# TROLLEY WIRE

Journal of
AUSTRALIAN TRANSPORT MUSEUMS

NUMBER 162 FEBRUARY 1976



MUSEUM OPERATIONS IN THE U.S.A. AND BRITAIN

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# TROLLEY WIRE

Iournal of

Australian Electric Transport Museum
 Ballarat Transport Preservation Society

- Brisbane Tramway Museum Society

- Illawarra Light Railway Museum Society
- South Pacific Electric Railway

South Pacific Electric Railway
 Steam Tram Preservation Society

- Tramway Museum Society of Victoria

- Western Australian Transport Museum

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# **FEBRUARY 1976**

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# YOUR NEW TROLLEY WIRE!

FOR SEVERAL years now, the Editors of this magazine have discussed the possibility of enlarging the page size of Trolley Wire rather than increase the number of pages. This idea has been shelved for one reason or another, until recently, when a serious discussion with the printer revealed amongst other things that the previous size was extremely wasteful when related to stock paper size. A few minutes with a desk calculator revealed that if only the barest trimming margin was allowed, we could enlarge the page size of the magazine to allow the same page content of the old 40 page issue in 32 pages new size!

The cost of the larger printing plates was negligibly higher, so the Publishing Department could see no reason for postponing the change any longer. One immediate advantage will be that subscription rates will remain unchanged for possibly the next 24 months!

So, here we are.

We had intended, with this issue to introduce, onto the cover, a new Trolley Wire logo depicting elements of tramway, bus and light railway with a transport/movement motif, but a full scale mock-up cover disclosed that we would destroy the uncluttered appearance that had been achieved. We thank Darras Hancock for his suggestion and trust that more time will be available in the coming year to devote to this item.

The typing section of the Editorial Committee, with an ever increasing burden to type out the manuscripts, but with little increase in the time in which to do the work, earnestly asks all contributors to observe a few rules with regard to submissions.

While typewritten manuscripts are preferred handwritten notes will be accepted, provided they are on one side only of ruled white paper, with a 1½" (32 mm) margin on the left hand side and proper names where they first occur lettered in block capitals. Typed material should be on one side only of white paper, with a 1½" (32 mm) margin on the left hand side and typed one-and-a-half or double line spacing.

Contributors are invited to submit suggestions for layout of their articles; these will be incorporated in the production wherever it is possible. Please note, also, that items for inclusion in the magazine should be addressed 'The Editors'; and not to any particular person. This will avoid the delays in receipt of material which has occurred on a number of occasions.

Finally, we would like to note that this issue of *Trolley Wire* marks the entry into the 25th year of publication of the magazine.

FRONT COVER: Prague 180 arrives at the 'Town End' terminus at Crich. Leeds 602 and Blackpool & Fleetwood 2 pass at rear. The imposing facade is that of the recently re-erected Derby Assembly Rooms.

—John Radcliffe

-- The Editors.



# MUSEUM OPERATIONS IN THE U.S.A. AND BRITAIN

written and illustrated

by John C. Radcliffe

# NORTH AMERICA

When one considers the museums of North America, one's attention is naturally drawn to the great collections, such as those at Orange Empire, Branford and Seashore. Yet it is the smaller museums which can prove instructive, since these more nearly approximate the size of Australian museums, and have similar problems.

# GLENWOOD, OREGON.

The Oregon Electric Railway Historical Society operates a Trolley Park at Glenwood, Oregon. This museum is of interest to Australians since it houses one of the two Sydney trams shipped to North America, O class 1187. Leader of activities at Glenwood is Paul Class who lives with his family in a cottage on the site. Paul has achieved some notoriety in recent years by becoming the world's first professional international museum trolleybroker. His firm, Gales Creek Enterprises, was instrumental in importing single truck cars from Portugal to Yakima, Washington. He has imported numerous Brill 13 bench toastrack cars from Rio de Janiero to America for distrib-

ABOVE: Mrs. Sonia Class drives Portland 4012 through the Oregon woods at Glenwood.

-John Radcliffe

ution to various museums. He has advised on the possible importation of Melbourne W2 cars to Aspen, Colorado. He has reconstructed numerous small cars for use in 'Spaghetti Factory' eating houses and recently completed a contract to supply a reconstructed Birney to the British Columbia Provincial Museum in Victoria, B.C.

He has entered into a profit-sharing contract with the O.E.R.H.S. to carry out the maintenance of the Glenwood Trolley Park cars. The park has attractive camping facilities among the rolling slopes dotted with Douglas Firs adjacent to Gales Creek. The tramway winds in a loop around the site and is being built with unemployment labour. All rails and sleepers must be supplied from the resources of the park.

Cars include a Portland streetcar, a British Columbia interurban, Sydney O 1187, (now reconstructed to operate on two motors, and currently receiving a new dash following an encounter with the interurban) and a Blackpool double decker (similarly receiving two new dashes). Other Portland streetcars and a Birney await reconstruction. A fleet in poor condition once owned by the Willamette Valley Electric Railway Association was also stored at Glenwood. This group is believed to have been deregistered by the Oregon Commissioner for Corporate Affairs, and some of its vehicles have since found their way into spaghetti houses. A large Bay Area articulated inter-

urban car from the Key System was also stored for a time at Glenwood, but its owner later moved it to the depot of the Vernonia, South Park and Sunset Steam Railway at nearby Banks, Oregon, for reasons of security. However, this group has since gone into receivership, its collection dispersed and the car remains at Banks, a vandalised wreck.

The lesson to be learned at Glenwood is that it is possible for one man with a pragmatic outlook and considerable entrepreneurial skill to make a living from being a tramway museum professional. It follows that the Glenwood operation is very much a 'one-man-band' and this could present some problems for the long term preservation of the exhibits there. Oregon experience also shows that weaker museums can go to the wall, and some have. Their collections can subsequently become dispersed and lost

#### MINNEAPOLIS. MINNESOTA

The Minnesota Transport Museum has had the distinction of operating a successful museum line nearly a mile in length for the past five years while owning only one operable car. This vehicle, former Twin Cities Rapid Transit Co. car 1300, runs for about 20 hours each week during the summer on a track laid on portion of the former Harriet-Como streetcar line, adjacent to Lake Calhoun in suburban Minneapolis. It is housed in a shed built under a bridge at one end of the line.

For the first couple of years the car was operated without overhead, being propelled by a small motor-generator towed behind. (This unit was later mounted on rubber tyres for propelling a trolleybus from Wisconsin to Minneapolis. However, as the rig had a top speed of only 14 mph on the freeway, a state trooper eventually encouraged the museum group to hire a tow truck.)

Last winter, the trucks were removed from the car for overhaul. New cast wheels were obtained from San Francisco, as tyres were not used on Twin Cities cars. Other components were rebuilt. In a race against time, the museum group managed to complete the job and get the car rolling again in time for the 1975 summer season. This in itself contained a great disappointment, for all the operating noises they had come to know and love had disappeared. They quickly realised that all these noises derived from the fact that the car had been completely worn out when they got it.

The M.T.M. also leases one of the large old Como shops from the Northern Pacific Railway in St. Paul. In this building, members are slowly restoring Duluth Street Railway car No. 265, which was originally built in Minneapolis. The car was withdrawn from service in 1939 and stood in the secluded woods of Wisconsin waiting to be converted into a summer cabin. It was still waiting when rescued by the M.T.M.

in 1973.

The lesson from Minneapolis is that it is not necessary to collect a large fleet of cars to provide a worthwhile service. By following very tight operating standards, the Minneapolis group have been able to provide a reliable and attractive amenity for their city. They have avoided spreading limited resources over a greater number of vehicles than they could effectively maintain.

#### WASHINGTON, D.C.

The National Capital Trolley Museum, located in Northwest Branch Regional Park beyond outer-suburban Wheaton, is an enigmatic museum with a peculiar history. One would suppose it would contain cars representative of the nation in which it is located, and it comes as a surprise to find that the basic service is provided by a fleet of four wheel cars imported from Europe. Within the depot are several fine cars from Washington's Capital Transit, but for the moment, their use is restricted by the need to build a loop at each end of the line, for they are mostly single-ended.

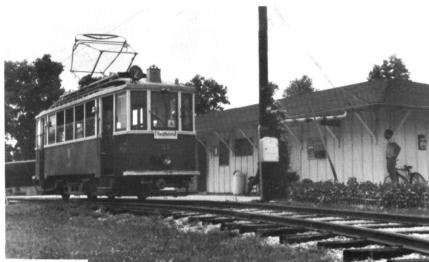
The museum lost its newest exhibit several years ago during the plague of riots which swept America. Capital Transit had upgraded a modern PCC car with air conditioning for tourist purposes, and had christened it the 'Silver Sightseer'. After it had been presented to the museum, it was destroyed by fire bombing while parked adjacent to the depot. Rather than attempting to rebuild the car, it was decided to divert the funds towards providing greater security for the remainder of the fleet.

Two tidy three-road depots now house the fleet. Over \$40,000 was borrowed commercially to originally establish the museum, and this has since been repaid from income earned by the European cars which were ready to operate in traffic on arrival. An entrance hall-bookshop also includes a meeting room for a local modelling group, and this room can also be used for teaching purposes with visiting school groups. Park authorities mow grass around the environs of the museum.

