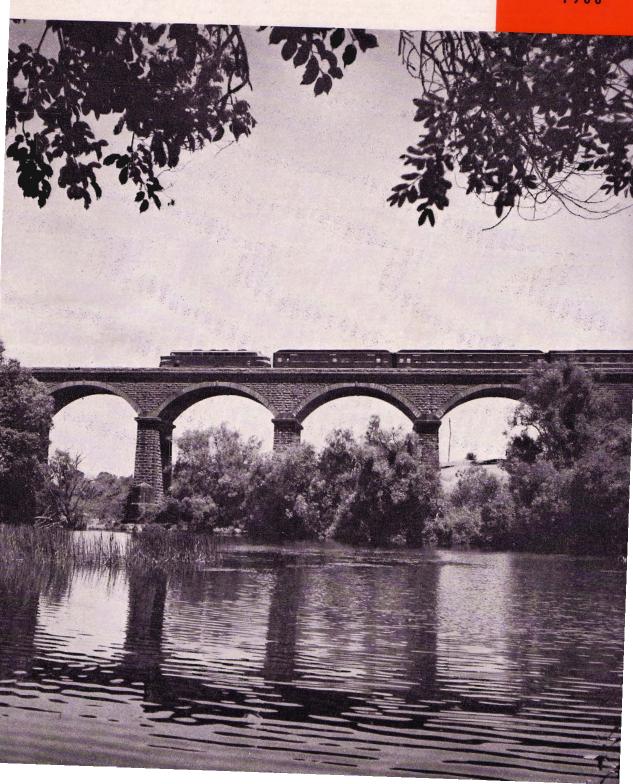


JANUARY



THE MONTH'S REVIEW

Frozen vegetables in containers

A striking example of sea, road and rail co-ordination took place last month when the first consignment of frozen vegetables was sent from Tasmania to Sydney.

The deep-frozen vegetables, in containers, were shipped from Davenport by *Princess of Tasmania*. To hold the containers' temperature down during the journey across Bass Strait, each container's refrigerator unit was plugged into the ship's electric power supply.

Upon arrival at the ferry terminal in Melbourne, the containers were loaded on to a road vehicle and driven to Dynon, where they were transferred to special flat-top wagons. These were coupled to a power van that re-started the electric motors of the refrigerator units-as in a house-hold freezer.

The flat-tops carrying the containers were attached to a fast freight train that provided shippers with an overnight service in Sydney. Upon arrival at the outskirts of Sydney, the containers and their deep frozen vegetables were taken by road to their destination.

This consignment consisted of eight container loads. To meet the present demand, 45 containers will be placed in service.

Good work by Bendigo staff

A sthis magazine went to press, news was received of the disastrous fire that swept through the down side of Bendigo station on the afternoon of December 23. When the alarm was given, railway staff rushed into the buildings to protect the vital communications equipment from damage and, as a result, saved the switchboard and carrier system. Train services were not affected. Reconstruction plans were put in hand immediately.

Flat rate race tickets

AST month, reduced combined rail and racecourse admission charges were introduced for Flemington races from nearer suburban stations and outwards. Beginning with the meeting on December 11, flat rate rail-admission tickets became available from 168 stations in the suburban electrified area, and as far as Werribee. From these stations, racegoers can travel to and enter the course for only 13/- to The Hill or 23/- (ladies 19/-) to The Stand.

The stations selling the combined flat rate tickets are St. Kilda and those beyond South Kensington, Flemington Bridge, Newmarket, South Yarra, Burnley and Victoria Park.

WATCH THIS \$ c TRAP

WHEN converting £.s.d. to \$ c remember you convert the total of the coins you receive, not the individual coins. For example: four threepences equal 10 cents, not eight cents.

Customer comfort

S well as major improvements to train services for the benefit of rail users, there are many small jobs done that also add to customer comfort. A recent one was the elimination of glare to passengers using the eastern ramp from Platforms 6 and 7 at Flinders Street station. As they moved from the ramp towards the bright daylight beyond the Swanston Street concourse, passengers encountered a strong glare, particularly in the early morning when the sun was low. Some time ago, powerful lamps were installed to counter it, but this did not prove effective. Screens were recently erected over barrier gates opposite the ramp and are expected to make a satisfactory improvement. Passengers using the other ramps do not encounter this difficulty as they are shielded from glare by various structures.

Tie bar for rail fans

ESCRIBED as "a must for the well dressed rail fan", a tie bar is now available from the Australian Railway Historical Society. It is a reproduction of a D3 locomotive, finished in antique gold. The cost is 15/- each, plus 6d. postage, from A.R.H.S. Sales Dept., Box 5177AA, G.P.O. Melbourne.

FRONT COVER

SYMMETRY IN STONE: Mirrored in the Coliban River, the Malmsbury Viaduct carries a train of today as safely as it has carried the trains of a century. Built in 1862, this beautiful Viaduct consists of five 60 ft. spans; is 79 ft. high; and, like most stone bridges on the system, needs very little maintenance. (See page 6)



At Dynon, a container of frozen vegetables from Tasmania is being loaded from road vehicle on to flat-top rail wagon. The power van at right is supplying power for refrigerators in the containers.

COSTLY CROSSING DAMAGE

ARDLY a day passes without some motorist hitting a railway crossing boom barrier or gate. Such bad driving is causing the Department considerable concern.

These careless motorists, wrecking the devices that are designed to protect railway crossings, are rarely heard of, as it is usually only when they hit a train and wreck their vehicle that they get into the newspaper or radio reports.

It is a sad commentary on the lack of driving skill and road sense of far too many motorists that Departmental records disclose that 74 per cent. – three out of every four – level crossing accidents occur at those crossings equipped with flashing lights, boom barriers or gates.

From the beginning of last year to the middle of December, motorists had either damaged or destroyed 221 level crossing protective devices. Recently, gates in five different localities were damaged in just over 36 hours.

The cost of repairs ran into thousands of pounds and, although a very

substantial proportion was recovered from the motorists involved, it did not compensate the Department for the time and trouble incurred in carrying out repairs and making the level crossings safe for traffic again.

The average boom barrier costs about £12,000 to install, and interlocking gates cost about £400; some of the longer ones are even more expensive. So, when a motorist crashes into one of these gates it is a very costly act on his part. On occasions, repair gangs are obliged to dig into foundations to replace a gate column and its casting supports, valued at between £50 and £60.

Apart from the damage caused to boom barriers, flashing lights, gates, etc., one of the most serious aspects of level crossing crashes is their effect on train services.

Trains are slowed down because of speed restrictions enforced while repair work is in progress and trains have to be manually flagged over the affected crossing. If a level crossing device is damaged late on a Friday, it is sometimes necessary to use flagmen at overtime rates during the

entire week-end. To quote a recent case, the total cost of repairing an interlocking gate was £106, of which 15% represented manual flagging protection.

When a level crossing gate is smashed, or one of the other protective devices damaged, it is necessary for a signal adjuster and an assistant to be diverted from their ordinary work and be sent to the spot without delay to ensure that trains are kept running. If necessary, they are followed by carpenters, who repair the damage, if possible, or, if the damage is too extensive, install a new gate. Sometimes this is necessary because all that remains of the original gates are the hinges or a few splintered rails.

Some little time ago, while a repair gang was mending a section of a level crossing gate, a motorist ran into another part of it. And there have been times when repair gangs have been forced to jump aside to avoid being struck by a motor car. Indeed, some gates have been smashed, repaired, and damaged again in the same day.

RAIL USERS SAY . . .

Boronia

A S a regular passenger between Boronia and Flinders Street, I always renew my weekly ticket on Friday at the latter station.

I would like to bring under your notice your young station assistant, firstly for his efficiency, and secondly for the politeness and courteous manner in which he queried the validity of my ticket with next week's number on it.

At 69 and having raised a family of my own it was most refreshing to be addressed in such a manner by this young man . . .

—R. Hartley, 7 Flower Street, Ferntree Gully, writing to Stationmaster, Boronia

South Yarra Fences

I would like to praise the efficiency and courtesy of Mr. MacNamara, the gentleman who attends to the fences from South Yarra station to Alexandra Avenue. On November 8, I rang his department at approx-

imately 8.15 a.m. re our dividing fence, and by 10 a.m. Mr. Mac-Namara was on our doorstep.

I would also like to give fullest praise to the 2-carriage trains which operate on the Broadmeadows-Sandringham line on the off-peak hours. I think they make for safer travelling for women, and vandalism can be detected more easily.

I love train travelling, and hope I never live far from a railway station. (Miss) Mavis Grant, 34 Darling Street, South Yarra, writing to the Secretary

Spencer Street Cloak Room

Vould you please pass on to all the kind folk involved in finding and returning Denis' lost transistor our very grateful thanks.

It must have caused a lot of bother and travelling as Fern Hill is an unmanned station . Also, thank you for your patience and co-operation over the 'phone, you were very thoughtful.

(Mrs.) Dorothy Hoston, 7 Ivanhoe

Parade, Ivanhoe writing to Cloak Room Assistant W. Walsh, Spencer Street

From East African Railways

M Y wife and I recently travelled from Melbourne to Perth, and I would like to take this opportunity of congratulating the Australian Railways on the very high standard of their passenger services.

I have travelled on many railway systems, but I do not think I have ever travelled over any system where the standard of efficiency, comfort, service and punctuality has been so consistently high. The behavior of the staff was also above reproach. For civility, friendliness and co-operation they are among the best I have ever met and if it is possible I would be most grateful if you would convey to them my appreciation for making our journey so comfortable and interesting . . .

-G. Geddes, Chief Commercial Superintendent, East African Railways and Harbours, writing to the Chief Commercial Manager

INCREASED RAIL TRAFFIC

from FORWARDING AGENTS



A fork lift truck transfers goods from Flexi-Flat to rail van in a section of the Forwarding Agents' area at North Dynon.

FOR many years, the Australian railways suffered a severe disadvantage in competing with road transport for the very lucrative interstate freight business as they were unable to provide the door-to-door service that road operators exploited so successfully.

Railway customers were obliged to bring their goods or arrange for them to be brought to the nearest railhead to be loaded into freight vehicles; then, when the train arrived at its destination in another State, the consignee had a similar responsibility in getting the goods to his premises.

Thirteen years ago the Australian railways decided to adapt their freight system to the demands of shippers, in a determined move to recapture big business that had been lost to road operators.

The railway systems introduced what became known as the Forwarding Agents' scheme, whereby established carriers undertook the pick-up and delivery and used the railway for the long haul from capital to capital, the client being quoted one charge for the complete streamlined movement. The problem was one of providing an adequate, regular, and reliable service at a competitive rate.

The railway proportion of the rates for the Forwarding Agents' scheme therefore took into account the prevailing road transport charges between the points concerned, and allowed the Forwarding Agent to receive a satisfactory return for his work of picking up and bringing the goods to the railhead, loading them into the rail vehicles and then, at the destination station, unloading and delivering the freight to the ultimate client.

Flat rates

In 1952 the Forwarding Agents were conceded flat rates of so much per ton from one capital city to the others, with a prescribed minimum tonnage to be loaded into each of the then available rail vans.

Following the 1954 Privy Council decision, which removed interstate transport from the regulatory control of the States, there was a great influx of road operators and, consequently, a fierce freight rate war.

To meet the challenge of lower road transport rates, the Railways Departments were obliged to reduce their freight rates.

As a result, there are now two recognized methods of charging consignments dispatched by rail through Forwarding Agents.

These two methods are designed to exploit the advantage of road for short distance retail collection and delivery, and the railways' superiority for bulk handling over long distances. This meant abandoning the illusory ton-mile concept and substituting rates which ensured reasonable returns per wagon load. The two methods are:

 Forwarding Agents pay a base rate for a prescribed minimum tonnage per van, with a lower incentive rate for additional loading; this means that the more loading placed into a van, the lower the average rate becomes, while the return to the Railway Departments increases.

 A flat van charge, whereby the Forwarding Agent orders the van, pays a set charge for it, and is permitted to load any tonnage up to the maximum contents capacity of the van. Under this scheme, the rate for a van loaded to capacity is less than by the above normal incentive rating.

Big rise in traffic

Interstate rail traffic, under the Forwarding Agents' scheme, showed a steady increase from 1952 until With the completion in January 1962 of the standard gauge line between Melbourne and Albury, and the establishment of bogie exchange at Melbourne (both of which eliminated the necessity to manually transfer goods en route and allowed them to remain undisturbed in the same rail vehicle) it was possible to provide, with certainty, overnight express services between Melbourne-Sydney and Melbourne-Adelaide to a set schedule that allowed road operators at both ends to plan positively their pick up and delivery services and avoid empty running.

A tremendous upsurge in rail traffic resulted. For example, for the financial year ended June 30, 1954, the total tonnage handled through Forwarding Agents between Melbourne and other Australian capital cities totalled 77,461 tons.

For the financial year ended June 30, 1965, the tonnage had soared to 604,703 tons.

A great deal of this astonishing growth in business has been due to an aggressive commercial campaign by the enthusiastic sales staff of the railways and the Forwarding Agents, who pooled their market knowledge and research to capture new business or regain business lost by the railways. An essential condition of the scheme is that the forwarding agents will not solicit business already on rail.

One waybill

At the rail terminal in each capital city, the railways provide covered loading and unloading facilities in an area exclusively used by Forwarding Agents. Irrespective of the number of different consignments making up the wagon load, only one waybill is required—for the wagon itself, which

is locked by the Forwarding Agent who accepts responsibility for any claims.

Two years ago, Flexi-Van operation became an integral part of the Forwarding Agents' operation. The Flexi-Van has a capacity of 2,100 cubic ft., or 20 long tons dead weight, and permits the rapid transfer of the load from road to rail and vice versa.

A large proportion of the rail wagons came from Newport Workshops, including 76 ft. long vehicles, which can accommodate two Flexi-Vans.

Because of limits of the loading gauge, piggyback operation is not possible on most Australian systems and the Flexi-Van is thus a more than adequate alternative.

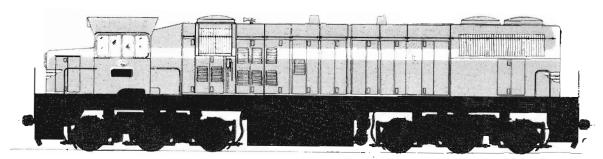
A special Flexi-Van train operates in each direction between Melbourne and Sydney on every day of the week, except Sunday. This schedule enables each rail wagon to make three return trips per week over the 598mile journey. Charges for Flexi-Vans are assessed on a base rate for a prescribed daily guaranteed minimum payment whether the rail wagon is loaded or not, with a low incentive rate for additional loading.

Refrigerated Flexi-Vans are also in operation. Their domensions, basically, are the same as ordinary Flexi-Vans, but they are equipped with thermostat-controlled motor-operated refrigerator units, which reduce their contents capacity to 1,470 cubic ft., and their maximum payload to 18 long tons.

More recently, Flexi-Flats have been introduced. These are 35 ft. long and 8 ft. wide tray-type units with removable sides and ends and are particularly suitable for palletized loading and fork lift handling.

In addition, there are many other types and sizes of privately owned containers in the composition of intercapital freight trains on the Australian railway systems.

NEW LOCOMOTIVE



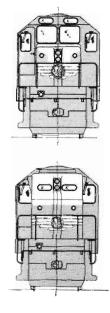
Artist's impression of the new 1,800 h.p. type C-C, diesel-electric goods locomotive.

THE new 1,800 h.p. diesel-electric locomotives, six of which have been ordered by the Department (News Letter October 1965) will be known as the X class. The first is due to arrive next July.

This will be the third batch of locmotives to be known as X class. The first X class engines (0-6-0 type) were built by the Phoenix Foundry Company at Ballarat in 1886-87. The modern X class steam locomotives (2-8-2 type) were built at Newport Workshops during 1929-47. Noteworthy among them was X 32 as it was the first V.R. engine to be converted to burn pulverised brown coal.

(Top right) No. 1. end

(Below, right) No. 2. end

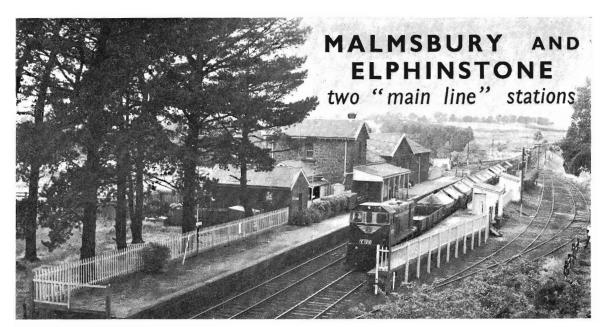


GEELONG STAFF PRAISED

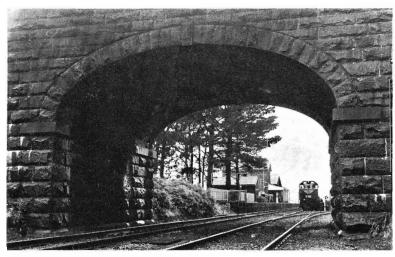
FOR at least two years I have had it in my heart to write to you re the staff at our Geelong railway station. As I and the members of my family have noticed, their pleasant service and helpful co-operation makes travelling a charming experience.

How many times have I felt lifted and happy because of the friendly manners of the staff. This goes for parcels office, goods section and passenger service. Human, warm, friendly, co-operative, helpful, efficient; and credit, too, for the stationmaster whose ability keeps his staff so relaxed and cheerful.

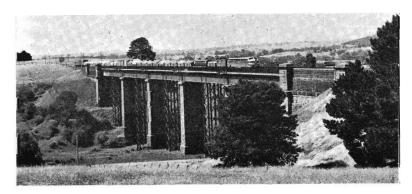
(Mrs.) E. J. Ling, Wallington, via Geelong, writing to the Commissioners



Malmsbury station



Single arch bluestone bridge at Malmsbury.



The vertical pillars of the Taradale Viaduct form a pleasing contrast with the arches of other stone bridges on the line.



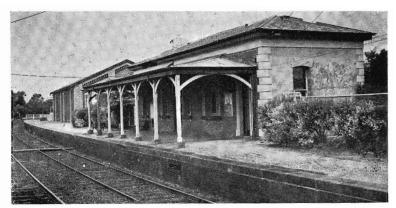
Stationmaster H. H. Hill prunes roses that he planted at the entrance to Malmsbury station.

R UNNING through the centre of the State and almost bisecting it, the Melbourne to Echuca line was, from the time it was built, known as the main line, and the term was still used by train running staff long after it had been supplanted in importance by the interstate lines to Sydney and Adelaide. Even today, it is still placed first in the public folder time-table. The line was opened to Bendigo in 1862 and to Echuca in 1864.

As would be expected, the design of its permanent way, buildings, bridges, etc., followed what was then contemporary English practice. Its solid bluestone structures, and even the names of some of the stations—Sunbury, Kyneton, Malmsbury—are



Assistant Stationmaster G. T. Grigg has been at Elphinstone for a year. He joined the Department in 1959 and was at Warrnambool for several years.



Elphinstone station



Assistant Stationmaster C. D. Krusel tightens lashing on a wagon at Elphinstone. He was recruited in Germany for the V.R., five years ago.



Shown operating the block instrument, Assistant Stationmaster L. B. Williams has been at Malmsbury since 1954. Before that he was for six years on the relieving staff in the Ballarat area.

Creek bridge near Harcourt, and the Malmsbury Viaduct (see front cover). Malmsbury station is $63\frac{1}{2}$ miles from Melbourne, in high country, 1492 ft. up. The staff consists of Stationmaster H. H. Hill and assistant Stationmaster L. B. Williams. The severity of the bluestone station buildings is softened by shrubs and flowers planted by Mr. Hill who is an enthusiastic gardener. Naturally the station is a frequent prize-winner in the annual decoration competitions. Malmsbury supervises Taradale, Elphinstone and Chewton. The recent establishment of a youth training centre (housing 120 lads) in the town has given a stimulus to passenger and freight traffic.

evocative of the English scene. Superb examples of the stonemason's craft are such bridges on the line as the Taradale Viaduct, the Barkers

Elphinstone, 63 miles on the down side of Malmsbury, has a staff of three assistant stationmasters, Messrs. L. N. Grant, C. D. Krusel and G. T. Grigg. Outwards freight, last year, amounted to 453 tons and inwards freight 2,024 tons. The station was named after Lord Elphinstone, a nineteenth century Governor of Bombay and Madras. Before that the locality was known as Sawpit Gully.



(From left) Repairer H. Benton, Ganger J. Walsh and Repairer G. Bruni replace sleepers in Malmsbury siding.





NEW TRACK: Last month, Box Hill and Glen Waverley line trains began using a half-mile of new track between East Richmond and Burnley. The new track is part of a project involving two extra tracks that will ultimately benefit train schedules. The track previously used by down trains has been removed and is being re-built at a lower level. Another track will be built in the centre and the two centre tracks eventually made available for express trains.

A train passes over the old track, at a much higher level. New track is in the centre.

Workmen are dismantling the old track prior to lowering it. A train is using the new lower track (centre).

PRINCES GATE: Plaza of the Princes Gate project takes shape. On the left can be seen the steps down to Finders Street. The City Council will lease the area and be responsible for its beautification and upkeep.



ON THE "SEE LEVEL": Although he usually travels by air, Mr. Justice Joske, of the Commonwealth Industrial Court, recently decided to take a train trip to Sydney in order, he said, "to see the countryside". Shown about to board Intercapital Daylight are (left to right) Mr. Justice Joske, his Tipstaff, Mr. W. Bell, and Mr. J. Webb, Associate. In a subsequent letter, Mr. Webb wrote "... His Honour desires me to express his appreciation of the many courtesies that were extended to him by the staff of the railways. He found the trip to be most interesting and very relaxing ... When commitments of the Court permit it, His Honour hopes to make further rail journeys on his travel between Capitals".



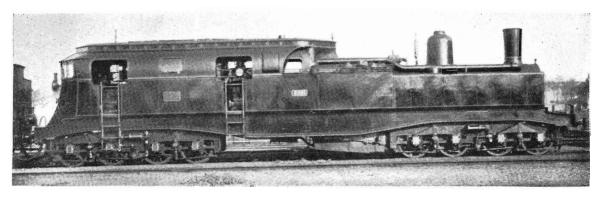
AROUND THE SYSTEM



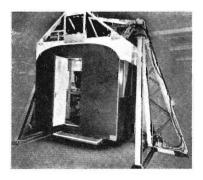


BUTTER FOR EXPORT: Butter is being loaded into an iced van at the Government Cool Stores. West Melbourne, for railing to Victoria Dock and shipping from there to the United Kingdom. In the last financial year, 202 million 1b. of butter were exported from Victoria.

LINES FROM OTHER LINES



1895 STEAM-ELECTRIC LOCOMOTIVE—This 1350 h.p. steam-electric locomotive was built in 1895 by Brown, Boveri for Chemin de Fer de L'Ouest. Its six cylinder, high speed steam engine was built by Willans and Robinson of Rugby, (English Electric Company's booklet—" 2000th diesel for British Rail")



Locomotive simulator installed by British Railways

Everything but go

simulator, that is, a mock-up of a 3,500 h.p. electric locomotive cab equipped with fully operational devices, has been installed by British Railways at London for training enginemen. Most of the functions associated with controls in the cab are simulated electronically. Through a wide-vision windshield a projected picture of 16 miles of track unrolls at speeds up to 100 m.p.h. From a panel on a partition behind the trainee an instructor can set up normal and abnormal operating conditions, including equipment failures, emergency operation of brakes, different train weights, and varying grades. A computer controls the simulator equipment to produce signal indications, and rocking of cab as on an actual locomotive when it speeds up or slows down.

Also, an audio system reproduces the sounds of the pantograph, the closing of contactors, and the passing of wayside structures. In an 8 hour shift the simulator makes possible a full eight hours of training, except for periodic 5-minute film rewinds. A simulator for diesel locomotives can also be produced. —(Railway Age).

"Le Kangourou"

NE of the most successful ventures in railroad co-operation—the piggyback system of loading road semi-trailers onto rail wagons to complete their journey by rail—has received a new twist from the French Railways. They provide two forms of piggyback—"ordinary", using the standard height flat wagons, and "Kangaroo".

Kangaroo piggyback was developed by the French Railways to overcome some of the height restrictions operating on European railways, where the standard overall height has been fixed at 14 ft. 0½ in.

The floor of a French Railway's flat wagon is 3 ft. 3 in. above the rail, so the height of the load carried must not exceed 10 ft. 9 in. With the kangaroo wagon, however, the height of the load is increased to 12 ft. 2 in. by using a well, or kangaroo pouch, in the rail wagon. The wheels of the semi-trailer roll into these wells, lowering its height by 1 ft. 5 in., when loaded on the rail wagon, and thereby increasing the height of the load it can carry by this amount.

The semi-trailer can be a van, refrigerated transporter or tanker. The semi-trailers are standard units except for a coupling to facilitate loading-unloading and steel rims between the twin tyres for aligning the semi-trailers' wheels.

The French Railways are operating nearly 250 kangaroo wagons on fast overnight services (62 m.p.h. with trainloads up to 1,000 tons) linking the main French commercial and industrial centres.

Diesels save British Railways £30 million a year

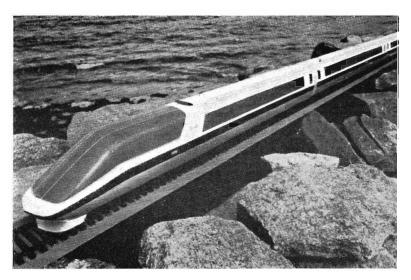
TEN years ago, British Railways had 18,000 steam locomotives and only seven diesels operating main line services. Electrified railways were almost entirely confined to commuter and short-distance services around London and Manchester.

Today there are over 2,500 main line diesel locomotives, over 2,000 diesel shunters and more than 4,000 diesel multiple-unit vehicles in service, while the steam locomotive fleet has shrunk to under 5,000. By 1968, steam locomotives will have been eliminated from British Railways. Dieselization has enabled British Railways to provide a vastly superior service for both passenger and freight traffic.

Mr. John Ratter, Member of the British Railways Board, estimated that, had British Railways this year been operating steam traction in place of diesels, it would have cost approximately £30 million more. With full dieselization the savings will be still greater.

High speed in West Germany

A thickly populated country that has had marked success in dealing with transport problems is West Germany. This country is on the verge of a new era in fast railway travel. New-type high-speed trains have been tested extensively on special track between Forcheim and Bamberg, and cruising speeds of up to 125 m.p.h. have been attained. It is expected that, by 1970, a quarter of German Federal Railways 19,200 miles of track will be ready for high-speed operation. (Trains)



TRAIN OF THE FUTURE? This is a model of a high speed train that the Budd Company proposes to build in connexion with a government-financed, high-speed ground transportation system between large metropolitan centres in U.S.A. (The Enginemen's Press).

Fuel cells may power loco

PUEL cells, similar to those generating current in space-craft, are being developed in Britain as a possible power source for railway locomotives.

Already British Railways has a model locomotive running on fuel cells, and its research experts are now trying to establish whether the cells can be developed sufficiently to replace the diesel-engined generator set used in full-scale locomotives.

A British Railways spokesman said recently that, although the project was still in the very early stages, the experts hoped that fuel cells would eventually cut locomotive running costs and also reduce the amount of fuel carried by present day engines.

—(British Information Services)

World's Undergrounds

The following cities, with the same (or less) population as Melbourne, have underground railway systems: Athens, Barcelona, Boston, Brussels, Budapest, Cleveland, Copenhagen, Fort Worth (pop. million), Glasgow, Haifa (pop. million), Hamburg, Lisbon, Madrid, Milan, Nagoya, Oslo, Stockholm, Toronto and Tbilisa (Southern Russia).

London view of cars

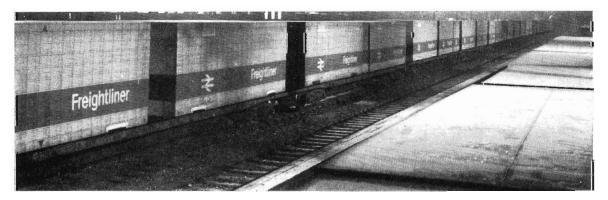
"T is clear that, whatever improvements can be made on the roads, it will be necessary in the long-term to rely still more heavily on the railways, with their inherent advantage of an exclusive track for peak-hour passenger travel,"

says the London Transport Board in its 1964 Annual Report. "An urban underground railway has the great advantage that it can carry several times more people than a multi-lane motor-way, at less cost, while causing much less disturbance and loss of amenity".

"It must be doubted whether London can longer afford the unrestricted use of private cars at all times of the day," the Report continues. "The private car cannot, either at present or in the forseeable future, carry all the passengers who have to come daily by road into the main centres of employment in the London area... the private car could in the forseeable future stifle both the bus and itself".

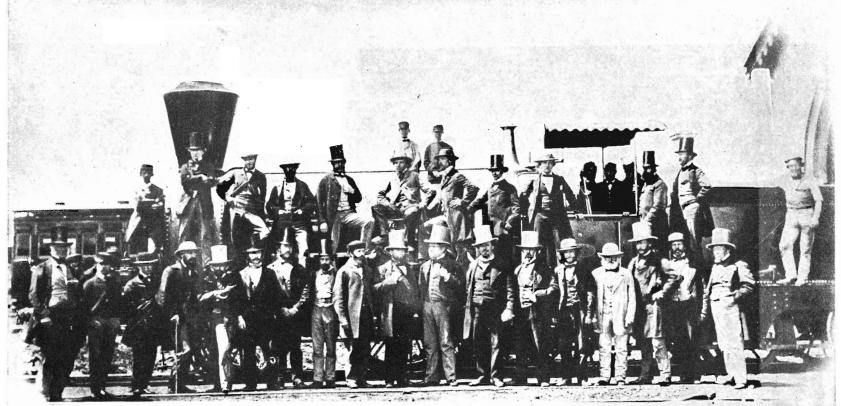
The London Transport Board does not let its Report stand unsupported by evidence. "Between 1954 and 1964, the number of road vehicles entering the central area during the morning peak has risen by 44%, but the number of passengers in those vehicles has decreased by 10%. The additional cars occupied much more road space than that made vacant by 1,600 fewer buses. In 1964, private cars carried less than one-third of total road passengers, but amounted to more than twothirds of the vehicles. Buses and coaches carried over 60% of the passengers but represented only about 5% of the total vehicles. The effect of the increased traffic congestion has been to drive many peak-hour passengers off the roads on to the railways".

In every city of the world the story is the same, the car—once man's asset—is now his burden. Everyone wants to use a car, but in Sydney and Melbourne we are quickly running out of space in which to drive it or park it. One authority called it "urban suicide".



LINER TRAIN IN U.K.: The first-ever Liner Train from London to Glasgow is pictured at a North London freight yard before departing on its non-stop night run to Scotland. The long flat bogic wagons carried metal containers bearing the word FREIGHTLINER and the British Rail reversed arrow symbol. This first run, which was completed in 8½ hours, formed part of the planned experimental stage of this service which, it is expected, will be operating on five major routes early this year. (British Information Services)

AS WE WERE



W. Wallan N. Pollard K. Singleton - Ellicker & Langtree C. Whiteford J.P. Madden J.C. Boehme D. M.: Infosh f.C. Chrish Mr. Moore P.A. Doyle W.R. Martin Thos Hoare Mr. Anderson A. Wells - Bailey R. Martin J. S. Sinclair Thos Acton - Fisher Mr. Llewellen J. Stokes J.T. Jones F. Rennick Patrick Brady S.V. Kemp O. Christopherson - Hassel

This picture of the V.R. Engineer in Chief's staff, taken in 1862, is a reproduction of one of the two or three oldest photographs in the possession of the Department. The picture is believed to have been taken at the old Spencer Street Locomotive Shed. The engine is a J class built in England by Beyer Peacock. Although the year shown is con-

sidered correct, the names shown below the picture are not correctly related to the figures above them.

Those top-hatted worthies were pretty important people in the life of the young colony, as they were the technical brains behind the operation of Victoria's biggest and, probably most important business undertaking. Just how vital railways were to a developing country can be seen by a comparison of some road and rail charges as quoted in the Department's annual report for 1862. They were 1/2d, a ton-mile for goods by road, as against 5d, by rail, and 7d, a mile for passengers against 2\forall d. a mile on the railway. (The V.R's present average rate charged per ton-mile for goods is 3.75d.) Porters in 1862 received 8/- a day, guards 10/- and engine drivers 13/- to 15/-.

The photograph is quite good, considering that, in those days, photographers used the wet-plate process. This involved first coating a sheet of glass with collodion, and then, just before using it, coating it with wet silver nitrate solution. Then the long exposure had to be completed before the solution dried—in a matter of about 10 minutes.

AMONG OURSELVES

Ganger rescues boys

ANGER G. J. Drummond, of Kangaroo Flat, was instrumental in saving two sevenyear-old boys from serious danger last mond. While travelling on a trolley from Big Hill to Kangaroo Flat, Mr. Drummond noticed a small boy dash away near the Kangaroo Flat railway bridge.

On investigation, he found two little boys were trapped on a ledge about 30 ft. above the ground below the bridge.

With little time to lose-a train was due in about three-quarters of an hour -Mr. Drummond quickly informed the police. Accompanied by Senior Constable D. Jones, Constable B. Burchell, and first Constable R. Pearse, he returned to the bridge.

With the aid of the police he swung down by a rope to the ledge and rescued the boys, one after the other.

Both the police and Mr. Drummond had feared that the arrival of the train would terrify the boys, and in their fright they might fall from the narrow ledge. The police said that Mr. Drummond, with his prompt action, had averted what could have been a serious tragedy.

Sunshine V.R.I. Car Club

CUNSHINE has the only V.R.I. Car Club. Formed in 1960, the club arranges picnic outings for members, theatre nights, an annual mystery car trip, and a Christmas picnic for children. Of special benefit to members are the tools (valued at over £300) which are available for maintenance and repairs to their vehicles. The tools include an electric welder, complete set of metric spanners and various other equipment. Membership of the club is limited to railwaymen from Sunshine and surrounding districts.

Club's officers are Messrs, M. Flavell (president); T. Campbell and W. Gadsby (Vice-presidents) and C. Garlick (secretary-treasurer),

New Ambulance officers



Grace, the new Amb-Officer, ulance joined the railways in 1933 and was a train examiner at various places before going to Ouyen in 1939. While there he was instructor and leader of the Ouyen first aid team which was very successful in the annual compet-

Mr. Grace itions. He was on the Ouven hospital committee for 14 years, and president for four years. In the post war years when there was an acute shortage of nursing staff, Mr. Grace organized a voluntary aid service among railwaymen that prevented the closing of a section of the hospital. For this, he was made a life governor of the hospital, and subsequently awarded the Queen's Coronation Medal. Mr. Grace was transferred to the Ambulance Section

in 1955 and appointed Assistant Ambulance Officer the following year.

The new Assist-Ambulance Officer, Mr. H. L. Wignall, has had 15 years experience in first aid. He began his Departmental career as an apprentice fitter and turner at Newport Workshops in 1938 and after completing



a member of the team that won the all Australian competitions. Mr. Wignall was transferred to the Amb-

ulance Section four years ago.

Swimming pool

O provide a swimming pool in the back yard of his D.R., Driver G. Lehmann, of Seymour, used part of an old water tank that had been dismantled at Euroa. He bought it from the Department, cemented it into the ground, painted it and built in some accessories. It made a pool 14 ft. in diameter and 4 ft, deep, with an overflow 3 ft. 8 in. from the bottom. The water that drains from the pool irrigates fruit trees. Altogether, says Mr. Lehmann, it cost £35 to set up, and the annual expense is about £7 for painting. Mr. Lehmann has been at Seymour since 1952 when he came from Germany to join the Department.

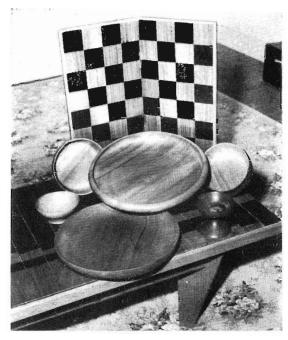


Mr. Lehmann watches his three children-Michael, Thomas and Evelyn-having fun in the pool.

MAN OF MANY HOBBIES







The chessboard was made from mountain ash and jarrah; plates and bowls from kauri and cup from jarrah.

EVERYONE should have a hobby, we're told. Even if it's only work, a cynic might add. Well, Signalman Koaas Kimstra certainly has his quota; a round half-dozen hobbies, at the latest count.

Mr. Kimstra came from Holland in 1958, joined the Department about 18 months ago, and works in the Alphington Signal Box.

"One of my cheapest, and most useful hobbies – but a very laborious one – is the spinning of wool and other fibres", he said.

It started when Koaas found an old, well-seasoned piece of jarrah and, wondering what he could use it for, decided to make a spinning wheel. Although it was based on the traditional wheel, he gave it modern lines and simplicity.

Having finished the wheel, he taught himself to spin, and, after a few experiments, tackled wool. Now says Koaas, he spins all kinds of fibre, even goat's hair which makes "beautiful silky yarn". Before spinning, the wool must have the burrs removed and be combed. Spinning is the quickest part of the job; the wool that takes eight hours to clean and comb, can be spun in two hours. The wool is not washed before spinning, as its natural lanoline keeps it flexible, and the hands soft. And the

cloth into which it may later be woven repels dirt and water for some considerable time.

After spinning the fibre, Koaas weaves it on a loom he also made. Originally, he built a large loom-6ft. wide-but as it proved cumbrous when shifting house, it is now being rebuilt to a smaller size. He has woven material for skirts, cushion covers, scarves and bookmarks. Recently he won a prize with a scarf entered in a western district wool exhibition.

Photography and pottery making are two of his other hobbies. The turning, on a lathe, of odd pieces of timber is another one. Koaas has made breakfast dishes, plates, bowls, cups, chess boards and inlaid tables, many of them from timber that would otherwise be scrapped.

He has also built some of his furniture. Koaas points out that all of his hobbies, except one, need little money. The exception is a model railway, with track-controlled signalling, that he is building.

But he can't find much time for that at present as he has started to build an adobe house at North Eltham. He makes the bricks-18 in. by 12 in. by 4 in.-from a mixture of clay and gravel which is tamped into moulds until the moisture is squeezed out, and then sun dried.



Daughter Maureen displays some of the products of her father's loom. The cushion cover was woven from mohair and wool; the other materials from wool.

BOOK NOTES FROM THE V.R.I. LIBRARIAN

T'S not so many years since the day when many Australian readers, confronted with a book by an Australian author, would shudder and look for something else by one of the more "accepted" (or overseas) authors. This attitude has now, mercifully, largely disappeared; Australian authors are not only accepted, but, judging by the experience of the V.R.I. library, their works are now much sought after.

Three recent books by Australian authors will, I feel sure, add to the popularity of this section of the library . . .

Morris West's The Ambassador is written in West's usual, fluent style, and the setting-South Vietnamof considerable topical interest. Read as pure fiction, this is a most en-tertaining book, but readers should be wary of attempting to read into it an interpretation of the tangled political situation in that unhappy The author has based many of his characters on recognizable prominent figures, but many others, whose influence during this period was considerable, are omitted from the novel.

The second title, by now well known from the A.B.C. television serialization, is George Johnston's My Brother Jack. If you enjoyed the TV version, you'll find the book even more entertaining. But whether seen on TV or not, this is a book that should not be missed. Almost autobiographical in form, it is the story of the lives of two brothers in Melbourne between the wars, through childhood and adolescence to maturity. The characterization is quite memorable, and the author's description of everyday life in suburban Melbourne of the period will evoke, in most readers, nostalgic memories.

Finally, a romping riot of a book— The Hero of Too by David Martin. This is a long book, but the fun never flags. It is a completely irreverent "send up" of a number of Australian "Sacred Cows" which will never seem quite the same again. Readers will find here, enormous, gusty fun; characters, larger than life, but as Australian as billy tea; excellent descriptive passages; and a plot to keep the reader glued to the page, until the book has been read. I strongly recommend this one to all Australians, old and new, who have any sort of a sense of humour.

Corrigan, J. P., Jolimont McIndoe, R., Bendigo North Morris, R. H., Seymour Tsotsoulis, N., Newport Duncan, C. E., North Melbourne Penhalluriack, J. K. P., North

WAY AND WORKS BRANCH

WAY AND WORKS BRANCH
Crisp, N., Spencer Street
Banks, A. C., Estate Office
Reynolds, V., North Melbourne
Komarowskly, A., Special Works
Palmer, N. (Mrs.), Laurens Street
Pevitt, A. R., Cavendish
Burton, H. T. C., Ararat
Smith, N. L., Spotswood
Williams, D., Spencer Street
Wood, S. J., Bendigo
McGuane, M. J., Ballarat
Lewczuk, J., Benalla

Wishart, J. P., Newport Workshops

Melbourne

Storehouse



Basketball

THE V.R.I. Basketball Club entered three teams in the spring competition of the Victorian Women's Night Basketball Association and they competed in B3 grade (Melbourne Goods), C3 grade (V.R.I. 2) and G1 grade (V.R.I. 1).

Melbourne Goods after a bad start, battled their way into fourth place, only to lose the first semi-final, by 10 points. It was a good fight back by these girls, and a tribute to their courage and determination that they finished in the final four.

The best and fairest trophy was won by Marie Bourke, with Sharon Marshall runner up. Michaline Szujada was captain of this team.

V.R.I. 2 (C3 grade) did not enjoy a good season and at no time looked like troubling the top teams in their section. The retirement of quite a few experienced players forced the side into a period of team building and it was not until the latter part of the season that wins came their way. Nevertheless, they finished the season on a confident note, winning five of their last seven games.

If this improvement can be continued next season then I'd say V.R.I. 2 are right back in business. Best and fairest experienced player was our interstate captain Joan Thurgood; Fay Bell won the trophy as best of the less experienced players.

V.R.I.1 had a really good season, finishing third in their section, and eventually being eliminated in the preliminary final by one goal. To be beaten by such a narrow margin was probably disappointing to the girls, but they had played well throughout the season and have every reason to be satisfied with their performances. Anne Phelan was adjudged the best and fairest player, with Christine Lalor (captain) as runner up. Special mention should be made of Carmel Boyce who, when Anne Phelan was

RECENT RETIREMENTS

TRAFFIC BRANCH

Gleeson, B. L., Shepparton Gleeson, B. L., Shepparton Gilchrist, A., Bendigo Williams, J. J., Melbourne Goods Laragy, C. J., Balaclava Wilson, A. T., Spencer Street Lardner, W. J. A., c/- D. S. Ballarat Orr, W. W., Melbourne Goods Kruse, A. H., West Richmond O'Neill, M. B., Spencer Street Simms, C. F., Melbourne Goods Ewin, R. E., Head Office Rehe, A. C., Tallarook

ROLLING STOCK BRANCH

ROLLING STOCK BRANCH
Connelly, J., North Melbourne
McAdams, G. V., Ballarat North
Burns, J. J., E. R. Depot
Hawkes, A. J., Newport
Streckfuss, A., Shelter Shed
McIver, W. J. C., North Melbourne
Rayner, J. T., Newport
Hare, H. E., Newport
Scobie, P. G., Ballarat North
Usher, T., North Melbourne
Hitch, A. L., Bendigo North
Harrison, A., Dimboola Harrison, A., Dimboola Gough, J. R., North Melbourne

DEATHS

WAY AND WORKS BRANCH

ACCOUNTANCY BRANCH

Donohue, D. J., Flinders Street

STORES BRANCH

Sinclair, R. C., Tallarook Lappin, D. K., c/o Line Supervisor Chirico, S., Spencer Street Kennedy, R. P., Spotswood

ACCOUNTANCY BRANCH Colwell, M. W., Flinders Street

... AND

TRAFFIC BRANCH Bowman, (Mrs.), M. I., Tragowel Forrester, J. R. A., Footscray "A" Hartai, K., Ivanhoe Tancredi, J., Dynon

ROLLING STOCK BRANCH Cockburn, F. Y., Newport Kowalczyk, F., Newport Brook, H., South Dynon



Play in the match between Suburban Lines and Codon in which the latter recorded its first victory of the season.

not available for the last few games of the year, came out of retirement and turned in a wonderful series of games.

The men's division of the Club has two teams competing in the Business Houses Summer Competition, and at the half-way stage both teams were in a similar position; having played nine games, they won five and lost four.

Cricket

In the last round of matches prior to Christmas, Codon (114) at last broke the ice with a 12 runs defeat of Suburban Lines (102). It was a great morale booster for the lads from Codon and could seriously jeopardise the final four aspirations of Suburban Lines. In the other matches, Loco (2/211 declared) easily accounted for Melbourne Yard (58 and 43); and Jolimont (84) beat Spotswood (70).

Two centuries have been recorded so far this season, the first by W. Short (Stores) who made 103 n.o. and the second by R. Chapman (Loco) who hit up 105 n.o. I hope both these boys are available to play in the Postal game on February 24, as batsman capable of making runs against a first-class attack are what we need for the match.

Position of teams at the end of the fourth round:

Jolimont W'shops.	14	point
Loco.	14	,,
Stores	10	"
Codon	6	,,
Spotswood W'shops	5	,,
Suburban Lines	4	"
Melbourne Yard	4	,,

Bowls

A visit to Toorak Bowling Club was the opening fixture on the V.R.I. Social Bowling Club's 1965/66 syllabus, and resulted in a good win for our club. The match against Flemington-Kensington B.C. had to be postponed because of in-

clement weather, and will be played at a later date. Two country trips, to Seymour and Ballarat, have proved a huge success both competitively and socially. Members and their ladies are looking forward to further country visits now the Christmas holidays are over.

The 20 carnival players assembled at Albert Park V.R.I. Club on Sunday, December 12, and contested an elimination event to decide the Victorian representative in the Australian Railways Singles Championship to be played in Brisbane during the carnival. Ray Judd, of Ballarat, won the honour from another Ballarat player, Henry Boyle. Congratulations, Ray, on your win and our best wishes that you can repeat the effort in Brisbane.

The Social Bowling Club is still looking for new members, and any railway bowler will be made most welcome. There are quite a few games (both metropolitan and country) to be played in 1966 before the syllabus is completed. If you are interested, then give me a ring on auto. 2445 for further information.

Tennis

A T the completion of the fourth round in the Dunklings Shield and Pimms Cup competition, Combine led, followed by Sunshine 1, Jolimont, Melb. Yard, Sunshine 2 and Apprentices in that order.

The team to represent Victoria at the Intersystem Carnival to be staged in Adelaide from March 22-30 is: J. Bromley (elect. fitter) L. Butcher (clerk), K. Deayton (shunter), L. Murphy (car builder), K. Payne (signal adjuster) and B. Pearce (clerk) from the metropolitan area, with T. Fitzgerald, of Wodonga (leading shunter), the only country representative. The team will be managed by the Hon. Secretary of the V.R.I. Tennis Association, S. K. Pearn, with H. Jones as Assistant Manager. Arthur Hargreaves has been appointed the Institute's representative at this fixture.

Table tennis

AST year was history making for the V.R.I. Table Tennis Association, as on Tuesday, December, 7, the A3 team competing in the V.T.T.A's Summer Competition, won the grade pennant, thus surpassing the efforts of the 1940 team, which took out the B Reserve pennant of that year.

Our congratulations to the members of the side—W. Lawrie (capt.), B. Smart and M. Carroll—all of whom played consistent tennis throughout the season, and who would now hold their own with any player in Victoria. These three players were members of the Victorian Carnival side in Sydney in 1964, which again shows that the experience gained in this fixture is invaluable. The only other team to reach the final four in the V.T.T.A. competition was in C6 grade and they were eliminated in the preliminary final.

In the internal competition, Revenue Accounts pulled off the double by winning the summer section, having won the winter section earlier in the year.

The season wound up with a theatre and presentation night at the Tivoli. Thirty-eight members and friends attended and the trophies were presented by the General President of the Institute, Mr. L. A. Reynolds, at a late supper. The annual meeting of the association will be held at the V.R.I. on Thursday, February 3.

Players are reminded that the 1966 Intersystem Table Tennis Carnival will be staged in Perth, the team departing Melbourne on Friday, May 6 and arriving back on Sunday, May 22. Nominations from players desiring to be considered for inclusion in the Victorian team should be in the hands of the Hon. Secretary, V.T.T.A. C/- V.R.I., Flinders Street, Melbourne, by February 1. Country players are most welcome to apply and if in doubt as to standard of play, should keep in mind that the 1965 V.R.I.T.T.A. singles championship was won by a country player.







THE MONTH'S REVIEW

Aluminium wagon

THE first of the aluminium bulk wheat wagons was officially handed over on February 2, to the Minister of Transport (Mr. E. R. Meagher) who accepted the wagon on behalf of the Department from the Chairman of Directors of Tulloch Ltd. (Mr. K. O. Humphreys) of Rhodes, New South Wales.

The wagon reached Melbourne on standard gauge bogies which were exchanged for normal B.G. bogies at the B.E. centre a few minutes after the ceremony was completed.

One hundred aluminium hopper wagons are to be built for the Department and delivered at the rate of two per week. The Government made a special allocation of £730,000 above the ordinary railway allotment of funds to meet the construction costs.

An aluminium wagon can carry approximately 2,000 bushels of wheat, which can be loaded in 25 minutes and discharged in two minutes. It is anticipated that, because of quicker turnround, one hopper wagon will do the work of nearly five standard 22-ton, 800 bushel capacity steel fourwheel wagons now used in the wheat traffic.

The new wagons will be fitted with high-speed bogies, enabling them to operate at 60 m.p.h. instead of the present wheat wagon speed of 45 m.p.h. For the next wheat season the new wagons will be used in a block, as far as practicable.

Water train ready

SINCE the middle of December the Department's 63,000 gallon fire emergency train has been on 24-hour standby in Flinders Street yards. Spray equipment on the train has been modified and improved as a result of experience gained in last summer's bush fires in Gippsland, and at Longwood in north-eastern Victoria.

In past years it has been found that the train could be manned and dispatched within 30 minutes of receiving a call for assistance. The train has nine 7,000-gallon water tankers, two of which are equipped with portable pumps, hoses and spraybooms. Water can be sprayed on to tracks or used to put out trackside fires, including fence posts, trees, bridges and culverts, more than 100 ft. from the train. Water can also be transferred to road vehicles.

In addition, couplings are provided to allow connexion, if necessary, to hoses of the Country Fire Authority or Forests Commission. Each of the two pumps can handle 11,000 gallons per hour, and they also en-

able the rail tankers to be refilled from a river or other water sources close to railway property.

Wheat

THE movement of 375,000 tons of wheat in excess of country storage capacity was completed early last month. Altogether, 17,000 wagons were needed for this "overflow" wheat-less than half the number required for last season's harvest. The maximum number of wagons handled in any one week was 4,500—approximately 100,000 tons of wheat.

Tas. veg. traffic grows

A record consignment of Tasmanian vegetables for Sydney left Dynon on January 9 and reached Sydney early the following morning.

The train carried 345 tons of potatoes and 120 tons of frozen vegetables. All the vegetables were packed in containers. During the rail journey, the containers were connected to a power van that restarted the electric motors of the refrigerator units—as in a household freezer.

Return to the train

A S Melbourne's traffic congestion grows more acute, quite a few motor car users find the train is often quicker. A recent instance was the decision of members of a western suburban bowling club who had to play on a Saturday afternoon in Dandenong. Realizing that if they went by car they would be held up by the Sandown race traffic, they took the quicker way and went by train.

C Day nerves

A S C Day approached, one of the cheques received by the Department showed £10,000,049 in payment of an account for £49. The machine had apparently slipped in a few million. Looks as though the machines were a bit worried about C Day.

FRONT COVER

There was at least one trier in the race for the over 35's at the Jolimont Social Club's picnic held last month at Queenscliff. (See page 27.)

Model of mountain



The almost unique situation of the Department's Chalet at Mt. Buffalo is shown in this model of the famous mountain. Two of these models have been made to stimulate tourist business to the Chalet. To obtain these, an original was first made from fibre board by the Commercial Drafting Section; from it a plaster cast was made and two plastic models moulded from it by an outside firm. The models were painted by the Public Relations and Betterment Board's workshop staff. The vertical scale is 200 ft. to the inch. The contour plans used to make the model were prepared by Lands Department staff from their aerial photographs.

BLONDE FROM NORWAY

A MONG the latest recruits to the Department is an attractive blonde from Stavenger, Norway. Resusci-Anne, as she is officially known, is a Nordic beauty, about 36-24-36, and very pneumatic. In fact, Anne's so pneumatic that she has to be inflated with a bike pump.

She is a model recently obtained by the Department for teaching the mouth-to-mouth and external cardiac methods of artificial resuscitation. Made from rubber and similar material, she is very realistic, with natural seeming hair, flesh and teeth.

The latest type of model for this purpose, Anne has many advantages. When teaching the mouth-to-mouth method, her tongue, as in real life, falls back and blocks the wind pipe unless the head is held in the correct position. If this is not done the first aid student cannot blow air into her lungs. In addition, the mouth can be sterilized with an antiseptic solution each time after use.

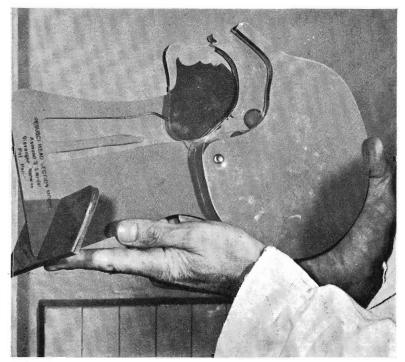
In the external cardiac method of resuscitation the correct pressure is applied to the sternum (breastbone) directly over the heart. For this, Anne has equipment that enables the pressure being exerted by the student to be measured by a manometer. There are also two plastic tubes in her neck occupying the same position as the carotid arteries. When the "heart" is correctly stimulated, the pulse can be felt in these tubes. In other words, Anne's a real box of tricks.

When travelling, Anne is deflated and fits into a neat box. With her is a transparent plastic model representing a section through a human head with a movable "tongue" that clearly shows how the human tongue tends to block the windpipe in an unconscious person.

Anne will be meeting many railway staff in the near future as she makes the round of first-aid classes. In conjunction with these classes an excellent film—The Pulse of Life—is shown. Produced in U.S.A., it is in colour, runs for nearly 30 minutes and clearly and dramatically demonstrates with real life situations these two modern methods of resuscitation.



Assistant Ambulance Officer H. L. Wignall (left) applies external cardiac stimulation to Anne while Ambulance Officer R. Grace measures with a manometer the pressure being applied.



This model of a head section is used to show how the tongue in an unconscious patient may fall back and block the windpipe.

A QUARTER CENTURY OF

FREIGHTS AND FARES

THE table on the opposite page shows that, although the average railway wage has risen nearly 400% in 26 years, Victorian fares and freights have gone up less than 200%. This is typical of Australian railway operations.

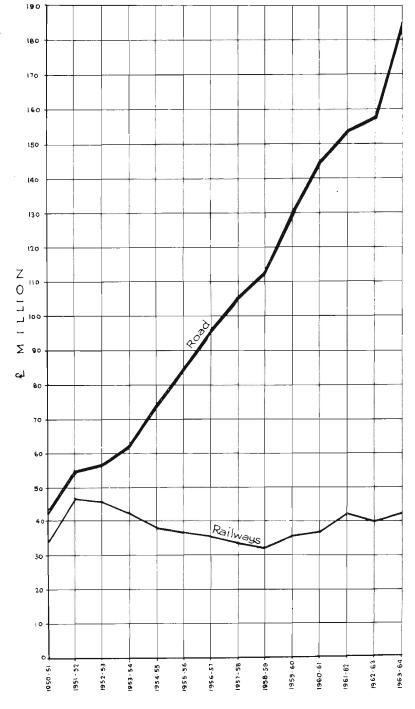
The discrepancy in the rate of increase of costs on the one hand, and charges on the other, reflects the strong political and public resistance to any endeavour by an essential public service to keep the two in line. The Australian publicwhich accepts with equanimity the fact that the prices of motor cars, refrigerators and television sets must always cover their cost of production -seems convinced that essential services, such as the railways, possess some magic formula that should enable them to absorb ever-spiralling costs without passing them on.

People of normal intelligence, presumably capable of doing simple sums in arithmetic, even go so far as to suggest that the proper way for the railways to counter rising costs is to reduce their charges, "thus increasing turnover". Nobody has yet explained, however, just what rate of turnover is necessary to make a profit if your selling price is less than your cost of production!

That the railway systems have been able to absorb the effects of increased costs, to the extent disclosed by the table, is a tribute to the very great increase in their efficiency since the war. This efficiency has been brought about both by physical improvements to locomotives, rolling stock, tracks and signalling, and by the lower unit cost that, in the case of rail transport, flows from increased traffic because of the more intensive use of fixed plant that the extra traffic makes possible.

The graph at the right clearly shows the increasing amounts being spent on road improvements while the amount spent on rail improvements has remained almost static. Furthermore, while the actual amount allotted to the railways has not been greatly varied, the rise in the basic wage and the consequential rise in costs have considerably reduced the spending power of the amounts allotted.

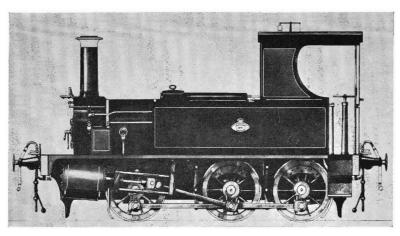
EXPENDITURE ON FIXED CAPITAL EQUIPMENT BY PUBLIC AUTHORITIES & ENTERPRISES IN AUSTRALIA 1950-51 TO 1963-64



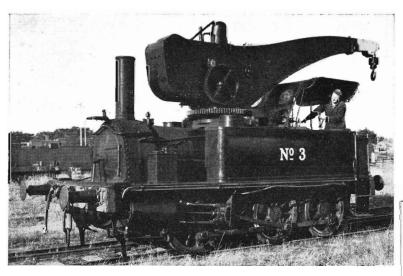
COMPARISON BETWEEN VICTORIAN RAILWAYS MAN POWER COSTS AND FARE AND FREIGHT CHARGES SINCE 1939

s. d. 3 2 3 4 4 2 5 0	% _ .27	£ 253	%	d.					since 1939
3 4 4 2	_ I .27	253		٠,	%	d.	%	d.	%
6 2 6 0 6 0 6 2 7 8 8 10 0 6 2 6 9	7 .59 13 .92 22 .78 21 .52 21 .52 22 .78 34 .18 43 .04 55 .70 70 .89 124 .05 168 .35 192 .41 200 .00 200 .00 222 .78 232 .91 232 .91 248 .01 248 .01 248 .01 248 .01 248 .01 263 .29 263 .29	260 274 310 347 354 347 348 336 431 487 529 557 771 817 856 914 942 963 957 974 1,038 1,095 1,131	2 .76 8 .30 22 .53 37 .15 39 .92 37 .15 37 .55 32 .81 70 .36 92 .48 109 .09 120 .16 204 .74 222 .92 238 .34 261 .26 272 .33 280 .63 278 .26 284 .98 310 .28 332 .81 347 .04 345 .45	0 .62 0 .62 0 .61 0 .69 0 .70 0 .77 0 .82 0 .90 1 .04 1 .06 1 .06 1 .22 1 .30 1 .27 1 .50 1 .57 1 .66 1 .66		0.95 0.94 0.87 1.15 1.17 1.36 1.47 1.58 1.78 1.78 1.78 1.83 1.98 2.04 2.01 2.01 2.00 2.01 2.00 2.01 2.02 2.02	-1.05 -8.42 21.05 23.16 32.63 54.74 66.32 87.37 87.37 92.63 108.42 114.74 111.58 111.58 111.58 111.58 112.63 112.63	1.35 1.36 1.44 ——————————————————————————————————	0.74 6.67 — 0.74 6.67 — — — — — — — — — — — — — — — — — — —
67802959992335557	2 8 10 6 6 6 6 6 6 6 6 6 6 6 6 6 10 10 10 10 10 10 10 10 10 10 10 10 10	0 21.52 2 22.78 8 34.18 10 43.04 6 55.70 6 70.89 6 124.05 4 168.35 6 192.41 6 200.00 6 200.00 6 222.78 10 232.91 10 248.01 10 248.01 10 248.01 10 248.01 10 263.29 10 263.29 2 288.61	0 21.52 347 2 22.78 348 8 34.18 336 10 43.04 431 6 55.70 487 6 70.89 529 6 124.05 557 4 168.35 771 6 192.41 817 6 200.00 856 6 200.00 914 6 222.78 942 10 232.91 963 10 232.91 957 10 248.01 1,038 10 248.01 1,038 10 248.01 1,095 10 263.29 1,131 10 263.29 1,127 2 288.61 1,182	0 21.52 347 37.15 2 22.78 348 37.55 8 34.18 336 32.81 10 43.04 431 70.36 6 55.70 487 92.48 6 70.89 529 109.09 6 124.05 557 120.16 4 168.35 771 204.74 6 192.41 817 222.92 6 200.00 856 238.34 6 200.00 914 261.26 6 222.78 942 272.33 10 232.91 963 280.63 10 248.01 974 284.98 10 248.01 1,038 310.28 10 248.01 1,038 310.28 10 248.01 1,095 332.81 10 263.29 1,131 347.04 10 263.29 1,127 345.45 2 288.61 1,182 367.19	0 21.52 347 37.15 — 2 22.78 348 37.55 — 8 34.18 336 32.81 — 10 43.04 431 70.36 0.69 6 55.70 487 92.48 0.70 6 70.89 529 109.09 0.77 6 124.05 557 120.16 0.82 4 168.35 771 204.74 0.90 6 192.41 817 222.92 1.04 6 200.00 856 238.34 1.06 6 200.00 914 261.26 1.06 6 222.78 942 272.33 1.22 10 232.91 963 280.63 1.30 10 232.91 957 278.26 1.27 10 248.01 1,038 310.28 1.57 10 248.01 1,095 332.81 1.66 10 263.29 1,131 347.04 1.66	0 21.52 347 37.15 — — 2 22.78 348 37.55 — — 8 34.18 336 32.81 — — 10 43.04 431 70.36 0.69 11.29 6 55.70 487 92.48 0.70 12.90 6 70.89 529 109.09 0.77 24.19 6 124.05 557 120.16 0.82 32.26 4 168.35 771 204.74 0.90 49.16 6 192.41 817 222.92 1.04 67.74 6 200.00 856 238.34 1.06 70.97 6 200.00 914 261.26 1.06 70.97 6 222.78 942 272.33 1.22 96.77 10 232.91 963 280.63 1.30 109.68 10 232.91 957 278.26 1.27 104.84 10 248.01 1,038 310.28 <td< td=""><td>0 21.52 347 37.15 — — — — 2 22.78 348 37.55 — — — — 8 34.18 336 32.81 — — — — 10 43.04 431 70.36 0.69 11.29 1.15 6 55.70 487 92.48 0.70 12.90 1.17 6 70.89 529 109.09 0.77 24.19 1.36 6 124.05 557 120.16 0.82 32.26 1.47 4 168.35 771 204.74 0.90 49.16 1.58 6 192.41 817 222.92 1.04 67.74 1.78 6 200.00 856 238.34 1.06 70.97 1.78 6 200.00 914 261.26 1.06 70.97 1.83 6 222.78 942 272.33 1.32 96.77 1.98 10 232.91 963 280.63 1.3</td><td>0 21.52 347 37.15 — <td< td=""><td>0 21.52 347 37.15 — <td< td=""></td<></td></td<></td></td<>	0 21.52 347 37.15 — — — — 2 22.78 348 37.55 — — — — 8 34.18 336 32.81 — — — — 10 43.04 431 70.36 0.69 11.29 1.15 6 55.70 487 92.48 0.70 12.90 1.17 6 70.89 529 109.09 0.77 24.19 1.36 6 124.05 557 120.16 0.82 32.26 1.47 4 168.35 771 204.74 0.90 49.16 1.58 6 192.41 817 222.92 1.04 67.74 1.78 6 200.00 856 238.34 1.06 70.97 1.78 6 200.00 914 261.26 1.06 70.97 1.83 6 222.78 942 272.33 1.32 96.77 1.98 10 232.91 963 280.63 1.3	0 21.52 347 37.15 — <td< td=""><td>0 21.52 347 37.15 — <td< td=""></td<></td></td<>	0 21.52 347 37.15 — <td< td=""></td<>

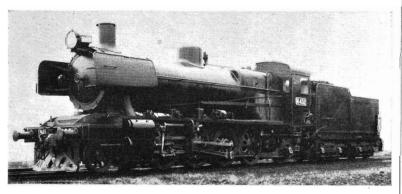
FIRST AND LAST STEAM LOCOS



Drawing of Z 526, the first locomotive built at Newport Workshops, as it was when put into running in 1893.



