an hydraulic motor. This sequence eliminates the need for a gearbox. Further, the tramcar being double ended, requires the ability to travel equally well in either direction. The hydraulic system provides this feature simply by the gripman pushing a floor level knob, attached to a directional lever, which reverses the oil flow. There is a crossover relief valve to protect the hydraulic motor against the car overrunning.

The petrol engine is a 16 h.p. single cylinder four stroke air cooled Kohler from the U.S.A., with an electric starter and automatic compression release, for easy starting.

On the same side of the car as the engine, but at the other end, and under the end seat, was fitted the petrol tank, of approximately 10 gallons (45.46 litres) capacity.

The opposing end seats house the battery for the electric starter and the tool box. The 12

volt battery occupies the same position as that of the lighting batteries on the Melbourne grip cars after 1920, when electric lights replaced the kerosene lamps.

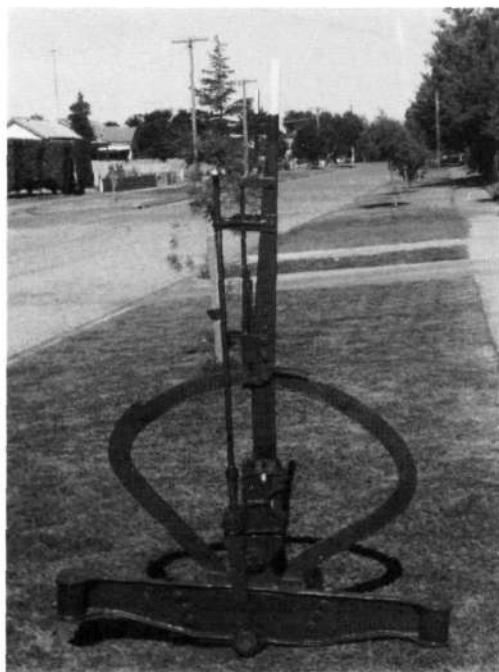
The side of the car between the engine and petrol tank, houses the hydraulic pump and motor. The latter is an Adan D Series 200 from England. The oil is Mobil DTE 24 stored in a 17.6 gallon (80 litre) tank between the wheels and the opposite side of the from the hydraulic motor. Only 2 gallons (9.1 litres) are required for the system to function. However, an oil collar would then be a necessity and there was no space to fit one effectively. The larger tank provides a greater volume of oil which prevents overheating, thus cancelling out the need for an oil cooler.

The engine, pump and motor have compatible capacities so that all three are nicely balanced during operation. The optimum performance is 1,000 to 1,500 rpm for the petrol engine, on level track, providing a steady speed of about 4mph (6.44kph).

The positioning of the motive power equipment is such that a balanced weight distribution for the whole car has been maintained.

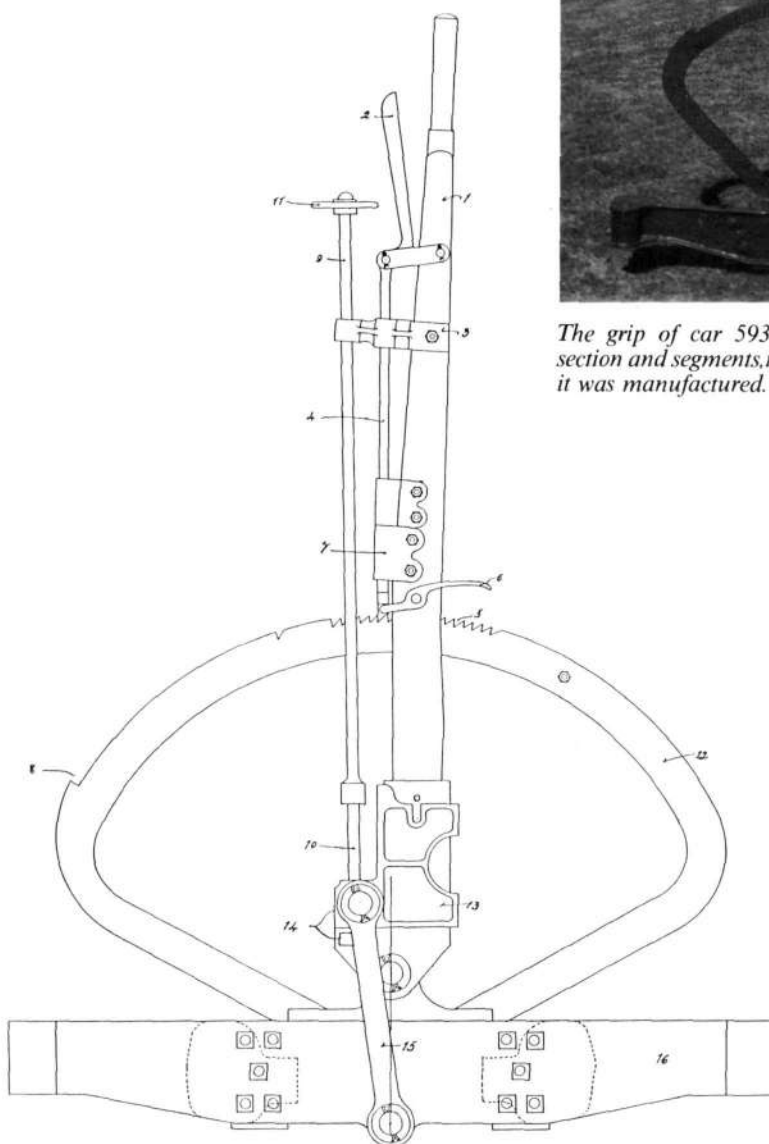
Side elevation depicting the above-road components of a Melbourne grip, taken from a drawing made by the Melbourne Tramway and Omnibus Company dated 7 August 1895. The 'grip' for car 593 was based on this elevation and a specially arranged visit to the Science Museum of Victoria to view cable car set number 1, and the only original grip known to exist.

KEITH S. KINGS COLLECTION



The grip of car 593 constructed from standard section and segments, illustrated at Swan Hill where it was manufactured.

WILLIAM F. SCOTT



The parts of the above-road section of the grip are as follows:

- 1 Lever
- 2 Pawl handle
- 3 Pawl bracket
- 4 Pawl rod
- 5 Rack
- 6 Lever stop
- 7 Pawl box
- 8 Lever stop
- 9 Adjusting rod
- 10 Adjusting screw
- 11 Adjusting wheel
- 12 Quadrant
- 13 Socket
- 14 Adjusting nuts
- 15 Links
- 16 Crossbar



A close up view of the three control levers on cable grip car 593. The grip is in the middle, flanked by the wheel and track brake levers. Notice the floor level knob on the left, which reverses the oil flow in the hydraulic system.

WILLIAM F. SCOTT

The drive train comprises a pinion attached to the hydraulic motor and linked by a chain to a sprocket bolted to one of the four car wheels. The car wheels are cast iron with chilled flanges and treads, their overall

diameter when after machining being $29\frac{1}{8}$ " ($\cdot 74$ m).

In the days of the Melbourne cable tramways, the middle of the three gripman's levers controlled the grip mechanism, which extended down into the tunnel between the running rails, accessed via the slot in the road surface.

In the case of car 593, the "grip" comprises an accurate recreation of the above-road section of a grip, made in accordance with a drawing by the Melbourne Tramway and Omnibus Company dated 7 August 1895. The Newton grip contains over seventy individual components, being cut and welded dexterously from standard sections and segments. It is connected to the throttle of the petrol engine by a bowden cable. Another bowden cable joins the grip to a pressure compensated control valve, to manage the oil flow in the hydraulic system. Thus the car's progress along a track can be governed by the same lever arrangement as in the days of cable tramways.

The levers on either side of the grip are the brake controls, one for the wheel brakes, with a cast iron shoe acting on each wheel and equalised. The other lever works the track brake shoes, one each side between the wheel sets. They comprise rough sawn hardwood, the sap from them assisting with braking. Accordingly, the car in progress along a tramway is visually indistinguishable from a totally authentic grip car.

The complete car has an unladen weight of 2.35 tons (2.39 tonnes).

The grip car's running mate is restored Melbourne trailer 171 of 1887. This saloon was retrieved from Mount Macedon in 1980 and restored with consummate skill by TMSV member Daryl Hawksworth. He therefore, unknowingly at the time, probably saved it from destruction in the "Ash Wednesday" bushfires of February 1983.

Since commissioning, 593 has been displayed and given runs at Bylands, Swan Hill Pioneer Settlement, Mildura, Loftus and Port Kembla, as well as on the line of the Ballarat Tramway Preservation Society. While at Loftus, the Sydney Tramway Museum cast a gong for the car from a pattern supplied to them by Newton, thus adding a final though vital touch. When the car returned to Swan Hill from Loftus, the engine cooling system

was improved, as overheating had occurred in service.

Further, whilst at Loftus the grip car was insured for loss or damage at replacement value, which was estimated at \$40,000, based on the cost of materials and professional rebuilding!

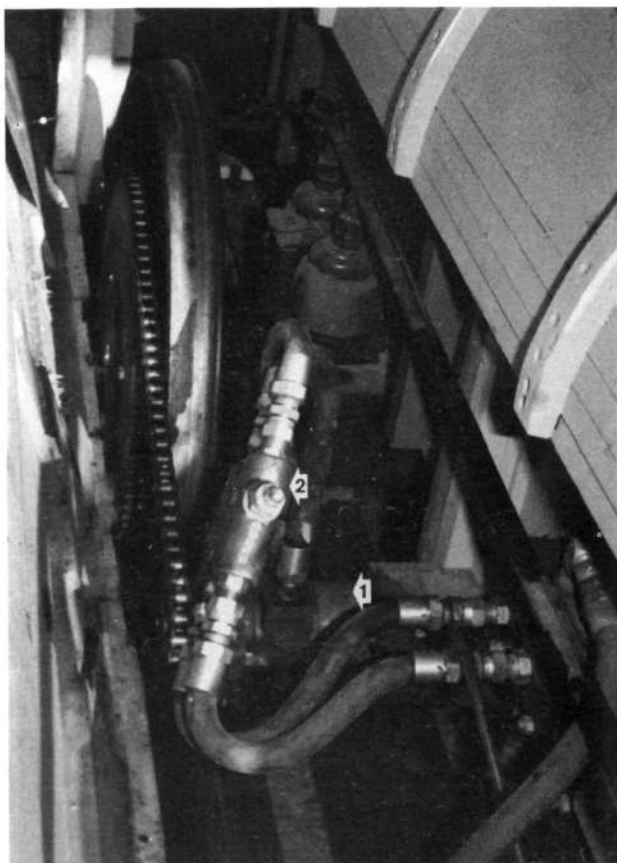
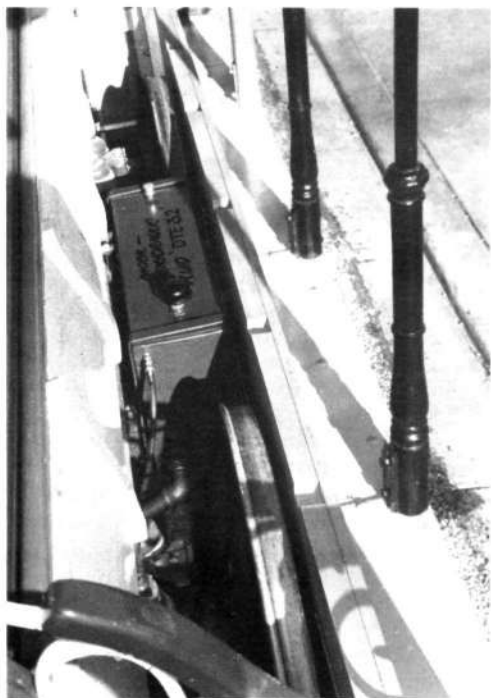
The first extensive assessing of 593 under the acid test of regular service in traffic, occurred on the Ballarat Tramway Preservation Society's line for three successive days over the long weekend celebrations of the March 1987 Begonia Festival.

The grip and saloon car set made trial runs on the Thursday to check for compatibility with the track. No problems were encountered.

On the Friday the set ran again for the local television station BTV Channel 6 and the Ballarat Courier newspaper gave major front page coverage.

View of the hydraulic system oil tank located under a side seat on car 593. The oil grade should read DTE24 or ISO32.

WILLIAM F. SCOTT

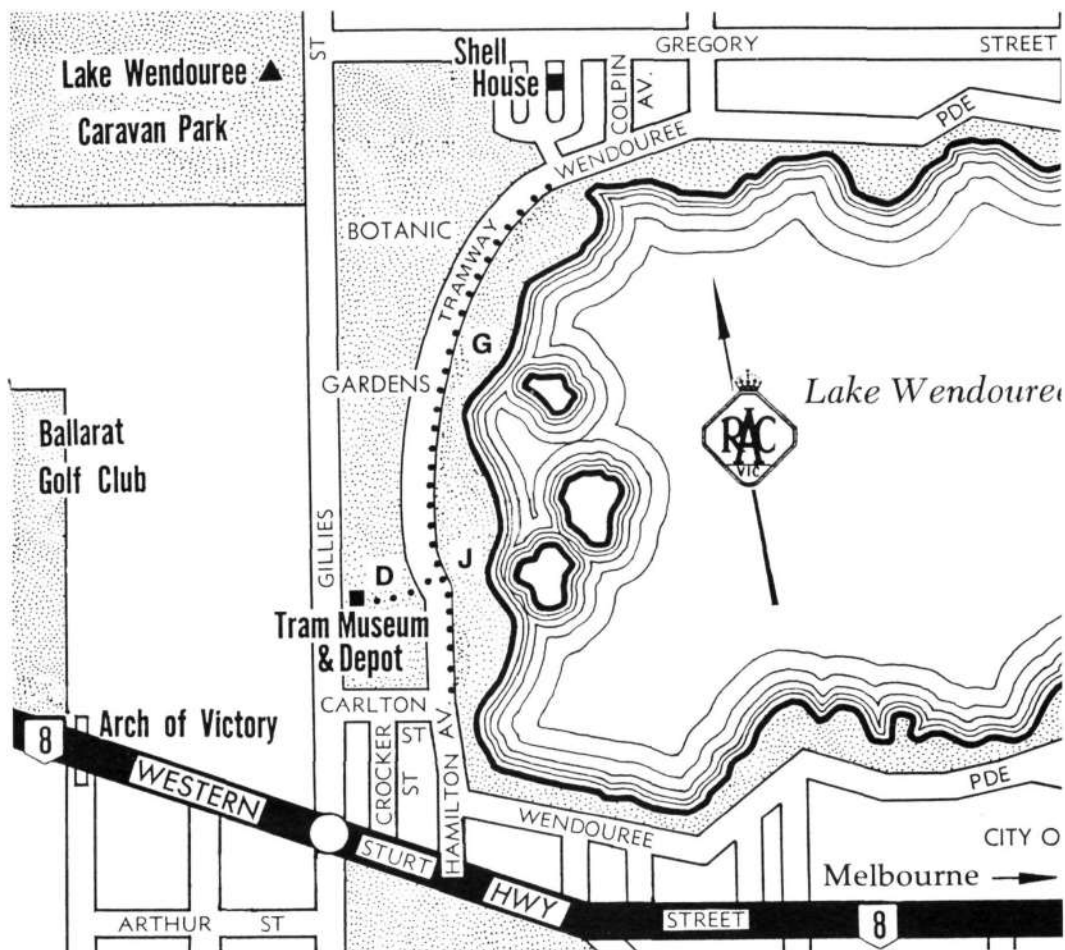


Above: View of the drive train, hydraulic motor (1) and crossover relief valve (2), located under a side seat on car 593. Notice the substantial hoses for conveying the hydraulic system oil.