The general impression is neat and orderly free from the depressing clutter of dereliction which surrounds so many fledgling museums. A business-like approach has been successfully used to overcome limited initial resources and subsequent emotional setbacks, and a small but impressive museum is the result.

#### The Smithsonian Institute

The formality of the Smithsonian Institution may be contrasted with the informality of the previous groups. As the largest museum complex in the United States, it has access to funds unmatched by other museums. Established by Act of Congress in 1846, it was launched by a benefaction from James Smithson of England to found at Washington 'an establishment for

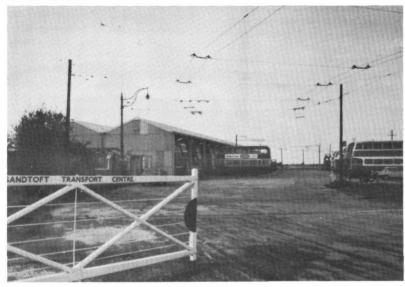


TOP: Car 120 from Graz, Austria, is one of the European cars operated at the National Capital Trolley Museum near Washington. It is seen outside the attractive waiting hall.

tractive waiting hall.

MIDDLE: Transport exhibits are formally displayed at the National Museum of Science and Technology which is part of the Smithsonian Institution in Washington, D.C. BOTTOM: Blackpool 159 is seen leaving the front of the main depot at Carlton Colville. Restoration of trams is done in the left depot, motor buses are stored on the right.





The Sandtoft Transport Centre includes both motor buses and trolley buses. A double trolley bus circuit has been built

the increase and diffusion of knowledge among men'. The Smithsonian, sometimes referred to as the 'National Attic', now has seven art galleries, a zoo, the National Museum of Natural History and the National Museum of Science and Technology. The latter includes the transportation collection, which has one four wheel tram, a cable grip car and a case of small but well detailed models. Several railway engines are also displayed, but many aspects of engineering technology are represented by models. This type of display could be incorporated into some of our Australian museums.

Director of the Division of Transportation is John H. White, Jr, whose particular speciality is steam traction. However, he is familiar with most American trolley museums, and expressed several points of view on their development. He particularly stressed that preservation, with true standards of historical accuracy, should be the primary aim of the museum. He considers it better to leave an object unrestored than to do the job inaccurately. He further feels that many museums could do a better job of preparing records of what they have before commencing a restoration programme. Restoration should involve scholarship as well as craftsmanship. Concern was expressed that excessive operation of equipment may be detrimental to the basic principle of preservation. He also noted the relative difficulty of securing financial support for the history of technology compared with the arts. (There is only one state-supported railway museum in the U.S.A., the Pennsylvania State Railway Museum at Strassburg, Pa. Even this museum has been located in an area needing economic support, rather than in an area with links to railway operations.)

The Smithsonian Science Museum had over

seven million visitors last year. Yet the Smithsonian itself shows the continued bias towards financial support of the arts by its efforts to boost attendances. So poor is the attendance at the National Portrait Gallery that a free bus service (the ubiquitous gimmick — London double deckers) is provided there from the forecourt of the Science museum in order to increase visitor numbers.

#### BRITAIN

Unlike some other governments, the British Government does not have a policy of promoting museums for tourist purposes. Consequently there are no museums motivated solely by tourist criteria. In truth, it is hardly necessary anyway, as the visiting tourist is likely to find the whole country something of a museum. Although there has been a re-awakening of interest in history throughout Britain, the arts continue to receive a major share of financial support. Some new museum developments have obtained their funds from non-museum sources. For example, the recent reconstructions at Ironbridge have been supported with funds set aside for the new regional growth centre being established at nearby Telford.

#### LONDON

The Science Museum at South Kensington fills a similar role in Britain to the Smithsonian Science Museum in the U.S.A. The visitor gets the impression that although the exhibits are less elegantly presented, the quality of the material is better. Detailed descriptions are provided on most exhibits, though they are better in their scientific detail than in simplicity of expression. A Glasgow tram, underground

railway equipment and numerous locomotives are on display. The aeronautical collection is outstanding. Keeper of Transport is Mr. Brian Lacey, who is also President of the Association of British Transport Museums, a body similar to C.O.T.M.A.

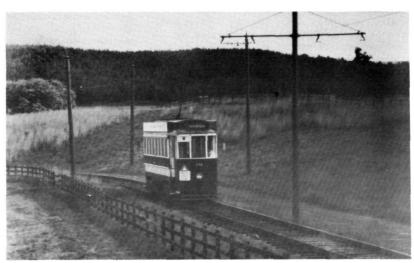
The Association of British Transport Museums meets twice each year. Usually there is a one-day spring meeting, and a two-day meeting is held later in the year. The latter discusses a specific theme, and may also witness a specific event. For example, a recent meeting at the National Motor Museum at Beaulieu discussed long-term preservation, then observed the conduct of a steam traction rally. By such means, the various groups learn from each other. The Association, which has about 60 members, has no direct advisory role to government, but rather tries to promote the circulation of ideas.

The Science Museum recently opened its first 'outstation', the National Railway Museum at York, under the direction of Dr. John Coiley. It is Dr. Coiley's intention that a few of the locomotives will be kept operational. Cooperation and exchange of equipment, including locomotives, has already taken place between York and several of the recognised voluntary rail museums. If the York museum is successful, it could result in the creation of other 'outstations' to house detailed collections, with only introductory material remaining at South Kensington.

The London Transport Collection used to be housed, not inappropriately, in a disused tram depot at Clapham. Recently it was reestablished on a reduced scale in a large plastic greenhouse at Syon Park. Although the exhibits are well lit, the facility must be considered a disaster. High temperatures are not desirable for long term preservation, particularly in a humid environment. Timber bodywork opens up. Paint oxidises. The building is poorly ventilated, and since it is too small to display the entire collection, some have gone to store. The lesson here is what happens when responsibility is subjugated to expediency. The availability of a large empty edifice seems to have been the principal justification of the site. It is hoped that a better facility can be found to house this collection, and the present building used for some more suitable purpose such as the cultivation of date palms.

#### BEAMISH

The North of England Open Air Museum claims to be England's first open air museum, being established by a consortium of four local County Councils. (The recent British local government reorganisation has since had some repercussions on the stability of the project.) The museum is focussed around Beamish Hall, a stately home obtained from the Joint Coal Board who had purchased it in 1948. Other exhibits include workmen's cottages, somewhat oddly exhibited as period shops; two farmsteads; a quantity of coal mining gear and a tramway about 1 km long. The tramway was constructed by contract, and some derailments have been experienced as the contractor failed to widen the gauge on the curves. One car, Gateshead No. 10, has been overhauled at the museum for use on the line. A transport hall includes several old buses, a Newcastle double deck trolley bus and a Sheffield double deck tram which has been cut down at Beamish into an open top vehicle. In this form, little use can be made of it as Ministry of Transport regulations require that tracks be completely checkrailed for the operation of open top single truck cars, and this has not been done. The tramway is now



Gateshead 10 is used on the tramway at Beamish, near Newcastle-upon-Tyne.

maintained by an employee, Peter W. Price, who previously worked with Bradford Corporation Transport.

Arailway station has been quite attractively rebuilt on the site, and the museum recently gained fame for rebuilding a working replica of George Stephenson's Locomotion, which was used to open the Stockton - Darlington railway in 1825. Less impressive is the line of railway carriages, varying from barely restorable wrecks to completely burned out hulks. Like many other similar museums, this one is yet in a raw-boned The age which it is attempting to recapture is not clear, and one had the impression that its objectives may not have been completely thought out at the time it was established. Nevertheless, with careful development, it will become a valuable if not entirely historically sound community asset.

# SANDTOFT

The Sandtoft Transport Centre is jointly operated by the Doncaster Omnibus and Light Railway Society, the British Trolleybus Society, the Bradford Trolleybus Association and the West Yorkshire Transport Circle and provides accommodation for trolley buses and motor buses. A number of trolley buses owned by the National Trolleybus Association were also on the site, but this body is not represented on the management committee and its vehicles did not appear to be receiving any attention.

The site is located on a portion of an old airfield on a remote site in the fens east of Doncaster. Funds to initially establish the site were provided by a member who is now being repaid by rentals of stored vehicles. For covered storage, £1 is paid, while the charge for open storage is 50p each week. An annual field day is held, and the trolley buses are operated over a duo-directional loop outside the depot. What proposals existed for the long term development of the site were not clear to the author. What was clear, however, is that there can be serious difficulties in coordinating the operations of an enterprise in which portion of the vehicles are owned by societies while others are privately owned.

# CARLTON COLVILLE

The East Anglia Transport Museum Society in association with the Historic Commercial Vehicle Club and the London Trolleybus Preservation Society operates a multi-vehicle museum at Carlton Colville, near Lowestoft in East Anglia. There are five trams, 14 trolley buses, a small group of motor buses, several works vehicles and cars. Blackpool 159 operates over a couple of hundred yards of track and an extra wire has been erected for trolley bus operation. A small railway runs on the site. The collection is housed in several small sheds, but some deterioration was evident, especially among those trolley buses which do

not fit completely within their sheds. Various transport objects were strewn about the site. A peculiar exhibit is an elegant six-wheel Cardiff trolley bus without its upper deck. Enquiries revealed that the upper deck had been cut off and sold for scrap in order to defray the costs of preservation.