No. 3 steam crane (formerly locomotive Z 526); single cylinder; 3 ft. 6 in. diameter wheels; 10 ft. wheel-base; roadworthy weight 37½ tons; total heating surface 545.4 sq. ft.; grate area 7.2 sq. ft.; tractive effort 7,844 lb.



N 432, the last steam locomotive built at Newport Workshops, as it was when it left the Workshops in 1951.

BUILT AT NEWPORT

N response to a reader's request, we publish details of the first and last steam locomotives built at Newport Workshops. At the time of writing, the first locomotive is still in use, and the last one was in service up to the end of December last, but is now in the Workshops.

Newport Workshops' first locomotive, built in 1893, was a goods motor engine, 0-6-0 tank type, Z class, numbered 526. In 1904 it was converted to No. 3 steam crane.

The last steam locomotive built at the Workshops was N432 (type 2–8-2, "Mikado") which was completed in July 1951 and converted to an oil burner in November 1954. It was the last of a group of N class locos—Nos. 400 to 432—that were built at Newport between 1925 and 1951. Details when built were: two cylinders, 20" diameter, 26" stroke; wheels, coupled, 4 ft. 7 3/16 in. diameter; wheelbase, rigid, 15 ft. 6 in., engine and tender, 58 ft.; length overall, 67 ft. 5½ in.; weight in working order, 124 tons 13 cwt.; total boiler heating surface, 1,777 sq. ft.; boiler pressure, 175 lb. per sq. in.; tractive effort at 85% boiler pressure, 28,650 lb.

MINI-BUFFET SERVICE

new mini-buffet refreshment service for passengers on Mildura Sunlight began on February 15 and enabled half an hour to be clipped from the train's running time. The trolley service on the trains between Melbourne and Donald has been withdrawn, and refreshment facilities at Birchip and Ouyen closed. Introduction of the new service also resulted in amendments to the schedules of overnight trains.

Each Mildura Sunlight has a minibuffet section that was built into two air-conditioned carriages at Newport Workshops. There is a waitress service at the tables which can seat 15 passengers.

Passengers can obtain tea and coffee and various types of light refreshments, including salads. They can also buy soft drinks, confectionery, cigarettes, ice-cream and light refreshments to take back to their carriage seats.

V.R.I. SCHOLARSHIPS

IN last October's News Letter, details were given of scholarships being offered by the Victorian Railways Institute to members who were undertaking, or intended to undertake a course of study at educational institutions other than the V.R.I. and whose studies would eventually assist them in their railway careers.

The Institute Council received a very satisfactory response to its offer and after considering each application allotted scholarships for the 1966 school year to the following:

 Mr. G. J. Mouser, Clerk, Accountancy Branch, at Newport Workshops Accounting Office. Mr. Mouser has already completed part of the Accountancy course, and intends to become a qualified accountant. The scholarship will financially help him through the remainder of his course.

- Mr. B. W. Nicholls, Clerical Assistant, Traffic Branch, at Nhill. Mr. Nicholls wishes to obtain his Intermediate Certificate in order to become eligible for the position of clerk in the Department. The scholarship will cover the cost of correspondence tuition for certain Intermediate subjects.
- Mr. R. E. G. Smith, Draughtsman in the Signal and Tele-

graph Division at Head Office. Mr. Smith, who learned the trade of electrical fitting, intends to gain the Certificate of Electrical Engineering in order to specialize in railway signalling. To undertake the Certificate course, he must first qualify in Leaving Certificate mathematics and physics. Mr. Smith's scholarship will help him with his Leaving subjects and his Certificate of Electrical Engineering.

The V.R.I. Council thanks all those who applied for a scholarship and states that further applications will be invited for V.R.I. Scholarships next October or November.

LOST PROPERTY SALE IN 1909



Beards seemed to be "out" but moustaches were "in" when this picture of a Lost Property sale was taken—about 1909 it is believed. But the "stror 'at coot" that C. J. Dennis immortalised was in evidence; and quite a few swags were up for sale that day.

February 1966 23



AROUND THE SYSTI

NEW EQUIPMENT: As well as improvements to major railway installations, the modernization of minor items of equipment is not overlooked Some recent introductions of this nature include:

STRIP INDEX — Records of the Department's road motor vehicles are now kept on a strip index that enables details to be quickly and easily changed. When lists of vehicles are required, the new index enables them to be prepared by fast photo-copying instead of laborious typing. Junior Clerk Les. Pumphrey, of the Motor Garage, is shown inserting a strip into the index.





DUST CONTROL MOPS—Mrs. D. I. Greenwood (left) and Mrs. A. Stuart examine a new type of mop issued to the Head Office cleaning staff. Impregnated with a chemical compound that attracts dust and prevents its dispersion, these mops are both efficient and hygienic.

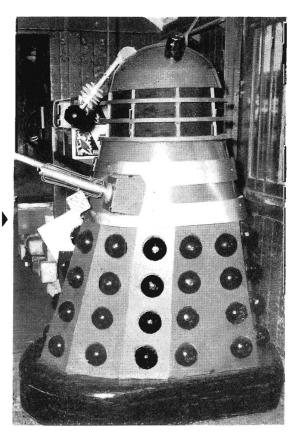


ELEC' CALC a featu tronic Miss strates Statist counta answer neon 1



WAGON LINE UP: These nine special bulk flour wagons are shown leaving the North Melbourne Workshops last month after having been repainted. Used exclusively by Howard Jackett & Co. Pty. Ltd., Swan Hill millers, the 20-ton wagons are pneumatically filled and discharged, and have proved so successful that the company has trebled its consignments by rail since it began using the wagons in 1962.

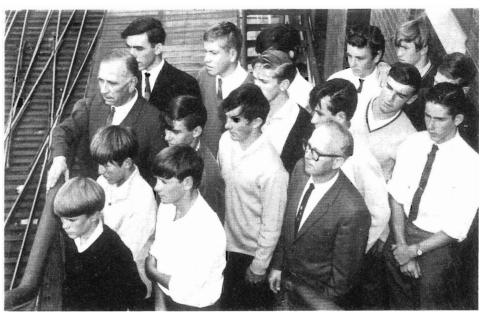
DALEK ON TRAIN: There were some raised eyebrows among the staff at Spencer Street recently when this unusual object was loaded into the van of a train. Some science fiction addicts, however, recognized it as a "Dalek", a robot-like creature from another world. The Daleks appear in a film dealing with the adventures of Dr. Who-an elderly scientist who gads about the universe in his home made space ship. A Dalek has a very metallic voice but not a very lovable disposition. specimen was on its way to advertise the film at Ballarat.







ONIC DESK ATOR—Silence is of this new eleccalculator which . Daly demonin the Mileage office of the Acy Branch. The appear in glowing to on the register the machine.



NEW APPRENTICES: These lads were among the 210 new apprentices who were officially welcomed to the Department last month by the Chairman of the Staff Board, Mr. C. S. Morris. They are seen here with the Supervisor of Apprentices, Mr. R. Curtis (left), and the V.R. Technical College Principal Mr. J. Kain (right).

LINES FROM OTHER LINES



MODERN BOOKING OFFICE: Picture shows Britain's most modern booking office which opened recently at London's Cannon Street station. Using specially designed cash registers, a staff of four will issue about 800,000 tickets a year as they cope with the requirements of commuters and other travellers at one of London's busiest terminals. (British information Services)

World's locomotives

THE world locomotive population now totals at least 186,000 units of all types, according to a recent international survey.

The actual total is probable somewhat larger. Detailed figures for the Communist Chinese Republic and a few other countries are not available. Also, figures for the USSR, as well as for industrial locomotive ownership, are based partly on estimates.

On a continental basis, Europe (including Great Britain and the USSR) has the largest number—105,000 units, or 56% of the world's total. It is followed by North America with 36,200 units; Asia with 22,800; Central and South America, 11,300; Africa 7,700, and Australasia, 3,600.

Despite the rapid expansion of dieselization and electrification, nearly 54% of the world's locomotives are still steam-driven—about 100,000 in all. Europe, again, is the largest owner in terms of number of units, but Asia operates a higher

percentage of steam locomotives than any other continent.

North America, on the other hand, is the stronghold of diesel power. More than 97% of all its locomotives are diesel, and they account for more than half of all the diesels in the world. Steam, in that region, has virtually disappeared.

The proportion of world railway traffic handled by diesel or electric power is far higher than the number of diesel or electric locomotives might indicate. That is partly because the figures show locomotives only. They do not include the electric or diesel multiple-unit stock which hauls millions of passengers daily in the vicinity of large cities and on secondary lines.

It is partly, also, because diesel and electric locomotives (except shunters) are almost invariably more powerful than the steam locomotives they may have replaced. This is well illustrated by the situation in North America. There, the Pennsylvania has a fleet of electric locomotives nearly equal in number to all of North America's remaining steamers. Yet the electrics handle

an infinitely greater volume of both goods and passenger traffic.

—(Railway Age).

Underground for Chicago?

HICAGO has requested a federal loan to be used for preliminary investigating for an underground railway. The minimum cost of the proposed system has been estimated at \$300 (U.S.) million, of which, it is presumed, the federal government would provide two-thirds. Ideas for obtaining the remaining third include a tax against city property owners.

—(Railway Age)

Australian railways' results

A USTRALIA'S seven railway systems earned a record £238.2 million in revenue during 1964/65. This represents an improvement of £6.6 million on the previous year's revenue, which also had been a record. Earnings exceeded working expenses by £13.3 m., all systems excepting the smallest, Tasmania, recording operating surpluses. Freight tonnages and earnings, at 64.7 m. tons and £177.5 m. respectively, were also records.

Bulk freights, including grain, coal, ores and concentrates, artificial manures, cement, sugar, steel and timber, were the biggest money earners. The record freights and revenues were achieved with 49 less locomotives than in 1963/64. The nation's steam locomotive fleet dropped by 174 to 1,784 while an additional 125 diesel-electric locomotives were brought into service. At 817, Australia's fleet of diesel-electric locomotives is still less than half the total number of steam locomotives still operative.

The decline in passenger traffic, although slight, was consistent with trends experienced by railways overseas. Revenue from passenger traffic, at £45 m., was about £300,000 below the previous year's figure.

Revenue from other sources, including real estate and advertising, rose £1.4 m. to a record level of £15.6 m.

Railway staff fell by nearly 3,000 to 126, 337, but the Australian railway industry still remains the nation's biggest single employer of labour. A record £164.5 m. in salaries and wages were paid while a further record £64.4 m. were spent in the purchase of stores and materials, mostly of local manufacture.

The capital value of Australia's railways rose £30.6 m. to a record level of £902.3 m. during 1964/65.



JOLIMONT PICNIC



Handing out Iollies on the train are committee members Arthur Green (left), Stan Coster (right) and Eddy Knowles (rear).



At Queenscliff, secretary Jack Smith serves the ice cream.



Proud race winners receive their prizes from Mrs. J. Smith (left) and Mrs. G. Watts. Men give the ladies credit for much of the success of the picnic.



Last-minute advice is given by parents to runners in a tot's race.

ACK in 1943, four men at Jolimont-Messrs. A. Ogden, G. Wells, J. Smith and N. Kerchival-decided it would be a good thing to have an annual picnic for the men in the area and their families. Battling against scepticism and lack of money, they managed to organize one to Aspendale. It cost only £12. But, over the years, the picnic became more popular, and the venue changed-from Aspendale to Ferny Creek, Warburton, Carrum, Bacchus Marsh and so on. But there were some things that never changed-the enthusiasm of the committee members and their wives...and the good weather that always arrived for the day.

TEN TOWN WITH HERE TO THE

Last month-under the auspices of the Jolimont Social Club-the twenty-fourth of these picnics was held, when 300 adults and children went by special train to Queenscliff. But, it cost somewhat more than that first picnic-over £300 in factmost of which was collected during the course of the year. And the weather, as usual, was perfect. The picnic committee consisted of Messrs. E. Knowles (president), G. Watts (treasurer), J. N. Smith (Secretary), R. Shea, S. Coster, N. Godden, C. Roy, A. Green, A. Borg, F. Mansell, V. Giampoulo and M. Geary.

February 1966

AMONG OURSELVES

Mayor

THE V.R. is well represented in the civic life of Preston.
The recently elected Mayor,
Mr. Theo A. Cochrane, is a Railway Investigation Officer; and the Mayoress, Mrs. Eva Cochrane, is the wife of the Mayor's brother, Mr. Ronald Cochrane, who is a Storeman-in-Charge at Spotswood General Storehouse. As well as carrying out his



Mr. Cochrane

mayoral duties, Mr. Cochrane manages to find time to serve on the council of the Preston Technical College, the Newlands High School and the committees of the local municipal band and symphony orchestra. Another of his interests is literature; he is a member of the Henry Lawson Literary Society and also has an extensive library. Mr. Cochrane has another brother in the Department—John, who is a clerk in the Rolling Stock Branch at Newport Workshops.

Shire President



Mr. Jones

A NOTHER railwayman prominent in the civic life of his community is Mr. J. F. Jones, assistant stationmaster at Little River. Mr. Jones has been a Shire Councillor of Werribee for the past nine years and, last year, completed his term as Shire President. He is also the Council's representative on the Little

River Recreation Reserve Committee and its secretary. For many years Mr. Jones played an active part in V.R.I. tennis; for over 20 years he took part in each annual Country Week and was a member of three interstate teams. Last year he became a V.R.I. Councillor.

Hectic day at Aspendale

A SPENDALE station was the scene of some dramatic events on New Year's Day when, in the late afternoon, a police car suddenly drew up and its occupants approached the station. As they did so, a youth on the up platform immediately scaled the fence, and ran. Junior Station Assistant P. J. Backhouse noticed his action and chased him. After a chase that led through blocks of flats and over fences, the youth was found by Jirr. Station Assistant Backhouse and handed over to the police. Subsequently, the youth was identified as a prison farm escapee from New South Wales.

Wants old News Letters

N. Victor Melder, an engine driver on the Ceylon Government Railway, writes to say that a copy of News Letter was read with great interest by himself and his friends who are ardent rail fans. He says that if any readers are able to mail him old copies of the magazine, it would be much appreciated. Mr. Melder's address is 51 Templers Road, Galle, Ceylon.

Father at retirement



Mr. P. H. Granger (right) shown being farewelled by Mr. R. Murcutt, Ldg. Hand Car Builder at Jolimont, had attended a social evening the night before, at which his father-an 86-year-old retired blacksmith (from Newport Workshops)-had been present. The father had also intended to be present at his son's farewell in the Jolimont yard, but decided otherwise when the time came. Mr. P. H. Granger joined the Department in 1915, completed his apprenticeship as a car builder and was in the Jolimont Yard for the past 25 years. He has a brother Bill, still in the service, and also a car builder at Jolimont.



Newport Workshops' Safety Officer, Mr. J. H. McCubbery (right) is fare-welled by Mr. E. P. Rogan, Commissioner, (left) and the Chief Safety Officer, Mr. Ian Wearne. Mr McCubbery was the first industrial safety officer appointed in the Department. He had nearly 50 years' service, all at Newport Workshops. He started there on April 6, 1915; completed an apprenticeship as fitter and turner; worked in the Tool Room for some years; and become a supervisor in 1937. In thanking him for his service, Mr. Rogan added that Mr. McCubbery's work as safety officer had prevented loss of life and much needless suffering. loss of life and much needless suffering.

Railway tradition

SEVENTEEN-YEAR-OLD Allan Douglas Morffew who was among the 210 new apprentices who began last month is certainly adhering to a family tradition.

His father is an electric train driver; his mother was a typiste in the Department; and grandfather his (Mr. Les Pope) is a foreman blacksmith at Newport Workshops.

Allan's great uncle was also a blacksmith in the Workshops; his greatgrandfather was an electric train driv- Apprentice Morffew er; and his great-



great-great uncle was a foreman in the Williamstown Railway Workshops away back in 1890! Allan, himself, has been a scout for five years, and is now a Queen's Scout.

ACH Flexi-Van wagon runs from 120,000 to 150,000 miles a year.

Engineer of Tests retires

R. E. D. Connor, who retired last month as Engineer of Tests, was in charge of that section of the Department that applies the latest scientific method to railway practice. Mr. Connor was educated at Geelong Grammar School and Melbourne University where he graduated as Bachelor of Science with honours in Chemistry and Metallurgy. He joined the Department in 1922 and was appointed Engineer of Tests in 1935.

In 1957 he went abroad to investigate a wide variety of technical matters. Some of the main Departmental projects with which Mr. Connor has been associated were the treatment of bullet-proof steel for machine gun carriers (during the second world war), the establishment of a technical library and radiographic methods of testing, and the development of methods of dieselelectric locomotive maintenance. Mr. Connor has specialized in metallurgy. He is a Fellow of the Royal Australian Chemical Institute and, last year, was elected an honorary member of the Australian Institute of Metals.

Golf, reading, and research into the history of metallurgy will occupy much of his leisure during retire-

From wheat to metals

THE environment into which Mr. J. A. Bate, the new Engineer of Tests, was born, is

in marked contrast to his present field of work. Mr. Bate was born at Stawell and grew up in the open spaces of his family's wheat farm in the Wimmera. For a period, he operated a plant at Stawell for the cyanidation of gold.

After the outbreak of the second world war, he joined the A.I.F. and served with an engineering company in the Northern Territory and Pacific Islands area. On returning to civilian life, Mr. Bate completed a course of metallurgy at the then Melbourne Technical College, and joined the Engineer of Tests' section in 1950. Among the variety of chemical and

metallurgical work with which he has been concerned was the establishment of the system of diesel oil analysis for locomotive maintenance. When not engrossed in laboratory problems, Mr. Bate enjoys an evening of classical music.

TATISTICALLY speaking, one diesel-electric locomotive does as much work as 21 steam locomotives, and it's available for traffic 23 out of every 24 hours.

AFETY is everybody's business.



Mr. Bate (left) and Mr. Connor in a discussion with the Chief Mechanical Engineer, Mr. Galletly (right).

Works for Red Cross



Mr. Bartlett, with presentation made at his retirement.

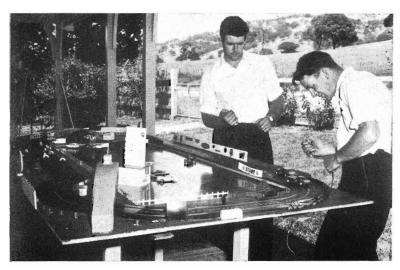
R. C. H. Bartlett, who recently retired as Acting Assistant Distribution Engineer, joined the Electrical Engineering Branch in 1917-two years before Melbourne's first electric train service began.

Race your own Jag

ERRARIS and Jags recorded some good times at the Kilmore East circuit recently. Never heard of it? Well, of course, it was only founded last July and the circuit (7½ yards a lap) belongs to the Ajax Minature Motor Racing Club. Three of the club's officials are railwaymen-Assistant Stationmasters Bruce Varney (president), Graham Comport (treasurer) and Repairer Kenneth Howson (secretary); other V.R. men are also members.

Flinders Street The fascinating little 1/32nd scale cars are electrically controlled and need a good deal of skill to keep on the track. Latest news is that the club's Grand Prix was won by Repairer Stan Simpson, with a scale speed of 120 m.p.h. The record for 8 laps is 36.5 seconds, held by Bruce Varney. The members are very enthusiastic and will welcome others who may wish to join. The annual membership fee is 50c, and members

pay 30c a race meeting. The cars cost from about \$10 to \$24 each.



Assistant Stationmasters Bruce Varney and Graham Comport have a few practice laps on the club's circuit.

Actually, he had joined the Department in what was then the Signal and Telegraph Branch, and was later transferred as a pupil draftsman to his new branch. His career, therefore, spanned the era from the supremacy of steam to its fastapproaching disappearance. Bartlett will find a good deal of use for the power drill with which he was presented at a retirement farewell, as, for 15 years, he has been one of a group making crutches, walking sticks and other items for the Red Cross.

Flinders Street

Y daughter recently suffered a severe asthma attack at Flinders Street on her way home from school. A member of your staff rang me, as a result of which she was sent by taxi to Royal Childrens Hospital (at my request).

I would like to thank and compliment the member or members of your staff involved in this matter. Their prompt action helped to avoid a far more serious situation.

(Dr.) M. Clark, 161 Station Street, Fairfield writing to Stationmaster,

First aid from guard

wish to commend to you the actions of the guard on the Sandringham to Melbourne train on Sunday 9.1.66 (at 8.23 a.m.) for his prompt, efficient and kindly attention to a girl who had collapsed on the Ripponlea station.

-(Mrs.) S. Pearce writing to the Secretary

Mount Waverley

should like to express my appreciation of the splendid service given the public by your senior lady assistant at this station. Under the most trying circumstances she has proved her efficiency and the standard of cleanliness at this station is marked.

-Mary I. Meagher, 326 Stephenson's Road, Mount Waverley (Station Assistant referred to is Mrs. J. A. Roberts who is now at Gardiner. Ed.)

Springhurst

friend was putting our nineyear-old son on the train at Springhurst this morning (7.50 a.m.) to travel alone to Melbourne. On her mentioning this fact to the Springhurst S.M., he spoke to the Conductor. Before the train pulled out after its brief stop, the Conductor was beside our boy noting his seat number, and signalling to our friend that all was well.

My wife and I are very appreciative of this prompt and considerate attention and wish to express our gratitude to you and to the officers concerned.

-A. R. McEvey, 5 Gissing Street, Blackburn South, writing to the Secretary

Boys Scouts excursion

N behalf of the Cub Council of the Camberwell South Boy Scouts District Association, I wish to thank you for the recent steam train excursion for the Cubs to Healesville. The venture was most successful and enjoyed by all who took part - both adults and children.

We would like to commend the following people for the initial organization of the trip - Messrs. N. Callam, J. Stirling and J. Clark. Special mention must go to the crew of the train - Driver Haining, Fireman Greaves and Guard Pridham. During the trip, Guard Pridham assisted with the children in the observation coach; while at Healesville the driver and fireman did a very good job in showing the children through the cabin of the engine. We would also like to thank the stationmaster and staff at both the Camberwell and Box Hill stations, whose assistance made the loading of the train comparatively easy.

A. J. Lacev, District Cub Master, Camberwell South Boy Scouts, writing to

the Secretary

RECENT RETIREMENTS . . .

TRAFFIC BRANCH

Douglas, H. T. Stawell Ryan, C. F., Elsternwick Streader, B. A. M., Spencer Street Grinter, W. H. A., Melbourne Goods Horwill, J. A. B., Hughesdale McMillan, T. A., Melbourne Goods James, F. W., Melbourne Goods Burgess, E. C., Melbourne Goods Elliott, A. F., Melbourne Yard Judd, J. C., Kyabram Woodgate, H. W. L., Wallan

ROLLING STOCK BRANCH
McQuade, G. A., Newport
Greensmith, A. J., Newport
Loveland, N. S., Bendigo North
Walsh, W. F., Jolimont
Munnerley, A. W. T., North Melbne.
Browning, H. A., Benalla
Granger, P. H., Jolimont
Hamilton, H., Bendigo North
McIlroy, R. G., Newport
Forward, D. I., Newport

WAY AND WORKS BRANCH
Walker, N., Ironworks
Edelsten, S., St. Arnaud
Bishop, W. J., North Melbourne
Guy, G., Flinders Street
Ford, W., c/o Head Gardener
Graham. C. W., Geelong
Armstrong, M. A. (Mrs.), Clunes
Carstairs, W. T., Sale
Oats, A., Shepparton
Polichowski, P., Spencer Street
Walshe, T. S., Moe

ACCOUNTANCY BRANCH Matthews, G. D., Head Office Shirreff, C. W., Flinders Street

REFRESHMENT SERVICES BRANCH
Harris, A., Hairdressing Saloon
Spencer Street
Moller, M. (Miss), Shepparton
Jack, H, J., Spencer Street
Bridle, F., Bookstalls Division,
Flinders Street

AND DEATHS . . .

TRAFFIC BRANCH

Brain, J. I., Ticket Checking Division Hollioake, P. H., Harcourt Wellington, C. B., Melbourne Goods Mathieson, J. H., Melbourne Goods

ROLLING STOCK BRANCH

Maltese, S., Jolimont Carrucan, J., Jolimont Pilavakis, J., Newport

WAY AND WORKS BRANCH

Bond, M. G., Batman Avenue Puglielli, F., Special Works Willey, J. A., Mornington Licence, G. H., Ironworks Division Sneddon, M., North Melbourne MacNamara, E., Foreman Painter Sweeney, M. H., Wallan Sayers, R. M., Queenscliff

ACCOUNTANCY BRANCH Jackson, L. C., Head Office



Cricket

I have it on good authority that any railwayman who watched the last hour of play in the V.R.I. v. A.P.I. cricket match and survived will be exempt from examination by the R.M.O. for at least two years. Seriously though, I think that this 1966 match was as good and as exciting as any in the 40 years this fixture has been played.

As usual the weather was perfect and the South Melbourne ground a picture. Postal won the toss and had no hesitation in batting on a near perfect wicket. Waixel and Piper opened to the bowling of Thom from the lake end and Janson from the city end. Runs came along slowly but surely, when a misunderstanding between the batsman resulted in Waixel being run out for 12, the score then being 38. Postal Captain Ron Owens then came to the wickets, but a change in bowling with Coyne (Dimboola) replacing Janson brought immediate results when the country lad clean bowled Piper for 23 and Postal were 2/42. L. Green, Hawthorn-East Melbourne batsman, was next in, but a beautiful ball from Janson who had relieved Thom, clean bowled him and Postal were 3/43. Then a stroke of bad luck added to Postal's worry. A beautiful straight

drive by Owens seemed certain to rattle the pickets when Janson threw himself at the ball and deflected it on to the wicket with Toohey out of his ground, and A.P.I. were 4/48. Eleven runs later Coyne struck again when he had Carboon caught by Chapman for a duck.

Schmidt then joined Owens and this pair pushed the score along to 88 before Schmidt edged a chance to Chapman in slips off the bowling of Mumford, and another wicket had fallen. Hales followed and made 7 before being out to a good catch by Coyne off Thom, and the score was 7/99. Owens was Thom's next victim for after a great knock of 36, he gave a hard slip chance to the ever alert Chapman and he was on his way to the pavilion.

Thom struck again when Coyne held what was probably the most brilliant catch of the match and O'Brien was out for 4. McColl took the long handle to the bowlers, but a smart bit of fielding by Dyson, complete with a throw that broke the wickets, resulted in Tobin being run out for 4, and A.P.1's innings had finished at 12.53 p.m. with the score at 129. Best of our bowlers was Dave Thom who finished with 3/33 from 13 overs, then Bob Coyne (Dimboola) 2/32, Ron Janson 1/47 and Arthur Mumford (Seymour) 1/9.

Railways opened with Pitcher and Reid, and after 20 minutes Reid snicked a ball from Hales into slips and Toohey held the catch—1/11. Short then joined Pitcher, but Short was run out with the score at 32 Dyson (V.R.I. captain) then came to the wicket and immediately got on top of the bowling.

With the score at 56, Pitcher edged one from O'Brien to Toohey and we were 3 for 56. Chapman followed and without adding to the score was clean bowled by O'Brien and the score stood at 4/56. Wallis (Ballarat) then joined Dyson and these two batsman pushed the score along quite



At the A.P.I. versus V.R.I. cricket: A chat after lunch between (from left, standing) Messrs. G. N. Smith (Director of Posts and Telegraphs), E. H. Brownbill (Chairman of Railways Commissioners), W. Waixel (Postal), S. Wallace (V.R.I.), and (seated) A. Mumford (V.R.I.), K. Carmody (V.R.I.), and T. Tobin (Postal).

steadily until, at about 4 p.m., Dyson was run out by excellent fielding by

the Postal boys.

With the score at 5/85, 60 minutes left to play, 45 runs needed for victory and five wickets in hand, we still seemed in a pretty good position, particularly as Wallis was batting well. Suddenly a dramatic change came over the game. Schmidt, who had been bowling well but with no luck, suddenly found a spot, and quickly dismissed Mumford (3) and Janson (3) and when Wallis was bowled for 41 (a mighty knock) we were in a pretty desperate position-8/117, 16 minutes left to play and 13 runs still needed. Kevin Carmody defended grimly and with Thom picking up a run off any loose ball (and, believe me, there were not too many of them) the score slowly crept along until Carmody snicked one to Waixel off McColl and we were 9/124, the time 4.53 p.m., six runs still required, seven minutes left and the last batsman—young Coyne from Dimboola—at the crease.

Coyne played the last ball of McColl's over, then Schmidt came on for the last over of the day. Off the first seven balls, 5 singles were scored (3 by Thoms and 2 by Coyne) which carried the total to 129, and a tie looked like the final result. Schmidt's last ball was pitched perhaps just alittle short of a length and Coyne straight drove it to the fence for four runs and victory by one wicket and

four runs.

It was a terrific game and both sides are to be congratulated on the way the match was played. I feel our narrow win was due to an all-over team effort, as Rob Rayson said when he spoke to his players after the game, and all players contributed to the win.

and all players contributed to the win. Messrs. E. H. Brownbill (Chairman), G. F. Brown (Deputy Chairman) G. N. Smith (Director of Posts and Telegraphs), L. A. Reynolds (General President V. R. I.), M. McKenzie (Senior Vice-President V.R.I.) R. Collins (Senior Vice-President Á.P.I.) F. M. Mitchell (General Secretary V.R.I.) and R. McKay (General Secretary A.P.I.), were among the senior officers of both departments and Institutes who seemed to thoroughly enjoy this game. As well, many councillors of both Institutes were present and it was good to see some of our retired railwaymen, relatives and friends of the players, and quite a few members of the South Melbourne Cricket Club taking an interest in the match. At the official luncheon Mr. Reynolds extended a sincere welcome to our visitors from the Postal Department, and Mr. Collins suitably responded on behalf of the A.P.I.. Might I conclude in thanking South Melbourne Cricket Club for their hospitality on this day and congratulating their curator on the excellent condition of the playing arena.



NEW BOWLING GREEN: Mr. E. P. Rogan, Commissioner, delivers the first kitty and officially opens the new V.R.I. bowling green at Sunshine. Much of the construction work of this-the first Institute green in the metropolitan area-was done by volunteers from the local V.R.I. centre. The green was opened on December 19.

Women's Athletics

TOU might remember that in last October's issue, I appealed to any girls in the Department interested in athletics to join the V.R.I. W.A.A. Club. I don't know if any of the lasses heeded my call, but if they did not, then they missed an opportunity of perhaps playing a part in one of the most fantastic club efforts in the history of the Victorian Women's Amateur Athletic Association. Performances of the V.R.I. girls in the Victorian Women's Athletic Championships just concluded at Royal Park, are almost unbelievable. In the open events Pam Somerville won the hurdles and long jump title, and finished third in what I consider the toughest event on the programme, the modern pen-Rhonda Jenkins gained tathlon. third place in the 100-yard, Carol Oaten third in the 100-metre and Marlene Bray took third place in the 220-yard.

The 440-yard Victorian relay title was also won by the V.R.I. girls. In the Junior events (under 18 years) 15-year-old Christine Malakar won the 100-yard, 100-metre, 220-yard and 440-yard Victorian titles, and was a member of the relay team that finished second in its final—a truly amazing performance for one so young. In the sub-junior section, Michele O'Connor finished second in the 100-yard, and the relay team came third in the 440-yard event. How's that for a club performance.

In the two representative State teams, selected immediately after the championships, Pam Somerville and Marlene Bray will represent Victoria in the R. H. North Cup Competition against New South Wales in Sydney. Pam will compete in the hurdles and long jump, and Marlene in the 220-yard and relay. In the L. C. Mills Cup competition against South Aus-

tralia in Melbourne, Michele O'Connor will run in the 100-yard. I feel that in congratulating the girls on this terrific performance, some tribute should be paid to the officials and committee of the club, for without sound organization, first class coaching, and an excellent club spirit, results such as these could not have been achieved.

Fencing club engages top coach

TO prepare the top fencers for Jamaica and Mexico City and to provide the opportunity for a greater number of people to learn the sport, the V.R.I. Fencing Club has engaged the National Coach from the beginning of this month up till April 7. The National Coach is Maitre John E. Fethers who, after eight years of successful teaching in France, England and Scotland, returned to Australia early this year. He will be available for lessons during the day, and at night during the club hours. A special lunch period class for beginners will also be conducted by Mtr. Fethers. Further information may be obtained from Mr. E. J. Szakall (auto. 1230).

Rifle Shooting

Fe have just received word from Queensland that the 1966 Triggs Shield Shoot will be held in that State on June 8 next, the day before the opening of the Queensland Rifle Association's Prize Shoot. It is hoped that a strong team from Victoria will contest this event. Any railway shooters interested in making the side should submit an application immediately to the General Secretary, V.R.I., Melbourne, giving details of his latest scores (certified by his club captain) over the 500 yard, 600 yard and 700 yard ranges.







THE MONTH'S REVIEW

Overseas visit

NR. G. F. Brown, Deputy Chairman of Commissioners, accompanied by Mr. A. J. Nicholson, Workshops Superintendent, Newport, will leave on April 5 for a tour of Japan, the U.S.A. and Canada to study the latest railway developments. The following matters will be particularly investigated:

- The design of suburban cars and their associated equipment.
- Improved methods of train operation, including train control and signalling systems, and the working of automatic marshalling yards.
- The design and construction of van and wagon stock and methods being used to ensure efficient and damage-free handling and carriage of goods.
- The use of containers, Flexi-Vans, and other techniques for specialized loading.
- The operation of underground railways.
- The design, motorization and operation of self-propelled diesel passenger trains.
- · Research and training facilities.

Dollars Australian

WITH the introduction of decimal currency, all dollars referred to in News Letter will be Australian unless otherwise indicated.

Plastic tickets

ROM April 1, all suburban quarterly tickets will be plastic. Practically all quarterly, half-yearly and yearly country tickets have been made from plastic material since last April. They have been well received by rail users who have appreciated their cleanliness and durability. In fact, when they are collected after expiry and returned to the Ticket Collection Office, many are in as good condition as when they were issued.

Main cause of accidents

THE United States Interstate Commerce Commission, after an investigation that took several years, concluded that negligent motorists are the main cause of level crossing accidents. The I.C.C. also discovered that road users are the parties who benefit most from grade separation, gates, flashing light signals and other protective devices installed at level crossings. It therefore concluded that the cost of these

installations should be paid from public funds, just as traffic lights and stop signs are.

Road transport "subsidized by motorists"

THE view that privately operated road transport systems could exist only because they were "heavily subsidized by private motorists" was expressed at a recent meeting of the East Gippsland Regional Committee.

In order to be on an equal footing with the State owned railway system, which has to maintain its own tracks, roads operators should pay five times the amount of registration and petrol tax they were now paying, it was stated.

During a discussion on the merits of road versus rail transport, Mr. W. H. Dolamore told the committee that if roads were used only by private cars a sealed pavement with gravel two or three inches deep would be sufficient.

However, because allowance had to be made for use of roads by heavy vehicles operated by private enterprise transport firms, a gravel depth of up to 15 inches was necessary on main roads.

"What should happen is that truck operators should be paying about five times as much registration and petrol tax as they are at present", said Mr. Dolamore.

"This would put them on a comparable basis with the amount of money required to construct roads suitable for their use.

"The Railways are always prepared, they say, to compete with private transport if they are put on a comparable basis, but privately owned trucks are not on a comparable basis because the railways must provide all their tracks and pay all the costs in connection with running the system . . .

"I think the railways have done more to develop the country than private truck owners ever have, Mr. Dolamore said . . .

—(Extracts from Bairnsdale Advertiser of 1.2.66)

New Act needed

WHEN new works are being constructed by the Department, the problems encountered are usually of an engineering nature. Sometimes, however, they are legal ones. A recent example of this occurred in the building of track and stockyards to serve the Municipal Saleyards at Echuca.

Under the Railways Act, the Commissioners, for the purpose of constructing certain additional facilities, may take and use land within 132 ft. from either side of a railway line. For the new facilities, however, the track had to extend well beyond that distance, over land belonging to the City of Echuca. So, to place the legality of the extension beyond doubt, a special Act of Parliament was passed.

Incidentally, the City authorities at Echuca are very appreciative of the new rail facilities and the co-operation received from the Department during their construction. In a recent letter to the Secretary, Mr. K. F. McCartney, Town Clerk, wrote:

"My Council has noted with pleasure the expeditious manner in which the new trucking yard facilities have been constructed adjacent to the Municipal Saleyards. Many favourable comments have been made upon the structure and it has undoubtedly greatly facilitated the handling of stock sold in the Municipal Saleyards.

"The Councillors have appreciated the co-operation and assistance of your Commissioners and the Officers of your Department who were responsible for the project and for the arrangement of several small modifications to the structure, and would be grateful if you would convey to them their sincere thanks".

FRONT COVER

It's a day on the bay for Train Examiner Max Harris of Melbourne Yard, and his daughters Loris (left) and Terri, both of whom work in the Department-Terri as a Secretary's Branch typiste, and Loris as a Powers machinist in the Accountancy Branch. Like their father, they are fond of yachting; in a recent Ladies' Day race Terri skippered her yacht to second place. Mr. Harris took up the sport about a year ago. He belongs to the Chelsea Club, and, in November won the club's opening day championship for the GP class. An all-round sports-man, Mr. Harris in his younger days was prominent in V.R.I. cricket, tennis and golf and played Association football (with Preston) as well as sub-district cricket. In V.R.I. cricket, he captained Northern Lines and Dimboola, and also played with an interstate team.

Heads technical education group

THE reconstituted Advisory Council on Technical Education, the membership of which was announced early this month by the Minister of Education (Mr. J. S. Bloomfield), is headed by Mr. G. F. Brown, Deputy Chairman of Commissioners. The secretary of the Council is Mr. R. M. Wright, member of the Staff Board.

Hump yard progress

major development in the \$10 million Melbourne Goods Yard re-arrangement project, which includes Australia's first hump yard, took place during February 5 and 6. Approximately 300 men were engaged in an important week-end changeover operation that necessitated cutting existing tracks in five different locations, and slewing them into the new yard. A new lead was also provided to the Appleton Dock area, enabling a more direct service to be given shippers of freight by rail.

As a result of work that has been done since the start of the plan, the large area of 17 acres that was previously occupied by the North Melbourne steam locomotive depot has lost all traces of its original appearance, apart from the retention of a locker room.

Nearly 10 miles of new track-work have been laid in the area, and, apart from 1½ miles used for the new icing area (which was opened last October), this section of the new yard was brought into use in the middle of last month.

It is estimated that the goods yard re-arrangement scheme will involve 36 separate stages, of which 25 have already been planned. Work has been undertaken on 12 stages, and the completion of the week-end change-over last month means that eight stages of the multimillion project have now been finished.

The work that has been completed has already had a beneficial operating effect that will become more pronounced as the re-arrangement scheme progresses towards completion.

Fixture card

THE Department again took the field first in the production and distribution of a Victorian Football Fixture card for the 1966 season. At the end of last month 100,000 of the cards were printed and supplies distributed to metropolitan and country railway stations and the Victorian Government Tourist Bureau, from where they can be obtained, free for the asking. In addition to the fixtures, the card gives the number of games each club has won, lost or tied, and also how to get to the League grounds by train and-in the case of Carlton and Fitzroy-by connecting tram services.

Rocket in the pocket?

A letter recently received by the Department requested that "the designers of the underground railway should do all they could to encourage the invention of a device to eliminate stairs, ramps, escalators, lifts, overhead bridges, under-rail walkways, and long walks generally". A rocket in the pocket, perhaps?

Air service to close

A NSETT-ANA will close its twice weekly Melbourne-Bairnsdale-Sale, and weekly Melbourne - Bairnsdale - Merimbula services. A spokesman for the airline said the services were losing about \$30,000 a year.

—(" The Age" 22.2.66)

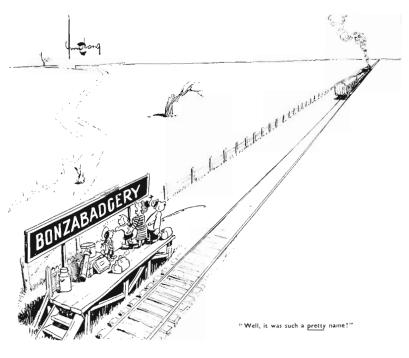
Books for railfans

ODERN Australian and New Zealand Trains, edited by Frank Shennen, is an allpictorial, full colour volume containing over 100 action photographs of today's trains in Australia and New Zealand. All the photographs have been carefully selected from hundreds that originally appeared over the years in the monthly railway industry magazine, Railway Transportation. As the preface points out, Australia and New Zealand are wonderful places for the rail enthusiast. Even quite lately in this country and New Zealand, could be found—if one knew where to look—the counterparts of almost every variety of orthodox and unique railway operation, from the diminutive logging and rack lines to the biggest and most complex terminal operations. Publisher is K. G. Murray Publishing Co. Pty. Ltd., 142 Clarence Street, Sydney; price is \$4.50.

Along the Line, No. 3 (Traction Publications, P.O. Box 438, Canberra City, A.C.T., 60 cents) will be popular with lovers of steam, as practically all its 42 pages of black and white photographs plus cover are devoted to that fading form of power.

Great Railway Journeys of the World

THIS book by K. Westcott Jones makes a good case for the pleasures of train travel today. No mere rail fan, author Jones is an international travel consultant who knows whereof he speaks. He has personally made all but one of the 18 spectacular long rail journeys he describes with engaging enthusiasm. Among them he tells the story of a 2,850-mile journey from Sydney to Perth; he waxes enthusiastic about the Intercapital Daylight, and The Overland, with the finest of equipment, including rooms with showers, and the luxury of breakfast in bed. His report on the journey from Madras to the Blue Mountains of Southern India paints a picture of heat, noise, crowds and utter fascination, and the exhiliration of stepping off the train into the cool air of Ooty, 7,312 feet above sea level. Publisher: The Stephen Greene Press, 120 Main Street, Brattleboro, Vermont, price \$(U.S.) 5.95. (Pacific Travel News)



March 1966 35

DEFENCE AND GAUGE STANDARDIZATION

THE recently developed bogie exchange procedures* had made further rail gauge standardization economically unjustifiable, except from defence or development viewpoints, the Victorian Railways Deputy Chairman of Commissioners (Mr. G. F. Brown) told a Royal Institute of Public Administration conference in Canberra.

Under the "Wentworth" plan, standard 4 ft. 8½ in. gauge lines had or would link Albury and Melbourne, Kalgoorlie and Perth, Broken Hill and Port Pirie, and Port Pirie and Adelaide.

With the possible exception of portions of the Clapp plan† relating to Western Queensland and the Northern Territory, bogie exchange could meet the requirements of intergauge transfers much more economically than gauge conversion.

These Clapp proposals, however, were warranted by both defence and developmental considerations. They provided for conversion of the Darwin-Birdum line from 3 ft. 6 in. to 4 ft. 8½ in., a new standard gauge line from Birdum to Dajarra (Queensland), conversion of the Dajarra-Mt. Isa - Hughenden - Townsville line (recently rebuilt, 3 ft. 6 in. gauge, between Mt Isa and Townsville), and a standard gauge link between Hughenden and Bourke (northern N.S.W.).

Apart from the all important defence viewpoint, these proposals had developmental merit. Livestock from the areas would have rapid mass transport to any market in the eastern states, while Mt. Isa products would also be linked to the standard gauge.

An alternative and more direct standard gauge connexion between Dajarra and Bourke was along a route authorized for a 3 ft. 6 in. line between Tobermory and Camooweal, under Queensland's Great Western Railway Act of 1910, together with the track recommended by the North Australian Commission in 1927 (see map).

Dr. J. B. Condliffe, senior economist of the Standard Research Institute of California (U.S.A.), who surveyed Australia's potential

for economic development, reported

"In the long run Australia will need to supplement its east-west by north-south trunk railway lines.

"The most obvious method of doing so would seem to be by linking up the standard gauge lines from Broken Hill to Bourke, and north to connect through Cunnamulla and Charleville to Longreach, Winton, Mt. Isa and ultimately through Tennant Creek to the line that runs from Birdum to Darwin.

"Such a north-south line would supplement the east coastal system and link with it by the existing eastwest lines that run to Brisbane, Rockhampton, Townsville and Cairns."

This was virtually the Clapp route and serves better class country than the alternative one to the west. The present day cost would be about \$134,000 per mile.

By using the existing line from Oodnadatta (South Australia) to Alice Springs, a line from Kingoonya (South Australia-on the Trans line) to Darwin-through much poorer country-would cost about \$130,000 per mile.

A sealed beef road would cost \$20,000 a mile, but maintenance would cost, unfortunately, more than a railway.

If war comes

An integral part of any defence programme would be the provision of an efficient movement of troops. It was doubtful if anyone could deny that the main supply medium of armed forces was the railway network, continued Mr. Brown.

While the Federal Government recognized this fact, not enough had been done to assist the states to increase the efficiency of their railways.

Mainly because state governments were unable to provide sufficient funds, none of the railway systems had yet been able to complete its post-war rehabilitation programme. Despite this, new modern equipment had increased railway capacity. Additional funds, however, if used to build locomotives and rolling stock would permit efficiency to be increased substantially.

The measure of efficiency already achieved was revealed by statistics, using the Victorian system as a typical example. Although average railway wages had risen nearly 400% since 1939, fares and freights had not even increased by 200% (this aspect of Mr. Brown's address was covered separately in last month's News Letter). The railway systems now

"The more I have seen of war, the more I realize how it all depends on administration and transportation. It takes much knowledge and hard work to know where you can place your forces and whether you can maintain them there. A real knowledge of supply and movement factors must be the basis of every leader's plan."— Field Marshall Lord Wavel!

had the ability to move huge tonnages of freight in a short period.

Overall authority urgent

In the event of war, and the absence of adequate forward planning, road and rail transport would have to be allocated on a hit or miss basis, continued Mr. Brown, who urged the immediate setting up of an overall land transport authority—even to the stage of selecting key personnel.

In the last World War, the Land Transport Board was not formed until $2\frac{1}{2}$ years after the outbreak. It took so long to produce a control system because nothing had been done to plan for possible contingencies before the need arose.

To overcome the many problems of such a delay, was the reason for advocating a new authority, whose task would be listing the resources of the various railway systems and studying co-ordination with road authorities.

Such an organization would be wasted unless it had available sufficient information on which to base its planning. At present, no transport administration possessed even a rough estimate of what could be required of it in war.

Little value in past

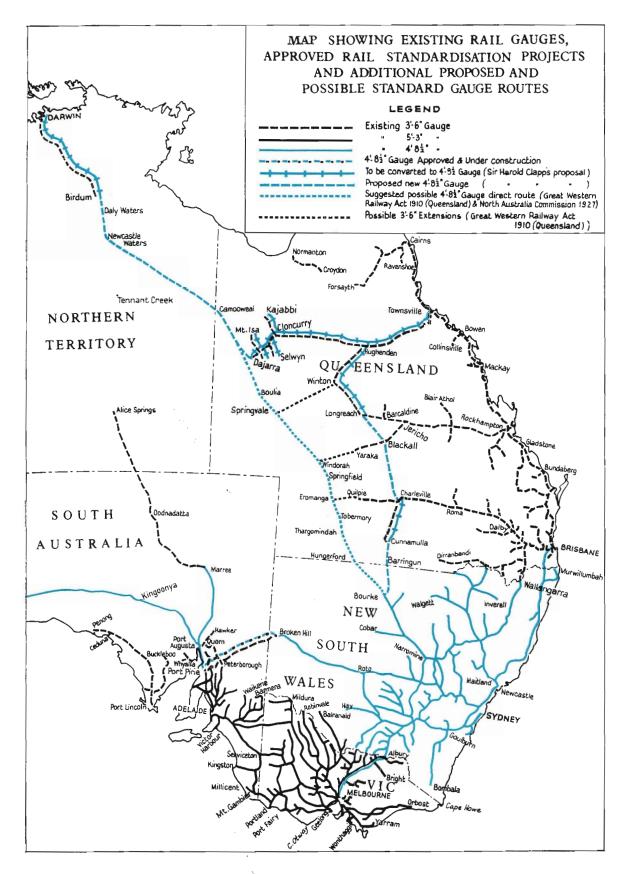
Obviously, with the improved design and operating efficiency of heavy motor vehicles, locomotives and rolling stock, the experience of the last war would be of very limited value today, and the approach to mobilization of transport resources would need complete revision in the light of circumstances now prevailing.

Also, some authority was needed now to review manpower, and prepare lists of key personnel, whose defence services would be allocated between maintaining essential industries and providing technical personnel for the armed forces.

In time of war, as in peacetime

More fully discussed in a later article.—Ed.

[†] Sir Harold Clapp, a former Chairman of Victorian Railways Commissioners, was requested by the Chifley government in 1944, as part of a post-war reconstruction programme, to investigate and report on a uniform gauge.



disasters such as floods, fires and droughts, railways moved up in priority from "necessary" to 'vital', to cope effectively with the huge quantity and wide variety of transport requirements needed.

National service training

Therefore, there was need to reconsider the principles underlying deferments for national service training, and establish a policy in line with one necessary when the armed services were committed to action.

Consequently, it was essential that

the national service training of some young men in the railway industry be deferred, to ensure conservation of skilled manpower required at home – or abroad – during war. National service training did not provide skills or experience of railway operation.

The British Army had demonstrated its belief in the importance of transport for a modern army, by forming a Royal Corps of Transport, with a strength of 1,300 officers and 11,000 men, trained in the operation of all types of road vehicles, diesel locomotives, army ocean-going

vessels, light aircraft and helicopters.

The importance of the British Army's Transport Corps lay in the fact that transport was recognized as a science, to be handled by experts in the various fields.

"I might add that I am fully aware of the activities of the various committees acting with different Federal Departments, but I must stress that no committee has been given the major task of co-ordinating road and rail activities with the services under various types of warfare and in different theatres of operations", concluded Mr. Brown.

MUMS JUST CAN'T BE BOTHERED

POR the sake of a slightly longer walk and a few seconds, mothers are daily risking their children's lives and their own by walking on the road at the Puckle Street railway gates, writes a reporter in the Essendon Gazette of 26.1.66.

They think nothing of letting their children walk within inches of the wheels of heavy trucks and cars or manoeuvring prams in between traffic and the gates.

Why do they do it when there is a subway specially built for them right beside the gates?

The plain but startling answer is they cannot be bothered using the Subway!

So, instead, they take their chances squeezing through the gates with road traffic. For some it turns out to be a pretty tight squeeze. For drivers going over the crossing it is a constant worry.

I stationed myself at the crossing this week to find out why the subway Essendon Council spent \$10,000 improving, especially for mothers with prams and children, was being ignored by them.

I was surprised to see some mothers even WAITING at the gates for trains to go through when they would have been far quicker using the ramps.

Mothers whom I stopped, openly admitted that it was "too much trouble" for them to walk under the tunnel.

"Oh, I just can't be bothered", was the most repeated comment.

Or . . . "Too much of a walk".

One young mother even confessed she was a bit scared for her children

and herself that the railway gates might close on her or push her towards traffic.

Then she continued on her way-on to the road and over the line.

Another with a pram said she much preferred the subway the way it used to be—a steep flight of rough steps!

Admittedly, the subway is on an unavoidable incline which could exert the elderly. But if a mother can walk her children to Puckle St. and then up and down it, surely the short push would not be very noticeable.

I walked through the subway with one of the minority of women with prams who used the tunnel while I was there.

It took us 25 seconds. She felt it was worth it. Why don't the others?

TWO RAILWAY CENTENARIES

THE Ceylon Railway and the Queensland Railways are among systems that have recently issued publications commemorating their centenaries.

One Hundred Years tells the story of the Ceylon Government Railway from the first train in 1864. A well produced and illustrated book of 174 pages, it reminds one that the small but beautiful island of Ceylon has quite a considerable railway system. Totalling 898 route miles, most of it is broad gauge-811 miles of 5ft 6 in.and the remainder is 2 ft. 6 in. Employees number 24,467 and the rolling stock includes 277 locomotives, 2,692 passenger cars, and 4,875 goods vehicles. Passenger traffic brings in 52% of the revenue and goods 44%.

With its scenic beauty and wealth of historical interest, Ceylon, of course, is a tourist paradise. For this traffic, luxurious trains are provided. Another source of rail revenue is pilgrims travelling to various shrines throughout the island.

An unusual feature is the provision by the railway of comfortable accommodation for visitors who wish to stay overnight at certain stations. Typical of these is the attractive new station built at the 2,500-year-old city of Anuradhapura—the great centre of Sinhalese art, architecture and religion.

On the employment side, it is interesting to note that 50% of the vacancies in certain grades are reserved for sons of railwaymen.

A Century of Service shows the progress made by the Queensland Railways since the first official rail service opened on July 31, 1865. That was only six years after the colony had been granted self-government and separation from New South Wales.

Today, the Railway Department is the oldest and biggest business in Queensland and has more employees (26,000) than the entire population of the State (25,000) a century ago. Operating on 5,774 miles of track, the Department uses 764 locomotives and nearly 28,000 carriages, wagons and rail motors to carry its annual 26 million passengers, eight million tons of goods and three million head of livestock.

The earnings for the year ended June 30, 1964, were \$82 million, and working expenses \$76 million.

The booklet (60 pages with many illustrations) has special sections on such big projects as the \$20 million Mt. Isa scheme and the \$27½ million Moura-Gladstone railway. The latter, one of the biggest financial ventures in the history of the State, is scheduled for completion by 1968 when coal exports from Moura to Japan are expected to be three million tons a year. Trains of 60 wagons, carrying 2,500 tons of coal, will operate on the completed line.

A chapter on The Railway of Tomorrow gives an interesting forecast of developments that may be expected in the course of the next century.

GJX 1 ARRIVES

A T the Bogie Exchange centre, on February 2, the first of the GJX aluminium bulk wheat wagons was officially handed over to the Minister of Transport (Mr. E. R. Meagher) who accepted it on behalf of the Department from the Chairman of Directors of Tulloch Ltd. (Mr. K. O. Humphreys) of Rhodes, New South Wales (News Letter, February).

During a short ceremony, Mr. Humphreys said that, as Australian conditions are similar, in many ways, to those in North America, his company had sought the advice of Canadian manufacturers and users of aluminium rolling stock, before designing the new wagon. The first wagon was completed in 94 days from the date of the order, and, within a few months, his company would be producing one aluminium wagon each working day.

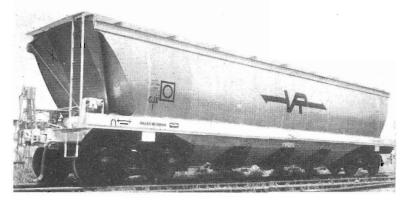
Mr. E. H. Brownbill, Chairman of Commissioners, pointed out that the tare weight to capacity ratio of the new wagon is very much better than that of the standard GY wagon. The GJX wagon will normally carry about 57 tons of wheat for a tare weight of 16 tons, which gives a load to tare ratio of about $3\frac{1}{2}$ to one in comparison with the GY's ratio of about $2\frac{1}{2}$ to one.

However no one should think that this would solve all the Department's problems, said Mr. Brownbill. Although 100 of the aluminium wagons have been ordered, the department had 6,000 standard 22-ton capacity wagons that are very good general purpose vehicles, so that no matter what their speed, the 100 new wagons would only be a drop in the ocean compared with the overall capacity of the existing standard wagons.

"We propose to use the new vehicles in trainload lots . . . going back and forward between the big terminals, with a quick turn-round, thus getting our money's worth out of them", continued Mr. Brownbill. Too much cannot be expected from 100 wagons . . they won't provide anything more than an economical handling of wheat between main terminals, he added.

In accepting delivery of the wagon, Mr. Meagher pointed out that the co-operation between the Grain Elevators Board and the Railways "has made Victoria pre-eminent among the States in its handling of wheat harvests".

After the wagon's standard gauge bogies were exchanged for broad gauge bogies, the wagon was sent to Geelong wheat terminal for loading and discharging tests.



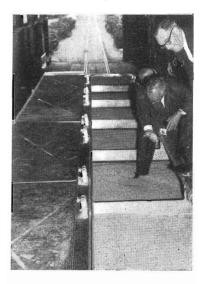
The Victorian Railways' first aluminium wagon.

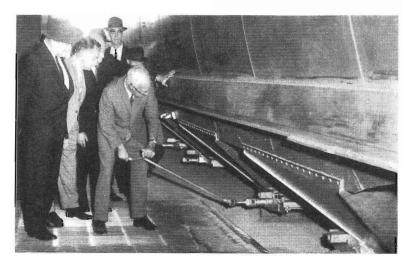
Wagon details

The only parts of the GJX wagon that are not built of aluminium alloy are the discharge doors, couplers, bogies and certain items of standard railway equipment. The maximum width is 10 ft.; max. height, 11 ft. 1¼ in.; and length 48 ft. 10 in.

Loading of the wagon is done through a continuous top hatch opening having a weather-sealed cover in six sections. Discharge of the grain is almost immediate. There are four bottom discharge doors, each controllable to give varying discharge rates. With all four doors fully opened, the entire load of about 2,000 bushels can be discharged in less than two minutes.

(Right) Wagons' top hatches are inspected at Dynon by Messrs. E. H. Brownbill, Chairman of Commissioners (left) and S. F. Keane, Assistant Chief Mechanical Engineer.





At Geelong wheat terminal, Mr. W. D. P. Knights, Superintendent, releases wheat from GJX 1. In the group are (from left) Messrs. G. F. Brown, Deputy Chairman of Commissioners; E. P. Rogan, Commissioner; W. O. Galletly, Chief Mechanical Engineer, and (at rear) T. A. James, Assistant Chief Traffic Manager.



FINE DIESEL freight train: One B class and four S class diesels were attached to this 40 vehicle freight train when it left Melbourne for Adelaide on February 8, and two more B class diesels were attached at Ararat. The extra locomotives were, of course, being worked to Serviceton to cope with the backlog of passenger and freight traffic resulting from the Feb. 9-10 stoppage. The train is shown climbing Ingliston Bank.



New LUGGAGE TRACTOR: The latest type of luggage tractor is this *Clarktor* that is being driven by Station Assistant D. Moody at Spencer Street. Its engine develops 68 b.h.p. at 2,650 r.p.m. and the drive, through hydraulic coupling, gives a smooth start.



Electrical Mechanic J. Neve checks electrical load on carriage.

MILDURA MINI-BUFFET: Before the mini-buffet given a preliminary try-out by Refreshment Servare two mini-buffet carriages to provide an each-february News Letter page 22.)

Ro



AROUND THE SYSTEM



tant Engineer W. Hoole (left) and Engineer H. son note data from recording thermometer.



Two Mildura waitresses, Mrs. G. White (left) and Mrs. P. Cumming are acting as customers for their Melbourne counterparts, Mrs. V. McGregor (with tray) and Mrs. E. McLean, in the dining section that has seating for 12 passengers.

rvice on Mildura Sunlight began last month, a carriage was staff and engineers during a test run to Bendigo. There y service on the days that Mildura Sunlight runs. (See

GIPPSLAND INDUSTRIES TRAIN

"From the time the train became an accepted proposition, the degree of co-operation and effort by the Victorian Railways has been outstanding". Mr. Bruce Eastwood, Director of the Gippsland Industries



Scene at Spencer Street during the launching of the train by Mr. J. W. Manson, Minister of State Development. Speaker is Mr. E. R. Meagher, Minister of Transport.



State Electricity Commission's exhibit; the S.E.C. has an investment of \$750 million in the Latrobe Valley.

HEN the Gippsland Industries
Train left Spencer Street on
Friday, February 18, for its
official tour, it made railway history.
Although it naturally revived memories of the Better Farming Train of
the 'twenties, it differed radically
from that train . . . and in the
difference it showed how Gippslandand Victoria—has progressed since
those days.

The Better Farming Train was mainly an educational train for the farming community throughout the State . . . to enable the man on the land to modernize his farming techniques. The train that ran last month showed Gippslanders the economic and industrial strength of their region and gave an indication of its still greater potentialities. Among the displays on the train were those from paper mills, chemical manufacturers, metal works, hardboard makers and other industries that did not even exist in the Gippsland of the 'twenties. Such a train would then have been impossible.

As far as is known, the Gippsland Industries Train was the first to run in Victoria for a trade and industry exhibition. It was sponsored by ALVA—as the Advance Latrobe

Valley Association is known—with financial backing from the Division of State Development, as well as from Chambers of Commerce and similar bodies throughout Gippsland.

The object of the train was not merely to promote decentralization but also to show Gippslanders-and others-just what can be bought in Gippsland.

Idea of the train

When ALVA first considered a trade promotion plan, a big fair was discussed, but the problem of setting up and dismantling a fair in at least four towns was too costly and impracticable. Then an ALVA member recalled the Department's Better Farming Train and suggested putting the fair on a train and railing it through Gippsland.

After preliminary inquiries were made from this Department, the plan for the train was unfolded to over 80 industrialists and businessmen during a promotional dinner held at Morwell last November. The scheme was enthusiastically approved.

Stripped carriages

But before the train could run, much work and planning had to be done by several sections of the Department.

Four corridor type carriages were completely stripped internally. This included partitions, seats, toilets, light fittings, and so on until only a shell-consisting of floor, ceiling and walls-remained.



Commercial Agent John Maslin hands out pamphlets to visitors inspecting the V.R. display.

The stripped carriages were then re-wired for special display lighting and power points to operate 240 volts a.c. appliances. In addition the carriages were wired for public address systems to permit background music to be piped through the train and announcements made.

The roofs were re-lined with pegboard to provide an attractive ceiling surface and at the same time allow ventilation. Exhaust fans were installed to provide additional ventilation; and both exteriors and interiors were painted to a planned design. Floors were sanded and painted a neutral colour.

Problems

Many problems were encountered during the preparation. The supply of a.c. power at all the sidings where the train would stay was one. This was overcome by providing a power unit on the train. The design of an attractive external appearance for the train was another problem satisfactorily solved. Then, on the operational side, suitable sidings had to be found both for installing the displays in the train and, later, for its inspection by the public.

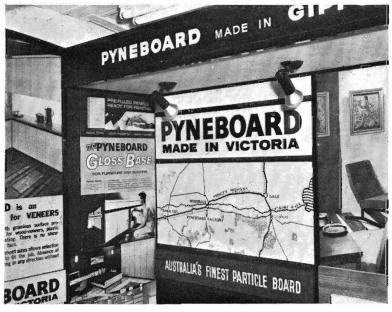
Launching

When the Department's preparation of the carriages was completed, they were hauled to Gippsland and dropped off at suitable locations to enable exhibitors to install their displays. When this was done, the train was hauled to Spencer Street where it was opened to the public during the afternoon of Friday, February 18. It was then launched by Mr. J. W. Manson, Minister of State Development.

The next day it was on display at Drouin; and during the week was open for inspection for a day each at Warragul, Moe, Morwell, Traralgon, Sale and, on February 26-the final day-at Bairnsdale. Hours at nearly every town were from 9.30 a.m. to 9.30 p.m. A Commercial Agent and Publicity Assistant from the Department accompanied the train.

A specially produced newspaper, The Gippslander, was distributed to visitors. Two radio stations, 3UL Warragul and 3TR Sale, had exhibits on the train, and made broadcasts from it.

During the week's tour there were queues at every stop, and a total of 30,000 people went through the train.



The Pyneboard display; particle board from the company's factory at Rosedale is railed in specially adapted wagons with movable bulkheads.

RAIL USERS SAY

Seymour

WOULD you please convey my thanks to two of your employees at Seymour railway station, Messrs. R. Saunders and K. Walsh. In the early hours of the morning after an urgent call from the hospital for drugs which were believed to be in the parcels office, Mr. Walsh contacted Mr. Saunders and the courtesy and co-operation received left nothing to be desired.

—J. A. Ware (Chemist), Seymour, writing to the District Superintendent

Group travel

E thank you for your valued interest in our recent trip to Brisbane and return. All arrangements were carried out satisfactorily, including the handling of the luggage in bulk. Might we thank you personally for your attention to the many small details that made the trip so much more successful.. We received closest co-operation from railway staff in all states.. our requirements were met very well, and a similar proposition is envisaged for Christmas 1966.

Christmas 1966.
—Stuart G. Brown, Tour Organizer, Youth for Christ, 747 Burke Road, Camberwell, writing to Mr. R. Deam, Train Services Division.

Camberwell

W for your splendid co-operation during the year. Our Mr. Smith tells us of your efficient and willing assistance which greatly eases his work.

—Dorothy Wilson, President, The Voluntary Helpers' Shop, writing to Stationmaster, Camberwell

Wheat harvest

THE Goroke Silo Committee praised the Department for its efficient handling of the Wimmera wheat harvest, and pointed out that the railways had shifted a near-record quantity of wheat (from the district) during the season. Mr. J. Marsh, Grain Elevators Board representative and silo manager, said that if it had not been for the way the railways handled the wheat it would have been impossible to have coped with the harvest.