Below: The Kohler petrol engine located under an end seat on car 593, with covers lifted.

BOTH WILLIAM F. SCOTT





Map of the Ballarat Tramway Preservation Society's line and environs, showing the section over which cable car operation occurred: (D) Depot, (J) Depot Junction, (G) Gardens Loop.

COURTESY ROYAL AUTOMOBILE CLUB OF VICTORIA

The round trip in service commenced on the depot fan, proceeding along the access track in South Gardens Reserve to Wendouree Parade. Here, flagmen held up motor traffic to allow the set to negotiate the curve without stopping. A steady haul took it to the Gardens Loop just beyond Lake Lodge.

Both loop points were specially set for manual operation which allowed the grip car to run wrong road around the loop to change ends. As the set came into the loop the coupling pin was pulled out by the grip conductor. The trailer was brought to a halt on the inner track by its conductor winding

down the goose-neck handbrake. The grip car continued to circle the loop.

This arrangement ensured the grip car parked on the inner track of the loop away from the general flow of traffic in Wendouree Parade, a desirable feature since it has open side seats! Passengers were set down after this sequence was fulfilled. Moreover, all electric cars ran through the loop on the straight track thus leaving the inner one free for the cable set exclusively.

On returning towards the depot, flagmen again gave a clear run through the curve at Depot Junction and into South Gardens Reserve. A bucket of water was kept on hand to lubricate the curve as required, in case of stalling with capacity loads.

The trailer was uncoupled again just beyond the level crossing, in the depot area.



The cable car set crossing Wendouree Parade, Ballarat, at Depot Junction on its way to the depot area in South Gardens Reserve.

WILLIAM F. SCOTT

pushed manually onto the adjacent road from the grip car, thus allowing the grip car to run past and back up to the trailer for the next journey.

Traffic inspectors were on duty to co-ordinate the slower cable short and faster electric full workings. Usually, only one electric car was in service, though on occasions there were two, along with the cable set. Careful timing was then needful on the single track! The round trip was approximately 1.2 miles (2km) in length.

The weather remained cool or chilly, with showers on the Sunday. Even so loadings were generally good. On occasions even in nippy periods the grip car was loaded and the trailer empty, thus showing passenger preference for the novelty of an open car even in the cool spells!

It speaks volumes for Newton, that after this prolonged period in service, the only modification needs to become apparent were further improvements to the engine cooling features! Additionally, total fuel consumption for the entire three days of the Begonia Festival long weekend was estimated at only 2¼ gallons (10.2 litres)!

OPPOSITE:

Top: Grip car 593 and trailer 171 passing over the level crossing near the depot and into South Gardens Reserve towards Wendouree Parade.

Centre: Grip car 593 and trailer 171 have left South Gardens Reserve and are turning across Wendouree Parade on their way to Gardens Loop near Lake Lodge. The flagman has held up road traffic to allow the set uninterrupted progress. The straight track leads to 'Cannon Hill' curve and the Society's Carlton Street terminus.

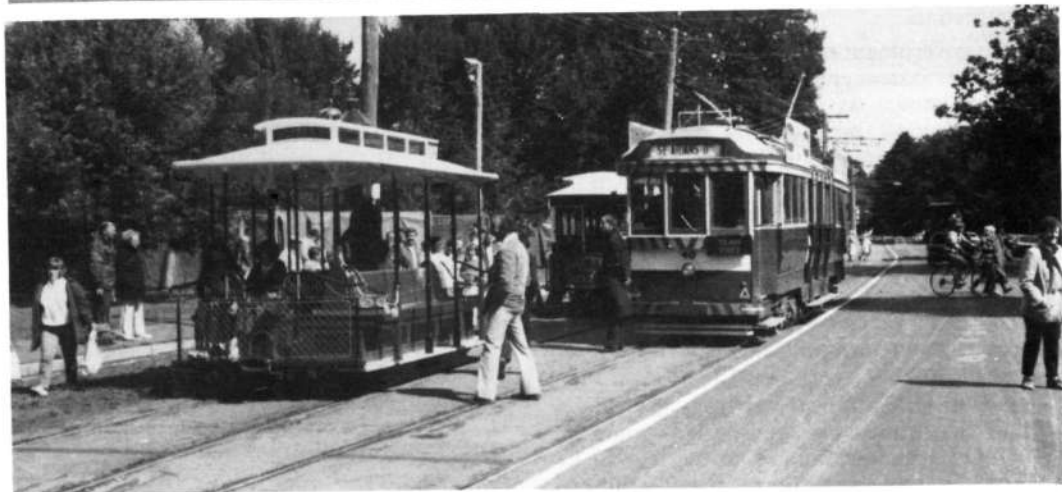
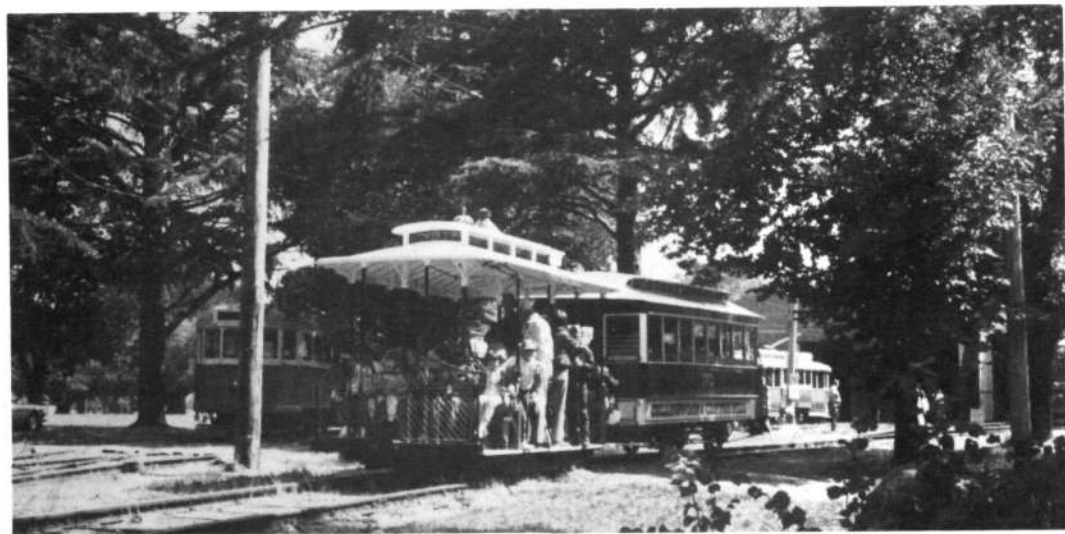
Bottom: Cable grip car 593 has dropped trailer 171 and will wait for electric car 40 to continue straight on to St. Aiden's Drive terminus, before running wrong road round the loop to change ends.

ALL WILLIAM F. SCOTT

Ballarat looks forward to the opportunity of further operations on other special occasions.

Plans exist to continue running car 593 on various museum and other tracks, perhaps, often with trailer 171.

Grip car 593 is a magnificent and ingenious conception making a tremendous contribution to tramway preservation and the middle history of Melbourne.



PASSENGER STREET TRANSPORT IN NEWCASTLE, N.S.W.

by Ken Magor

July 1987 marks the centenary of the opening of the Newcastle to Plattsburg steam tramway. Since 19 July 1887 the trunk street transport needs of passengers have been provided by State Government services in Newcastle.

Since 1977 *Trolley Wire* has been publishing a definitive history of the Newcastle Tramways in progressive parts. To mark the centenary we present here a brief account of the passenger transport scene from the 1860's to the 1960's. This was prepared by Ken Magor in the late 1960's and provides a background for our definitive series.

Newcastle has seen many forms of local passenger transport over the last 120 years. In the 1860's the Newcastle Wallsend Coal Company provided a railway passenger service, as an act of grace, for the fast expanding residential population in the twin towns of Wallsend and Plattsburg. The company attached a passenger carriage to its coal trucks but a regular timetable was not provided.

Horse buses were prominent in Newcastle during the 1890's and early 1900's. These were mostly open topped double deckers hauled by four to six horses while single deckers were handled by two or three horses. These vehicles were gradually replaced as the motor age progressed. By the 1920's Newcastle was served by various types of motor buses ranging from the toast rack charabancs to fully enclosed bodied vehicles carried on solid rubber tyres and using carbide lamps for illumination.

The government operated steam trams from 1887. This system employed an enclosed steam engine (known as a steam motor) hauling trains of toast rack trailers. This mode of transport continued until the early 1930's being gradually replaced by electric trams from 1923. The electric system was gradually replaced by motor buses from 1938, the last electric tram being withdrawn from the streets in June 1950.

The taxi cab system operating today dates back to the Hansom Cab. This was a two wheeled, rubber tyred, vehicle drawn by a single horse. Entrance was from the side or front according to the design and the "cabby's" seat was situated at the rear of the vehicle, in a position exposed to all weathers.

Hansom Cabs

During June 1868 Mr Joseph Hollinshead became the proprietor of two neat and elegant cabs which were available for hire from Hunter Street.

During November 1868 the first Hansom Cab was constructed in this northern part of the State. The *Newcastle Chronicle* reported:

"We had the pleasure of inspecting this very creditable piece of workmanship at the establishment of Mr. George Corby, coach-builder and wheelwright of Hunter Street. It was made to the order of Mr. John Robinson. The vehicle appears equal in every respect to similar vehicles made in larger Sydney establishments. It is elegantly finished and presents a very smart and dashing appearance. The hood, technically termed a "social hood", is a very pretty shape surpassing in that respect any of the cabs now running in Newcastle. The vehicle was thrown open for public inspection and the cost was stated to be from £90 to £100. (\$180 to \$200)."

The Council of the Municipality of Newcastle was the controlling body for local transport and all licences and fares for public vehicles were dealt with, while the council located public stands for such vehicles. It is noted that in 1919 one of the "stands" for taxi cabs was in the centre of the roadway in Bolton Street, Newcastle between Hunter and King Streets and "not more than 8 cars shall be on the stand at one time".

Motor bus stands were in Telford Street and in Perkins Street as directed by the Traffic Inspector from time to time.

Fares for the horse drawn cabs were:—



A double deck Waratah horse bus and a single deck Carrington vehicle provide viewing platforms for an "8 Hour Day" (Labour Day) procession in Hunter Street at the Brown Street corner. This view possibly dates from October 1907.

K. MAGOR COLLECTION

1. For a cab at any time not exceeding one quarter of an hour, to carry two passengers if required by the hirer; 1/- (10¢).
2. For every subsequent quarter of an hour or part thereof; 1/- (10¢).
3. But if engaged for more than an hour, then to be paid for at the rate of 9d for every additional quarter of an hour or part thereof.
4. For as much of every drive by time or distance as may be performed by cab after 10 o'clock at night and before 5 o'clock in the morning, an addition of half fare shall be paid with such ordinary fare.

Fares or rates charged to persons hiring licensed motor cars (later known as taxis) within the municipality were set out on a map showing coloured areas marked A, B, C and D. Each letter signified a particular area and

the map, with a table of fares, was issued to applicants for licenses.

In June 1932 the last horse drawn cab gave way to the motor age when Dick Probert exchanged the reins for a steering wheel of a taxi and turned his faithful friend "Teddy" for 17 years into green pastures. Dick and Jack Nash were also some of the last "cabbies" and, like many others of this calling, moved with the time by becoming taxi proprietors.

Horse Buses

Many were the proprietors of the "Yankee" horse drawn buses which formed the nucleus of regular transport services in the Newcastle district. Dick McAuliffe operated a "Livory and Bait" stable in Pacific Street where the nurses' home now stands. He was a great lover of horses and bought only those with a good blood strain.

The Newcastle to The Junction bus was a familiar sight being hauled by his team of skewbalds, having, as their leader, a thoroughbred called "Sir Salomons". Mr. McAuliffe's horses were never known to knock up on a ting several trips between Wallsend Railway Station and the Racecourse. McAuliffe was their vehicles and loads to Wallsend Racecourse. On Easter Monday 1908, after operating several trips between Wallsend Railway Station and the Racecourse, McAuliffe was informed that about fifty people were stranded at Swansea as a result of a storm. Without resting his horses, two buses were sent there to collect the crowd and on returning to Newcastle every horse was still stepping high although they had not been out of harness for nearly twelve hours.

Wallsend in the 1870's was served by a large chain of horse bus services. The main operator was the James family who, prior to the advent of the motor age, owned a fleet of 40 buses and 200 horses. Mr. Peter James Snr. operated between Newcastle-Wallsend-Minmi prior to the arrival of the steam tram in 1887. These bus services were then operated by his son Tom from their Wallsend depot to West Maitland. Branch services were developed to Cockle Creek Station, West Wallsend to Killingworth, Young Wallsend to Minmi.