The differences between the various double deck trolley buses are not very evident to the casual observer. It was noted, however, that many of the earlier buses were wooden framed. In some, the framing had completely rotted out, even though the panels were quite sound. Restoration of such vehicles will be extremely time consuming.

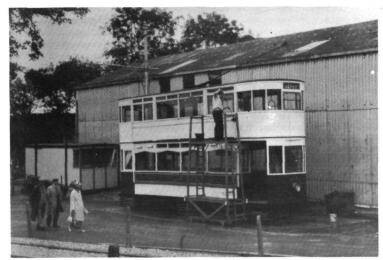
The Carlton Colville group appeared to be a small but dedicated band who are finding difficult the creation of a museum in an area which is off the beaten track.

#### CRICH

The Tramway Museum Society's display at Crich must rank as one of the world's premier tramway museums. One has the impression from the relatively insular approach of a few of its members that they may well be aware of it. Three excellent three-road depots house the majority of the operating fleet. A well-equipped two-road workshop has deep pits with excellent lighting. A specially constructed washing bay is available for car cleaning, while a fifth depot houses cars awaiting major reconstruction. Earthworks have begun for a sixth depot, and other cars are held in a former railway goods shed at Clay Cross, some 15 km distant. Rental paid by the owners of a number of buses also stored there helps defray the cost of this facility.

The trams operate through a village street, and the Crich group have succeeded in creating a real place. The line itself, largely in single track, is about 1 km long. The effect is a little short, and it only leads to a small lead mine exhibit which attracts little attention. However, the winding ride through the trees is pleasant and the standards of track construction are, by museum standards, excellent.

Standards of restoration are far superior to those generally practised in Australia. For example, the recently completed restoration of Newcastle No. 102, an open top double deck bogie car, took nine years. During that period, a high proportion of the structural timber was replaced. Neverbteless, it is a real concern to the Management Committee at Crich that they may not have sufficient cars to run the service in future years. About 16 cars are required to guarantee services through the summer. Many of the cars have been running almost continuously since their arrival at Crich, and have received no major attention. The majority will require overhaul in the next five years. After a museum has been operating for some time, programming the restoration projects in with the



Crich has a specially constructed and drained washing bay. Switchgear to isolate the overhead is an integral feature.

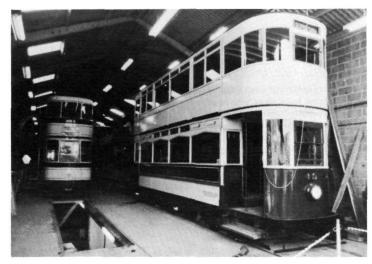
overhaul schedule becomes an important consideration.

To assist the restoration programme, several cars are being restored off-site. Two are being rebuilt by an enthusiastic group who meet at an old depot in Stepney Green, London, each Tuesday night. After three or four hours work, they adjourn to the 'local' for a convivial ale just before closing time. Another interesting project is the restoration of Bolton 66 by a group in the Midlands. This group recently had an entire new upper deck built for the car by a local firm who otherwise specialised in coffinmaking. Drawings had been prepared from the original components, and the firm did an excellent job. Although the cost was over £2,000, several years time was saved, and greater professional skill used than if members had done it. An increase in contract specialist

construction can be expected as museums achieve greater financial independence.

In watching the operation at Crich, one comes to realise that Australian cars are relatively simple and unsophisticated. Most cars within each museum operate on generally similar principles. Not so at Crich. A wide variety of control characteristics from manual notches to joysticks are used. Handbrakes, air brakes, magnetic brakes, electric brakes, manual operation, foot operation all contribute to the complexities of driver training. Standards are high, though the author questions the wisdom of having a trainee motorman practising emergency stops in heavy Extravaganza traffic at a time when 10 cars were operating on the line.

It is in the area of power supplies that the Australian museums, with their modern diode rectifiers, have advantages over Crich. The



The T.M.S. has constructed excellent workshop facilities. Sheffield 264 and Blackpool 49 are ready to return to traffic, while cars at rear undergo major restoration.

T.M.S. power supply is an antediluvian affair involving a motor-generator, a rotary converter, a set of traction batteries, a large diesel generator and until recently a smaller diesel generator mounted within a tram. Various combinations of these are brought on line as demand requires. A goodly amount of time appeared to be spent extinguishing small fires among the traction batteries. Unfortunately the local power distribution supply at Crich does not permit the installation of a diode system.

Communications are important, and Crich has a convenient 40 line private automatic exchange. A practical touch was the location of one extension in the parlour of the Cliff Inniust down the road.

The souvenir shop, as well as being equipped with the usual range of traction literature and postcards, also carries an extensive range of what can best be described as trinkets. Shop manager Colin Scothern by skilled buying, has considerably aided profits with these items. Many are bought by visiting children to take home as presents after an educational outing to the museum.

The fact remains that the operation of a voluntary society which in 1974 had an annual turnover of £66,000, requires considerable administrative skill. When a museum reaches

the size and complexity of the T.M.S., the administration is just as essential to successful operation as is the work performed in the workshops or in traffic. Relationships between management, professional staff and voluntary workers are important. Their potential turbulence should not be underestimated.

The one major lesson to be learned at Crich is not immediately obvious to the casual visitor. It is that a young generation of members are playing an increasing role in the operation and management of the museum. The British group are succeeding in passing their hobby, now a major enterprise, down to an equally enthusiastic and responsible younger generation—a generation which has never known trams in the environment for which they were originally conceived.

This is the transition for which we must all begin to strive in Australia.

# Acknowledgements

It is a pleasure to acknowledge the hospitality of the many museum groups visited. Particular appreciation is expressed to Paul Class, George Isaacs, Ed Frazier, John H. White Jr., Brian Lacey, Winstan Bond, Geoffery Claydon and John Henderson.

# \*MUSEUM Notes & News \*

# from LOFTUS

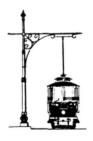
South Pacific Electric Railway

#### DEPOT ROOF COMPLETED

The remaining sections of the old low-height depot roof were removed over the Christmas-New Year period. Work will soon commence on the construction of troughing for the overhead wire to be installed in the depot which will enable the use of the wandering lead to be discontinued. Depot road 3 is to be extended through doors at the back of the depot by the construction of an outside elevated inspection track, which will permit easier access to the various components under the trams requiring maintenance.

# CANVAS TRAM DOOR BLINDS

Through the efforts of Bruce Pinnell, a



quantity of unused canvas for R and R1 class car concertina door blinds has been obtained. Replacement of the canvas doors on R 1740 is now being undertaken.

# BOGIE FARM DEVELOPMENTS

The museum's stock of Sydney tram bogies was augmented recently with the acquisition of two Sydney No. 13 (R1 type) trucks. These were located by Bob McKeever in an engineering factory at Chipping Norton and were exchanged for two of our spare W2 bogies.

#### CABLE TRAM TRAILER CAR

Through the generosity of the Steam Tram and Railway Preservation Co-op. Society, the



O breakdown car 141S, in rather an unusual role, heads off towards the side yard at Loftus with the body of ABV 758 in tow. The ABV was moved on the steel framed trolley, another recent acquisition to the fleet, and offloaded at its final location, adjacent the points to the rear of the depot.

-Tony Cody

museum has acquired an ex King Street cable tram trailer. This vehicle is at present stored off-site and will fill an important gap in the museum's collection. We are indeed grateful to the S.T.&R.P.S. for their help in this matter.

#### WORKSHOP

Some rearrangement of the workshop area has been carried out by Bill Parkinson to provide better utilisation of the available working space. Additional shelving has also been installed to accommodate numerous spare parts and tools.

# THE 'ABV'

A power point and fluorescent lighting have been installed in the ABV van body, now the S.T.M.'s paintshop.

# MEMBERS' DAY, 1975

The inclement weather experienced during the previous few days cleared by Saturday, 20th

December and by the time traffic operations commenced in the early afternoon, the sun was shining brightly.

A number of trams provided a regular service during the afternoon's activities, K class car 1296 making several runs as did O class cars 1111 and 141S in multiple. The two green and cream O cars made a pleasing sight.

On completion of the day's activities at the museum, the evening social dinner was held at the Astron Lounge, Gymea, following which a selection of vintage 9.5 mm movies of general interest were screened.

Members' Day for 1976 will be held on Saturday, 11th December.



# S.P.E.R. Notice of General Meeting

The next general meeting of the South Pacific Electric Railway Cooperative Society Limited, will be held on MONDAY 8th March 1976 at the *Transport Club*, Regent Street City, commencing about 7.45 pm. S.P.E.R. members and friends who are not Transport Club members will be required to sign the special visitor's book at the door on arrival. The usual restrictions apply to members under 21 years of age.



Inspecting the cable tram fleet at the home of Mr. Twentyman on 8th November 1975.

'Blowing' a hole in the bolt-on check rail outside the dep-ot at Bylands with the electric welder in the background -Keith Kings

Charles Horse plods south to the Union Lane terminus past the line up of vintage and veteran cars on 11th January 1976.

