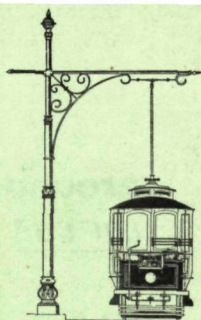


TROLLEY WIRE

Magazine of the
SOUTH PACIFIC ELECTRIC RAILWAY
and
AUSTRALIAN ELECTRIC TRANSPORT
MUSEUM

Registered at the G.P.O., Sydney, for
transmission by post as a periodical.

THIRTY CENTS



OCTOBER 1970



around the depot....

LOFTUS

Work is once again under way on the overhaul of the N car motor. The difficult task of boring out the suspension bearing housings is now being carried out. The opportunity is also being taken to exchange the bogies under N 728 for those under 948. To this end, one bogie from 948 has been removed and almost completely dismantled for inspection and overhaul.

During early November, the N car is to be loaned to Ryde Council for inclusion in their Centenary of Local Government Celebrations. N cars operated peak hour services on the former Ryde to Circular Quay tramway while for a time operated exclusively the Ryde to (West) Ryde Station branch tramway shuttle service.

The Sydney County Council have recently installed higher capacity power lines to a point adjacent to the Museum, while a start has been made on the new wiring from the Society's meterboard to the substation switchboard to allow for an improved 100 amp 415 volt power supply. This will enable us to put into regular operation the third motor-generator set with consequent improved running of the trams especially the larger loaded passenger cars.

Trevor Glenn is at present occupied in his spare time in overhauling tramway lifting jacks and air brake control valves. As Trevor works shift hours, he often has time during the day to devote to SPER work. He would, however, like to hear from anyone similarly disposed who would like to assist him in this work.

Bookshop construction is about 95% complete with only minor finishing work required, together with a final coat of paint. Several members recently took the opportunity of paying a visit on a weekday to Loftus especially to carry out this work which included finishing the shelving on the east wall and constructing new shelves and a small counter along the west wall. The shelves are now well stocked with a good selection of railway and tramway books including a recent batch of British tramway books.

Member Bill Turnbull has been actively engaged over the past few weeks in the overhaul of certain electrical equipment, including meters in the substation and tramcar

FRONT COVER: Early evening at Morphettsville. H-class cars 370 and 369 leaving Morphetts Road for Glenelg during the early part of the evening peak hour in mid-winter.

Photo: J.W. Hoffmann

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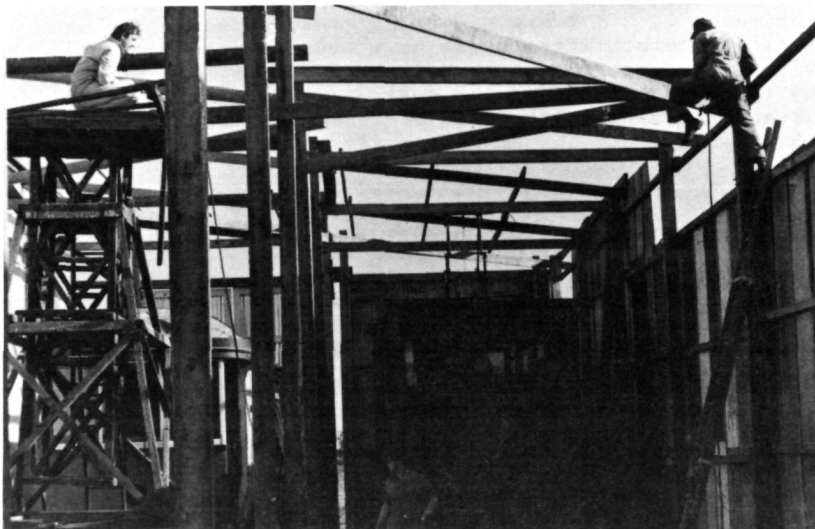
Subscription rate (for non-members):
\$2.00 per annum, post paid.

NEW MEMBERS

The Board and Shareholders of the SPER welcome the following members to the Museum:-

Paul Gribble	237
Alan Robb	238

Moral is to effort as
3 is to 1



A maze of timbers, but each essential to the construction of the workshop. President John Radcliffe supervises from the comfort of the tower wagon (left) while Malcolm Butler completes the bolting (right).