Alternative transport from Minmi at that period was by means of a carriage attached to the private coal trains as far as Hexham, where the government train could be joined for Newcastle. On Sundays a horse drawn tram worked between Minmi and Hexham on picnic trips. This tram was a flat top trolley and jolted passengers along at 8 km/hr.

In the motor bus era many of the James routes were served by Linsley Brothers fleet of single and double deck blue and cream buses.

The suburb of Hamilton was also served by regular horse bus services. Mr. Thomas Tudor operated the first omnibus service to Newcastle. By 1867 he worked a bus for hire between his hotel, "The Agricultural" in Denison Street to the city. By 1875 he ran four buses providing a half hour frequency.

Before a bus service was introduced, the A.A.Coy. (Australian Agricultural Coy.) permitted a loco and several open trucks to run on Sunday mornings for the convenience of churchgoers. The engine driver collected the fares.

James Cameron also operated buses from the Queens Arms Hotel in Hamilton to Newcastle. The fare cutting which resulted from this rivalry prompted Tudor and four other bus owners to pool their resources to form the Northumberland United Omnibus Company. The company's new stables were erected at the rear of Tudor's Hotel facing Bridge Street Hamilton. The other bus owners who joined this venture with Tudor were James Cameron, Peter James (All Nations Hotel, Carrington) and James Norrie (Cross Keys Hotel, Tighes Hill).

The company was dissolved in 1879 due to the competition caused by the Waggonettes, Albert cars and phaetons. Tudor and Cameron continued running horse buses to Newcastle for 6d (5¢). With the introduction of the steam trams in 1887 Hamilton became the first section on the Plattsburg route with a fare of threepence (2¢) from Newcastle. The bus owners could not compete with this and diverted their fleets to other routes.

In 1879 a Mr. Hubbard placed a new bus carrying 12 passengers on the long Newcastle to Lake Macquarie route with John Arkins as driver. Charles English opened a service between Elizabeth Street Tighes Hill and Ordinance Street Newcastle; Baileys operated a two horse single deck bus to Carrington with its terminus at The Family Hotel; Mr. G. Durham ran a three-in-hand single decker from Lambton to Wallsend in 1898; Mr W. Scott worked a sixty passenger double decker named "Pioneer" from West Wallsend to Wallsend in 1908 for miners from Monday to Friday and for general passengers on Saturdays.

The suburb of Waratah was not served by a regular service until the advent of the steam tram in 1915. Motor buses appeared after World War I, but Mr. James Stewart, a blacksmith of Station Street, Waratah ran a horse bus to Newcastle. As the journey was a long haul residents of this suburb preferred to travel by train.

The bus station in Newcastle was at the corner of Watt and King Streets. By municipal regulations of that period, the drivers were compelled to walk their vehicles to the foot of Watt Street due to the density of other wheeled traffic. The inspector in charge would shout departure warnings to the horse bus drivers such as "Tighes Hill — 3 o'clock — off you go" and "All aboard for Hamilton" etc. He



Private buses pass in Hunter Street near Thorn Street, circa 1921. From 1919 tram tracks were progressively constructed along Hunter Street between Perkins and Pacific Streets in preparation for the electrification which occurred in December 1923. This newly constructed, but not yet used track, can be seen in this photo.

V. SOLOMONS COLLECTION

also answered queries from prospective passengers.

As the roads of that period were only sandy tracks out of the city area, great credit must be given to the drivers in the manner which the spirited horses were handled, especially when racing a rival bus.

Letters were regularly written, however, to the local newspapers expressing complaints. A columnist of 1868 wrote this comment:—

"Twenty minutes from the A.A.Coy. bridge (Perkins Street) to the Belview Hotel, Wickham (Bank Corner, 1.6km) is considered by the bus drivers to be smart work. Why, funeral coaches do the trip in less time without hurrying. It is not a case of weak horses but of busmen being unable to pass a pedestrian without regarding him as a potential fare."

Motor Buses

Motor bus records in Newcastle indicate that a Mr. Gee commenced a service from the

old Hamilton Council Chambers, Beaumont Street, via Tudor and Hunter Streets to Newcastle Hospital in 1918.

George King operated the first motor bus to Tighes Hill. His four buses were named "Delunga", "Denoga", "Denega" and "She'll Do Us". The drivers wore dust coats, cloth caps and leather gloves. After pioneering this route, it was extended to Mayfield East. These buses were powered by Jeffery engines, a manufacturer which was taken over by the Nash Motor Company in 1917.

The 1920's was a period when a large number of private bus operators extended routes like spider webs throughout Newcastle.

Varied names were given to the early private motor buses, these being painted on the side of the body. Some of the names carried in the Newcastle district were: "Adelaide", "Canberra", "Newcastle", "Endeavour", "Jazz", "Britannic", "Sunbeam", "Salitros", "The Wattle", "Laddie Blue", "Red Cardinal", "West-

ralia", "The Arcadia", "The Marathon", "The Victory", "Olive May", "Excelsior", "Gloaming", "Minerva", "Irresistable", "Cooee", "Lily White", and "Pakeha".

Owing to the large number of buses operating in the district, the proprietors formed the Newcastle Motor Omnibus Association on 16 May 1922.

At one time during the late steam tramway period there were 53 buses operating in Newcastle but with the advent of the electric tram in December 1923 this number was gradually reduced. By 30 September 1946 a total of 65 private buses were in service, but this included outlying runs such as Tea Gardens and Bulladelah.

The majority of owners in the 1920's commenced with a standard vehicle, mainly a 30cwt International chassis carried on solid rubber tyres. Kents, the removalists from Waratah operated Model "T" Fords. When these were not required for carrying work, seats would be placed inside the body for passengers.

On 22 August 1935 the Department of Road Transport and Tramways took control of two Newcastle bus routes in the Mayfield area. These continued to be operated by Fogg's Motor Service on behalf of the government until 20 September 1936 when the first government vehicles entered service.

Tramway System

Owing to the large residential population in the twin mining towns of Wallsend and Plattsburg situated 14km west of Newcastle, the Wallsend Coal Company was forced to provide a passenger carriage on some coal trains. In spite of public traffic interfering with their coal haulage the Wallsend Company had to appoint an officer at Wallsend station to supervise the goods and passenger business in 1869.

Although the Government tried to force the Company to operate regular passenger services in 1875 the effort was only partially successful. Passengers were only carried when the mines operated, while there were periods when passengers were ignored entirely.

The success of the new steam tramways in Sydney, which had been introduced in September 1879, attracted the attention of Newcastle residents. Not only for local city traffic but as a solution to the transport problems of Wallsend and Plattsburg.

A survey was conducted in 1883 for a direct steam tram route from Newcastle to Plattsburg. The tender of Messrs. Johnson and Billings was accepted in March 1886 for the construction of the 12km route at a cost of £30,885 (\$61,770).

The first documented trial run took place on 1 July 1887 when a steam car traversed the city end of the tramway from the Perkins Street terminus to Honeysuckle. Various operating difficulties emerged over the next two weeks causing the opening date to be postponed. Public service was finally introduced with the 6.30am departure from Newcastle on Tuesday July 19, 1887.

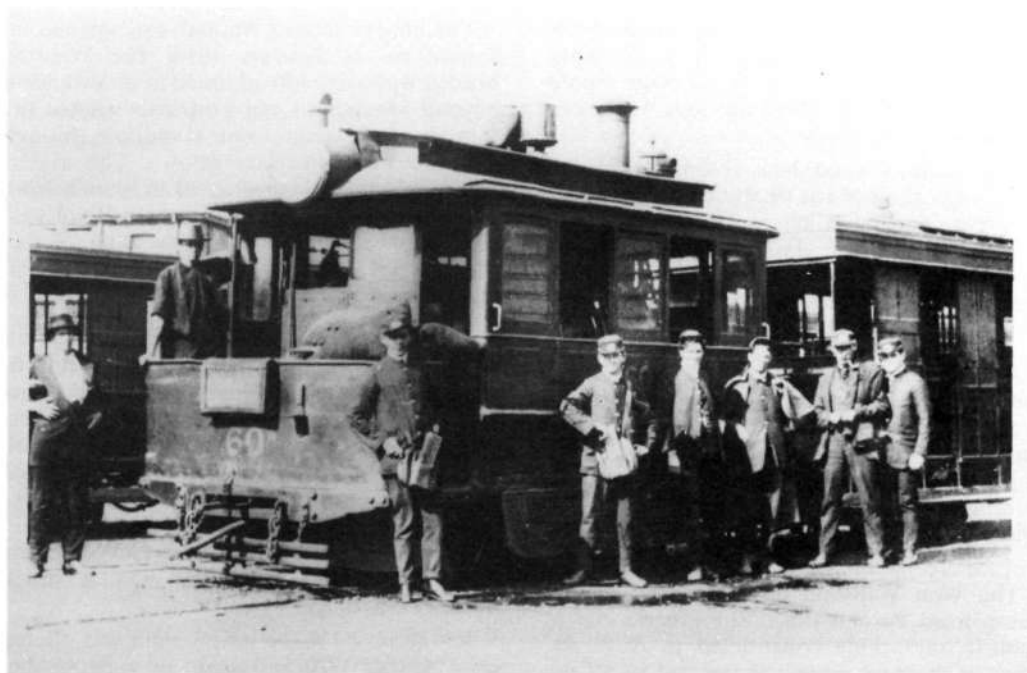
The first week of service was plagued with mechanical failures in the self-contained steam cars as well as derailments. By the first weekend, however, the timetable was being worked with a certain degree of reliability but it was not until October 1887 that the problems were solved and other suburbs were clamouring for tramway extensions.

The initial motive power consisted of long self-contained steam vehicles. The vertical boiler and running gear was mounted on the leading four wheel bogie while the rear trailing truck was situated under the four enclosed compartments in which ten passengers were seated on transverse wooden benches, resulting in 40 seats in the entire car. These six cars had been introduced on the Sydney tramways during the 1883-84 in a double deck form. These proved unreliable in Sydney but were expected to be suitable on the generally level Newcastle terrain with the top deck removed.

Reliable operation only resulted in Newcastle when the first two self-contained steam motors hauling enclosed cross bench trailers were despatched from Sydney.

Prior to the opening of the Hawkesbury railway bridge in May 1889 rolling stock transfers between Sydney and Newcastle were made by sea. After the completion of the through railway connection the transfer was made by rail. In most instances the steam motors hauled the passenger cars along the rail tracks but if the steam engines were in need of major repairs the transfer was carried out on railway well wagons.

Originally the tramway system was under the control of the Railway Department with Mr. John Higgs as Traffic Manager, Mr. Harry



Steam motor 60A is awaiting departure time for a trip to Lambton at the Parnell Place terminus. Circa 1915.

K. MAGOR COLLECTION

Edwards as Traffic Inspector, Mr. E. Thompson as Locomotive Inspector and Mr. George Bewick in charge of the permanent way. In 1893 the service was brought under Tramway Department control with Mr. W. Murray as Traffic Officer and Mr. George Downes as Locomotive Superintendent. In 1910 Mr. N. Munro became the first District Tramway Superintendent.

During December 1893 the Newcastle tramway was extended through the city along Scott Street to a new terminus at Parnell Place adjacent to Newcastle Beach. Motor and car sheds, offices, fuel and watering facilities were provided at this new terminus, then known as Gaol Hill. These became the nucleus of the large cluttered depot complex which expanded over the site creating an eyesore from the beach until demolished during 1927.

Repairs were carried out at Honeysuckle Point Railway Workshops as well as Parnell Place. Major work, however, was conducted at Randwick Tramway Workshops in Sydney.

From 1894 until 1910 tramway extensions in Newcastle were constructed as branch lines to the main trunk route between Parnell Place

and Plattsburg. These lines opened for service on the dates shown below:

Union Street Junction to Merewether (Glebe) — 19 April 1894

Hannel Street Junction to Tighes Hill - 19 April 1894

Adamstown Junction to Adamstown — 13 August 1900

Tighes Hill to Mayfield — 11 January 1901

Darby Street Junction to Patrick Street — 3 November 1902

Patrick Street to Merewether Beach — 21 September 1903

Adamstown Junction to Racecourse — 27 April 1907.

Between 1902 and 1904 most of the track on the Carrington Tramway was constructed. This branched from the Hunter Street line at Denison Street east of Union Street and crossed Throsby Creek on the Denison Street Bridge. From May 1902 until July 1904 a major argument raged as to the method which should be employed to carry the Carrington Tramway across the five railway tracks in Cowper Street. Until 1908 this railway served the coal loading facilities at The Dyke. It was

feared that a level crossing would be continually blocked by slow shunting coal trains, while the proposed overhead bridge would block off the main shopping area in Young Street.

The tramway stood disused until September 1912 when the service finally opened using a different connection across Throsby Creek to a junction with the Hannell Street tramway. The outer end of the 1902 route was used but the portion between Hunter and Cowper Streets was never commissioned!

A long end-on extension beyond the Wallsend and Plattsburg terminus was opened to West Wallsend on 19 September 1910. At this stage the inner Newcastle collieries were approaching the stage of exhaustion and mining activities were being transferred to the Wallsend-West Wallsend-Lake Macquarie area and the South Maitland fields.

The West Wallsend terminus was situated 26km from Parnell Place, the longest city to suburb tram route constructed in Australia. Most of the new route was situated in off the street locations. At two points considerable ranges had to be crossed requiring the line to snake along contours to keep within the 1 in 30 grade limitations.

A long branch opened on 15 January 1912. This left the West Wallsend line near Young Wallsend (Edgeworth) and served the picnic grounds at Speers Point on Lake Macquarie. Not only did this tramway provide easy access to the Lake for recreation traffic from the West Wallsend and Wallsend districts, it also provided a local feeder service to Cockle Creek station on the main Newcastle to Sydney railway.

The standard fuel for the steam motors on the Newcastle system was coke but due to the open nature of the routes beyond Wallsend and the freedom from smoke pollution complaints, coal was used to West Wallsend and Speers Point.

Following the opening of the Carrington tramway in 1912 only two further major extensions were carried out in Newcastle.

The Port Waratah extension from the Carrington and Hannell Street route opened in two stages: to Maryville on 20 July 1914 and to the terminus on 18 December 1916. This served the new steel works constructed by the Broken Hill Proprietary Company.