—(Horsham " Mail-Times " 24.1.66)

Lost property recovered

In a letter to the Secretary, Mr. T.S. Coman of Devon House, Steele Street, Devonport, Tasmania, expressed his gratitude at the service given by the Lost Property Office and the Claims Office in recovering a valuable document lost by him on a recent visit to Victoria.

St. Kilda line

wish to commend the service given by one of your station assistants (Miss H. Wischmann) who is stationed mainly at St. Kilda and South Melbourne. . . I travel on this line every working day and find she is always very obliging . . . nothing is a trouble to her . . . (Mrs.) J. Evans, 14 St. Leonards Avenue, St. Kilda writing to the Secretary

Spencer Street

RECENTLY my wife became ill at Spencer Street, and I wish to express our deep appreciation of the very sympathetic attention given by one of your Platform

Supervisors who assisted in such a nice, understanding way to get my wife to the Traveller's Aid Rooms where she was given needful attention throughout the day. . and assisted on to the evening train.

-T. L. Robb, 9 Duke Street, Daylesford, writing to the Commissioners

Maryborough

REPORTING to the Maryborough Water Trust, the Engineer-Mr. K.V. McMahonthanked the Victorian Railways for its co-operation in the work of laying a new six-inch main under the railway tracks in Inkerman Street.

—(Maryborough Advertiser 24.1.66))

TELL NEWS LETTER

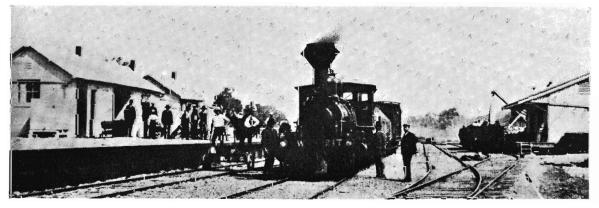
NEWS LETTER pays for news and photographs that are published.

Payment is made on the basis of a minimum of \$1 for each accepted contribution. Some items of unusual interest or importance rate higher.

News and photographs are wanted about:

- railway men and women with unusual hobbies or who are prominent in civic affairs;
- unusual incidents on the system;
- any items of railway historical interest;
- outstanding sports and games records made by railway staff.

OPENING DAY AT MANSFIELD



The date on the original of this picture of Mansfield station is October 6, 1891—the date on which the line was completed to that station. The photograph was sent to Netws Letter by Mr. G. H. Ross of Mansfield.

TRAIN EXAMINERS'



Eager hands stretch for ice creams from Ted Handley (left) and Laurie Ricketts.

7 HEN the train examiners had their recent annual picnic they invited, as usual, some young guests-about 40 boys from St. Vincent's Orphanage. Altogether 500 railwaymen and their families attended, including some from Geelong, Korumburra, and other stations outside the metropolitan area. They went to Olinda on one of those perfect Sundays that have been so frequent this summer. After refreshments were enjoyed, a good programme of races and similar picnic events was held on the attractive Olinda sports ground. The day happily concluded with a dance in the local hall.

SOCIAL



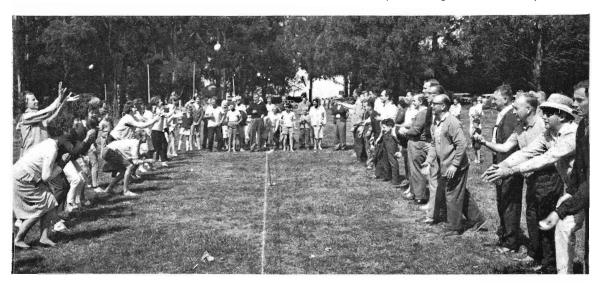
Committee President Clem Cooney (right) presents prize to Fred Bonser, winner of the Train Examiners' Gift.



Competitors flat out in the wheelbarrow race.



"Snowy" Duncan, from Nyora, wins the "over 50" walk from Jack Harding and Arthur Bleazby.

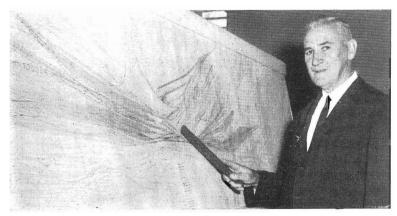


Much amusement was caused by the egg throwing competition for husbands and wives.

March 1966 45

AMONG OURSELVES

Mr. A. C. Brown retires



On one of the huge plans for the re-arrangement of the Melbourne Yard, Mr. Brown indicates the position of the hump.

NIR. A. C. Brown, who retired last month as Assistant Chief Traffic Manager, began his career as a lad porter at Traralgon in 1918. After wide experience in the country and metropolitan areas, he rose to District Superintendent at Seymour and, later, Geelong. Afterwards he was acting as Metropolitan D.S. for three years until, in 1956, he was appointed Assistant Chief Traffic Manager. In 1959, together with other V.R. officers, he was sent overseas to investigate the latest railway techniques.

During his long career, Mr. Brown has been closely associated with many Traffic Branch developments. He organized the Central Reservation Bureau, the improvements to the Tottenham marshalling yard, and the installation of the ticket printing machine at Spencer Street—to name a few. Since 1963, he has been engaged—in collaboration with the Chief Civil Engineer, Mr. L. A. Reynolds—on the reorganization of the Melbourne Yard, which includes the construction of Australia's first automated hump yard.

And, as a young man, Mr. Brown was not inactive in the field of sport. Together with the late Mr. J. L. Brain, he started the Suburban Lines football competitions. Soon, he will be leaving on a trip to Japan.

Lake Boga

"THERE has been a marked improvement in the surroundings of the Lake Boga Railway Station during recent months, due to the efforts of the station master (Mr. E. Haag).

"Mr. Haag has worked untiringly planting trees and flowers around the station buildings, and at present the array of dahlias in full bloom is a delight to see.

"Many visitors to and from the station have remarked on the greatly improved appearance, indicating that civic pride still prevails in these modern times".

—(Swan Hill "Guardian", 11.2.66

Holidays for retired staff

THE 20% reduction in tariff granted to railway staff, for accommodation at Mt. Buffalo Chalet at certain periods of the year, has now been extended by the Commissioners to railway staff who retire on account of age. (Full details of that reduction were published in last November's News Letter). Retired staff who wish to take advantage of this concession should apply to the Secretary for Railways, Room 108, Railway Administrative Offices, Spencer Street, for the necessary authority to obtain the concession.

View from Germany

In Eschborn, near the German city of Frankfurt, is a former V.R. man, Mr. Hans Chemnitzer, now a computer programmer, who still has warm memories of Australia and the time he worked with the V.R.

He paid his fare to Australia about 1960 and joined the V.R. as a station assistant, working at Noble Park, andafter having qualified as an A.S.M. at Hawthorn. Returning to Germany in 1963, for a holiday, Mr Chemnitzer decided to remain there.

He corresponds with Mr. A. J. Coleman, stationmaster at Mentone, and in a recent letter to him wrote: " . . . I still remember Showtime, when all the new, terrible timetables must be written and the ticket boxes must be signed with the special fares. After the balance which did not balance, one remembered the debit of those special fares. For you doing this railway daily job, it won't count at all, as it did when I was at the station. But now, being miles away, everything counts that calls back my thoughts to good old Australia. Maybe I am still a railwayman at heart, even if I am programming about one year now . . .

"It is cold outside now, but sitting in a warm room I sometimes read a few pages of my book Victorian Railways to '62, or I look through my Station Accounts book and see things I knew three years ago . . and sometimes feel sad at not being back in Australia . ."

Mr. Chemnitzer, however, says he is settling down to his job and is starting on the production of a national bibliography by computer, a project which is arousing considerable international interest.

Best fishing

7HAT'S the ideal location for a keen angler, as so many railwaymen are? Stationmaster H. H. Hill, of Malmsbury, would certainly nominate his town. He points out that there are three rivers in the district—the Coliban, Campaspe and the Lodden-together with their associated reservoirs. And within reasonable distance are Jackson's Creek, the Eppalock Reservoir at Bendigo and the Cairn Curran Dam at Maldon. In addition, adds Mr. Hill, the Murray and Port Phillip Bay are only a couple of hour's drive away.

Does anyone know a better spot?

S. and T. retirement

THERE was a good gathering at Caulfield Signal and Telegraph depot last month to farewell Electrical Fitter's Assistant Harold Cahill who retired after 25 years service. Mr. Cahill worked with the signal adjusters before his transfer to Caulfield 13 years ago. Among those present was retired Electrical Fitter Bill Graham who, incidentally, had just returned from a trip to England.

BOOK NOTES

FROM

THE V.R.I. LIBRARIAN

THE Library's Summer 1965 book list was recently produced, and a number of copies are still available on request. This list includes 1400-1500 titles added to the library in the four months to December 1965. A list of additions to the Childrens' Section and a new Technical Catalogue are in preparation, and it is planned to issue new lists at intervals of two to three

As we are adding about 350 books each month, I feel confident that we have something for every taste. But, obviously, they cannot all be reviewed. Consequently, the books reviewed at any one time may not appeal to everyone, and they are not necessarily the best or most readable books added; but I shall try, over a period, to review a selection of books in every section of the library so that no group of readers will feel neglected, and all may gain some idea of the types of books available.

Many of our older readers will have happy memories of J. B. Priestley's The Good Companions which was a best-seller many years ago. In his new book, Lost Empires, he returns to the backstage world of the old English music hall, and I feel he recaptures much of the spirit and all of the brisk pace of his earlier success. But this time his theme is quite different: this is a much franker, perhaps earthier book than one would expect from Priestley; but master craftsman that he is, he will offend no one. His off-beat characters really come to life, and if you enjoy a book the theme of which is human relations, and the aim, entertainment without a message, this should be for you.

The changes in the English countryside since the war, and their effect on an old established landowning family are strongly evoked in John Moor's The Waters Under the Earth. This is a very "English" book, beautifully written, with strong characterization, and a smattering of social and political history. A most satisfying book.

Two other novels which I feel will have wide appeal are The Hard Winners by John Quirk, and From a High Tower by Terence Newman. American and British respectively, the theme of both is big businessin both cases the motor industry. The Hard Winners is the story of the internal struggle for power when a big corporation has to elect a new

president. All the aspirants have a somewhat murky past, and the "hatchet-man" of the organization is aware of this This is a tough, hard-hitting novel, but I found some of the flash-backs a little drawn out. From a High Tower on the other hand, is one you'll find hard to put down. The theme is a take-over bid, with social undercurrents. A gripping story, with a couple of very well drawn char-

For those with an interest in contemporary affairs, I would invite attention to two new titles on the Vietnam war. Malcolm Browne in The New Face of War writes angrily and frighteningly about a war which, he feels, the West is losing because of the ineptitude of his own countrymen, the Americans. He won a Pulitzer Prize in 1964, as correspondent for A.P. in Vietnam. David Halberstam's The Making of a Quagmire is a hodge-podge of a book which could be considerably im-proved by firm editing, but it is nevertheless an interesting, and again, an accusing book. Both writers are pessimistic. They may not present the full story of Vietnam, but their books will give you something to think about.

To end on a happier note: cricket fans, don't miss Wally Grout's book My Country's Keeper. It's a beauty.

Who was No. 1?

N old book recently found A among Departmental archives contains a record of the rates paid to V.R. staff in 1883. In clerkly copperplate it shows that Carpenter Charles Abbott received 10/- (\$1.00) a day, and his Departmental number was 1. Other gleanings from its worn pages reveal that a repairer was paid 6/6d. (65c) a day and a drayman 12/- (\$1.20), but the latter had to provide his horse and dray out of that generous sum.

Footscray Tech. reunion

OOTSCRAY Technical College which has been celebrating its jubilee year, will hold a reunion of past students on Saturday, April 2. The college authorities extend a cordial invitation to all former students. The college buildings will be open for inspection, and entertainments will include stall, sports exhibitions, hobbies, and art displays.

Table tennis

THE V.R.I. Table Tennis Association selectors have announced that the following players will represent Victoria at the Inter-system Carnival to be held in Perth from May 9-19: E. Campbell, M. Carroll, E. Martin, J. Rees, B. Smart, S. White, W. Lawrie (captain) from the metro-politan area; M. Davey, Geelong, J. Eldridge and G. Roiter of Horsham, G. Johnson, Warrnambool, and D. Mumford, Bendigo. Officials who will accompany the team are G. Smith (manager), D. Catchpool (assistant manager), and A. Tabone (property steward); J. Crouch has been appointed Institute Representa-

RECENT RETIREMENTS....

ROLLING STOCK BRANCH

ROLLING STOCK BRANCH
Tricarico, G., Jolimont
McSpirrit, P. J.. Newport
McCusker, H. V., Head Office
Scullie, A. C., E.R. Depot
Higgins, W.T., Newport
Moorfoot, A. S., Ararat
Bryans, A. C., Benalla
Ellen, S. W., Traralgon
McConnell, J., Ballarat Nth.
Brown, A. L., Bendigo North
Gabbe, R. B., E.R. Depot
Di Stefano, G., Jolimont

STORES BRANCH

Lee, A. E., Spotswood Workshops Storehouse

. . . . A N D

ROLLING STOCK BRANCH

Obrembalski, S., Newport Goodall, I. R., South Dynon Goodall, I. R., South Dynon Bell, W. J., Ararat Milley, I., Elec. R. Depot Sewell, J., Seymour Mirst, W. J., Shelter Shed Mamo, F. X., North Melbourne Dodd, J. E., Motor Garage

TRAFFIC BRANCH

Smith, J. J., Dynon Helman, R. F., Benalla

TRAFFIC BRANCH

Virtigan, P. D., Ballarat Carter, G. W., Melbourne Goods Cole, K. C., Bendigo Egan, J. J., Melbourne Yard Wilson, R. O., Melbourne Goods Thomas, W. J., Morwell Lee, C. T., Hamilton Baillie, A. J., Melbourne Goods

WAY AND WORKS BRANCH Blackshaw, C. J. G., Chillingollah Jackson, J. T., Estate Office Dredge, F. J., Flinders Street Richards, J. A., Spencer Street Nicholson, F. A., Warrnambool Strachan, F. J., Ballarat

REFRESHMENT SERVICES BRANCH Ward, W. R., Geelong

DEATHS

WAY AND WORKS BRANCH

Cooney, J. J., Flinders Street Lazarus, R. W., North Melbourne Kayll, C. E., Ironworks Division Mills, G. L., Flinders Street

STORES BRANCH

Stockton, N. D., Permanent Way Materials Depot

ELECTRICAL ENGINEERING BRANCH Pollard, R. J., Batman Avenue



Cricket

URTHER to my report on the V.R.I. v A.P.I. match (February, News Letter), and to emphasize the team spirit that was evident in the V.R.I. room, when the selectors got down to the task of picking 11 players from the 13 who were available, big, genial, Bob Figgis (Stores) —a selector and winner of the bowling average at the last carnival—immediately dropped himself from the side to enable one of the younger bowlers to have a game; and Brian Smith (Loco.), who must have been most disappointed at being 12th man, carried out his drink-waiting duties in a most cheerful and efficient manner. Perhaps these were only small incidents, but, in my book, they add up to the spirit that wins games.

The home-and-home games in the internal competition have been completed, and what a finish to a great season! In the last round, Stores beat Codon, Suburban Lines beat Loco., while the Melbourne Yard—Spotswood game was drawn. This left three teams—Stores, Jolimont Workshops and Loco.—tied for top position with 19 points, and Suburban Lines one point away (18) in fourth place. After calculating percentages, it was found that Stores (percentage 3.04) were first, Jolimont (1.79) were second and Loco. (1.43) third.

In view of the evenness of these sides it is pretty hard to predict who willt ake out the Commissioners, Shield, but Stores should be favourites. Personally, I have a sneaking regard for Suburban Lines who seemed to dig up a couple of good cricketers late in the season and I would not be at all surprised if they caused an upset.

Women's Athletics

As a wind-up to the paragraph in last month's News Letter on the activities of the V.R.I. Women's Amateur Athletic Club, it is interseting to note that our club was awarded the Standard News Shield for the greatest number of points gained during the Victorian Championships, the Phyllis Cantwell Shield for the highest aggregate in senior events, and the Mabel Moad Shield for the highest aggregate in junior events (under 18). I hope there was something left for the other clubs.

Basketball

ECENTLY, the girls and boys of the V.R.I. basketball Club. played at Bendigo against local teams. In the girls' match we came out winners 20 goals to 9, but, in fairness to the locals, it should be remembered that in their competition international rules (five a side) are played. Consequently they took a little time to settle down to the seven a side game. The city lads also had a win-48 points to 34, and I feel our rough house tactics and greater experience proved too much for the Bendigo fellows. However, I've heard that return matches have been arranged and I suggest that we had better be ready for a really torrid game. It appeared that our party were most impressed with the stadium in Bendigo and consider it better than the Albert Park Basketball Centre, which is indeed a compliment.

Bowls

BY the time you read this, the Intersystem Carnival in Brisbane will be over and won—or lost. Let's hope that our boys can

maintain the winning streak that has resulted in the Commissioners' Shield being held by Victoria since 1962.

On the home front the Social Bowling Club is still going on its winning way. In a tournament, called the Victorian Transport Industries Tournament, and played on the City of Melbourne Bowling Club's green, on Sunday, January 30, teams representing Ansett-A.N.A., T.A.A., M.M.T.B., and the V.R.I. met in what is hoped will become an annual event.

Playing practically the team that will represent us in Brisbane, we managed to win the trophy donated by Mr. Reg. Ansett, and also take out the champion rink trophy. This rink consisted of Taffy Jenkins (Skipper), Laurie Hindson, Ted Prebble and Keith McElhinney.

Bowlers are reminded that Country Week will take place from March 28 to April 1 inclusive, and on Wednesday, March 30, the Social Bowling Club has arranged a social evening in the Port Melbourne Town Hall, beginning at 8 p.m. All country bowling members of the V.R.I. who are taking part in Country Week are invited (together with their ladies) and, as the evening is free, a big roll up of country fellows is expected.

Football

see by the dailies that most League clubs have begun training, and I feel that the time is appropriate to remind our clubs that the season should soon be under way. Details of the V.R.I. Football League's annual meeting will be advertised in the Weekly Notice, and clubs should see that they are represented. New clubs are required, and it would add a tremendous amount of interest to the competition if the number of competing teams were increased. Surely there are sufficient footballers in the Melbourne Yard, North Melbourne Workshops, and Jolimont Workshops, to name a few places, to form new sides?



In the Melbourne Yard v Spotswood Workshops match, Spotswood Captain Ron. Smith snicks a fast rising ball through the tight umbrella field. Players: (left to right) Jack Fisher, Max Flavell, John McAllister, Kevin Clark (w'keeper), Gary Payne and John Vincent.







THE MONTH'S REVIEW

Walk-through trains

THE first block of four Harris Train carriages with connecting doorways to allow passengers to walk from one carriage to the other is expected to be in service about the end of June, and the first full train of such carriages towards the end of this year.

Nine motor carriages and 20 trailers of the second series of 30 Harris Trains will be of the walk-through type. Other modifications include two doorways (instead of three) on each side, and re-arranged seating.

The shells of eight of the redesigned carriages have been completed at Newport Workshops and are ready for internal fitting.

Steam draws

N a survey of passengers travelling by the specially sponsored Sunday Mornington trains, 85% said they would not have come if the train had not been steam hauled.

TOFC arrives

new co-ordinated rail/road service reached Melbourne on March 3, from N.S.W. It consisted of two loaded semi-trailers from Port Kembla (without their prime movers) on flat-top rail wagons. One semi-trailer was taken off at Dynon, while the other went through to Adelaide after its flat wagon had been bogie exchanged in Melbourne. Prime movers at both terminals picked up the semi-trailers. This system of freight haulage, which was pioneered in the U.S.A. as TOFC (trailer on flat car), provides safe and speedy door-to-door delivery.

For this service, the N.S.W. Government Railways is buying two

prime movers and 16 semi-trailers, each capable of carrying 16 tons.

The first consignment consisted of copper tubing and wire which were loaded into the semi-trailers at Metal Manufactures' Port Kembla works and then driven on to flat-top rail wagons at a nearby siding at Dapto.

The semi-trailers were back-loaded with consignments for door-to-door delivery at both Port Kembla and Sydney. On the round trip of about 2,000 miles for the Adelaide-bound semi-trailer, road haulage amounted to about 50 miles.

This service between Sydney, Melbourne and Adelaide will later be extended to Perth.

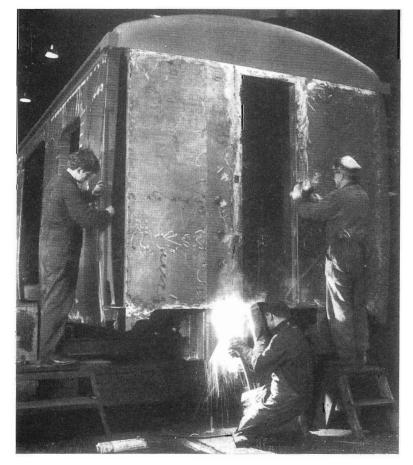
Phoenix locomotive for Ballarat

RECENTLY the Ballarat City Council acquired from the Department the last of the Phoenix locomotives, Y 112, for public display. This loco., built by the Phoenix Foundry at Ballarat, was put into running on July 24, 1889 and ceased service in March 1961 with a mileage of 1,421,872. On Sunday, February 27 last, the engine was moved from Doveton Street Siding along Armstrong Street to its display site near the Civic Hall, by laying and taking up sets of panellized trackwork.

In a subsequent letter to the Secretary for Railways, the Town Clerk (Mr. H. R. Martin) expressed the gratitude of the City Council and the Ballaarat Historical Society for "the generous and willing assistance given by your District Engineer (Mr. D. H. Cowden) and members of the railway staff who worked diligently to assist the local contractors who had also volunteered their assistance in a very difficult and tedious task".

FRONT COVER

LADY WITH THE LAMP Assistant Gatekeeper Carmel Scanlon, shown placing lamp on crossing gate at Horsham station. Although Miss Scanlon has been in the Department for only 17 months, she was recently commended for her vigilance in detecting and reporting a hot box on a passing goods train. Her parents, who are also gatekeepers at the crossing, came to Horsham recently from Dimboola. (See page 54 for story on Horsham).



At Newport Workshops welders are working on the shell of one of the walk-through carriages.

IMPROVEMENTS IN RAILWAY POTENTIAL

THE overall transport potential of road and rail at the present time is very much greater than was the case in 1940. Due to the increased volume of capital funds—both governmental and private—available over recent years, the road system has been extended and improved, new coastal shipping is available, and the air lines have extended their route coverage as well as the quality and quantity of equipment.

The railway systems of the Commonwealth have also purchased and built new locomotives and rolling stock and improved their traffic facilities.

The erection within recent years of large oil refineries throughout the Commonwealth has overcome a certain amount of reluctance towards a full programme of railway dieselization.

During the 1939-45 war, the Queensland Railways had the most difficult task of all systems, and former Commissioner, Mr. Moriarty, who was in charge of traffic operation on that system during the war years, said:

"Owing to the forms of road transport being withdrawn to conserve fuel, and release men for war service, the railways became the prime agency for passenger travel and goods transport over both long and short distances".

Commenting before his retirement on the improved capacity of the Queensland system and its ability to cope with defence demands, Mr. Moriarty said: "The introduction of the diesel-electric locomotive with its greater tractive effort and reduction of 33\frac{1}{3} per cent to 40 per cent in schedules, the laying of heavier tracks, better facilities for handling traffic, and the introduction of modern rolling stock, are all improvements receiving continual attention, with the resultant increase in capacity of the railway system".

This remark is equally applicable to all state railway systems, where the provision of diesel and electric locomotives, with goods rolling stock of bogie type suitable for operation at passenger train speeds, will permit the running of additional trains without additional track, and increased tonnages on trains can be obtained by using locomotives in multiple operation.

The modern type of rolling stock now available is also suitable for transfer from one gauge to another by bogie exchange; as an example, all bogie rolling stock of 5 ft. 3 in. gauge has been made suitable for operation over the 4 ft. 8½ in. gauge system.

In the event of an emergency, with the consequential movements of large tonnages of goods, the time involved in the loading and unloading of wagons becomes a major factor. Modern methods of transporting and handling materials, by the use of containers and forms of semi-trailer bodies such as Flexi-Vans, etc., result in the quick loading and unloading of the rail wagon. Following are details of the efficient methods now available.

PIGGYBACK

"Piggyback" is one of the methods of co-ordinated road/rail transport being tried by many railroads overseas, more intensively in the U.S.A. than elsewhere, in an effort to reduce overall transport costs and to improve freight services generally.

It may be defined as the transport of highway vehicles, complete with their road wheels, on railway flattop wagons. "Piggyback" operation calls for end-ramp loading facilities, either permanent or portable, at each terminal or roadside station from where the service is to operate. The number of wagons usually placed in a rake for "piggyback" end loading varies from four to 15, the factor being one of a balanced economy between shunting required and the time it takes to load or unload a road vehicle over the distance.

Originally, in America, ordinary highway semi-trailers were end-loaded on to hastily improvised existing railway flat-top wagons, and this brought about varied methods of tie-downs and supports which resulted in costly expenditure of operating time and manpower.

There is now a trend towards specially equipped highway semi-trailers and railway flat wagons incorporating quickly applied and efficient tie-down methods and front-end supports.

One such form is known as the "Clejan" guided rail "piggyback". This system calls for a specially designed railway wagon consisting principally of two heavy centre-sill beams carried on passenger type freight bogies; it is designed for end loading only and has no floor.

As outlined to a conference of the Royal Institute of Public Administration by the Deputy Chairman of Commissioners (Mr. G. F. Brown)

The specially equipped highway semi-trailers used for this system have small flanged dolly wheels and guide castings attached to their rear axles. These dolly wheels ride on the "track" formed by the two top flanges of the rail wagon's heavy centre-sill beams. Drop rails are fitted to the wagon ends to bridge the gap for rake loading over a group of connected wagons.

The "Clejan" guided "piggy-back" trailers ride about 8 in. closer to the rail than conventional "piggy-back" trailers and the road wheels are not in contact with the rail wagon either during loading operations or in transit.

"Piggyback" operation with full height highway semi-trailers (12 ft. 6 in.) is not possible on the railways of Australia, except on the Commonwealth east-west line, because of the relatively low maximum "outline of rolling stock" height of 14 feet.

However, semi-trailers with a maximum height of 11 ft. at the centre and of 9 ft. 9 in. at the sides could be transported by the "piggyback" system of operation, but, except under special circumstances, it is considered that this limitation of height would probably make such operation uneconomical.

FLEXI-VANS

Flexi-Van is a container form of freight road/rail transportation which makes use of a patented technique for separating the rear wheel assembly from a highway semi-trailer and placing the trailer, less the wheel assembly, on to a railway wagon without the aid of overhead crane or other railway terminal equipment.

Flexi-Van transport was developed in America in 1957. In Australia Flexi-Van rail wagons are now in operation between South Australia and Victoria on broad gauge and New South Wales, Victoria and Queensland on standard gauge.

The units operating on broad gauge are 43 ft. long and carry a single 35 ft. long Flexi-Van. On the standard gauge, the wagons are 76 ft. long and carry two Flexi-Vans.

The advantages claimed for Flexi-Van operations are:

 Speed in transloading from road to rail and back again allows rapid turn-round of rail wagons with subsequent high vehicle utilization.

- (2) Ability to make transfers without special and heavy terminal equipment.
- (3) Ability to make simultaneous mass transloadings.
- (4) Saving on terminal costs. Trailers need not be loaded in station order.
- (5) It results in a reduction of height and gives a lower centre of gravity than with "piggyback" loading.
- (6) Permits greater use of each prime-mover and semi-trailer wheel unit, giving a reduction in the number of such units required to operate the service.
- (7) Contents of Flexi-Vans remain untouched from loading at depots or other road originating points to unloading at destination points.

This form of transport has proved most popular with shippers who have expanded their fleets and have also introduced refrigerated and flat-top units.

From a purely railways point of view, the main advantage is the high Flexi-Van wagon utilization possible—up to 130,000 miles per wagon per annum between Melbourne and Sydney.

Additional rail wagons are at present being constructed in order to meet traffic requirements.

It is considered that the economics of Flexi-Van operation are such that it would be acceptable only for rail hauls of not less than 300 miles.

CONTAINERS

The container could be looked upon as the perfect unit load for door-to-door rail and road operation as with it, advantage can be taken of:

- the highway vehicles' ability to go wherever there is road access
- the railways' ability to move full unit loads with speed and economy.

Containerization may be said to embrace the transport of bulk goods in boxes and crates with load capacities of not less than 350 cubic feet, and in highway vehicle bodies without their road wheels. (The Victorian Railways calls it the Rail Pak system—Ed.)

The principal types in use are:

- (a) closed containers with either side or end doors
- (b) containers for goods in grain or powder form, constructed to suit required type of discharge
- (c) tank containers for liquids
- (d) insulated containers for goods requiring temperature control
- (e) containers fitted with a refrigeration unit for the transport of frozen goods

(f) tray type containers with removable wire gate or similar sides which, when loaded, are covered with a tarpaulin and sprayed with a sealing solution to give a cocoon effect for the protection of goods. On the return trip, if loading is not available, the sides may be removed and the containers stacked into one wagon.

Containers can be transloaded by means of fixed or mobile cranes or fork lift trucks and can be transported on rail wagons or highway vehicles with or without special securing gear and can be designed for storage stacking.

The railways of the eastern states of Australia originally standardized on container base lengths of 7 ft., 14 ft. 5 in., 21 ft. 10 in. and 29 ft. 3 in. with a maximum width of 8 ft. They have in service a large number of rail wagons specially designed and fitted with efficient, quickly applied tie-downs to accommodate containers of these lengths.

The Standards Association of Australia, however, recently introduced a new standard for containers with a base length of 8 ft., 16 ft. and 32 ft. Railway systems will need to build special container wagons for the economic carriage of these containers.

The wide scope of container operation, with its completely sealed protection and door-to-door service, and the many uses to which containers can be put, make this form of goods handling very attractive and efficient.

One factor to be kept in mind, however, is that the advantages or drawbacks of any door-to-door system of goods handling are closely related to the nature of the transport operation, as a containerization service which compares favourably with other services over one system for certain kinds of goods, may be useless or inefficient over another system, or even over the same system for a different class of goods.

In England and on the Continent, container door-to-door service includes sea transport for containerized merchandise with gross weights up to 5½ to 6 tons.

American shipping companies have also entered into this field, one company—the Pan Atlantic Steamship Corporation—has in service a fleet of ships specially fitted and each with accommodation for 226 fully loaded containers 35 ft. long x 8 ft. x 8 ft. 6in. and a capacity of 2,100 cubic feet.

Australia now has a combined rail-ship-road container service (called "Railroader") operating between Tasmania and the mainland states. The containers are delivered to the shipping terminal in Tasmania

by rail or road, carried across Bass Strait by special ferry service ships, and then either delivered locally by road transport or transferred to rail vehicles for carriage to their ultimate destination.

This type of service has proved ideal for bulk malt, bricks, paint, steel, vegetables, bagged cement and many other commodities.

PALLETS

Australia has one (unofficial) standard pallet having base dimensions of 46 in. x 46 in. and this has been adopted by industry mainly for the shop handling and storage of manufactured products and materials.

However, over the past few years pallets, particularly in the form of box pallets with grid or closed sides and ends, are being increasingly used over short distance road transport, with occasional special loads over long distances and even interstate.

From a technical point of view, the use of pallets for combined transport (i.e. pallet with load) over long distances, with a reduction in the transport vehicle's carrying capacity, could result in uneconomical traffic.

On the other hand, advantages might accrue from :

- simpler and speedier handling
- no need to break the bulk
- lighter packaging required.

Recent investigations overseas revealed that, generally speaking, palletizing is not adopted for transport of goods by rail or road containers. It is done in a selective sense on odd occasions when some particular piece of freight calls for isolated treatment.

Pallets are being used mainly for shed handling; goods received on pallets or stacked on pallets when unloaded from the road vehicle are transferred to the rail van by fork lift and then hand stowed within the van.

Some European countries however, are transporting considerable quantities of palletized loading in railway wagons, but in practically every instance there is a resultant reduction in the net carrying capacity of the wagon ranging from one-half to two-thirds.

The Australian railway systems are constructing new box wagons with extra wide doorways and floors suitable for the handling of palletized loads by fork lift trucks.

BOGIE EXCHANGE

The manual transfer of goods at Albury prior to standard gauge, even with the assistance of mechanical handling equipment, was very expensive as well as time wasting and required a covered transfer area for

some commodities. Furthermore, for every two wagons of either gauge requiring transfer of loading, three wagons of the opposite gauge were necessary for transfer operations and this meant that a large number of wagons were necessarily out of revenue service during the period of this operation.

Experimental system

As space and manpower at the Melbourne terminal were at a premium, it was decided to break new ground and inaugurate an experimental system of bogie exchange and study the results.

It was realized that before bogic changing could become a practical or economical proposition, it would be necessary to ensure that a sufficient number of vehicles of uniform body and bogic design would be available. A survey showed that Victoria had been building all new vehicles to the Australian and New Zealand Railways' standard for the past 10 years and that South Australia and the Commonwealth Railways had followed suit.

It was considered that the number of suitable vehicles then in service, together with those being constructed to meet the requirements of the Melbourne-Albury standard gauge line, would be adequate for the traffic offering and would warrant the provision of bogie changing facilities.

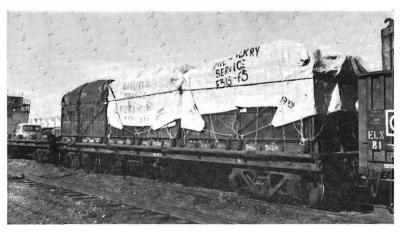
Accordingly, a temporary installation was set up at Dynon using a section of three-rail dual-gauge track. It was soon proved that bogie exchange was a practical and economical operation and the lessons learned while operating this temporary installation assisted in the planning of the efficient covered-centre now operating on a $4\frac{1}{2}$ -acre site at Dynon.

Pool of bogies

The desired operation is that the broad gauge bogies released from vehicles being transferred to standard gauge be placed under a vehicle being transferred to broad gauge and vice versa. It is important that a reasonable balance of vehicles be maintained although a pool of bogies of both gauges is held in the area.

The Dynon centre has proved that bogie exchange is completely practical and that it will be an essential part of railway operation whilst break-of-gauge conditions exist.

However, the economic implications of bogie exchange go far deeper than this. This technique has eliminated for the foreseeable future any economic justification for the wholesale standardization of rail gauges in Victoria. (See last month's News Letter).



The rail-ferry service from Tasmania is an excellent example of the versalitity of containers. These containers go by rail, road and sea, bringing potatoes, apples and other freight, from Tasmania to Sydney and Brisbane. Pictured above are containers at Dynon, en route to Sydney.



On the return journey, when back loading is not obtainable, containers are returned in a collapsed condition, thus saving space.

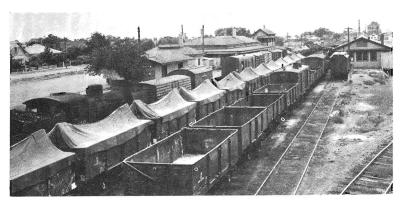
The main category of traffic at present passing through the bogie exchange depot is "overland" traffic-New South Wales to South Australia and vice versa—the current volume of which is in the vicinity of 250,000 tons per annum. The cost of transferring this by bogie exchange would not exceed \$50,000 per annum. Because the depot is located in Mel-Sydney-Adelaide bourne where traffic must be re-marshalled in any case, coupled with the fact that the fast interstate goods trains operate overnight, bogie exchange results in very little, if any, delay.

By comparison, the cost of a standard gauge line from Melbourne to Adelaide to eliminate the break-ofgauge in Melbourne would be at least \$80 million, on which the annual interest and sinking fund payments alone would be \$4 million, to say nothing of the cost of maintaining the additional mileage of track.

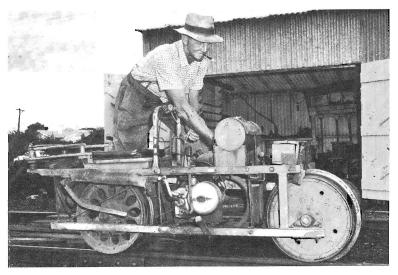
Traffic between New South Wales and Victorian broad gauge stations, passing through the bogie exchange centre is currently 150,000 tons per annum. The conversion of any portion of the Victorian system to standard gauge to handle this relatively small volume of traffic—which is, in fact, spread over practically every main line on the system—is economically out of the question.

If complete gauge standardization ever does become a reality in Victoria, it will be only because economics have been outweighed by other and stronger considerations.

WOPETBUNGUNDILAR



Horsham yard and station



Ganger P. L. (Pat) McNamara prepares his trolley before going out on the track. Pat was at Ouyen for 23 years before transfer to Horsham eight years ago.



Station Assistant R. J. (Rod) Watson does a yard check of wagons.



Stationmaster R. H. Travers was at Korumburra, Kerang and Serviceton before coming to Horsham. He belongs to the Rotary, R.S.L., and bowling clubs and is also a keen steam enthusiast.

ANY Victorian place names are derived from the aboriginal—a practice that has much in its favour—giving as it does a distinctive character that suits the Australian scene and adding new vowel combinations to the riches of the English language.

But it's just as well it didn't happen to Horsham. Because the aboriginal name for that locality was Wopetbungundilar. And that's a word that fails to trip lightly off the tongue, although it has possibilities as a breathalyser substitute. And when that mouthful received the inevitable abbreviation to Wopet, it would still have left much to be desired.

Escaping that fate, Horsham received its name from the first settler, James Monckton Darlot, who arrived in the district with his flocks and herds in 1841. He named the settlement after his native town in Essex, England. In 1849, Darlot broke a piece of machinery and had to haul it to Melbourne, by bullock dray, to get it mended. There he met a merchant, George Langlands, whom he brought back with him to Horsham where Langlands set up the first store.

The Horsham of today is, in the words of its stationmaster, Mr. R. H. Travers, "a booming city of nearly 11,000 people". Not only is it on the line to Adelaide, but the goods lines to Hamilton and Carpolac also pass through. The total revenue of its station, last financial year, was \$179,220, of which goods and livestock accounted for \$115,650 and passengers \$51,482. The total goods tonnage was 20,469 outwards and 36,706 inwards.

As would be expected in such a busy commercial centre, railway parcels traffic is heavy; last year, outwards parcels alone produced more than \$12,000 revenue. Although wheat, of course, is the most important grain traffic, oats is encreasing; recently a 100,000 bushel oat storage was opened.

Among the city's major industries must be counted the railways. Last year, the amount paid out in wages by the Department was over \$164, 000—enough to keep the cash registers ringing merrily in Horsham's shopping centre.



Parcels Assistant H. G. (Ted) Edwards (left) and Station Assistant W. L. (Les) Timmins at work in the Parcels Office.



Fireman John Fowler (left) checks ash pan slides while Driver Don Harris looks over motion gear of J 522. Don has been at Horsham for nine years; John is a recent arrival there. The locomotive hauled the 7 a.m. goods ex Goroke.



Pause that refreshes: Signalman David Eldridge (right) takes some refreshment with his sons, Ralph (left), a station assistant, and John, a leading shunter. Also at Horsham are relatives Shunter_Dennis Eldridge and Fireman Bruce Eldridge.



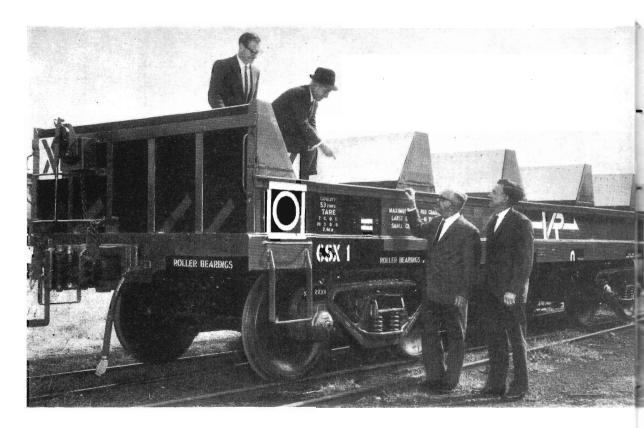
Clerk A. E. (Ted) Wangeman (left) has been 38 years in the district. He is shown in the Booking Office with Junior Clerical Assistant R. (Dick) Przewloka.



In the Refreshment Room, Miss N. Ryan checks the day's takings while Mrs. C. Martin stacks magazines. Miss Ryan has been 19 years in the Refreshment Services Branch, the last four at Horsham. Mrs. Martin has been at the Horsham Rooms for three years.



(From left) Clerk J. Wilson, Goods Checker G. Roiter and Shedman J. Allen are at work in the Goods Shed.



AROUND THE SYSTEM



GRAVY TRAIN: An unusual train was this special that ran on the Heathcote line recently to make a TV commercial.

NEW WAGON: This CSX wagon—the first of a number under construction for the steel traffic between Port Kembla, Melbourne and Adelaide—was completed at Newport Workshops in a little over four weeks. The wagon is 35 ft. 6 in. long, 9 ft. 4½ in. wide, has a capacity of 53 tons, and has been designed to carry steel strip in coils up to 6 ft. diameter and 16 tons weight. It is fitted with five fixed cradles that keep the steel strip from shifting during transit.

The modified underframe of an R class locomotive tender was used for the wagon's underframe. Another feature is the new ratchet-type handbrake.

Mr. W. Chapman, Manager of Newport Workshops points out features of the wagon to Mr. E. H. Brownbill (Chairman of Commissioners), at left, and Commissioner Mr. E. P. Rogan. Standing beside Mr. Chapman is Mr. J. Brown, Superintendent of Newport Workshops Steel Construction Shop.

TECHNICAL EDUCATION: The reconstituted Advisory Council on Technical Education held its inaugural meeting last month, in the conference room at Spencer Street station. Pictured are (left to right) Messrs. J. S. Bloomfield (Minister of Education), G. F. Brown (Chairman of the Council and Deputy Chairman of Commissioners) and R. M. Wright (Council secretary and Member of the Staff Board).





FROM FIJI: One of the most colourful group of passengers to arrive last month by Spirit of Progress was the Fiji Military Band, some members of which are shown giving an impromptu item on the platform at Spencer Street. Afterwards, in the car parking area, they delighted an enthusiastic crowd with rousing Fijian songs and colourful dances. The band came for the Moomba celebrations.

LINES FROM OTHER LINES

mainly because improved methods of detection uncovered offenders more

readily. Under a new plan, a travel-

ling ticket examiner and two Railway Protection Force Rakshaks are posted

in each third class compartment to

check fare evaders.



Polyester glass fibre is used in both cab and body of this new Czechoslovakian electric locomotive.

Plastic locomotive

THE need for more effective streamlining, lighter tare weights and greater economy of production has led to the manufacture of a new electric locomotive with a polyester glass fibre cab and body at the Skoda Works in Czechoslovakia.

Stainless steel passenger cars in Australia

TN Australia, 254 stainless steel cars are now in service. use of "shot-welded" tensile stainless steel for the whole of the car body structure and underframe (with the exception of the draft-gear area) provides a carriage that is enormously strong, proof against deterioration from corrosion, and needs no exterior paint or other surface protection. Simple cleaning keeps stainless steel in gleaming first-class condition. The high impact strength of stainless steel and the excellent energy absorption of the "shot-welded" structure give the passenger the ultimate in protection, while minimizing damage to the car itself.

No tickets

A N average of 5,000 passengers are detected daily travelling without tickets on India's South Eastern Railway, says the Indian Railway Gazette. This is an increase over last year's figures,

Auto barriers for auto park

In Chippenham (England) a new railway car park has automatic barriers. As a car approaches, a barrier rises automatically to admit the car into the parking area unless a sign indicates that the park is full. On leaving the park, motorists drive to the departure gate when, without leaving their car, they insert a coin into a slot or place a special type of season ticket into it. This releases the gate and enables the car to leave.—(British Rail News)

Transport co-ordination in U.S.A.

PRESIDENT Johnson's radical plans for co-ordinating and regulating the sprawling American transport industry have been sent to Congress, reports *The Financial Review* of 11.3.66. The plans not only include the creation of a huge new department of Transportation but also provide for a great expansion of Federal control over the aircraft, maritime and car industries.

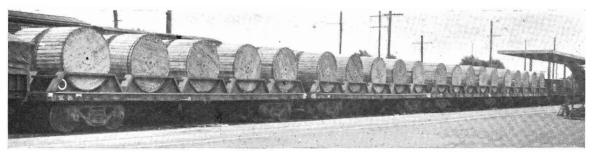
The new Department will be one of the largest concentrations of power in the Federal Government, with 10,000 employees, a budget of at least \$ U.S. 6,000 million yearly, and a seat in the cabinet.

STRANGER IN THE HOUSE



A rare sight on the V.R. was this English Electric locomotive shown having its bogies exchanged at South Dynon. It came recently from Brisbane en route to the Western Australian Railways.

CABLE WITH CARE



Each of these four SC wagons holds 10 reels of cable (39 tons) valued at approximately \$16,000. The consignment is one of the final loads of a total 470 reels that were railed to N.S.W.

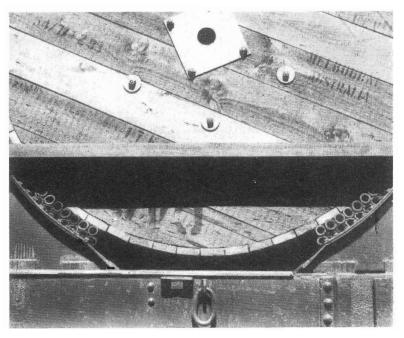
To look at a piece of aluminium cable used for high tension power lines, anyone would think it's as easy to transport as, say, ballast metal. Actually, this 1½ in. thick cable with its steel core surrounded by aluminium strands needs very careful transport. Vibration can dent the soft aluminium and set up unwanted electrical conditions when the cable is carrying the very high voltages for which it is designed.

Prior to 1961, this cable was carried in 4-wheel open wagons. In spite of every care, the soft strands were frequently damaged, and claims, consequently, were high. In 1961, the Senior Packaging Officer discussed with Rolling Stock engineers the provision of a special bogie wagon. Accordingly, an SC wagon was equipped with cradles in which the reels were cushioned with discarded Westinghouse brake hose pipes.

After tests, the wagon went into traffic on July 24, 1961. Within the following four months a further wagon became necessary and, during the first seven months of running, the two wagons brought in more than \$30,000 revenue.

Increased traffic resulted in two more of the wagons being placed in service in April last year, bringing the total to four. Recently, these four wagons carried 300 reels of cable into the Gippsland area to distribute power from the Hazelwood Power Station. At present they are engaged on moving 660 reels into north-eastern Victoria to provide a new power line from the Snowy Mountains scheme.

Since the inception of the new wagon, not a penny (or a cent) has been paid in claims for damage to this very valuable freight. It's another example of the success of specialized rail transport.



This close-up shows how discarded brake hose pipes are used to cushion the reels.

PASTERNAK AND TRAINS

TRAINS are always appearing in the work of the Russian author, Boris Pasternak.

"Trains are palpably godlike, dangerous, wildly exciting. For him they live and breathe, and he could no more regard them as lumps of metal than he could regard a flower as insentient. Asked once why he was always describing train journeys, Pasternak answered: 'Where else can you enjoy the supernatural? You go to the ticket office, pay some money, and you are transported to Paradise'. He enjoyed all train journeys, even journeys across the endless plains. He refused to travel

by air, saying that the supreme advantage of the train was that it brought you closer to the earth ".

—(From "The Three Worlds of Boris Pasternak" by Robert Payne)

PART of the funds now allocated for the construction of freeways and other major roads should go towards improving public transport. (L. Freeman, secretary of the Road Passenger Service Operators' Association, "The Age" 7.3.66).

WHEN a train whistles at a level crossing, it's a good time to believe what you hear.

1905 PRESENTATION





These two pages of an address presented, on retirement, to a Deputy Chief Mechanical Engineer, 60 years ago, give but an indication of the labour lavished on it by the unknown draftsman. The address was entirely drawn, lettered, and coloured by hand; it was in a leather-bound book of photographs of Newport Workshops and items of V.R. rolling stock. Accompanying the book was the programme of the "Smoke Concert" at which the presentation was made. The "Zingari Amateur Orchestra" rendered selections; there were recitations, and songs by A. E. Wotherspoon, and—of course—speeches. Altogether, the programme listed 12 items but a footnote stipulated no encores. The book was lent to News Letter by Mr. Charles Stinton (son of Walter) who was a foreman at Newport Workshops at the time of his retirement.

THANKS FROM LEGACY

I would be grateful if you would convey my personal thanks, and that of our Camps and Holidays Committee, to the members of the Victorian Railways in very many sections, for the maximum assistance and co-operation accorded us during the recent Christmas holiday period.

The movement of approximately 600 city children to the country and 230 country children to the city would have little chance of success, if it was not for the whole-hearted support we receive, in very many ways, from your organization.

I understand our requirements are sometimes complex, and additional last minute changes must make things difficult, but the patience and goodwill of those with whom we are in contact never falters, thus contributing considerably to the smoothness of this side of the operation . . .

A. V. Dore, President, Melbourne Legacy, writing to Stationmaster, Spencer Street

NEW N.T. RAILWAY

WITH the proposed development of iron deposits at Frances Creek, construction of the first railway line to be built in the Northern Territory for nearly 40 years (except certain sidings built during the war) is now in progress.

The new line, about 10 miles long, will be built by, and at the expense of, Frances Creek Iron Mining Corporation Pty. Ltd. It will be operated as a spur line connecting with

the North Australia Railway mainline at approximately 134½ miles from Darwin, between Spring Hill and Union Reef sidings.

At least 3 million tons of iron ore are expected to be hauled from the mine to Darwin in eight years, at the rate of approximately 375,000 tons per year.

CANDLELIGHT ON TRAIN

N the crack Panama Limited (U.S.A.) dining cars, passengers can dine in intimate dining nooks by candlelight. The flickering candles are inside hurricane lamps and a contest was recently held to find a name for the nooks. The winning name was Candlelight Cove.

(Illinois Central Magazine)

AMONG OURSELVES

Assistant C.T.M.

FOLLOWING the retirement of Mr. A. C. Brown (March News Letter), Mr. T. A. James has been appointed Assistant Chief Traffic Manager. (Mr. James had been acting in the position while Mr. Brown was engaged on the Melbourne Yard re-arrangement).



Mr. James

It was back in 1920 when the youthful Tom James started as a junior clerk at Gardenvale. After a period in the metropolitan area he went to Seymour in 1927, a district in which he was to spend much of his career. He became a station-master at Barnawartha in 1939, and five years later, after a period as a train controller at Head Office, returned to Seymour where he became a Traffic Inspector in 1951. A few years after, Mr. James came to Spencer Street where he was stationmaster for a short time, until, in 1956, he was appointed District Superintendent at Seymour. Three years later, he became Superintendent of Train Services, and, in 1964, Outdoor Superintendent. So, there are few rungs of the administrative ladder of which Mr. James does not have a detailed knowledge.

For over 20 years, he has been a keen bowler—mostly at the M.C.C. and recently, with Mt. Waverley.

Stores picnic

THE train to Healesville was well patronized on Sunday, March 6, when members of the Stores Branch Social Club took their families to that pleasant resort for their annual picnic. Although the day was rather warm, the full programme of sports and races was

held. The classic event for the day—the branch handicap—was won by Neil Fell of the Newport Oil Store. Naturally, the Stores Branch men had a good store of drinks, ice-creams

and other goodies which were freely issued without even as much as a requisition in triplicate! But they all enjoyed it, and everyone looks forward to the next picnic.

V.R. STAFF WIN BIG T.V. PRIZES

A LTHOUGH the Ides of March were unhealthy enough for Julius Caesar, they meant big T.V. prizes for two V.R. people.

First, Booking Clerk Chris Theophilou of Richmond station, reached the \$6,000 question on Channel 7. He took mythology and came within a hairsbreadth of correctly answering the five-part \$6,000 question. However, he received the consolation prize of a Holden car.

Chris came from Cyprus 16 years ago; he has been in the railways since 1954 and at Richmond for the past five years.

Next to scoop a prize was Stenographer Marie Cahill of the Secretary's Branch. On I.M.T., Marie was fortunate enough for the spinning wheel to stop at one of the big prizes, and skilful enough to correctly answer the quiz question. The prize was a trip round the world for two. Marie will be leaving on her trip shortly, accompanied by her

sister Joan and her father (Al) who was a well known member of the Secretary's Branch before his retirement several years ago.



Mr. Theophilou



Marie Cahill (second from right) shows travel folders for her trip, to Head Office typistes (from left) Pat Harrington, Carolyn Bailey and Margaret Hardiman.

Ballarat wedding



Railway history was made when Mr. John Kevin Power and Miss Doreen Mavis Mayne were married at Ballarat on February 19, because the reception was held in the Railway Refreshment Rooms which were specially decorated for the occasion. As far as is known, this was the first time that such a reception had been held in a V.R. Refreshment Room. The bridegroom is a goods guard; the bride worked at the Refreshment Rooms; the best man, Mr. L. Mitchem, is a goods guard; and the matron of honour, Mrs. J. Bennetts is also on the Refreshment Room staff. Mr. and Mrs. Power are shown cutting the cake at the reception. (Photograph: "Ballarat Courier")

Surrey Hills' S.M.

MR. Harry Noy who retires this month as Surrey Hills' S.M. for the last eight years, really has a railway family background.

"Join the railways and see the country", was the advice his father gave him.

His father was the first S.M. at Lang Lang where Harry was born in 1901. Two sons are in the Department; Max, a train controller at Bendigo, and Harry, a guard in Melbourne yard.

Among Mr. Noy's off-duty interests is music; he plays the trumpet and was a member of the Oakleigh Concert Orchestra.

Monaco underground

NacO has won back 500,000 square feet of precious land by putting underground a $2\frac{1}{2}$ -mile section of French Railways track. The excavated material was used to create three new beaches and three flat peninsulas. (Viola)

In China

OMEWHERE in China, there's possibly a textbook for loco. foremen that, word for word, is identical with the old V.R.I. course. How it happened was recalled by Mr. R. H. (Bob) Wilson before his retirement last month as manager of North Melbourne Workshops

At the end of the second world war, the Chinese railways were in such a chaotic state that the United Nations sent experts to rehabilitate them. Among them were three V.R. men—Messrs. R. H. Wilson, T. Dawes (now Ballarat Workshops manager) and E. Pidd (since retired).

They were each assigned to

different parts of the country. In Mr. Wilson's area, he set up four schools with a total of 500 pupils; and, for textbooks had the V.R.I. course translated into Chinese. Soon after, however, the Communist forces swept down and Mr. Wilson believes the V.R. men were among the last Westerners to leave southern China.

Mr. Wilson started with the Department as an apprentice in 1916. After completing his apprenticeship and, later, receiving promotion, he worked as a supervisor in several shops at Newport Workshops and almost every running shed in the State. A crowd of several hundred attended his farewell at the workshops where he had been manager for the past five years.



Mr. Wilson speaking at his farewell.

SIGNAL ENGINEERS' ANNUAL MEETING



Last month, the Institution of Railway Signal Engineers (Aust.) held its annual meeting in Melbourne. Members arrived on Friday, March 18, and after inspecting railway installations, attended a lecture and dinner. The Department's Circuit Engineer, Mr. A. G. Irving, is shown delivering the lecture which was on signalling for three-track operation between Hawthorn and Camberwell and the route-setting control panel at Camberwell.

Another judo class for women

The first V.R.I. course in judo for women members of the Institute has now ended, with very encouraging results, as all who attended gained their orange belt-the second degree of efficiency. Mrs. R. Jackson (a draftswoman in the Estate Office) also attempted the third stage of proficiency (brown belt), but unfortunately just missed that honour.

The original intention of girls joining the class was to learn to protect themselves from surprise attack, particularly during the hours of darkness. In this respect, the Institute feels that the class has accomplished its object.

The Institute is now starting a second course. Any Institute women members who wish to enrol for this class are urged to do so promptly, as the list is rapidly filling. If enrolment is left too late, some members may have to be relegated to the third course which will probably not start till late this year or early 1967.

Refreshment Rooms

have been a regular traveller on Mildura Sunlight. Since the advent of the new mini-buffet car I have realized how many willing people served so well the needs of travellers at the Refreshment stops on the way.

I have heard complaints over the years from travellers who failed to get quick attention. For myself I can only say that I have had courteous attention at refreshment stops.

I suppose the new mini-buffet is a sign of progress and in some ways caters better for the traveller.

Would you please convey my thanks and appreciation to all refreshment room helpers for their help and attention which I have received over the years.

Wilfred J. Moy writing to Stationmaster, Ouyen.

Moe, Warragul, and Flinders Street Lost Property Office

wish to commend the efficiency and care shown by your staff at Moe, Warragul, and Flinders Street Lost Property Office in recovering a large overnight bag left in error on Moe station platform on February 5.

—J. Prideaux, 2 Emmaline St., Northcote writing to the Secretary.

STAFF COLLEGE VISITORS



As part of their course, a group from the Australian Administrative Staff College inspected some railway installations last month. They are shown at South Dynon where Mr. G. A. Swift (left), engineer, is explaining some aspects of diesel maintenance. Next to him is Mr. C. S. Morris, Chairman of Staff Board, and (far right) Mr. V. A. Winter, Staff Board Member.

RECENT RETIREMENTS....

TRAFFIC BRANCH

McDonald, G. A., Melbourne Goods Jamieson, R. R. N., Flinders Street Morelli, A. W., Oakleigh Rose, D. J., Head Office Valentine, R. W., Essendon Brown, J. E., Melbourne Goods Hally, J., Broadmeadows

ROLLING STOCK BRANCH

ROLLING STOCK BRANCH
Goss, G. L., E. R. Depot
O'Callaghan, W. J. L., Newport
Elliott, J. W., Seymour
Brandl, A., Newport
Foley, V. J., E. R. Depot
Lambie, N. J., Newport
Mahony, L. F., Bendigo W'shops
Rivett, W. R. G., Newport
Milana, M., Jolimont
Camm, J. J., Jolimont
MacGarvey, A. McK., Newport
Higgins, F. G., Bendigo North
Fox, W. H., Jolimont

WAY AND WORKS BRANCH Cahill, H. J., Flinders Street Couser, T. M., Tynong

Bricknell, T., Spencer Street Williamson, J. E., Ironworks Division Butterworth, F. W. J., Spotswood Workshops Workshops
Florrimell, F. W., Caulfield
Malady, L. J., Geelong
Smith, W. R., Korumburra
Walton, C. C., Walpeup
Williams, E. T., Spotswood Workshops
Willman, W. C., Moama
Mitchell, R. E., Echuca
Barton, F. Saymour Barton, E., Seymour McDowell, H. R., Marong

ACCOUNTANCY BRANCH

Armstrong, R. W., Head Office Taylor, H. G., Flinders Street McMahon, L., Head Office Jones, S. V., Geelong Adams, J. L., Flinders Street Brockwell, W. C., Head Office Roberts, E. E., Head Office

STORES BRANCH

Buschtedt, E., Spotswood General Storehouse

. . . . A N D DEATHS

TRAFFIC BRANCH

Weir, G. R., Flinders Street Morey, Mrs. L. M., Flinders Street Wenman, H. G., Melbourne Goods Pay, H. E., Melbourne Goods Fogarty, P. J., Moe

ROLLING STOCK BRANCH

Brown, N. M., Traralgon Grainger, R. B., T. L. Depot

Chambers, D. H. G., Ballarat W'shops West, R. H. F., Jolimont Parkhill, G. H., Newport

WAY AND WORKS BRANCH

Scanlan, F. A., Ararat Evans, R. S., Stawell Hale, W. M., Flinders Street Ward, A. R., Picola Kulaga, W., P. W. M. D., Spotswood

E Boy Brs. Keating



Carnival bowls

THE 16th bowling carnival, held in Brisbane from February 28 to March 11, was contested by all Australian Railways Systems and New Zealand. The first of the seven test matches was played at the Newmarket Bowling Club on Tuesday, March 1, when Western Australia beat New Zealand, South Australia beat Commonwealth, Queensland defeated New South Wales and Tasmania went down to Victoria.

It was immediately obvious that the home State was going to be a big threat to our boys, but the surprise defeat of N.S.W. seemed to have ended that State's chances of winning the Commissioners' Shield. How wrong can you be. The next day, Victoria, for the first time for three carnivals were forced to lower their colours to a determined N.S.W. team, being beaten by 8 shots. This left Queensland undefeated and, at that time, unquestionably the top dogs.

So the tests continued—Victoria beating W.A. with Queensland and N.S.W. also recording wins in the third test. This pattern continued in the fourth and fifth test, Victoria beating S.A. and Commonwealth

respectively.

Then came the crucial series—the sixth test—also played at the Newmarket Bowling Club, when our fellows were drawn to play the unbeaten locals. In a great game when every rink pulled its weight we downed the banana benders 117 to 78 to take a lead in the carnival for the first time on percentage.

On Thursday, March 10, the last test was played and we were able to beat N.Z. 121-71, and so win the Commissioners' Shield and the Dennis Cup for the third successive carnival. It was a close victory but it speaks volumes for the team's spirit, that, after the early defeat, they were able to fight back and regain the coveted number one position.

The Davey Paxman Trophy for the champion rink was won by a New South Wales four skippered by Alan Thompson, while three Victorian fours, skippered by Gil Sargeant, Taffy Jenkins and Alan Cowling respectively, filled second,

third and fourth places.

In the reserve rinks competition, Keith McElhinney, Alex Reaper, Alan McKenzie and Ray Quail ran out winners, so the W. A. Anderson Trophy is back in Victoria.

The Vics. have every reason to be proud of the efforts in the individual events as well as the teams section. In the singles Champion of Champions, Ray Judd went down in the final to Arthur Chapman, (N.S.W.) 31-21, but in the pairs final Laurie Hindson and Ray Laycock proved too good for their N.Z. opponents and ran out fairly easy winners 21-12.

So ended a most enjoyable carnival, and it was a pretty happy, if tired, bunch of Vics., who arrived home on March 13, with three out of the five trophies and the satisfaction of being runners-up in the other two. Our congratulations to the manager, Harry Watts, and his team on again winning the title of the Champion Bowling State.

Victorian bowls

TWO events on the local scene were, firstly, a visit by the V.R.I. Social Bowling Club to Hastings on Sunday, January 26, where a game was played against the local club. Many ladies accompanied their menfolk on the trip and the picnic atmosphere was greatly appreciated by the visitors. These country visits do a lot to cement the friendships made between city and country railway bowlers, and it is pleasing to see them so well patronized.

Secondly, the 10th Annual Wimmera V.R.I. Bowling Tournament was held at Dimboola and a fine entry of 28 teams was received. Railwaymen from Ararat, Dimboola, Hamilton, Hopetoun, Maryborough, Murtoa, Ouyen, Serviceton and Warracknabeal took part. As well as the country contestants, a rink representing Head Office and consisting of Messrs. C. S. Morris (Chairman of the Staff Board), W. Chapman (Workshops Manager, Newport), K. Smith (Engineer of Machinery and Water Supply) and R. Weisheit (Staff Officer, Traffic Branch) and (Staff Officer, Traffic Branch) and a rink of V.R.I. Councillors,— Messrs. L. Lynch, K. W. McKenzie, D. O'Donnell and E. J. Williamson-also played in this fixture. Five games of eight ends were played under ideal conditions and a Hamilton team (M. Elston, C. King, G. Willinghan and J. Leversha—skipper) were the eventual winners from the Council team who, although not arriving until about 2 o'clock on the

Sunday morning, bowled particularly well throughout the tournament (in spite of the rumour that some hard talking was necessary before "Doc." would produce his best form). Our congratulations to the organisers for the way in which the tournament was conducted and to Hamilton on winning the Council Cup. I hope they remember that they are expected to defend it at Ararat next year.

Cricket

TOU might recall that in last months News Letter I tipped Suburban Lines as the dark horse in this year's finals. Well, I might not be too far out. In the semi-finals played on Tuesday, March 1, they easily accounted for Jolimont Workshops, who, on form, looked likely finalists. In the other semi., Stores and Loco staged a great battle, with Dame Fortune favouring first one side then the other. However, Stores all-round strength, coupled with a marathon bowling performance by Dave Thoms, eventually carried the day in one of the most entertaining and interesting games seen for a long time. Un-fortunately the final has had to be postponed on at least three occasions due to inclement weather but it is hoped to give the result in the next issue.