-A. Cooke -A. Cooke



# from BYLANDS

Tramway Museum Society of Victoria

Rolling Stock

Bogie cable trailer No. 192 was lifted onto the overhauled bogies by the local Kilmore crane contractor and is now stored in the depot. Several fittings have been removed from the outside of the car to make it look less like a backyard bungalow! Its spacious interior is being used to store the variety of spare parts that we have collected over the years from several cable dummies and trailers thus relieving depot space as well as tidying up the general appearance of the shed.

Mr. Twentyman continues to spend many hours each week working on dummy No. 28, and it is taking on quite a presentable appearance. Week-night work at Malvern depot recently has cleaned the cars stored there, and continued the repainting of No. 180.

In February 1963, the M.& M.T.B. disposed of tramcar No. 231 to the Sisters of St. Joseph in the Melbourne suburb of Canterbury. Late last year they decided to have Whelan the Wrecker dispose of the vehicle to enable improvements to be made to their grounds. We were fortunate in being allowed to remove any fitting we liked, and the full set of wooden saloon seats (in, generally, fair condition) were removed and transported to Bylands. Several lesser items were also acquired.

The wheel press and its smaller parts have been moved across to the east fence and stacked out of the way, while the old goods loop siding has been finally cleared. Brian Weedon used the tractor to tow several lengths of rail to the stack before feeling that the machine was finding it difficult to haul the last rail. He found that he was towing seven lengths of rail which had not been unbolted! Oh, well, it will save us bolting it together again, someday....

The improvements to the toilet facilities have been completed, but wash basins and piped water have yet to be installed. Work continues on the front of the depot. The tedious task of framing for the outer and middle columns to take the cladding is complete, and attention is now being given to the gable end above the doors.

#### **OPERATIONS**

Training of Charles Horse progressed satis-

factorily until it was decided to re-commence passenger traffic on Sunday 30th November. The Vintage Drivers Club visited Bylands for their lunch stop on Sunday 11th January with some 36 vintage and veteran cars, as well as several more modern autos. Quite a few other vehicles also arrived, several of whom turned into Union Lane to see where the old cars were going!

Filling has been placed in the main line turnout to enable 'Charlie' to walk up and over the curved rail. The horse tram service has therefore been extended to the limit of gauge conversion just north of the Gang shed, and we hope it will soon reach the northern limit of the yard area. The next extension will be to the top of the gradient — referred to as 'one tree hill' — giving a journey of some 3/8ths of a mile.

# PUBLIC RELATIONS

Tony Cooke's work on the new one gauge boards for running and displaying the various model tramcars is nearing completion, and they will be used at our stand at the A.M.R.A. annual model railway exhibition at the Camberwell Civic Centre from Friday 5th to Monday 8th March 1976. Robert Green is preparing displays on Society activities and is repainting all the display boards and stands. It is hoped that our first appearance at this function will be of benefit to all concerned.

# TOURS

Word spread through the fraternity early in December that the M.& M.T.B. would de-register the remaining Leyland OPS1 type motor buses (stored for several years) at the end of that month, and offer them for sale. Several members had previously talked about chartering one of these vehicles for a Society tour to Bylands, but had not pressed the matter for inclusion in the tours programme. The situation thus became urgent, and a trip was hurriedly arranged for Sunday 21st December. The cost of a mail-out for this one item could not be justified, so as many members as possible were notified by word of mouth. We apologise to any member not notified who would have liked to join the trip. Alan Jungworth kept the driver's seat warm for the day, and the Bus Branch Engineer's staff produced a very nice looking No. 422 for our trip. (These latter gentlemen always excell themselves whenever we charter an M.& M.T.B.

bus, and we have wondered, if we ever gave them several months notice — instead of the usual two to four weeks — whether they might be tempted to build us a brand new bus!) A pleasant outing was had by all who participated

The annual 'Golden Sunset Tour' ran on

Boxing Day as per usual. Car No.53 was used for a pleasant afternoon and early evening run through Royal Park to West Coburg and then to some of the eastern suburbs with the almost customary evening meal layover at Malvern depot.

# from ST. KILDA

# Australian Electric Transport Museum

# SPECIAL NOTICE

The Sunday Roster for operations April – June inclusive will be drawn up during March, and therefore members who work on the roster are asked to notify Ron White by the end of February of any days they wish to be rostered or any days they wish not to be rostered. The phone number is 297 4447, but if unable to contact Ron White, notify Max Fenner.

#### ST. KILDA BEACH TERMINAL

Following the decision of the Australian Government to phase out the Regional Employment Development schemes, the second project planned by the A.E.T.M. was denied its labour component. However, with the experience gained through operating the cars in the last eighteen months, Operations Manager Max Fenner recommended to the Executive Committee that a single, stub track form the final layout of the terminus at St. Kilda. Beach in lieu of the proposed two sidings. This was accepted and the Corporation of the City of Salisbury undertook to complete the half chain of track required, together with a sand buffer and an additional pole for tying off the overhead. No action will be taken on the latter for the time being as it is probable that when Birney car No. 303 arrives from Bendigo it will be unloaded at St Kilda Beach. At present the overhead is conveniently offset at this point which will facilitate the manoeuvre.

#### TROLLEYBUS SHED

After considerable delay, a sub-contractor to the manufacturer, W. Ahrens and Son, commenced erecting the new trolleybus shed on Monday 24th November just south of the existing depot. This steel-framed, corrugated iron clad building measures 108' x 30' with a clear interior height of 19' to accommodate the Museum's double deck A.E.C. trolley bus No. 417 in working order. All the A.E.T.M.'s rubber tyred



vehicles will subsequently be housed in this structure.

#### OTHER DEPOT NEWS

Christopher Steele has been busy endeavouring to forestall — with varying degrees of success — the usual Spring invasion of the museum's buildings by dozens of nesting birds. In the process of 'battening down the hatches' with strips of wooden beading, he has performed minor repairs on doors and other fixtures and applied coats of paint where they are still needed.

The environs of the depot have continued to be enhanced as the last of the external stores are neatly stacked away and upwards of 60 new trees planted.

Warren Burt and Ron Jenkins have been instrumental in dealing a blow to the dangerous and unsightly problem of dry grass around the depot by adapting a tractor-hauled agricultural reaper to cut it in big swathes for the first time.

# THE TRACK

Warren Burt has also been the protagonist for the installation of spring-loaded points at Mangrove Loop. Fabricated by Robert Magnussen from a strong leaf spring and wire cable, the first of these has been introduced at the east end of the loop. Simple and effective, it saves motormen having to stop the cars to go to set the points.

Mark Skinner continues his regular inspections for track subsidences, particularly on the causeway, and usually carries out the remedial ballasting and re-packing. Experiments with pneumatic tamping equipment are likely to be undertaken in the near future.

#### OVERHEAD

John Radcliffe has re-stencilled the numbers on the lineside traction poles following their repainting.



The photo above shows boxing for the concrete footings of the new trolley bus shed being set out by the erecting contractors, and below, the first column being lowered into position.

—Christopher Steele

## THE CARS

Much more activity is now centring on the cars than has been the case for many a day. Paul Shillabeer has for months deputed to himself the onerous but important task of regularly servicing those features of the cars which need oils and lubricants.

The first phase of re-furbishing No. 381 prior to an overall repainting has begun with the reglazing and re-rubbering of a number of windows.

But most of the work still revolves around No. 192 where John Pennack has reconditioned the second controller and is now in the process of rewiring the traction circuits. At the same time, Robert Magnussen is installing the handbrake system.

#### VISITORS

On Friday 31st October, some 10 engineers from interstate and overseas who were attending the Conference in Adelaide on electric transportation convened by the Institution of Engineers, Australia availed themselves of an invitation to visit the museum. Christopher Steele, Roger Wheaton and John Pennack were their hosts, and a return ride was provided to St. Kilda Beach in either No. 111 or No. 381. These visitors congratulated the A.E.T.M. on its achievements and proffered some technical advice on certain aspects of our operations.



# from BALLARAT



# Ballarat Tramway Preservation Society

## BENDIGO TRUST CO-OPERATION

Our grateful thanks are tendered to the Bendigo Trust for making available to us, a complete front end of ex-Bendigo tram No. 10. This was, incidently, painted in the trust's livery, attached onto a metal frame and then, when required, mounted on the front of a road vehicle and used in a number of parades a year or two ago — such as the Easter Carnival in Bendigo and the Moomba Parade in Melbourne, et cetera.

Some of our members travelled from Ballarat by road motors, whilst others 'trained' their way from Melbourne.

After loading the front onto a hired tandem trailer, the end was closely examined, and it was decided, on account of its size, to dismantle the front portion from the roof and metal frame.

This was successfully completed, thanks to some hard work by the gang, and particularly by Michael McGowan of the Bendigo Trust, who displayed great expertise in using hammers, cold chisels and screw drivers. The 'goodies' were lashed to the trailer, and we report that they sat on or fitted into the trailer very neatly.

Barry McCandlish then set forth for Ballarat, whilst the others reported to the trust's depot, where an informal handing-over-and-acceptance took place with Bendigo No. 3, repainted in Chocolate and Cream and renumbered No. 122, providing the background.