Photo: J.W. Hoffmann

buzzer systems. The buzzers on 1740 and 1497 were checked, while the buzzer systems on 154 and 1111 were restored to functioning condition. Bill has now turned his attention to the problem of excessive flashover in the controllers of E cars 529-530. Part of the problem has already been solved with the result that the E cars are once again operable although not yet available for passenger service.

Early September saw the abrupt withdrawal from service of car 295 with what proved to be a defective roller bearing in the north end bogie motor. Several weeks later a small group of members retrieved the spare drop-centre type bogie from the depths of the tramshed and commenced to remove much of the accumulation of mud and brakedust. After a good clean down, oiling and greasing and replacement of a brake shoe, the spare bogie was swapped with the defective one under 295. The tram returned to service the following day after a very successful piece of maintenance work by the members concerned.

A programme of regular mechanical inspection has been started on all operating cars. So far all axle boxes have been checked, repacked and oiled where necessary. Close inspection of motor bearings and compressors will also be undertaken.

Following the success of the pair of full height doors installed some time ago on No.1 road, further pairs for roads 2, 3 & 4 are now being constructed on the same basic pattern. After these have been erected work will continue with the roof, work delayed for some time by the need to redesign portion of the centre of the shed to allow increased headroom without an increase in overall height of the roof.

ST. KILDA

The winter months have seen a hive of activity on the new workshop being built at St. Kilda adjacent to the existing depot. Effort has been concentrated on the western half of the workshop where the electric locomotive and C-class car 173 are housed. The framing for this section has been completed and the purlins erected. All new materials are being used in the roof, including continuous length corrugated iron, especially cut to the correct length. Use of this iron will ensure that the new workshop is completely weatherproof. Following completion of the western half of the roof, framing will be erected for the eastern half. This is expected to be done in the spring months.

NEW PER-WAY DISPLAY

A new display of permanent way equipment was added to the exhibits in the main shed in July. Situated

at the entrance to No.1 road adjacent to car 381, the various brightly painted tools have attracted considerable interest. Included are rail sections, manual and pneumatic packers, a track gauge, tongs, etc..

A consignment of second hand railway sleepers arrived at St. Kilda in July. These have been positioned along road 4 in preparation for further trackwork to be done in the coming months.

CAR RESTORATION CONTINUES

While one group of members have been busy on the new workshop, two other groups have been busy on restoration work on cars 282 and 111. The restoration of car 282 is now far advanced, and it is hoped to have the task completed in October. A recent find was the acquisition of two complete sets of plywood saloon seat-backs, located in the rafters of a shed at Williamstown. They had been removed from cars 263 and 266 in 1957 when these bodies were converted by a remarkable piece of bush carpentry into a house. When the seats have been refinished and the floors repainted, only the replacement of rusted steel side panels will remain to complete the job.

Pride of place in the restoration of car 111 goes to the recently installed maple ceiling. They were salvaged from car 102 about 1964, and have since been stored at St. Kilda. The old varnish was carefully removed from the veneer by a number of members, and Max Fenner then laboriously renewed all the gold lining. The car has been rewired for both traction and 240 volt lighting, and after the ceilings were reinstalled, the original brass light fittings were connected. The result is most pleasing.

TROLLEYBUS OVERHEAD

Following the acquisition of Sunbeam trolleybus parts from the Perth M.T.T., the Museum recently took delivery of a selection of trolleybus overhead fittings. Much of the equipment was new, having been held in store in Perth for maintenance purposes. The co-operation of officers of the Perth M.T.T. in making equipment available, and the very sturdy manner in which it has been crated for transport to Adelaide is greatly appreciated by AETM members. Although it may be some years before much of the material is used, it will be very valuable when the Museum decides it can undertake trolleybus operation.

SPER - MEMBERS OPEN DAY AND DINNER

Members are reminded that the Annual Open Day and Dinner will be held this year on 12th December, 1970.

Full details of the days activities will be forwarded to members as soon as they are to hand.

CABLE TRAMCARS ON PUBLIC DISPLAY

Of the four ex-Melbourne grip cars and the five former Melbourne and two ex-Sydney cable trailers set aside for posterity only two of these items are available for public inspection. As the Month of October 1970 marks the 30th anniversary of the closure of the last Australian cable tramline, that along Bourke Street, Melbourne closed during the early evening of 26th October, 1940, it is fitting, therefore, to spare some thoughts for these two items which represent the 638 grip cars and 660 trailers which once operated along the streets of Melbourne and Sydney.