The long-promised Waratah line opened for service on 21 January 1915. The Waratah branch was originally planned as an extension beyond Mayfield. Later proposals wanted the tramway to extend from Hamilton through Gregson Park and Georgetown. The undertaking was finally constructed to branch from the Wallsend tramway in Lambton Road west of Broadmeadow station thus avoiding another major level crossing with the Government Railway.

The inner end of the 1902 Carrington tramway was not the only section of line in Newcastle constructed but never used. During 1919 an extension to the Port Waratah line was built to the Walsh Island Ferry Wharf. The project required major embankments and a long bridge to cross the industrial railways near the steel works. The Walsh Island employees refused to use the tramway as the direct ferry into Newcastle was a much cheaper alternative.

It is recorded that a tram service was offered on 2 August 1920 and again on 6 September 1923 but as there was no patronage the project was abandoned and the track lifted during 1933.

The conversion of the Newcastle steam tramway to electric traction was a gradual process.

The official opening of the initial electrification to Mayfield on 15 December 1923 attracted thousands of people to the Hunter Street Post Office where the Mayoress of Newcastle, Mrs. Cornish, cut a green and brown ribbon stretched across the track. This was repeated at other locations along the route where the tramway crossed municipal boundaries.

The original Mayfield tramway crossed the Northern Railway on the level at Hannell Street and traversed Albert Street, Wickham before joining Maitland Road. The electric line was diverted along Hunter Street West and crossed the railway on a realigned "High Level Bridge" in Maitland Road.

Between 1923 and 1926 electrification of the inner steam lines opened for public traffic on:

Broadmeadow	14 April 1924
Merewether Beach	27 July 1924
Glebe	2 November 1924
Adamstown	2 February 1925
Waratah	6 April 1925
Lambton	24 May 1925



Electric tramcar LP270 bound for Mayfield departs from the Scott's Corner stopping place in Hunter Street. Circa 1930.

V. SOLOMONS COLLECTION

Racecourse	14 November 1925
Wallsend	26 December 1925
Carrington	15 August 1926
Port Waratah	11 October 1926

Although plans were prepared for the electrification of the long West Wallsend and Speers Point routes beyond Wallsend, this was not performed. Industrial problems, which erupted on the coal fields during 1929, lead into the economic depression. The rapid decline in patronage caused the steam lines beyond Wallsend to be closed to regular traffic on 2 November 1930. The replacement private buses experienced problems carrying the Speers Point traffic on public holidays. This was solved by reintroducing steam trams between Cockle Creek station and Speers Point on public holidays until May 1932.

Although a minor extension of the Adamstown tramway was opened on 26 August 1938, a programme, which would result in the gradual conversion of the Newcastle system to omnibus operation, was launched later that year. The Carrington and Port Waratah routes, which crossed the main railway line at Hannell Street, Wickham, closed on 20 November 1938. World War II interrupted this

conversion project but with the return of peace the remaining seven routes were taken over by omnibuses between 1948 and 1950:

Mayfield	26 September 1948
Wallsend	5 November 1949
Merewether	25 February 1950
Glebe	25 February 1950
Racecourse	10 April 1950
Adamstown	16 April 1950
Waratah	10 June 1950

(These dates are the last day of full tramway operation.)

The Last Tram

At 1.49am on Sunday 11 June 1950 LP car 147 left the city terminus of Telford Street, after returning from the last Waratah trip, on the final journey to Hamilton Depot. At 5.30am on that same morning, the first Waratah bus departed on route 227 bringing to an end 63 years of tram services in the Newcastle district.

Mr. John Clayton claimed the honour of driving the first Newcastle tram in 1887. Jerry Frome drove the last tram to Waratah accompanied by Conductor J. Robertson.

Rolling Stock

On the eve of the conversion to electric traction in 1923, the steam rolling stock in Newcastle consisted of the following items:

Steam Motors	56
Steam Trailers	120
Hearse Cars	2
Water Sprinklers	2
Ballast Cars	11
Gas Tank Car	1
Electric Trailer Breakdown Car	1
Cable Trailer Breakdown Car	1

Between 1915 and 1920 six 70-seat N type Sydney electric trams had their motors removed and were used in Newcastle as steam trailers during the peak periods such as Newcastle Cup Day.

By 1926 the passenger car roster, consisting entirely of 70-seat LP tramcars, reached its maximum:

LP type electric trams	98
Hearse cars (ex steam traffic)	2
Track scrubber cars	2
Breakdown car (C type)	1
Haulage cars (C type)	4
Electric sprinkler cars	2
Electric ballast trailers (ex steam traffic)	2
Reciprocating grinder car	1

The items of rolling stock were housed in various depots during the 63 years of tramway operation in Newcastle:

Perkins Street Shed	1887-1923
Parnell Place Depot	1893-1927
Wallsend Shed	1910-c.1934
Hamilton Steam Shed	1917-1923
Hamilton Depot	1923-1950
Ivy Street Per Way Yard	1912-1950

An unique operation on the Newcastle tramways was the funeral service. Two hearse trailer cars with a capacity of three coffins were available for hire at a charge of 15/- (\$1.50) from locations beyond Wallsend and

for 10/- (\$1) on the inner routes east of Wallsend. The hearse was attached to the rear of the tram in which mourners travelled for an ordinary fare.

The majority of funeral hirings were to Newcastle or Honeysuckle stations where the mourners would alight while the pallbearers carried the coffin to the funeral train bound for Sandgate Cemetery. The last funeral hearse hiring was made in June 1946.

At its maximum extent between 1923 and 1930 the Newcastle tramway routes amounted to 35 miles (58km). The Newcastle office was also responsible for tramway operations on the Toronto (1910-1911) and Morpeth (1893-1913) branch railways as well as the Maitland street system (1909-1926). These workings added a further 10 miles (17km) to the total.

During October 1958 the last major lengths of tram tracks were removed in Darby Street on the Merewether Beach line. The rails were shipped to Japan as scrap on the S.S. *Delos*.

Although some of the electric trams were broken up at Hamilton Depot, many were sold for use as sheds and sleep outs. Cars 327 and 284 have been retrieved for restoration in recent years and the return of 284 to running order by the Newcastle Tramway Museum is approaching a successful conclusion. In addition the Museum of Applied Arts and Sciences in Sydney (Powerhouse Museum) has restored hearse car 27S, the Steam Tram and Railway Preservation Society at Parramatta Park has preserved Newcastle steam tram trailer 74B while the Sydney Tramway Museum at Loftus has the reciprocating grinder No. 2 in their fleet. Steam motor 103A, which worked at Newcastle for a period prior to World War I, also operates on the Parramatta Park Museum tramway.

Although the Newcastle government bus service has expanded well beyond the former tram routes, many of the inner omnibus runs still follow old tram workings.

Errata and Corrigenda

December, 1986 Issue

Page 15 — Second line of news in box should read

"Australia Post's proposal to discontinue...", No decision has yet been made.

Page 27 — Lower photo caption should read "Hyde Park/Colonel Light Gardens route..."

February, 1987 Issue

Page 14 — 1st paragraph, 8th line should read "November 1958..."

Page 31 — 'Glenorchy News, 2nd column' 7th line should read "transport museum architecture..."

Page 38 — 1st paragraph, 6th line should read "poles 54 and 55..."

LEYLAND TIGER TURNS 50

By D. O'Brien

The SPER's Leyland Tiger half-cab single deck bus reached fifty years of age in February 1986. Number 275, registered as M/O1275, entered service on 11 February 1937 and is representative of the single deck vehicles used in Sydney and Newcastle between 1934 and 1953. The bus was sold to Kuringai Bus Company in Sydney's northern suburbs for further service during 1952 until purchased for preservation in 1970.

The Leyland Tiger TS7 was built for the Department of Road Transport and Tramways by Waddingtons in 1937. It has a six cylinder diesel engine and constant mesh gearbox, is 29ft 2in (8890mm) long and weighs 7½ tons (7.62 tonnes). The bus has clocked over 1.5 million miles and emerges from its well earned retirement only on special occasions.

The vehicle emerged from storage twice during January 1987. The first occasion was for the annual 'Motorfest' held at The Rocks, on the western side of Circular Quay, as part of the Festival of Sydney celebrations. 275 was displayed with buses owned by SPER members and the Historic Commercial Vehicles Association. Dozens of vintage and veteran cars were also on display, with street stalls, jazz bands and other entertainments making a festive occasion.

At the conclusion of the display 275 was taken to a private bus depot at Gladesville,

owned by SPER member Ken Butt. Here work was carried out on the rear emergency exit door under Ken's supervision. The bus was also prepared for passenger working on the Australia Day weekend, 24-26 January.

On Sunday 25 January M/O1275 took part in a free historic bus service in conjunction with the HCVA preserved bus fleet of former private and Government buses. The service commenced at Hyde Park from the Elizabeth Street stop near Market Street. The route followed was from Hyde Park to Circular Quay, The Rocks, Pier One and the Power House Museum at Ultimo before returning to Hyde Park via George Street and King Street.

The day proved to be a great success and many passengers recalled their experiences in riding similar vehicles to school or work. It was a rewarding time for our bus crew.

On Monday 26 January 275 was again used on the free bus service, this time running from Hyde Park through The Domain to Mrs. Macquarie's Point. Single deck buses only were used on this run due to overhanging trees along the route. One HCVA vehicle of interest operating with 275 was the first production run Leyland Tiger underfloor bus, M/O2701.

Both operating days saw the bus operated by SPER members and special thanks are extended to Ken Butt for his assistance and support with our Motor Omnibuses.

The Leyland is again in retirement, stored under cover at the HCVA Museum housed in the former Tempe Tram Depot.



Leyland 295 at Mrs. Macquarie's Chair on Monday, 26 January 1987. Driver Ken Butt is about to take the bus on its last trip of the day.

DENNIS O'BRIEN

OBITUARY

Thomas, Cedric Blake, 1911-1987

It is with extreme regret that we announce the death of Rev. Cedric Thomas. He passed away quietly on 18 February at the age of 75. Cedric was an active tramway and light railway historian from the late 1920's and was in the fortunate position to have travelled on the Maitland and Broken Hill steam tramways as well as to witness peak operations during that period of maximum development of tramway and light railway activity in Australia.

Cedric Thomas was born on 16 July 1911, the second son of Mr. and Mrs. Cecil Thomas of Thornleigh, NSW where his father was the manager of the Normanhurst Brickworks.

He obtained his initial schooling at Highfield Preparatory School and then attended Barker College near Hornsby from 1923 to 1928. In 1929 he entered employment on the clerical staff at Dalgety's.

Through the encouragement of the late Arch Deacon R. B. S. Hammond, Cedric Thomas decided to make the church his calling and he entered Moore Theological College at Newtown during September 1933. He withdrew prior to completing the two year course and finished his theological studies privately. A fellow student at Moore College was Rev. Eric Champion. Cedric had visited the home of Rev. and Mrs. Champion on the evening of 18 February and passed away on the Bondi Junction train while returning home.

During 1936 Cedric Thomas became the catechist at All Souls' Church of England at Leichhardt under the late Rev. Leyland Parsons. He served in this capacity until 1959.

Cedric then owned a house at Hurlstone Park and two of his early boarders were Len Manny and well known ARHS historian the late Mal Park. Through the encouragement of Malcolm Park, Cedric became a member of the Australian Railway Historical Society on 13 December 1937. He teamed up with various well known members to carry out research and prepare articles for the ARHS *Bulletin*. In addition he wrote the series *In and Around Sydney with the Steam Tram*. His research mainly centred on steam trams and light railways and over the years he amassed a large archives of books, photographs and maps. A

total of 38 cartons have now been deposited in the Mitchell Library while 8 boxes of material were given to the Steamtram and Railway Preservation Society.

Over the last ten years the *Trolley Wire* archives benefitted from Cedric Thomas' labours of six decades. He permitted his photos to be copied for use in this magazine while he contributed detailed information from his copious notes.

During 1952 Cedric Thomas was one of several members of the ARHS who attempted to form a "Steam Research Group" within that Society. Due to logistic problems in the ARHS the N.S.W. Steam Tramway and Railway Preservation Society was formed on 11 June 1954 with Cedric Thomas as the first President.

As a result of representation made by Rev. Tom McKnight, who was relieving minister at All Souls' Leichhardt in 1959, the Bishop of Tasmania appointed Cedric Thomas to the Smithton parish of the Anglican Church in Tasmania, a post he occupied for eight months. He was made a Deacon on 25 March 1960, ordained a Priest in 1961. During his service in Tasmania Cedric was attached to the parishes of Burnie (2 years), East Devonport (9 years) and finally St. Helens (7 years).



The Late Cedric Thomas stands beside Hobart Municipal Tramways car 40 at Moonah Depot during the 1950s.



The Late Cedric Thomas as he was best known . . . investigating a set of abandoned light railway points in a paddock.

In 1978 he retired from St. Helens and returned to Sydney on 29 March. He was authorised to continue his work in the Diocese of Sydney. He served in a relieving capacity at Woollahra, Glebe, Kingsford and Rose Bay as he lived in retirement at the Goodwin Retirement Village at Woollahra. In later years

Cedric's interests mellowed a little towards electric trams and main line trains, and during his last decade he made frequent visits to the Sydney Tramway Museum at Loftus and the N.S.W. Rail Transport Museum at Thirlmere.

On 29 November 1975 Cedric was made a Life Member of the STRPS in appreciation of his life's work in this field.

The funeral service was held at the Northern Suburbs Crematorium on 25 February where Rev. Tom McKnight performed a fitting service. The departing function was well attended by Cedric's sister, nephews and nieces while friends from his church associations and the tramway and railway fields were present.

A special memorial service was also held by the Rev. David Davies at All Saints Woollahra on 1 March.

Although Cedric's fellowship will be sadly missed, the fruits of his research will live on through his large collection deposited in the Mitchell Library and his contribution towards definitive articles which will appear in *Trolley Wire* and other publications in the future.

— Frank Moag

HERE AND THERE

NEWS ITEMS OF INTEREST FROM ALL OVER

Walsh Bay Tramway

The New South Wales State Government is considering a proposal to reintroduce a tram service to Sydney. Public Works Minister Laurie Brereton confirmed on 23 February 1987 that he was keen to see a tramway linking Circular Quay with Walsh Bay, which is to undergo a \$400 million facelift. The redeveloped Walsh Bay area would include restaurants, shops, offices, hotels, residential units, plazas and waterside walkways.