I think it's a timely spot to pay a short tribute to the Benalla V.R.I. Cricket Club and in particular, Mr. Cricket himself, Doug Walker. Doug, engineman at Benalla, has been one of the mainstays of the Club for many years and although, in his own words, "getting a bit long in the tooth", is still one of the best bats in the district. The club fields two senior teams and one junior team in the local competition, and all three have made the finals. Doug who has personally coached the juniors, got a mighty thrill to see the youngsters in the final four, and for his sake I'd like to see them take out the flag.

Basketball

BASKETBALL players, both girls and men, are reminded that the South Aussies are due to visit Melbourne over the Queen's Birthday holiday week end and we would like to hear from any players, particularly country players, who are interested in representing their State in this fixture.







THE MONTH'S REVIEW

Visit to Britain

N R. E. H. Brownbill, Chairman of Commissioners, was one of seven Australian railway executives who left last month on a visit to Britain at the invitation of the British High Commissioner, Sir Charles Johnston. The visit, organized by the British Board of Trade, extends from April 24 to May 22.

Other members of the group are Messrs. K. A. Smith, (Commonwealth Railways Commissioner), N. McCusker, C.B.E. (Commissioner for Railways, New South Wales), B. A. Fox, (Secretary for Railways, Tasmania), A. G. Lee, (Commissioner for Railways, Queensland), J. B. Horrigan, (Deputy Commissioner of Railways, Western Australia), and R. J. Fitch, (Commissioner for Railways, South Australia).

During the visit the party is being shown the latest activities of British Railways, including liner trains, electrification schemes, modernised workshops, new marshalling yards and new research facilities.

Crawled across line

A N amazing case was heard at the Williamstown court last month involving a man who disregarded the fact that the Giffard Street boom gates were operating, and crawled across the railway line in front of a train which narrowly missed him.

The defendant did not appear at the court to answer a charge that on November 13 last he did, without reasonable excuse, cause an employee in charge of a train in motion to stop the train. He was fined \$20 with \$2.05 costs.

The driver gave evidence that he was in charge of the 4.13 p.m. down Williamstown train on November 13. When a hundred yards from the Giffard Street crossing he saw the defendant entering the crossing although the boom gates were operating. He was walking slowly.

The driver sounded the train's whistle but the defendant took no notice. He applied the emergency brakes and again used the whistle.

The defendant got down on his hands and knees and crawled over the line in front of the train. The train stopped half a carriage length through the crossing.

The driver looked out to see the defendant still on his hands and knees only a few inches from a wheel.

He said to defendant, "Are you trying to get yourself killed?"

The defendant replied: "You missed me, you are a terrific driver."

The driver went on to say that it was a joke to defendant who was smiling and laughing. He appeared to be perfectly sober.

The guard also gave evidence that the defendant did not appear at all perturbed by the incident.

—(Williamstown "Chronicle", 14.4.66)

Flinders Street No. 1 Platform

TRAINS began using the new No. 1 East Platform at Flinders Street on March 28. The platform was re-located as part of the Princes Gate project.

The entire No. 1 Platform is now 2,322 ft. long, making it one of the longest in the world.

FRONT COVER

ROUND THE CLOCK service is given to locomotives at South Dynon. At the servicing platforms, fuel oil, lubricating oil, sand and engine cooling water are supplied to diesel locomotives as they are washed and serviced for their next traffic assignment. In the background are the sanding towers from which sand feeds by gravity to the locomotives. The sand, after drying by an oil-fired drier, is sieved into pressure drums and blown by air to the sanding towers. At this area, facilities have been provided to service the various types of diesel and electric locomotives operating out of South Dynon Locomotive Depot.

Bins save feet



At the Outwards Parcels Office, Station Assistant Margaret Vergos loads one of the new mobile sorting bins that have recently been introduced. These bins eliminate unnecessary walking and carrying of parcels by the staff.

Basis of RAILROADING

RAILWAY construction and operation come under the following headings:

(a) Permanent way

(b) Locomotive and traction considerations

(c) Carriages and wagons

(d) Signalling and safe working

(e) Fixed operating facilities.

PERMANENT WAY

Location of the permanent way is governed by considerations of gradient, curvature and bridging. In early construction, steep grades of 1 in 30 were acceptable, but regrading has, where the terrain permits, been carried out to give main line grades of 1 in 50 to 1 in 75 and easier if practicable.

All States still operate under the difficulties of heavy grades in the vicinity of the capital cities; in the case of Victoria, all lines out of Melbourne have grades of 1 in 50.

In these days of diesel and electric traction, it is cheaper to add an assisting locomotive than incur the heavy costs of further regrading.

A ballast bed of varying thickness supports the track with rails of up to 107 lb. per yard in weight, the ballast thickness being dependent on the speed and loading requirements imposed by the rolling stock used.

Sleepers, at a rate of 2,200 per mile, are standard on the broad gauges and are of hardwood with sections of up to 10 in. x 5 in. Concrete sleepers are under test and steel sleepers are used in certain areas.

The permanent way and its immediate associated requirements can account for up to 30 per cent of the total fixed assets of any railway system.

The major limitation of the axle loading of rolling stock permitted on any line is normally the weight of rail, thickness of ballast and permissible bridge loading.

Standard rail used for heavy duty operation is one weighing 94 lb. per yard, although New South Wales has standardized on a 107 lb./yd. rail

On standard and broad gauge, trains with axle loading of up to 19 tons can operate over these rails at 70 m.p.h. for passenger trains and 60 m.p.h. for fast freight trains hauling modern bogic stock. Unfortunately, shortage of finances has prevented the elimination of lighter rails, and 60 lb. rail is still common on branch lines, with consequential limitations of speed and axle loading.

On 3 ft. 6 in. gauge with rails up to 80 lb./yd., speeds of 50 m.p.h. for passenger trains and freight trains of bogie vehicles, and 30 m.p.h. for freight trains with 4-wheel vehicles, are permitted.

The shape of tunnels, platforms, structural clearances on bridges and the overhead wiring associated with

From an address by the Deputy Chairman of the Victorian Railways Commissioners (Mr. G. F. Brown) to a Canberra conference of the Royal Institute of Public Administration.

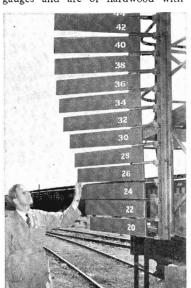
electrification impose strict limitations of width and height, and the Australian Railways have a loading gauge diagram as shown on following page. Additional clearances are allowed in some cases. For instance, the wide N.S.W. suburban carriages are restricted to the suburbs; existing Trans Australian carriages are too wide for Sydney lines.

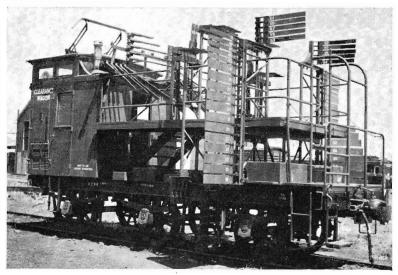
All bridges, tunnels, buildings, etc., being constructed or renewed will be designed to allow the maximum clearances.

LOCOMOTIVE AND TRACTION CONSIDERATIONS

Until recent years, railways depended on steam for motive power, using different types of locomotives for passenger and goods trains, and further subdivided as suitable for main line operation only, or over lines constructed of light weight rails.

The steam locomotive requires for its maintenance heavy workshops facilities, with lighter equipment for running repairs, coal stages, watering stations, de-ashing plants and, apart from driving staff, needs hostlers for handling inside the depot area, washers-out for boiler cleaning, lighters-up and other semi-skilled grades.





The shapes of tunnels, platforms, structural clearances on bridges, etc., impose strict limitations of width and height of trains. A check is made, when necessary, of clearances on V.R. lines by means of the clearance wagon (left and above).

Locomotive water of suitable quality is a major problem, and water treatment is normally required as impurities in water cause damage to boiler components.

The average steam locomotive needs coaling every 100 miles, watering facilities no more than 50 miles apart and running shed attention after 200 miles. However, during the past 12 years, the diesel locomotive has materially altered the locomotive position; the Commonwealth Railways have completely changed over to diesel power and all other States of the Commonwealth have programmes to eliminate steam.

Limited finance is the governing factor, and various schemes have been proposed for Commonwealth assistance to expedite this programme—so far without success.

The diesel locomotive has the advantage of greater capacity at higher operating speeds, lower maintenance costs, reduced fuel cost and the ability to run high mileage between depot attention, so that running sheds can be dispensed with. They also have the added advantage of being capable of operating as multiple units under the control of one crew.

In addition, the need for heavy workshops equipment and staff is less, while fewer locomotives are required to run the same service.

Where traffic density or special considerations of terrain justify the high costs of providing the overhead wiring and sub-stations, etc., electrification gives similar benefits to diesel operation.

Victoria has electrification for approximately 100 miles (Melbourne-Yallourn-Traralgon) and New South Wales for a similar distance (Sydney-Lithgow and Sydney-Gosford, the latter to handle heavy tonnage trains up the 1 in 40 banks from the Hawkesbury River to Hornsby). Cost of power to the railways has now increased to such an extent that it is cheaper, based on the cost per kilowatt at the rail, to operate diesel-electric locomotives when the full costs of electrification are taken into account.

On both broad and standard gauge, two types of diesel-electrics are being used—a heavy axle load locomotive with horsepower of approximately 1,800 for main lines, and a light axle load locomotive with horsepower of up to 1,000 for branch line work.

Higher h.p. locomotives with axle loading within the limitation of rail loading are now becoming available. The 3 ft. 6 in. gauge systems use diesel-electrics with a horsepower rating of up to 1,600.

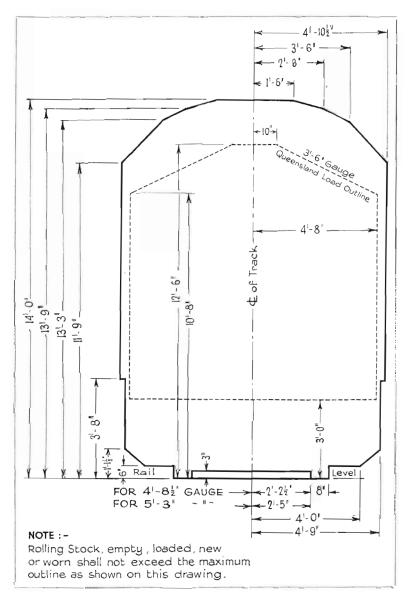
CARRIAGES AND WAGONS

Passenger carriages are all bogie type. Except for the building of rail-cars, a number of air-conditioned carriages and two new trains for Melbourne-Sydney standard gauge running, little country/interstate passenger rolling stock construction has taken place over the last few years—the number of carriages available being sufficient to meet all civilian demands at any of the normal peak periods. In fact, the overall number of carriages available has declined, due to scrapping of older carriages.

On the other hand, new suburban carriages are constantly being introduced into service. In the case of Victoria, old carriages thus released are scrapped and the under-frames used in some cases for the construction of special goods wagons. In Victoria, suburban trains can, if necessary, be used for country running—either locomotive hauled or under their own power on electrified lines.

The open 4-wheel wagon of capacity ranging from 10 to 27 tons, with a content of approx. 900 cubic ft., is the standard freight vehicle of Australian railways and constitutes up to 75 per cent of the total freight stock. However, with the limited finance available, 4-wheel wagons must be kept in service beyond their economic life and their maintenance is a burden on railway finances.

Special wagons, flat wagons, box vans, sheep and cattle vans, and



louvre vans comprise the remainder and include many bogie vehicles suitable for operation at passenger train speeds. The N.S.W. and Queensland systems have purchased modern bogie cattle and sheep vans, which proved wonderfully valuable during the drought. Victorian and South Australian Railways are fitting existing bogie vehicles with modern high speed bogies, to make them suitable for 60 m.p.h. express freight trains.

In addition, many rail tank wagons used for petrol, oils, etc., are on the registers, with bogie vehicles predominating.

SIGNALLING AND SAFE WORKING

The function of railway signalling is to make the train driver aware of the intention of the signalman; fixed signals are provided for this purpose. A system of interlocking is provided so that signals and points can only be moved in the correct sequence, to prevent conflicting train movements.

On double lines, there are two systems:

- block telegraph, where, by a system of bell codes between signalmen and a mechanical instrument, a train cannot be permitted to proceed without the permission of the signalman in advance;
- power signalling, whereby the train itself operates the fixed signals and keeps the signal or signals in the rear at the stop position until the train has passed out of the section.

On certain single lines, token

systems known as train staff and ticket and electric train staff are in use, and train orders are also used. Under the train staff and ticket and electric train staff, the driver carries the staff and, as only one staff is obtainable at the one time, it ensures that no other train can be in the section.

On other single lines, the same principle is carried out by electric track circuiting, and the driver's authority to proceed is given by fixed signal. Safety is maintained by the fact that the controlling signals at each end of the section cannot sumultaneously exhibit a proceed indication, nor, while a train is in the section, can the signal controlling opposing train movements be placed to proceed. To minimize the human element, no train can move until at least two men take positive action.

Centralized traffic control, as used on the standard gauge line from Melbourne to Albury, is a remote control system by means of which the movement of trains over routes and through sections of line between crossing loops or interlockings is directed by signals controlled from a central office.

Automatic power signalling is a pre-requisite for C.T.C., which can control a combination of automatic block signalling sections and interlockings, and may be applied to single or to two or more tracks that are power signalled.

FIXED OPERATING FACILITIES

The present fixed operating facilities at marshalling yards, freight terminals and stations are adequate for the traffic offering. Gantry cranes, self-propelled cranes, bogie transfer equipment, heavy fork lifts and other machines, enable goods to be handled on a single shift basis. This gives an inherent additional capacity by shift working.

The capacity of rail to load, haul and unload big tonnages is indicated by the tonnages handled by the various systems during the year

ended June 30, 1964:

 New South Wales
 25,878,032

 Victoria
 12,132,015

 Queensland
 9,205,716

 Western Australia
 5,708,258

 South Australia
 5,213,398

 Commonwealth
 2,477,664

 Tasmania
 1,164,864

TOTAL ... 61,779,947

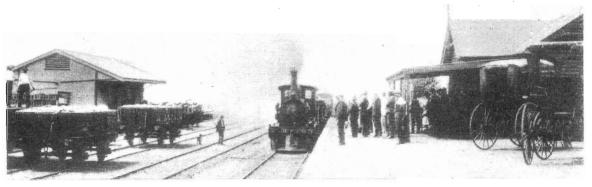
The large tonnage carried by the New South Wales Railways is mainly due to that state's vast mineral resources, which account for nearly 50 per cent of the traffic carried.

TRANSPORT STUDY

A MONG the proposals and forecasts made in the summary of the consultant's report issued last month by the Metropolitan Transport Committee are:

- transportation networks that all envisage improved access to and distribution through city area by underground railway and underground trams;
- an express rail service from the Doncaster area;
- suburban train travel will rise by 50 per cent. to nearly 600,000 passengers a day by 1985.

EARLY RUSHWORTH



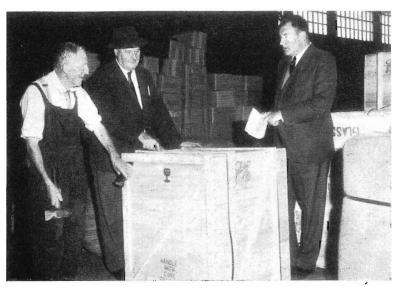
Arrival of midday train at Rushworth. Date is unknown but is believed to be about 1910.

SILK from SAMARKAND

and okra.... tahini.... pasatempo.... and trahanas from Greece. It doesn't sound at all like the usual V.R. freight. And neither it is. But it's the rather exotic sort of goods they handle at the Montague Shipping Shed.



View showing part of Shipping Shed.



Licensed Cooper W. H. Evans (left) is about to open a case of goods for inspection by Messrs. T. Hartnedy (Officer-in-Charge) and Customs Examining Officer C. Curtin (right).

KRA, by the way, is a canned bean; tahini, a fish; pasatempo, a variety of seed; and trahanas is a kind of spaghetti. Under the control of the Melbourne Goods Superintendent, the Shipping Shed deals with all ships' cargo railed from Port Melbourne. It is unloaded at the Shed for inspection and subsequent release to the importers. The cargo comes from the four corners of the earth. At the Sheds they've handled silk from Samarkand and camel saddles from Arabia. At the right time you might see on the floor of the Shed tins of sea snails and bamboo shoots from Hong Kong; jars of Chinese wine; cars and chemicals from Yokahama; pickled gherkins from Poland; cucumbers from Bulgaria; Spanish wine; Italian cheese; cam-phorwood tables from Formosa, and hundreds of other goods to meet the needs of old and new Australians.

At the Shed, rail men work in close collaboration with Customs and Quarantine officers and shipping agents. Then there are licensed coopers, skilled men of their trade who are licensed by the Department. As required, the coopers open cases for inspection.

The goods are inspected by Customs and Quarantine officers who also keep a sharp look-out for timber with Sirex wasp infestation, food that could convey animal disease and similar forbidden items. Motor cars, for example, must be steam cleaned if they have been driven in another country. This is done to avoid the importation of soil that could carry seeds of noxious weeds.

Instead of the familiar V.R. consignment notes, the Shipping Shed staff are concerned more with bills of lading. The goods are only released to their importers on production of properly endorsed bills of lading.

The Shed, 900 ft. long by 140 ft. wide, was originally built to store bagged wheat during the first world war. As well as ships' cargo the Shipping Shed handles other loading such as pineboard from Rosedale, paper from Maryvale and groceries for Gippsland.



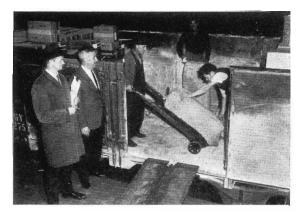
Animal Quarantine Officer R. N. Lindsay (right) examines a carton of cheese from Italy that has been opened by Licensed Cooper R. Mudge.



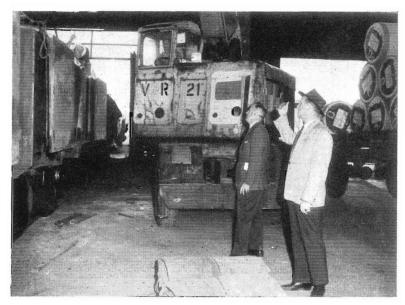
Messrs. W. Anderson (left) and H. J. Brown (shipping company representatives) measure cargo that is to be transhipped.



Location Checker C. Griffin (left) records the position and marks, while Floorman A. Grimalda directs the placing of goods ex Marconi that have been hand trucked by Goods Trucker W. West.



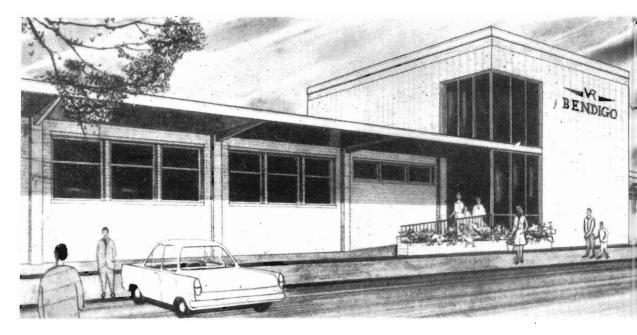
Goods are unloaded from wagon under the supervision of Railways Investigation Officer G. Moyle (left) and Foreman A. Gosewinckel.



A load of paper from Tasmania is being checked and loaded into wagon for railing to Ballarat. (Left to right) Slinger V. Interligi (in wagon), Crane Driver F. Hunter, Foreman A. Gosewinckel, and Goods Checker C. Keneally.



Office staff in the Shipping Shed are concerned more with bills of lading than the familiar V.R. consignment notes. Messrs. T. Hartnedy, (*eft) and L. Cook, Senior Delivery Clerk, are shown inspecting some of those documents.



NEW BENDIGO STATION: A perspective view of the proposed new Bendigo station that will replace the building destroyed by fire. (See story on page 77.)





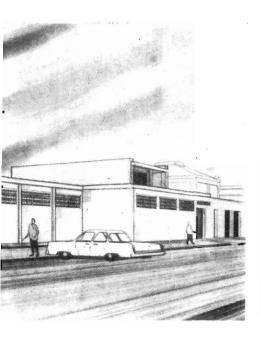
HER



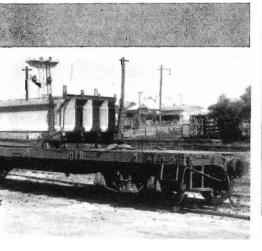


STAWELL: On two S flat-trate Stawell for use in a road

ANOTHER SYDNEY SHO of Channel O's Kommotion a by Souther

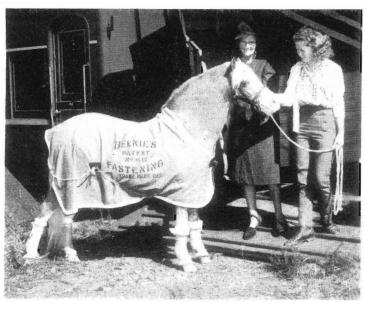


E AND HERE

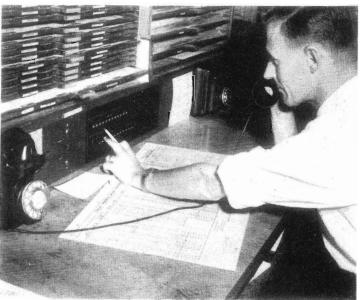


wagons, these concrete girders arrived last month dge about 14 miles from the station. Each girder of the long and weighs 10 tons.

There was quite a commotion when members we a free show on the platform on arrival in Sydney surora from Melbourne last month.

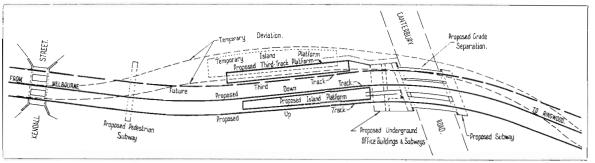


SYDNEY SHOW: This Welsh mountain pony—Nattai Eclipse—was among the \$70,000 worth of pedigreed cattle and horses that were railed from South Dynon for Sydney's Royal Easter Show. The animals were given V.I.P. attention, and 50 attendants travelled in a passenger carriage attached to the express livestock train. The pony is shown with the owner, Mrs. H. Bartram, of Heidelberg (left), and attendant Miss Muriel Mawby.

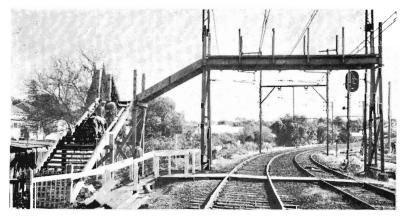


QUEUE FOR CALLS: Reservation Clerk J. Conroy is taking a call in the Central Reservation Bureau, where a system of electrically recording calls in the order in which they are received was recently installed. A flashing light on the board reveals which call is to be taken; should a call be taken out of its order, a buzzer sounds. The system ensures that every call is answered in the correct order.

BIG GRADE SEPARATION JOB AT CANTERBURY



Proposed grade separation and third-track at Canterbury (not to scale).



Demolishing footbridge.



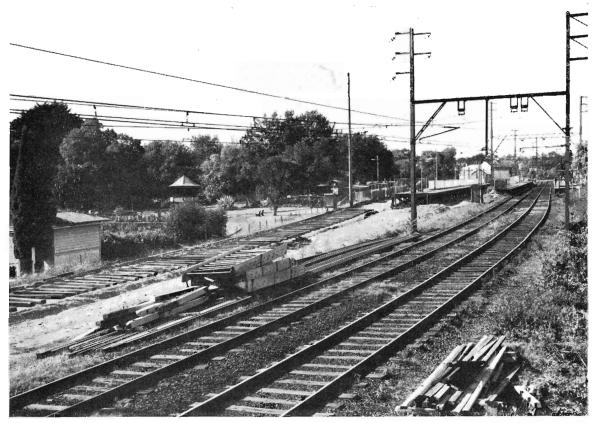
Members of Special Works gang are constructing a crib crossing in place of the footbridge. The crossing will later be replaced by a pedestrian subway.

THE \$2 million grade separation scheme at Canterbury involves the building of more than half a mile of temporary track, a temporary station, four pedestrian subways, an overpass carrying the present track above Canterbury Road, and the construction of a new station approximately 20 ft. above the site of the existing one. Depending on loan money being available, the work is expected to be completed in two years.

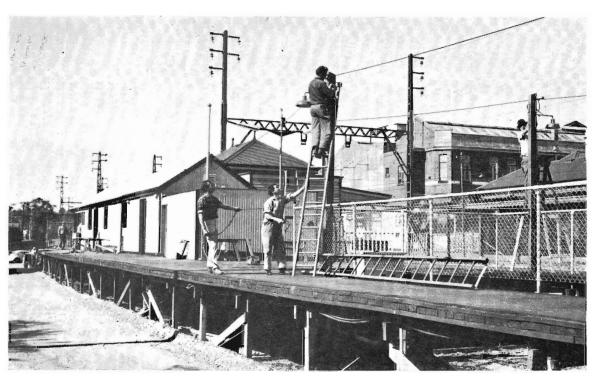
Automatic boom barriers have been installed at the Canterbury Road level crossing; these, of course, will be removed when the overpass is built. The temporary track deviation is now under construction together with the temporary station. The footbridge on the up side of Canterbury has been demolished and in its place is being built a crib crossing that will later be replaced by a pedestrian subway. Two pedestrian subways will be built along Canterbury Road with an additional subway to give access to the station platforms.

While trains are using the temporary track and station, the overpass will be built to carry the existing double track and an ultimate third track over Canterbury Road. The work has been planned to allow for the extension of the dual-signalled third track from East Camberwell towards Box Hill. (See January 1964 News Letter.)

The roadway under the overpass will have twice the width of the original gate crossing, and the overpass will be high enough for all types of legal road vehicles to pass under it. The capacity of the car park will be increased to 100 cars.

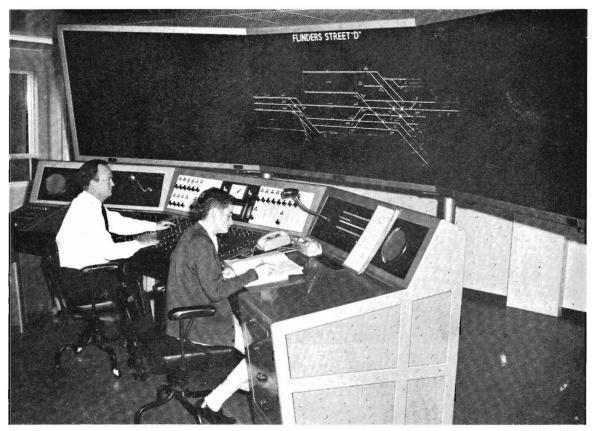


Canterbury station showing (at left) sleepers in position for temporary track.



Linesmen are installing platform wiring at temporary station.

PUSH-BUTTON SIGNALLING AT FLINDERS STREET



Signalman K. Kelly (left) and Block Recorder W. Grimsey at work in the new Flinders Street D Box. Space has been provided on the diagram for future requirements.

THE new route setting, relay interlocking signal box that came into operation recently at Flinders Street — D Box — has been planned to cope with future developments in traffic density for many years ahead. It has sufficient capacity to take over power signalling of additional lines. It is expected that this will ultimately be necessary to meet future increases in through traffic at the station.

In route setting, points are set and the signal cleared for the train by the signalman pressing one route button. The signal is automatically cancelled by the passage of the train through the route. Point levers mounted above the route setting panel are used mainly for manual setting of points for maintenance purposes. (See January 1965 News Letter for description of the Department's first route setting box, at Camberwell.)

Situated at the end of No. 1 East Platform, the new box has a sound absorbing ceiling, and floor heating.



On the power supply switchboard, Apprentice Electrical Fitter I. Barnes tests D.C. supply for earth.

Mechanical ventilation of filtered air (warmed in winter) at a pressure slightly above that of the atmosphere, keeps dust out of the equipment,

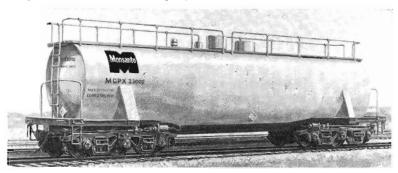


Signal Maintenance Fitter G. Wakefield removes a relay from the rack in the relay room. Relays are of the latest miniature type, needing much less mounting space.

especially the 1,100 signal relays in the room below. Altogether there are 130,000 yards of electrical wiring in the box.

LINES FROM OTHER LINES

Huge tank cars for U.S. company



Artist's impression of Monsanto's new tank car for elemental phosphorus.

M ONSANTO Company has orddered a new fleet of 37 railroad tank cars which will be among the heaviest and most efficient in the world.

The cars will be used to carry elemental phosphorus, one of the

heaviest commodities transported in tank cars, and weighing approximately 14.5 pounds per gallon. The capacity of each car is 22,900 gallons and the total gross weight on rail will be 414,000 pounds.

Russia builds new railway

R USSIA is building a new trans-Siberian railway which will connect western Russia with the Pacific coast. Nearly 5000 miles long, the railway will take 15 to 20 years to complete.

The new line will run through barren rugged country, 200 to 300 miles north of the present railway that was completed at the beginning of the century.

Much of the line will go through Siberian forests and marshland. The Russians will build on the marshy stretches only in wintertime.

The new line will supplement, not replace, the old Trans-Siberian Railway. It will pass through parts of West Siberia that are rich in iron, copper, and coal.

(" The Guardian", London).

New monorail system

A new type of monorail system, with 100-mile-an-hour over-head trains powered by a revolutionary magnetic field drive, has been developed by scientists and engineers.

An experimental two-mile section is planned for South London within the next two years, and there are hopes of providing a fast overhead link between London Airport and the City, the designers say.

The new system would cost about \$1 million a mile for a lightweight double track, supported by steel columns similar to lamp standards.

Passenger capacity in 50-seater coaches would be up to 12,000 an

Designers of the system, including members of Britain's car industry as well as Manchester University scientists, say the lightweight coaches are both driven and suspended from their overhead tracks by electro-magnetism, using linear induction motors with no moving parts. (Australian Financial Review)

Champagne and fashions

NITED States railroads are luring passengers back to the train by offering some unusual amenities. They are having some success as, last year, for the first time since 1944, they carried more passengers than the year before. The Atlantic Coast Line's Florida Special, running between New York and Miami, offers free champagne, dinner by candlelight, television, telephone, and a recreation car with a hostess who models latest holiday fashions, organizes games and shows movies. Trains on other lines also show firstrun movies. Many railroads believe that new, fast trains that are proposed will bring car travellers back to the train. Among the pro-posed services is a New York-Washington 150 m.p.h. supertrain on which test runs will start next year.

An opposite sex

"COMPARTMENTS (generally 2/4 berths) have a radio, writing desk and reading lamp. Don't be alarmed if there's an opposite sex in the nearby berth; it's common in Russia and Finland."

—(From tourist booklet "Visiting the U.S.S.R. in 1965" quoted in "Printers' Ink".)

BENDIGO'S NEW STATION

ESCRIBED as a smaller version of the Spencer Street station from the design point of view, the new Bendigo station will be the most modern provincial city railway station in Victoria. It will be coloured sunny salmon pink and beige, and a decorative feature will be panels of perforated concrete block that will also screen the dining room and kitchen from the sun's rays. (See picture in centre pages.)

The main feature will be an entrance hall built around the original stone and steel staircase leading to the footbridge spanning the railway tracks. Design of the new station provides for a combined station-master's and booking office, a communications block, including a telephone exchange and train control officers, and the administrative centre for the Bendigo district.

Plans provide for a dining room, with accommodation for 120 people, and kitchens. On the car park side of the building a cantilever verandah will serve as a shelter for those waiting for taxis or private cars, and also shade the administrative section from sun. The approach to the entrance hall from the car park will be by a short ramp, instead of steps; this will be convenient

for mothers wheeling prams, and for those using luggage trolleys.

The parcels office, undamaged by fire, has been retained, and an adjacent block of the old building will be converted to a boiler room. The Department's architects have integrated the new design with the section of the old building that escaped the fire.

C.M.F. OFFICERS WANTED

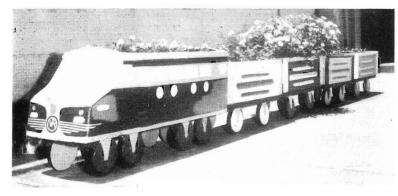
THE Citizen Military Forces are inviting applications from eligible males who wish to become commissioned officers in the C.M.F.

A course of training for officers will begin next July. The duration of the course is 18 months, on a part-time basis. The educational qualifications are Victorian Leaving Certificate (or equivalent) except in special circumstances. Further information and full conditions of eligibility may be obtained from the Combined Service Recruiting Centre, Queen's Gate, 83a Queen's Road, Melbourne (telephone 51–5371). Those interested should make inquiries as soon as possible, as enlistment for the course will not be made after May 20.

May 1966 77

AMONG OURSELVES

Loco in concrete



This unusual flower box in the shape of a diesel-electric locomotive and wagons is behind the Refreshment Rooms at Ballarat station, and was made from concrete by Mr. Bill Relouw who works with the Refreshment Services. Mr. Relouw came from Holland to Australia 10 years ago and has been at Ballarat for a year. ("The Courier" photograph)

Leaves Ultima



Driver W. G. Smith, shown on N 463 Driver W. G. Smith, shown on N 463 at Ultima, is probably driving his last steam engine, as, last month, he transferred to Traralgon, in dieselized Gippsland. Mr. Smith, who has been at Ultima for the past eight years, has now returned to the depot at which he gained his driver's "ticket". His favourite recreations are fishing, golf and billiards, all of which should be well catered for at Traralgon. (Photo; J. Baker)

Ticket seller extraordinary

OOTBALL'S ace ticket seller must surely be Mr. Mervyn Olholm, Carlton's assistant to Ticket Secretary. From 1934 (the year he began selling) up to April 16, his



sales of season tickets totalled \$202,011. This is a remarkable effort when it is considered that, in the 'thirties, tickets were 8/4d. (adults) and 2/6d. (children). For the past five years, Olholm's Mr. sales have averaged 4,000 an-

Mr. Olholm nually. He was made a life member of the club in 1958.

It is interesting to note that Mr. Olholm, who is Officer-in-Charge of the Accountancy Branch Goods Audit Office, was persuaded to sell membership tickets by Mr. Newton Chandler, who was then Carlton's secretary and the Provedore of the Refreshment Services Branch. Mr. Chandler who is now the club's Director of Recruiting, is also a former star Carlton and interstate footballer.

Flinders Street

AST Thursday I found myself on Flinders Street Station in dire distress and in need of first aid. I went to the Ladies' Room where an attendant fetched the first aid assistant. She was so helpful and efficient I felt that I really must write and express my thanks. I find people as a rule are so quick to complain but so slow to congratulate on a job well done. -(Mrs.) June Fishwick, 4 Clarendon Street, Frankston writing to the Secretary

RECENT RETIREMENTS...

TRAFFIC BRANCH

TRAFFIC BRANCH
Schofield, P. J., Head Office
Glennon, P. E., Flinders Street
Symes, A. E., Flinders Street
Armstrong, E. L., Ballarat
Kevill, E. R., Head Office
Keating, C. A., Bendigo
Blackall, J. E., Glenroy
White, A. R., Spencer Street
Carroll, J. M., Melbourne Goods
Pearson, F. C., Spencer Street
McMahon, F. D., Flinders Street
Taylor, E. R., North Geelong
Harris, (Mrs.) M., Leongatha
Pleydell, J. J., North Williamstown
Kane, T. J., Melbourne Goods

ROLLING STOCK BRANCH
Gavin, W. C., Newport
Smith, T. M., North Melbourne
McColl, J. H., E.R. Depot
Dosser, A. T., Seymour
Geering, S. G., Newport
Phelan, B. M., E.R. Depot
Fielder, T., T.L. Depot
Hilton, R. G., North Melbourne
Mitchell, J., Newport
O'Donnell, P., Newport
Baker, J., Newport
Baker, J., Newport
Brankovic, D., Jolimont
Shuttleworth, C. H., Newport
Terry, B. A., Jolimont ROLLING STOCK BRANCH

WAY AND WORKS BRANCH
Butterworth, F. W. J., Spotswood
Hills, H., Dartmoor
Jesson, A. A., Spotswood
Robins, H. E., Kiata
Newman, W. J., Coburg
Charles, L. M., Laurens
Brown, A. E., Berwick
Law, F. H., Kyneton
Marks, L., Spencer Street
Henderson, R. A., Wallan
Gibbons, L. S., Caulfield
Stojanovic, M., Wangaratta
Wolynec, D., Ironworks Division
Bowtell, P. H., Great Western
Riordan, T. C., Woomelang
Hale, P. G., Flinders Street WAY AND WORKS BRANCH

STORES BRANCH Mollica, G., Newport Workshops Storehouse V. M., Jolimont Workshops Corke, Storehouse Wolski, J., Newport Workshops Store-

REFRESHMENT SERVICES BRANCH Henderson (Miss) R., Flinders Street Belcher, A., Dining Car Depot

ACCOUNTANCY BRANCH Clark, R. H., Bendigo

...AND DEATHS

TRAFFIC BRANCH Traczyk, Z., Geelong

ROLLING STOCK BRANCH Anderson, A., Head Office Lindell, R. C., Ararat

WAY AND WORKS BRANCH Young, D., Bendigo Hrycyschin, M., Horsham Milosavljevic, C., Spotswood

STORES BRANCH Jeffs, H., Permanent Way Materials Depot

REFRESHMENT SERVICES BRANCH Paterson (Mrs.) M., Newport Canteen

TALKS

ABOUT BOOKS

N the subject of detective/ thriller/adventure stories, some new and very promising authors are represented in our recent acquisitions, as well as some of the well known writers. In the field of the pure detective story, Some Beasts No More by Kenneth Giles will win many fans. Briefly, the case here is one where a number of murderers or suspected murderers, who have never been charged through lack of evidence, are themselves "bumped off". Detective Sergeant James has the task of untangling a complex case involving seemingly unconnected murders. An unusual theme and some good characters will make this book seem too short for some readers.

Ross Macdonald is probably the true successor to Raymond Chandler, the old master of the hard boiled private detective story: like Chandler's main character, Macdonald's private detective is very human, no superman. His supporting characters are only slightly larger than life, and there's only a narrow margin between the good and the not-so-good. Another similarity is in the increasing complexities of the plots within plots which both Chandler and Macdonald introduce into their stories. I think you will find Ross Macdonald's latest-The Far Side of the Dollar-will add to his fans, particularly since this one is a Crime Club Choice which is the hallmark of good detective stories for many people.

Another author who will be well known to detective story readers is Ed McBain, author of the 87th Precinct novels.

This latest McBain thriller is not a detective story. It is an adventure story, different from any of McBain's other books, but I feel, a lot of McBain fans will read it, although their usual reading may formerly have been confined to detectives. The Sentries is a story about a fanatical American who designs a fantastic plot to save America from . . . well, read the book yourself to find out from what. This is a very taut, tough book in which the suspense builds up, literally to the last page but one. There are some very likeable characters, lots of blood, a little sex, very little humour and much sadness in this book. I found the climax a little contrived and disappointing, but this was no doubt a purely personal reaction. This is one of those books about which publishers like to scare us by saying"....perhaps it could happen".



Tennis

THE 1966 Tennis Carnival in Adelaide was, from Victoria's point of view, not nearly as successful as the bowls in Brisbane. I am referring to results achieved, of course, and not to the host State's hospitality, which, as is usual in South Australia, was overwhelming. We had to be content with fourth place, behind New South Wales, (who won the Commissioners' Cup), Queensland (runners-up) and Commonwealth. South Australia and Western Australia finished fifth and sixth respectively. It is still a mystery to me that we can't field a team capable of breaking the New South Wales and Queensland stranglehold on this sport, particularly when we remember the large number of first class international players turned out by our State. I am not convinced that the best tennis players in the Victorian Railways are making themselves available for these carnivals, but I am hopeful that, by 1968, we can recruit well enough to again become a threat to the leading States in this sphere.

A good place to look for some worthwhile players might be out at the Sunshine V.R.I. Six senior teams and two junior teams were entered in the Sunshine and District Tennis Association and of these, five senior teams and one junior team made the finals of their respective grades. Pennants were won in the B Reserve Grade (Seniors) and in the junior B grade. Annual matches played by Sunshine with Geelong and Warragul have become popular fixtures in the summer season, and this year Sunshine were successful in defending the perpetual cups, which they already held, against both these centres. A junior trophy was provided for competition between Sunshine and Geelong and on this occasion Geelong were the victors 2 games to 1.

Basketball

In the Business Houses Competition, both our teams made the finals of their grades, but a pennant eluded V.R.I. I, who were beaten 37 to 27 in the grand final. However V.R.I. 2 (E. 2 grade), proved too strong for their opponents and managed to win the V.R.I. Basketball Club's first pennant (men's division) by taking out the grand final of the grade, 49 points to 42. Congratulations to this young side, and i hope all players can maintain this form until the June visit of the South Australian party.

Billiards

UR annual grudge match against the S.A.R.I. Billiards Club was staged in Adelaide from March 13 to 20, and our boys were lucky enough to make a clean sweep of all events. We apparently just scrambled home in the teams event, but the snooker and billiards championships were an all Victorian affair, Tom Hoare defeating Colin Carmody at snooker and Jim McKane defeating Kevin Dunne at billiards.

Bowls

NOTHER Country Week which began in March was the 1966 Bowls fixture. Eighty-one bowlers were welcomed by Mr. L. A. Reynolds, (General President V.R.I.) and the fixture was officially declared open by Mr. Commissioner E. P. Rogan. Rinks representing Dim-Rogan. Ribrs representing Dim-boola, Yallourn, Ballarat, Seymour, Bendigo, Ararat, Maryborough, Gee-long, Korong Vale, Ouyen, Donald and Warrnambool, as well as two composite rinks, competed in the championship fours for the V.R.I. Perpetual Cup and the V.F. Trainor trophy. Section winners were Ararat 3, Yallourn, Geelong 1, Ballarat 2, Korong Vale and Warrnambool. The best loser at Albert Park was Ballarat 1; and, at St. Kilda, Seymour. Both these teams entered the quarter finals of the event. Ballarat 2 and Geelong 1 won the right to contest the final. As the former proved the better side, the Cup will remain with Ballarat for the next 12 months.

The final of the pairs championship saw J. Lorenz and R. Hughes of Hastings doing battle with J. Hutchinson and T. Ross of Maryborough, with the Maryborough pair coming out winners after a close and interesting tussle.

In the singles championship Alec McKay of Ballarat and Albert Scott of Colac met in the final, but excellent bowling by Scott, who has just recently won his club championship, enabled him to easily take out this title. In the consolation fours event, Maryborough 2 took the honours, defeating Bendigo 2 in the final.

All trophies won during the week were presented at a social function held in the Albert Park—V.R.I. Club Room on the Friday afternoon. The presentations were made by Messrs. E. P. Rogan and M. Mc-Kenzie (Senior Vice President V.R.I.) Valuable help given throughout the week by Des O'Donnell, Bob Grace, Keith MacKenzie (V.R.I. Councillors), Harry Watts, (Hon. Secretary, V.R.I. Social Bowling Club) and Frank Deller was much appreciated and contributed greatly to the smooth running of the fixture.

The 1965-66 Wimmera Bowling Association's season has just concluded and I feel a mention of the performances put up by members of the Ararat V.R.I. Bowling Club would be justified. The men won the B section pennant from 23 other teams, who came from places as widely apart as Kaniva in the north and Lake Bolac in the south. The ladies, not to be outdone by the men, won their section and their first pennant, and finally the Club won the Murray Byrne trophy which was competed for by the six clubs situated in the Ararat district. A fitting end to a very satisfactory season, I'd say.

Cricket

A FTER three unfortunate postponements, due to inclement weather, the final of the Commissioners' Cup competition was eventually decided on March 29. It was a fairly easy win for Stores, who defeated Suburban Lines by 113 runs.

Winning the toss, Lines sent Stores in to bat, obviously hoping for a quick break-through while the wicket was a little greasy. But the Stores batting line-up was too strong and with Dyson hitting a lovely 105



Members of Ballarat No. 2 team, winners of the fours championship in Country Bowls: (from left) Messrs. N. Wallis, C. Kisler, A. McKay and A. Polson.

and Counsell putting together 76, they set the Traffic lads a huge task. McCalman was the best of the Suburban Lines bowlers taking 4/15, while Vic. Hill worked hard for his 3/96. Except for a stand by McCalman, who made a great 57, and Brister who also batted well for his 43, the Suburban Lines batsmen offered no real resistance to the spirited bowling of Dave Thom who finished with the excellent figures of 7/58. The other Stores wicket taker was Figgis, who obtained two wickets for 36 runs. So the cup, once again, goes to Stores, and congratulations go to Robin Dyson and his boys on again proving they are the best side in the competition.

Royal Park, from March 7 to 11, was the venue of the 1966 Country Cricket Week. Six teams, representing Ballarat, Benalla, Dimboola, Geelong, Korumburra and Traralgon, competed for the D.S.J. Shield and the V.F. Trainor trophy. Mr. G. F. Brown (Deputy Chairman)

and Mr. L. A. Reynolds (General President V.R.I.) welcomed players and officials during the luncheon break on the opening day. The results of the opening matches indicated that Korumburra and Ballarat would be the sides to beat but Benalla and Traralgon seemed stronger than 1965 and could surprise. However as the week went on, it became obvious that the 'Burra's all-round strength would be too strong for any of the opposing sides and when they beat Benalla outright on the Thursday, only a miracle would prevent them from taking the trophies back to Korumburra. And that's how it was-easily defeating Ballarat on the final day, they completed the week without a defeat. The trophies were presented to the winning team at the completion of play on the final day by Mr. Reynolds. Welcome visitors at this ceremony were Messrs. W. Walker, Secretary for Railways, and B. McInnes, General Secretary, South Australian Railways Institute.



Country Week cricket; Geelong Captain I. Patterson whips off the bails and G. Marshall, Benalla Captain, just makes the crease in a close and exciting match that was won by Benalla. Other players are (from left) P. Murnane, L. Charman, B. Elliott, B. Berry and R. Toohill.









THE MONTH'S REVIEW

Mornington service to be restored

A FTER a lapse of 24 years, the Department will restore passenger services on the 8-mile branch line between Baxter and Mornington. They will begin on Monday, September 12, and be on trial for two years. The decision to restore the service followed an investigation of local transport facilities by the Co-ordinator of Transport.

There will be five return trips between Frankston and Mornington on Mondays to Fridays, three on Saturdays and, during summer months, one on Sundays. Except on Sundays, the service will be operated by a 280 h.p. diesel rail-car of the same type now used between Frankston and Stony Point. It seats 94 passengers.

Single, day-return, and off-peak rail tickets to Melbourne will be the same fares as the existing combined rail and road fares. However, periodical rail tickets ranging from weekly to yearly, will be much cheaper than under the present co-ordinated service. As an example, an adult passenger between Mornington and Melbourne will pay \$161.50 for a yearly ticket, compared with an estimated \$244.00 at present; a monthly rail ticket will cost \$16.00 compared with an estimated \$22.88 at present.

To cater for the residential devellopment on the eastern side of Mornington, a rail motor stopping place will be established on both sides of the level crossing at Nepean Highway, one mile from Mornington.

Moorooduc times will be 10 minutes later or earlier than those for Mornington. Other stops will be at Baxter and Leawarra.

On Sundays during summer—from early December to approximately Easter—a diesel-hauled excursion train will leave Flinders Street at 9.35 a.m. and reach Mornington at 10.50 a.m. On return, it will leave Mornington at 6.30 p.m. and reach Melbourne at 7.50 p.m.

Teams take train

N three successive week-ends last month, a diesel rail car was used by football teams going to play at Geelong. Prahran went there on the 15th, Richmond on the 21st, and Frankston on the 29th—an encouraging start to the season as far as the V.R. team was concerned.

More diesels ordered

THE Department has ordered 10 more diesel-electric locomotives, of about 1,000 h.p., at a cost of \$1,500,000, from the Clyde Engineering Co. Pty. Ltd., of Granville, N.S.W.

These new diesels, with the six 1,800 h.p. X class diesel-electrics to be delivered later this year, will bring the strength of the V.R. diesel-electric locomotive fleet to over 200 units. They will assist the programme of scrapping obsolete steam locomotives, as rapidly as money becomes available. The objective is the complete dieselization of the system by 1972.

Wagon capacity increased

BY raising the roof of the CJ gravity-discharged, cement hopper wagons the Department is increasing their capacity. They originally carried 43 tons of cement, but the roof raising increases this to

50 tons. This will be further increased to 53 tons when bogies of greater load carrying capacity are fitted as they become available. Ten of the wagons already have been modified at Newport Workshops, and it is proposed to do 10 more at a later date.

FRONT COVER

The Governor, Sir Rohan Delacombe, has a few words with Apprentice Coppersmith Phillip Wenn during His Excellency's inspection of the Department's apprenticeship display at the V.R. Technical College. In the centre is Senior Instructor R. Streeter. (See story on page 92).

Tunnel under Flinders Street



Electrical Fitter's Assistant K. Short is shown using the telephone in the cable tunnel that runs below Flinders Street station. The tunnel, 820 ft. long and 6 ft. high, is, at parts, 26 ft. underground. In it are cables for signalling and communications; at the left is trunking carrying cables to a level below signal box.

The last of his line

Prince, the last of the railway shunting horses, will retire from the Department on June 30. Together with Madam, another horse that died only a few weeks ago, Prince has been moving rail wagons at Ballarat Goods Sheds for the past six years. From July 1, shunting work will be taken over by another form of horsepower—a pneumatic tyred motor tractor.

Saddest man at the departure of the sturdy Clydesdale from the goods sheds will be his owner, Mr. Nicholas ("Nick") Purcell, of Grant Street, Ballarat East, who had the V.R. horse-shunting contract and had farmed in the district for many years.

Mr. Purcell said that nine-year-old Prince will be put up for sale, but the buyer will have to guarantee a good home for him. "He's the best horse I've ever seen ", he added.

This faithful old retainer may, indeed, leave the railway scene without benefit of pass, pension or privilege ticketbut at least he's had his name in News Letter.

50th boom barrier

THE Department's 50th set of automatic boom barriers was installed at Tooronga Road, Tooronga, on May 29.

They replaced the existing level crossing gates operated from the nearby signal box.

In addition to the crossings with boom barriers, the V.R. system has 218 crossings with flashing lights, 72 with gates operated from signal boxes, and 75 with hand-operated

Big Reso Tour

THE most extensive Reso Tour in Australia is now taking 26 representative city and country men from Victoria through the Centre to Darwin, and then by road to Perth. Return to Melbourne from Perth will be by rail.

The party left Melbourne on June 12 and will return on July 15. Previous Reso Tours have visited Darwin and Perth, but have gone only as far north from Perth as Geraldton and Northampton. Recent developments in the area between Perth and Darwin are responsible for the organization, by the Department of this outstanding tour. The Tour Manager is Mr. A. J. Petrie, Member of the Public Relations and Betterment Board.

The first Reso Tour was organized by the Victorian Railways Commissioners in 1922 and, since then, tours have been made throughout Australia and to New Zealand.

The Jolimont Legend

ROM time to time, some people, without verifying facts, produce a ready answer to the question, "why are there no commercial advertisements on Jolimont station?". They carefully explain that it was originally a private station, built by Sir William Clarke, whose town house, Cliveden, was opposite, and that Sir William eventually presented the station to the Government on condition that no advertisements were displayed.

It's a good story, but, it just didn't happen that way: for dead men neither build nor present stations (or anything else), and Sir William was in his grave some years before Jolimont station was built.

Briefly, the facts are these. Sir William Clarke died on May 15,

1897, but the line from Princes Bridge to Collingwood was not authorized until December 19, 1898 (under act 1590). It was opened for traffic in 1901. The erstwhile parkland on which Jolimont station now stands was acquired by the Government from the Melbourne City Council. The cost of building the line and its stations, including Jolimont, was borne by the Railway Department.

Commercial advertising was not permitted because of the wish to keep the parklands on either side free of hoardings for aesthetic reasons. The wish is still respected.

Jolimont is not the only suburban station without hoardings (as is sometimes stated); Fawkner, because of its proximity to the cemetery, is another.

LEVEL CROSSING CARELESSNESS

PRESS reports for the last month disclose more indifference of motorists to their own safety at level crossings.

Three fined

THREE men who zig-zagged through the Nunn Street railway crossing when the booms were lowered, were fined a total of \$100 and ordered to pay costs totalling \$9.20, in the Benalla Court. The Court was told that the offence was "quite common" at the Nunn Street crossing.

A Wangaratta motorist who became "a bit impatient" and zigzagged through the booms only seconds before Intercapital Daylight thundered over the crossing paid dearly for his impatience.

A signalman told the Court that, at the time, the train was only 60 to 80 yards away and travelling at 60 m.p.h. He said pedestrians had to "scatter" because of the action the car took trying to avoid the oncoming train.

The magistrate said it was probably the most serious breach of the regulation one could envisage. He imposed a fine of \$50 and suspended the motorist's licence for seven days.

Another motorist was fined \$20 on a similar charge, and a third man \$30 with costs.
—(Benalla "Standard", 5/5/66)

Struck crossing gates for second time

young driver, who recently struck and smashed a set of railway gates for the second time, appeared in the Ballarat Court on a charge of failing to stop at a level crossing. The Court was told that an incident in which his small car wrecked two closed gates in Gillies Street on February 5, followed a similar incident in Stawell not long before. At Stawell he was charged

with having no registration or third party insurance.

In both cases, as his vehicle was not insured, he had to pay damages to the Railways Department. The Stawell gates had cost \$300 and the Gillies Street gates cost \$802 to re-

The magistrate imposed a fine of \$20, with \$4 costs, and cancelled the motorist's probationary licence.
—(Ballarat "Courier", 11/5/66)

Drove through wig-wag signal

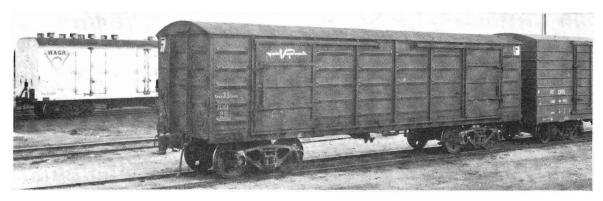
man who drove through wigwag signals at Warncoort railway crossing was fined \$50 and had his licence suspended for two months in Colac Court. A constable said that the motorist who was driving past at about 50 m.p.h., slowed down and then accelerated over the crossing. Wigwag signals and bells were operating at the crossing and the train was about 200 yards away. —(Colac "Herald", 13/5/66)

Confusion over flashing lights?

THE question has been asked whether some rail crossing accidents could have been caused by motorists treating flashing light signals at a rail crossing in the same way they treat those at road crossings. After stopping at a road crossing that has flashing red light signals, the motorist is accustomed to moving off again as the traffic permits. Such behaviour at a rail crossing-particularly where trains are approaching from opposite directions-could, of course, result in a serious accident. To avoid confusion, all flashing road lights could be the amber ones.

CO-OPERATION

BETWEEN THE RAILWAY SYSTEMS



Vans from Western Australian, Victorian and Commonwealth Railways meet at Parkeston, W.A. The extension of the bogie exchange system to Port Pirie has brought suitable Commonwealth Railways vehicles into the pool, and enabled rolling stock of N.S.W., Victoria and South Australia to run to Kalgoorlie.

THE Australian railway network is efficiently carrying approximately 470 million passengers and 62 million tons of goods annually over more than 25,000 route miles.

The total capital of nearly \$1,600 million employed by the systems calls for careful planning and budgeting by the administrations, as does the staff of over 128,000, approximately one-third of which are employed in the operating grades.

This information was given by the Deputy Chairman of Commissioners (Mr. G. F. Brown) during an address to the Royal Institute of Public Administration conference in Canberra.

The table on opposite page, while subject to some qualifications owing to differences in presentation of certain information, sufficiently indicates the overall magnitude of railway operation in Australia.

The state railway systems of Australia are organized as government departments rather than as statutory corporations. In other words, their financial affairs form an integral part of state budgets and any operating losses must be offset by savings elsewhere in the budget, or funded from loan moneys as budget deficits. Their revenue is paid direct to the respective state treasuries.

INTERNAL ORGANIZATION

Internal organization of the various systems is very similar, consisting of a commissioner (or a board of three Commissioners in the case of Victoria) responsible to Parliament through the appropriate Minister, and a number of branches arranged along functional lines—

secretariat, traffic, commercial, mechanical engineering, civil engineering, electrical engineering, stores and accounting forming the basic structure; actual details of the structure vary from state to state.

The day-to-day movement of trains between adjacent states is arranged by the respective passenger and freight superintendents in conjunction with their chief train controllers. Actual details of these movements are attended to by the divisional superintendents, through their train controllers, at the actual point of interchange.

Actual control of locomotive crews varies—in N.S.W. and Victoria, for instance, they are controlled by the respective Chief Mechanical Engineers, while in South Australia it is by the Chief Traffic Manager.

Other than for day-to-day working arrangements—particularly between adjoining systems—the main avenue of contact between the various systems is the Australian and New Zealand Railways Conferences. This body has no corporate existence, but maintains a Secretariat in Sydney served part-time by two officers of the New South Wales Railways.

Over recent years, the A.N.Z.R. Conference has become a potent factor in merging the often conflicting interests of adjacent states, and of producing standard methods of freight rating and handling, as well as standardization of design of rolling stock and civil engineering works.

This body serves three main functions:

 The reaching of agreement between the separate systems for the joint handling of intersystem traffic, particularly in regard to fares and freights (and the sharing thereof) and accounting procedures.

- (2) The establishment of technical standards in regard to tracks and structures, clearances, rolling stock outline and structural features, etc., all with a view to enable rolling stock to be exchanged between the various systems to the maximum extent possible.
- (3) Generally, as a meeting-point for the exchange of informattion, experiences and ideas for the mutual benefit of all concerned.

CONFERENCES

The main physical meeting-point between systems is the Commissioners' Conference held approximately every 18 months and rotated in venue between the states of the member systems. This conference is preceded by a conference of officers, usually representing traffic, commercial, mechanical engineering, and civil engineering branches; the minutes of the officers' conference become the agenda for the Commissioners. It will be noted that it is the similarity in organization of the various railway systems that has made this procedure possible.

In addition to the general Officers' Conference, sectional conferences for specific purposes—usually related to the handling of intersystem traffic—are held as required, and the recommendations of these conferences also form part of the agenda for the next ensuing Commissioners' Conference. There is also, naturally, a very considerable volume of correspondence passing between the systems, via the secretariat, all the time. (Continued on page 86)

AUSTRALIAN RAILWAYS - FACTS AND FIGURES (1963 - 64*)

	N.S.W.G.R.	V.R.	Q.R.	W.A.G.R.	S.A.R.	C.R.	T.G.R.	TOTAL
State population †	4.158.926	3,161,537	1,595,057	799,626	1,044,662		375,268	11,131,076
Capital	\$638,948,170	\$371,085,364	\$221,015,638	\$118,654,464	\$129,871,320	\$98,869,082	\$18,254,190	\$1,596,698,228
Total revenue	\$202,487,330	\$92,878,640	\$82,321,086	\$35,189,660	\$29,673,050			
Revenue-passengers, etc	\$57.842.232	\$34,147,794	\$11,403,118	\$5,316,894		\$15,357,050	\$5,598,480	\$463,415,296
Revenue-freight and livestock	\$144,645,098	\$58,730,846	\$70,827,968		\$6,375,526	\$3,525,476	\$555,246	\$119,166,286
Working expenses	\$177,415,100	\$91,635,734		\$29,872,766	\$23,297,524	\$11,831,574	\$5,043,234	\$344,249,010
Operating profit	\$25,072,230	\$1,242,906	\$76,276,220	\$32,250,488	\$29,463,796	\$12,315,612	\$6,130,272	\$425,487,322
Onomatine loss			\$5,954,866	\$2,939,172	\$209,254	\$2,877,562		\$39,764,198
On anating matic	87 .62%	98.61%	02.7/01				531,792	
First the smit House to the same	25,878,032		92.76%	91.65%	99.29%	94 .23%	109 .54%	91 .82%
Eroight ton miles (000s)		12,132,015	9,205,716	5,708,258	5,312,398	2,447,764	1,164,864	61,779,947
Parada de la companya /	4,282,089	1,905,612	1,840,532	813,319	754,897	663,558	111,834	10,371,141
Familia a sau avanas mila anas	263,796,140	153,395,722	25,718,398	11,064,596	15,227,032	338,414	1,557,453	471,097,755
Earnings per average mile open	\$33,442	\$21,878	\$13,732	\$9,410	\$11,802	\$6,746	\$10,860	\$18,358
Expenses per average mile open	\$29,300	\$20,442	\$12,676	\$8,650	\$12,356	\$6,356	\$11,890	\$16,856
Return per average mile open	\$4,142	\$1,436	\$996	\$760	\$554	\$390	\$1,030	\$1,502
Earnings per train-mile	\$5.18	\$4.61	\$4.37	\$4.54	\$4.45	\$5.70	\$4.23	\$4.81
Expenses per train-mile	\$4.54	\$4.31	\$4.05	\$4.17	\$4.66	\$5.36	\$4.63	\$4 .42
Return per train-mile	\$0.64	\$0.30	\$0.32	\$0.38	(loss) \$0.21	\$0.34	(loss) \$0.40	\$0.37
Passenger train mileage-suburban	10,938,879	8,369,479	1,742,002	1,367,795	1,966,524		135,449	24,520,128
Passenger train mileage-country	10,307,557	4,835,032	4,501,364	982,476	1,954,149	814,510	317,539	23,712,637
Freight train mileage	17,831,114	6,908,931	12,604,368	5,155,980	2,745,377	1,853,564	869,294	47,968,628
Total train mileage	39,077,550	20,113,442	18,847,744	7,506,251	6,666,050	2,668,074	1,322,282	96,201,393
Average haul per ton of freight (miles)	165 .47	157 .07	205 .29	156.78	144 .67	300 .43	95.31	167 .87
Passenger train mileage-Non-steam hauled	18,092,582	13,056,212	4,237,307	2,188,497	3,798,031	813,746	444,429	42,630,804
Passenger train mileage-steam hauled	3,153,854	148,299	1,813,351	161,774	100,842	764	8,559	5,387,443
Freight train mileage-non-steam hauled	12,007,910	4,983,497	6,472,177	2,304,150	2,439,433	1,849,292	839,763	30,896,222
Freight train mileage-steam hauled	5,823,204	1,925,434	6,324,909	2,851,830	327,744	4,272	29,531	17,286,924
Number of locomotives-steam	614	246	661	244	166	7	23	1,961
Number of locomotives-non-steam	268	255	120	83	86	58	54	924
Number of passenger vehicles	2,748	1,957	1,356	300	506	104	78	7.049
Number of freight vehicles	21,324	21,652	24,069	11,879	7,989	1,642	2,548	91,103
Number of service vehicles	2,144	1,660	2,048	747	509	433	165	7,106
Route miles	6,055	4,242	5,988	3,677	2,514	2,252	515	25,243
Staff	47,862	28,774	26,193	11,682	9,373	2,820	2,412	128,116

^{*} T.G.R. statistics are taken from the 1962-63 annual report of the Tasmanian Transport Commission.

[†] Population figures supplied by the Commonwealth Statistical Bureau and are accurate as at December 31, 1964.

(Continued from page 84)

Decisions of the Commissioners' Conference are morally binding upon all systems that have not expressed dissent. When it comes to matters of freights and fares, and accounting procedures, these decisions must be meticulously observed or chaos would result; but, regrettably, agreed-upon engineering standards have not always been so meticulously observed.

Recent developments, in the form of gauge standardization and bogie exchange, have made the strict observance of engineering standards a far more vital matter than was previously the case.

BOGIE EXCHANGE

The recent extension of the bogie exchange system to Port Pirie Junction has brought suitable Commonwealth Railways vehicles into the pool and enabled rolling stock of N.S.W., Victoria and South Australia to run to Kalgoorlie (see picture on p. 84.) In the case of New South Wales vehicles a double bogie exchange—Dynon and Port Pirie Junction—is necessary. By the reverse procedure, Commonwealth vehicles can run to Sydney and South Brisbane.

This procedure cannot be applied to fixed-wheel rolling stock, nor are all bogic vehicles suitable; but all new construction is so designed, and increasing numbers of existing vehicles are being modified, so that the purely physical barrier to the interchange of modern, high-capacity goods rolling stock between the various broad and standard gauge systems is progressively diminishing.

Some of the administrative prolems are not so easy to solve. It has always been propounded, as one of the great advantages of a universal standardization of Australian rail gauges, that rolling stock could be quickly congregated at a point of need. But what happens when everyone needs their vehicles at the same time?