One would expect that the cable rolling stock on public display would be located in Melbourne, the former stronghold of cable traction in Australia, but at the present time one must look to New South Wales for the two examples on exhibition.

Former Melbourne grip car 448 can be inspected on the ground floor of the Museum of Applied Arts and Sciences (MAAS) in Harris Street, Ultimo, Sydney. Details of the extensive restoration work carried out on this vehicle by the trade apprentices at the Clyde Railway Worksops were presented in the December 1969 issue of this magazine so it suffices to say that this excellent exhibit now represents the vehicles which plied along King Street, Sydney between 1894 and 1905.

Ex-Melbourne cable trailer number 110 arrived at the Marsden Museum of Historic Engines at Goulburn, NSW from Rushworth, Victoria on Sunday 23rd August. No. 110 was last in service in Victoria in 1928-29 on the Bourke Street lines and was withdrawn after the closure of the Flinders Street cable route when other more serviceable trailers



"This tram terminates here"
Cable trailer 110 arrives
at the Marsden Museum of
Historic Engines at Goul-
burn after being trucked
from its former resting-
place at Rutherglen.

Photo: Bruce Macdonald



Cable grip car 448 as it now appears on display in the Museum of Applied Arts and Sciences in Sydney.

Photo: Govt. Printer, by courtesy MAAS.

were able to take its place. The car stood under cover at Rushworth with trailer 131 until around 1961 but exposure to the elements during the last ten years had started to take a toll on the woodwork of the vehicle.

The purpose of this tramcar at Goulburn will be to carry passengers on the $\frac{1}{2}$ -mile, 2'0" gauge steam railway and for this service the 4 wheel standard gauge truck will be replaced by two narrow gauge bogies. The Goulburn "Jaycees" have adopted the restoration of the trailer as a service project, so although the car is at present on static display, visitors to Goulburn will be able to sample a ride in a genuine cable trailer in the not too distant future.



Former Melbourne cable trailer 110 at Goulburn on 31st August, 1970. A "Super Sentinel" steam lorry can be seen in the background.

Photo: Ken McCarthy

THOMAS WEARNE

continued...

The next step in the development of Wearne's heavy engineering enterprises proved to be his undoing in this sphere. This was the affair of the "Fifty Goods Locomotives". In winning the contract, of dubious worth to himself, Thomas Wearne's business became a pawn in the intrigue associated with the "Protectionist v. Free Trade" politics, the petty jealousies existing then within the locomotive engineering section of the NSWGR, and if this web of entanglement was not enough, the business was also caught up with the difficulties of the 1890-93 depression which caused the banks to frantically call up overdrafts due to the failure of their speculations in land development companies and boom building societies.

Prior to the Railways' (Reorganisation) Act of 1888, when Sir Henry Parkes placed the railway administration on an independent footing, many of the top appointments were politically inspired. On August 11th 1880, Mr. Thomas Midelton (ex-GWR) of the Tasmanian Main Line Railway Co., was appointed draughtsman on the NSWGR largely on the recommendation of the then Locomotive Engineer, Mr. R. Burnett, the Protectionist politician W. J. Lyne and the Commissioner, Mr. C. Goodchap. Mr. William Scott, (ex-L&NWR) had been locomotive overseer of the NSWGR since the opening in 1855, but from 1857 he had been relegated to second-in-charge under Whitton and this situation continued after 1878 under Burnett. Midelton's appointment had been aimed at grooming him to take over from Burnett at the expense of Scott. Due largely to Midelton's headstrong personality, Commissioner Goodchap had second thoughts about the matter and on Burnett's retirement, at the close of 1881, Scott at last became Locomotive Engineer.

Between 1876 and 1879 two Baldwin 4-4-0 locos (U105-class) and 11 Baldwin 2-8-0 machines (J131) entered service on the NSWGR initially to serve as a comparison with the then favoured British products and later due to the fact that the USA manufacturers could offer speedier deliveries than their English counterparts. Scott favoured English products but Midelton, looming in the background, felt that the US locos would be more suitable to NSW conditions. Under Midelton's pressure, Scott approved the purchase of 20, 2-6-0 Baldwin locos in 1883-4, ten of these of the K294 class were for goods haulage and the remainder, of the L304 class, for passenger trains. In May 1884 two state cars, built entirely to Midelton's designs were received from Hudsons by the NSWGR. These proved to be uncomfortable and hard riding and were bitterly rejected in Vice Regal and political circles.