The Ballarat members were invited to an imprompturide to the mine, over the new mass concrete track from Charing Cross to Violet Street in No. 122; this trip was thoroughly enjoyed by all concerned.

The work party consisted of the following, and to them we extend our grateful thanks:-Barry McCandlish for making his station sedan available as the prime mover for the trailer; Bill Jessup, Graeme Jordan, Andrew Hall, and Bob Prentice, all B.T.P.S. The Bendigo Trust was represented by Mike McGowan and Craig Lapsley.

Thanks, fellas!

# TRAFFIC

A passenger service has been provided continuously from 20th December 1975 to 1st February 1976, inclusive.

The usual Christmas influx of interstate tourists has provided at least half of the patronage. Week days see about 150 fares riding,

whilst on Saturdays and Sundays, loadings have been as high as 300 passengers per day. By expert manipulation of the duty rosters, the back bone of the week day services have been provided by members who are in the fortunate position of being school teachers, off-duty tram and train drivers, and members on annual leave.

The next period of intensive tram services will be during the Begonia Festival in Ballarat and, of course, Melbourne's Moomba, when large public attendances to the glorious Ballarat Gardens are assured.

#### WOMEN PLATFORM STAFF

The society has three female members who are being trained as conductresses; soon, they will be considered for selection as motor-er... um...ah...? women, of course! This will be the first time, since 1946, that women have been used as platform staff on the provincial tramways. Recently, the Ballarat Courier learnt of this fact, and subsequently, a large photograph, plus an article concerning the active participation by our lady members was featured.

#### REPAIRS TO TRAM No. 28

Further work has been completed, such as painting the wooden body framework with primer, and the metal side panels have been stripped of many coats of paint and anti-rust coatings applied. The front, ex-Bendigo, has been fitted and work begun on repairs to the roof.

#### OVERHEAD SUPERINTENDENT

Geoff Dean has been appointed to this position and already, some adjustments to the overhead wiring and tensioning of same are in hand.

# SOUVENIR SALES

These items have been selling like the proverbial 'hot cakes'. Conductors carry badges and postcards in their cash bags ready for instant sales. To date, the top seller of badges is Jack Chadwick with 57 sold on the trams during New Years Day.

The first edition of the society's souvenir booklet has been completely sold out, and an upgraded second edition is well in hand and should be on sale soon.

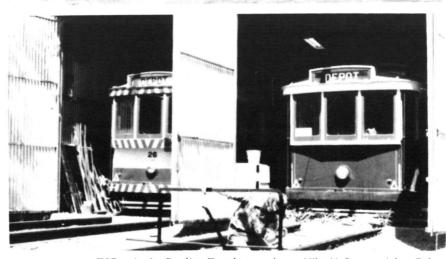
#### VISITORS

We extend greetings to the following, over the past few weeks;-

Mark Kilpatrick of M.O.T.A.T., Auckland, New Zealand and Ron White, A.E.T.M., South Australia.

FEBRUARY 1976 TROLLEY WIRE





TOP: At the Bendigo Trust's tram depot, Mike McGowan wishes Ballarat all speed with repairs to their No. 28. Bob Prentice accepts his best wishes on behalf of the B.T.P.S. MIDDLE: With the front end of ex-Bendigo No. 10 now neatly stowed on the trailer, Barry McCandlish sets out for Ballarat. BOTTOM: Graeme Jordan repairs part of the safety gear from No. 27. The un-numbered tram on the right is No. 28.

—Bob Prentice & Richard Gilbert

# from BRISBANE



Brisbane Tramway Museum Society



The trolley buses Nos. 1 and 34 have turned their backs on the bogie nursery at Ferny Grove, but advertising car No. 128 is there to keep a watchful eye. -Tim Atherton

#### MUSEUM PROGRESS

Due to the fact that the building permit on the depot shed expires early in February, it has been decided to concentrate all work on the completion of the shed. This has meant that the construction of the tramway intersection in the terminus area has been temporarily postponed, but with daily temperatures in Brisbane around 29 to 33 degrees, no-one is complaining. New supplies of sand and gravel have been obtained as the previous stock was exhausted. Cement was obtained and arrangements for the hire of a 240 volt welder when required were finalised

Since the middle of November, work has concentrated on digging the trenches for the baffle walls around the shed. Once they are dug forming will be set up and the concrete poured.

Phil Smith has been hard at work welding the Z-girts to hold the Colorbond walling. At the time of writing, all except three bays have received baffle walls, and the back of the shed has been sheeted. Z-girts have been welded on 7 of the 12 bays, and welding work was being carried out during the week by Phil. It seems likely that the deadline will be met.

It is hoped that John Hudson will soon finalise plans to install fluorescent lighting in

the depot as the installation of the walling makes the shed very dark inside. During the last weekend in November, a branch water pipe was installed off the 1 inch pipe running through our grounds to the dump, and a tap was installed in the front of the shed, mainly to supply a firefighting hose temporarily until proper fire precautions can be installed.

### CAR NEWS

During mid-November, ten bench car 76 arrived at the museum from its resting place at Geebung. This car is in remarkable condition with the seats, some grab rails, hand brake connections and canvassed roof still fitted to the tram. It was off-loaded at the rear of the store shed by a crane, and placed on two dropcentre bogies for storage. Members Bob Deskins and Denis Campbell were responsible for the arranging of donation and delivery of the tram to Ferny Grove, and we are indebted to them.

Restoration has continued on car 341, the fascia around the destination boxes having been removed and the new ones in the process of being cut out. This was because the old ones, while looking in good condition on the car, once removed, it was found that they had badly corroded.

WASTE NOT, WANT NOT....

Whilst the crane was at the museum offloading No. 76, opportunity was taken to use it to complete some of the jobs which had been held in abevance for some time. All the spare FM, drop-centre and handbrake drop-centre bogies, as well as the spare Brill sideframe were moved to a specially prepared bogie storage area between the workshop and the storage shed. Also moved were the spare motors which are now stored off the ground near an entrance to the store shed into which they will be moved when space permits. A spare transformer which has hindered the extension of the garage adjacent to the workshops was shifted, and the points stack was dismantled allowing easier access to several sets of points which we will be needing in the not-too-distant future.

# BRISBANE HOBBY DISPLAY

Once again, the Society provided a display for the Brisbane Hobby Exhibition. This year's display consisted of a large photographic collection covering subjects such as the building of FM cars, tramcar accidents, advertising cars, the Brisbane City Council Display at the R.N.A. Exhibition, and the development and the present progress at the Museum. As well there was a narrated slide show of the history of the tramways and the development of the Museum Society, and a bookshop which did brisk business. Great public interest was shown in the museum, illustrated perhaps by the visitor

attendance at the museum the weekend after the exhibition finished — over 30!

MUSEUM SURVEY

Recently an approach was made by the Planning Committee, headed by Secretary Stephen Tyrrell to the Oueensland Institute of Technology regarding the possibility of surveying the museum, including the new proposals in the museum plan. We have received a reply from the Institute, and they have told us that they will be pleased to initiate a survey, as an exercise for their surveying students. It will probably be undertaken in February, and will be done over the period of one week. Needless to say, the survey will benefit the museum tremendously, eliminating all the doubts about track levels, building locations and roadways. The generosity of the Institute will save the Society thousands of dollars in surveyor's fees.

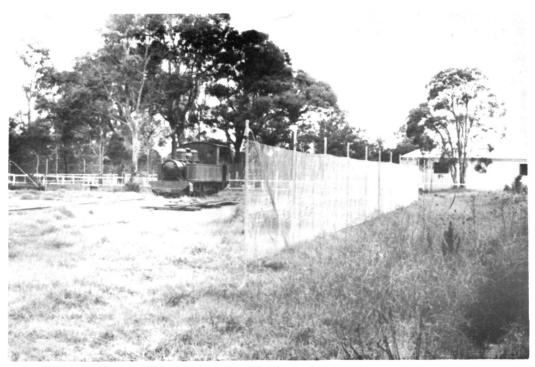
#### FIRE BRIGADE VISIT

Early in November, an advisory Officer from the Metropolitan Fire Brigade attended at Ferny Grove to advise on the future installation of fire fighting equipment, and the location of the flammables store, and fuels shed. This officer was most informative, and some of his suggestions had the limited financial capacity of the Society in mind. The Council will now consider the recommendations, and in the future will make sure that the precautions outlined are incorporated in the development of the museum.



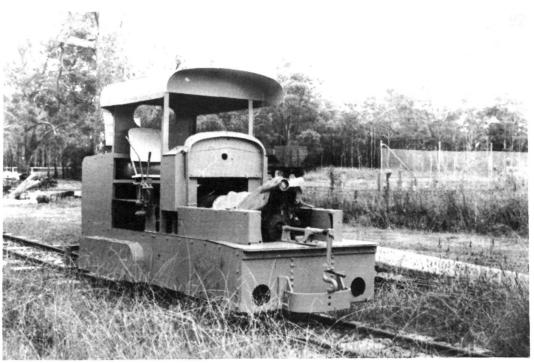
'Easy does it!' The body of ten bench car No. 76 is gently lowered onto a pair of spare dropcentre bogies after arrival at Ferny Grove.