The proposed tram service would commence at Circular Quay and run along George Street North through The Rocks, already a busy tourist area, to Hickson Road. It would follow Hickson Road around Dawes Point and terminate in the Walsh Bay area.

Mr. Brereton rejected the tram proposal to take visitors from the city to the Darling Harbour development but said that trams were much more suited to the Circular Quay/Rocks area because the streets were wider and the traffic flow was unlikely to be disrupted. The plan will have the Minister's support if it can be shown that trams can be restored to The Rocks and Circular Quay at no cost to the taxpayer. It would be up to the successful tenderer for the Walsh Bay project to determine how quickly trams were introduced, but it is understood the Government is hoping the first trams will be running by 1989.

Four companies have been short-listed for the Walsh Bay project and originally only two of those companies included proposals to

include a tramway in the development. However, the Government is so keen on the idea of a tramway that it asked the other two tenderers to revise their plans.

The four companies are White Industries Ltd with Cooper-White, Ipoh Gardens Berhad (who successfully restored Sydney's Queen Victoria Building), Custom Resources International-State Bank, and Comrealty Ltd who are using well-known tramway enthusiast Norm Boxall as their tramway consultant.

Subsequently Mr. Stan Shorte, owner of former Sydney R1 class car 1995, has offered his tram for lease to the Minister for use on the project.

New Tram Route for Adelaide?

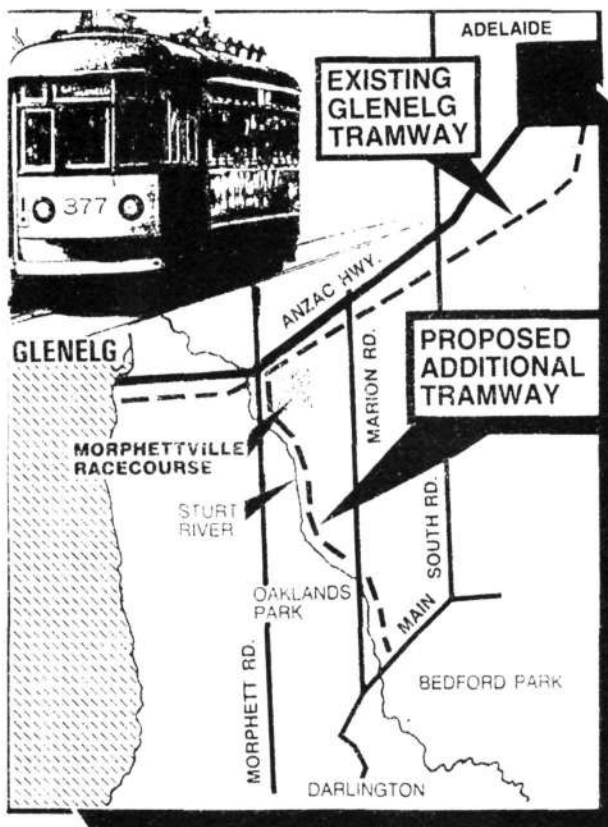
Plans to build a branch of the Glenelg tramline along Sturt Creek to Darlington are being examined by the South Australian Government. The Director General of Transport, Dr. Derek Scrafton, confirmed that plans for utilising Sturt Creek had been drawn up and the studies were being done to try to get an idea of costs. It is understood a branch of the Glenelg tramline, from Morphettville to Darlington, would cost between \$50m and \$60m.

One option is understood to be the replacement of the Glenelg tram route with an O-Bahn busway.

The enquiry was designed to provide information to help planners in determining Adelaide's transport needs in the 1990's. The financial resources available were such that any very expensive transport system was difficult to contemplate.

While an assessment was under way, work on a new system could not begin until the O-Bahn busway to the north-eastern suburbs was finished at the end of 1988. Examination of alternative transport alignments between Adelaide and the south-western suburbs revealed the alignment along Sturt Creek was obviously under-utilised. If it were used as a tram corridor, it would provide a better utilisation of the existing tram track.

Parking could be provided in the Sturt triangle enclosed by South Road, Sturt Road and Marion Road. There would be room to run a transport service parallel to the Sturt Creek without covering the creek, although some road crossings could present problems.



MAP COURTESY THE ADVERTISER

The Opposition transport spokesman said the Liberal Party had proposed three years ago to extend the O-Bahn system to the southern suburbs utilising the Glenelg tramline. He stated that in the longer term it would also prove economically successful and far cheaper than a light rail system.

Macarthur-Menangle Tramway Proposal

A proposal has been put before the Campbelltown City Council to construct and operate an electric tramway from Macarthur railway station, on the southern outskirts of Sydney, south to Menangle Park to service existing and proposed recreational developments along Menangle Road. The existing developments include Campbelltown golf course, Glenlee House, the N.S.W. Steam Preservation Society's property and the National Equestrian Centre.

The promoters intend to provide a Sundays and Public Holidays service using ex-

Melbourne trams currently being withdrawn and hope to include four Adelaide H class cars at a later date. A feature of the service would be special access for wheelchair passengers. The trams would be painted in a special colour scheme similar to the uniform of John Macarthur, the famed settler after whom the district is named, whose portrait will appear on the tramway logo. It is intended to be a commuter line, not a museum.

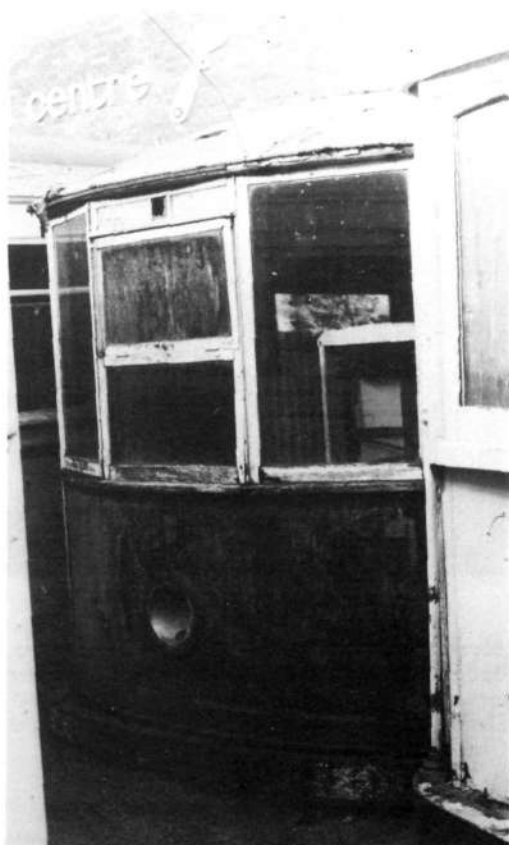
The line is planned to run adjacent to Menangle Road for most of its length (approximately seven kilometres). The promoters intend to construct the line with shale ballast, second hand rail and concrete sleepers. Construction would be financed by Government grants which will be secured by political lobbying by the promoting group.

Canberra

The Canberra Tradesmen's Union Club has obtained former Melbourne tram L102 for its collection. The tram is in excellent condition, and is complete with controllers and trolley poles. It is located at the rear of the club, mounted on W2 bogies with motors, and is standing on a short length of track.

Launceston single truck car No. 1 has also arrived at the club. All trams in open storage at the club have been moved since the photos in December 1986 *Trolley Wire* were taken, to allow for an extension to the club building.

There was an error in the list of trams at the club in the December 1986 issue of *Trolley Wire*. The former Sydney C class car at the club is No. 37, not 33: its move to Canberra from Parramatta Park was referred to in the June 1985 issue of *Trolley Wire*.



Above:
A glimpse of Launceston No. 1 at the Canberra Tradesman's Union Club.

Below: Melbourne L class 102 is on W2 trucks and stands on rail at the Club. Hobart bogie car 120 is under the tarpaulin at left.

BOTH DALE BUDD





Above: A view of two ex-Victorian Railways trams, a glimpse of a Sydney R class car, Hobart 120 under tarpaulins, Melbourne L class 102 and ex-Melbourne overhead poles in open storage at the Club.

Below: The end of Hobart 120. The car has been placed under cover to help prevent further body deterioration.

BOTH DALE BUDD



Port Kembla Museum Project

The feasibility study released during September 1986 recommended that the Port Kembla Industrial Museum should be established and that this should be a major unit in a promotion to be known as Illawarra Kaleidoscope. Under this promotion the various natural, man-made and pre-history attractions of the region would be linked in a tourist trail.

The report proposed the construction of standard reception kiosks at each major tourist location in which continual screenings of visual materials would explain the significance of that location. Other attractions in the tourist trail would be introduced while maps, posters, refreshments and souvenirs would be on sale. It seems that the first unit will be established at Bald Hill overlooking Stanwell Park where Lawrence Hargrave conducted his kite and aerodynamic experiments around 1900.

The Military Fortifications Group have been busy restoring the underground magazines and barracks at the Port Kembla Breakwater Battery which are situated on the 2 ha Industrial Museum site.

On 29 March 1987 details were released of the \$95,381 CEP grant awarded to the Port Kembla Museum Project Committee through the Illawarra Environment Committee and the Port Kembla Chamber of Commerce.

This will be used for two major projects:

- a. The restoration of the four storey signal station which contains two full size flats. During World War II the two top floors of this building were used as plotting rooms where the various batteries protecting the Port Kembla-Wollongong area were controlled. This building will contain the military history displays as well as the administration section of the first stage of the museum.
- b. The erection of a chain wire enclosure and a large restoration building in which the three W2 tramcars, as well as the standard gauge railway rolling stock at present at the ILRMS Albion Park Museum and other items will be stored.

In August 1986 the Museum Project Committee was informed that the large block setting steam crane, built circa 1898 by Sheldons of Carlisle and located on the shore end of the Port Kembla Eastern Breakwater, had been given to the Museum. The Museum site includes the railway tracks on the shore end of the breakwater and the steam crane will eventually be moved 50 metres into this area.

ElecRail News

The first piece of suburban rolling stock to be restored to operating condition by volunteers in

Victoria, 341T, a Tait trailer car built in 1913, made its first trip sponsored by ElecRail on 13 December, 1986 to Werribee (both ways), Dandenong and Essendon.

Victoria's 150th Anniversary restored Commemorative Tait Train (317M, 230D, 208T, 381M) operated in regular service on three weekends during its second season of Summer Sunday Holiday trips to the following destinations: 18 January, Epping and Hurstbridge; 25 January, Camberwell-Alamein shuttles; 1 February, St. Albans Railway Centenary. Despite two ElecRail volunteer officials being rostered in each car to oversee passenger behavior, a phantom vandal splashed graffiti in red paint over the interior of 230D on the Alamein branch. Fortunately the paint could be removed before it damaged the upholstery and varnished woodwork. The end of the use of Tait stock in regular service occurred on 5 February when 1470M and 1471M were withdrawn after a year's duty on the Overhead (wire) Lubrication Train which is now operated by two non-asbestos Harris motors, 794M and 797M. However, non-powered Tait 447M which lubricates the overhead wire with grease pumped through its pantograph is still included in the consist.

Swing-door motor 107M currently nearing completion of restoration is expected to be re-commissioned on 29 August. Other ElecRail tours for 1987 include: April 4, Double-header double-ender motors 1470M and 1471M to commemorate the Windsor Accident Centenary and also visiting Upfield, Sandringham, Glen

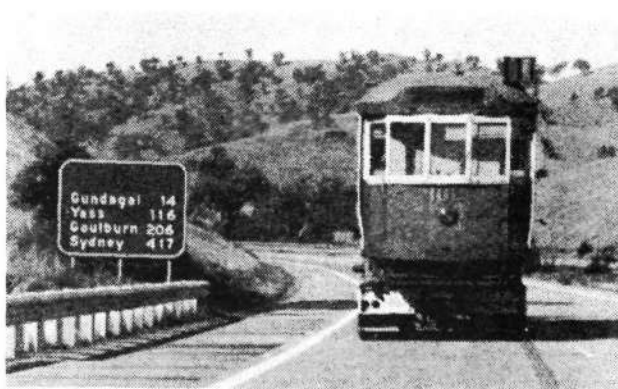
Victoria's 150th Anniversary restored Tait motor cars 381M and 317M in the 1936-58 Rose Red & Moonstone Grey livery cross the Cremorne Bridge over the Yarra River with the first piece of electric rolling stock restored by ElecRail, 341T, built 1913 and painted VR carriage Red, the 1958-84 colour scheme, on 13 December 1986.

JOHN DARE



Waverley and St. Kilda and Port Melbourne. Both the latter lines are fated for conversion to standard gauge light rail vehicle operation later this year. With the proposed phasing out of all L class electric locomotive hauled trains beyond Warragul to Traralgon after 5 July in favour of diesel locomotive operations it is anticipated that the overhead wiring will not be maintained over the latter section. Suburban multiple unit stock was scheduled to replace locomotive hauled commuter trains to Warragul on 16 February. ElecRail plans to sponsor a Tait Train to Traralgon and return, 316km on 30 May.

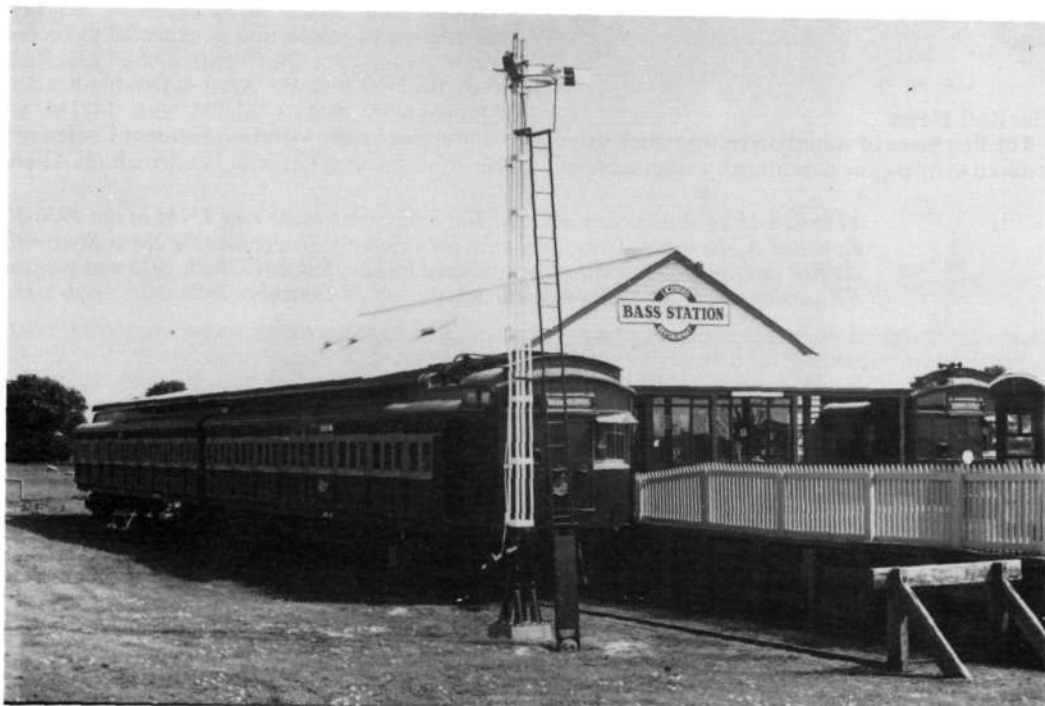
A group of enthusiasts is exploring the possibility of retaining an L class in operating condition.