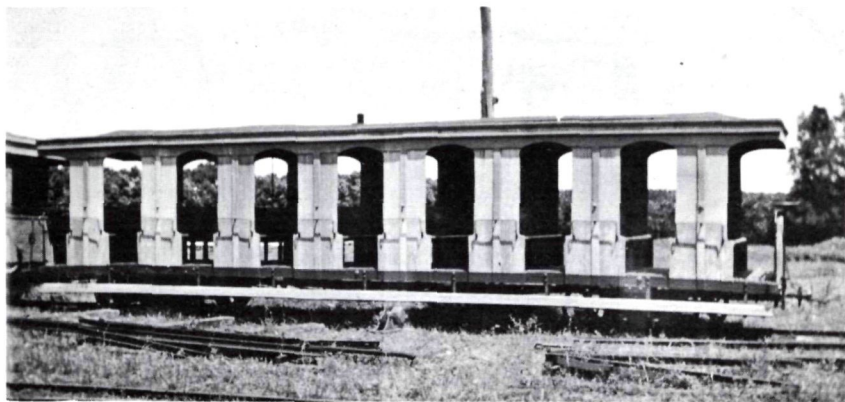
As a result of the failure of these two vehicles, friction with Scott and his volatile personality, events came to a head in 1885 when Midelton was dismissed by Goodchap under complaints made by Scott.

This left William Scott free to expand the system's motive power roster with a repeat order of 20 Beyer Peacock B205 type 2-6-0 goods locos and to prepare for the 12 Vulcan H373-class 4-4-0 passenger locos which arrived in 1887, all of British manufacture.

On 15th October, 1886, 14 months after his dismissal, Goodchap reappointed Midelton to NSWGR service in the sinecure position of Superintendent of Tramway Rolling Stock to "wait in the wings" until Scott's routine retirement in 1888. Midelton's original appointment had been partially influenced by Protectionist W.J. Lyne and at the time of his reappointment the Protectionists again held power in the Colonial Parliament.

On 20th January, 1887 Sir Henry Parkes' Free Trade Government took over from Sir P.A. Jennings' Protectionist regime, but prior to this the Protectionists had set in motion, under Midelton's influence, arrangements to have a further 25 USA type locos of the L304 class and 25 of the J131 type built by local engineering firms. The relevant tender details were announced on 25th April, 1887 and closed on 17th May.

Scott had recommended that a further 28 goods (B205) and 16 passengers (H373) type locos be ordered from Beyer Peacock and Vulcan (Britain) but Goodchap and



NSWG Tramways C-class 99 was built by Thos. Wearne and entered service in March, 1883. It was sold in 1888 to Mr. C. Jeanneret for use on his tramway at Parramatta where it carried the number 4. It remained in service until 1942 when the body was sold.

Photo: Ken Magor

Sutherland (Minister for Works) lobbied for the opinions of Mr. Thomas Midelton, the "Loco Engineer Elect" and so cleared the way for further construction of the standard Baldwin type locos instead of adding to the existing roster of "42 different classes of locos of every possible shape and dimension".

On 22nd May 1888 William Scott retired and Midelton finally reached his goal of Locomotive Engineer but this was not to last for long. The Parkes Ministry (20th January 1887 to 16th January 1889) had the post of a single Railway Commissioner replaced by a triumvirate of a Chief Commissioner and two assistants. On 22nd October, 1888, Mr. E. Eddy (ex-Caledonian Railway Co.) as Chief and C. Oliver and W. Fehon as assistants, took up their new commissions while W. Thow (ex-LNWR) the then SAR Loco. Engineer was invited to report on the state of the NSWGR motive power situation.

One outcome of this upheaval was the dismissal of Midelton from his post in April 1889 with an award of £1,500 (\$3,000) to compensate for the termination of his services, and the appointment of W. Thow to his position. Thomas Wearne was therefore caught up in this bickering and unrest during the 1887 to 1890 period.