EXCHANGE OF ROLLING STOCK

The setting up of a scale of interchange charges based, as far as practicable, on the true costs of vehicle ownership, but at the same time armed with teeth that will deter a system from meeting peak requirements by simply hanging on to the other fellow's vehicles without his consent, is still occupying our attention.

The exchange of passenger rolling stock between systems is normally confined to specified train-sets operating on intercapital routes. Certain of these trains are jointly owned—

Southern Aurora, The Overland—while others are owned by one system and hired to the other—Spirit of Progress, Intercapital Daylight. There is a proposal for the operation of through standard gauge trains, between Sydney and Perth, jointly owned by four systems.

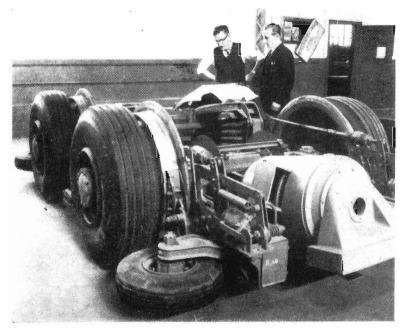
Occasionally passenger cars are lent to an adjoining system, on a common gauge, to meet a specific traffic surge such as a Scout Jamboree or a Royal Tour.

On a day-to-day basis, contact between adjoining systems at the operating level—traffic superintendents and train controllers—enables a very considerable degree of flexibility to be maintained in regard to train schedules, wagon and carriage supply, etc.

There is, to date, no provision in Australia for the interchange of locomotives, which are changed at border points even on through intersystem expresses.

Present arrangements reasonably cater for peace-time needs, but in the event of a national emergency—which would undoubtedly impose great pressure on the resources of all systems—there would be an imperative need for an over-riding authority allotting inter-changeable locomotives and rolling stock with regard only for the national interest. (See News Letter, March 1966)

RUBBER TYRES FOR MONTREAL TRAINS



Michelin tyres are fitted to the vertical running wheels and the horizontal guiding wheels. The steel flanged wheels mounted inboard are used for guiding and braking.

TRAINS for the 16-mile underground railway now being built in Montreal will run on pneumatic-tyred bogies. The underground, scheduled for completion in 1967, will have 26 stations and be geared to move upwards of 60,000 passengers an hour.

The planned 369-car passenger fleet will be shod with Michelin pneumatic, rubber tyres on the running wheels and also on the horizontal guiding wheels. Rubber tyred trains have been used on portion of the Paris underground system since 1956, but Montreal provides the first instance where pneumatic tyres have been adopted for an entire system. The rubber tyres will run on concrete tracks. The greater adhesion of the tyres will enable gradients up to 1 in 7 to be used. (See picture at left.)

-(Railway Transportation)

RAIL USERS SAY

Parliamentary Association

THE Speaker of the Legislative Assembly (The Hon. Sir William McDonald, M.L.A.) and the President of the Legislative Council (The Hon. R. W. Mack, M.L.C.) as Joint Presidents of the Victoria Branch of the Commonwealth Parliamentary Association, have directed me to express the thanks of the Association to you and your staff for the assistance given in connexion with the holding of the Sixth Annual Inter-Parliamentary Bowling Carnival.

The use of station facilities, and the assistance rendered by your staff in the handling of visitors' luggage was greatly appreciated by all concerned.

-J. A. Robertson, Honorary Secretary Commonwealth Parliamentary Association, writing to Stationmaster, Spencer Street

Children's Camp

N behalf of the Directors of the Lord Mayor's Children's Camp . . . our most sincere thanks for the practical assistance rendered to the Camp by the Victorian Railways during the 1965/66 season recently terminated.

Our Camp Manager, Mr. E. H. Price, has informed us all of the close liaison that exists between your Traffic Branch, Refreshment Services, and officers at Spencer Street, Flinders Street and Dande-nong stations. There is little doubt that the efficient transportation of the children to and from Portsea was largely due to the kindly interest

taken in the Camp by those sections.

No doubt you will be pleased to learn that, during our recent season, 3,050 children spent a happy, healthy seaside holiday at our Portsea Camp, and all of them received the medical and other facilities of which we are all justly proud . . . We trust that we shall, in the future as in the past, continue to have the practical assistance and co-operation of the Victorian Railways.

—Ian F. Beaurepaire, Lord Mayor, writing to the Chairman of Commissioners

Courtesy at Terang

N Monday evening I rang the Terang railway station for information. The man who answered the phone (Assistant Stationmaster D. J. Brown—Ed.) was most helpful and the most courteous person I have ever encountered from any organization ever telephoned by me. The staff at this station should be praised for the help they give the public.

-(Mrs.) P. New, "Tourac", Mortlake writing to the District Superintendent, Geelong

Thanks from State Relief Committee

N its latest (35th) annual report, the State Relief Committee thanks railway staff "for the services they give in despatch and receipt of goods, trucking of livestock and fruit, urgent fire and flood relief consignments; and the audit of the Committee's books and accounts ". The report shows that 1,241

parcels were received last year, from the Flinders Street Station boxes which also effect a considerable saving by eliminating the cost of collections at private houses.

Edithvale

Y husband and I do not want to let this opportunity pass of thanking you and your staff for being so kind to our late uncle (Mr. Ellison Rowe).

We believe you comforted him in his time of passing, and did all in your power to help him . . . - D. F. A. & E. E. Prior, Waterloo Street, Heathmont writing to the Stationmaster, Edithvale

Korong Vale

OULD you please convey to
the staff of the Korong Vale railway station, our grateful thanks for their co-operation and assistance during the past 12 months. -F. E. Matthews & Son, Korong Vale writing to the Chairman of Commissioners

Cafe praised

₹ OOD service from the obliging T manager at the Flinders Street railway cafe who left his post and carried the returning rail traveller's two small cases to a spot near his table while the V.R.'s customer looked after his tray.

This cafe is about the cheapest spot for a lightning service meal for returning Gippsland travellers. And its freshly cooked fish are brought to the table at about the lowest prices in Melbourne.

—(Sale " Times ", 24.3.66)

STATION AND DEPOT DECORATION PRIZES

PRIZES totalling \$2408 can be won in this year's competitions for decoration of stations, depots, barracks and rest houses. The individual prizes range from \$10.50 to \$51.00. On request, trees, shrubs

-and advice-are provided free by the Departmental Nursery.

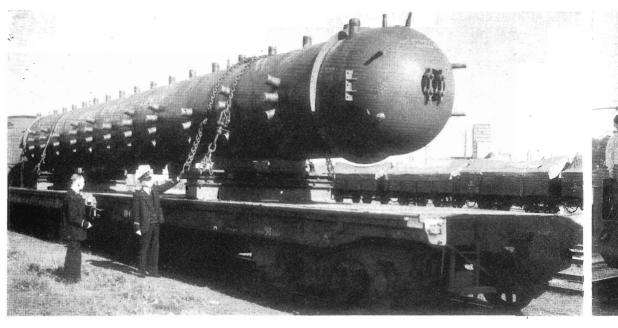
The names of prize winners in the 1965 competitions appeared in Weekly Notice No. 21 of 24.5.66.



Station Assistant A. D. Butler at Bonbeach. Together with Station Assistant R. S. Edrich, he shared first prize in the Metropolitan District for new work with piped water supply.



Stationmaster R. E. Wilton at work in Berwick's garden. He was awarded in Berwick's garden. He was awarded first prize in the Eastern District for new work with piped water supply,



HEAVY FOR HAZELWOOD: At Port Melbourne, Stationmaster J. Callaghan (right) and Assistant Stationmaster A. Hinchcliffe check out wagons carrying a 105-ton boiler drum for Hazelwood Power Station.

NEWS AND VIEWS



4 RF





ATEST TRAIN OF KNOWLEDGE was the Mount Scopus Express which took 96 students and teachers from Mt. Scopus billege for an educational tour of western and central Victoria. (Left) A happy group on the locomotive at Toolamba. (Right) Waiters wearing college caps lent a festive air to this meal in the Dining Car.



PUBLIC ADDRESS SYSTEM and new rostrum facilitate the work of the auctioneer at the Lost Property sale.

CAR GOES THE BEST WAY: A Rolls-Royce is shown being loaded at Dynon, last month, for trans port to Kalgoorlie.

AVOCA-ARARAT LINE TO BE RE-OPENED

AST month, the Government decided to re-open the 39 miles of line between Avoca and Ararat to shorten the route for goods hauled from the Mildura line and other Mallee and northern areas to Portland.

By linking Portland with the whole of the Mallee and northern Victoria, through Maryborough, ininstead of some point further north the advantage of a shortened rail haul will not be limited to the Mildura line, but will extend to goods consigned from most of the Goulburn Valley and the Balranald and Deniliquin lines in New South Wales.

Portland traffic grows

When the Avoca-Ararat section was closed in July 1959 as an economy measure, the export of oats through Portland had not developed and the line was judged purely on its local traffic, which was very small. Today, the picture is entirely different, with a large quantity of export oats being railed to Portland (see Oats Flow Chart on opposite page), and the Maryborough-Ararat line will once more become an important link in the State's railway network feeding Portland. It will be capable of handling all heavy traffic offering.

Exhaustive investigation had shown that the only real shortcoming of the present railway system serving Portland was the absence of a direct line from Maryborough to Ararat, which resulted in the hauling of big tonnages of export oats along the indirect route, via Ballarat, an extra 46 miles, as shown on chart opposite.

Freight concessions

The re-opening of the Avoca-Ararat section will be accompanied by extension of the present freight concession by which goods railed from Ouyen and stations beyond to Portland for shipment, are charged as though a railway existed between Ouyen and Patchewollock, a distance of 24 miles.

In future, the freight rates on all goods consigned from Litchfield and all stations beyond for shipment from Portland, will be calculated as though a railway, 21 miles long, existed between Litchfield and Minyip. In this way, primary producers will receive the benefit of lower freight charges without the State incurring the heavy cost of actually building a line between these points.

As can be seen from the Oats Flow Chart, only a very small proportion

of the export oats traffic passes through Litchfield.

Work started

It is planned to re-open the line in November, in time for the oat harvest. The first maintenance train carrying hundreds of new sleepers ran over the line on May 23, after

the track from Ararat to Ben Nevis had been prepared during the previous week. A considerable amount of track work and bridge maintenance must be completed before the line is re-opened. At Elmhurst (about half-way between Ararat and Avoca) an intermediate crossing loop will be put in.

STATION DIRECTION SIGNS



THE Department is erecting modern, attractively designed signs to direct people to suburban railway stations. Initially the signs are being used for stations with car parking facilities.

It was considered that municipalities would welcome the signs which are designed to persuade motorists to park their cars in the municipality rather than to drive through to the city. In this way, both the municipality and the Department would benefit.

Before the signs can be put up, permission must be obtained from the municipal council concerned and also the authority owning the pole (either the State Electricity Commission or the Council).

To keep down the cost, the signs were produced in quantity. It was therefore impossible to use individually designed signs—a design had to be adopted that generally complied with the wishes of the councils.

The scheme is now well under way, although a number of municipalities have still to be contacted.

FASHION EXPRESS WILL GO THROUGH FOUR STATES

N August a specially fitted-out train will take wardrobes of the latest in men's wear-and the male models to display themacross four States.

Commissioned from the Victorian Railways by the Men's Fashion Council, the train will run through Victoria, South Australia, N.S.W. and into Brisbane-a distance of

more than 5,000 miles.

Two former passenger carriages that were stripped of their seats and compartment walls for the Gippsland Industries Train (News Letter, March 1966) have been converted for mobile fashion displays. Each carriage has been given a new external skin of hard board panels, and the interiors have been redecorated in shades ranging from burgundy to rattan. The train will include a sleeper to carry garments and male models for parades on route, and a VIP carriage in which retailers and civic officials will be entertained. The entire four-State tour will occupy 14 days, covering 50 country towns and four capital cities, with overnight travel between the major stopping points.

The Fashion Express, designed to stimulate interest in men's wear wherever it goes, is believed to be the first project of its kind anywhere in the world.

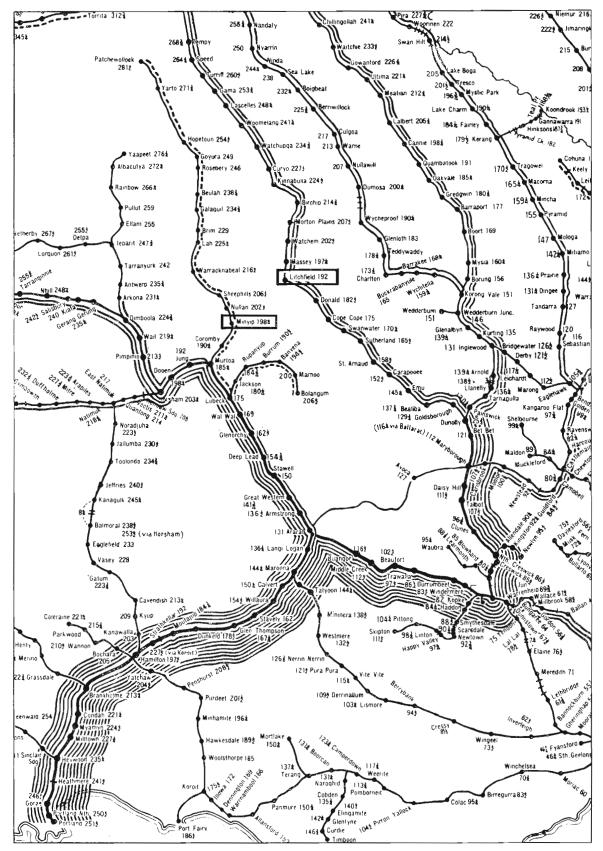
THIS WAS SERVICE

would like you to know how grateful we are for the kindness and helpfulness of the stationmaster and his assistant at Camberwell station.

On Anzac Day morning, my daughter was travelling to school and trapped her hand in the door of the train. The stationmaster comforted her, put her arm in a sling, and most kindly telephoned me to tell me what had happened. Fortunately, no bones were broken, but the child was frightened at the time, as well as hurt, and the stationmaster's reassurance, kindliness and helpfulness made all the difference to her.

It is very reassuring for those of us whose children regularly travel by train to have such evidence of humaneness as well as efficiency on the part of railways staff.

-Margaret Bowman, 18 Churchill Street, Mont Albert writing to the Commissioners



A "MUST" FOR PARENTS

who want a promising technical career for their sons, is a visit to the annual Apprentice Week Display at the V.R. Technical College, Newport.



During his inspection of the display at Newport Technical College, the Governor, Sir Rohan Delacombe, was interested in a demonstration of equipment testing by Apprentice Electrical Fitter John Vloedmans. (From left) Mr. G. F. Brown (Deputy Chairman of Commissioners), Mr. R. (Curtis, (Supervisor of Apprentices), Sir Rohan, and Mr. J. Kain (Principal of the V.R. Technical College).



A visitor, Mrs. J. Tainsh, has the operation of a spectrometer (used to determine the refractive index of a material) explained to her by (from left) Apprentice Fitter and Turner J. R. Barry and her son John, who is an Apprentice Electrical Mechanic.

At right is another interested visitor, Miss Lorraine Payne.

THERE they can see the many advantages of a railway apprenticeship—the wide scope offered by 31 trades from which to choose; the thorough instruction given to the youths, combining theoretical training in the College with practical work at the training centres; and the fatherly care that the Supervisor of Apprentices gives to the career of each lad. In addition, the high standard of skill acquired by the apprentices is made obvious by the superb craftsmanship in the displays, and the pride in their work shown by the apprentice demonstrators. And parents who have a son already apprenticed may discuss his progress with the in-

There are exhibits covering every trade, and apprentices may be seen at work in their manual training centres. This year's display at the College was inspected by the Governor, Sir Rohan Delacombe, and, altogether, it attracted over 2,600 visitors, including groups of first-year railway apprentices from Ballarat and Bendigo Workshops. It was open from May 10 to 12 until 9 p.m. each night.

In addition to the V.R. Technical College displays there were others by the Department in the Victorian Government Tourist Bureau window (Collins Street) and at shopping centres in Geelong, Ballarat and Bendigo. There was also an exhibit at Storey Hall in the Royal Melbourne Institute of Technology.

Indicative of the success of the displays are such comments as the following from the V.R. College visitors' book:

- "Impressed by the confidence and ability shown by the boys demonstrating." (J. Kepert, Chief Inspector of Technical Schools)
- "Very high standard of work shown, very impressed by the help given to visitors by apprentices and their ability to communicate with people." (B. Brown, ICIANZ Apprentice Training School)
- "Wonderful apparatus; guides and demonstrators—excellent." (Brother Bouchard, St. John's College, Braybrook)
- "An excellent grounding for future tradesmen." (E. J. Barker, Principal, School of Mines and Industries, Ballarat)



Mrs. E. Pleydell (left), a typiste in the office of the Supervisor of Apprentices, and Mrs. B. Downs, a typiste in the V.R. Technical College, obligingly pose against locomotive boiler plates that have been welded to an oil tank end.



At the conclusion of His Excellency's inspection, he was At the conclusion of His Excellency's inspection, he was presented with a writing pad and stand made by the apprentices. The presentation was made on their behalf by Robert Arklay (right), the V.R. Technical College's outstanding apprentice for 1965. (From left) Sir Rohan, Messrs. J. Kain and G. F. Brown. (The following evening, Sir Rohan presented to Robert a bronze medallion during the annual presentation of awards to the State's leading apprentices at Melbourne Town Hall.)

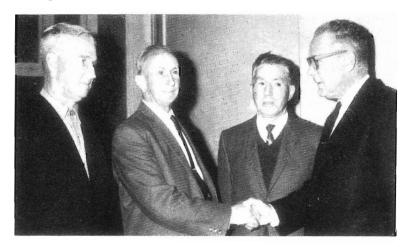


Members of the Advisory Council on Technical Education also inspected the display at the V.R. Technical College. (The Chairman of the Advisory Council is Mr. G. F. Brown, Deputy Chairman of Commissioners). (Left to right) Messrs. J. Kain, G. Thompson*, Acting Principal of the Royal Melbourne Institute of Technology; Mrs. H. T. McKern; Mr. R. Curtis; Mrs. V. E. Vibert; Mr. G. Barton*, Manager, Victorian Division, Bradford Cotton Mills Pty. Ltd.; Miss M. Cahill (V.R. Stenographer); Messrs. W. Chapman, Manager of Newport Workshops; J. Barker*, Principal of School of Mines and Industries, Ballarat; E. Boland, Apprenticeship Commissioner of New South Wales; H. McKern*, Managing Director of H. T. McKern and Sons Pty. Ltd.; J. Watson*, Manager of Training and Development, General-Motors-Holdens Pty. Ltd.; G. F. Brown*, J. Kepert*, Chief Inspector of Technical Schools; H. Beanland*, Principal of the Footscray Technical College; and V. E. Vibert*, of E. J. Vibert Pty. Ltd.

(* Member of the Advisory Council on Technical Education)

AMONG OURSELVES

Bendigo retirements



Bendigo North Workshops Manager Mr. F. F. Smythe farewells Messrs. Fred Roberts and H. W. Bradford (second from right). Mr. Roberts, who had 49 years service, was senior clerk at Bendigo for 17 years and was at Newport Workshops for a similar period. He is an enthusiastic bowler and angler, and, in his younger days, played football, cricket and A grade tennis. He intends to live at Rosebud. Mr. Bradford, a turner, started at Ballarat Workshops in 1918, and after 34 years there, came to Bendigo 14 years ago. He plans to remain in Bendigo. President of the Shop Committee, Mr. E. Sonneman, is at the left. (Bendigo "Advertiser" photograph)

Rotary honours apprentice

DOTH the V.R. Technical College's outstanding apprentice—Robert Arklay—and Ballarat's outstanding boilermaker apprentice—David Ewens—were dinner guests of Rotary during Apprenticeship Week, last month. Robert is at Newport Workshops and David at Ballarat Workshops.

Moe Council thanks V.R. man

TRIBUTES to the work of Assistant Stationmaster Lionel Gale, who recently retired after 26 years at Moe, were paid at a Moe Council meeting.

"I would like to thank Mr. Gale for the work he has done for the people of Moe; he has always been most co-operative", said the Mayor, Cr. E. Scott. Councillor A. McHardy said Mr. Gale had been a very good public relations man who had "lived up to the code of conduct set by the railways". "He is a citizen of whom we can all be proud", added the Councillor. Mr. Gale also received a letter of appreciation from the Moe Chamber of Commerce.

Farewelled by Mayor of Echuca

THE Mayor of Echuca, Cr. W. G. Elms, was among the gathering that farewelled Rail Motor Driver Jack Cedelland as he left on his last trip from Echuca before retirement. Mr. Cedelland became well known to many passengers during the 16 years he had been driving the rail motor between Deniliquin and Bendigo.

Film evening at V.R.I.

To launch this season's V.R.I. lectures, and following the popularity of the two previous years' programmes, another film evening will be held, entitled Even More Railways of the World. Like the others, it has been arranged by Mr. K. C. Findlay, of the Public Relations and Betterment Board staff, in conjunction with the State Film Centre, and will be presented in the V.R.I. ballroom on Wednesday, July 20, with two sessions—at 5.10 p.m. and 8 p.m.

Special arrangements have been made to overcome the acoustic difficulties that were experienced last year.

The non-technical family programme will run for just over two hours. The films, in the order of screening, will be: Trade Route of the Future (Australia), Federal (Railways (Brazil), The Little Train (West Germany), The Elizabethan Express (Britain), Railroaders (Canada), End of an Era (America) and Permanent Way (East Africa).

The Brazilian Railway film is the first from the Brazilian system ever to be shown in Australia. So popular was Last of the Giants last year that End of an Era—a memorial to the steam locomotives used on the logging railroads in the State of Washington-will be eagerly awaited for its first Australian public screening. Permanent Way, from the book of the same name, tells how the line from Nairobi to Port Florence was built in 1907. Sir Winston Churchill helped in the making of this film that concludes with a colourful scenic tour. The Little Train, the story of the Puffing Billy engine that ran away, is for the children, while Trade Route of the Future has been made available specially by 20th Century Fox. The British and Canadian films are award winners.



This group of apprentices were presented last month with prizes won for their work during 1965. In the centre of the front row are (from left): Messrs. J. Kain (Principal of the V.R. Technical College), R. M. Wright (Actg. Chairman, Staff Board) and R. Curtis (Supervisor of Apprentices).

To afford the maximum possible comfort to those attending, the Institute Council has limited the seats to 400 each session. Intending patrons should obtain their tickets as soon as possible and indicate which session is preferred. Allocation will be strictly on a "first come, first served" basis.

The usual supper will be provided at the conclusion of the 8 p.m. screening. Tickets can be obtained by either personal or written application to the General Secretary, V.R.I., Railway Buildings, Flinders Street.

Obedient dogs



Mr. Bell and Black Zee

NYONE who owns the sort of dog that chases cars and cats, gets into fights, and takes not the slightest notice of his owner's frantic shouts should join an Obedience Dog Club, says Welder J. H. Bell of Newport Workshops. Mr. Bell belongs to the Hobson's Bay Obedience Dog Club and, although he joined only last year, his dog-Black Zee—has won several trophies in club competitions, and recently won an open trial at Noble Park.

Obedience Dog Clubs (there are half-a-dozen in Melbourne) do not train dogs, Mr. Bell emphasises, as this is a costly and lengthy business, but they teach the owner how to train his dog. Mr. Bell's club holds classes in the reserve at the corner of Williamstown Road and Graham Street every Sunday at 11.0 a.m., and visitors are welcomed. These clubs, it must be pointed out, are definitely not interested in having a dog taught tricks.

At Bright



While on their honeymoon at Bright, Mr. and Mrs. Max Michel posed for this picture with Stationmaster Cliff Exelby. Mr. Michel works in the Metropolitan Superintendent's office, and Mrs. Michel has been a typiste at Dynon for the past eight years. Her father, Mr. N. Emmett, is in the foundry at Newport Workshops, and a brother, John, is an instructor in a Training Centre at the Workshops.

(Photograph; W. Larsen)

Fifth generation

ISS Bev Cameron, Punch Card Operator in the Accountancy Branch, who had a 21st birthday party last month in the Sunshine V.R.I. centre, comes from a family with strong railway associations. Her uncle, Mr. A. Maxwell, is a guard at Traralgon; her grandfather (now retired) was a ganger; and both her great grandfather and his father were also employed in the Way and Works Branch. Many railway friends were among the 100 guests who attended the party.

Mt Buffalo Chalet

wish to pay a compliment to the Chalet services from management level right down. As a visitor for many years I have always enjoyed excellent attention and kindness from the various managers and the staff. . . Mr. McIver and his good lady have done a magnificent job as far as the happiness of the guests are concerned. The old timers are met with graciousness we appreciate; and we particularly notice the kindness shown to new-comers . .

In my opinion, the food in the dining room has never been excelled and full credit must again go to the manager—then the chef and his kitchen staff . . The dining room supervisor and her team of waitresses are of very high standard.

The house—always spotless—has never been cleaner and our housey is a real gem. No little extra is too much for her, and the same spirit seems to be right through the house.

Being a regular horse-rider I am always interested in the condition of the horses and the stables. Both are first class . . .

-King Lloyd, 108 Noble Street, Newtown, Geelong, writing while at the Chalet, to the Superintendent of Refreshment Services

RETIREMENTS... RECENT

TRAFFIC BRANCH

TRAFFIC BRANCH
Sugrue, M., Melbourne Yard
Williams, R., Dandenong
Garland, B., Melbourne Goods
Hatton, G. N., Drouin
Rowe, J. H., Eendigo
Daly, J. F., Maryborough
Connell, J. F., Melbourne Goods
Holmes, B. M., Upper Ferntree Gully
Richardson, J. J., Dunnstown
Halsall, W. R., Euroa

ROLLING STOCK BRANCH

ROLLING STOCK BRANCH
Chamberlain, W., Jolimont
Cedelland, A. J., Bendigo
Gowland, H. T., North Melbourne
Steel, T. W., E. R. Depot
Geddes, N. J., Bendigo North
Scholes, A., Ballarat North
Roberts, F. C. S., Bendigo North
Mitchie, D., Jolimont
Lidemore, J. L., Newport
Beveridge, R., South Dynon
Ede, F. J., Jolimont
Tydeman, H. E., Jolimont
Orth, C. B., Newport Orth, C. B., Newport Bradford, H. W., Bendigo North Maguire, M. P., Ballarat North

WAY AND WORKS BRANCH; Jackson, A. C., c/o Foreman Plumber Kain, T. A., c/o R. F. Relaying (1) Blackwell, V. H., Nar Nar Goon Longstaff, G., Glenhuntly Hornbuckle, R. D., Bairnsdale Walsh, W., Flinders Street

ACCOUNTANCY BRANCH Elksnis, J., Head Office Nowakowski, T. M., Flinders Street McTaggart, (Mrs.) E., Head Office

REFRESHMENT SERVICES BRANCH Petersteirs, (Mrs.) E., Flinders Street

ELECTRICAL ENGINEERING BRANCH Woodford, H. H. R., Head Office

STORES BRANCH Fletcher, E. J., Jolimont Workshops

COMMERCIAL BRANCH Smith, E. C., Head Office

DEATHS . A N D

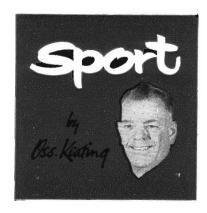
TRAFFIC BRANCH Dickson, G. E., Melbourne Goods

ROLLING STOCK BRANCH Michie, F. J., Newport Denman, J., Ballarat Hughes, C. M., Benalla Muir, G. M., Jolimont Schlemme, W. M., Jolimont Sage, A. C., Newport

WAY AND WORKS BRANCH;

Ganaway, L. A. L., Raywood Rocco, R., Spotswood Ewins, E. W., North Melbourne Melville, J. A., Geelong Dunstan, A. E., Head Office

STORES BRANCH Weate, A. G., Printing Works



Football

THE opening rounds of the 1966 season have been completed, and already it is obvious that Loco, last year's premiers, and Newport Shops are going to be strong contenders for the title. There has been a noticeable improvement in the play and ability of the Codon boys, and it is to their credit that they have again fielded a side. Suburban Lines have lost some of their experienced players and do not appear to be as strong as last year and, in my opinion, will have to improve somewhat to toss Codon for third place. Position of teams at the end of three rounds are: Newport Shops (12 points), Loco (8), Codon (4), Suburban Lines (nil).

Players are still required by Suburban Lines and Codon teams, and any railwayman who would like a game of football on a Tuesday afternoon should contact me at auto 2445 for further information.

Table tennis

SLOWLY, but surely, our Table Tennis Club is becoming a real force in the table tennis world. This fact is emphasized by the results achieved in the recently concluded Northern Table Tennis Association's competition. Teams. competed in the A Reserve, C2, D1 and E2 Grades and all, except the E2 Grade, made the finals. Pennants were won by the A Reserve team who, incidentally, went through the season without a defeat, and the C2 team. D1 were eliminated in the semi finals of their grade, and the fourth team E2 finished in sixth place. The A Reserve team of W. Laurie, B. Smart and M. Carroll should form the backbone of our interstate side in Perth, and, with the addition of some of our country stars, we should give a pretty good account of ourselves in this year's carnival. You will be interested to learn that six teams have been entered in this year's V.T.T.A. Winter Pennant Competition.

Golf

NCE again Australian Postal Institute were far too strong for us in the annual match played at Medway Golf Course this year, winning 16 games to seven with one match squared. It seems a pity that we cannot get some of our stronger players interested in this fixture, as it is a long, long time since we have had our name on the R. L. Edwards shield. By contrast the P. Water Cup, presented to the losers of the long markers match, seems to have found a permanent home in the V.R.I., and while this

useful trophy helps to fill a spot in one of our trophy cases I would much prefer to have the Shield on display once in a while.

Among the guests who attended this match were Messrs. A. Stephens (Assistant Director of Posts and Telegraphs), L. A. Reynolds (General President, V.R.I.), W. Walker (Secretary for Railways) and F. M. Mitchell (General Secretary, V.R.I.).

Carlton's railway recruit

N 1964, a 16-year-old Maffra lad was promoted from the local Third Eighteen to play the last three games of the season, including the first semi-final, with the Senior Side. Bill Bennett, junior clerk in the Accountancy Branch, was the lad in question, and in 1965 was a regular member of the First Eighteen, a top side in the strong Latrobe Valley League. In fact, so well did he perform, particualrly against Morwell, that Graham Donaldson, ex-Carlton champion and coach of that side, immediately advised his old team of Bill's ability. Towards the end of the season when Carlton visited Latrobe Valley and played a combined side from that League, Bill Bennett stripped with the Blues and did so well that he was invited to try his luck with them in 1966. Bill had no trouble in making the senior list at Carlton this year, and after playing the first game in the Reserves, has been in the Seniors for the last four games, playing in what is probably the toughest position on the field — full forward. Good luck Bill for your football future and a bag of goals (except, of course, against the



Rucks clash at the opening of the game between Loco. and Codon on May 17.





THE MONTH'S REVIEW

Super record

By the middle of last month, the Department had set a record for superphosphate carried in a single year—1,000,000 tons. This record was 60,000 tons greater than the amount carried during the whole of the previous financial year.

The growing use of superphosphate has placed a heavy demand on the railways. However, detailed planning, that included special trains during the peak between January and May, resulted in up to 10,000 tons a day being railed. It was sent to all parts of the State, many of the trains having a gross weight of over 1,000 tons.

The proportion of bulk to bagged superphosphate is expanding rapidly. Bulk storage and handling facilities at country sidings offered a quick and efficient method of supplying primary producers with superphosphate for use at the time it is needed.

Last history sold

THE last copy of the Victorian Railways official history was sold on June 23. The 6,000 copy edition has been completely sold out in three years. In fact, more than 5,000 copies were ordered before printing began.

Buyer of the last copy was Parcels Assistant Barry Taylor who works in North Melbourne's parcels office. Barry has been in the Department for five years and is studying for his A.S.M's certificate. Actually, this was the third copy he had bought. He gave the first one to the library at his old school—Glenroy High— and the second copy was bought for a friend. Barry is keenly interested in railways, and comes from a family with other railway associations, as an uncle, Mr. R. Upton, is a ganger at Flinders Street, and Barry's brother, Robert, is an Accountancy Branch clerk. (See centre pages.)

Basic wage

FOR every 10 cents rise in the weekly basic wage, the salaries and wages bill of the Department will increase by \$180,000 a year. To this must be added further increases in the costs of materials etc. bought by the Department.

Fined \$100

A youth was fined \$100 with \$16.50 costs, and ordered to pay \$147 damages in Sunshine Court on May 20, for breaking railway carriage windows and blinds. A witness said two youths boarded a train at West Footscray and he saw one of them break a window. At Sunshine they went to another carriage and he heard at least two other windows break. Another witness said he saw the defendant break the windows, and the youths pull down the blinds.

-(Sunshine " Advocate" 26/5/66)

Level crossing offences

A MONG the motorists charged with traffic offences during the Queen's Birthday week-end were 16 who failed to stop at a level crossing (while signals were operating).

Drove into train

A man who drove his car into a train at the Cohuna road crossing was fined \$5 with \$39.90 costs in the Kerang Court.

The motorist said he had not travelled on the road in the daytime before, and could not hear the train whistle because he had the wireless on, and only one window was down.

The train driver said he blew the whistle several times and when an accident was unavoidable, applied the brakes. . .

A truck driver who was driving behind the motorist said the latter had not applied his brakes until he was 15 to 20 ft. away from the train.

—(Kerang "News-Times", 31/5/66)

Failed to stop

In Hamilton Court of Petty Sessions, a van driver was charged with failing to stop his vehicle when there was a danger of collision with a train, and he was fined \$20 with \$6.70 costs.

The train driver said he sounded the siren as the train neared the crossing at 40 mp.h. but the van did not stop. He applied the emergency brakes and the train came to a stop just over the crossing; if he had not done this there would have been a collision. The van crossed when the train was about 12 to 14 ft. away from the crossing, he said.

—(Hamilton " Spectator ", 28/5/66)

Success of first apprentice

A PPRENTICES were first admitted to the railway workshops at Williamstown in 1860. The pioneer in this grade was Thomas Hale Woodroffe who subsequently became Chief Mechanical Engineer and also acted for a period as a Commissioner.

Spencer Street statistics

OME recent figures show that the average number of passengers using Spencer Street station daily is approximately 31,000, and the maximum at holiday peaks is in the region of 50,000. The number of trains arriving and leaving daily is 663, including 574 suburban electric trains and parcels coaches.

FRONT COVER

shows Mr. Purcell, Prince and Lassie on the job.

WHEN Prince, the last of the railway shunting horses "retired" from Ballarat Goods Shed on June 30, (News Letter, page 83), he left in a blaze of publicity that even Phar Lap might have envied. Not so much notice, however, was paid to Lassie, a black and white border Collie that has been Princes' inseparable companion for years. To anyone who watched the ton-weight Clydesdale shunt a wagon it appeared that Lassie really believed she had the brains, and Prince just had the brawn.

When the horse was brought from his stall at the rear of the goods shed, Lassie galloped excitedly alongside, almost under the huge hoofs. While his owner, Mr. Nick Purcell, hitched him to the wagon Lassie crouched in front with her eyes fixed intently on Prince. As the horse started hauling, she gave some short, sharp barks and dashed ahead to a position in front of where the wagon would be placed. Her barks seemed to say, "Stop here".

And when Nick patted Prince for a job well done, Lassie would jump up and insist on her share of the praise. True to her sex, she was very jealous.

Lassie was the idol of the goods sheds staff and the friend of everyone. But her belief that she was the master mind was just a happy canine delusion, because, said Nick, "Prince knew his job so well that he could probably do it without me".

....

ELEVENTH RAILWAY BALL

I T seems that the Railway Ball is becoming more popular than ever. For this year's ball, held on June 24, the entire Palais de Danse was booked out only a fortnight after the booking opened.

What might be called the theme of this year's event was Mt. Buffalo Chalet. Around the ballroom were posters, there was a life-size figure of a skier over-looking the scene, and,



prominently displayed, was the model of the plateau that is used for publicity purposes. Mt. Buffalo book matches and folders on the resort were distributed, and to judge by some of the patrons' comments as

they read the pamphlets, there should be some new faces at the Chalet this season.

Highlight of the ball was the Buffalo Shuffle, in which representatives of each branch, shod with skis, raced along the floor to where their partners were waiting in "sleds" which they hauled back to the winning tape. The prize, donated by the Commissioners, was a week's holiday at Mt. Buffalo Chalet.

In the official party were Messrs. E. P. Rogan (Commissioner), K. A. Smith (Commissioner, Commonwealth Railways), W. O. Galletley (Chief Mechanical Engineer), J. R. Rewell (Chief Traffic Manager), A. W. Weeks (Chief Commercial Manager) and their wives.

As well as the Palais band, the crowd enjoyed numbers from the Sonamatics, T. V. star Patti McGrath, and floor shows by the Olive Wallace Dancers.



At this Rolling Stock Branch table were: (left to right) Terry Coad, Lynette Jenkins, John Stone, Rob Watson, Rhonda Whitney, Rick Kuta, Jan Newton, Roger Denning, Wendy Sutcliffe and Mrs. Terry Coad.



Mr. Rogan starts competitors in the Buffalo Shuffle.



Mr. and Mrs. Graeme Fricke, winners of the Buffalo Shuffle, are presented with their prize by Mr. C. W. Pilgrim (Chief Inspector, Railways Investigation Division). Mr Fricke is a Storeman-in-Charge at Warragul.

WORLD'S FASTEST TRAIN

R G. F. Brown, Deputy Chairman of Commissioners, and Mr. A. J. Nicholson, Newport Workshops Superintendent, are abroad on an investigation of the latest developments in railway operation. Recently, they travelled in one of the Super-Expresses of Japan's New Tokaido Line—the world's fastest and most modern train service. Here are some comments from Mr. Brown.

Leaving Tokyo central station at 9.30 a.m. we travelled 320 miles by the Super Express *Hikari* to Shin-Osaka (New Osaka) station, at speeds of about 130 miles an hour. The journey took 3 hours 10 minutes, and the train arrived at exactly the scheduled time of 12.40 p.m.

Should this train run late, Japanese National Railways will refund the super-charge.

The main lobby of Tokyo's central entraining point for the New Tokaido Line is large—it handles up to 1,200,000 passengers daily—but there are very few seats for the public. An attendant (not on the railway staff) hires collapsible seats at 20 yen (about 5 cents).

From the taxi set-down point to the train, we walked about 200 yards, up two flights of 12 steps and a further flight of 38 steps—all with 8"-9" rise; as no luggage porters were available, we carried our bags. When seated in the carriage we were level with the third floor of the surrounding buildings.

In view of the unfavourable comments about the steepness and length of ramps at Spencer Street, we discussed this matter with J.N.R. officials and were told that ramps occupy too much space, and the escalators at each end of the platform were too slow and too far from the taxi entrance.

However, the comfort of our seats (although they are not as roomy as those in V.R. saloon carriages) was welcome after the walk.

Passengers on this train pay a first-class single fare of \$16.75 (Aust.) in two cars only, or a second-class fare of \$8.30 in 10 cars. No return tickets are sold and all seats are booked. The first-class fare is the same as the air fare but, due to the safety factor and time taken to travel from the city to the airport at each end, most travellers use this train.

The ride is most comfortable, because of the almost perfect track and the riding quality of the carriages. The only effect noticed at high speed was pressure on the ear

drums when travelling through the many tunnels.

Lunch and look

Lunch was served in the Buffet Car. Its counter was along one side of the car and the diners sat at a bench along the windows so that the passing view could be admired while they ate a tasty mean served by waitresses. This car was operated by a sub-contractor, *The Imperial Hotel*.

The carriages are of simple design, functional and yet attractive, with very wide windows and with effective air-conditioning provided by six roof-mounted units of *Toshiba* manufacture.

A noticeable feature was the public address system. Each announcement, preceded by a few bars of bell music, was remarkably clear, indicating that the communications equipment is of the same high standard that we have encountered throughout the J.N.R. system.

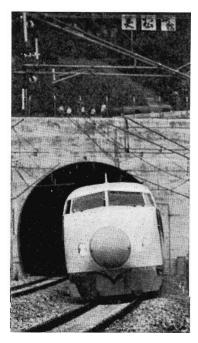
The journey itself was most enjoyable, with little noticeable effect from the high speed. The conductor and other staff were most courteous and polite and provided a very high standard of service.

In fact, as far as our visit generally is concerned, we have been given wonderful assistance by both railway staff and manufacturers.

SAFETY EQUIPMENT

The New Tokaido Line train's running equipment calls for extreme care and accuracy in manufacture and the use of special steels for such items as the axle box roller bearings.

The Japanese are fully aware of the results of a derailment, or of equipment falling from underneath the carriage, and take special precautions. For instance, equipment is provided at the leading end of the train to brush aside such things as sleepers or other obstructions. It is designed to partly collapse at the first impact, then the resistance of the buffer increases to the stage where



Hikari Super Express roars out of one of the 66 tunnels on Japan's New Tokaido Line

the obstruction is rolled clear. Rubber wiping stops are provided on the bogie frame to sweep away stones, dog-spikes, etc.

The line is completely fenced from end to end by a 5 ft. high chain wire fence with barbed strands above. There are no level crossings, and where bridges go over, similar fences stop any objects from being thrown on the trains.

TRACK

The track, using 110 lb. rail, has concrete sleepers with a special design of spring type clip; and long welded rails with expansion joints like point blades (see picture). The riding qualities are excellent, but considering the expenditure involved, only what one would expect. Due to drainage problems, speed

restrictions are in force (on the day we travelled, at five points) and big work forces are employed in improving the drainage.

The slopes of cuttings and many embankments are completely covered with concrete blocks to prevent slips. This is also done on the slope above tunnel entrances where special precautions are taken against slipping.

The J.N.R. research centre is busy testing a method of disconnecting the overhead power and thus stopping trains if an obstruction falls on to the permanent way.

Practically all the overhead poles are of concrete, quite light in design, and the overhead is very flexible—as it needs to be with a pantograph picking up its supply at the high speed of 190 ft. per second.

Wind and earthquakes

Safety measures also include wind measuring stations at 24 points; when the wind exceeds 45 m.p.h. the train speed is reduced. Seis-mographs are installed at the 25 electric sub-stations, and in the event of an earth-quake the power is cut off. (We are fortunate to live in a country where problems of excessive snow, typhoons and earth-quakes are non-existent. It certainly makes railway operation much easier.)

The whole length of the new line is under a C.T.C. system with an automatic train control (A.T.C.) which gives the train controller power to speed up or slow down trains (dependent on the position of other trains) and an overriding emergency control. The driver acts as a safety device in the event of equipment malfunction.

As one would expect, following the recent air disasters in Japan, there has been an upsurge of rail traffic between Tokyo and Osaka.

N.T.L. DRIVERS

The drivers are not responsible for the train inspection; therefore most of their shifts start and finish at the New Tokyo or Shin-Osaka station plarform, where sign-off facilities are provided. Rosters on this line provide that each driver works an average of 12 rest jobs per month, i.e. three per week. Rest barracks are provided at the main carriage sheds which are three to four miles from the station; drivers must arrange their own meals. Each driver is required to run as average of 530 kilometers (330 miles) per day but some rosters include a round trip to Osaka (320 miles x 2).



Special expansion joint for long sections of welded rail.

Thus the day's work could include a rest of one hour at Osaka and a run of 640 miles.

The driver's control consists of a 10-step throttle, and air brake which is normally used only for the final stop, but is capable of being operated in an emergency. A large speedometer with horizontal scale is mounted in front of him, and a second unit lights up to indicate the permissible speed in the section under automatic control.

Automatic control

The automatic control operates from track mounted equipment that relays signals to the master control panel. The driver has no control except to obey the indications shown on the second speed indicator as it lights up.

His task is to run at the indicated speed, and when he enters a section, he is warned by bell signals of any speed changes, although power is automatically controlled and the brake applied by A.T.C.

When approaching a stop the A.T.C. operates until speed has been cut to under 45 m.p.h. when the driver pushes a cancelling button and takes over the brake.

If he exceeds a section speed, power is cut off, and the brake applied to reduce speed to within the limits. At the same time, a cab signal is sent back to the main control room, through the A.T.C., informing the train controller of what has happened. The driver cannot get power again until he presses an acknowledgement button; train control then restores power.

A radio telephone is provided so that the driver can speak to control, as also is a train telephone so that he can speak to the conductor.

The driver, although he has no visible signals to see, calls back each indication given by the A.T.C. as do all the drivers on the suburban system. These drivers call each signal as it comes into view.

In the cab of the Super Express, there is no sensation of high speed, but when standing alongside the track as the train passes at 130 m.p.h. one fully realizes the magnitude of the engineering feat the Japanese railway engineers have accomplished and the value of all the preliminary research done over the years before by the Japanese National Railways research centre—an organization that certainly makes the most of its annual budget.

The drivers and other train crew wear a smart, grey uniform modelled on that of an aircraft crew, and are spotless.

Wages

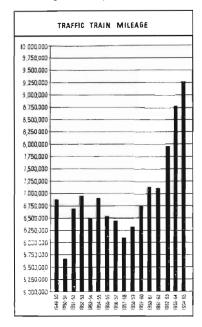
The wages of a driver are made up of a basic rate of 40,000 yen (\$A100) a month plus a bonus (paid twice yearly) equal to \$A50 a month, the two making a total wage of \$A150 a month, based on a six day week. He is not paid any extra for rest jobs, but, as mentioned earlier, good standard accommodation is provided free. No meal allowance is paid, he buys his food from the canteen.

The job of driving this crack train of Japan is much sought after by enginemen, and there is a waiting list of applicants, who are given a stiff examination and also psychologically tested for high speed operation.

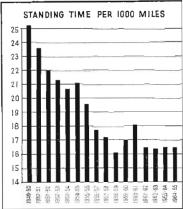
GROWTH OF EFFICIENCY

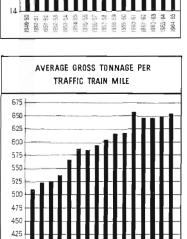
THESE graphs show the increasing efficiency of the Victorian Railways, particularly since 1957-58, except for 1961-62 when performance was severely hit by the long "regulation strike".

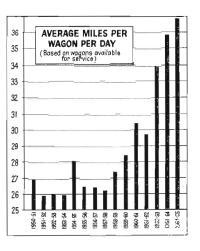
A major factor in these improvements is the use of diesel locomotives with their everage speed of 22 m.p.h. against 11 m.p.h. of steam stock. Another is the extended use of bogie vehicles; when all 4-wheelers have been replaced by these vehicles

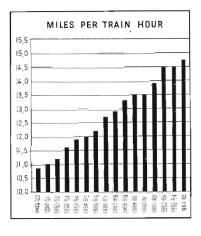


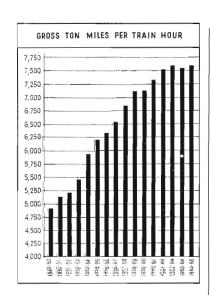
railways will be able to handle the ever increasing tonnage offering, more efficiently and economically.











WHISTLE WORKS BARRIERS

980 1981 1981 1981

THE electronic Whistle Detector designed and introduced by New Zealand Railways in 1963 to operate signals and level-crossing barrier installations has aroused interest in many overseas countries.

Inquiries for information about the device have been received from Britain, Australia, Denmark and other countries, said Mr. I. D. Stevenson, Superintending Engineer, Signal and Communications, New Zealand Railways, in a recent address to a conference of the N. Z. Institution of Engineers.

The Whistle Detector picks up the sound of a locomotive whistle, and converts it into electrical energy to operate starting signals, lower level-

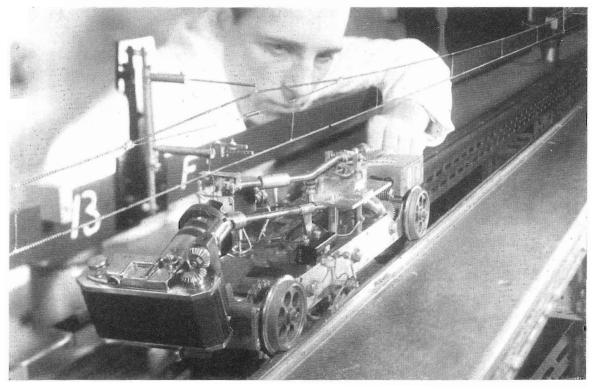
crossing barrier arms, and actuate warning-device bells and flashing lights.

The system used advanced electronic and transistorised equipment, and was designed to overcome difficulties at road crossings where trains made many shunting movements near the crossing, but did not all have to cross the road, said Mr. Stevenson.

The device had been installed at Plimmerton, near Wellington, and at Queen Street, Levin, and it was planned to install several in the Auckland metropolitan area.

Further installations were being planned for awkwardly situated crossings in other parts of the country.

LINES FROM OTHER LINES



The model train at the research laboratories.

"Toy" train for research

T the research laboratories of British Insulated Callender's Cables Ltd., (England) a 1/33 scale model of an overhead line system is used to investigate the problems of using overhead wires to supply power for railway traction.

The equipment is dynamically similar to that used on actual locomotives and permits quantitative study of pantograph trajectory, contact pressure and loss of contact at model speeds up to an equivalent of 140 miles per hour.

The trolley also includes a camera for recording pantograph trajectory.

Port Pirie Bogie Exchange

THE Port Pirie bogie exchange is now moving well over 4,000 tons of freight a week, with an average of 25 wagons being handled daily, seven days a week. Early this year the daily movement of wagons to western destinations averaged only 16 a day. Back loading is growing in volume, particularly of timber and potatoes (in season).

Ant proof station

NHE new railway station at Cloncurry, Queensland, opened on April 5, was designed and built to be termite proof. There is no natural timber anywhere in its construction, even the counter tops are formed from a termite proof, compressed pulp board. The building is of light steel frame construction on a concrete base. The walls are sheeted externally with ribbed aluminium, while the roof is of steel deck covered with bituminous fibreglass membranes. Thermal insulation in the ceilings and the external walls will help to keep the interior reasonably cool throughout the year.

TV eliminates signal box

THE installation of closed circuit TV in a signal box at Wickham, near Newcastle, N.S.W., will eliminate the need for a signal box at another location, halfa-mile away. A special TV camera installed at Railway Street will scan the vehicular traffic approaching the level crossing, beaming the picture back to the signal box at Wickham, from where the signalman will control the Railway Street half-boom

barriers and flashing lights. This is the first of its type installed by the NSWGR, but could be the forerunner of other similar installations.

100 m.p.h. in Britain

BRITAIN'S fastest rail services—with trains reaching 100 with trains reaching 100 m.p.h. -were introduced on April 18 on two main routes linking London with the cities of Manchester and Liverpool in north-west England.

The new services mark the completion of the major part of a \$413 million modernisation scheme by Rail's London Midland British Region.

Luxurious, air-conditioned, highspeed coaches are hauled by Britain's most powerful 80-ton locomotives. Developing 6,000 h.p., they average 74 miles an hour over the 190-mile routes, cutting the journey times from 3 hrs. 10 min. to 2 hrs. 35 min.

Some of the new 470-ton trains consist entirely of Pullman luxury coaches with sleeping cars, but all offer dining car or cafeteria services. Rubber-cushioned suspension reduces transmission noise, and the new track's continuous welded rail gives a smoother ride.

July 1966 103



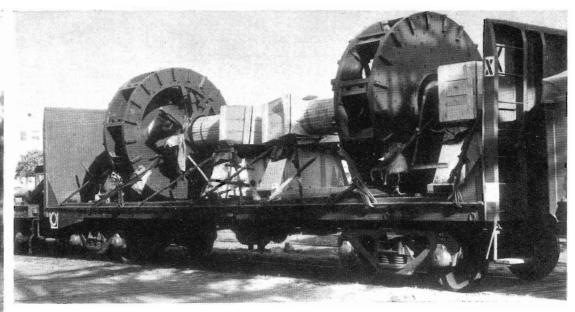
FIRST TRAIN to travel on the Ararat-Avoca line in connexion with the re-opening, was this work train. Its driver was Mr. R. A. Blachford who is also Mayor of Ararat. The train carried sleepers and other material for reconditioning the line. (See last month's News Letter)

(Photograph: Ararat "Advertiser")

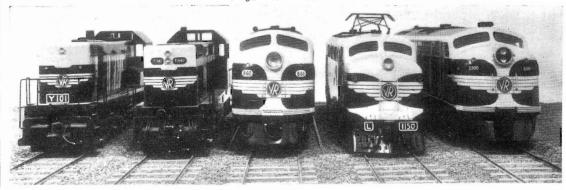
RAIL PICS

LAST COPY OF HISTORY: Buyer of the last copy of the V. R. history, Parcels Assistant Barry Taylor, examines his purchase while Junior Clerk Ron Howes prepares to write a receipt. (See page 98)



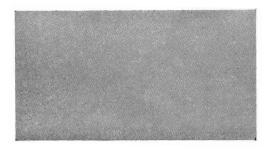


SHAFTS for a mill to pulverise brown coal at Hazelwood Power Station await dispatch at Melbourne Goods. They weigh 17 tons each.





LOCO LINE UP: So realistic are these models of V. R. locomotives, that more than one glance is needed before it is realized that they are not the real thing, but 1/12th scale miniatures. They are used in Departmental displays.



MANNEQUIN OF THE YEAR: Anna Lengo, who, last month, was awarded the silver trophy for Mannequin of the Year, has been one of the models used in V. R. publicity. Anna is shown with Max Hordern, posing for a publicity shot in the carriage used for the Melbourne-Canberra service. (See News Letter, page 42, 1965)

AS OTHERS SEE US

THE following article, reprinted from a recent issue of the N.S.W. – published *Manufacturers' Monthly*, gives what might be termed an onlooker's view of the Victorian Railways.

Second biggest money-earner of Australia's seven railway systems, the Victorian Railways is both one of the most complex and most interesting.

With the highest route mileage (4,211) per square mile of area, it has the most integrated network; thus, on the face of it, the ability to provide services more comprehensive than most other systems might offer.

The close spacing of its lines, however, although of immense importance in the State's early days of development, lost much of its value with the arrival of commercial road transport.

Unhealthy growth

In a climate of short-haul freights ideally suited to its needs, road transport inevitably has flourished.

But, in part, it has been an unhealthy growth somewhat rashly stimulated by a government that permits road hauliers, on payment of a nominal \$4 fee, to carry a wide range of commodities and livestock in unbridled competition with its own railways.

No other Australian railway system is subjected to such political indifference as is the Victorian.

For instance, it does not enjoy the regulatory ordinances such as are imposed on road hauliers by N.S.W., especially on the longer hauls.

This has resulted in a tragic overcapitalization of the transport industry, since there is insufficient rraffic available in Victoria to sustain two long-distance transport systems.

The Victorian Government's 1964 Railways (Funds) Act, requiring the Railways to meet interest charges on loan funds, has set the system on a course in which heavy overcapitalization will soon impose a crippling interest charge in railway accounts.

While the existing basis of providing funds continues, approximately \$500,000 will be added progressively to charges each year.

Despite these impositions, however, the Victorian Railways retains the inventiveness and resource that have characterized it from early days.

Like those of all States, excepting Queensland, the Victorian railways

were founded by private companies, no fewer than eight separate bodies being involved—all but one reaching the stage of operating trains.

State ownership dated from March 1856, when the Legislative Assembly bought out the first private company—the Melbourne, Mount Alexander and Murray River Company.

Two years earlier, the Melbourne and Hobson's Bay Railway Company gave Victoria the nation's first steam-hauled train. This operated on a 2½-mile line from Flinders Street to Sandridge (now Port Melbourne).

" Firsts"

Since then the System has had some other notable "firsts".

It was the first to introduce railwelding in Australia; first to introduce electric trains (Essendon to Sandringham, in May 1919); first to introduce air-conditioned trains on main lines services operating from a capital (Spirit of Progress, Melbourne-Albury, 1937); first to convert to standard gauge following the recommendations of the Rail Standardization Committee in 1956 (Wodonga-Melbourne, 1962); first to convert all freight vehicles to automatic coupling; and first to introduce bogie-exchange techniques, to give through running for interstate trains.

In Melbourne's \$5m Goods Yard now taking shape, it is also planning to give Australia its first hump marshalling yard.

Although the Victorian and N.S.W. Railways have Australia's only electrified systems, the former, handling heavy brown coal traffic on the double-track electrified line from Morwell to Melbourne, makes greater utilization of electric motive power for freight-getting purposes.

The Underground

Unlike Sydney, however, it does not possess an underground railway.

That a city the size of Melbourne is still without one is due to the vacillations of a government strangely reluctant to exploit the advantages of its own transport system, a reluctance implicit in a recent statement by as unlikely a champion for the railway cause as the Road Passenger Service Operators' Association.

It said: "We advocate that it is now imperative that the State must sell the public of Victoria on the commonsense economics of spending 50 million-odd pounds required for Melbourne's underground and provision of additional express tracks to the city.

"As an Association, we would urge the State Government to cut down the freeway complex and to develop these railway improvements as a comparatively cheap and expedient solution to road and parking congestion."

The Victorian Railways, like the South Australian, is built basically to the 5ft. 3in. broad gauge and, like all other Australian Railway systems is working to a programme of replacing steam by diesel-electric motive power.

Unlike other systems, however, its destinies are controlled by not one Commissioner, but three.

Traversing mostly flat country, the ruling gradients are most favourable for railway working but, compared with other mainland States, the routes are short, the longest trunk lines being Melbourne-Mildura (351 miles); Melbourne-Serviceton (287 miles); and Melbourne-Albury (190 miles).

Wheat—from the Wimmera and the Mallee—is by far the largest single freight and, measured in tons, is followed by briquettes, artificial manures, cement, coal, iron and steel.

Last year the Victorian Railways moved a record tonnage of freight traffic—12.5m tons, an improvement of some 460,000 tons on the previous year's figure.

Earnings, at \$100.3m, were also a record and up nearly \$8m on the figures for 1963/64.

Passenger traffic dropped by some four million journeys to 151m, a trend experienced by railways the world over.

It is interesting to note that the combined passenger journeys of the Victorian and N.S.W. Railways, the only two providing electrified services in their capital cities, amounted to 412m last year—over 88% of the total passenger journeys recorded by Australia's seven railway systems.

V.R. ENGINEER AT TASHKENT

NIR. L. C. Rolls, V. R. Superintendent of Locomotive Maintenance, together with Mr. C. A. Clough, Superintending Engineer, Commonwealth Railways, represented all Australian railway systems at a recent Seminar and study tour, on Railway Diesel Locomotive Operation and Maintenance, in U.S.S.R. The Seminar, organized by the United Nations Bureau of Technical Assistance Operations and the U.S.S.R. Government, was held at Tashkent.

Topics discussed at the Seminar included:

- general review of transport developments in the Soviet Union;
- operation and maintenance of diesel locomotives, with special reference to the Middle-Asia Railway of the Soviet Union;
- reclamation of diesel locomotive parts;
- experience in operation and maintenance of diesel passenger trains;
- safety measures to be observed in operation and repairs of diesel locomotives;
- organisation and administration of repair facilities for diesel locomotives.



Mr. Rolls at Tashkent Seminar

Following the Seminar, a study tour covered locomotive depots and other installations at Tashkent, Samarkhand, and Leningrad; and the railway scientific and research institute, experimental circular railway and Central Locomotive Department

in Moscow.

On the return journey, Mr. Rolls travelled through West Germany and U.S.A., investigating the latest developments in those countries in diesel locomotive operation and maintenance.

PORTLAND



Caption on this early photograph reads "Portland Express nearing tunnel", but no date is shown. The picture appears to have been taken about forty years ago.

APPRECIATION ..

East Malvern

had the misfortune, on June 1, to lose my newly purchased monthly ticket. This was reported to the Lost Property Office at Spencer Street, who arranged to have the carriage checked in the yards and then telephoned me to advise that the ticket had not been found. On the way home I reported this to the East Malvern Stationmaster, who supplied all the information about the procedure for replacement. I had only been home a few minutes when the Stationmaster rang to say that the ticket had been handed in at Flinders Street, and was being sent back to East Malvern.

Shepparton

N 20/5/66 I escorted my blind wife to Shepparton on the 8.15 a.m. On arrival I inadvertently handed in the wrong half of my ticket.

On the return journey, I discovered my error, and approached the booking clerk. He referred me to the S. M. who, in a matter of minutes, issued me a ticket. I appreciated this act which was carried out with expediency and the utmost courtesy. –C. F. Usher, 1301 Nepean Highway, Cheltenham, writing to the Secretary

S.O.P.

AVING just returned from a very pleasant holiday in Ausralia, I wish to compliment you on the very comfortable journey my wife and I had on Spirit of Progress... We have travelled on English and Continental railways and have found your service quite comparable with them . . .

-A. McGregor-Torpy, 26 High Street, Rotorua, New Zealand, writing to the Secretary

I should like you to know how much we appreciated the attention given us both by the conductor and hostess on Spirit of Progress when returning from Canberra on May 21. Nothing was too much trouble for them. My sister was far from well, and the conductor not only secured us a "Red Cap" for our luggage but also got a taxi to come to the gate nearest to Car 13 which was the one in which we travelled, occupying berths 3 and 4.—Marion Shedden, 36 Vincent St., Glen Iris, writing to the Chairman of Commissioners

Southern Aurora

N May 14 I travelled from Melbourne to Sydney on Southern Aurora, returned by the same service on May 21, and received splendid courtesy and attention from train conductors and staff on both occasions. On the run from Melbourne to Sydney I travelled I am sure, in car 15, berth No. 2, and on the southern run in car 2, berth 2.

Mr. and Mrs. J. R. Berry of Hobart also travelled on the same train on May 14, and returned southward on the daylight train on the 27th. They also advised they were most

happy about the service which they received.

—H. G. Harcourt, 12 Nutgrove Avenue, Sandy Bay writing to the Chairman of Commissioners

Berrybank

YOU probably know of the excellent state of the Berrybank railway station near here. I think your stationmaster is to be highly commended for the trouble he takes with the gardening and general tidiness of the place.

-W. T. Rowe, Naringal, Private Bag, Cape Clear, writing to the Commissioners.

NEW POSTER



Loaded with bargains, this lady has appeared on suburban station poster boards, to stimulate off-peak travel.

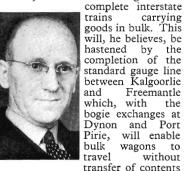
OURSELVES

Rushworth

R. M. J. H. Clark, Silvan Road, Monbulk, writes to say that the engine shown arriving at Rushworth, in the May issue (p. 69), was H 150 which, he says, was sold by the Department to the Trawalla and Waterloo Tramway on 31.5.1909 for \$1200. Mr. Clark was an apprentice at Newport Workshops when the engine came in for overhaul, prior to its sale.

Packaging expert

OOKING into the future, Mr. E. C. Smith, who recently retired as Senior Packaging Officer, forecast increasing use of



Mr. Smith

Mr. Smith has had a lifetime's experience in claims work and packaging. Starting as a lad porter in 1916, he worked at Wonthaggi and some suburban stations before transfer as a clerk to the Claims Division at Head Office in 1920. Later, he became a licensed shorthand writer, a qualification that was useful to him during the second world war when he was on loan to the Commonwealth as secretary to the Manager for Aircraft Servicing.

Returning to the V.R. in 1946, he was placed with Mr. H. Fleming of the Claims Prevention Section. The Section began to make extensive use of cameras to bring home the necessity for correct packaging of goods to prevent damage in transit. In 1960, following Mr. Fleming's retirement, Mr. Smith took over control of the Section which by then had been strengthened to six Packaging Officers and two clerks. During the next five years he was in control of experiments made to improve the handling of bulk and palletized loads. Other developments with which Mr. Smith was concerned led to the construction of special wagons for the transport of such goods as building board and electric transmission cables.

Senior Packaging Officer

R. D. Kellond, who succeeded Mr. Smith as Senior Packaging Officer, joined the Claim's Agent's Office as a junior Clerk in

1937. During the second world war he served with the 2/4 Commando Squadron in Timor, Tarakan and other areas of the south-west Pacific.

On returning to the Department, he resumed duties in the Claims Division. In 1955, Mr. Kellond was appointed to what was then the known as Claims Prevention



Mr. Kellond

Section—afterwards called the Packaging Section. Later, he was appointed Assistant Senior Packaging Officer.

When away from packaging problems, Mr. Kellond likes to relax with gardening problems. Some years ago he played with the V.R.I. hockey team.

Movie maker

the

without

between all main-

land States.