-R. Deskins



Progress at Albion Park. Above; 0-6-2T Perry loco. ex 'Tully 6' showing the initial stage of construction of the loco compound fence on 3rd January 1976, and Below; the Leyland-Krauss loco on the same day. This view shows the loco in a stripped down condition awaiting reassembly. The Krauss parentage of the underframe is clearly seen in this photo.

—Ken McCarthy



# from ALBION PARK



Illawarra Light Railway Museum Society

# ALBION PARK SITE PROGRESS

During the hot summer holiday period, the important, but less spectacular tasks associated with the museum site development progressed at Albion Park. During the August-November period, when most working members were involved in the final track lifting efforts at Corrimal, the grass and weed growth at Albion Park developed into a major problem. This has since been brought under control with the spreading of 200 tons of gravel over the engine compound floor, while mowing, weed spraying and hoe-work now has the tracks and picnic areas back to an ordered appearance.

Work is progressing on the construction of a weed killing wagon. This is being erected on a spare Hudson-Jubilee 2 foot gauge side tipping underframe, retrieved from the Scone-Gundy area in northern N.S.W. three years ago. A large tank has been fitted to two steel channel cross cradles while a stop cock and delivery pipe leads the weed killing liquid to a transverse sprinkler pipe just above rail level. Hose extensions are being fitted to the cross sprinkler pipe to enable the liquid to reach about 1 foot on each side of the track; this will allow flexibility in locations where a rigid sprinkler extension would possibly run foul of nearby structures and fixtures.

By Mid January, chain wire security fencing had been fixed to the southern and eastern wall of the exhibit enclosure. Some further progress can be made beyond this point, but completion will be delayed until the arrival of several further large relics, the delivery of which would be very difficult if the enclosure was fully erected. Most of the galvanised pipe posts, however, are in position, but some effort will be directed to gate assembly in the near future.

# TRACKWORK

With the exception of turnouts to skip sidings, the Albion Park layout has been designed so that main lines and sidings will be constructed to a minimum radius of 2 chains. Although the I.L.R.M.S. has been most fortunate in obtaining many sets of points, some in near new condition, in both 25-30 lb and 45 lb rail sections, only five units have had frog inclinations which would give the standard curves, the others being of a sharp turnout radius.

This problem has been partially solved with the construction of a trial 2 chain radius turnout frog by I.L.R.M.S. members. Member

Keith Mayhew, the proprietor of Daniel's Engineering Works, has made available the use of such shop plant as presses and planing machines which has enabled this professional job to be done. Of course, the Society is still negotiating for suitable point work in made up condition, but if such plant is no longer obtainable, this will not hinder the track progress at the museum.

RESTORATION

By mid January the stage had been reached with the restoration of the 0-4-0 petrol Leyland-Krauss (see T.W., August 1975, p30 and April 1975, p28) that reassembly had commenced. The major tasks overcome were the restoration of the cracked radiator header and bottom tank: these were restored to new condition with an aluminium base resin compound; the resoldering of the copper radiator cores; the reconditioning of the water pump and fabrication of replacement parts; the replacement of the damaged magneto with a reconditioned unit made available by the N.S.W. Fire Engine Preservation Society; fitting of new compression and oil rings, the former being manufactured for the Society at Daniel Engineering of Wollongong; the reconditioning of the pair of cracked combination cylinder and head units, this being carried out at no charge by 'Metalock Pty. Ltd' of Bankstown, Sydney.

The body of this unit had earlier been rubbed back and primed and work is now advanced on repainting the locomotive. If no reassembly difficulties are encountered, this interesting relic should be ready for power trials during autumn, with an official naming and service entry ceremony to follow.

Work has commenced on a restoration job which will take very much longer; but, all long journeys start with one short step! The initial tasks in the Shay loco restoration have started... this has been the cutting back and priming of transmission parts. Donations towards the \$1150 cost of retrieving the Shays have been received in recent months, now lifting the total amount received towards this project to \$830. Although the I.L.R.M.S. was fortunate in receiving so much of these locomotives, the cylinders being the most important missing parts, many single items will have to be used as patterns to have duplicate parts cast, so the donation target will have to advance well beyond the initial cost of delivery to enable even a static restoration of a single Shay engine to be undertaken.

# City Section

NEWS OF THE M. & M. T. B.



M/s. Ellen Butland during driver training. Below; the new type safety zone in Swanston Street. -Keith Kings

Monday, 5th January 1976 saw the commencement of an all Z car service on the East Brunswick route. The previous day, five Z cars were transferred to North Fitzroy depot from Preston Workshops to join the eight cars already there. Seven W6 and W7 cars were returned to the workshops, with the final two following on the Monday.

Trams in stock on Friday 2nd January 1976:-W6 & W7 - 972, 973, 979, 984, 1023, 1025, 1035, 1037, 1039 (9 cars) Z - 16, 17, 18, 19, 21, 22, 23, 24

> (8 cars) Total - 17 cars

On Sundey 4th, the following transfers took place:-

To Preston W/shops:- 972, 979, 973, 1025, 1035, 1037, 1039, (7 cars)
From Preston W/shops:- 9, 11, 12, 13, 15 (5 cars)

On Monday 5th, the following transfers took place:-

To Preston W/shops:- 984, 1023 (2 cars)
From Preston W/shops:- 6, 7 (2 cars)
Trams in stock on Tuesday 6th January 1976;Z class:- 6, 7, 9, 11, 12, 13, 15, 16, 17, 18,
19, 21, 22, 23, 24 Total - 15 cars

The service appears to be running fairly

smoothly, but the end of the summer holiday period for many city workers will probably provide the proof about the end of January. Z No. 25 entered service on 21st January and No.31 was received ex Com-Eng, Dandenong, on 19th January.

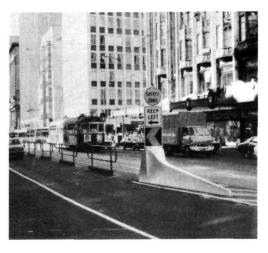
New Type Safety Zone

A new type of prow has been fitted to the Town Hall safety zone in Swanston Street, for southbound cars at Collins Street. It is a slightly neater design to the former style, and is surmounted by the same warning standard as has been used on 'light loading' zones for some time. The existing 'light loading' safety zone in Spencer Street at Bourke Street, for southbound cars, has been upgraded and fitted with one of the new prows.

Other News

T.M.S.V. member Ellen Butland has become the fifth lady to qualify as a Melbourne tram driver. She qualified at the beginning of January after the usual period of tuition in December.

A shortage of Z class drivers at North Fitzroy depot caused a crew to be borrowed from South Melbourne depot on Saturday morning, 17th January — complete with W5 class car 794. The car made a couple of round trips to East Brunswick with a composite destination name turned half off so as to read only East Brunswick. A black auxiliary destination board with East Brunswick chalked on it was also carried.



FEBRUARY 1976

# Here & There

# Newcastle LP 327

Over the last year or so, a group of preservationists in Newcastle, N.S.W., have been restoring a growing collection of buses. In early 1975 these enthusiasts formed a preservation group named 'Newcastle Historical Vehicles Association', (PO Box 179, Wallsend, N.S.W., 2287).

This group felt that it was unfortunate that an LP type tramcar, which operated in Newcastle between 1923 and 1950, had not been preserved in that provincial city. Accordingly, foundation member Brian Blacklock discovered the complete body of LP 327 at Duri, near Tamworth, in September 1973 and immediately initiated negotiations aimed at enabling the tram to return to Newcastle for restoration and preservation.

The perseverance of the group was rewarded when No. 327 returned home on 30th October 1975!

LP 327 entered service in Sydney as a bogie 'California' car of the F class on 27th September 1901 and was probably converted to the L design, with transverse seating in the open end sections by 16th December 1916. This vehicle returned to Randwick Workshops during 1924 for a drastic and final conversion to the LP 70 seat cross bench enclosed configuration to provide 'new' rolling stock for the then current Newcastle tramway electrification. On leaving the workshops, No. 327 was transferred to Newcastle on 31st July 1924.

Newcastle records suggest that the tram's services were quite routine. It was painted five times, 42/1929, 4/1935, 2/1939, 2/1943 and 3/1949, while air powered windscreen wipers were fitted during June 1940. Its one claim to fame occured on the night of 25th February 1950 when it operated the last trip to Merewether Beach. No. 327 departed from the inner city Telford Street terminus at 12.10 am on Sunday 26th February in the care of driver Hunter and conductor Dent and left Merewether Beach for the last time at 12.30 am for Hamilton Depot. This tram was available for regular traffic until the Newcastle closure on 10th June 1950, but it is doubtful if it was placed to much use after the closure of the Adamstown branch on 16th April 1950.

LP 327 was one of the last trams to be lifted from its bogies and stripped of electrical gear as it was not shipped to Tamworth until 20th August 1951, for use as a building at the



Central Tourist Auto Park, Cars 141, 315 and 375 had been shipped to the same destination over the previous eight months. Only two tram bodies, Nos. 141 and 375, were fitted out for this role, cars 327 and 315 being resold during 1953/54.

The two trams remaining at Tamworth were burnt in 1957/58 but No. 327 was transferred to Duri as a bunk house, a use to which it was never converted; thus, at the eleventh hour, LP 327 has been rescued for preservation and restoration.