Locomotive construction by NSW manufacturers was not unusual at this stage, but was the exception rather



Steam motor (N)11 with one of the cars shortened by Wearne for the Newcastle tramways in 1887-8. Seen in Parnell Place about 1902, motor 11 was the first to be fitted with diagonal duplicate controls for one man operation.

Photo: Ken Nagor collection

than the rule. Loco (2nd) 10 had been constructed at the Railway's Redfern workshops in 1870 and displayed at the Intercolonial Exhibition at Prince Alfred Park to celebrate the Centenary of Captain Cook's landing while later machines had been produced by Mort & Co., Vale & Lacey, the Atlas Works and in the Railway Workshops.

Many local firms tendered for the contract concerning the 50 locos which closed on 17th May 1887 but as the NSWGR considered the prices quoted as excessive, all were rejected. To resolve the situation, seven of the tenderers were called by the Hon. John Sutherland and Mr. Thomas Midelton to the Locomotive Engineer's Office at Eveleigh where they were informed that the railway department was anxious to have the locos built in NSW and would be willing to simplify the designs if the contractors could produce them for £3,000 (\$6,000) each. Thomas Wearne, who had originally quoted £3,750 (\$7,500) agreed to this as the engineer proposed alterations which would enable the work to be less costly than the original proposed design, and was awarded the contract for 25 J-class 2-8-0 locos at £3,000 (\$6,000) each in December, 1887. The Atlas Company agreed to build the 25 L-class 2-6-0 passenger locos for £2,989 (\$5,978) each.

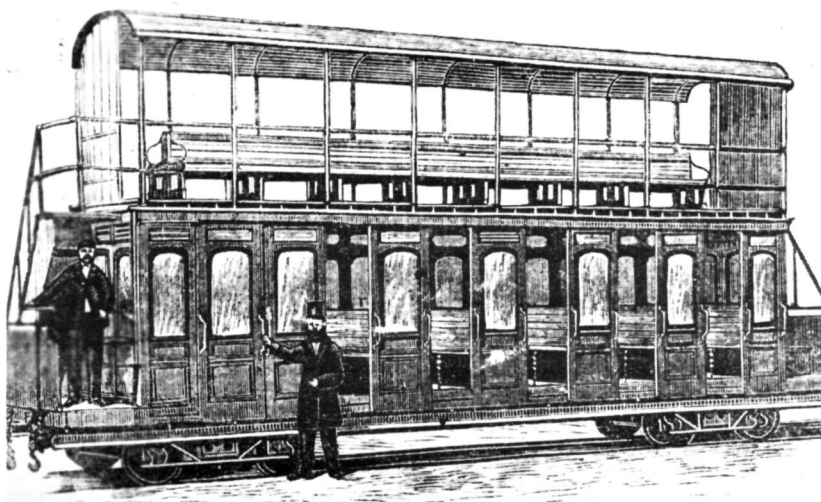
Although William Scott was still Locomotive Engineer at this period his absence from the meeting at Eveleigh is best explained by the fact that he was close personal friend of Thomas Wearne and perhaps thought it best to be absent from a contract awarding meeting such as this.

During 1888 Wearne had 100 men working on the first four engines of his order and was devoting his labours exclusively to the contract. By November 1888 the cylinders had been cast, the loco and tender wheels, frames and motion links completed and all was on schedule for the boiler material (promised by Midelton for November 1888 delivery) and the planned July 1889 delivery of the first completed locos.

The Atlas Works had by this time completed motion parts and bogies with a work force of 150 men but a hitch occurred, which no doubt that Company was later thankful about, when it transpired that not all the Atlas directors had signed the contract thus making it void. Thus the Atlas Company was able to withdraw early from the whole business when the Railway Department became troublesome.

One irregularity appears here. Although contemporary press accounts reveal that the contracts were awarded during December 1887 and the loco construction commenced soon afterwards, official railway reports date the contracts as 21st June 1888 for Wearne and 20th October 1888 for Atlas.

One of the savings in the amended contracts was the substitution of built up frames for the forged and cast



A contemporary newspaper woodcut illustrating "the first bogie (double deck) car manufactured in the colonies" by Wearne's works. This car, A2 class 21, was built in April, 1881.