ILM producing is the hobby of 18-year-old Apprentice Boilermaker Frank Farrugia of Newport Workshops. Interested in film making since he was a boy, Frank has made two films-King of Kings and The White Rose-and, at present, is working on a third, Cleopatra. The King of Kings is the traditional story; the White Rose is an Arabian-nights style story for which Frank also wrote the film script. It runs for about 15 minutes. Cleopatra, in colour, will run for an hour. For it, he obtained the Footscray Council's permission to film some sequences in front of the town hall, where the imposing Corinthian columns made the background needed. Frank's brothers and sisters fill the main roles, and boys from his brother Leonard's school class act as extras.

Frank's equipment is simple and inexpensive, but the sets he uses show both industry and ingenuity. In miniature, he produces a castle, a ship at sea and so on. Working in life size, he turns a magician into a tree as convincingly as any other film producer.

Critics who have seen Frank's work say that it is technically good and his stories maintain a pace and flow of ideas that hold the interest. Channel 2, which has seen one of his films, has encouraged him to continue.

R.S.L. presidents

TWO railwaymen were recently elected to important offices in the Returned Servicemen's League. Mr. W. Johnson, Storemanin-charge at Ballarat North Workshops, was elected president of the Ballarat Sub-Branch, and Mr. T. Davis, a carpenter at Ararat Works Depot, accepted a second term as president of the Ararat Sub-Branch.

Apprentice honoured

THIS year, the Australian Welding Institute has awarded its Apprentice Opportunity Award to V.R. Apprentice Boilermaker John Arthur Clarke. This award is made to the "outstanding apprentice who has shown particular aptitude and skill in subjects related to welding ".

John is in the Steel Preparation Shop at Newport Workshops. Under the terms of the award he will be a guest of the Australian Welding Institute at the National Welding Convention to be held in Brisbane during September. It is interesting to note that John's father (now with the Country Roads Board) completed his apprenticeship with the V.R., and his grandfather, the late Norman Victor Clarke, was also an apprentice in this Department, and retired as a foreman boilermaker.

Wounded in Vietnam

TATIONAL serviceman Private Leslie Keith Hyatt, a trainee engineman from Ballarat East locomotive depot, has been wounded in both legs by mortar bomb shrapnel and has undergone an operation in a Vietnam hospital. He joined the railways in 1962.

\$50 a block

S OME interesting memories of Dandenong in the 'thirties were recalled by Mr. Roy Williams who retired recently from Dandenong station, where he had been in charge of the goods shed for the past 11 years. In 1932, he said, Dandenong was just another sleepy country town of ancient shops surrounded by open plains and patches of scrub. Blocks of land could be bought for \$100 to \$200. Dandenong West was then a swamp, and blocks in that area sold for \$50. Mr. Williams joined the Department in 1917. His first station was Castlemaine, and, after experience at a number of other stations, he transferred to Dandenong in 1932.

Mr. A. W. Chapman, who retired last month as clerk at the District Superintendent's Office, Seymour, joined the Department in 1918. During the first couple of years he was off sick for a week, but had not lost a day's work through illness in the ensuing 45 years. Mr. Chapman had been at Seymour for 32 years except for a period in the 'thirties when he was on loan to the Chief Secretary's Department. The picture shows a tea break during the well atended farewell presentation to Mr. Chapman. (From left) Messrs. R. M. McLeod (Block & Signal Insepctor), H. J. Lardner (Traffic Inspector), A. H. Goudie (Stationmaster, Nagambie), R. F. Evans (Loads Clerk), and A. W. Chapman.

Oldest reader?

A N inquiry for his copy of News Letter was recently received from Mr. C. Lyon of Montrose, who at the time of his retirement, 35 years ago, was an upholsterer in Head Office. As Mr. Lyon will be 100 this

year he must surely be the magazine's oldest reader.

Greyhounds and gardening

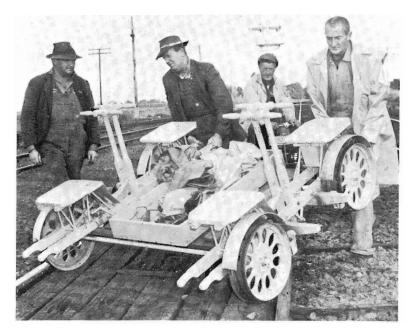
TWO hobbies will help to keep Mr. Jack Greenwell a "young 65" in his retirement; they are gardening and training his two grey-hounds. The long training walks not only keep the dogs in good trim, he says, but also their owner. Mr. Greenwell joined the Department in 1918 and has been at Stawell for the past 39 years. He was in charge of the goods sheds at the time of his retirement, last month. Mr Greenwell is also a well known member of the Ararat City Band in which he plays tenor horn.

South Dynon Diesel Shop



Mr. F. Boadle, Chief Foreman (left) makes a presentation to Mr. R. Ashton who recently retired from S.D.D.S., after 21 years as a fitter at that location. Before that, Mr. Ashton had been at Seymour for 22 years after completing his apprenticeship at Newport Workshops. In the background are Messrs. E. McGregor (left) and H. Field.

At Bungaree



Track gang No. 4 about to leave Bungaree for work at Wallace. (From left) Ganger A. Hateley, Repairers L. D. Maher, A Ryan, and J. Hartigan. Repairer M. R. Meade who is also in the gang, was on leave when this photographwas taken.

TALKS

ABOUT BOOKS

In the secret agent field, Simon Harvester is a respected name. He has an intimate knowledge of the East and Near East, his stories are usually unsensational but gripping, and his characters are the sort of people one meets every day. He has two recent titles worth watching for: The Assassin's Road and Shadows in a Hidden Land. The former is an authentic-seeming story of espionage in the Middle East, with a good tense plot, a likeable hero and a couple of humorously ineffectual agents, as well as the villains of the piece. His second book takes a most unusual area for its locale - Sinkiang, the site of the Chinese nuclear bomb tests. Harvester writes well, his knowledge of the East shows through in many ways, enabling him to write on this occasion, a very believable story of a scientific expedition's trek through this harsh country. The clashing personalities of the members of the expedition, murder and blackmail, all make the task of the secret agent hero that much more difficult.

A new author, again writing in the realistic-authentic vein is Dominic Torr. Diplomatic Cover is his first title, and it's written around the Cold War in Europe. Although the author is an Englishman, his characters are American and Russian. All are sympathetically drawn, and I think this one could prove at least as popular as The Spy Who Came in From the Cold.

Modesty Blaize by Peter O'Donnell has arrived at last. Modesty, according to publishers and some reviewers is a female James Bond—what could I add to that? I don't agree, but a lot of readers will enjoy this—Modesty is certainly not the sort of girl to tangle with.

A Covenant with Death by Stephen Becker has been compared with Anatomy of a Murder. It is to be filmed, and is a Book of the Month Club choice. Very well written, this will be popular, particularly with those who enjoy court-room scenes.

Skinner by Hugh C. Rae, the cruel, sordid story of a pathological killer is almost a social document rather than a thriller. It will not appeal to everyone, being written in the present tense, and in the first person, but each chapter records the story of a different person. It is not the easiest book to read but, once read, it may be hard to forget.

RECENT RETIREMENTS...

TRAFFIC BRANCH

O'Brien, O., Melbourne Goods Wakefield, H. H. Werribee McCaskill, W. T. P., Spencer Street Lowcock, L. G., Melbourne Goods Gilliland, H. C., Spencer Street Greenwell, J. F., Ararat Gallagher, H., Melbourne Goods Webb, R. H., Essendon Lyon, K. A., Telegraph Office Chapman, A. W., C/- D. S. Seymour Thomas, F. E., Caulfield Group Griffin, E., Hamilton Lawless, S. E., Bungaree Bazgas, J., Dynon Arblaster, C. H., Shepparton Smith, L. W., South Dynon Dow, C. A., Melbourne Goods Le Roy, A. L., South Yarra Berlowitz, H. G. D. Cheltenham

ROLLING STOCK BRANCH

Van-os, H., Newport Le Lock, L. N., Bendigo North Maksymow, M., Jolimont Hansford, W., Bendigo North Smart, H. E., Traralgon Giordano, G., Newport Kenny, F. J., Newport Ashton, R., South Dynon Brick, P., E. R. Depot Oxley, W. G., Newport Wilsmore, L. A., Jolimont Feaver, A. W., Ballarat North Marsh, J. E., North Melbourne Peacock, G. F., Newport McDonald, C. J., Newport Davey, T., Hamilton Thompson, H. W., Bendigo North Duniam, H., South Dynon

WAY AND WORKS BRANCH

Simpson, H. J., Bendigo Presser, J. G., Barnes Dix, E. J., Nowa Nowa Rust, F., Special Works Thirkell, R. R., Special Works Neal, F. E., Maryborough Hornbuckle, R., c/o R. F. Sale Longstaff, G., c/o R. F. Caulfield

STORES BRANCH

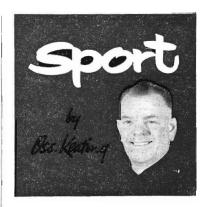
Robson, P., Spotswood General Storehouse Rawson, M. J., Head Office Willison, R. A. Printing Works

...AND DEATHS

TRAFFIC BRANCH Smith, W., Melbourne Goods

ROLLING STOCK BRANCH Donnelly, T. S., South Dynon Pope, L. J., Newport Muspratt, G. E., Newport

WAY AND WORKS BRANCH Coates, J. A., Korumburra Hill, H. O., Special Works Melville, J. A., c/o R. F. Geelong



Basketball

WELL, it was our turn this year to be hosts to our South Australian friends during the Queen's Birthday week end, when the annual Interstate basketball matches were played. Arriving by The Overland on Saturday morning, the visitors were welcomed by our General President, Mr. L. A. Reynolds, while they had breakfast in the Spencer Street Refreshment Rooms. The visitors were free on the Saturday afternoon, so we gave them an opportunity to have a look at some real footy. Our club was host to the visitors at an informal function in the evening.

On Sunday, we got down to the serious business of the week end and arrived in Geelong in time to begin the mens' match at 10.30 a.m. This saw the Vics. winning the Council Shield by five points in what was a most interesting, tough, and, at times, fiery game. Final scores were:—Victoria 38, South Australia 33. Top scorer for Victoria was Ron Smith who netted 26 points; and for South Australia, Ray Elliot with 13 points. Mel Boyd of Bendigo, was judged best on court by the referees.

The girls' game began at 11.45, and it was soon evident it would be a repetition of last year's, for the taller and stronger South Aussies gradually got on top and ran out winners 42 points to 31. Sue Bruderick starred for South Australia and was bset on court, while Joan Thurgood, who literally played herself into the ground, was the best of our girls.

A barbeque lunch at the Geelong Institute and a trip around the Bell-arine Peninsula completed an eventful day.

On Monday, the men's match was played at the Showgrounds courts and resulted in an easy win for the Croweaters, 46 to 27, with Ray Elliott really burning, scoring 27 of the 46 points and easily the best afield.

The Flagstaff Gardens courts were the venue for the second of the girl's matches, and again S.A. was too strong, particularly in the first half. The final scores were South Australia 36, Victoria 27. Best on court in this match was Michie Szujda, of Victoria, who turned in a first class performance.

At a farewell dinner in the Spencer Street Refreshment Rooms, prior to departing for home on *The Overland*, trophies won over the week end were presented and the visitors were farewelled by Messrs. L. A. Reynolds, F. McCloskey (V.R.I. Councillor), and E. Huber (President of the V.R.I. Basketball Club).

Messrs. L. McLean, E. Stephens (S.A.R.I. Councillors) and W. Dunbar (General Secretary, S.A.R.I.) suitably responded.

We hope our visitors enjoyed the week-end arranged for them and I would like to thank all those who assisted us over this period. In particular, our special thanks to Bob McHenry, (Hon. Secretary, V.R.I. Geelong), Ernie Huber and the boys and girls of the basketball club, and the manageress and staff of the Spencer Street refreshment rooms.

Athletics

A BOUT 12 months ago, I wrote an article in News Letter about the running ability of young Accountancy Branch clerk Kevin Seers. Well, if you have a little black book and you jotted down his name, then you should have had a rather profitable Easter, because once again Kevin proved himself one of the best middle distance runners in the professional ranks by winning the Victory Mile at Stawell on Easter Saturday night. As I said last year, this lad's potential is unlimited, and it will be interesting to see how far he goes in the next 12 months.

Rifle shooting

THE annual interstate shoot for the Trigg shield and the Kirkwood trophy was held on the Cannon Hill Rifle range, Brisbane, last month, with three states—, last month, with three states—. Queensland, New South Wales and Victoria—competing. The team event was won by N.S.W. with 392, followed by Queensland 388, and Victoria 377. The Kirkwood went to W. McArdle (N.S.W.) who beat D. Baker (Queensland) in a shoot off after both had scored 101 points. The three teams were entertained by the Queensland Railways Institute, and trophies won during the day were presented by Mr. Kelso, Q.R's Chief Traffic Manager.

Table Tennis

THE winning of the Glick Shield the runner's up trophy at the Intersystem Table Tennis Carnival recently held in Perth, was the best result ever achieved by a Victorian team since these carnivals began in 1936, and it was a great thrill for our lads to bring home the first-ever table tennis trophy. The match results showed that our second placing was no fluke as we defeated Queensland—the favourites—to finish second, by 24 rubbers to 9.

Other matches resulted as follows: we beat South Australia 23 rubbers to 10, Western Australia 29 rubbers to 4 and were defeated by the ultimate winners, New South Wales, by 25 rubbers to 8. In the single championship, our boys were eliminated in the early rounds, but in the doubles event Wally Lawrie and Barry Smart made the semi-final before being knocked out by the eventual winners.

I think these results again emphasise the steady improvement in the standard of play in our club. Should this be continued over the next two years, then perhaps New South Wales' stranglehold on this sport could be in jeopardy.

All Victorian players (metropolitan and country) are reminded that the 1966 V.R.I. championships will be held at the Albert Park Table Tennis Centre on Sunday, July 31. Players interested in competing should contact Graham Smith, Hon. Secretary, V.R.I.T.T.A. c/o V.R.I., or myself on auto 2445, as soon as possible.

Football

THE match against the Australian Postal Institute was almost an exact repetition of last year's game. Although we felt that our side could have been weaker than

previous teams we have fielded, the final result proved that our calculations were quite wrong.

Tom Allsop won the toss and V.R.I. kicked with the breeze. V.R.I. swung into attack and for most of the quarter their forwards peppered the goal, to finish with 6-5—41 to Postal's 0-3—3. The second quarter was a little better for Postal who managed 2 goals 2 behinds but our boys kicked another 6 goals 5 behinds, making the half-time scores V.R.I. 12-10—82 to A.P.I. 2-5-17. Some positional changes and a greater determination to win the ball by Postal improved the game as a spectacle after half time, but the match was virtually over, and the only interest seemed to be the margin by which we would win. Threequarter time saw the scores as V.R.I. 15-10-100, A.P.I. 5-8-38.

The game petered out to a tame finish, with V.R.I. winning 18-14 —122 to 8-8--56.

Goal kickers for V.R.I:—Allsop (2) A. C. McDonald (2), Limbom (2), Archer (2), McGrotty (2), and Zappa, Pearce, Majerczak, Fulford, N. McDonald, Hughes, Costa, and Mortinenko one each. For Postal, Steventon (5), Brice (2), and Somerton (1). Best Players: V.R.I. A. C. McDonald, DeLuca, Campbell, Limbom and Fulford. A.P.I.—Heyme, McCormick, Somerton, Steventon and Grey.

After the match, Mr. L. A. Reynolds, General President V.R.I., presented Council's trophy to Tom Allsop, the winning captain. Mr. H. Singleton, President of the Australian Postal Institute, in replying to Mr. Reynold's words of welcome, warned us that A.P.I. was determined to take home the trophy next year. It was interesting to see among the spectators, our Secretary for

Railways, Mr. Wils Walker, many Councillors of both the V.R.I. and A.P.I, and quite a number of off-duty railwaymen.



Captains toss before the V.R.I. v A.P.I. match. (Left) G. Heyme (A.P.I.) and T. Allsop (V.R.I.).

APPRECIATION

THE Bunnaloo Wheat-growers' Association expressed their appreciation of the co-operation you extended to the elevator attendant (Mr. J. C. White) during the last harvest. It was most helpful to him to know how many rail trucks would be available, and at what time.

Hector W. Scott, Honorary Sec-

—Hector W. Scott, Honorary Secretary, Bunnaloo Wheatgrowers Association, writing to the Station-master, Echuca.



Members of the Victorian team who played in the intersystem table tennis carnival at Perth. (Left to right) back row—E. Martin, M. Davey, A. Tabone, B. Smart, J. Rees, S. White, E. Campbell, G. Roiter; front row—G. Johnson, G. Smith (manager), W. Lawrie (captain), J. Crouch (V.R.I. representative), and R. Webster.



1966



THE MONTH'S REVIEW

SEE PAGE 127 FOR SUPERANNUATION DECISIONS

Walk-through carriages

THE first walk-through Harris Train carriages went into service last month, running on the Frankston, Dandenong and Broadmeadows-Sandringham lines. They have two double doorways on each side, and re-arranged seating. End doorways allow passengers to walk from one carriage to the other.

New fares and freights by computer

THE new fares and freight schedules announced last month by the Government, were produced by the Department's new computer (Data Processing Machine).

When it was known that increases would be made, the existing rates were prepared to be fed into the computer. After the percentage rises were officially given to the Department, the computer was instructed to add them to those rates.

In 30 minutes it calculated the suburban mileage fare tables, fares between Melbourne and suburban stations, country mileage fare tables, and all freight rates on a mileage basis.

Without the computer, 12 clerks working overtime for one week would have been needed to make the calculations.

The computer also printed the new rates on master sheets for photographing on offset printing plates, to be used for producing fare and freight rate books for railway staff.

Employes' tax certificates were also produced by this computer—see picture in centre pages.

Mornington line

WITH the restoration of Mornington line passenger services on September 12 it will be interesting to assess the accuracy of a survey taken last November by the Mornington Railway Research Committee under the auspices of the Mornington Shire Council.

A sampling of a little over half the homes in Mornington indicated that a minimum of 25,862 return trips to Frankston, and 35,880 return trips to Melbourne would be made annually. This represents a minimum usage of 61,742 return trips per annum or an average of 1,187 per week.

From railway to kitchen

OW many housewives, when cooking a tasty casserole dish, reflect that the heat defying ovenware they are using was developed to overcome a railway problem? Probably none—most housewives have enough of their own prob-

lems to think about. But, the fact remains, that before 1908 railways were troubled with breakages of glass in signal lanterns when suddenly transferred from the warmth of a railway vehicle to the bitter cold outside. In that year, the U.S.A. railroads brought their problem to the Corning Glass Works. Could Corning develop a glass that would withstand quick changes in temperature? The company's answer came in the form of a new heat resistant glass that later became familiar to all the world under the trade name Pyrex.

New restaurant

THE Department's new restaurant at Princes Gate, below Princes Plaza, opened on August 2. Seating 108, it provides a wide variety of hot meals, salad dishes and light refreshments between 11.30 a.m. and 7 p.m., Mondays to Fridays. Entrance is in the Princes Bridge station concourse at the corner of Swanston and Flinders Streets.

Incorporating the latest dining and food preparation facilities, the Princes Gate restaurant replaces the previous Princes Bridge station cafeteria, that was closed on May 8, 1964, to make way for one of Melbourne's biggest multi-storey development projects.

Digital clocks for Princes Bridge

IGITAL clocks showing train departure times will be installed in the Flinders Street entrance ramp and on platforms at Princes Bridge station. Those in the ramp will be installed about half-way down so that they will be readable from the top of the ramp. All the clocks will be controlled from the platforms. A new type of train destination indicator using slide projection (News Letter, November 1965) will also be installed on the platforms.

FRONT COVER

The wheels of railway vehicles with their low surface friction on the steel rails, enable huge loads to be hauled with relatively small power consumption. In this way, they are an important factor in the economy of rail transport. Suburban motor carriage wheels such as these, can run over 400,000 miles before replacement of the tyres becomes necessary. They also made an interesting pattern for V.R. photographer Roger Hayne.

Mobile Crane



Leading Hand Mechanic Geoff Nixon tests the operating controls of a new Signal and Telegraph Division mobile crane. It has a maximum lift of 2½ tons, uses hydraulic power supplied by truck engine, and boom can be extended to 13 ft.

Vandal fined

TILFUL damage to railway property cost the average decent citizen thousands of dollars a year, Mr. L. F. Froude, S. M., told a 17-year old youth in Sunshine Court.

The youth was fined \$150, in default three months' imprisonment, for breaking three train carriage windows, valued at \$3.90. —("Age" 27.6.66)

Warnings ignored

man who drove a car over a railway level crossing when flashing red lights were operating and warning bell ringing was fined \$40 in Chelsea Court and his licence suspended for three months. -(" The Herald ", 11.7.66)

Swan Hill drivers

THE repairs on the railway crossing about five miles south of Swan Hill have been completed and the warning signals are now in operation. The lights are well positioned and should catch the attention of all drivers. They start operating automatically when the train is at a distance of 600 yards from the crossing, thus giving drivers ample warn-

The authorities claim that, with the new safety precautions, there should be no conceivable reason for an accident occurring through neg-

ligence of drivers.

However, now that the approaches are straightened, the crossing could become a challenge to more foolhardy drivers. While a "Guardian"

representative was waiting for the first train to pass the lights last Thursday, a car went over the crossing at a speed between 60 and 70 m.p.h., while all the officials' cars were ranged around the approaches.

It is probable that with a clear crossing such drivers will be apt to treat it with even greater reckless-ness.—(Swan Hill "Guardian"

18.7.66)

Causes of crossing accidents

7HAT are some of the common causes of crossing accidents? The driver sometimes sees the train coming, but misjudges the speed and distance; others try to race" the train to the crossing, and are either struck by the train or run into the side of it.

Often too, drivers fail to look the other way and don't see the second train speeding through. fail to observe the rules for a variety of reasons: shortsightedness, defective hearing, or both; too much drink; faulty brakes; inattention; or, as often happens at this time of the year, windows "fogged-up" allround.—" Australian Road Safety Council Report", July 1966)

Survey

recent survey showed that 53 accidents occurred at level crossings during daylight hours in the 12 months ended June 30 last. Of these, 19 were at crossings equipped with flashing lights and a bell, and 34 were at crossings protected by standard warning signs. In other words, nearly 36 per cent of

these crossings had the far more expensive devices of flashing red lights and a ringing bell, yet motorists still killed or injured themselves at these crossings.

Russian roulette at boom barriers

NE way some motorists play a kind of Russian roulette is to zoom around barriers at a boom railway crossing. This was done by a number of motorists at the Park Street crossing, Moonee Ponds, last Wednesday afternoon. They had become tired of waiting for the booms to go up. Cause of the delay was an electrical failure between Essendon and Broadmeadows. Several drivers who went around the barriers would not have known this.

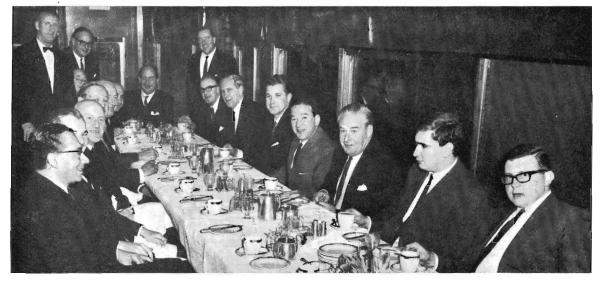
There is a bend in the railway line just north of the locality, and it only takes seconds for an express train to sweep around this curve.

Magistrates generally take a dim view of motorists who ignore railway flashing lights. . . Several motorists who have been caught infringing the regulations regarding rail crossings in Victoria have been heavily fined and, in some cases, licences have been suspended.

In case it is felt that motorists get away with only a fine, it should be pointed out that the Railways Department often prosecutes for the damage done to railways property (boom or gates) and usually recovers the fairly heavy costs from the motorist who gambles his life at a railway crossing.

-(Essendon "Gazette", 20.7.66)

EXECUTIVE HIRES NORMAN CARRIAGE



Members of the Executive of the Wholesale Spirit Merchants' Association of Victoria relax after breakfast in the Norman carriage. On July 14, they travelled to Ballarat in the carriage and also held their monthly executive meeting on board. The carriage was attached to the 9.10 a.m. Melbourne-Dimboola train and was detached at Ballarat, where leading citizens and trade representatives met the executive members. At 5.55 p.m. they rejoined the Norman carriage which was attached to the train reaching Melbourne at 7.55 p.m. The Norman carriage was originally the Spirit of Progress parlour car, and then The Daylight club car before the completion of the standard gauge line. It has been remodelled as a conference and inspection carriage; it is air-conditioned, has a well equipped kitchen, and is available for hire. (See News Letter, July 1963)

August 1966

TOKYO'S SUBURBAN RAILWAYS

from Mr. G. F. Brown, Deputy Chairman of Commissioners, who, accompanied by Mr. A. J. Nicholson, Newport Workshops Superintendent, is investigating overseas railway developments.



Rush hour at Tokyo station

ERE, in Tokyo, are three railway systems that serve an area with a bigger population than that of all Australia. They are:

- Japanese National Railways, which is mainly surface transport;
- the underground system operated by a separate organization known as Teito Rapid Transit;
- private railways feeding into interchange points with J.N.R. and the underground system and serving major centres of population just outside the inner circle of the city.

Trams are also in use with a uniform fare of 15 yen (almost 4 cents) but owing to traffic snarls, their average speed is low and they are not a significant factor in Tokyo transport.

Time...not distance

The Japanese are not interested so much in the distance they travel to work but rather in the time it takes. They always say "I live 36 minutes away from such-and-such a station".

The traffic conditions in their narrow streets are such that rail transport is the only logical way of travel for all but the shortest trips. In any case, the average worker cannot afford taxis and does not own a car. Even if he could afford a car there is no road system that could accommodate the vehicles. The ownership of cars per head would be one of the lowest in the world.

The shops in Japan are open six days a week—department stores from 10 a.m. to 6 p.m. and small shops to at least 10 p.m. each day, including Saturdays. On Sundays, the department stores are open all day, but close one day a week on a roster system, so that it's a six-day week for the shop girl, and Sunday is a day of heavy loading for the railway systems.

The number of seats provided in a train is 10% less per equivalent car length than in a *Harris Train* and most passengers must stand on train trips except in those trains moving in the opposite direction to the peak.

The carriage seating is designed to give maximum standing room. There is only one row of seats, with the back facing the windows, on

each side wall of the carriage, between the doors. In most carriage designs, three doors are spaced along each side of a 65 ft. carriage, some are 4 ft. wide and double acting while others are 3 ft. 6 in. single acting. The design varies according to the system operating the carriages.

Train colours

One noticeable feature of Japanese National Railways operations is that trains are painted a distinctive colour to designate certain lines. For instance, Otsuka line trains are yellow, and those on the Jidabashi line blue; however, this system is now somewhat altered, as stainless steel carriages are being brought into service, and only the conventional head end name appears.

STATIONS

There are three types of stations in the Tokyo suburban system:

- the normal outer stations where people join the trains for journeys from their homes;
- the interchange stations;
- the Tokyo central station.

An interchange station

At a typical interchange station in the morning peak (7.45-8.30) we saw scenes of incredible activity.

The station concerned—one of four similar stations—was Ikebukuro, where trains running north and south cross one of the main tracks into Tokyo, and two private railways terminate. In addition, bus services feed this interchange point.

The station staff consists of two per door plus a supervisor to every two carriages. In addition, a control centre is located above the steps at each end of the platform, with closed T.V. to allow the platform to be observed generally, and particularly the ticket collection at entrance and exit, the steps up to the platform and the centre part of it. There are four men in each control, and the total staff on each platform is 73 plus a supervising assistant stationmaster.

This staff is made up of three groups.

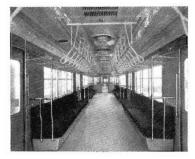
- · regular station staff;
- staff from the station and other railway offices;
- temporary staff, usually students, employed for one hour in the peak at the rate equivalent to 45 cents an hour.

The busiest platform has a train from each side running in the same direction—every two minutes.

The trains are of 10 carriages, each with three power-operated double doors.

Each carriage holds about 400 people, yet is only 6ft. longer than a Harris Train carriage. (The peak capacity of a Harris Train carriage is approximately 190 - Ed.) This means that when a train holding nearly 4,000 passengers arrives, out struggle at least 1000; and through 30 doors and back into the train goes something in excess of 1000 to produce a train that is really packed.

The platform is marked with lines to indicate the queueing-up points for each door of the carriages. The



A carriage on Tokyo's suburban underground.

station staff stand at the head of the queue. A train pulls up, the doors open, and out struggle the arriving passengers.

As soon as they get clear, the station staff stand aside and an irresistible flow of humanity starts to move into the carriage. It's like a stirred-up ants nest, but with the ants moving under strict control!

The real problem occurs when more people try to board the train than the number that got off. Then the station staff at each door swing into action. The first stage is to *push* people in, so that the doors can be closed.

When the carriage is so crowded that no more will go in, and still the door will not close, the surplus must be pulled out. The station staff do this quite cheerfully, but a girl near the door seems to have a greater chance of landing back on the platform than a male passenger. Still, it is done very nicely, and all the station staff wear white gloves. Passengers taken off just smile and take their place at the head of the queue for the next train, which they know will be along within a couple of minutes.

This unloading and loading takes about 40 seconds. The guard pushes the door-close button on instructions from the control room, the door closes and the train goes on its way.

If the number of passengers on the platform is building up faster than trains are taking them away, the barrier gates feeding the platform are closed until the congestion is under control. This is done by the control staff watching the scene through the closed T.V.

The amazing part of all this activity and crowding is the good nature of the people involved. The President of J.N.R. says that the traveller knows that if he co-operates with the station staff, he will get to work on time and arrive home in the evening without delay. From our observation, his claim is justified.

TOKYO CENTRAL STATION

At this station, which is used by 13 million passengers a day, the picture is a little different. Tokyo Central serves the main business and shopping area, and although some of the passengers may have alighted at previous stations, the trains that enter the platforms every two minutes in the peak, will be loaded heavily with 350 to 400 passengers per carriage.

As the guard opens the doors, the passengers are almost ejected from the train on to the platform, which is usually fairly clear as there is little movement away from Tokyo in the



An entrance to Japan's first underground railway, opened in 1927. It is part of the Tokyo suburban system.

morning peak. They flow down the wide stairways and into the main station galleries where they pass through the station wicket (ticket barrier). Here the ticket nipper inspects or collects each passenger's ticket. His vigilance is such that it is almost impossible to pass without the correct ticket.

It was noticeable that although escalators are provided in some places, they are usually by-passed—because they are too slow and cause more congestion than occurs at the stairways. There are no ramps.

In the main gallery are the ticketselling windows, ticket-selling machines (apparently little used), and the barriers from whence can be heard the constant clicking of the ticket nippers, which never stops even when there are no passengers about.

From the main galleries, the passengers walk through passages leading to the steps to various street exits. Along many of these passages are shops, bookstalls and small eating houses and food sellers; these seem to thrive on the Japanese love of food. The most lasting impression is the cleanliness of the station and the pride of the station staff in keeping it clean. Rubbish containers are placed at strategic positions, and are always used. It is rare to see a piece of paper or match on the floor. Even the station-master would stop and pick up any litter—if, by some remote chance, it should be dropped.

The night peak is little different to the scene at the interchange stations, with the exception that few people are alighting from the trains. The orderly queues; the rush of humanity when the doors open; the packing of 400 passengers to the carriage (less in winter because overcoats take up space); and all without any sign of impatience, but accepting the struggle as an inevitable part of peak period travel—these are the overwhelming impressions of suburban rail travel in Tokyo.

THEY KEEP THE KEYS TAPPING

in thousands of Government typewriters throughout Victoria. As well as V.R. machines, the Victorian Railways Typewriter Maintenance Depot looks after typewriters belonging to a number of State Government Departments such as Education, Police, Forests Commission, State Rivers and Water Supply Commission, and a number of other smaller Departments.



Messrs. W. Dern (left), O-in-C, and L. Faulkner, clerk, discuss details of a job.



Typewriter Mechanic K. Brown uses compressed air to blow dust from machine before it is given a cleaning bath. (Rubber dust from type erasers mixes with the lubricating oil and makes the mechanism stick.)

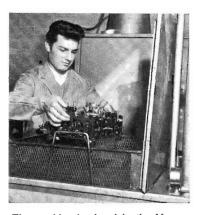


General view of the workshop at the Typewriter Maintenance Depot. Other members of the staff were away servicing machines when this picture was taken.

A LTOGETHER, the Depot services about 12,000 type-writers a year. To do this, the staff travel to the four corners of the State, but co-operation between the various Departments enables travelling time to be cut down.

"The police are a great help to us in this", says Mr. W. Dern, the Depot's Officer-in-Charge, "as they often bring in to a town typewriters from outlying schools, etc."

The Depot moved into its spacious well-equipped workshop in the Inwards Parcels Office building when the latter was completed, at the end of 1961. Machines that cannot be serviced at their locations are sent to the workshop. Typical of the modern equipment that enables the Depot to promptly service the machines of its wide-flung clientele, is the recently installed Magna-Dip cleaning bath. This consists of an enclosed bath of specially designed cleaning fluid that also has lubricating properties. After the dust has been blown from the typewriter, it is immersed in the bath and mechanically agitated. Warmed air in a drying cabinet completes the process. After overhaul and any necessary



The machine is placed in the Magna-Dip cleaning bath by Typewriter Mechanic P. D'Amore.

repairs, machines are returned to country users, by rail, in wooden cases.



After the cleaning bath, typewriters are put into a drying cabinet where solvent from the bath is removed. Typewriter Mechanic E. Callas is shown placing a machine in the cabinet.



Storeman R. Osmand places an overhauled typewriter on a trolley for subsequent delivery to the Department concerned.

STANDARD GAUGE BUILDS

COKE TRAFFIC

Among the traffic that the standard gauge line has recaptured from the road is metallurgical coke. About 25,000 tons a year are railed from the Wollongong area of N.S.W. to Dynon.



Rapid unloading of metallurgical coke at Dynon, by contractor's special equipment



The tractor with its hydraulically operated arm can speedily remove every piece of coke from a wagon.

OKE is the sort of material that apparently would need no special care either in transport or handling. This however, is not so with the metallurgical variety, used by foundries for smelting metals. It must be uniform in size as specified by the foundry, in order to give satisfactory results in the furnaces. Before standard gauge, the transfer of this traffic at Albury resulted in some of the coke crum,bling which made it unsuitable for foundry use.

The elimination of the Albury transfer, and the use of special unloading equipment by the cartage contractor—G.E. Porter Pty. Ltd. has enabled this material to be carried by rail to the complete satisfaction of all concerned.

The special equipment developed

by the contractor consists of a tractor with a long, hydraulically-operated moveable arm. At the end of the arm are spring-loaded steel flaps that can fold back to enable the arm to remove every piece of coke from a wagon. In operation, the tractor moves backwards and forwards, and pulls down the coke into a hopper just below the doors of the wagon. From there the coke goes by elevator to the road motor truck for delivery to the contractor's customers. The tractor unloads more than a ton a minute—a 35-ton wagon in 30 minutes.

Since standard gauge, this traffic has grown spectacularly; and it appears likely to increase further, as potential clients realize the excellent service given by the railways and G. E. Porter Pty. Ltd.

August 1966 119



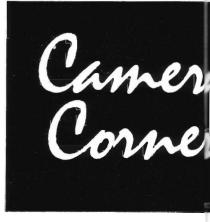


CAREERS TRAIN: Students from the Shepparton district Careers Train are interested in the "innards" of a diesel-electric locomotive at South Dynon Locomotive Depot. More than 900 students came by this special train to Melbourne. last month, to look at career prospects in 62 different occupations. Sponsored by the Victorian Rotary Clubs and the Commonwealth Employment Service, these trains have become annual events in various parts of the State, for students about to leave school and choose an occupation.

RE-RAILING EQUIPMENT: At South Dynon, Depot Foremen watch a demonstration of re-railing equipment, consisting of powerful hydraulic jacks that are controlled from the portable unit at the left. A petrol-driven hydraulic pump in the emergency van supplies pressure, through pipe lines, to the jacks. Three sets of this equipment are held by the Department.

TAX CERTIFICATES: Watched by Brownbill, Chairman of Commissioners of Mr. J. K. McGowan, Statistical Officer, acquired Data Processing Machine, opera K. Harrington, Assistant Supervisor, beg group certificates for the Department's machine showed the amount of superan other deductions from each employee, gramming of the Data Processing machine by Messrs. R. Allardyce and T. Tuvey of the ment Services Division.

"BOMBERS" are about to leave by diesel r. Spencer Street for their match against July 16. The "Bombers" have used the rai number of years to travel to South Geel adjacent to the "Cats" ground. And, despit reports that they would be having stew if the Spencer Street dining room, they all In fact, stew wasn't even on the menu. Then who are on the team's training stayelled—they are Messrs. W. Cox head traistock Branch) and A. Harry (Traffic Brsubsequent letter, the Club Secretary, Cookson, expressed the "complete satis members, with the meals supplied and a made by the Departmet



PLAYING IT COOL: Loaded at minus Centigrade, this tank of liquid oxygen is freight ever handled by the Departm carried on a Flexi-flat from Sydney to thence to the Dandenong storage of Austr Air Pty. Ltd. The tank holds 2,417 galle oxygen which in the gaseous form amouthird of a million cubic feet of stands Vacuum insulation holds it at the correct during transit.

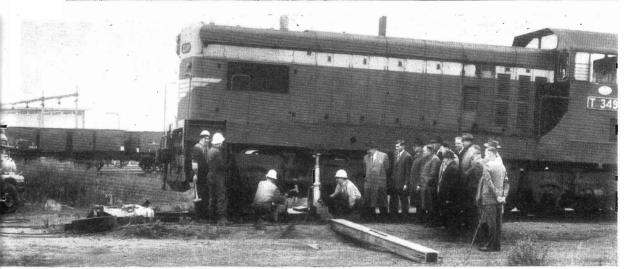


E. H.
tre), and
recently
by Miss
printing
iff. The
tion and
he prowas done
Managelar from
clong on
hys for a

ar from clong on sys for a station, wspaper lunch at ad steak. railwayso trav-Rolling h. In a W. H. tion'' of cements

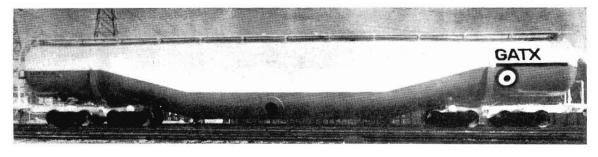






degrees
coldest
it was
non and
in Liquid
of liquid
to oneoxygen.
perature

LINES FROM OTHER LINES



TAILORED TRANSPORT IN U.S.A.—All over the world, railways are building wagons specially designed for carrying traffic that offers in sufficient quantities to make it economically justifiable. Above is shown a huge, 8-axle tank car built by General American Transportation Corporation to carry liquid gas under high pressure. The latest of its type, it has the phenomenal capacity of 60,000 gallons. The Victorian Railways are well advanced in the field of tailored transport. See centre pages for liquid oxygen tank carried on standard gauge line, also News Letter November 1965. (Photograph: International Railways Jounal)

Subway made from sewer pipes

A passenger subway, 250 ft. long and constructed from surplus pipes, has recently been completed by the South Australian Railways at an estimated cost

of only £12,500.

The original design of this subway was a concrete base and walls poured in place, but at the design stage it was ascertained that Humes Ltd. had available a number of pipes of sufficient strength to carry railway loading. These pipes were surplus to requirements for the Bolivar Sewerage Scheme and, being suitable for use in construction of the subway, were bought at a reasonable cost by the S.A.R. and then railed from Dry Creek to Edwardstown, five miles south of Adelaide.

Each pipe is constructed of precast concrete, has a 10ft. 10 in. outside diameter and weighs 16 tons. As excavation for the subway progressed, the pipes were placed in position with a 107-ton railway breakdown crane. Most of the work was done between midnight Saturdays and midday Sundays. The average depth of excavation was 12 ft.

20,000 ton trains for W.A. line

THE railway line for the Hamersley Iron Ore Pty. Ltd. from their iron ore deposits at Mt. Tom Price, 179 miles from the new port of Dampier, has been completed.

This standard gauge line has been built for heavy ore trains with loads up to 20,000 tons, hauled by three 2,750 h.p. diesel-electric locomotives. An iron ore train with this load will consist of about 200 rail wagons, and will be 14 miles long.

and will be 1½ miles long.

The Mt. Tom Price railway track is the heaviest ever built in Australia. The steel rails weigh 119 lb. a yard, and the 648,000 jarrah sleepers cut from Western Australia's southern forests, are bigger than normal rail

sleepers and laid closer together—about eight inches apart.

Hamersley Iron Ore has contracts to supply the Japanese steel interests with over \$800 million of ore and pellets from the deposits of the Pilbara area. Under the present contracts, 65 million tons of ore will be carried on this line in the next 17 years. Traffic will grow from a million tons annually to an eventual 4½ million tons, but further contracts seem likely, particularly from the United Kingdom.

Rail transport for another city

YET another city in U.S.A-the most motorized country in the world—has been advised to build a suburban railway system to cope with its traffic problems. It is Seattle, the booming north-west city of 800,000 people. The proposed line would have nearly 20 miles of double track with 18 stations and 160 carriages to cope with an expected daily passenger patronage of 76,000. It would cost \$U.S. 171 million. —(Railway Age)

Toronto extends Underground

TORONTO (Canada) has opened an 8-mile extension to its underground system. In addition, two 3-mile extensions are being built and expected to be in service by the end of next year, while a further four miles have been approved. Upon completion of the latter—by 1970—Toronto Transit Commission will have 24.67 route miles of underground in service.

-(Railway Age)

Future freight for Australia's railways

A great deal has been written about the new freight patterns emerging for the Australian railways over the next few years, while the old staples of railway revenue—wool and wheat, cattle and sheep—are still creating new

freight records. Australian primary production today is 90 per cent higher than in 1946/7.

The new freight pattern has developed from the rapid industrialisation of Australia's economy, and mineral development. Today, only 12 per cent of the total work force is engaged in primary production. In past years the bulk of Australia's export earnings, and the railways' revenue, came from a relatively small number of primary products subject to seasonal change and, in the case of wool, under constant pressure from synthetics.

This is the pattern that is now changing rapidly, with manufacturing and overseas exports playing an ever increasing role in the nation's and the railways' economy. The volume and variety of manufacturing have grown rapidly. Australia's factories now produce diesel-electric locomotives, motor vehicles, sophisticated jet aircraft, and petrochemicals.

Key industries have made tremendous increases in production in the post-war period—electricity output has increased over five times, to 32,000 million kilowatt hours, cement production is up nearly 400 per cent. to 3.3 million tons a year, and steel has increased production to 4.8 million tons per annum.

It is from the export growth and development of the mineral industry, however, that the Railways will receive an increasing volume of

bulk freight traffic.

Australia's export earnings from minerals by the early 1970's are fairly clear. The Bureau of Mineral Resources, on present information which is firmly based on projects already begun, has placed export earnings at a minimum of \$550 million, but new developments are expected to lift mineral exports to well over \$600 million early in the 1970's.

Automatic fare collection

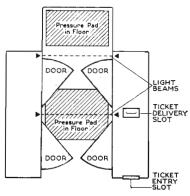


Diagram of London Transport passenger gate, a prototype for future systems of automatic fare collection.

NO improve the economics of the Chicago commuter lines operated by the Illinois Central Railroad, the company began, some time ago, to study automatic fare collection. Last month, it became the first public transport commuter network in the world to have a fully automatic system of fare collection and passenger control. By 1968 it is expected that the automation will extend to all 49 stations of the system. The work is being carried out by Advance Data Systems, the company that developed the computer-control automatic passenger gate now in operation at Acton Town station on the London underground, where it serves as a prototype installation for future developments.

The system which the Illinois Central decided to adopt was, as far as possible, based upon existing fare structures, traffic patterns and passenger habits. All types of tickets previously used have been retained, with fares remaining essentially unchanged except for rounding off prices to the nearest five cents. This is desirable because most tickets will eventually be sold by vending machines.

One unavoidable change had to be made in the way that the passenger's ticket is checked for validity. Ticket collectors, travelling on the trains, checked the ticket of the passenger, shortly after he boarded the train, and would sell single-ride tickets where necessary. With automatic equipment, such onboard fare collection is impracticable.

The automatic passenger gate permitting entry and exit to and from the station platform is an improvement on the conventional turnstile, and consists of two barriers containing the ticket handler, photocells and two sets of doors which fold back into the barrier when open. When a ticket is inserted in the entry slot

of the ticket handler, it is checked for validity within a fraction of a second by a digital computer and returned to the passenger. If the ticket is valid the computer sends a signal to the gate causing the first set of doors to open before the passenger is near enough to touch or be touched by the The second set of doors opens and the first set closes when the passenger breaks a light beam in the centre between the two sets of doors (an alternative is to use a floor treadle). The second set closes when the passenger breaks a beam at the exit side of the gate.

The tickets used in the system are paper and similar to normal tickets with the exception that a magnetic surface is bonded to one side.

—(Railway Gazette).

World's first car-train terminal

THE first combined car and passenger train terminal in the world has just been opened in London.

Formalities for departing passengers have been cut to a minimum. After calling at the reception desk, the motorist drives immediately to one of the car bays and on to the waiting train. While other cars are being loaded passengers can visit the buffet or wait in the passenger lounge until the train's departure. All heavy luggage is left in the cars and the journey is completed in comfortable reserved compartments on the day trains, or on sleeping berths when the passengers travel at night.

The London terminal is located near several major roads at Kensington, adjoining Olympia station—a focal point in London's road and rail networks, with connecting rail routes to all parts of Britain.

The terminal can handle up to four trains at a time, and is fully equipped for loading both single-deck and two-tier car carriers. In the peak of the holiday season the terminal will handle up to eight trains and between 250 and 300 cars daily.

The principle's the same

I have no quarrel with those who lament the days of steam. Indeed, the days when smoke still rose above the land are but memories, brought to an end by the need to conform to the fast changing pattern of economics and progress. The friendly ironhorse has been put aside. The times and the means may have changed, the details are so much different, but the principle's still the same.

I used to poke around the dark engine-house at Norseman, at Esperance and at Kalgoorlie, listening to the humid wheezes of the big Garratts, taking their rest between goods hauls . . . the blast of open safety valves . . . the lazy "pishpish" beat of the air pump on a Commonwealth "C" . . . and perhaps the gurgle of condensed steam through the open cylinder cocks of a dying Pacific awaiting the boiler inspector.

Yet for me, there is still a thrill when a big hood leans into 40 bogies after clearing Kalgoorlie yard, and with the harsh stutter of the fourstrokes, rousing the echoes through the gullies on the Northam bank. There's a thrill when you hear the blurred chatter of 32 cylinders churning out the power for a border hurdling trans-continental, hitting 60 with a flat run parallel with "the Mile that Midas touched", and eastbound.

One can feel and hear the throb in the air as the amps wind into the motors, when an Axmo with 2,200 horses lifts the mixed through the curved cutting, and under the home stick, then the rapid drop in revs as she shuts off for the roll into the yard.

At night, the cab lights glow as a hood stands waiting in the yard and the softly purring night diesel makes much less racket than she will shortly, lugging the night goods over Binduli. There's the tremble underfoot as a double-header charges upgrade through the Coolgardie hills, where the blast of the out-of-step exhaust of the "ASG" must echo yet.

Yes, the details may be different, but the principle's the same; this is still big machinery.

—(" A Trainee Engineman" in W. A. Railways Institute Magazine)









FIRST AID PRELIMS.

L AST month, the preliminary competitions in first aid began, to decide the winners of the various district shields, and the teams and individuals who will compete in the State championships to be held at Mt. Evelyn on September 8.

In all, 43 teams took part. Teams from Warragul, Numurkah, and Geelong came to Melbourne, and the adjudicators went to Bendigo, Sale, Ballarat and Mildura for competitions in those districts. The teams to take part in the finals will be the first five senior and the first seven novice teams in the order of their marks; and for the individual events, the first five senior and seven novice individuals. As News Letter went to press the competitions were still in course.

(Top) Warragul team carefully lowers patient Fred Szewczuk to the stretcher in the transport event. From left: Alan Godsil, Ted Beasley, Alex Parus and Max Foley (leader), at back are Adjudicator Horrie Patterson and Timekeeper Arthur Reynolds.

Arthur Reynolds.
(Center) In the improvised material event. (left to right) Adjudicator Bob Grace and Timekeeper Jack Richards explain details to Numurkah team members Kevin Watson, Jack Wallace (leader), Bill Bowie, Peter Steel and Herb Allan.

Herb Allan. (Bottom) Geelong team are busy diagnosing trouble of patient Frank Bole in the supplied material event. From left; Stan Astor, Leo Evans. Roy Wood and Jack Rice; at back are Adjudicator Noel Adams and Timekeeper Ernie Wensor.

RACE SPECIALS

PECIAL race trains were first operated in Victoria on October 1, 1859, for a race meeting at Flemington. A small platform had been erected on the city side of Salt Water River, where passengers alighted, and walked about half-a-mile to the course. The fare was 2/- return, and trains ran from Melbourne to the river every few minutes. A contemporary report stated that 12,000 passengers were carried by the special trains. Some time after, a double-platform station was built at the river, and it remained in regular service for race meetings at Flemington until the direct line to the course via Newmarket was reopened in 1867, when the Department took over from the Melbourne and Essendon Railway Co.

OURSELVES

Trugo invades Gold Coast

T seems that escaped Victorians on the Gold Coast have brought not only their welcome cash to that happy refuge from Melbourne's bracing weather, but have also introduced a new game—and one that is believed to have originated at Newport Workshops, as a lunchtime recreation, about 20 years ago.

In a recent letter, Retired Electric Train Driver E. P. Crowe writes that a team of Victorians, mostly ex-railwaymen, introduced the game last month, to the senior citizens of the Twin Towns—Coolangatta and

Tweed Heads.

A newspaper cutting he enclosed said that "visiting Victorian members of the Trugo Association set up goal posts in Boundary Street" and "braved cold winds" (yes, thats' what the cutting said) "to practice the game for a few hours"

Mr. Claude King, president of the Victorian Trugo Association, said

he would leave the equipment with the Twin Towns club. He also said that more than 2,000 members of 20 clubs played regular competitions in Victoria. They had to be over the age of 60, and, as the game costs little to play, it was ideal for senior citizens. It is played with wooden mallets and 6 in. diameter rubber rings that are struck with a mallet to roll between the goal posts.

Morse for train control

RAIN Controller F. C. Kaiser, who retired last month after nearly 50 years service, was a link with the early days of train control—at Dandenong—when stations communicated with control by Morse code as the selector telephones had not then been installed. After starting as a messenger at Melbourne Goods in 1916, he became a clerk and entered train control life in 1924. For the past 26 years, Mr. Kaiser has been a controller on the eastern board in Head Office.



Mr. Kaiser

The family has had a link with the V.R. for nearly 80 years, as his father joined the Department in 1887 and was the first V.R. Ambulance Officer. There are also two cousins and an uncle in the service. Incidentally Mr. Kaiser's mother is still alive, at the age of 92. Gardening and angling will occupy much of Mr. Kaiser's future leisure.

"I've always liked shift work", he said, "it's given me so much more time for gardening in sunny weather".

Canteen supervisor

familiar face is missing from the Boiler Shop Canteen at Newport Workshops, with the retirement of the Canteen Supervisor, Mrs. F. Driver, who had been there for nearly 20 years. At her farewell, Mrs. Driver received two present-ations—one from the canteen staff and the other from the men of the Boiler and Erecting Shops.

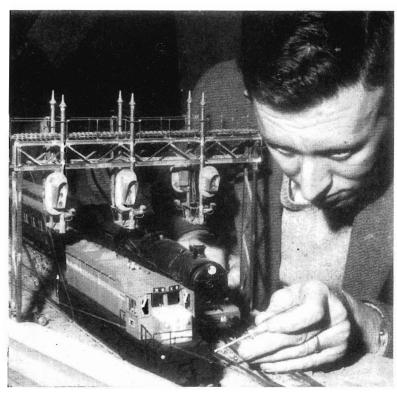
Life Governor

R. V. C. Dyring, Chief Medical Officer, has been nominated by the Commissioners for a life governorship in the Victorian Civil Ambulance service. After extensive experience as a general practitioner, Dr. Dyring joined the Department in 1958 and has been Chief Medical Officer since 1963. Among other activities, he was instrumental in the formation of Casualty Union, a branch of the St. John Ambulance Brigade that supplies realistic "patients" for competitive first-aid work.

Philatelic president

R. A. J. Petrie, Member of the Public Relations and Betterment Board who, last month, was elected President of the Royal Philatelic Society of Victoria, has been a philatelist for many years and specializes in the stamps and postal history of Thailand. His collection was awarded a bronze medal at Melbourne's recent International Philatelic Exhibition.

Beat the gun



Although the Department's first X class diesel-electric had not arrived, Mr. Ian Weickhardt, of Upper Ferntree Gully, completed on July 4, a model of it from the drawing published in last January's News Letter, and from photographs of other V.R. and American locomotives. He is an instructor at the P.M.G. Technicians' School, and among those who attended his classes are V.R. Apprentices John Whittingham and Norm Cleeland. Mr. Weickhardt is shown with the X class and other models.

-(Photograph: "Mountain District Free Press"

Coach



The retirement of Prince, the last of the railway shunting horses, meant a change of job for Mr. Frank Youngfrom horse shunter to tractor shunter. Frank has been in the department for 11 years, all at Ballarat. For 12 years he has played as a ruck-rover for Golden Point and is now a life member of that club. For the past three years he has coached Clunes.

Only one left

THE retirement, last month, of Boilermaker Frederick Dorgan from Newport Workshops leaves only one member of that railway family still in the Department—his brother, Charles, also at Newport Workshops. Mr. Frederick Dorgan had nearly 50 years service—eight at Bendigo and the rest at Newport. Altogether, 18 members of the family have worked in the Department—and one in the Melbourne and Hobson's Bay Railway Co.

Talk on apprentice training

A MONG the speakers who took part in the evening's discussion held early this month, on the apprenticeship system, was Mr. R. Curtis, the Department's Supervisor of Apprentices. The

evening was organized by the Australian Institute of Management for its Training Management Group. To an interested audience, Mr. Curtis outlined the system used by the Department for training apprentices.

\$100 reward



Unofficial custodian of the seven railway cats that keep Ballarat Goods Shed free from rats, is Office Cleaner Bert Pearce, and so highly did he regard one of them—a part Persian and the best ratter—that he offered \$100 reward for its return when the cat disappeared. So far, it has not been returned. Bert is trying (unsuccessfully) to coax the cats out for their picture. But, being off duty, they refused to budge.

"Displaced person"

R. D. P. Taylor humorously says his initials could well stand for "displaced person"; although he retired last month from the railway service, he was actually Industrial Fuel Sales Officer with the State Electricity Commission, having been on loan to the S.E.C. since 1957. As an apprentice fitter and turner at Newport Workshops—he started there in 1917—Mr. Taylor recalls working on the A2 locomotive that was used

for the Prince of Wales' (now Duke of Windsor) visit in 1920. He also remembers working on the first of the S, C, N, and K class locomotives built at the workshops.

In 1930, Mr. Taylor transferred to the Newport Power House. There during the war, a lot of repairs were made to ships' turbines; among them were some for the 36,000-ton Mauretania, then being used as a troop carrier. During the black coal shortage in 1946, Mr. Taylor worked with a panel from the Commonwealth Coal Commission investigating the industrial use of brown coal. The following year found him on loan to the Mines Department. Out of a total service of nearly 49 years, Mr. Taylor was on loan to other Government bodies for almost 20 years.

Empire Games

T is interesting to note that in the Empire Games Fencing events, 10 fencers (three women and seven men) represented Australia. Of these, one woman and four men are members of the V.R.I. Fencing Club. How's that for an indication of the standard of the administrators and instructors of the club. Members have every reason to be proud of Andy Szakall—Mr. Fencing himself—who as secretary, is the driving force behind this most successful of clubs.

The V.R.I. Wrestling Club is also entitled to claim a share of fame, as one of our wrestlers is representing Australia in the middle weight division. Worth thinking about, isn't it? Six members of the Institute were among those who represented their country at the Jamacia Games. Proves again that the sporting clubs and associations attached to, or affiliated with the Institute are as good as any, anywhere.

Off to N.Z.



Mr. H. Hopper (right) who retired after 47 years as a coppersmith at Newport Workshops, farewells a group of friends in the Copper Shop. He says the biggest change he noticed during his lifetime in the shops was the increasing size of the steam locomotive and then its sudden replacement by the diesel. Mr. Hopper was a member of the Workshops Safety Committee for 25 years, and its chairman for the past 10 years. And now, he has packed his bag for a trip to New Zealand.

SUPERANNUATION DECISIONS

URTHER to the instructions issued by letter to contributors to the State Superannuation Fund following the recent amending legislation, the State Superannuation Board has given the following directions concerning the deferment of contributions, and the taking out of "lost" units just prior to retirement:

Deferred Contributions

"The Amount shown on an election to defer contributions cannot be altered and the deferment of this amount will continue until the contribution in respect of the units to which the deferment relates ceases to be payable.

"The Board will accept, at any time, payments of not less than \$200 to reduce the balance standing in a contributor's deferred contributions account.

"An election to defer contributions will operate not later than one month after it has been lodged. This should give paying officers time to make the necessary alterations without retrospective adjustment.

"A contributor who has deferred payment of his contributions, but will be unable to meet his liability at retirement from private resources, should apply to the Board about one month prior to retirement with a view to converting part of his fortnightly pension entitlement to a lump sum to offset the outstanding contributions.

"The Board has reaffirmed its decision regarding the payment of contributions in respect of "lost units" effected just prior to retirement.

"In cases where a contributor elects for "lost units" just prior to retirement, the Board has decided that he must pay into the Fund, before his date of retirement, at least one fortnightly contribution in respect of the lost units. Payment of pension or payment of a lump sum consequent on an election to convert part of a pension entitlement will not be authorized until the balance of contributions has been paid by the contributor."

Spencer Street I.P.O.

wish to express appreciation for the help that was so freely given last Saturday night, by one of your employees—namely Mr. W. G. Foster (Inwards Parcels Office). This gentleman— and I am sure this title fits the man-went out of his way to be of assistance to me, with regard to a very important parcel that had gone astray, and that he eventually found.

Gough, Arnold Gough Studios, Shepparton writing to the Metropolitan Superintendent

Ballarat

N occasions in the past I have written to you when I have been annoyed with lack of service, or poor service, by railways staff, but I have always failed to thank you for excellent service and attention received at other times.

In this latter regard I feel it only fair to draw to your attention Mr. Deveson, in the Parcels Office at Ballarat station. I would sooner be served by him than anyone else I have ever struck in the Railways.

His unfailing courtesy and efficiency over a good many years must have made lots of friends, both for

himself and the Railways. Extracts from letter to Chairman from Mr. R. A. Grimme, York Street, Ballarat

Mt. Buffalo Chalet

N behalf of the members of the Citroen Car Club of Victoria who spent the Queen's Birthday holiday at the Mount Buffalo Chalet, I would like to thank you and your staff for a wonderful week-end. Speaking personally, I did not expect as many of the comforts of home to be found so far from the nearest large town. I certainly did not expect central heating, comfort, cuisine and service that would leave most metropolitan hotels for dead... John Parsons (Hon. Sec.) writing to the Manager, Mt. Buffalo Chalet.

Intercapital Daylight

would like to express my appreciation for the courteous and helpful attitude of two train hostesses, recently, when my three children travelled unaccompanied to Albury on the 7.45 a.m. relief daylight express on May 14 last and returned to Melbourne on Intercapital Daylight on May 25.

Both of the hostesses concerned took pains to ensure that the children were made comfortable, and that they were actually met at the end of each journey.

-W. I. Chalmers, 8 Ralton Avenue, Glen Waverley, writing to the Secretary

RECENT RETIREMENTS . . .

TRAFFIC BRANCH

Hughes, C. A., Flinders Street Brook, F. N., Ballarat Goods Bult, C. V., Melbourne Goods Taylor, G. S., Spotswood Hall, F. A., Melbourne Goods Bury, A. J., Ticket Checking Division Sherman, G. A., Geelong Rolls, M. E., Melbourne Goods

ROLLING STOCK BRANCH

Note in North Melbourne
Walters, H., Newport
Hopper, H., Newport
Hopper, H., Newport
Malloy, C. E., Bendigo North
McKay, C. K., South Dynon
Gingell, W. L., Ballarat North
Bright, H. A., Newport
Dorgan, F., Newport
Russell, J. W., Newport
Patterson, J., E. R. Depot
Asling, W. N., Benalla
Passuello, G., Newport
Ashmore, W. G., Bendigo
Quinn, H. J., Bendigo
Gray, H. B., Newport
Phillips, T. E., Jolimont;
Duggan, D. O., E. R. Depot
Cordell, F. G., Newport
Midgley, F., South Dynon
Selim, M., Newport
Crosthwaite, E. G., E. R. Depot
Prime, H. W., Maryborough
Billman, D. E., Ararat
Rowe, E. J. M., Bendigo North Samuel, I., North Melbourne

WAY & WORKS BRANCH

WAY & WORKS BRANCH
Hanrahan, J., Special Works
Fewster, L. M., c/o R.F. Spencer St.
Fitzgerald, J. F. T. c/o Bond Supervr.
Porajski, W., c/o R. F. Caulfield
Meredith, T., Spotswood Workshops
Murray, M., c/o R. F. Shepparton
Harris, W. A., S. & T. Division
Ridley, T. Y., c/o R.F. Laurens St.
McIver, A. W., c/o R.F. Laurens St.
Grace, E. S., Spotswood Workshops
Liddy, H. M., Ironworks Division
Koressis, P., Spotswood Workshops
Richardson, J. R., c/o R. F. Murtoa

STORES BRANCH

Westcott, C. O., Head Office Matheson, L., Newport Workshops REFRESHMENT SERVICES BRANCH Avent, C. B., Dining Car Depot Driver, F. (Mrs.), Newport

NEWS LETTER REGRETS TO RECORD THE FOLLOWING

DEATHS

TRAFFIC BRANCH Herrin, J. L., Flinders Street Richards, T., Melbourne Goods

ROLLING STOCK BRANCH Dunn, S. F., Newport Jago, L. G., North Melbourne Bishop, A. W., South Dynon Blair, C. A., Newport

WAY & WORKS BRANCH Hassell, W. M., c/o Foreman Painter Petek, A., c/o R.F. Seymour Seymour, M. V., c/o R. F. Shepparton



Football

In the metropolitan competition, Newport 'Shops go on their winning way, and at the time of writing are undefeated. This performance makes their appearance in the grand final at South Melbourne a certainty, and they will meet the winners of the preliminary final (Loco v Suburban Lines) in the match.

The earlier improvement shown by Codon was not sufficient to enable them to break into the final series, and this must be a little disappointing to these lads, but I'm sure that if they can recruit a couple of big blokes to do the bullocking work around the ground by next season, then they'll be in business all right.

I think this year's flag must go to Newport, as they look by far the best team in the league. I'm sure that coach Joe McGrath will not allow them to go into this match with any feeling of complacency—keeping in mind what happened last year. I feel also that a premiership will act as an excellent tonic to my old friend Tom O'Neill, Newport 'Shops popular Secretary, who has been seriously ill for the past few weeks, but who, I'm glad to report, is on the road to recovery. We wish you a speedy return to good health, Tom, and look forward to seeing you in your old position in the timekeeper's box next season.

Up Ararat way, they held the 1966 V.R.I. lightning premiership last month, and although a couple of teams withdrew at the last minute, Ararat beat Maryborough in a most interesting final, and thus retained council's trophy.

Cricket

LUBS are reminded that the V.R.I.C.A. annual meeting and presentation night will be held in the V.R.I. on Friday, September 1. Teams intending to compete in the 1966/67 season are asked to send along two delegates each to this meeting. Remember, matches are played on excellent turf wickets at Royal Park on Tuesdays and Thursday afternoons. Gear is supplied by the association.

Players wishing to be considered for the Victorian team that will compete in the interstate carnival in Brisbane from next February 12 to 14, should submit their names to Mr. W. Crowe, Hon. Secretary, V.R.I. C.A., c/o V.R.I. Melbourne, or myself, as soon as possible.

Basketball

PRESENT indications—with three rounds to go—are that our No. 2 side will make the

finals of its grade in the business houses winter competition. No. 1 team, while improving vastly, has left its run too late to finish in the top four.