On the Road to Gundagai

The accompanying photo of L 101 en route from Bylands to Canberra was taken by Tom Brassel, turf editor for Sydney's *Daily Mirror* newspaper just 14 kilometres south of Gundagai in southern New South Wales. Tom, who was returning to Sydney after the Melbourne

autumn carnival, was more than surprised at seeing a tram roaring along the Hume Highway at 100km per hour. Tom's inquiries failed to reveal the tram's destination but this has already been revealed to *Trolley Wire* readers on page 25 of this issue.



Although Bass, a few kilometres from the closed Nyora-Wonthaggi railway in south-eastern Victoria, never had its own railway station, the new Bass Station Restaurant creates a distinctive railway atmosphere. Diners have a choice of 388M, 203T or 243M painted in the 1936-58 colours of Rose Red and Moonstone Grey, with excellent interior restoration.

JOHN DARE

C.O.T.M.A.



Council of Tramway Museums of Australasia

From Bill Kingsley, Executive Officer,
COTMA

Parts Acquisitions

A story worth telling, and recording for history. For some time Keith Kings and Tony Smith have been enviously watching the steady growth of a small mountain of spare parts, obsolete, both perfect and damaged and all categories in between, in the north-east corner of the MTAV Preston Workshops.

On Monday, 10 November I made my first visit to the Workshops in my new role, to be greeted by the news that the whole mountain had suddenly been released for disposal by tender, applications closing the following Monday. A copy of the tender document (obviously aimed at the scrap industry) showed that tenders were invited per tonne of armatures, of motor cases, of compressors, of all sorts of COTMA needed things, things that were vital in order to bring other old trams back to life.

But how could COTMA tender on a per tonne basis? What would we do with all the damaged parts? How could we afford an unbeatable tender price? Overnight I pondered these problems until inspiration struck. Since the tenders were invited on a per tonne basis, perhaps no one really knew how many tonnes were there. Was there any chance that we could remove all that we needed at scrap value first? All that remained could still be provided to the successful tenderer on a per tonne basis.

So, next day, I phoned Keith Allender, our contact at the Workshops, who, it transpired, had come up with the same idea. My call was then transferred to Les Jean, the Workshops Manager, who readily agreed to our proposal. Fantastic! We had until the weekend to act.

Immediately Telecom started to do brisk business between Melbourne and Ballarat, starting with a call to Tony Smith at Haddon exactly as he walked in his door on a rest break from work. In very smart time a jubilant Tony had organised a rental truck and two

willing helpers in John Withers and Arthur Ireland. By the weekend some 8 to 10 tonnes of wonderful parts resided safely at Bylands, a most satisfying accomplishment.

Thanks Tony, John and Arthur for an outstanding contribution, though I guess you enjoyed the opportunity immensely. Real thanks to my Mum who acted as telephone co-ordinator (you try getting a shift working train driver and a TAFE teacher on opposite ends of the same STD calls!). Greatest thanks to Les Jean and Keith Allender for making it all possible.

Statement of Understanding

This document has now been finalised and signed by the General Manager of the Metropolitan Transit Authority of Victoria and the Chairman of the Council of Tramway Museums of Australasia. It states as follows:

While recognising that its primary function is the provision of transport services in the Melbourne metropolitan area, the Metropolitan Transit Authority of Victoria (MTA) is prepared to assist with the development of transport museum projects in the voluntary museum sector in Australia and New Zealand. This is achieved by offering surplus cars and equipment through the Council of Tramway Museums of Australasia (COTMA) for possible acquisition by COTMA affiliated museums. The prices and conditions of acquisition of surplus cars and equipment will be determined by the MTA.

It is noted that the various museums have accepted roles conserving the transport heritage of the cities where they are located, and that the Tramway Museum Society of Victoria (TMSV) has undertaken the task of conserving Melbourne's tramway heritage. As such, the TMSV is seen by the Authority as having a primary claim on any items offered through COTMA in relation to other affiliated museums.

To expediate this understanding, the Authority prefers that all significant requests for

parts or equipment from the MTA are co-ordinated through COTMA. Where the Authority agrees to dispose of items to COTMA-affiliated museums, accounts for the items must be settled with the Authority prior to delivery and removal of the items is then to be effected promptly from the Authority's premises.

Under the MTA's tram modernisation programme a supply of fully operational old trams is available for sale. Currently W2s are being withdrawn from service and the MTA reserves the right to dispose of these at the best obtainable price. Where any tram is of particular historical significance, such as a special purpose tram and its disposal is intended, it will be offered in the first instance to COTMA.

From Colin Seymour, President, AETM
1986 Conference Report

The 1986 COTMA Conference was held in Adelaide from 26 to 29 September 1986. The inaugural Conference was hosted by the Ballarat Tramway Preservation Society in 1975. Subsequently, conferences were held in Sydney in 1976, Adelaide 1977, Christchurch

1978, Brisbane 1980, Melbourne 1982 and Auckland 1984.

Adelaide is the first city to host the Conference for a second time — the event coinciding with South Australia's 150th anniversary, its Jubilee 150 year.

The Conferences are designed to promote understanding between Museums in Australia and New Zealand and an appreciation of each others problems. They enable ideas to be exchanged over formal and informal discussion in a spirit of friendship and co-operation. The Executive Council, which is elected at each Conference, collates and co-ordinates the need of each Museum for parts and cars, particularly in relation to those required from Melbourne.

Venue for the 1986 Conference was the Hilton Motor Inn at Parkside on the edge of the city and a short walk from the Glenelg tram line. Most of the interstate and New Zealand participants had arrived by breakfast time on Friday 26 and, after booking in, spent the day riding the famous H cars. 35 interstate and 11 trans-Tasman representatives were in attendance, along with a number of AETM members.



Adelaide dropcentre cars 264 and 282 at the St. Kilda playground during the visit by COTMA delegates on 28 September 1986.

BOB MERCHANT

The Conference began with an Official Dinner at 7pm at which the South Australian Minister for Transport, Hon. Gavin Keneally was our guest and he officially opened the Conference proceedings. The evening concluded with a video/slide presentation on the AETM prepared by Trevor Triplow.

The Conference theme "Museums Through the Eyes of the Public" was studied first-hand on the Saturday morning with a visit to the newly established Migration and Settlement Museum to examine the use of modern techniques in museum displays.

During the day guest speakers covered the following topics:

- Getting mileage from a display
- Legal responsibilities to members and the general public
- Opportunities for and within membership
- What makes a tramway museum?
- What brings a senior citizen to visit?
- Adding reality to a social studies programme
- Why promote a museum?

A highlight of each Conference is the 'What's happening at home' segment where each Museum screens a slide or video sequence to illustrate recent progress and activities. The screenings commenced during the social dinner on Saturday night and continued into the early hours. A special surprise during the evening was the showing of a thirty minutes colour film of Adelaide trolleybuses in the 1940s, presented by our friends from Christchurch. The film was said to have been found in a rubbish dump in Dunedin. It is possible that the film was made by the Metropolitan Tramways Trust in Adelaide as a trolleybus promotion. The General Manager of the MTT, Sir William Goodman visited Dunedin in the late 1940s to

advise on the replacement of the city's tramway system with trolleybuses.

Most of Sunday morning was spent watching the annual Bay to Birdwood vintage vehicle rally which passed the motel on its way to Birdwood. Taking part in the rally were the State Transport Authority's restored Garford double deck bus 208 and the recently restored Ford Hercules single decker 164 of 1942. The Hercules was obtained from TMSV member Len Millar a few years ago and Len, who was in attendance at the Conference, was invited to ride the bus from Glenelg to the motel.

Sunday afternoon and evening were spent at the Museum at St. Kilda photographing and riding the trams (see *Trolley Wire* Dec. 1986).

The formal meeting of the Executive Council and Museum Representatives was held on Monday morning, 29 September. A ride on the recently opened O'Bahn guided busway to Paradise and return was followed by an inspection of the new tram depot at Glengowrie which was due to open three weeks later.

The next Conference will be held in Sydney in 1988 to coincide with Australia's Bicentenary of European Settlement celebrations.

MTT Ford Hercules 164 passes the Conference venue as an entrant in the Bay to Birdwood Rally on Sunday morning, 28 September, 1986.

BOB MERCHANT



BENDIGO

THE BENDIGO TRUST

The recommissioning of Birney car No. 11 on 12 December 1986 went smoothly. The rebuilt car led a procession of all five of our Birney cars from the depot down Pall Mall to the Alexandra Fountain and return. Seven of the eight Birney cars imported into Australia in the 1920s have been preserved. No. 11 arrived in Victoria in 1925 to enter service in Geelong. The car was transferred to Bendigo in 1949 direct from Geelong. It sustained severe accident damage in the early 1960s and

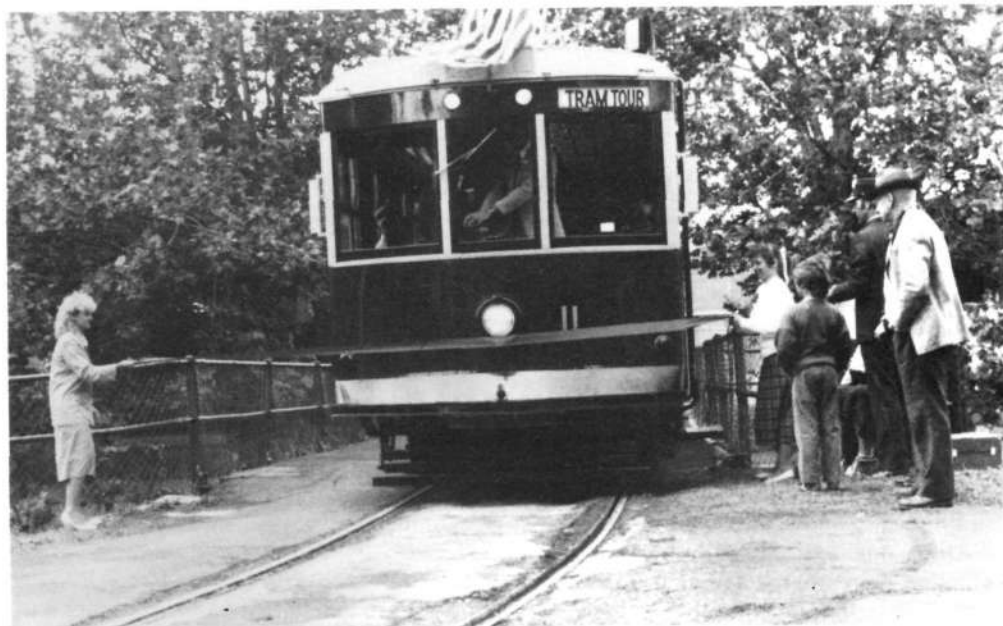
had been out of commission for more than twenty years until its recent rebuilding.

Car No.12, a single truck drop end California combination car is the next vehicle on the Bendigo Tramway's restoration programme. No. 12 was built in Adelaide by Duncan & Fraser in 1916 for the Hawthorn Tramways Trust as their car No.1. It came to Bendigo in 1930. The car has already been stripped down and will be completely rebuilt.



Single truck car No. 12 was being stripped right down in December 1986. Our coachbuilder, Ted Reid is seen inspecting the work. No. 12 commenced life as Hawthorn Tramways Trust No. 1 and after the takeover by the Melbourne & Metropolitan Tramways Board it became their M class No. 107. It entered service in Bendigo as No. 19 and was renumbered 12 in 1935. During its last years in service with the S.E.C. the car was known for its very loose bodywork, something that will now be rectified!

DENNIS BELL



Birney No. 11 is about to break the ribbon during its recommissioning on 12 December 1986. The car is standing on the bridge over Back Creek, just outside the depot.

DENNIS BELL



Former Melbourne W2 class car 421 stands outside the new Gas Works depot at Bendigo on 4 January 1986.

KEN MCCARTHY

BALLARAT . . .

Ballarat Tramway Preservation Society



Cable Tram Operation

A cable tram set ran on the Society's Wendouree Parade track on the Labour Day weekend, 7-9 March. The set comprised the replica grip car built by Newton Williams of Swan Hill, and an original cable trailer restored by Daryl Hawsworth of Blampied (near Daylesford).

A full account of this grip car can be found in Bill Scott's article on page 3 of this issue.