Photo: Mrs.E. Chadwick collection

rivetted frames of Baldwin design. On 6th November 1888, Wearne requested an advance payment on his progress based on the satisfactory reports of the Chief Railway Draughtsman, Mr. Chambers, and the favourable report of Thow and also urgently requested the supply of the boiler material from the NSWGR. Instead of receiving payment or materials, Midelton ordered Wearne to stop work immediately, to revert to the Baldwin type frames and to return all drawings in hand and await for the progressive issue of revised plans and specifications. When the new details were received, not only had the frame designs reverted to the original costly proposal, to which Wearne had quoted £3,750 each, but their was considerable alterations to cylinders, footplate castings, brake gear, springing and valve motions, which would cause Wearne to lose money on his original £3,750 quotation, let alone the "simplified" £3,000 one. In addition to this, much of the material produced to that date would be a complete write-off.

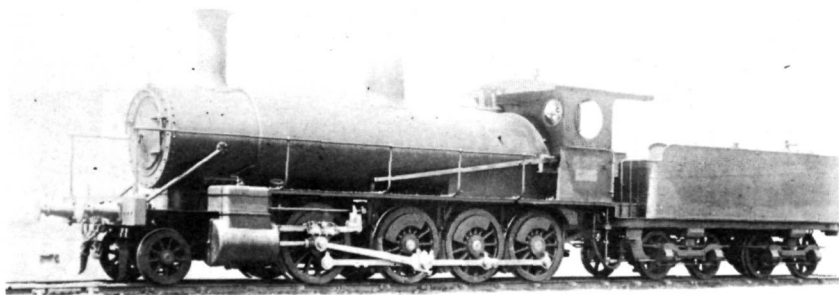
Thus an unworkable situation emerged. Wearne had the frame portions of the 4 locomotives on his hands and could not obtain the boiler plate (which was not landed in Sydney between 18th July and 15th November, 1889) while Midelton refused to sanction progress payments until the locos were delivered in steam at Redfern. By March 1889,

Wearne was exasperated and appealed to Sir Henry Parkes to clarify the situation. This wily old Free Trader wanted nothing to do with this matter promoted by the previous government, thus Wearne was forced to abandon the project and close the doors of his Glebe workshops during the trade depression and bank failures of 1890.

During the delivery of the new P6 (C32) class locos, and while awaiting delivery of the first standard goods T524 (D50) machines, Thow was faced with a chronic loco shortage. To relieve this situation to a very small degree the Railway Department retrieved the four J-class components from Thomas Wearne and completed them during 1893 and 1896. Known as the J522-class (later Z28) these "Native Bears" remained in service for some 30 years when they were withdrawn between 1927 and 1937.

After the closure of the Glebe works and the financial settlement of the situation the name of Wearne again appeared at the Sussex St. safe making foundry, so the separation of the Glebe and Sussex Street businesses in 1885 had been a wise step.

With the fall of the Parkes Ministry the Protectionist League again formed a government from 23rd November 1891 until 2nd August 1894 under the Premiership of G.R. Dibbs but this was too late to save Wearne's rolling stock business. Thomas Wearne, who had been active in local council politics at Liverpool and Glebe now turned to the Colonial political arena where he nominated as a candidate for the 1894 elections on the Protectionist platform in the Canterbury electorate. Press accounts for July 1894 relate that Wearne conducted



Locomotive 522 of the 'J'-class, one of the four locomotives of the 131-class design commenced by T. Wearne and Co. and completed by Eveleigh Workshops. The four locomotives were known as "Native Bears" and were later grouped with the Z28 class in the 1924 renumbering.

Photo: Mrs. E. Chadwick collection

his pre-election meetings in "clear forcible terms and his arguments in favour of protection for local industries were favourably received". Wearne favoured a protectionist fiscal policy for the colony and disapproved of the proposed land tax of the infant Labour Party. He felt that equal finance could be raised by increased customs duties on imported articles which could be readily produced by local industries.