It is the club's intention to enter a ladies team in the international rules (5 a side) competition. V.R. girls who have played under these rules will be most welcome, as well as any others who would like a game of basketball. Practice and coaching classes will be held each Thursday night, and the team will play on Fridays, beginning in September. I hope we can find sufficient girls interested in this particular brand of basketball, as this team will form the nucleus of next year's carnival team.

Tennis

OUNTRY tennis players should note the date of this year's country week fixture—October 10 to 14. Entries close on Monday September 12. Teams are required for the country championships (four players to each side), and individual entries will be accepted for the country open singles championship and the country railways singles championship.

You might remember that last year we had to cancel this fixture owing to lack of entries, which rather amazes me when you stop and think of the number of country railwaymen who play tennis. The entry fee per player is only \$1.00 which includes the provision of first grade balls, luncheon each day and excellent trophies. The matches are played on the V.R.I. tennis courts at Royal Park, noted for their first class, allweather surfaces. So, come on fellows, let's not have to drop tennis from the list of country weeks.



In the Loco v Suburban Lines match, players tussle for a mark in the goal front.









THE MONTH'S REVIEW

Tailored transport

THIS year's V.R. exhibit at the Royal Show reveals by means of 1/120 and 1/12 scale models, changing colour slides, and display panels, the wide variety of specially designed vehicles that the Department offers for the needs of rail users—transport "tailored" to suit each variety of freight. As usual, main attractions are the miniature working railway (including a train of the new aluminium wheat wagons and the ALVA display train), the free pamphlets, free identity discs to stop children staying lost, and the advisory section staffed by Commercial Agents.

New bulk flour wagon

THE first of four FX bogie type 40-ton capacity bulk flour wagons, recently built at Newport Workshops, arrived on July 28 at B Siding, Footscray, with its load of flour consigned to Maize Products Pty. Ltd. from Howard Jackett and Co. Pty. Ltd., flour millers at Swan Hill.

The flour, 10 tons of which can be carried in each of the four separate compartments of the wagon, is pneumatically discharged through an underground pipeline that crosses the road and is connected to five bulk silos in the flour products factory.

Fitted with modern, 50-ton, rollerbearing, high speed bogies, the wagon is 54 ft. 4 in long, has a tare weight of 28½ tons, and can be bogie exchanged.

Wagon booklet

THE Department has produced its first booklet on freight wagons for the information of rail users. The 24-page booklet gives details of 79 different types of rail freight vehicles and covers such information as loading areas, capacities, and door sizes. There are 79 illustrations that show the wide variety of specialized vehicles and containers built for general use or to meet a customer's needs. Also included are loading diagrams and information on packaging for rail transport.

The booklet has two indices—one for classes of vehicles and the other identifying vehicles by the commodity carried, for those not familiar with vehicle classes. The booklet is made available to shippers and business firms.

Model railway exhibition

N September 29, 10 members of the Australian Model Railway Association will travel by Southern Aurora to Sydney for the exhibition by the Sydney branch of the Association. The exhibition

will be open from September 30 to October 3. Present membership of the Association is about 400, including some who are overseas.

8-carriage trains

TWO platforms—one at East Richmond and the other at Nunawading—have been extended to take 8-carriage suburban trains; 11 other platforms on the Ringwood and Glen Waverley lines are being lengthened.

The 8-carriage trains are part of a long range plan to improve the peak period conditions on the Belgrave, Lilydale, and Glen Waverley lines, which serve areas of big housing developments. The complete plan envisages more tracks for more trains and express running, but depends on sufficient funds being made available.

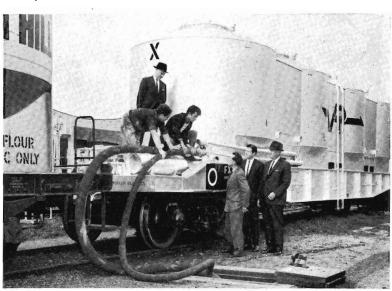
One of the major problems of suburban railway operations is, of course, the very limited use made—during the peak hours only—of equipment and facilities, in which considerable interest-bearing capital is invested. If the loads could be spread, costs could be greatly reduced.

By-law offences

THE Department, in the last financial year, 1965/66, successfully prosecuted 5,008 people for by-law offences, including non-payment of fares, vandalism, and playing radios to the annoyance of other passengers. The total amount paid by those convicted was \$43,265.

FRONT COVER

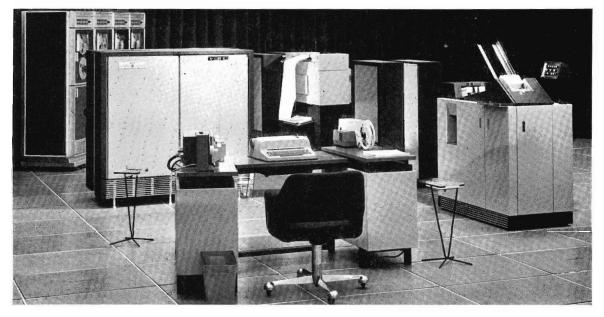
KISS FOR THE BRIDE: Puffing Billy played a unique part in the wedding of Miss Janet Hartney and Mr. Peter Harcourt at Selby Church of England, on July 30. After the ceremony, the couple and the wedding party boarded a V.I.P. carriage attached to the train and travelled to Marshall's Halt, just past Menzies Creek, for the reception. Both Peter and Janet are members of the Puffing Billy Preservation Society. Picture shows the bride receiving a kiss from Driver Les Haining under the approving eye of Peter. (See centre pages.)



The new bulk flour wagon at B siding, Footscray, has discharge hoses attached. Standing on the wagon is Mr. R. Lehmann, Rolling Stock Branch engineer. Beside the wagon (left to right) are Messrs. L. A. Murphy (Rolling Stock Branch engineer), T. Jackett (director of Howard Jackett and Co. Pty. Ltd.) and his father, Mr. H. Jackett (managing director of the company).

WE HIRE A COMPUTER

THE Department recently decided to lease a computer from Australian General Electric Pty. Ltd. for a period of five years. This article is the first of a series designed to acquaint the staff with the Department's progress in electronic data processing—or E. D. P. as it is generally known.



G.E. 140 computer assembly similar to that which will be hired by the Department

The computer that will be hired by the Department is known as the G.E. 140 System and is the latest in computer engineering design. Present arrangements are for delivery in July next year and it is expected that it will be in operation in the same or following month. It will be installed on the third floor at Head Office.

The computer's first job will be to provide information for the control and accounting for railway stores. Payroll preparation will follow, with later applications to waybilling, freight statistics, wagon control and—in the distant future—train scheduling.

The staff that will do the planning and other work associated with the computer are being trained from within the Department. Under the leasing agreement, the contractor is responsible for maintenance of the computer.

How will the computer affect me? is what everyone thinks when they hear that a computer will be introduced into their organization. Feelings against computers are usually vague, but generally indicate an anxiety about security of employment and status. There is no good reason for such alarm.

The arrival of a computer does not mean such drastic changes as many think. This is particularly so in a big organization such as the railways, with its normal depletion of staff caused by retirements, resignations, etc. There is, in fact, a definite shortage of the staff needed to do the large amount of clerical work that gives management the basic information for its decisions and day to day business.

The Commissioners have adopted a firm policy that installation of the computer will not affect your security in the Department.

Changes in procedure will certainly be necessary, and a re-arrangement of duties will be involved in some instances, but there will be no decrease in responsibilities.

The new computer will increase the efficiency of the Department and help it to hold its own in the highly competitive field of transport. By doing this, the computer will actually make its own contribution to the security of railway employment.

Why get a computer ?

The processing of information by machines is not new. The Department has used punch card tabulating equipment (originally known as Powers machines) since 1921, and the decision to hire a computer is merely an extension of this information processing. The computer, however, can handle a much greater volume of far more complicated work than can the existing punch card equipment.

It will do much of the repetitive uninteresting work faster than is now possible, and thus give vital information to all levels of management far more quickly.

Computers generally are but part of the technological advance that has been going on since man first invented the wheel. This advance has done away with back-breaking manual drudgery. The computer is now eliminating much mental drudgery.

To run a big business efficiently, management must have a vast amount of speedily supplied information. But the volume and complexity of the information required has been growing at such a spectacular rate that the stage has been reached where the clerical work force needed to do the paper work is quite out of proportion to the size of most businesses. The arrival of the computer has provided the means to reduce this paperwork and yet give management the information it requires.

WORLD TREND TO

Our visit to Japan, Canada and U.S.A.—and discussions with Ministers, Government authorities, city administrators, rapid transit system and railroad operators in those countries—have shown that there is agreement that the provision of more and more roads or freeways is not the total solution to the problem of moving people.

Therefore, urgent action is being taken to provide the finance necessary to ensure properly balanced and co-ordinated transport systems in many of the large cities with popuations approaching, or exceeding that of Melbourne.

Recognizing this, the Federal Government of U.S.A. on July 9, 1964 passed the Urban Mass Transportation Act making available \$US 500 million Federal assistance to mass transportation. The assistance will be limited to new capital and research expenditure.

In response to this offer, 30 cities with populations of over 500,000 each (Melbourne has over 2 million), have developed plans and applied for portion of these funds. Canada is operating under a similar proposal.

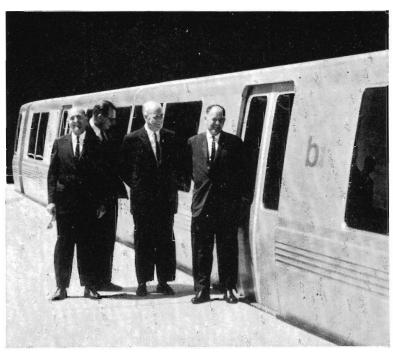
Recently in Pittsburg, U.S.A., the Chamber of Commerce, realizing the loss of business and the strangulation that would occur within the city, if plans for a series of freeways leading to the centre of the city—and bringing a multitude of cars into it, were proceeded with, organized an International Conference on Urban Transportation.

Representatives of numerous transportation organizations were present, together with the Mayors of many American cities, Government representatives, University professors specializing in road and other forms of transport, as well as industrialists, bankers and representatives from the United Kingdom, Canada and Japan.

Freeways need acres

Familiar differences of opinion on the use of mass transit rail and bus, as opposed to the use of private cars on freeways, were expressed. At the conclusion there was a considerable agreement that, exclusive reliance on freeways cannot possibly meet the traffic problem nor overcome the loss of rateable land required for freeways; and that, all-out freeway building is self defeating.

The freeway builders (who are often supported by pressure groups with interests in the building of freeways) are realizing that, although their pathway through the open country is relatively easy, they are taking over vast tracts of land; and



(From right) In San Francisco, Messrs. G. F. Brown, Deputy Chairman of Commissioners, and E. R. Meagher, Minister of Transport, accompanied by officials of the Bay Area Rapid Transit District, inspect the BART carriage for the rapid transit system that will give San Francisco one of the world's most advanced suburban rail networks. (Photo: A.J. Nicholson)

the construction of these wide freeways, which require acres of land for overpasses, underpasses, inlet roads and outlet roads, produces a major engineering problem in built-up areas and also causes considerable hardship and economic distress both to people in areas separated by freeways and those living adjacent to them.

In U.S.A., people so inconvenienced are becoming better organized and are increasingly vocal about the inconvenience and the unsightliness of the freeways.

In Japan, the problem is not as acute because government policy has been to concentrate on underground and surface rail systems, with feeder lines and buses transporting passengers to strategic interchange points.

BIG CHANGE IN NORTH AMERICA

On the North American continent, during the last three years, there has been a marked change in outlook concerning the provision of freeways for large cities. Although up to that time the Federal Government was prepared to finance up to 90% of the cost of such projects, they now realize that freeways in city areas have failed to provide an effective solution to the city transport problem.

In his message to Congress, President Kennedy laid down that any freeway project for a metropolitan area must be considered as a portion of a co-ordinated transport plan along with rail and bus services, and must be an integral part of a soundly based and balanced transportation system for the area involved. And, after January 1, 1965, Federal assistance has only been given on that basis.

Further, as mentioned previously, the Federal Government, to support its opinion that fixed rail transport is essential to a co-ordinated system, has set aside at least \$US500 million for the advancement of rapid transit techniques.

Los Angeles freeways

A classical example—and one that has been quoted throughout the world by freeway minded people as a particularly successful example of freeway building—is in the freeways of Los Angeles.

PUBLIC TRANSPORT FOR BIG CITIES

Recently, however, the Mayor of Los Angeles stated that "urban transportation can now be described as a two headed dragon. Our facilities for moving large masses of people in private motor cars are outstanding and a source of great pride.

"That dragon head is healthy. In fact, its appetite is so healthy that our freeways are gobbling up our Southern Californian land at a rather alarming rate.

"The other head of the dragon—mass public transportation—is unfortunately not so healthy. It is, in fact, about to starve to death.

"We have ambitious plans under way which should result in the birth of a 160-mile ultra modern network of dual-rail rapid transit.

But Los Angeles will not have the level of public transportation its people need until our first-rate network of freeways can be balanced with an equally first-rate network of rail rapid transit routed to connect those places in which our people live with the places to which they must travel".

It is a fact that, even with their extensive freeways, travelling in Los Angeles is slow, with many blockages at peak periods.

Washington

In the Federal capital city of Washington, after years of study by consultants and the submission of various proposals, approval has been given for the construction, at a cost of \$US431 million of a railway network with extensive parking areas and bus transfer facilities at stations.

San Francisco

In the San Francisco area, a city that has great civic pride, the people agreed by a 60% vote to pay additional taxes to finance a bond issue to build a rapid transit system. A typical home-owner will pay about \$US27 in the peak year with a decline in subsequent years.

Tenders have now been called for the building of the system at an overall cost of \$US792 million – and San Francisco is a city the same size as Melbourne.

The people of San Francisco realize that an effective rapid transit system is the only way to obtain reduced travelling time and costs, and also eliminate the dangers of peak period road travel.

They also fear that their very lovely city—of which they are justly proud—would be ruined by two other factors inseparable from freeways. These are the scars that would be made by the extensive freeway network needed to give even a very ineffective service; and the smog from the increased city motor traffic.

Chicago

Chicago has an extensive public transit system and also several private railroads, all of which have maintained a quality of service and equipment that has held 80% of the population to the public transit system. They are now designing extensions and improvements to their system; and further extensions are being planned.

New York

In New York, the City authorities have taken over and placed under the control of P.A.T.H. (Port Authority Trans Hudson) a major rail line that was in difficulties. That organization is now restoring it to effectiveness. It is planned to absorb other private railroads and restore them also. However, this is only one section of New York's suburban system.

The New York City Transit Authority, which operates the underground, has been authorized (in a bill signed by Governor Rockefeller) to issue up to \$US92 million in bonds so that it can buy 724 new rapid transit cars.

Since 1961, the City of New York has bought 1,084 new cars through the city's capital budget. With the 724 new cars authorized, this will give the New York underground a total of 1,808 new cars.

The Long Island Railroad has recently been absorbed by the New York Metropolitan Transportation Authority, and plans are in hand to extend and electrify over 70 route miles, and buy 500 new cars.

Toronto

On the North American continent, the only city that has opened a new subway system in the last 20 years is Toronto. This has been so successful that a new 8-mile extension will be opened next year and another 6 miles have been approved. There are further plans for extensions, using rapid transit trains in the middle of a new expressway.

THIS has been found by Mr. G. F. Brown, Deputy Chairman of Commissioners, who, accompanied by Mr. A. J. Nicholson, Newport Workshops Superintendent, returned last month from an investigation of overseas railway developments. In this article, Mr. Brown shows how authorities in other countries are taking a fresh (railoriented) look at urban transport.

A rail service extending for 30 miles along the south-west shore of Lake Ontario and connecting with a service to Hamilton is now being planned, to bring commuters into Toronto.

The Government has accepted this scheme on the basis that it will build and equip the system and then hand it over to the operating authority, which will be responsible for operating costs and depreciation of rolling stock only.

Montreal

Montreal, Canada, is an outstanding example of what can be done when there is realization of a need for improvement in public transport.

In 1961, the Mayor was elected on the basis of his promise to improve the very poor transport facilities of the area. Within five years, Montreal has reached the stage where a section of the planned 15 miles of underground will be in operation very soon, and the complete system, including a tunnel under the St. Lawrence River, will be in use for the 1967 Exposition.

This necessitated passing an Act by the State Parliament to form the Montreal Transit Commission and provide for the amalgamation of the local councils for the purpose of raising the required money by taxation bonds.

JAPAN

In Japan, where a number of cities have extensive urban rail transit systems, extensions and improvements are constantly being carried out.

As a major example, Tokyo's progress is outstanding. That city is served by Japanese National Railways, Teito Rapid Transit system (also Government controlled) and a number of private suburban systems.



American experience has shown that freeways devour acres of valuable city and suburban land, as can be seen from the above aerial view of a freeway interchange in Los Angeles.

Teito Rapid Transit, as a case in point, already operates 33 miles of system (30 miles of which is underground) and is currently building 18 miles of new route which, for a considerable distance, passes under the centre of the city and has many attendant engineering problems. In places, the underground tracks are four layers deep to provide for interchange points within its own system and with the other systems.

Part of this underground will be open for traffic this year.

Osaka, which after the war had only 5½ miles of subway, already has added 11 miles, plans to have 72 miles in service within the next eight years, and at present has six miles under construction.

This is in addition to the extensive suburban system of surface railway being operated by the National Railways and by privately owned railway companies.

WORLD-WIDE MOVEMENT

One could quote cases of this nature for some time. In U.S.A. alone, there are 30 cities that are in

the course of extending existing systems or planning the construction of completely new systems.

Further, every one of the 15 cities with a population equivalent to or in excess of Melbourne, is taking action to improve its rapid transit system with co-ordination between rail, bus and road where possible. And every effort is being made to eliminate competition between public transport systems.

The growing interest in improved rapid transit systems in U.S.A. is only a part of the world-wide movement. There are more than 26 cities throughout the world, each with a population of over half a million people, that are at present engaged in improving existing systems or building new ones.

Government helps public transport

The cost of improving or building is high, and the civic authorities and State and Federal Governments all realize that it is impossible to repay the capital cost of the facilities from passenger fares.

The civic authorities in each city involved have accepted the responsibility for raising the funds, but they have been assisted by grants from both the State and Federal Governments.

In most cases, the capital required has been raised by a bond issue repayable from a community tax over a number of years.

Thus the operating cost only, plus 8% set aside for the replacement of rolling stock and equipment, is paid by the passengers using the services.

Few concession fares

Practically all fares are on the basis of "one fare for all" and concessions are not generally granted to school children, University students, aged people or the various types of trainees.

In the few cases where concession fares apply, the difference between normal and concession fare is paid to the railroad operating body by the authority that grants the concession.

Periodical tickets are not issued, but a small discount is available to regular passengers who are prepared to buy, at the one time, a number of tickets or tokens for daily travel (for example: six 20 cent tokens may be bought for \$1).

Country services

Most country or inter-city services are operated by the private railway companies, but such services are not profitable and the railroads concerned are terminating them where possible.

The New York Central Railroad recently stated that all long distance passenger trains would be withdrawn as from January 1, 1967. This includes what was once the crack train of America—the 20th Century Limited from New York to Chicago.

They have stated that they would concentrate on providing services between cities up to a maximum of 200 miles, using modern high-speed trains where sufficient passengers were available to make the operation profitable.

CONCLUSIONS

The conclusions reached from our visit are that the Japanese Government is fully aware that if they wish to sustain and improve the economy of Japan, they must ensure that the working people are able to move from their homes to their selected places of employment with a minimum of lost time and at minimum cost.

To achieve this end, they are urgently engaged in the planned development, extension and improvement of fixed rail transport. This is receiving preference over any extensive road improvement pro-

Canada, with its very successful rapid rail transit system in Toronto and its nearly complete Montreal underground project, needs no comment except to stress the part played by local civic authorities in the organization and financing of the projects.

In U.S.A., over the past three years, there has been a complete change from the idea promulgated by road-minded groups—that more and more freeways would solve all traffic problems—to a realization that there is an urgent need for co-ordination of road, rail and bus, to provide economic and satisfactory transport of people from their homes to their places of employment.

The action of the Federal Government in refusing to assist cities in freeway projects, unless a co-ordinated plan giving proper emphasis to rapid rail transit and bus services was prepared and approved, has been a major factor in this change of thought.

Further, there is now a realization by local government authorities that, if they wish to retain the centre of their city, they must assist in the organization and financing of some means of transporting people other than by private car.

People voted to pay

By their action in voting for increased rates, the people of such cities have shown that they also realize that it is just as logical for the ratepayer to meet the cost of building and maintaining a rapid transit railway line—whether he uses it or not—as it is for him to meet the construction and maintenance costs of a freeway.

When rail lines are financed in this way, the fares charged for their use need only be high enough to cover operating costs, plus maintenance and replacement of rolling stock. Such fares are truly comparable with the alternative cost, faced by each potential passenger, of driving his car on the freeway for which he has also paid.

Moreover, the capital outlay necessary to build a rail rapid transit system is only a fraction of the amount the ratepayer would be called upon to meet for a freeway system big enough to do the same job.

An essential service

Everywhere we went overseas, it was realized that a suburban transport system is an essential service similar to the provision of roadways, sewerage, drains and water supply, and therefore must share in the use of available tax funds in accordance with its importance to the community.

While Melbourne is most fortunate in already possessing an extensive railway, trainway, and bus network capable of being built up, at only moderate cost, into a really world class metropolitan transport system, there is no denying that the existing system has many short-comings.

On the suburban railway system there are still too many miles of single track; insufficient multiple tracks for express running on the inner approaches to the city; too few modern trains; and, above all, there is no city loop to carry passengers close to their employment and shopping areas. Overcoming these drawbacks will be costly—but not when compared with planned expenditure on freeway improvements that will do only a fraction of the job.

UNDERGROUND NEEDED

On return from his 3-month overseas tour, the Minister of Transport (Mr. Meagher) said that Melbourne couldn't survive without an underground railway.

He added that Melbourne would have a full scale co-ordinated traffic programme within a few months in which he had no doubt railways would play a dominant part.

APPRECIATION .

Southern Aurora

AST Friday and Sunday evenings my husband and I had the pleasure of travelling on Southern Aurora . . .

Firstly, from a personnel side, we were delighted with the attention and courtesy we received, especially in the dining car. The steward attached to Car 9 (both ways) was also very helpful, as were the boys in the Club Car.

Secondly, with the comfortable conditions of travel, we can only say that our journey was extremely good. Once we got our train legs we were right in the swing of things and thoroughly enjoyed our new experience in Victoria.

No doubt you receive a lot of "grizzles" about the Victorian Railways; here is one which is the opposite. A big pat on the back to all concerned for delightful travelling.

--Mrs. M. Bulbick, Electronic Industries Ltd., writing to the Chairman

N July 5, my sister (Dr. Gallia) and I travelled on Southern Aurora from Sydney to Melbourne . . . Conductor Bruce (Car 7) went out of his way to help us . . .

and I cannot praise Conductor Helvey (Car 4) highly enough for the way he looked after us . . .

-Mrs. M. H. Gallia, 25 Kareela Road, Cremorne, N.S.W., writing to the Secretary

Flinders Street

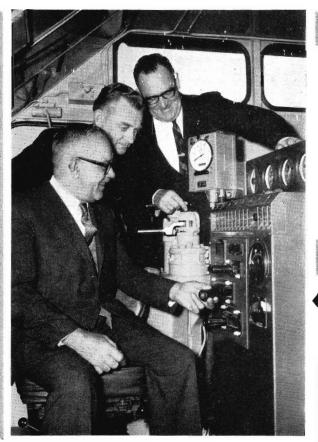
A letter containing two Melbourne Football Club tickets was delivered in error to Flinders Street railway station. When the envelope remained unclaimed for several days, Mr Tom Fitzgerald opened it and from the scant information available tracked me down and told me what had happened. Naturally enough, I am most appreciative of the action taken by Mr. Fitzgerald . . .

-Harvey Tonkin, Beamsley Street, Malvern, writing to the Chairman

Camperdown

A S secretary of the Camperdown Poultry Society, I have a lot of fowls coming to, and returning from our shows. I wish to express my appreciation of the co-operation I have received at all times from the stationmaster and staff at Camperdown.

-Frank H. Fisher, Camperdown



(From left) Messrs. E. H. Brownbill, (Chairman of Commissioners), E. P. Rogan (Commissioner), and S. F. Keane (Assistant Chief Mechanical Engineer) examine the controls of the new locomotive.

The X class hauls a freight train to Melbourne.

Polly, the first locomotive built at Newport Workshops (in 1893, but converted to No. 3 steam crane in 1904) stands jauntily beside a B class diesel—the first class of V.R. main line diesel-electrics introduced in 1952—and the new X class.

VIEW\$ OF NEW\$

FIRST X CLASS: On August 16, the first of the D X class diesel-electric locomotives reached Melbourn a standard gauge freight train from Sydney. The X c purpose locomotive of 1,800 h.p., and has a single, partl with controls that allow running in either direction w a turn-table. (See January News Letter, p

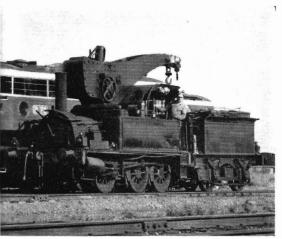






fter hauling is a general wated, cabin the aid of





BRIDAL PARTY BY TRAIN: V.I.P. carriage takes Mr. and Mrs. Peter Harcourt (left centre) and guests, from Selby to Marshall's Halt, for their wedding reception. (See page 130)

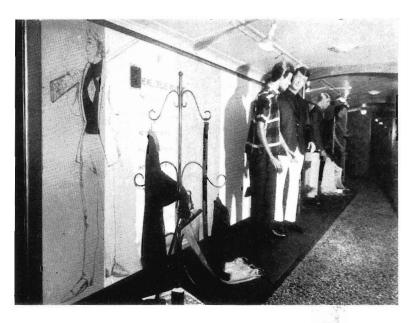


CONTRASTING with the new X class is this Mt. Lyell rack locomotive which arrived from Tasmania early last month. Shown being loaded on to a road vehicle at Melbourne Goods, the old engine was brought here by the Victorian Division of the Australian Railway Historical Society. It will be exhibited at the Puffing Billy Preservation Society's museum to be opened at Menzies Creek late this year. With the aid of its toothed rack, this locomotive coped with one-in-16 grades on the Mt. Lyell line in Tasmania.

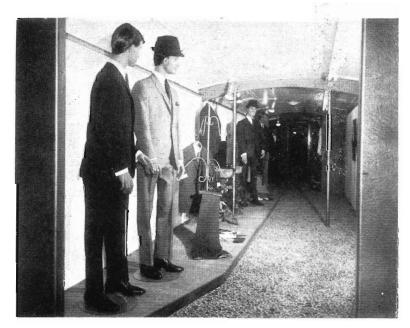
IT WAS

MAINLY FOR MEN

but women were also interested in the Fashion Express, a special train fitted out as a publicity vehicle for men's fashions, that, last month, toured through four States. As far as is known, it was the first train of its type in the world.



Ample space, made available by connected carriages, makes the train the perfect vehicle for travelling displays.







Before launching the train, Mr. A. G. Rylah, Acting Premier (right) together with Messrs. E. P. Rogan, Commissioner (centre) and Stan Hughes, Executive Director of the Men's Fashion Council, inspected the displays.

NOMMISSIONED from the Victorian Railways by the Men's Fashion Council, the train consisted of the Goulburn and Norman carriages, a van, and two special display carriages that had been given carefully designed colour schemes, and were specially fitted so that garments could be displayed as effectively as in a city store display window. As the Goulburn carriage has sleeping, lounge and shower facilities, and the Norman has a kitchen and dining section, the train was completely self-contained. A male model travelled on the "wardrobe on wheels" and staged fashion parades in the train and on station platforms. Electrical power for the brightly-lit interiors was supplied by equipment specially installed in the van.

The Fashion Express left Spencer Street at 9 p.m. on Sunday, August 11, after having been launched by the Acting Premier, Mr. A. G. Rylah. The first part of the tour was through the Western District into South Australia, then through central and north-eastern Victoria to New South Wales and Queensland. Bogies were exchanged at Wodonga. The return to Victoria



With its display carriages painted a brilliant yellow, the Fashion Express was a striking picture as it approached Colac.

was made through the coastal areas of N.S.W.

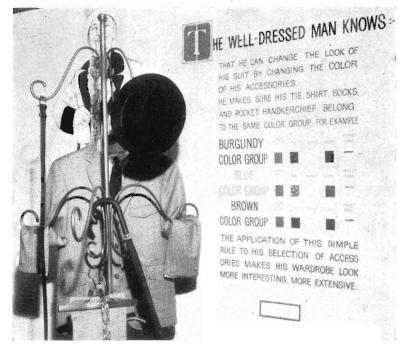
"The Fashion Express was not designed as a method of getting free advertising for manufacturers", said Mr. Stan Hughes, the Executive Director of the Men's Fashion Council.

"Its purpose was to show men what they could expect to see in their own men's wear stores in the new season and pass on some tips on how to get more fun out of their clothes", he said.

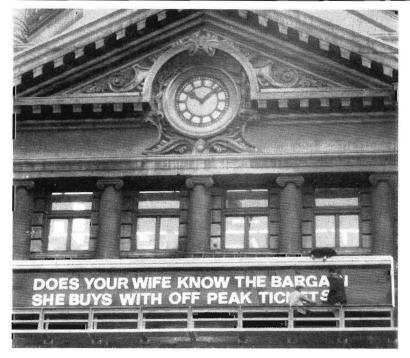
A crammed itinerary was planned that covered 50 country towns and four capital cities during the 5,000-mile tour. The average stopping time at each centre was about two hours. Up to 300 people an hour were able to walk through the display carriages.

As well as business suits, the fashions shown included casual, sports and beach wear. None of the suits had labels or price tickets.

The two display carriages were used for the Gippsland Industries Train (News Letter, March 1966) and, together with two others, are available for hire.



The importance of accessories was stressed in this information panel.



NEW SIGN FOR FLINDERS STREET

THE neon sign on the Swanston Street entrance to Flinders Street station has been replaced by a sign with plastic lettering, that is more economical in operation. Viewed by the many thousands that pass by, or enter the busy station every day, the sign carries railway messages that are changed each Tuesday.

The new sign is equally legible by day or night, as it is lit by fluorescent lights at top and bottom. Similar in design to the signs in the subway ramps at Spencer Street station, the plastic letters are supported by stainless steel clips on a modular wire mesh background. This method of attachment avoids the distraction of supporting rails for the letters.

The picture at left shows railway staff altering the sign.

NEW RESTAURANT OPENED



In the gleaming kitchen, Miss Joan McWilliams prepares coffee.

THE Department's new restaurant that opened at Princes Gate on August 2, was an instant success, its popularity surpassing all Departmental expectations.

Contributing to this are not only its central location, but also its attractive modern decor and furnishings, and the high standard of meals and service.

Prints on walls

Seating 108, the new restaurant has wrought iron chairs upholstered in burgundy vinyl, wrought iron tables with laminex tops covered by white tablecloths, and mahogany counters and incidental furniture. There are pastel coloured wall, ceiling, and floor tiles; and two feature walls—one with pastel check linen drapes and the other with Japanese grass panels, that have shadow boxes holding reproductions of black and white prints of early Melbourne scenes.

Kitchen

Hygienic food handling is facilitated by the kitchen's stainless steel equipment—for food preparation and storage, and utensil washing—and the ceramic tiled walls. The placement of kitchen facilities has been planned to ensure smooth working between kitchen and waitress staff, with the aim of giving quick, efficient service to patrons.

Waitresses are dressed in the recently introduced refreshment staff uniform of bluish-grey with white piping and V.R. emblem.



(above) A corner of the new restaurant.

(below, from left) Mr. E. H. Brownbill, Chairman of Commissioners, Miss R. Griffiths, Manageress, and Mr. F. P. Kennedy, Superintendent of Refreshment Services, admire an early print of the Princes Bridge area.



Menus and prices are comparable with those at the Spencer Street interstate rail terminal dining room. The restaurant is open between 11.30 a.m. and 7 p.m., Mondays to

Fridays. It is not open for breakfast, as the Department already provides a breakfast service at the Flinders Street cafeteria, only a few hundred yards away.

AMONG OURSELVES

Changes in traffic executives

THE retirement, this month, of Mr. J. R. Rewell, Chief Traffic Manager, has resulted in changes among top executives of the Traffic Branch. Mr. Rewell has been succeeded by Mr. T. A. James, former Assistant Chief Traffic Manager; and Mr. E. L. P. Black, who was Outdoor Superintendent, becomes the new Assistant C.T.M.

During a railway career of nearly 50 years-he started as a junior clerk on November 15, 1915, in the District Superintendent's office at Maryborough-Mr. Rewell has had a long and close connexion with top-level V.R. administration. After transfer to Head Office in 1918, he was on the Outdoor Superintendent's staff before becoming secretary to Mr. R. G. Wishart, then assistant head of the branch. Mr. Rewell also worked in that capacity when Mr. Wishart became Commissioner and, later, Chairman. After being engaged, for a period, on special duties, Mr. Rewell was appointed Outdoor Assistant to the Chief Traffic Manager in 1950. Four years later, he accompanied Mr. L. A. Reynolds, now Chief Civil Engineer, on an overseas tour of investigation. In 1956, Mr. Rewell became Assistant Chief Traffic Manager, and in 1959, head of the branch.

Mr. James joined the service as a junior clerk at Gardenvale in 1920. Much of his career was spent in the north-eastern district; he eventually became District Superintendent at Seymour. Other senior positions Mr. James has filled, include Superintendent of Train Services and Outdoor Superintendent. (Mr. James' career was more fully covered in April News Letter, follow-



Mr. Black



Mr. James (left) takes over from Mr. Rewell.

ing his appointment as Assistant Chief Traffic Manager.)

One of Mr. Black's earliest jobs in the Department was as a lad porter at Berwick, nearly 47 years ago. Appointed to the clerical staff shortly after, he was stationed in the northeast for several years—until the 'thirties when he was acting as assistant stationmaster at Buangor, Berwick, Euroa and Lismore. In 1945, Mr. Black became stationmaster at Culgoa, and, four years later, was appointed traffic inspector in the metropolitan district. Then followed two years as District Superintendent at Ballarat until his appointment as Metropolitan Superintendent. Promotion to Superintendent of Train Services followed in 1964, and to Outdoor Superintendent early in 1966.

While in the latter position, Mr. Black was the Branch representative on the Decimal Currency Committee, and responsible for the complex arrangements that resulted in the smooth changeover by the Department to decimal currency. Working with police and P.M.G. officials, he also arranged the schedules for the transport of the new decimal notes throughout Victoria. Week ends may find Mr. Black relaxing with spade and seccateurs in the garden, or perhaps wading a mountain stream after the wary trout.

Apprenticeship opportunities

THIS year the Department is offering 254 apprenticeships in a range of 24 different trades. Applications close on October 24.

These vacancies are available to eligible junior railway employees and sons of railway staff as well as to young applicants from the general public.

Information booklets and application forms have been distributed to most railway stations and may also be obtained from the Employment Officer, Room 215, Railways Administrative Offices, Spencer Street, Melbourne. Members of the staff can co-operate by encouraging inquiries about apprenticeships and advising those interested how to obtain information.

Officers-in-charge of stations can help by ensuring that information booklets and application forms are available, to meet any requests stimulated by railwaymen and through Departmental advertising. Additional copies can be obtained from Room 215, Head Office, auto. 1678 or 1780.

Motor trucks



Mr. L. H. McCallum, shown holding a wristlet watch presented by his fellow workers on his retirement last month, has been connected with the Department's road motor services ever since he transferred in 1932 to what was then known as the Supervisor of Road Transport's division. At the time of retirement he was in charge of the allocation of the domestic fleet of road trucks.



At a private party on the occasion of his retirement last month, Driver J. Kennelly was presented by his workmates with a model of an X class steam locomotive as well as a transistor radio. Shown at Ashburton, farewelling Mr. Kennelly (centre) are (left to right): Guard W. Fogarty, Assistant Stationmaster J. Jennings, Driver J. Baskin, Driver P. Kanigowski, Guard J. Gavan, and Stationmaster G. Maddox.

Friendly service at Leongatha

RS. Mollie Harris has retired as gatekeeper at Roughead Street (Leongatha) after 20 years and five months of unfailing, friendly service. And in that time she has learnt to know almost every car in the district . . . She could look either way, knew who would stop, who would try and rush through at the last moment before the gates were closed-and allow accordingly . . . In retirement, Mrs. Harris takes the best of wishes from the innumerable district motorists who received ready service and a happy smile during all sorts of weather at the Roughead Street gates". —(The Star, Leongatha)

THE man who can smile when things go wrong has probably just thought of someone he can blame it on.

North-eastern golf

OLFERS are reminded that this year's annual north-eastern tournament will be played on the Golden Vale course at Benalla, on Sunday, October 2. Intending competitors should contact Peter Hale, tournament secretary, Works Foreman's Office, Benalla.

WORTH QUOTING

"HE Federal Government spent more in subsidising air travel than all the State Governments did on other public transport losses in Australia. And most people who travel by air do so on expense accounts or warrants. Every time you take a flight anywhere in Australia, the Federal Government gives you \$6 or \$7 for your ticket. —(Mr G. Whitlam, Deputy Federal Opposition Leader, "The Sun", 19.7.66)

Mileposts IN V.R. HISTORY

1839

First railway plan. Robert Hoddle, New South Wale Government Surveyor at Port Phillip District, in March, marked out a town site at The Beach (now Port Melbourne) and planned a line from Melbourne.

1846

Geelong residents, in March, proposed a 200-mile line, to be operated by horses, from Geelong to Portland and Hamilton.

1850

Uneventful public discussions on railways from Melbourne to The Beach and to Geelong.

A company to build a steam railway from Geelong to Melbourne, and to be completed within three years at an estimated cost of \$84,000, collapsed because of lack of financial support.

1851

The Colony of Victoria established,

A public meeting at the Mechanics Institution (now Melbourne Athenaeum), September 7, considered a proposal for a railway between Sandridge (The Beach) and Melbourne, to cost \$120,000. The scheme lapsed.

1852

Eight private railway syndicates formed.

Dinner to Country Delegates



Guest of honour at the recent annual dinner tendered by the Victorian Railways Returned Servicemen's Section to its country delegates was Brigadier W. H. Hall, C.B.E., D.S.O., E.D. One of the most pleasant social events of the railway year, this annual dinner is noted for the distinguished men who have attended as guests of honour. The Section has been in existence for 47 years and its present membership is about 800. The secretary is Mr. J. A. Taylor of the Rolling Stock Branch at Head Office.

RECENT RETIREMENTS ...

ROLLING STOCK BRANCH
Briggs, R., Seymour
Kennelly, J. G., E.R. Depot
Withington, F. J. H., Bendigo North
Welford, F., Yarram
Leguire, J. A., Jolimont
Simpson, W. A., Newport
Vellios, C. N., Shelter Shed
Baker, C., Newport
Schruhm, N. F., Newport
Howard, F. A., E.R. Depot
Gowan, J. W., Ballarat
Eddy, W., Bendigo North
Joyce, W. V., Wodonga
Fitzgerald, W. B., Jolimont
Martin, R. J., Newport
Ryan, J. W., Train Lighting Depot
Jouvelet, L. P., Jolimont
Mitchell, H. J., Newport
Makin, G. E., Jolimont

TRAFFIC BRANCH
Moyes, G. R. H., Head Office
Lawry, A. E., Bendigo
Brophy, E. J., Dynon
Surridge, J. McE., Geelong
Callaghan, J., Port Melbourne
McCallum, L. H., Melbourne Goods
Kaiser, F. C., Head Office
Dickson, A. E., Melbourne Goods
Galbraith, H. J., Kyabram
Clanchy, W., c/o Metro. Supt.
Cook, W. J., Flinders Street
Kennedy, F. A., Melbourne Goods
Schenk, W. L., Riversdale
Evans, J. S., Deniliquin
Calnan, J., Mildura
Williams, C. M., Flinders Street

WAY AND WORKS BRANCH
Duncan, W. F., Blackburn
Wilkinson, G. H., Ironworks Division
Hicks, W. C., Benalla
McAuliffe, P. P., Mordialloc
Cable, R. S., Kangaroo Flat
Sokol, J., Ararat
Kent, R. W., Spotswood
Rayne, R., c/o Bonding Supervisor

ACCOUNTANCY BRANCH
Gallivan, J., North Eastern Accounting
Office
Roberts, R. E. J., Head Office
Slade, J. F., Head Office
Bourke, M. J., Head Office

ELECTRICAL ENGINEERING BRANCH

Frawley, J. M., Flinders Street Reid, H. R., Jolimont Substation Evans, A., Testing Division Barker, D. L., Overhead Division

NEWS LETTER REGRETS
TO RECORD THE FOLLOWING

DEATHS

ROLLING STOCK BRANCH

Clancy, M., Newport Kite, S. F., Newport Lyster, J. J., Jolimont Gammon, A., Newport Newton, D. J., Newport Beath, H. R., Geelong Hartigan, M., Ballarat North Dowell, R. W., Yarrawonga Hodson, H., Jolimont

TRAFFIC BRANCH Rogers, A., Melbourne Goods Breen, F. J., Numurkah

WAY & WORKS BRANCH Stepien, F., Geelong Smith, A., Maryborough



Country carpet bowls championship

A GAIN we had 22 teams from seven country centres (Ballarat, Bendigo, Benalla, Geelong, Korumburra, Maryborough and Seymour) competing in the country carpet bowls championship, held in the V.R.I. ballroom on Sunday, August 14.

In the ladies' championships, last year's winners, Ballarat, were eliminated in the semi-finals by Bendigo, who went on to take the title. This combination played well throughout the series, but after looking as if they were going to win the final in a canter, had to produce everything they knew to hold off a magnificent fighting finish by the Seymour ladies. Bendigo made a clean sweep of the ladies' events, when their No. 2 side won the consolation event, comfortably beating Maryborough 1 in the final.

In the men's section, Bendigo also provided the winning team, when their No. 2 side beat Ballarat 2 in the final of the championship, after an exciting and thrilling match. The scores were close throughout—neither team being able to obtain a winning break—and after 20 ends had been played the sides were tied, 17 points each. Two extra ends were played and, with almost the last bowl of the match, Bendigo managed to pick up three points to run out winners 20 to 17. The men's consolation saw victory go to Maryborough, with the unlucky Ballarat centre again providing the runner-up, this time their No. 1 side.

Trophies were presented to the winning teams by Mr. M. McKenzie, senior Vice-President, V.R.I., ably assisted by Mr. F. M. Mitchell, General Secretary, V.R.I. Incidentally I feel that some mention should be made of the many councillors of the Institute, who give up their Sunday to assist in running this fixture, for without their help, it would have been extremely difficult to conduct the tournament.

Bowls

AILWAYMEN who are interested in taking up bowls, or who are experienced bowlers and would like to join an A grade club, are reminded that Albert Park-V.R.I. are making a drive to increase the club's membership. The green is situated in St. Vincent's Gardens, Albert Park, and is only three minutes walk from the Albert Park railway station. A modern club house has been erected and there is ample parking space for cars. The club has many teams entered in the R.V.B.A. pennant competition and new players are required in all grades. Expert tuition is available to beginners. Social games are arranged every Sunday, from Oc-tober to May. There is a strong associates' section attached to the club, and any prospective member's wife also wishing to play bowls would be most welcome. Further information, such as yearly subscription, can be obtained from me. (auto. 2445).

Table Tennis

I N the final of the 1966 singles championship, G. Lewis (Metro.) won back the title he lost last year by defeating a fellow metropolitan player, B. Smart, in an interesting match.

The doubles championship was won by a scratch country pair, G. Roiter (Horsham) and M. Lethlean (Traralgon), who played together for the first time in this event. The country pair defeated G. Lewis and E. Campbell, both metropolitan players, in straight sets. The country singles championship went to last year's open champion, G. Roiter, of Horsham, with M. Davey, of Geelong, as runner-up. Davey proved that his form in the country singles was no flash in the pan by taking out the consolation singles from L. Baldwin of Bendigo. Mr. L. Bennett (V.R.I. councillor) presented the L. J. Evans memorial shield to G. Lewis, and other trophies to the respective winners.

Ballarat president

R. Alex Quayle, who was recently elected president of the Ballarat Football League, has been a fitter in the Department for the past 47 years, mainly at Ballarat, Maryborough and Mildura. Mr. Quayle has had a long association with football, in an administrative capacity. He was the Maryborough delegate to the Bendigo Football League in the 'thirties. When Maryborough joined the Ballarat league in 1946, Mr. Quayle, who was then back at the Ballarat Workshops, became the club's representative on the league's board of management. He resigned that position about seven years ago to accept the vicepresidency of the league.

September 1966 143

In addition to football, Mr. Quayle has had a number of other sporting interests. In his younger days he was a prominent runner with the Ebenezer Harriers, and on one occasion finished fourth in the Ballarat 5-mile Cross-country Championship. He won a number of races as a crew member representing the Ballarat City Rowing Club, at regattas in the country and on the Yarra. In the late twenties he reached the lightweight final at the annual boxing and wrestling championships at Ballarat. When stationed at Mildura, he was closely associated with plumpton coursing and was interested in Day Dreamer, who became one of Victoria's best performers, winning among other races, the Victuallers' Gold Cup, raced at Geelong.

Football

FTER last year's grand final result, I made the statement in News Letter that Newport were too good a team to be down for long, and results this season have proved how right I was. They coasted through the home-and-home games without at any stage being in danger of defeat, and when Loco. struggled to a 15 point win over Suburban Lines in the preliminary final, the writing was on the wall. So it proved, at South Melbourne on Tuesday, August 16, when Newport met Loco. for the Commissioners' Cup.

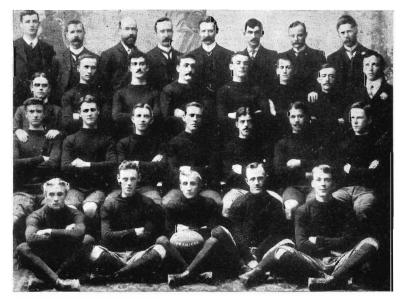
From the first bounce of the ball, the obvious superiority of the Shops' boys was soon apparent, and as attack followed attack on the Loco. goals, it was not a matter of winning, but simply by how much. Loco. fought grimly and battled hard, but were no match for their more talented opponents, and by half-time Newport led—13–9–87 to 1–2–8. In the second half they continued on their merry way and, no doubt with the memory of the 1965 grand final still rankling, they ruthlessly

bombarded the goals to run out the easiest of winners, 23-17-155 to Loco's 1-7-13.

Little can be said about the game except to congratulate Newport on a tremendous win in which every player played his part, and to remark that it was most surprising to see a Loco. grand final side so easily beaten. Best players for Newport were J. Allard, N. McDonald, T. McGrotty, C. Rigg, M. Zappa and G. Allen. For Loco. the best were B. Pomeroy, B. Allen, I. Milne, R. Lewis and J. Archer. Goal kickers—Newport: G. Allen (8), C. McDonald (4), C. Rigg (3), T. McGrotty (2), J. Tainsh (2); Loco: B. Higgins.

Messrs. E. H. Brownbill (Chairman of Commissioners), L. A. Reynolds (General President, V.R.I.), S. F. Keane (Asst. Chief Mechanical

Engineer), M. McKenzie, N. L. Miller (Vice-Presidents, V.R.I.), and F. M. Mitchell (General Secretary, V.R.I.) were among the spectators who witnessed the match. At the presentation night held in the V.R.I. on Monday August 22, Mr. E. P. Rogan (Commissioner) presented the Commissioners' cup to Mario Zappa, captain of the Newport team. Mr. L. A. Reynolds presented the best and fairest trophies to M. Castleman of Suburban Lines and J. Edmonds of Codon who finished equal first, even after a count back. It was very pleasing to see a member of the Codon club receive a league trophy and to share what is generally regarded as the highest honour a footballer can win. G. Allen, of Newport, won the goal kicking trophy and received his award from Mr. F. J. McCloskey (Vice-chairman, V.R.I. sports committee).



PREMIERS—in 1904. In the long trouser era, the Railways played against teams of Police, Firemen, etc.



Newport Workshops team, winners of the Commissioners' Cup. (Left to right) Back row: A. McCallum (trainer), G. Allen, R. Martinenko, N. McDonald, G. Fulford, P. Reed, W. Reardon, J. Morton, J. Tainsh, G. Butterworth, C. Studham, A. Hale, L. De Luca, L. Morrison, E. Rigon, J. Limbom, E. Tomlinson (trainer). Centre row: S. Majerczak, R. Bassett (president), J. Allard (vice-captain), M. Zappa (captain), J. McGrath (coach), T. McGrotty, G. Peters. Front row: C. McDonald, C. Rigg, R. Cameron, B. Pearce, J. Costa, B. Sherran, and G. Crick.



OCTOBER

1966



THE MONTH'S REVIEW

Rest of the story !

A FTER publishing a reader's letter last month, disputing a Departmental advertisement, The Herald asked the Commissioners for a comment. As so little of the Commissioners' statement was used, News Letter thought readers might be interested in the full reply.

The Department's advertisement compared the costs of travelling to work by train from a number of stations, and by car—a form of advertising used, in various presentations, since 1958. Car travel costs were stated to be at 7 cents a mile with 30 cents daily parking fees.

The reader claimed only actual running costs should be used—at

3.2 cents a mile.

The Commissioners commented: "A Railways' advertisement, showing the almost unbelievable savings when travelling to work by train rather than by car, could hardly be considered misleading when the basis was clearly given, so that readers could disagree—if they so wished—with the conclusions reached.

"It was never claimed that the "low 7c per mile" was the running cost only. The latest R.A.C.V. cost per mile was almost 10 cents, so 7c

could be considered "low".

"One has to consider many factors when placing such a cost comparison before the public—whether a second car is necessary for driving to work, the greater risk of collision, damage, and consequently higher insurance, the increased petrol consumption and mechanical wear due to peakhour driving conditions, etc.

"Even accepting the letter writer's actual running costs, the train traveller generally still shows a cash saving over the motorist. However, the savings are even greater if a yearly train ticket is used or, better still, if a person can travel off-peak.

"There is the added advantage that the periodical ticket holder can use the train ticket at night or weekends, between the stations specified—to see a film, or football match, for instance—at no additional cost.

"Before the comparisons were advertised, actual road tests were carried out and it was found, even after allowing the train traveller 50 per cent. more walking time, that there was very little difference in travelling time between home and office whether one goes by rail or road, for the motorist is beset by traffic snarls, cross movements, red lights, and road repairs.

"He usually has to park on the outskirts of the city, and it is interesting to note that R.A.C.V.'s General Manager, Mr. Neil McPhee, dis-

cussing driving to work (last month), commented that 'the walk to and from the parked car is healthy'.

"Equally healthy is a walk to and from the station—if the traveller does not wish to leave his car in one of the many free car parks provided

at local stations.

"Even the stress of driving itself can be harmful and, on March 29 last, one daily paper carried an article that included: 'The more one thinks about car ownership and coronaries, the more one is inclined to use taxis, hire cars, or public transport rather than be bothered with a private car'.

"Because so many want to travel within a short period, it is often overlooked that the Railways still carry about 100,000 seated passengers in the morning peak, and more could sit if those already occupying seats showed more consideration in squeezing up.

"Train travelling to work is also a time to read, knit or talk with friends; on the Reservoir line, Tatt's first prize has already been won twice by syndicates of regular commuters".

Colouring book

UROPEAN children will soon be familar with one of Australia's crack trains—Southern

Aurora—as it has been featured on the covers and inside a colouring book on Australian transport. The book has been published in Holland and distributed throughout Europe. In Australia, it is sold by G. J. Coles and Co. Ltd.

FRONT COVER

SHOW EXHIBIT: At the Department's exhibit in the Royal Agricultural Show, children are shown, in foreground, filling in their free identity discs obtained from a disc dispenser that eliminates wastage. Altogether, 70,000 discs were distributed. This year's exhibit featured the Department's ability to provide freight vehicles "tailored" to suit the individual needs of rail users. The miniature trains and 1/12th scale models of rolling stock reinforced the main theme. The exhibit was staffed by Commercial Agents, Hostess Evelyn Heron (centre).

Overseas Visitors



Among visitors to Train Control at Head Office, last month, were Messrs. Chatara Natara Thawat, from Thailand (left) and Mahmoud Mahomed Ali, from the Republic of the Sudan (right). They are shown having the operation of the standard gauge C.T.C. panel explained by Train Controller R. J. Brewster (seated). Messrs. Thawat and Ali are Government officials from their respective countries who are to attend a course in advanced administration at the Australian Administrative Staff College, Mt. Eliza.

A BRIEF COMPUTERS

is the second of a series of articles to aquaint the staff with the Department's progress in Electronic Data Processing. The first was published last month.

TAN has always had the need for counting. In the early days he probably wanted to know how many clubs he had . . . and sometimes how many wives. Knowledge of the number of soldiers a commander had was an assetand sometimes an embarrassmentin warfare. Throughout the ages, man has counted to determine his personal possessions—his flocks, herds and so on. At a very early stage, he found that he needed more than fingers and toes to do this. Consequently the accounts stick, with notches to represent numbers, was invented. Gradually he developed this elementary process and found he could subtract, multiply, and divide.

The Chinese and the Japanese developed an instrument known as the abacus which is still used for fast and accurate arithmetic.

In the 17th century, Blaise Pascal, the French philosopher, at the age of 19, designed a machine on which he could count, mainly to save himself the trouble of totting up figures manually; his father was a tax collector and Pascal junior had to keep the accounts. He had a lot of trouble carrying one and had to drop the idea.

An English inventor and mathematician, Charles Babbage, developed in the 19th century a machine that he called an *Analytical Computation Engine*. Unfortunately, he ran into both mechanical and financial difficulties.

Later, William Seward Burroughs built a commercial machine that could add and subtract. Today, there are a good many machines that still perform only these functions.

Punched cards

Henri Jacquard, a French engineer of the 18th century, designed a weaving loom that would produce a pattern by following certain hole sequences in a card. At the beginning of the 20th century, an American, Herman Hollerith, elaborated on Jacquard's principle and developed the punched card as a means of recording data. The U.S. Census of 1899 was handled by this means, saving \$US 10 million in the process. This was the beginning of punched card data processing.

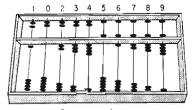
The same principle was used in the Australian census this year. The basic idea is that holes are punched in a card, one card for each person, and each hole or group of holes represents items such as sex, age, number of children, etc. Punched cards are also used for T.V. licences, child endowment, and in some cases, bank interest statements. You probably have one of these cards in your home now.

Such cards can be sorted and counted, and the numerical data punched in them may be added. The results can then be tabulated on a high speed printing unit.

The computer

During the last war, a "computer" was built at Harvard University, U.S.A. This machine used electro-

Specimen of a punched card. If put through a tabulator, the perforations on this card would cause the machine to print the numerals from 0 to 9, the letters of the alphabet, and the words Victorian Railways.



Japanese abacus

mechanical relays similar to those in telephone hand sets. Unfortunately it was fairly slow. (How long does it take you to dial a six digit telephone number?)

However, war-time developments, particularly in the field of radar, required a faster means of calculation. Consequently, electronic machines using radio valves instead of electrical relays were developed to meet the requirements. Not being limited by the relatively slow relays, they were about 1,000 times faster.

Between 1943 and 1949, a number of scientific machines was produced, but it was not until the early 'fifties that these new machines, which by then were called *electronic computers*, began to be used for commercial data processing such as the calculation and printing of invoices, wages, tax certificates, and—more familiar to most readers—the electricity and telephone accounts.

Modern computers using transistors and other advanced electronic devices are much faster than the earlier ones using valves. For example: the machine the Department will hire (News Letter, September p. 131), can add two numbers—say 73,649 and 10,957—in 65 millionths of a second, i.e. 65 microseconds. In other words, it can do 15,000 such additions each second.

By using the punched card principle to feed information, and the high speed of the computer for calculating, all that is needed is a means of printing the results at comparable speeds. All commercial computers can do this—at a rate of about 1,000 lines a minute. At this speed, the Tax Certificates for all the Department's 28,000 employees could be printed in just over half an hour.

MONORAILS ARE NOT THE ANSWER

In this survey of monorail systems, Mr. G. F. Brown, Deputy Chairman of Commissioners, who recently returned from an investigation of overseas railway developments, shows why monorails have no advantage over Melbourne's conventional duo-rail system.

ANY discussion of modern rapid mass transit systems usually includes talk of monorail systems, and it was natural that

we took every opportunity to inspect these systems and discuss their merits with transport authorities overseas.

Six carriage Tokyo to Haneda monorail train passes through track switches as it enters. Hamamatsu-cho station, Tokyo. At lower left are the J.N.R. suburban lines passing below the monorail track. (Photos: A. J. Nicholson)



Interior of the monorail carriages running between Tokyo and Haneda. Taken en route to Haneda, this shows the clear view through the carriages and also the lack of passengers.

However, it soon became apparent that few commercial type monorail systems were operating.

In all, there are about 25 miles of monorail service throughout the world. About two-thirds of this mileage is in two systems; a suspended type of monorail 8.5 miles long, which was built at Wuppertal, Germany, in 1901, and the Tokyo to Haneda Airport System, 8.2 miles long, built in 1964. The remainder are confined to amusement parks or experimental installations.

We were able to view those at Tokyo, Nagoya and Nara in Japan, and also the 2.5 mile loop at Anaheim, U.S.A.

JAPAN

The newest and most notable was the Tokyo to Haneda line which was built by Hitachi Ltd. to provide visitors to the 1964 Tokyo Olympic Games with a rapid and spectacular means of travelling from the International Airport, Haneda, into the city of Tokyo.

We travelled on the monorail with executives of the operating company, boarding it at Tokyo Terminal, which is on the fifth floor of a new building next to Hamamatsu-cho station of the Japanese National Railways, and about two miles from the centre of Tokyo.

The trains enter through a side wall of the building, and passengers can reach the platform either by using an elevator or escalators. Leaving the terminal, we passed through a busy industrial area. The lines are on an elevated structure that first runs above streets and canals and then continues over the shallow water at the edge of Tokyo Bay, until the lines enter tunnels to pass under the Ebitori River and airport runway into the airport terminal at Haneda.

The Alweg monorail system was developed by the Alweg Company of West Germany, the name Alweg being compounded from the initials of its founder, Swedish born industrialist Dr. Anel Leonart Wenner-Gren. In 1951, he conceived the idea for his monorail system and spent about \$6 million in research and velopment programs until, in 1957, he built, for testing, the first single track monorail system of this type. In 1961, the Japanese firm of Hitachi

Ltd. signed a technical co-operative agreement with Alweg and they now manufacture the Hitachi-Alweg monorail system.

In this system, cars run on prestressed concrete beams of hollow I section, approximately 32 in. wide by 55 in. high, which are supported on reinforced concrete columns spaced at approximately 65 ft. centres. Although switching devices of either flexible or articulated type can be provided, they are costly and slow in operation. No provision for crossover from one track to another was seen.

The trains run on the top of the beam with the main pneumatic-tyred, load bearing and driving wheels running on the top face, while the pneumatic guiding and stabilizing wheels bear on the sides of the beam. The pneumatic tyres are costly, and as they are heavily loaded, life is limited and maintenance high.

The trains, which are operated as either 3-car permanently coupled units or sometimes combined to make a 6-car unit, are of light aluminium construction, driven by D.C. electric traction motors operating on a 750 volt D.C. supply.

A clear passage is provided through the three coupled cars. They are comfortable, although there is some noise and sway at top speed. This was about 50 m.p.h., although it was claimed that the cars had a maximum speed of 62 m.p.h.

Each 3-car unit provides 109 seats and has accommodation for a further 131 standing passengers, who are required to pay a fare of 250 yen (60 cents) for the 8.2 mile journey, which is completed in 15 minutes. This is about three to four times as much as the cost of the journey by bus or surface railway, and probably accounts for the poor patronage.

It was stated that the company hoped that additional future patronage would improve the economics of this project. However, the line must compete with a parallel freeway, and it is obvious that the airways passengers prefer the Airport bus or taxis which are much quicker and cheaper for a door to door service. For monorail passengers, the time taken to travel to the city terminus and then climb to the platform level by a series of escalators adds considerably to the time taken by the train.

Disadvantages

This monorail has provided a comfortable but expensive shuttle service between Tokyo and Haneda Airport, but in common with all monorails it has many disadvantages. The weight of car per passenger is

twice as great as that for conventional trains being operated in Japan. It lacks flexibility, as the equipment required for switches is extensive and costly and is therefore kept to a minimum, and there are no cross overs. Further, any failure in the operation of switches (which would simply result in a derailment with a conventional system), could result in a major disaster with a monorail system. As it must operate on substantial overhead tracks, the monorail cannot take advantage of cheaper construction methods where normal ground is available.

Amusement Parks

The monorail in Ueno Park, Tokyo, which is of the suspended type running in a circle of about a half mile in circumference, is for the enjoyment of school children visiting the park, and can hardly be regarded as a transit system. Similarly the Alweg type monorail at Inuyama Park, Nagoya, and the small line at Nara are for amusement only.

DISNEYLAND (U.S.A.)

However, the Alweg type monorail that operates on a 2.5 mile loop at Disneyland in Anaheim, Cali-

fornia, is utilitarian. As well as providing for the amusement of visitors to the park, it is a means of conveyance from Disneyland to a hotel nearby, operated by the same organization. The amusement park is particularly well controlled and devoted to the enjoyment of children for whom there are soft drink and sweet stalls. On a warm afternoon monorail cars to the hotel are well patronized by adults.

A stamp on the hand

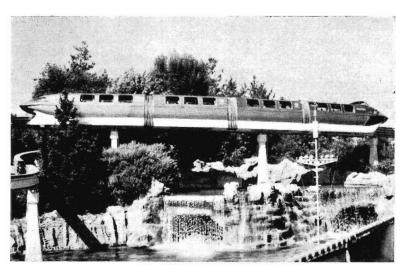
A feature of interest at this and other similar places, is that no "pass-outs" are issued. Patrons wishing to leave the grounds and return, have the back of the hand stamped with fluorescent paint. They are re-admitted by placing their hands under a special lamp which then identifies them.

The Disneyland system is 5/8ths scale, but as no passage is provided through the train, it can seat as many as a full size monorail car.

With only three 4-car trains, this system gives but a limited service that is not suitable for a rapid transit system.



Track switch gear at the Hamamatsu-cho station of the Tokyo to Haneda monorail. Track A is electrically driven so that it pivots about P to join tracks B or C as required, and thus complete the track into the station.



At Disneyland, California (U.S.A.), the monorail train is shown passing over an artificial pool. This train is only 5/8ths full size.

SEATTLE (U.S.A.)

This line, 1.2 miles long was built for the 1962 fair and is not considered part of the city transit system. An interim report submitted to the Puget Sound Governmental Conference setting out the recommendations of the consultants on Rapid Transit for the Seattle area, recommended the conventional duo-rail railway for this city. (The Australian railways are entirely conventional duo-rail).

WUPPERTAL (GERMANY)

The suspended type monorail in Germany is the only known regular urban transit monorail system. This line, 8.5 miles long, serves the West German city of Wuppertal and has been in operation since 1901. This application was suited to monorail as it follows the river along the Wupper Valley and thus no land acquisition was necessary. Although it was re-equipped in 1950, it has never been extended and is regarded as a shuttle service rather than a railway system.

COSTS

It has been claimed that the cost of a monorail is much less than the cost of an equal length of conventional duo-rail railway system. This, however, has been difficult to establish because in each case where a monorail has been installed, some special conditions applied.

The Tokyo-Haneda line cost \$50 million for 8.2 miles, or approximately \$6 million per mile, on a system that provided for only one

intermediate stop, which did not include a station building.

The cost of a conventional double track system as operating in the suburbs of Melbourne at present is approximately \$2 million per mile. This includes \$1.2 million per mile for land acquisition and clearing, but of course, does not provide for underground work.

The National Capital Transportation Agency, Washington, in a report prepared when monorails were considered for the new rapid transit system in Washington, stated that:

"Even at ground level we find that monobeam (monorail) is more expensive than modern duo-rail. Use of a \$3.5 million per mile cost (cited in the proposal for the suspended type) for monobeam along the Union Station—Silver Spring route, in comparison with NCTA's figure of \$9 million per mile for that route (a figure which has been ascertained by preliminary engineering), does not provide a comparison of the same facilities. The NCTA figure includes substantial sums for stations and extensive parking and terminal facilities, and for sections of subway at three locations which were indicated by profile and topographic considerations. If these items were removed from the NCTA estimate for comparative purposes, the duo-rail cost per mile would then be approximately 20% less than the stated cost of \$3.5 million per mile for monobeams ".