No. 327 is now at the Newcastle Technical College and the preservation group has commenced roof restoration, but, as would be expected of a tramcar which has stood almost a quarter century open to the elements, overall restoration will require a considerable amount of labour and time.

The year 1975 has been a milestone in Newcastle street transport history. It has marked the 25th anniversary of the tramway closure in that populous city and it has marked the withdrawal of the last double decker from government omnibus service in that centre (both events have been recorded in these pages), but the major attainment is perhaps the retrieval of LP 327 as now a form of urban transport and the efforts made by the men who manned these tramways there (between 1887 and 1950) is at long last being commemorated by the Newcastle preservation group.

Ken McCarthy, who compiled the above notes, thanks Messrs Ken Magor, Joe Gill, and Brian Blacklock for providing data for this brief report.

# Activity at Ultimo Tram Depot

\* \* \* \* \* \* \* \* \* \*

The old electric tram depot at Ultimo, Sydney, was a scene of transport activity for a few brief moments again on Friday afternoon, 19th December. On that occasion, two former (pre-World War II) Government buses, double deck Albion M/O 1615, and half cab single deck Leyland M/O 1275, were transferred from open store into the old tramway depot under secure cover.

The single deck bus was delivered to the Department of Road Transport and Tramways from Waddingtons workshop in 1937, and was sold to the Kuringai Bus Co. during 1952 for further employment on their Turramurra centred routes on the North Shore of Sydney. The double decker was delivered from the same body builders two years later, but remained on the Government bus fleet register until 1959 when it was purchased by West Bankstown Bus Service for further use in the south-western Sydney suburban areas.

Both vehicles were purchased from the private bus companies by a group of S.P.E.R. tramway museum members interested in bus preservation and have been restored back to external condition resembling that in which they entered service during the 1930's. M/O 1275 has been repainted green and cream with the sweeping 'streamline' body band, while M/O 1615 has returned to its original red and cream livery.

Ultimo was the first 'all electric' tram depot in Sydney, opened with the George Street electrification in December 1899. The structure served as a running depot until the closure of the Drummoyne service on 27th June 1953, but remained as a store depot housing trams due for scrapping or required for special peak services. In fact, the four initial S.P.E.R. trams, LP 154, Prison car 948, N 728 and F 393 were in that depot between 1954 and 1956. Other George Street lines continued in operation until 22nd November 1958, served from Rozelle depot, but Ultimo was cleared of trams during 1957.

Six years were to elapse until trams again entered the depot! On 2nd November 1963, O car 805 and R 1738 returned there for covered store, having been transferred there from Randwick Workshops where they had been housed for the Museum of Applied Arts and Sciences. (See T.W., April 1964, p12.) The depot now houses two buses and two tramcars, a contrast to the 123 passenger tramcars attached there in 1948—1949, but for a few brief moments on 19th

December, the depot yard was a scene of transport activity when the two buses were manoeuvred through the gates of road 10, only quickly to revert to a scene of inactivity again, perhaps for another decade!

\* \* \* \* \* \* \* \* \* \* \*

The two buses and the two trams are not available for regular inspection, but on special occasions the buses will be driven out to selected locations for display. The owners of the buses thank the Directors and Staff of the Museum of Applied Arts and Sciences for making space available in Ultimo depot for the housing of these vehicles.

# U.S. Museums Assist Transport Authorities

Most transport authorities generally are cooperative with museum groups as has been
recorded in *Trolley Wire* on numerous occasions.
Opportunities for the museums to offer assistance
are normally limited. However, this has recently changed in the U.S.A. where the surviving
tramway systems are labouring under the disadvantages of old equipment and a resurgence
of passenger traffic, whilst the museum movement has an extremely large collection of
vehicles, many still in good serviceable condition.

To help alleviate a rolling stock shortage until new trams are obtained in about 3 years time, the Cleveland Regional Transportation Authority has leased 2 ex Illinois Terminal Railroad, double ended P.C.C. cars, Nos. 450 and 451 from the Ohio Railway Museum and the Connecticut Electric Railway Association, respectively. These two cars will operate on the reserved track Shaker Heights line as a coupled set and will retain their I.T.R. numbers and colour scheme.

Two of a group of 8 cars purchased by the I.T.R. in 1949 for suburban service from St. Louis across the Mississippi River to Granite City, they only operated until 1958 when all I.T.R. passenger services ceased. These were the last new cars of any type purchased by an interurban company.

Boston has retained much of its tramway system and currently is taking delivery of new articulated trams. The system is being generally upgraded and the overhead converted for pantograph operation. To assist in this work an overhead line car has been borrowed from the Seashore Trolley Museum. Formerly used in Claremont, New Hampshire and numbered 4 in their roster, it is a much rebuilt vehicle, having started out in the early years of this century as a four wheel open passenger car. It is now a wooden bodied, bogie box car with swivelling



LP 327 about to depart from the Telford Street, Newcastle terminus on the last run by trams to Merewether Beach, on Sunday 26th February 1950.

-Ken McCarthy



RI 2031 about to depart on the final tour from Ultimo Depot to Drummoyne. This took place on 28th June 1953, the day after the closure of the depot and the Drummoyne line.

-Ben Parle

Preserved buses, double decker Albion M/O 1615 and single deck Leyland M/O 1275 in Ultimo Depot. The raised tram tracks have been removed, being level with the buses' lower deck window sills, and the buses are standing on what was once the pir floors under the tram the pit floors under the tram tracks, 19th December 1975. —Ken McCarthy



roof platform. One of three line cars at Seashore, it is now on its third working holiday in Boston since 1969.

The Seashore Museum also owns a tramcar carrying trailer which is affectionately known as 'the Highway Monster'. In October 1973 this trailer was made available to the Maine Central Railroad to rescue a covered hopper, box car and snowplough which were marooned at Colebrook, New Hampshire after the branch line thereto had been washed out by floods and subsequently abandoned.

-Connecticut Electric Railway News, & The Trolley Museum Dispatch.

# **BENDIGO TRUST NOTES**

by Bob Prentice

Since the Trust began operating a tourist tramway in Bendigo from Central Deborah Mine to North Bendigo, a number of interesting events have taken place; the major ones being....

At the Mine, a new curve has been laid from High Street into Violet Street, the trams terminating outside the Mine.

Trams 18, 19, 25, 28 and 30 have been painted in the Trust's colours of Red and White with ornate linings; they look resplendent in this livery.

A new solid state power supply was built in the depot, thus allowing the old rotary converters to be taken out of service.

However, over the past few months, a number of major capital works have been undertaken with great rapidity.

The single track from Violet Street to Charing Cross has been relaid in mass concrete; whilst these works were underway, the opportunity presented itself to re-align the curve outside the Cathedral to a more central position in the roadway and the track from this curve back to Charing Cross was also realigned. At the same time, new trolley wire has been installed, the overhead re-positioned and tensioned. The Myrtle Street loop has been removed. A new 'Y' terminus has been laid in Violet Street; this will allow traffic movements here in lieu of the removed loop.

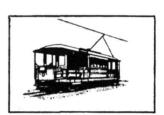
It is at the depot where most of the 'magic' is happening. Firstly, the depot roof has been repaired, and it, plus the appropriate places on the rest of the building have been repainted. Inside, trams have been, are being, or are about to be, repaired, re-wheeled and repainted.

Some instances are... Maximum traction No. 3 (Bendigo) is now very smart in a Chocolate and Cream livery and renumbered 122 of M.& M.T.B. days. Bogie cars 23 and 24 are being repainted. Birney 27 is a major re-build, and is being prepared in M.T.T., Adelaide

livery, for eventual change of ownership to the A.E.T.M., Adelaide.

Track cleaner tram (old No. 17) was converted from a summer car about 20 odd years ago, and it is pleasing to report that its reconversion to a 'summer car' (toastrack) is well in hand and progressing most satisfactorily. It must have been a sight to have seen the Trust's members removing the rather large water tank, though!

Ex-Ballarat No. 19, now Bendigo No. 7, has been painted to a later years S.E.C. colour scheme. No. 21 now has early S.E.C. decorative colours, eg. cream rocker panels, green side panels, cream trim, etc.; a very handsome tram indeed.



# LATE NEWS FROM W.A.T.M.

from 'Rattler'

The President's report this month is the announcement of a decision taken by the committee, regarding action to be taken at Castledare:

'The committee recommends beginning work at the station or terminus by filling the area required, the bringing of poles and tram body at the Lion Park, to Castledare, and the erection of a 6 foot cyclone type fence as a compound area, approximately 20 metres by 30 metres.'