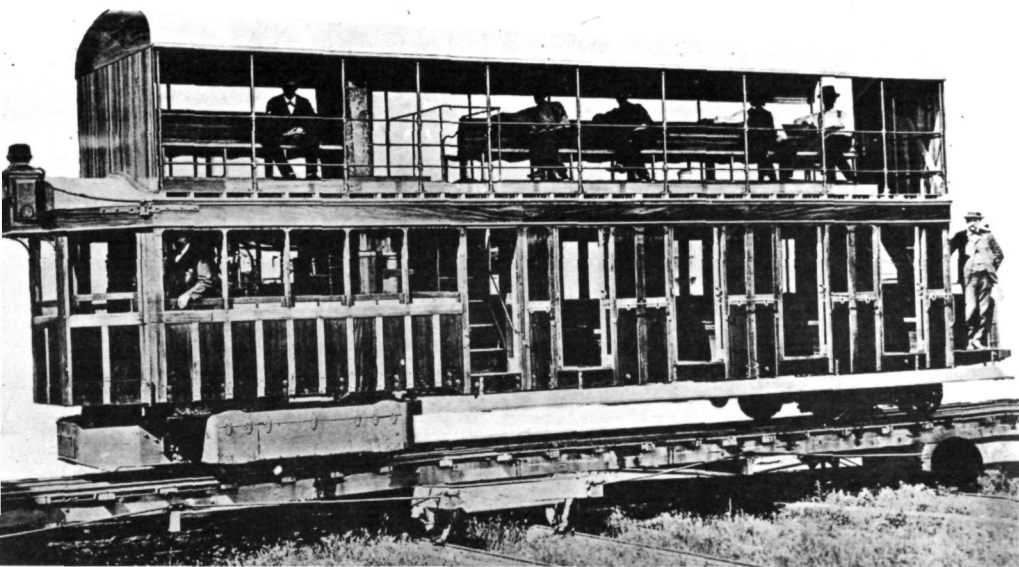
Thomas Wearne and the Protectionist League were unsuccessful at the 1894 elections as the voters returned a Free Trade coalition under George Reid who was able to govern with the aid of the Labour members. With Australian Federation in 1901, the politics of the new state governments ceased to be concerned with external trade matters, so Wearne's active interest in state politics waned.

Active at his iron foundry business until the end, Thomas Wearne died peacefully at the age of 80 at his large home "The Cedars" at Bonny Rigg on Saturday 30th May, 1914 leaving a wife, six daughters and five sons.

The funeral took place at the Methodist cemetery at Liverpool on the following day where a large gathering of relatives, friends and business associates paid tribute to one of the pioneer industrialists of NSW.

Thanks are due to the following people who assisted in the preparation of this article:-

Thos. Wearne built the bodies of six double deck combination steam trams in 1884. One of these units is seen on the traverser at Randwick Workshops.



1. Mrs. E. Chadwick, grand-daughter of Mr. Thomas Wearne for allowing access to family papers, for reminiscences, and for the use of photos from the family collection.
2. Ken Magor, for the use of other rare photos of Thomas Wearne's products.
3. Don Estell and Keith Seckold, for providing information on Wearne's work in Railway rolling stock production.
4. The Trustees of the Mitchell Library for giving access to the Parkes' correspondence and business directories.
5. John Shoebridge, for assistance in record interpretation.

---K. McC.

NEW EXCURSION TICKET

From time to time the Museum plays host to special groups of visitors who are present during normal traffic hours but who pay a group booking rate for the privilege of riding the trams. As it is not always possible to issue "All Day Tickets" to these visitors, a new "Excursion Ticket" based on the Brisbane ticket is now being issued to all members of such groups. Correctly punched, this ticket entitles the bearer to travel on all regular passenger trips on the day of issue, as well as any special runs operated solely for the group.

The new ticket.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
JAN	EXCURSION Nº 0002 L X ★ TICKET															JUL	
FEB																AUG	
MAR																SEP	
APR	SOUTH PACIFIC ELECTRIC RAILWAY CO-OPERATIVE SOCIETY LTD. ROYAL NATIONAL PARK TRAMWAY NOT TRANSFERABLE - AVAILABLE ONLY ON DAY OF ISSUE															OCT	
MAY																NOV	
JUN																DEC	
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		

BALLARAT AND BENDIGO

Notice of a Bill to close the SEC tramways in Ballarat and Bendigo was tabled in the Lower House of the Victorian Parliament on 15th September, 1970.

Baldwin steam motor 34 and a Wearne-built A2 class double deck trailer on the Woolahra line in the eighteen-eighties.

Photo: Tyrrell's Pty. Ltd.