The cable car set was run between the Gardens loop and the depot, while the electric cars used the full length of the track. Alterations were required to the springing of the loop points, to allow electric cars to run through in both directions on the straight track, and enable efficient shunting of the

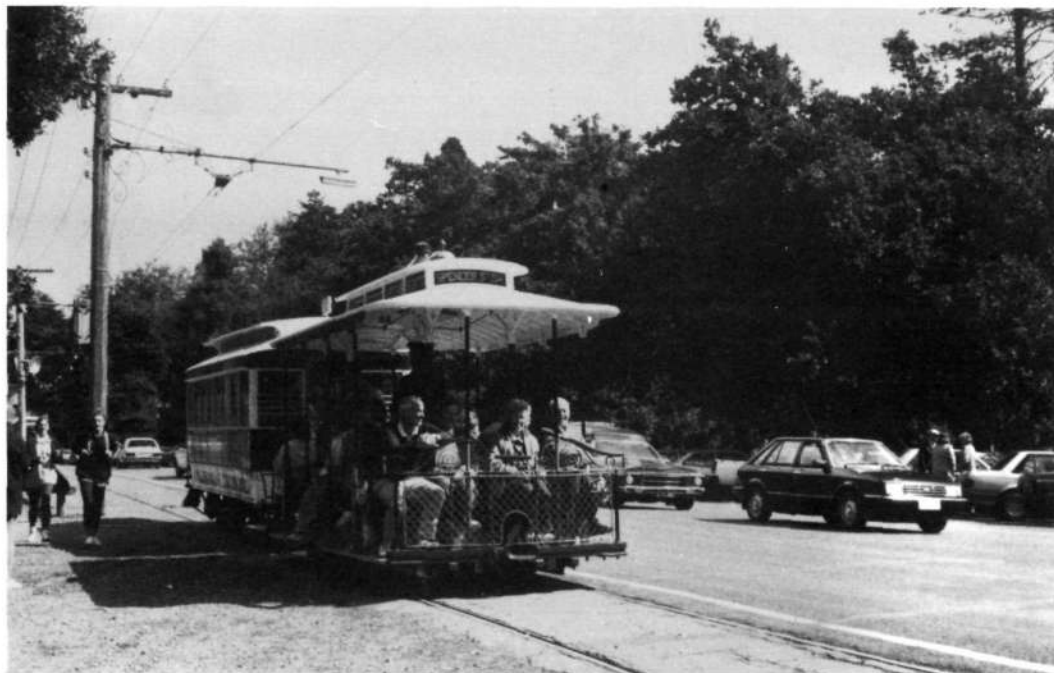
cable car. Shunting at the depot was done by use of Nos. 2 and 3 roads.

The use of the cable car created enormous interest and generated heavier than normal passenger loading. The passenger count for the three days shows that 1227 passengers rode the cable car and 976 rode the electric cars.

Overall, the Begonia Festival running was very successful. Electric cars ran on every day of the Festival (28 February to 15 March).

Horse Tram No. 1

Work has started on the restoration of No. 1. The side panels were removed, revealing that the timber framing above the rocker panels is in reasonable condition, but everything below is rotten and will have to be replaced. Work



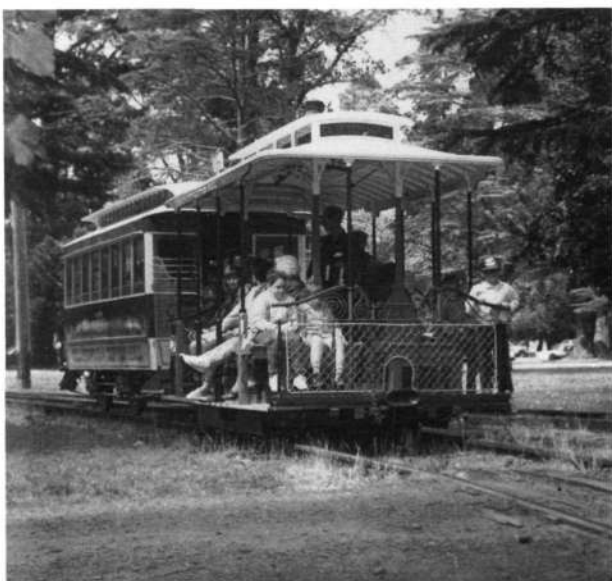
The cable car set passing Lake Lodge, to the left of the picture, as it nears Gardens Loop.

BILL SCOTT



Car 593 moves away from the camera as it runs around the loop in Wendouree Parade. It will recouple with trailer 171 for the return journey, and follow electric car 27.

BILL SCOTT



The cable car set at the level crossing in the Gardens as it approaches the depot area terminus.

BILL SCOTT

has started on the building of a new underframe.

Around the Depot

No. 13's truck has been re-assembled and the body has been lowered back onto the truck. Shortly the car will be able to be tested on Wendouree Parade, but it is expected that much bodywork will be required to enable No. 13 to return to service. No. 26 will soon take 13's place on the jacks as work is completed on its truck and wheels.

On No. 1 road work continues on the conversion of No. 39 to the new museum display. Wall panelling has been fitted in the new crew room and office, and a sink and cupboards installed.

ST. KILDA . . .

Australian Electric Transport Museum



Car 264 Returns

F1 264 returned to St. Kilda on 3 February after a three month stay at Glengowrie Depot. Whilst on the Glenelg line the car amassed 6402 kilometres. The restored car had only run 57 kilometres on the St. Kilda tramway, most of which was test running. It is interesting to note that the Museum's highest travelled car, F1 282, has travelled 7735 kilometres on the St. Kilda tramway since 1973. Car 264 has nearly achieved this in only three short months!

Our newly restored dropcentre entered regular service at St. Kilda the following Sunday, 8 February 1987. It is intended to use 264 as a workhorse at St. Kilda to maximise publicity. Dropcentre 282 will still be used on occasions and will eventually receive a light overhaul. In fact Mark Skinner has already repainted the floor.

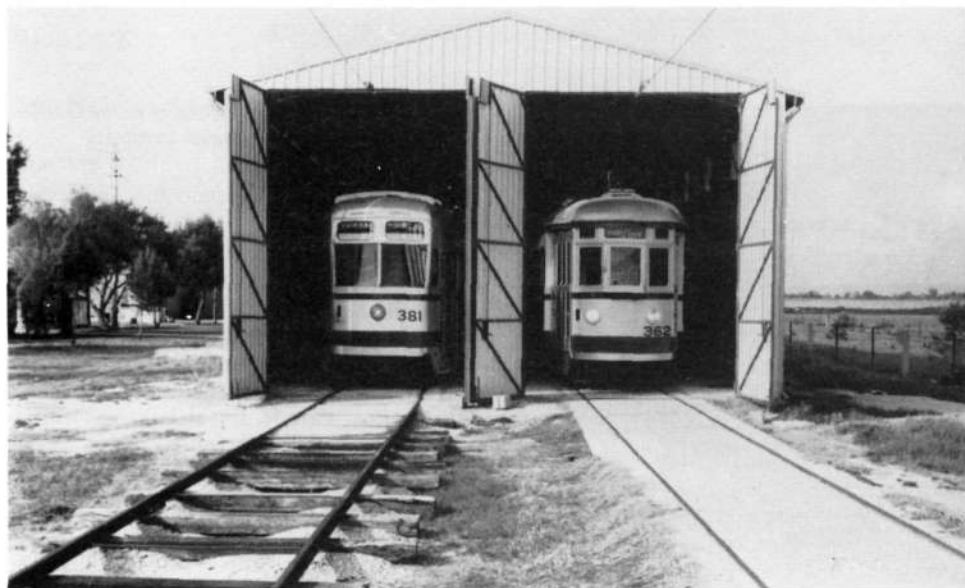
Trackwork

Ken Colbourne continues to carry out track improvements. Ballast has been spread along Road 7 outside the new depot and tie rods have been fitted to the Road 4/5 switch to maintain gauge as the track was found to be spreading. Ballast has also been spread over the newly reconditioned track panels between poles 54 and 55 between the playground and the terminus.

Other News

Works car W2 354 has had its air system modified to separate the air supply for the pneumatically powered track maintenance equipment from the car's braking system.

Half of the body of former toastrack tram No. 40 was recently discovered in the Adelaide Hills — yes, half! At some time in the past the



Silver and red liveried H1 381 of 1953 and H 362 of 1929 on Roads 7 and 8 in the new depot at St. Kilda. Road 7 (on the left) has since been ballasted to rail head.

PAUL SHILLABEER

body was cut almost exactly in half, including through the middle of a clerestory window. It is not known what became of the other half. A number of parts have been retrieved from the tram for use in the restoration of toastrack 42. Jim Burke has also retrieved parts from the body of F 227 as spares for our two dropcentre trams.

Two groups of West German rail enthusiasts recently visited St. Kilda. Although one group visited us during the week, a special line up of trams was arranged for them.

HADDON

Melbourne Tramcar Preservation Association

The shed road indicator light was fitted to the front of the workshop building during January, and wired in conjunction with the previously installed unit in the running shed.

John Withers is steadily working on a relay box which will control the circuit breaker reset and lockout functions, plus alarm indications, and will be ready for installation shortly.

Noel Gipps has started the design work for the overhead, and has already completed the pole layout plan. Suitable poles have been

Order of Australia Award

Founding member Dr. John Radcliffe received the Medal of the Order of Australia, General Division, in the 1987 Australia Day Honours List. John's award was for services to the Australian Electric Transport Museum and the Museums Association of South Australia. John has been one of the major contributors to the AETM for many years. John says that although it is a personal award, it reflects the high esteem in which the Museum and its hard core workforce are held in the community.

Congratulations, John.



selected and numbered according to their location, and they will be placed in position for erection next time a crane is on site.

Arthur Ireland is continuing his good work in overhauling fittings in readiness for overhead construction. Recently completed items are reel insulators and brackets, plus bracket arm slider ear frames and insulators.

In the substation, the blow out coils of the two circuit breakers have had the mica covers renewed and the two-piece arc chutes were fitted.

Trackwork

New point boxes have been welded to the No. 3/No. 4 road points and also the No. 5 road/mainline points, along with heel drain boxes. The newly cast and machined spring mechanisms were fitted to these points and after adjustment, worked perfectly. Arthur and Ted Ireland are to be thanked for machining the components.

During January, additional 60lb. rail purchased from the State Transport Authority was removed from the now closed Skipton Branch. Members Noel Gipps, Arthur Ireland, Lindsay Bounds, Colin Withington, John Withers, Craig Tooke and Tony Smith participated in this laborious task, which was made harder due to the 38°C temperature.



Arthur Ireland removing a carbon skid holder from the pole of W2 407.

COLIN WITHINGTON

During December the point components for the No. 1 and No. 2 roads were positioned and the closure rails cut and welded. Components for the bogie storage track points were selected and have been moved into position. This track will branch off the No. 1 road and will enable the Museum to store its large number of spare trucks in one area. The track will be constructed using scrap tramway grooved rail, and as such will not be wired.

During the recent M.T.A. relay of Domain Road junction, the Museum obtained the trailing set of points from Park Street and these will be used in the construction of a passing loop, at a later stage.

Concrete work re-commenced during March, with No. 4 road and points being completed and formwork is well underway on the mainline, down to the No. 5 road points.

W4670

The internal motorman's cabin doors have been sanded back, then clear lacquered and the finished result is most pleasing. The quarter panels of the dropcentre have all had the old filler over countersunk screws removed and new body filler applied. The window sills and driprails have been taken back to bare timber and repaired as required, then primed.

Work has commenced on re-installing the side destination boxes with the glass windows and external cover straps already in place. New winding mechanisms have been cast for these boxes using an original borrowed from the Tramway Museum Society of Victoria as a pattern. Arthur Ireland is currently machining these parts and will then assemble them. Special thanks must go to the TMSV for the loan of this winder.

Tony Smith has removed the brake valves and wiper motors for overhaul and when completed will remove the relay valve and governor for similar treatment.

The McGill seats in the dropcentre have been removed for sanding and the cover straps on the quarter panel windows have also been attended to.

Around the Site

In conjunction with trackwork, a drainage system for the point boxes has been installed, with the work being undertaken by Tony Smith. During March, timber was acquired to make permanent concrete formwork planks

for the track and these have been cut, with the ends being strapped to prevent splitting.

At long last the Museum now has a heavy crushed rock driveway which will permit the access of heavy road vehicles during winter. This drive was installed during March.

Craig Tooke is continuing his acquisition of special tools required for truck and undergear repairs for the workshop, and has already acquired most of the needed items.



General Manager Tony Smith adjusts the newly installed spring mechanism in the Road 3/4 points on 21 February 1987.

COLIN WITTINGTON



BYLANDS . . .



Tramway Museum Society of Victoria

As reported in December, the Society took delivery of trams 7W, 15W, 16W and 19W. Andy Hall and Norm Maddock (ATMOEA Federal Secretary and MTA Board member) spent many hours negotiating this, and the retention of the motors in their trucks. In recognition of this, the Society's Board, at a recent meeting, resolved unanimously that these trams be known as the 'The Hall/Maddock Collection'.

Bern Hurren Shed

Due to the continued generosity of members Craig Coop and Keith Kings, the Hurren shed will soon be extended some 140ft. This extension will house a further nine bogie cars.

The Society thanks the two members concerned for their continued support and generosity in providing funds to the order of \$22,000.

Acquisition

On Friday, 5 December 1986, W2 643 arrived at Bylands. This is the last three-door W2 to go to Bylands. Len Millar and Andy Hall were present at Preston Workshops for the loading of 643 and assisted with the unloading of the car at Bylands.

We extend our warmest thanks to the Antcliff family for purchasing and transporting 643 in memory of the late Allan Antcliff who did so much for the Museum. Thanks are offered to Andy and Len, and to Beamish Heavy Haulage for the extreme care taken in transporting the tram.

Troughing

Graham Jordan has completed the wooden troughing for No. 2 road in the old (No. 1) tram shed and is starting on the manufacture of the troughing to be erected over No. 1 road.



A view of the depots at Bylands with cars W2 643, freight car 15W, W2 522 and Ballarat 17 visible in the scene.

PETER HALLEN

V 214 Eighty Years Tour

Twenty-four members and friends braved showery (later teeming) weather on 24 October 1986 for an eightieth anniversary tour in the MTA of Victoria's preserved open car. The route followed was from Camberwell Depot to Essendon Depot via Batman Avenue, Swanston Street and Flemington Road.

At Essendon, V 214 was posed in front of the original portion of the depot opened eighty years ago by the North Melbourne Electric Tramway & Lighting Co. Ltd. The five cars which became the V class were built by J.G. Brill and assembled by Duncan & Fraser in 1906 for the NMETL Co.

The tour travelled through the city via William Street and shunted at the Grant Street crossover on the Kingsway. We travelled then to West Maribyrnong the terminus of route 57, passing on the way the old NMETL Co. terminus at Saltwater Creek (now Maribyrnong River). 214 then proceeded to route 57s city terminus at Elizabeth Street where a stop for refreshments was made. A very cold trip was made to Camberwell Junction and the depot by running to Victoria Street, then following route 72. Our Chairman Jim Dowel and member Ron

Scholten were our crew for the day — our thanks.