'Commencement of track laying as soon as possible, sufficient to stand 31 and bogies. Then progressively to lay track and/or erect poles to the area, on plan, of triangle. Later to develop the tramcar barn for storage of vehicles. In the meantime car 31 to be repainted to withstand the weather.' 'Track to progress towards Wilson as finances become available,'

J. Stanbridge, President W.A.T.M.

FEBRUARY 1976 TROLLEY WIRE

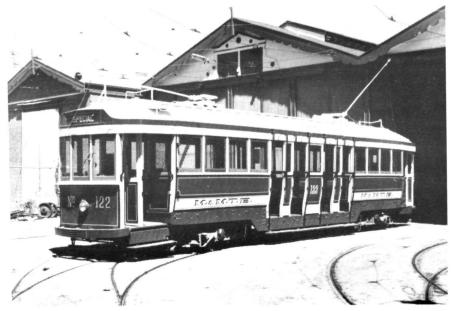


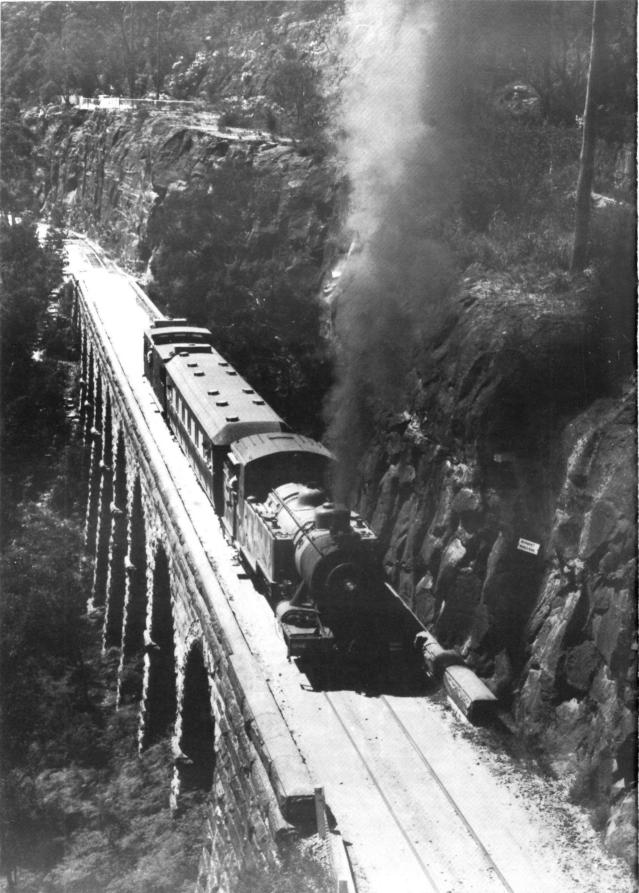


A colourful display of trams in Violet Street (above), the new concrete track in High Street with No. 25 passing the Cathedral (at right) and (below) the monochrome picture does no justice to the resplendent No. 122 (Bendigo No. 3); its new chocolate and cream livery is outstanding!

--Bob Prentice

-Bob Prentice





# a HERE and THERE special presentation

# THE ZIG ZAG RAILWAY

In June 1969, Trolley Wire reported on the existence of a Zig Zag Tramway Proposal; the object being the construction and operation of a 3' 6" gauge railway over the disused Great Zig Zag railway formation near Lithgow, N.S.W Five years of protracted negotiations finally brought the group's aims and objectives to fruition, with the signing of the licence agreement for the establishment and operation of the railway in Lithgow on 31st October 1974.

Trackwork commenced in November 1974, and was completed by September 1975. This work was performed under contract and involved some 1.6 km of track over two impressive stone viaducts, a 70 meter tunnel, the Top and Bottom Reversing Stations, and a four road depot complex at Bottom Points.

In the meantime, the Co-operative Society formed to operate the venture, had raised the funds necessary for the acquisition and transport of three DD.17 class tank engines (Nos. 1046, 1047 and 1049), Baldwin-built AC.16 No. 218A and BB.18½ class loco 1072 from the Queensland Government Railways and Beyer-Garratt No. 402 from the South Australian Railways.

Passenger rolling stock to operate on the railway was purchased from South Australia. These carriages were transported to Lithgow in 1972, where they have been undergoing restoration to an acceptable condition for revenue service on the Zig Zag. In 1974, the Society purchased a five car set of end platform suburban cars from the P.T.C.N.S.W. These cars will have their standard gauge bogies exchanged for narrow gauge trucks before entering service on the railway.

Four of the Queensland locomotives and most of the rolling stock were placed on site at Zig Zag in two movements on consecutive Sundays in March 1975. These movements involved the use of a portable turnout adjacent to the Society's dual gauge siding at Bottom Points.

Overnight accommodation is provided for working members in two former N.S.W.G.R. sleeping cars. One of these carriages has had several compartments removed to provide dining and kitchen facilities, together with toilet and shower facilities at the other end.

DD.17 1046 received a full overhaul during the winter of 1975 and was steamed on 23rd August 1975. To commemorate the 106th anniversary of the opening of the railway from Mt. Victoria to Bowenfels on 18th October 1869, limited public services commenced on Sunday 18th October 1975. Commencing 1st January 1976, trains run on weekends and public holidays between 11.00 am and 4.30 pm.

The project has been financed by loan funds arranged by the Zig Zag Trust and Lithgow City Council, with grants being received from the Australian and State Governments. The locomotives and carriages have been purchased by funds raised by society members.

The entire project has been regarded by the N.S.W. Departments of Tourism, Decentralisation and Development, and Lands, as a joint venture by the Zig Zag Railway Co-operative Limited and the Zig Zag Trust for the promotion of the tourist industry in the Lithgow area. Full use has been made of the historic and engineeringly excellent site and the need for future generations to appreciate the role of the steam locomotive in the development of Australia.

# ROLLING STOCK

#### Locomotives

402 4-8-2 + 2-8-4 Beyer-Garratt, ex S.A.R. 400 class 218A 2-8-2, ex Q.R. AC.16 class 1046 4-6-4T, ex Q.R. DD.17 class 1047 4-6-4T, ditto 1049 4-6-4T, ditto 1072 4-6-2, ex Q.R. BB.18¼ class

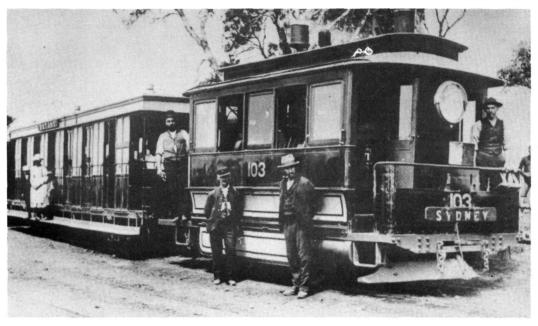
# Carriages

302	End platfor	m 1st class,	ex SAR, 3'6"
303		ditto	
305	ditto	ditto	
390	ditto	ditto	
404	ditto	2nd class,	ex SAR, 3'6''
405	ditto	ditto	
5575	Composite	Guards Van,	ex SAR, 3'6''
699	HLF , Set	End platform	, ex NSWGR (#)
707	CBA 15B	ditto	, ex NSWGR (#) ditto
683	HLF \ C-	ditto	ditto
650	LFA Set	ditto	ditto
684	LBB ) 13A	ditto ditto ditto	ditto
1250	LAM End	platform, ex N	NSWGR (#)*

OPPOSITE PAGE: DD.17 class loco 1046 and passenger train on No.2 viaduct on Sunday 4th January 1976.

-Shane O'Neil





LOOKING BACK... Around the turn of the century, steam motor No. 103 (later 103A) and cars at the Botany terminus of the Sydney steam tramway system. Motor 103A still steams regularly on the Parramatta Park museum tramway of the Steam Tram & Railway Preservation Society.

# Zig Zag Railway ... continued.

1299 EAM Mann sleeping car, ex NSWGR (#)\*

1782 FJ End platform, former Pullman Sleeping car rebuilt to sitting car. Latterly works vehicle W278, ex NSWGR (#)\*

## Wagons

4 wheel open, low sided, ex SAR@ 6

6630 MFN 4 wheel louvre van, ex SAR 3'6"

6639 MFN ditto 6624 FBN Bogie flat, ex SAR 3'6"

#### Notes:

# 4'81/2" gauge, to be converted to 3'6"/ 1067 mm gauge

#\* 4' 81/2" gauge, used for amenities; not envisaged that vehicle will operate on the railway.

@ 3'6" (1067 mm) gauge

Locos 402 and 1072 and two of the ex SAR cars are at present stored off site.

OPPOSITE PAGE: The depot complex in January 1976. From left to right: ex N.S.W.G.R. end platform cars (on standard gauge) ex Q.G.R. locos Nos. 1049, 218A, 1047, and 1046, ex S.A.R. goods vehicles and passenger cars and ex N.S.W.G.R. FJ, LAM and EAM cars on isolated standard gauge track.

-Shane O'Neil

Information on membership, etc. may be obtained from The Secretary

2077

Zig Zag Railway Co-operative Limited Box 196, PO NSW

Hornsby.

# New South Wales TRAMCAR HANDBOOK 1861-1961, Part Two

The production of this book, delayed by the staggering amount of unexpected material which had to be considered, is now well in hand, and it is planned to have the book to the printer in early March this year. This should allow for a release date in April, which will be announced in these pages.

# SPECIAL NOTICE

Contributors are asked to note that the deadlines for the April 1976 issue of Trolley Wire are:-

Major articles including photos - 10th March General Museum News, photos - 20th March

BACK PAGE: DD.17 1047 being lifted from its well wagon at the Zig Zag Railway Bottom Points depot on 18th March 1975.

-Shane O'Neil