Golden Sunset Outing 1986

Our annual Golden Sunset tour was held on Friday 26 December 1986 and was one of some importance — it was the Society's 100th special tour. We departed from South Melbourne Depot in W5 799 and visited South Melbourne, Collins Street and Eastern Hill before heading to East Preston Depot. Here we transferred to W2 646 for a run to West Preston and return.

799 then took us to Kew Depot where another change was made, this time to pantograph fitted A2 280 for a run to East Burwood via Flinders Street. We believe this to be the first time an A2 had been to East Burwood. Back at Kew Depot we rejoined 799 then west to North Richmond, south to St. Kilda and on to the South Melbourne Football Ground siding. Here we enjoyed a barbequed meal beside Albert Park Lake. From there we visited Malvern Depot via route 8 where another transfer was made, this time to W2 547 for the run to Malvern-Burke Road and return.

The evening ended back at South Melbourne Depot in 799 at 10.10pm and our thanks are due



The old and new meet at West Maribyrnong on 4 October 1986. Restored V214 is followed by the regular service car Z3 174.

S.J. VINE



to Inspector Jim Dowel for driving our tour cars.

Last Route 77 Tour

Saturday night, 1 November 1986 saw the closure of route 77 City-Prahran, the first abandonment since 1962. Route 77 terminated at Batman Avenue on the edge of the city and was sparsely patronised due to the close proximity of other city-bound routes.

A small group of members set out from Glenhuntly Depot at 8.45 pm. SW6 850 was used and we had a journalist present. Various routes served by Glenhuntly Depot were covered prior to the running of the last route 77 car. At Batman Avenue 850 was adorned with a floral wreath and farewells were chalked on the outside of the car.

The last and second last route 77 cars arrived full to the running boards with passengers questioning the reason for the route closure. At 11.57 pm the last tabled route 77 service, operated by W6 class 973 was followed by our tour car 850.

The service ended quietly and without incident, and we thank Jim Dowel and Glenhuntly's union delegate, Daryl Soden for operating our tour car.

TMSV special car 850 enters Glenhuntly Depot after following the last route 77 service from Batman Avenue to the depot. Sunday morning 2 November 1986.

LEN MILLAR

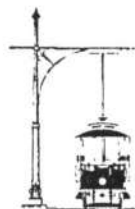


W6 973 prepares for the last revenue run of route 77 from Batman Avenue terminus on Saturday 1 November 1986. It will be followed by W5 850, operating as a TMSV special car, to Glenhuntly Depot.

LEN MILLAR

LOFTUS . . .

South Pacific Electric Railway



New Site

With only twelve months now remaining until the official opening of our new Museum Tramway on Saturday 19 March 1988, the pressure is really on our workers to complete the remaining tasks necessary to achieve this goal.

The interior of the depot building has been transformed over the past few months with the concreting of most of the floor area. Apart from the area between Roads 1 and 3, only the front half of Road 5 and the rear half of Road 4 remain to be concreted. Road 2, on which the maintenance pit will be located, has yet to be

laid as its completion is dependent on the construction of the pit. Some 35 cubic metres of concrete was put down between 14 February and 28 March, a task made difficult by the necessity to move trams and equipment each time a concrete delivery was made. A further 13 wooden span poles were erected on 21 March, eleven being placed from the Army level crossing southward to the location of Waratah Loop and the remaining two either side of the South Gate, near the headshunt. It will be necessary to obtain additional poles before the erection of the overhead wiring on the main line can proceed.



The Museum's Leyland single deck half-cab 275 took part in Australia Day and Festival of Sydney activities on 25 and 26 January. A free preserved bus service was operated through the city, The Rocks and past the Power House Museum at Ultimo. Here 275 stands in Hickson Road under the southern pylon of the Sydney Harbour Bridge on 25 January 1987.

BOB MERCHANT



*Removing earth from the depot in preparation for concreting No. 6 road on
7 February 1987.*

BOB MERCHANT

After various unavoidable delays, caused mainly by the need to revise the building plans due to price increases, a start on construction of the Workshop/restoration building is imminent. During March the site of the building was pegged out and drainage work commenced. The reinforcing for the foundations is now on hand and it is expected that construction will have commenced as this issue of *Trolley Wire* goes to press. The framework and steel cladding should be completed twenty weeks from the date of commencement. Derek Butler's rock wall along the western side of the site has now been completed which will allow him more time to attend to the erection of the former Railway Square waiting shed. The construction of bricklined stormwater drains across the front of the depot is being carried out under the supervision of Roger Roberts.

With the television mini-series 'Harp in the South', filmed partly at the new site, yet to be screened, the producers have optimistically commenced a sequel, set in the immediate post World War II years. Once again scenes were filmed at the Museum and a set constructed in the depot yard. To better portray the passage of time, a 'more modern' tramcar was required and

as no other suitable car was on hand at the new site, a shopping expedition at the old site brought forward a request for P 1497 to be made available. Following negotiations with the producers of the sequel, based on Ruth Park's novel *Poor Man's Orange*, arrangements were made to transfer 1497 to the new site on Saturday, 7 March. While the crane was on hand, the opportunity was taken to transfer a further three trams and accordingly Prison Car 948.F 393 and Ballast Motor/Overhead Line Car 99u also reside at the new site.

Since commencing his tramcar repainting programme, Norm Chinn has so far completed cars 134s (D 102), C 290 and K 1296. Further cosmetic patching and repainting has been carried out on the exterior of R1 2044, which is now carrying one of the 1954 Royal Visit colour schemes of white with blue and gold. Norm has commenced a repaint of Ballast Motor 99u, which will soon be pressed into service for the erection of the overhead wiring. Howard Clark's landscaping is progressing well and the trees which he has carefully planted are all surviving and thriving, in spite of a few caterpillars which practically stripped some of the trees over a six day period. Some problems are being ex-



A view of the set for the filming of 'Poor Man's Orange' It is remarkable how effectively the setbuilders can transform plywood, timber and sheets of moulded, painted plastic into a realistic setting, 1 April 1987.

BOB MERCHANT



99u tops the grade in Pitt Street, Loftus while 1497 moves across the tramway level crossing during their transfer to the new site on 7 March 1987.

BOB MERCHANT

perienced in the reconstruction of the scissors crossover, which forms a vital part of the track layout. It has been found necessary to partly dismantle one of the segments which includes three frogs, to repair some distortion, possibly caused by the passage of heavy road vehicles over the crossover while it was in position at Rozelle Depot. Mike Giddey has also repaired several sections of the crossover which were badly welded at Rozelle, obviously in an effort to keep the crossover functioning until the Depot closed in November 1958. The crossover was also a vital part of the Rozelle Depot track layout as every tram entering or leaving the depot was required to traverse it.

Old Site

The transfer of P 1497, F 393, Prison Car 948 and Ballast Motor 99u to the new site on 7 March permitted possibly the last major tram-car shunt at the old site to be carried out. This shuffling of cars enabled all cars except flatcar 93u to be placed under cover.

On Saturday 14 March, Ballarat 37, O Breakdown Car 141s, and R1 1971 were moved from the annexe (Roads A and B) to the main depot, while O 957 and O/P 1089 were moved into the annexe. To accomplish this relocation it



PCC 1014 turns to enter the west portal of the Twin Peaks Tunnel whilst operating on the L line on 13 September 1979. 1014 is being followed by car 1150, obtained second-hand from St. Louis in 1957.

TOM ACHESON



The low-bed trailer has been moved and 99u is about to be lowered onto the track at the new site on 7 March 1987.

BOB MERCHANT



The trams were backed through the entrance to the new site and Prison car 948 is seen at the entrance gate with F 393 in the background.

BOB MERCHANT



F 393 swings through the air at the old site on 7 March. The only car of its class not rebuilt, it survived as a driver's training car in its original condition.

BOB MERCHANT



PCC 1014 was moved out from the lineup of PCC cars in open storage at Pier 70 in San Francisco earlier this year. The car was being moved to the Municipal Railway's Metro Center, the Muni's Maintenance Workshops.

COURTESY MAURICE KLEBOLT

was found necessary, for various reasons, to move every car in the shed!

With the transfer of P1497 reducing the available traffic vehicles by one car, it was fortunate that L/P 154 was ready to re-enter service on the following day, 8 March. 154 will not now be transferred to the new site until the final stages of the relocation.

San Francisco

While not the usual location for a Museum work party, Bill Parkinson and Howard Clark flew to San Francisco in late February to inspect PCC 1014 and gain some experience with the maintenance and operation of the car. It was no holiday, as Bill and Howard will attest as arrangements were also required to be made for the transport and loading of the car, which should take place early in May. The car's arrival in Sydney is expected at the end of May, although this is yet to be confirmed. 1014 is still a 'goer' and our two representatives had the opportunity to ride in it while it was under test. The assistance rendered by various San Francisco Municipal Railway personnel in the preparation of 1014 for shipment 'Down Under' was very much appreciated by our two travellers and this assistance came from all levels.

Achievement Award

Norm Chinn, one of the Museum's founders, has won the Leader-McDonald's Achievement Award. The Leader-McDonald's Award is designed to recognise personal achievements and encourage the pursuit of excellence. This highly coveted community award was presented in recognition of Norm's dedication and service to the Tramway Museum.

Norm will now become eligible for the Achiever of the Year Award. — Congratulations, Norm.





O Breakdown car 141s was used to complete the shunting movement into the two annexe roads. Here 141s brings O/P 1089 over the rough frogs and stub pointwork of this little used trackage on 14 March 1987.

BOB MERCHANT



O/P 1089 occupies the main line (highway extension) as R 1979 shunts O 957 onto the annexe sidings at the rear of the old site depot on 14 March 1987.

BOB MERCHANT



Eleven pole holes were drilled and poles erected on the main line south from the Army Depot crossing on 21 March 1987. Here the fifth hole is being dug and the fourth pole erected.

BOB MERCHANT



P 1497 waits ready as film crews prepare to shoot another scene for "Poor Man's Orange" on 1 April 1987.

BOB MERCHANT

ALBION PARK . . .



Illawarra Light Railway Museum Society

Community Employment Programme

The third six months' session of the CEP employment scheme concluded on March 6. On the following day the employees and their families were entertained to a barbecue lunch in appreciation of the work carried out during that period.

The following major projects were performed during the period September 1986 to March 1987:

- Perry loco (7967/49/1) 0-6-2T "Tully No. 6" reached the stage where the final paint coats only needed to be applied, the side tanks bolted to the frame and cab fittings placed

in position for this engine to be steamed. The last major work performed by the CEP workers was the fabrication of new sanding pipes and the restoration of the sand dome flow valves.

- Lapping the D valves to the machined surfaces of the overhauled cylinder units on the locomotive "Burra" (Hawthorn Leslie 3574 of 1923).
- Construction of the rolling stock shed extension containing two roads in an area of 6m × 18m. Preparation of footings and main columns for a further shed extension of 6m × 20m.



C.E.P. employee Jim Tooley poses beside the Leyland-Krauss locomotive after completing a major overhaul on this unit.

A. ROBERTS

- Preparation of the footings and frame components for a 6m x 6m amenities room.
- Completion of the 6m x 4m employees meal room, paint store and small carpenters shop.
- Major mechanical overhauls given to the Ruston and Hornsby diesel loco and the Leyland Krauss petrol locomotive.
- Overhaul of the spare c.1920 four cylinder Leyland petrol engine for the Leyland Krauss unit.

Bicentenary Grant

The tender has been let for the construction of a new driver's cab for the locomotive "Kiamia". (Davenport 1596 of 1917). The unit will be constructed from Tasmanian Oak and Society members will construct the new floor, assemble the wooden frame and fit canvas to the roof.

Around the Museum

By the start of April locomotive road No. 1 has been extended the full length of the compound in 80lb rails and a new set of

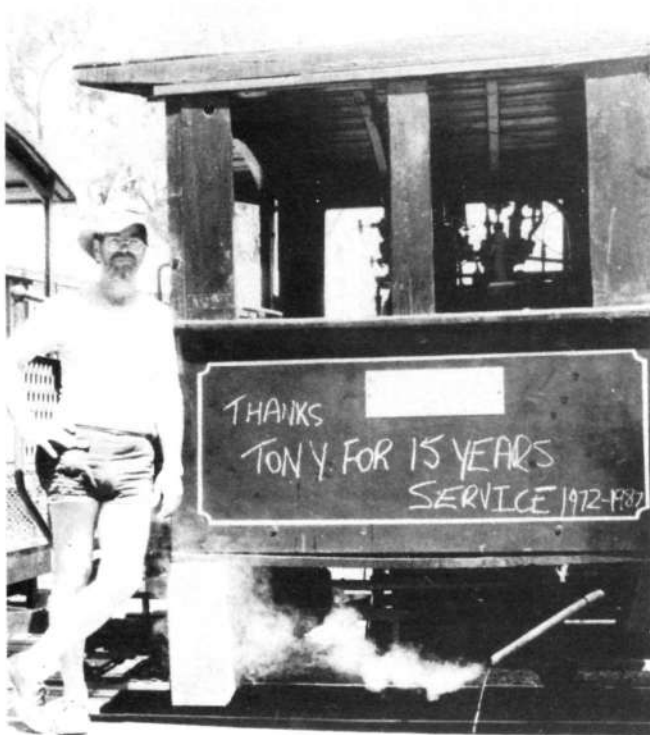
points were being fabricated to connect this track onto the main line. On the other side of the compound the fifth road which serves the rolling stock shed was completed during March and by mid April work was nearing completion on a back shunt track off road 5.

During March nine new uniform side brackets had been erected along the electric track on the southern and eastern perimeter of the compound. Efforts were then concentrated on lifting the trolley wire to the new alignment and fitting new insulators and multi strand galvanised span wire.

Foundation Secretary Retires

After 15 years of outstanding service ILRMS member No. 1, Tony Madden retired from the position of Secretary at the annual meeting in February. Since then Tony has been able to spend much of his spare time engaged in work of a practical nature for the museum.

As a mark of appreciation the museum members rewarded Tony Madden with Honorary Life Membership of the ILRMS.



ILRMS member No 1, Tony Madden stands beside the Davenport locomotive 'Kiamia' on 8 February, the eve of his retirement from the position of foundation secretary. A. ROBERTS



a sper magazine