They chose duo-rail

Monorails have been in existence for more than 100 years. During that period, 27 cities throughout the world have constructed rapid transit systems and six more are at present building new systems.

All of them—excepting Tokyo (Japan), Wuppertal (Germany) and Seattle (U.S.A.)—have chosen the conventional duo-rail surface transit systems. Recent examples are Toronto, Montreal and San Francisco, while Pittsburg and Washington are at present planning such systems.

It is notable that, although the Wuppertal system has been in existence since 1901, all subsequent systems in Germany (the birthplace of monorail) have been conventional duo-rail.

In San Francisco, where the Bay Area rapid transit project is now proceeding at a cost of \$US 792 million, the group of consultants were charged with the task of building a modern transit system that would be truly competitive with the private motor car.

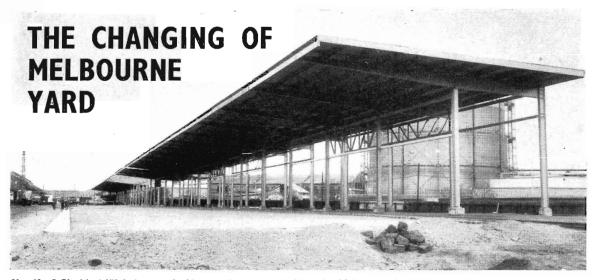
After the most conclusive study known to have been made regarding modern high speed public transport, they reported that monorails failed to offer the combination of speed, safety, capacity, flexibility, comfort and operating efficiency that is obtainable with a conventional duo-rail system using metal wheels on steel rails. (News Letter, March 1964, p. 39)

Although the Japanese selected monorail for the shuttle service to their Airport, they have since built conventional subway systems in Tokyo and Osaka, and the Japanese National Railways has continued with duo-rail equipment for the spectacular new Tokaido line from Tokyo to Osaka. (News Letter, July, 1966, pp. 100/101). Further, the monorail system to the Airport is now in serious financial difficulties and is looking for incentives to attract more passengers.

Although the monorail systems we have seen were serving a purpose, it is difficult to see how they could be fitted into a transport system that is operating on a conventional duo-rail track, except as a costly feeder line with fares much in excess of those applying to a conventional bus.

In cost, efficiency and reliability, the monorail certainly offers no advantage over a conventional system, while the tall columns and concrete tracks dominating the skyline would be an eyesore—something which few Australians would accept.

I am convinced that monorails offer no advantage when compared with the conventional duo-rail system now operating in Melbourne.



New No. 5 Shed is 1,070 ft. long, and wide enough to cover both road vehicle and rail wagon. The full length of the shed was brought into use on July 25, and the work previously done at Nos. 9 and 10 roads, Cowper Street, was transferred to it.



Testing piles for the new bridges across Dudley Street. To check that the piles are satisfactory and capable of standing up to requirements, a test load is applied to the pile, and its subsidence on loading, and restoration on unloading are measured. The pile shown is being loaded with a total weight of 180 tons. To the right of the test load is the pile driving frame used by the contractor to drive the pile shells.

To connect Melbourne Yard's new West Yard and D wagon sorting balloon with the automated hump yard to the north, under the \$10 million re-arrangement scheme, two new bridges are to be built across Dudley Street, south of the existing bridges.

Poor ground conditions in this area have necessitated driving piles 100 ft. below road level, to the bedrock of Silurian silt stone.

The re-arrangement (see 1964 News Letters, Aug., pp. 118-119, and Sept., pp. 132-135) has been planned in 35 stages, extending over five years, to allow normal yard working to continue. Nine of the 14 preliminary stages, in the outer areas of the yard, have been completed and work is proceeding on the remainder. Although some inconveniences can be expected as work progresses, the stages have been planned for minimum interference with day to day working, and minor operating benefits have already resulted from the new icing area (News Letter, Dec. 1965, p. 182), opening of the new South Yard where the North Melbourne Loco. Depot had been, and the new No. 5 shed parallel with Cowper Street. A new cement shed on the south side will be finished this month.

Completion of single stages, however, will not in themselves bring any major benefits.

The new West Yard and D balloon represent the first two major stages. The former will replace Cowper Street sidings Nos. 1-9, while the latter, with tracks Nos. 25-32, will be the westernmost of the four sorting balloons, that will each have eight tracks.

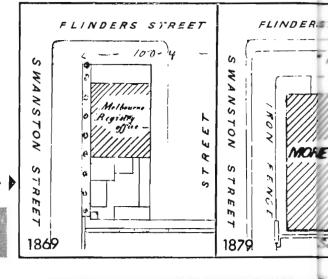


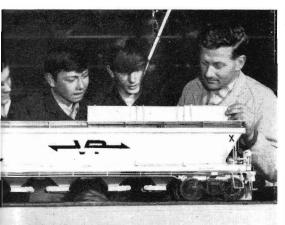


MODEL Salisbury with Inst model of made by use. Wh Departm GJX mod visitors.

PRINCES PLAZA OPENED: Scene at the opening of the Princes Plaza on September 5 shows Mr. E. H. Brownbill, Chairman of Commissioners, handing over the plaza to the Melbourne City Council, after having officially received it from the developer, Princes Gate Pty. Ltd. The Lord Mayor, Councillor Ian Beaurepaire, then opened the plaza to the public. The council, which has leased the plaza for 99 years, as a public amenity, has planted trees and shrubs. and installed seats and lighting.

ON SITE OF MORGUE: Mr. Brownbill mentioned that Princes Plaza was on the site once occupied by the City Morgue. This statement was subsequently disputed in a letter to The Aye. Here is a section of a well preserved plan (dated May 31, 1879) from the Department's records, showing the Morgue in Swanston Street. On an earlier plan, dated August 10, 1869, the same building was shown as a Registry Office. The Morgue building was demolished in 1890, and the site taken over by the Railways.





EAT WAGON: (From left) Apprentices Ken off Fordham, and Garry Morrison, together T. D. Clarke, are inspecting a 1/12th scale of the GJX wheat wagons. The model was sport Workshops' apprentices for publicity splayed, together with other models, in the exhibit at the Royal Agricultural Show, the royed specially interesting to many country in the exhibit was a miniature train (1/120th of the aluminium wheat wagons.



Su clives Pa

STREET

views of news



U.S. AMBASSADOR LIKES TRAINS. "The train is the best way to see the country", said Mr. Edward Clark, U.S. Ambassador, when, accompanied by his wife, he arrived in Melbourne by Southern Aurora, last month. He was making another tour of Australia, travelling by train from Sydney to Perth. Before boarding The Overland to continue his journey, Mr. Clark confessed that it had been his ambition since he" was a kid" to drive a train, and he would "like to have a go" if he got the chance. In the picture, the smiling Mr. Clark is seen being greeted at Spencer Street by Station-master B. Donovan.

1,500 TONS OF WHEAT: The longest train load of aluminium bulk wheat wagons (GJX) yet seen on the V.R. system ran from Bendigo to the Geelong wheat terminal on September 8. Hauled by B and T class diesel-electric locomotives, the train left Bendigo with 15 bulk wheat wagons, and took on another 10 at Woodend. On arrival at Newport, the B class locomotive was detached and replaced by a second T class, and the train was then hauled to the Geelong wheat terminal. The hopper wagons contained 1,500 tons (55,000 bushels) of wheat. The train is shown near Laverton.



LINES FROM OTHER LINES

Tides will lift Queensland bridge

THE contractors for a new bridge to cross the Calliope River, near Gladstone, will use the high tides—experienced in Central Queensland around October and November each year—to lift eight of the heavy spans into position.

The existing railway bridge crossing the river is a bottleneck. Built for the needs of a much smaller and mainly pastoral society, today it slows down the multiple-unit operations recently introduced to move export coal from the Moura mine, and the growing volume of livestock and other traffic.

The 69 miles of North Coast Line between Rockhampton and Gladstone is one of the busiest single line sections in the State—up to 46 trains a day are by no means unusual when traffic is at a peak. As the main limiting factor in track capacity is the number of trains a day to pass over a given section, rather than the length or weight of an individual train, multiple-unit operation was introduced to reduce track density, and reduce the cost of hauling the increasing volume of export coal from Central Queensland.

A considerable reduction in track density has been achieved, but the limitations of the old bridge prevent uninterrupted multiple-unit operation. The new bridge will be 990ft. long, the longest pre-stressed concrete railway bridge in Australia, and with a ballast track 10ft. above the highest recorded flood level.

Construction is proceeding rapidly, work on the piers is nearing completion, and the girders to be floated into position are poured and lie ready on the bank, waiting for the tidal range to increase.

Re-dieselization has arrived

The United States railroads have reached the stage where the first generation of diesel units is being completely superseded to such an extent that the process has been called the "re-dieselization of the railroads".

The new locomotives have more horsepower per unit, and low maintenance costs. The introduction of electronics to diesel-electric locomotives has resulted in its use for

control purposes and in power transmissions.

It was the development of the silicon rectifier that made the new locomotives of 3,000 h.p. or more, with AC/DC transmissions a practical reality. Further electronic development will undoubtedly make significant changes in both dieselelectric design and operation.

Doggy detectives

SINCE November last year, British Transport police in Glasgow have used eight Alsatian dogs to cut down theft and vandalism in the city's marshalling yards and sidings.

Prior to the use of the dogs, one of Glasgow's largest marshalling yards was raided by thieves several times a week. There has not been a single raid since the dogs began patrolling. They are also a pro-

tection for the constables. There is no pattern for the dog patrols; they can appear anywhere, at any time.

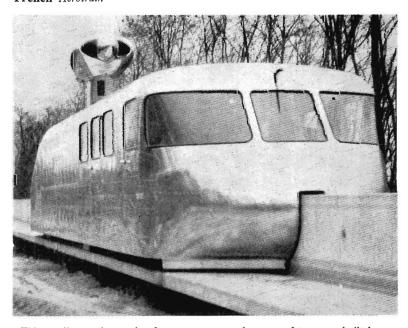
"Law-breakers think twice about entering a yard where there are dog patrols. One man entered and tried to escape. He didn't sit down for about a fortnight", said Mr. R. J. Booth, chief of police in the area.

—(Rail News)

THE first air-conditioned car in Australia ran in December 1935. It was the Victorian Railways carriage 36 AE. The dining car of the Sydney Limited was air-conditioned in February 1936.

PEOPLE in the same undertaking are natural friends—each one is helping the other to make a living.

French Aerotrain



This small aerotrain carrying four passengers and a crew of two, was built by a Government financed group in France for experimental and demonstration purposes. The first test run of the vehicle was limited to a speed of only 84 m.p.h. but later trials are expected to reach 125 m.p.h. It is an attempt to find a new means of super-fast rail transport that will compete with air services in speed, cost and comfort. Based on the air-cushion principle the vehicle runs on a track consisting of an inverted concrete T-beam. The full-scale model would carry from 80 to 100 passengers in each carriage. Braking would be done by propeller pitch reversal, combined with metal brake pads gripping the central concrete beam. If experiments are successful, it is expected that a 250 m.p.h. aerotrain will be in service by 1968.

RAIL USERS SAY...

Glenferrie

I wish to express my appreciation of the kindness extended to me by the staff of the Glenferrie station when I was recently taken ill on a Lilydale bound train. As their concern was quite genuine I would be grateful if you would convey my thanks to the persons concerned.

—Alan Rackemann, Carlyle Street, Croydon, writing to the Commissioners

Likes pamphlet

LAST June, my sister and I returned from Melbourne on Intercapital Daylight. As we were getting into our seats in car I we both found on the seat a pamphlet entitled "Good Morning—Welcome to Intercapital Daylight". We both appreciated the information it contained. In fact, my sister, who came out from England for three months, was very impressed with it and read every word about each town and city. She has now returned to England, and before she left she instructed me to write to you and give "full marks" for a very light.

—L. Sippel, Kogarah, N.S.W., writing to the Commissioners

Train tour

NCE again I would like to thank you for your co-operation in connexion with the recent Mt. Scopus rail tour of Gippsland. It is the general opinion that it was even more successful than the previous one . . .

Please convey my sincere thanks to all officials who helped to make the second tour a great success.

—John Kosky, Tour Director, writing to Traffic Branch Liaison Officer R. G. Napier

Geelong

I should like to express the thanks of those for whom your officer—Mr. D. Gugger—recently arranged the rail travel for an educacational tour of A.C.T. and N.S.W. Mr Gugger's diligence and advice relieved the teacher in charge of any anxiety regarding their travel arrangements.

-R. L. Kirkham, Teacher in Charge of tour, and A. H. A. Caldwell, Principal, Geelong West Technical School, writing to the Stationmaster, Geelong

Newport

N August 5, after arriving home from the city I discovered I had lost a set of quite valuable lecture-notes. Thinking I had left them on the train I rushed back to Newport where the stationmaster systematically questioned his own staff; rang all stations to Williamstown; and searched the train on its return to Newport at about 6.15 p.m. In case I had dropped them outside the platform area, the stationmaster questioned a newsboy who, as it happened, had seen them. They were then found and returned to me intact.

This officer gave me a valuable, efficient, and courteous service for which I am extremely grateful.

—R. M. Henger, Melbourne Road, Newport, writing to the Secretary

Moe

I wish to congratulate the Victorian Railways on having Mr. Jones on their Moe staff. He is always courteous and helpful. The members of the Goods Section are also most worthy of mention.

-J. I.Kreiger, 44 George Street, Moe

School special

N AY I thank you and your staff for the excellent service that you gave us in transporting our boys to Hall's Gap last week for a scientific excursion. The manner in which so many of your staff did more than would normally have been expected made our trip a very pleasant venture indeed.

—John Bugg, Master-in-Charge Junior School, Essendon Grammar School, writing to the Secretary

Portland

A motion was passed at the last General Meeting of the Portland Branch of the Liberal Party drawing attention to the excellent services given by the officers of the Victorian Railways in the Portland area over the last 18 months.

I shall be pleased if you will pass on these views to those concerned. Peter Morris, Hon. Secretary, writing to the Minister of Transport

Southern Aurora

THIS morning I arrived from Sydney on Southern Aurora... and I would like to bring under your notice the courtesy and attention I was given by the conductor whose name I understand is "Cotter". This is my sixth trip on Southern Aurora and never have I been looked after so well.

-Mrs. B. F. Macdonald, Hampton, writing to the Commissioners

Timetables

am very impressed with the way in which the Victorian Railways Country and Interstate Timetable has been compiled; it is clear and very easy to read. The information on train services, the map at the back, and the size of the time table are very good.

—B. M. Whibley, Braemar Terrace, Sterling West, S. A.

UP THE TRACK

AST month an unusual variation in level crossing incidents occurred at Pascoe Vale. At 10.54 p.m. on Saturday, September 17, a motor car entered the railway line at the Gaffney street crossing and travelled along the track towards Strathmore for about a quarter of a mile, blocking the up and down lines. The car was hauled clear at 12.45 a.m., after having caused train delays of up to 108 minutes. Buses were used to take passengers over the blocked section. Court proceedings may be taken.

The same night, a car collided with a train on the Mascot Avenue crossing at Carrum, where flashing lights and warning bell were operating. The car was slightly damaged but its 50-year-old driver went to hospital with back injuries.

A little earlier, in a collision at Altona's Pier Street crossing, a car was jammed under the train and between the platform, having to be cut clear; the road traffic "stop" sign was wrecked. The driver escaped with shock and minor injuries, but buses had to be used for several hours to convey train passengers.



The winners of the Challenge Shield, Eallarat Workshops No. 1 team, are competing in the Supplied Material event—a serious accident to a shunter.



Bendigo North Workshops No. 1 team treat patient in the Improvised Material 1994, event—an injury to a worker in a bush saw mill.



A road accident was the setting for the Novice Improvised Material event. Numurkah team is shown competing in it.

BAD ACCIDENTS AT MT. EVELYN

ARLY in Spring, Mt. Evelyn must easily seem the most accident prone area in the State. Last month, for example, a painter fell off his plank, a car hit a tree, a sawmill worker was struck by timber, there were serious injuries to a shunter, and a doctor leaving home fell over a toy in his path (he, at least, should have been more careful). The accidents, of course, were the usual sets designed by the Ambulance Officer (Mr. R. Grace) and his staff, to test the skill of the finalists in the State first aid competitions. The 56th of such competitions, they were held on September 7 and 8the novice individual event at Flinders Street on the 7th, and the remaining events at Mt. Evelyn on the following day.

Although the weather was, in Bureau language, "cool and cloudy with occasional showers", it failed to put a damper on the zeal of the competitors. Many of the placegetters were separated by only one or two marks.

The Challenge Shield (senior section) was won by Ballarat Workshops No. 1 team (Messrs. R. G. Benn, E. M. Sternberg, A. Maude, R. Davies, and G. O'Donnell). In the novice section, the Blackburn Shield went to Sunshine No. 3 team (Messrs. H. E. Liddall, E. Szoke, J. O'Brien, N. Jeacle, and A. Armstrong).

The senior and novice individual events were won by Messrs. G. Storey and R. Lunnon. Mr. Lunnon also finished a close second in the senior section, thus narrowly missing the rarely won "double".

Ballarat Workshops No. 1 is a team that has often reached the finals. Together with the winner of the senior individual event, Mr. G. Storey, they will represent Victoria at the Australian railways competitions to be held in Port Augusta this month.

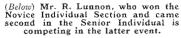
Teams from Sunshine came first and second in the novice section. Sunshine is noted for the enthusiasm of its first aiders; in fact, they even have their own specially designed blazer badge.

Adjudicators' comments

The adjudicators—Messrs. Douglas Donald and Hugh Johnston, and Doctors A. C. Reith, R. Howard, D. Brownbill, V. C. Dyring and A. W. Burton—made their comments on the work of the competitors immediately after the conclusion of the finals. They pointed out that they were necessarily looking for perfection, therefore marks were lost for even minor errors



(Above) Winner of the Senior Individual Section, Mr. G. Storey, is shown treating the patient—a "doctor" who falls as he leaves his house.





or omissions. Among other comments, they also stressed

- the necessity of removing sufficient clothing to facilitate treatment of wounds or injuries;
- the prompt control of haemmorhage;
- the importance of protecting team and patient from motor traffic.

The adjudicators praised the work of the patients and the organization of the competitions.

Dinner

Awards were announced and presentations made by Mr. E. H. Brownbill, Chairman of Commissioners, at the dinner to competitors held, as usual, in the V.R.I. concert hall. Mr. J. R. Rewell, then Chief Traffic Manager (he retired last month), was chairman; and toasts



In the Transport Event a patient found lying on the road has been injured in a motor accident and must be prepared for transport to Hospital. South Dynon Loco No. 3 team (Senior Section) are shown putting him into the utility.

were proposed by Messrs. R. M. Wright, Acting Chairman of Staff Board and I. G. Hodges, Assistant

Chief Electrical Engineer. Responses were made by Messrs. R. G. Benn, G. Storey and Hugh Johnston.

RESULTS

SENIOR TEAMS

- 1. Ballarat Nth. Workshops No. 1
- 2. Ballarat Traffic No. 1
- 3. Bendigo Nth. Workshops No. 1
- 4. South Dynon Loco. No. 3
- 5. Ararat

SENIOR INDIVIDUAL

- G. Storey, Fitter, Ballarat Nth. Workshops
- 2. R. Lunnon, Fitter, Ballarat Nth. Workshops
- 3. C. W. Paterson, First Aid Attdt., Jolimont W'shops
- 4. H. P. Isaac, Guard, Ararat
- 5. R. Clark, Diesel Mtnr., Sth. Dynon Loco.
- 6. F. K. Trengove, Boilmaker, Bendigo Nth. W'shops

NOVICE TEAMS

- 1. Sunshine No. 3
- 2. Sunshine No. 2
- 3. South Dynon Loco No. 5
- 4. Spencer Street
- 5. South Dynon Loco. No. 4
- 6. Spotswood P.W.M.D. No. 2
- 7. Numurkah

NOVICE INDIVIDUAL

- 1. R. Lunnon, Fitter, Ballarat Nth. W'shops
- J. Coughlin, Boilermaker, Bendigo Loco.
- 3. A. G. McCarrick, Driver, Sth. Dynon Loco.
- 4. V. Hayes, L.H. Elec. Mechanic, Spencer St.
- 5. T. Chafer, Boilmaker, Bendigo Nth. W'shops
- 6. G. Hood, Fitter, Jolimont W'shops
- H. Van Ĝinkel, Asst. Engineer, Head Office

AMONG OURSELVES

Last day laugh



Train Register Checker W. (Bill) Donnelly had good reason to smile when this picture was taken, as he was making one of his last entries in the registers on his final day in the service before retirement from the Block and Signal office at Flinders Street. And he was also looking forward to a trip to New Zealand next month. Before coming to the Block Office, six years ago, Mr. Donnelly was a signalman in the suburban area. (Photo. F. Newman)

From W.A.G.R.



Mr. Napier

Napier, Liaison Officer in the Superintendent of Train Services Division, is one of the comparatively few V.R. men who have worked on another Australian system. He started with the Western Australian Government Railways at Bunbury, when he was 15 years old, and remained with them for over three years. Coming to Victoria, he joined this Department in 1947. After experience as a booking clerk, Mr. Napier transferred to Train Services, and was appointed

to his present position in 1964. His job is to generate new passenger traffic for special trains—and also maintain the existing business. In the course of this, he visits schools and other organizations, and explains what the Department can offer in the way of special fares and con-The traffic venient schedules. ranges from day return specials for sports, exhibitions, Royal Show visits, etc., to extended tours such as the Trains of Knowledge in which students travel over much of Victoria and live on the train.

Bendigo's name plate collection



Some plates from the Newman collection

I N a letter to the editor, Mr. Carl Newman, a Canadian collector of locomotive builder's plates writes:

"Recently I was privileged to receive the May, 1965 issue of the Victorian Railways News Letter and, due to my own hobby activities, I was particularly interested in the very large collection of plates at Bendigo.

"The purpose of this note is to suggest that possibly the men in charge of preparing this wonderful collection might be interested in processing the plates in a manner similar to that used on our plates.

"After thoroughly cleaning each plate we give it a coat of aluminium paint and then enamel the lettering and border in black. The resulting plate then photographs excellently as the accompanying photograph shows.

"We have nearly 350 plates in our collection—principally from North American builders—but containing

items from Australia, Austria, England, Finland, France, Germany, Ireland, Japan, Norway, Scotland, and Sweden ".

(Mr. Newman's address is 955 Cloverdale Avenue, Victoria, B.C., Canada.)

Tree through track

MONG those at the First Aid Finals at Mt. Evelyn was Ganger Bill Wouda of Maryborough, formerly of Ouyen. Mr. Wouda, who has been a competitor in first aid for many years, was on leave and attended as a spectator this time. He has been at most of the finals for the last 16 years. At present, his gang is engaged on the reconditioning of the Avoca-Ararat section of line. Considering that the line was closed for seven years, the track, he said, was in fairly good condition. In places, however, saplings had grown through the ballast, and one of them was actually 10" in diameter.

\$2 bonus for staff recruiting

ECORDS show that a considerable number of new recruits to the Department have been referred by railway men and women. The Commissioners warmly appreciate the excellent cooperation that has been given in this matter by the staff. They also remind readers that any railway man or woman (including retired staff) who introduces a new employee in any of the grades shown below will be paid a bonus of \$2, provided the nominee completes six month's continuous service. The grades are: station assistant (junior, adult, or female), and shunter.

In order to qualify for the bonus, nominations must be addressed to the Employment Officer, Room 215, Railway Offices, Spencer Street, and must

- be received before the application for employment is lodged, or accompany the application for employment; or,
- in the case of personal application, be handed in by the applicant for employment on his first visit.

. . . THE V.R.I. LIBRARIAN

TALKS

ABOUT BOOKS

THREE series of books recently added to the Library, and which I feel will be popular and valuable, are LIFE Nature Library, LIFE World Library, and LIFE Science Library. All are profusely illustrated with striking colour and black and white photographs and diagrams.

The titles received to date are: World Library-South East Asia, China, Germany, Scandinavia, The West Indies; Nature Library—The Earth, The Sea, The Mountains, The Poles, The Desert, The Universe, Evolution, Ecology, The Mammals, The Print, The Birds, The Reptiles, The Fishes, The Insects, The Plants, The Land and Wild Life of Australasia, The Land and Wild Life of Eurasia, The Land and Wild Life of South America; Science Library—Matter, Energy, Mathematics, Machines, The Cell. Further volumes in each series will be received at regular intervals, and a new series, The Great Ages of Man, will begin later this year with a volume on classical Greece.

I can confidently commend these books to your attention. General readers will find they make most interesting as well as informative reading, but parents of school children will probably reap the greatest benefit from them. For primary school pupils; the illustrations, and particularly the diagrams will be most helpful to a clear understanding of the subjects; secondary, and even tertiary students will find the texts provide valuable supplementary material to their prescribed books. For project work, they are invaluable.

In the field of fiction, the usual quota of new books is added each month-general fiction, detective, western, romance, etc.,—just a few of which I would like to bring to your notice.

Science fiction fans will welcome a new book by Frederik Pohl after a 4-year gap since his last. A Plague of Pythons is the story of a mysterious sickness which sweeps the world, "possessing" people, so that they commit all sorts of uncontrolled actions. A previously unknown society of people is found in Hawaii and . . . there are thrills aplenty for the reader. Colossus is another S.F. title which will find a following for author D. F. Jones. one concerns a giant computer built to handle American defence matters. The Russians then build their

Colossus, and the two computers develop startling and unexpected abilities, somewhat like Frankenstein's monster.

Lovers of the historical novel will be interested in a fine, robust novel of Elizabethan England, The Grove of Eagles, by Winston Graham. In Avalon, by Anya Seton, in addition to romance, there is a background of England harried by the Vikings, St. Dunstan's efforts to reform the English church, and other historical themes. Another very good historical novel is The Keys of Heaven by P. G. Mann. Set during the governorship of Macquarie, this story was the subject of an A.B.C. television serial some months ago. Based on an historical incident, it is a gripping story.

The war in Vietnam is still a " hot " topic, and to keep our readers fully and impartially informed, three more titles have been added to our library of Vietnamana. Denis Warner's Reporting South East Asia covers more than the Viet war, but his material on that subject is very relevant. War Without Honour gives the impressions of Gerald L. Stone, an American who was war-correspondent for the Sydney Daily Mirror. The Lost Revolution, by Robert Shaplen, comprehensively covers the last 20 years of Western involvement in Indo China.

Prizes for track competitions

RIZES for the annual track competitions for the year ended June 30 last were shared by 291 members of track gangs. Prizes up to \$40, \$22 and \$12 were awarded to members of track gangs that finished first, second, and third respectively in each district. In the Most Improved section, the maximum individual prize was \$22. Winners names were published in the Weekly Notice of September 20.

Train and helicopter crash

COMETHING new in rail accidents occurred near North Platte, Nebraska (U.S.A.), the other day, reports The Conductor and Brakeman of 16.7.66. It was the collision of a train and a helicopter that was hovering over the Union Pacific main line to spray the tracks with weed killer. The pilot was warned by radio that the City of Los Angeles train was approaching, but he failed to get out of the way, and his copter was hit. The pilot was injured.

Worth quoting

"Australian taxpayers subsidized air travel by \$37 million a year. If railways were subsidized on anything like this scale, there would be a railway revolution"

-(Mr. G. Whitlam, Deputy Leader of Opposition, quoteu ... "Border Morning Mail") Opposition, quoted in Albury

RECENT RETIREMENTS...

ROLLING STOCK BRANCH Mornane, C. P., Rail Motor Depot Richards, R., Ararat Cousins, B. L., Bendigo Cody, E. J., Sth. Dynon Johnson, H. T. A., Newport Mankowski, H., Jolimont Wilcock, T. J., Jolimont Philpot, S. A., Bendigo North Fisher, W. E. E., Ballarat North Vos., L. M., Jolimont Simm, J. G. O., Jolimont Warren, A. L., Motor Garage Day, N., Bendigo North Mornane, C. P., Rail Motor Depot

TRAFFIC BRANCH

TRAFFIC BRANCH
Wills, W. C., Lilydale
Sutherland, C. A., Oakleigh
James, C. S., Spencer Street
Donnelly, W. J., c/- Metro. Supt.
Graham, N. J., Moonee Ponds
Coyne, M. F., Flinders Street
Peters, A. B., Bendigo
Bentley, A. E., Leongatha
Evans, J. S., Deniliquin
Grimmer, A. J., Ararat
Kegele, A. W., Traffic Stores
Forster, J. A., Footscray Goods
Eastham, H. W., Head Office
Mitting, A., Mordialloc

WAY AND WORKS BRANCH; WAT AND WORKS BRANCH;
Ardern, A. E., Bowser
Burnside, F., Echuca
Boyd, R. E., Spotswood Workshops
Harris, K. N., North Melbourne
Hine, H. R., Wodonga
Lowe, T., Flinders Street
Martin, W. J., Spotswood Workshops
Bailey, G. E., Hamilton

STORES BRANCH

Lindsay, D., Overhead Maintenance Storehouse Nikolajew, G., Reclamation Depot

ELECTRICAL ENGINEERING BRANCH

Troutbeck, A. A., Light and Power Division Lowden, V. H., Overhead Division

NEWS LETTER REGRETS

TO RECORD THE FOLLOWING

DEATHS

ROLLING STOCK BRANCH

Bunting, W. J., E. R. Depot Verde, M., Nth. Melb. W'shops Meehan, B. J., E. R. Depot Niven, J. L., Newport

TRAFFIC BRANCH

Schramm, W. V., Melbourne Goods Philpot, R. S., West Richmond Miller, H. W. L., Melbourne Goods Rundle, J. A., Melbourne Yard Nicholson, L. R., Stawell

WAY AND WORKS BRANCH

Ludekins, B. W., c/o Head Gardener Osmand, R. G. L., Typewriter Depot

STORES BRANCH

McDonald, J. S., Spotswood General Storehouse

ELECTRICAL ENGINEERING BRANCH

Clarke, E., Overhead Division Lang, W. R., Overhead Division

COMMERCIAL BRANCH Williams, C. F., Head Office





Geelong No. 1 team, winners of the Country Golf Week teams competition: (left to right) Messrs, Alan Clohesy, Stan Climpson, Frank Iones (capt.), Ray Darcy, and Norm Roberts.

Basketball

OLLOWING the par. in the August issue of News Letter, it is most gratifying to report that at least 20 girls have joined the coaching squad and two teams have been entered in the Women's Basketball Competition. These matches will be played under international rules (five a side) at the Victorian Basketball Centre, Albert Park. The grapevine has reported that the girls are turning in some very impressive training sessions, and Coaches Smith and Kerby are confident our teams will do well in the matches to come. In the Victorian Women's Basketball Association Night Competition (seven a side) our two sides are doing remarkably well, with both teams having played six matches for five wins. That's a great start and it is hoped they will retain this form for the remainder of the season.

The men's season is just about to begin. Should any railwayman be interested in a game of basketball, then contact me on auto 2445, or Dennis Kerby, auto 1403. You never know, it might lead to a trip to Adelaide in 1967.

Cricket

THE 1966-67 season is under way, and it is hoped that the final four will be as hard to sort out as last season. Six teams have entered this year's competition for the Commissioners' Cup-Stores, Loco, Jolimont Shops, Codon, Spotswood Shops and Melbourne Yard. A surprising omission is Suburban Lines, which, last year, contested the final. It is hoped that this club will return to the competition by next season. Rumor has it that Stores have lost quite a few of their stars, so their three year's domination of this competition may be coming to an end.

Womens' Amateur Athletic Club

THE 1966-67 season of the V.W.A.A.A. opens early next month, and our V.R.I. Club is looking for new members in all grades. Any girls interested in athletics should ring Miss Neville

(auto 1577) who will be glad to help them join one of the best clubs in Victoria.

Country Golf Week

OSSDALE Golf Course, Aspendale, which I feel we are beginning to think of as our own, was once again the venue for this year's Country Golf Week. While the number of country golfers competing was, perhaps, slightly lower than in the past few years, neverthe-less the standard of golf played was as high as ever, and, as usual, it required a pretty good score to pick up a trophy. One of the most consistent hazards in this fixture, over the years, has been the weather; and this year was no exception, playing conditions varying from shocking one day to perfect the next.

The week opened with the luncheon, at which our General President, Mr. L. A. Reynolds, welcomed the players on behalf of the Institute, and Mr. W. Walker, Secretary for Railways, representing the Commissioners, declared the fixture open.

In the externoon, an 18-hole handicap stroke event was played in ideal golfing weather, and some excellent cards were returned. The winner was Harold Humphrey, of Traralgon, who returned an 85 for a net score of 68

Tuesday morning saw the start of the teams competition, with an 18-hole stableford event being played as well. Shortly after hit-off, torrential rain began to fall and by lunch time, 70 points had been recorded. Winning teams were Geelong 2, Shepparton 2 and Bendigo, while the winner of the stableford was Barry Miles of Bendigo, with a magnificent score (under the conditions) of 41 points. As rain was still falling it was decided to hold over the team semi-finals until the next morning, but some of the more hardy types braved the elements and played a 9 hole-stableford competition, the winner of which was Bob Morris (Seymour) with 19 points.

Wednesday was Geelong's day both their teams getting into the final with wins over Shepparton 2 and Bendigo. The 18-hole bogie event, played in conjunction with the semi-finals, was won by Tom Brewer (Shepparton)—his score— 2 down. The afternoon saw Geelong I captained by Frank Jones, and Geelong 2, with Ray Paley as skipper, battling it out for the Council Cup under ideal golfing conditions. Proving that their 1965 win was no fluke, Geelong 1 were too strong for their opponents, who, in spite of a rousing pre-match address by captain "Blue", could not quite cope with the talent in the No. 1 side. Nevertheless they fought each game right out and practically all matches went to the last few holes. The only new member of the winning team was Captain Frank Jones, so the other boys, Alan Clohesy, Norm Roberts, Ray Darcy and Stan Climpson obviously retained the form they showed last year in winning the same event.

Thursday, of course, is championship day, and Jack Manning, of Benalla, turned in a real champion's persormance when he returned a score of 118 off the stick for 27 holes to win all the major titles, and although on a handicap of only six, easily won the Jim Barker Memorial trophy for the 27-hole handicap as well. If Wednesday was Geelong's day, then Thursday could be called Benalla's day. With Jack taking out the State Open Championship, the Country Open Championship, the Country Railways Champion-ship and the 27 hole handicap, the only title left was the Country Minor (handicap 14 and over) Championship. Last year's winner again proved the best of the "B" grade golfers, when Ike Dawkins, also from the Ned Kelly country of Benalla, returned a score of 138 off the stick for the 27 holes.

The week finished with a presentation dinner held in the club house at the conclusion of play. Trophies won during the week were presented by Messrs. L. A. Reynolds and W. Walker. Metropolitan players who won trophies during the week were Percy Perkinson, Reg Rolls, Tom Hoffman, George Winnell, Bill Heard and Harry Hawke.



NOVEMBER



1966



THE MONTH'S REVIEW

Colour

BEGINNING with the January 1967 issue News Letter will go into full colour for front covers. This year's two covers in colour solved the inevitable small production problems.

New automatic exchange

THE building for the Department's new telephone exchange at Spotswood is approaching completion, and it is expected that an early start will be made on the installation of the equipment. The new exchange will provide 500 extra lines and release about 80 numbers from the Head Office exchange for reallocation. It will speed telephone business by giving automatic connexion to numbers in the Newport and Spotswood region and, of course, also allow automatic connexion between telephones in those areas. At present, the majority of calls go through the manual exchanges at Newport and Spotswood.

On nine miles of line

NTORE than nine miles of obsolete railway line—some over 50 years old—will continue to carry a heavy load for many years to come. The rails have been used as pile supports for the new bagged cement handling depot in the Melbourne Yard. The depot—used by a leading cement company—opened on October 24.

The building has a covered area of 23,400 square feet and combines rail and road loading platforms as well as storage space for bagged cement. There are 202 piles supporting the building, many of them driven to depths of 100 feet. Each pile was assembled by welding a cluster of three 22 ft. 6 in rails together. A series of these clusters, bolted one on top of the other, was used for each pile according to the foundation depth required.

Horizontal concrete beams were laid across the tops of the piles, and a steel frame structure erected and covered with galvanized iron.

Airlines stop country services

A IR services to six N.S.W. inland country centres had been discontinued within the past two weeks, the N.S.W. Minister for Transport, Mr. Morris, told State Parliament on October 4. He said the Government was "very concerned" at the failure of the two operators concerned to maintain the services.

Mr. F. L. O'Keefe (CP, Upper Hunter) said that local government bodies in those areas had spent thousands of dollars in providing airport facilities, and he suggested that the minister try to restore the services.

—(The Australian, 5.10.66)

(Railways, of course, have to provide their own roadways, controls, and stations.—Ed.)

Standard gauge record

A new weekly train tonnage record of 86,964 tons was set for the Melbourne-Albury standard gauge line during the week ended October 1.

The record tonnage was carried on 92 trains that had a total of 4,266 bogie rail wagons. The main commodities were fruit, motor cars, steel and general goods. An interesting feature of the trains was that they contained vehicles owned by four railway systems—Victoria, New South Wales, South Australia and the Commonwealth. This indicated the growing success of bogie exchange at Melbourne and Port Pirie which allowed straight through rail freighting between Kalgoorlie and Brisbane by simply changing a vehicle's bogies to suit a change of gauge. During that week, the Dynon B.E. centre handled 525 vehicles.

U.K. may ban cars in cities

NRS. Barbara Castle, Britain's Minister of Transport, said last month, that there may have to be a partial ban on private transport in city centres at peak hours.

"This is something we are studying at the Ministry", she said at London Airport, before leaving for the United States to study transport developments there.

"I am certainly considering ways of controlling private transport in the peak hours in the highly congested areas.

"Of course, the parking controls which some local authorities are introducing will act as a partial ban. We have to consider ways of making it easier for the buses to move in our streets.

"If we don't we shall get the worst of both worlds—a congestion of private cars which cannot move and a decline in public transport".

—(The Australian Financial Review, 12.10.66)

Fading steam

THE last of the N class, Mikado type steam locomotives in regular service—N 475—made its final service run on September 29 when it left Ararat with a light goods train at 12.10 a.m. for Ballarat. It then ran "light" to Newport, via Geelong. Since it went into service on February 2, 1951, N 475 has registered more than 160,000 miles.

To commemorate the passing of yet another steam class, the Victorian School Railway Clubs Association and the Australian Railway Historical Society (Victorian Division) arranged two special steamhauled train trips.

For the first trip, N 468 was brought out of storage to haul the special train organized by the school railway clubs, in co-operation with the A.R.H.S. members. On Saturday, October 1, it made the journey from Flinders Street to Healesville and return.

On the following Saturday, October 8, the A.R.H.S. members left Spencer Street for Ballan in another special, hauled by N 475 and N 468. A commemorative booklet was issued to all passengers, giving historical, technical, and pictorial details of the N class.

Roof Spencer Street Yard?

multi-million dollar scheme to roof the Spencer Street railway yard, to provide space for a city-centre airport was put before aviation industry officials in Melbourne, last month. Melbourne town planners and architects, Brine, Wierzbowski and Associates proposed the scheme at a Royal Aeronautical Society symposium on air transport operations in metropolitan areas. They said the main advantages of the Spencer Street site were that it was centrally located, had plenty of room for expansion, had an easy aircraft approach, and was close to most forms of ground transport.

FRONT COVER

At Newport Workshops' Foundry, Cupola Furnaceman J. Briscoe taps a charge of molten cast iron for casting into brake blocks. The present daily output of the iron section of the Foundry is approximately 26 tons, most of which consists of brake blocks.

CARRIAGES TODAY AND TOMORROW

This article in the series by Mr. G. F. Brown, Deputy Chairman of Commissioners, surveys overseas suburban design and summarizes the specifications for the ideal carriage.

NE object of our visit to Japan, U.S.A. and Canada was to study modern rapid transit cars, or suburban carriages as they are known in Melbourne.

The ever-increasing number of people travelling on Tokyo's railways and the rebuilding of systems in nearly every major city of America has created great interest in rapid transit.

In Japan, railway operators, as well as passengers and the Government, are well aware of the problem of meeting growing transport needs. The accepted policy is to concentrate on underground and surface railways, with feeder lines and buses bringing passengers to centrally positioned interchange stations.

In America, however, it is only now that the public, and city and government officials are realizing that the building of more freeways alone cannot overcome the traffic problem.

The people who are being inconvenienced, not only by the lack of a properly co-ordinated transport system but also by the ugliness of freeways, are becoming organized and are demanding action involving the provision of effective rapid transit systems.

The Governments of U.S.A. and Canada are convinced that railways are a necessary part of the transport system and have provided loan funds and grants to assist civic authorities to establish effective suburban railways and buy new carriages.

Every rolling stock designer and manufacturer is working to get some share of the business. New techniques, new materials, and new enthusiasms are all being used to produce better and lighter carriages that will provide speedy, comfortable transport.

Naturally, the number of passengers offering (particularly in the peak period), the distance to be travelled, and the climate in which they must operate, affect design. However, all the carriages we travelled in, or inspected, had one common and outstanding feature—they were designed for simplicity of manufacture, ease of cleaning and reliable operation, with long periods of time between maintenance examinations.

IN JAPAN

Suburban systems operate in a number of the major Japanese cities.

We travelled in carriages in Tokyo, Nagoya and Osaka and found them generally comfortable and smooth riding, although, admittedly, it was not during the peak-hour crush.

Three groups operate suburban systems in Tokyo:

- Japanese National Railways (mainly on surface tracks),
- Teito Rapid Transit Authority (underground lines), and
- a number of private railway companies with services on many lines.

Both Japanese National Railways and Teito Rapid Transit systems design and prepare specifications for their carriages. Contracts are given to Japanese rolling stock manufacturers on a competitive tender basis.

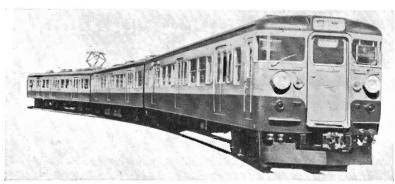
Such is not the case with private railways which have financial interests in rolling stock manufacturing companies. Capacity in their workshops for a certain type of construction is often the determining factor.

All Japanese suburban carriages are designed to handle the peak-hour traffic. Trains are always loaded far above their normal capacity in peak period—some on the Teito system up to 282 per cent. above (or 400 passengers per carriage)—something that would not be tolerated on our system.

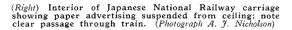
Japanese carriage designs, therefore, provide for maximum standing room and good ventilation. Seats, limited in number, are reasonably comfortable.

Although most of the Japanese National Railways suburban carriages were of conventional steel construction, orders have been placed for stainless steel designs.

An outstanding feature of the train on which we travelled to the Research Centre at Kunitachi was the large area of glass windows on sides and ends. Each carriage was 65 ft. long with four power-operated doors on each side.

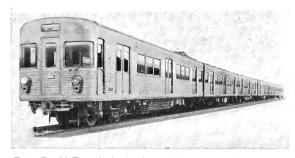


Typical Japanese National Railways suburban train.









Teito Rapid Transit Authority stainless steel underground train, showing large area of windows.

(Left) Automatic train on Hibiya line, Tokyo. Passengers can see through front windows and into the driver's cabin.

Right-through view

The partition between driver's or guard's cabin and the passenger compartment had glass windows across the full width, so that, with glass panels in the connecting doors between carriages, one had a clear view through the train.

The driver's cabin was approximately 3 ft. wide, with a comfortable seat. Controls were easily accessible; a blue sun visor and windscreen wiper were fitted on the front safety glass window.

The guard's cabin, of similar construction (but without control equipment), had door control buttons which the guard operates to close the doors. However, the train does not move until an indicator light on each carriage goes out, causing a buzzer to sound in the driver's cabin as the signal that the doors have closed and it is safe to proceed.

Internally, the carriages were completely functional in design. Floors were kept clear of obstructions as far as possible. Moquette covered seats were located along each side wall between the doors, altogether seating 48 persons. All internal surfaces were painted, but, despite the heavy usage, there was no sign of marking or chipping of paint.

Window framing had been reduced to a minimum by building the windows into the side walls. Light nylon mesh blinds were fitted to the windows of this train, although in most other trains no blinds are provided.

External surfaces were painted, the colour used identifying the line on which the train operates. Although clean and bright, the car exteriors did not have a high finish, and it was obvious that painting costs have been kept to a minimum.

So clean

Even though we were travelling at the end of the morning peak, the carriage was spotlessly clean—in marked contrast to our own, and a tribute to the Japanese people.

There is no doubt that the Japanese regulation that pro-

hibits train travellers from smoking contributes to this.

Even more to the credit of Japanese respect for public property was the form of carriage advertising—signs printed on light paper sheets, hung from the roof. Although they could be easily reached and readily torn, there was no evidence of their having been interfered with.

Carriage design of the Teito Rapid Transit Authority, which operates underground trains on both 4 ft. 8½ in. and 3 ft. 6 in. gauge, varies considerably; extensive use of stainless steel on late model carriages has, to some extent, complicated the colour system of line identification.

On the Ginza 4 ft. $8\frac{1}{2}$ in. gauge line, trains were of six conventional steel carriages, 53 ft. long and 8 ft. 6 in. wide, and with three motor-operated doors on each side. Capacity was 125 passengers per carriage.

Simplicity of design, maximum glass area and easy-to-clean surfaces were again in evidence. The guard and driver were visible from the passenger compartment, and had a clear view along the train.

Trains on the Maranouchi line, while similar in design to those on the Ginza line, had carriages 58 ft. long, with capacity for 150 passengers each.

The Hibiya line was served by carriages 52 ft. long, of stainless-steel-skin construction. Operating on a 3 ft. 6 in. gauge track, they have a rated capacity of 140 people.

Fully automatic

Teito has two trains, which are fully automatic, operating under test conditions on this line.

We were able to travel in one, and it was obvious that the system can spot trains accurately at the stations, and has reached the stage where practical operation can be introduced.

The driver pushes a start button, after ensuring that all doors are closed. The A.T.C. system then takes over all other operations until the train comes to a stop at the next

scheduled station. The driver only takes control if the A.T.C. system fails.

It was anticipated that trains would be progressively fitted with the A.T.C. equipment so that automatic operation could be introduced on the Hibiya line.

Two private railways, Tokyo Electric Express and Kinki Nippon Railways Co., run on 3 ft. 6 in. gauge. The former has all-stainless-steel carriages 58 ft. long.—typical of the trend towards simplicity and effectiveness—while the latter uses conventional steel carriages 68 ft. long.

Japanese rolling stock manufacturers have the ability and the capacity to produce carriages of high quality, at a high rate of production—whether of conventional or stainless steel, or aluminium. Their designs leave little to be desired; they are functional and reliable.

IN U.S.A.

Americans now realize that rapid rail transit is an essential part of effective suburban transport in any large city. Designers and manufacturers all want to share the business offering and are using every technique, device and material available to produce lighter, cheaper and more comfortable equipment.

No smoking

To our surprise, we found that most American states prohibit passengers from smoking in trains. The American people, like the Japanese, accept this regulation which helps to make train travel much more comfortable.

The PATH Car, manufactured by General Steel Industries, St. Louis car division, for the Port Authority Trans Hudson in New York, brought a new concept in comfort to train travellers on the Hudson-Manhattan lines.

Of aluminium alloy, except for moulded fibre-glass reinforced plastic front ends of drivers' cabins, the carriages are light in weight; sharp curves on this particular under-

ground line have restricted the length to 58 ft. 3 in. They seat 46, but have a capacity of about 140. Both the internal and external surfaces are bright and easily maintained.

The bogies, of conventional rolled steel wheel type, have each axle driven by a 100 h.p. high-speed, lightweight motor. Maximum rate of acceleration is $2\frac{1}{2}$ m.p.h. per second. Couplers are fully automatic so that mechanical, electrical, and compressed air connexions are made automatically during coupling. A combination of coil spring and air suspension, which adjusts to the passenger load, assures a smooth ride.

Designed for service up to 70 m.p.h., the carriages, with end connecting doors, provide comfortable seating, efficient lighting, sound proofing, heating and air-conditioning.

Double doors, two per side, are motor-operated in such a manner that, should one motor fail to operate, at least half the doorway is opened (see sketch above for motor arrangement).

Large windows, of heat reflecting safety glass, eliminate the need for blinds. There are no luggage racks, but hand holds are fitted to assist standing passengers. Partitions between drivers' and guards' cabins and the passenger compartments are glazed. Behind the driver is a blind for night use. A public address system allows announcements to passengers.

Easily read, illuminated maps of the *PATH* system, as well as large illuminated destination signs, are fitted in all carriages. Advertising signs, on light card and fitted over back-lighted glass panels in the curved ceiling, just above window level, are most effective. Although they can easily be removed by vandals, this has not been a problem. In any case, the signs are cheap and can be readily replaced.

The New York City Transit Authority has bought 600 Budd stainless steel 60 ft. long Bright-Liners to replace the antiquated carriages of the New York underground. Designed to operate as

units of two, they are motored to give rapid acceleration. Four motor-operated double doors are fitted to each side; windows are of simple design of tinted glass, and have only the top portion opening.

The interior, lined with laminated plastics to minimize maintenance, seats 50 passengers along the two side walls; maximum capacity is 250. Large fans, fitted with heating units, are installed in the roof. Public address systems are provided.

New York's newest

St. Louis Car Co., a division of General Steel Industries, was also manufacturing 200 carriages, 60 ft. long and 10 ft. wide, for the New York underground. The one we inspected at its Granite City Workshop is a composite construction of stainless, mild, and low alloy steels and aluminium, with roof ends of moulded fibre-glass.

The underframe and body framing are low alloy, high tensile steel; mild steel is used in the centre plate area; side sheathing is stainless steel—corrugated from side and end sill to window level, with flat sheets above. The roof is flat aluminium, finished to match the stainless sides.

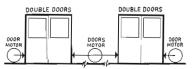
Four double doors, motor-operated from the driver's cabin, are fitted to each side; there is side wall seating for 50 and total capacity of 220.

Tinted windows have only a small area at the top that can be opened—of hopper type construction, hinged at the bottom. Interior is simple, and panelled with laminated plastics to minimize painting.

Braking will be primary retardation by a dynamic system, with on-tread composition blocks for final stopping.

New York City Transit Authority has now bought 4,800 new carriages since 1947, and it is expected that the remaining 1,200 of the old-type will be replaced within the next few years.

Chicago has bought new Standard Pullman carriages for its Lake and Douglas route. Built of aluminium with high tensile steel underframe



Sketch shows how double doors are operated by independent motors.

and reinforced fibre-glass end panels, they are fully air-conditioned. The interiors are plastic lined. Backlighted card displays are part of the fluorescent lighting system. Picture windows—completely sealed and tinted—and extra-wide, cross-ways, spring-cushion seats add to passenger comfort.

IN CANADA

Toronto Transit Commission has ordered from Hawker Siddeley Canada Ltd. carriages with the lowest weight to passenger ratio yet built in North America. They are 75 ft. long and 10 ft. 3 in. wide. Basically of aluminium alloy structure with steel end underframe assemblies and cross members, they have no centre sill.

Trains will consist of two, four, or six semi-permanently coupled 2-car units. In each unit, one carriage carries the motor alternator set and batteries, and the other the motor driven air compressor.

Each carriage seats 83; total capacity is 300. Four large door openings, two per side, are each fitted with two aluminium doors operated by electric door-opening motors.

All windows, with the exception of those in the driver's cabin, are fixed single panes of tinted safety glass. The driver's front window is laminated plate glass that slopes inwards at the top to minimize glare and reflection.

The interior is designed to be attractive, functional and easy to clean. Longitudinal hand rails are attached to the ceiling above the seats, but there are no luggage racks. With heating, ventilating, public address system and fluorescent lighting, this is a comfortable carriage.



(Left) P.A.T.H. carriages on Hudson-Manhattan line, New York. The interior is visible through front windows.



Air-conditioned Toronto underground train.

Rubber tyred

Montreal subway was not operating at the time of our visit, but through the courtesy of the Montreal Transit Commission we were able to ride in the new trains that were operating over a test section between Cremazie and Henri-Bourassa stations on the No. 2 line.

Modelled on the Paris underground system, they are rubber tyred to give quieter running. Steel safety wheels are provided in case of tyre failure.

Of conventional steel and painted exteriors, the carriages are 56 ft. 5 in. long, but only 8 ft. 3 in. wide. They will be coupled in units of three—two motorized and one trailer.

The interior, despite its limited width, was comfortable. Seating supports were kept clear of the floor, and the walls and ceiling were covered with plastic sheathing. With a capacity of 170 passengers per carriage, the 9-car train would accommodate 1,500.

Montreal's Expo Express

A fully automated rapid transit system is being built for the 1967 Montreal World Exposition. Eight 6-car trains will be used in a shuttle service to carry people from Mackay Pier, in Montreal Harbour, into the Exposition area, which is on an island in the St. Lawrence River.

The carriages, which are being delivered by Hawker Siddeley Canada Ltd., are 75 ft. long and modelled on those of the Toronto underground. However, the front end has been stream-lined to present a more impressive appearance.

Main feature of this train will be the fully automatic control. Although a fully qualified driver will travel on the train, he will take control in emergencies only.

B.A.R.T.

No discussion of American transit cars would be complete without a reference to the B.A.R.T. Project of San Francisco. Here, test carriages have been used by engineers to evaluate the performance of various types of bogies, different combinations of AC and DC motorization, and other undergear and running equipment.

We had the opportunity to discuss these tests with the executives of B.A.R.T. and also with the engineering consultants for the project. Although no final decision had at that time been announced, it was apparent that the choice of equipment, particularly bogies, had been narrowed.

However, it was noticeable when travelling on the test track, that the

high quality of this track contributed greatly to the smoothness of the ride.

Again, no final decision had been announced regarding body design. The eye-catching prototype has no doubt been designed to win motorists over to rail. Seventy feet long, with large windows, and stream-lined front end, it has two power-operated double doors on each side.

The interior was carpeted, and the side walls covered in plastic laminate. The seats proposed are luxurious, and it is claimed that the carriage will seat 72 passengers.

Whether final design will be of aluminium, as used for the prototype, or stainless steel, is yet to be established. This, and many other details are still under test. Nevertheless, the testing, planning and experimenting that have been carried out by the B.A.R.T. group will ensure that the carriage, when finally built, will be comfortable, efficient in operation and economic in maintenance.

Current and motors

Apart from B.A.R.T.'s proposed system for San Francisco, the new Tokaido line in Japan and the Pennsylvania Railroad's new carriages, which are designed for AC power, all other systems are using DC power, ranging from 600 volts to 1500 volts (as used in the V.R. system). They are not departing from the well-proven series-wound direct current motor.

As would be expected, most undergrounds use a third rail for power supply, but on some lines the Japanese have introduced a contact bar of T section, which is mounted directly on the roof of the tunnel in place of the normal catenary. This has allowed them to keep tunnel height to a minimum.

Probably the most noticeable feature was the reduction in the space occupied by control equipment, for which transistorized circuits and new wiring techniques have reduced the weight and size.

Although there is keen interest in the use of *chopper* circuits for motor control, to date no design is acceptable for operational purposes, and motor starting through resistors is still the normal practice.

Motor mounting varies considerably. Nose mounting is still popular, but gear box and bogie mountings, with Carden shaft drive to the axles, are being used. In one case, the drive was rather unconventional, the motor being mounted on the carriage underframe and long Carden shafts used to drive each axle in the bogie.

Although carriage design, generally, has reduced power requirements, motors of ample capacity to ensure rapid acceleration are being installed.

My comments, so far, have not included long-distance commuter or inter-city passenger vehicles. For both, many changes are taking place, but space will not permit detailed discussion in this article.

IDEAL SUBURBAN CARRIAGE

Looking back on the carriages we rode in, and those we were able to inspect in workshops, one realizes how much new ideas, new materials and new techniques have done to give passengers a quicker, quieter and more comfortable ride.

To choose one carriage that incorporated the best of materials and the most impressive features would be difficult. However, I am certain that the ideal suburban passenger carriage would include most of the following features—

- Material: Conventional steel, high strength alloy steels, stainless steel and aluminium can all be used to build a good carriage, but stainless steel for external surfaces is favoured by many operators.
- Dimensions: As the basic problem for designers has been to produce a vehicle for as little cost as possible, carriages have been made as long as track curvature and station platform design will permit. The longer the carriage, the fewer the bogies, motors and other basic units of equipment that will be required per train. Therefore, most designers prefer at least a 75-ft. length with width kept to a maximum. One system was examining the possibility of an 84-ft. carriage.
- Doors: Common overseas practice is for all doors to be fitted with power-operated opening mechanisms, with numbers restricted to a workable minimum so that passengers will not be uncomfortable in very cold weather.

If carriages are designed to ensure ready access to the interior, it has been proved that two double doors (up to 4 ft. wide) per side are quite effective. This is illustrated by the double-decker carriages in New South Wales, that are fitted with two double doors and yet comfortably handle their capacity of 278 passengers. In many cases, door control is such (see sketch) that only one-half of the double doorway may be opened at stations where few passengers board or leave the train.

Except in Japan, most carriages operating on surface tracks are fitted with windshields adjacent to the doorways.

- Windows: While as large as possible, and mainly with the top section of tinted safety glass so that blinds are not required, they should be of simple design to eliminate costly frames that are difficult to keep clean. The top section only should open, being hinged to form a hopper type window opening from the top inwards.
- Bogies: Although many welded units were in use, it was apparent that they were subject to cracking if used on other than very good tracks; preferably, they should be of cast steel. Springs of conventional coil type give a comfortable ride under most conditions; air springing would be used as a refinement, depending on cost. Wheels should be mounted on axles running on roller bearings. The motors on each axle of the motor carriages, should have ample horse-power to ensure an acceleration of 2½ m.p.h. per second and to maintain effective operating speeds.
- Brakes: Deceleration would be achieved by a combination of dynamic and compressed air brakes. The air brakes would utilize composition brake blocks acting on the tread of the wheel.
- Couplers: Of self-coupling type, they would join up air and electrical connexions as coupling takes place.
- Driver: He would control the train through conventional equipment, as the high cost of automatic control can only be justified on lines having a very high traffic density. Cab signalling, however, could be a worthwhile feature.

The driver's cabin would have a front window of laminated safety glass and the partition between driver and passengers would be glazed; a blind would be provided behind him for use if required. A public address system could be a desirable feature.

- Guard: He would occupy a similar cabin, but extending the full width of the carriage. He would have door operation controls.
 - The partition between guard and passengers would be glazed and fitted with a door having a glass panel similar to those in the partition. This door, when opened to provide a path through the train, would close off the half of the cabin having the controls.
- Seats: Sufficient seats should be provided for the maximum number of passengers consistent with peak-hour requirements of standing space.
 They should be—
 - (i) mounted so that they obstruct the floor as little as possible,
 - (ii) upholstered, as unit seats, with plastic materials, the thickness of the back being kept to a maximum of 2½ in.,
- (iii) placed at right-angles to the side and faced towards the nearest doors,
- (iv) equipped with grips in their backs for standing passengers.
- Interior finish: Laminated plastics for walls and ceilings, plastic tiles for floor, and satin finish on metal cover and

rubbing strips would eliminate painting.

In accordance with the general practice in Japan and America, hat or luggage racks would not be provided. Partitions, other than weather shields where necessary, would be eliminated and the support of fixtures from the floor kept to a minimum to expedite cleaning.

A tubular hand rail would be suspended from the ceiling and over the seats to assist standing passengers.

- Lighting: Fluorescent units should be mounted flush in the ceiling and also behind panels for advertising and information signs.
- Ventilation: Roof-mounted fans would provide fresh air in summer and air through heating elements for winter.
- General: The ideal suburban carriage would have weight reduced to the minimum, consistent with passenger safety, and have a power system that would ensure maximum economy in operation.

 It should be simple in design

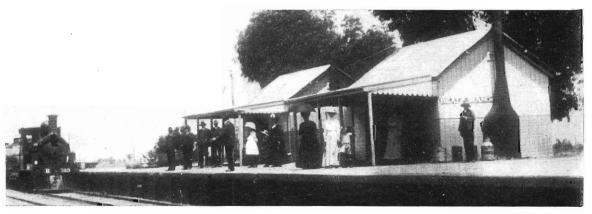
for easy maintenance, and yet

ensure passenger comfort.

Future trends

Many ideas have been expounded and many experiments conducted covering the introduction of jet-propelled trains, air-cushioned trains, and other trains with most advanced ideas. In the years to come, these may prove a reality. Until they do, designers must use all the available information, techniques and materials to provide carriages that are economical in operation, functional in design and comfortable for passengers.

TONGALA



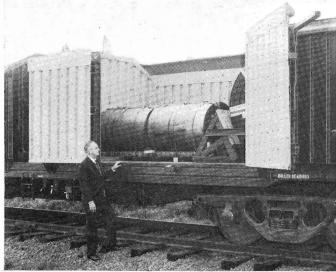
In this tableau at Tongala, a stationmaster of the Edwardian days is about to band staff to driver of approaching train. And the lady with the umbrella is determined to preserve her complexion from the Goulburn Valley sun.



CONTAINERS FOR SHIPPING: A trial consignment of shipping containers is shown being unloaded from the rail wagon at Victoria Dock, on September 23. The three containers carried canned fruit from Shepparton. Holding 20 short tons each, they are smaller than those that will be used when regular container ship service begins.

TAILORED TRANSPORT: Shown near the Sunshine factory of John Lysaght (Aust.) Ltd., this prototype N.S.W. Railways wagon has been specially designed to meet the needs of consignors of sheet steel in coils. As well as providing full protection for the goods in transit, the roof can be swung clear to enable loading of the steel by overhead crane. A manually operated hand wheel and reduction gearing enable the roof to be swung to either side of the wagon.



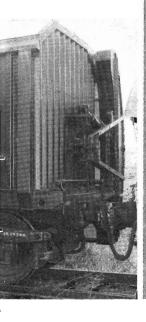


V OF



CONTAINERS SIDE-LOADED: A demonstration of side-loading of containers was recently given at Melbourne Goods. Picture shows the road transfer unit (left) unloading the container from the road transport. The transfer unit then loaded the container on to the rail wagon (not visible) at left of unit.

EWS NEWS

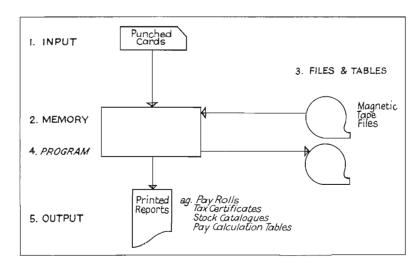




RE-RAILING: Members of the 41 Victorian and 43 South Australian Railway Squadrons of the C.M.F. held a combined annual camp at Ballarat Airport last month. Picture shows Sergeant Ken Withers (a sub-foreman from Ballarat Loco) directing members of the 43 Squadron in re-railing a wagon.

A CLOSER THE COMPUTER

DESPITE its almost incredible achievements, the computer actually "knows" only two digits—0 and 1. This article, the third in the series, shows how the computer overcomes this limitation.



A digital electronic computer is a machine built of electronic components (transistors, semiconductors, and ferrite cores) which enable it to make extremely fast calculations. The word digital means that it is capable of accepting and giving information in recognizable characters; i.e. the alphabet A-Z, numbers 0 to 9 and other symbols such as \$, . / @.

To understand what a computer is, and how it works, we can compare it with some of the processes of the human brain.

Before a person can carry out certain mental activities he must be able to accept information, or data. To use, or process this data, he must remember facts. If he can't remember he must have some form of reference books or access to some files.

To be able to alter the original data, he must follow some established rules, for example-multiplication, division, subtraction and addition.

As a way of telling other people the results of his work he needs some way of communication—the most common being speech and writing.

If we list these basic requirements we have the following:

- · a way of accepting data,
- a memory,
- access to tables and other references,
- rules for processing the data,
- means of communicating results.

Computer's capabilities

The computer has similar capabilities to the human brain.

As mentioned in the last article, computers can accept data in the form of punched cards. This is known as reading and the punched card is the method of input. The first requirement has been met.

The second point is memory. All computers are built with a memory in the form of small ferrite (or iron) rings. These rings, when arranged in banks of six or eight, can memorize or store all the common charactersthe alphabet, etc. So again the computer has a similarity.

The third point is a means of reference to tables and other data. As far as the Departmental computer is concerned, this type of information will be held in cold storage on magnetic tape files.

The processing of data is controlled by means of a program. No matter what problem a computer handles, it cannot succeed unless the problem is broken down into simple steps or routes of reasoning. Every step must be carefully thought out for the computer by a programmer. If the programmer makes a mistake, then the computer will copy the same mistake literally thousands of times faster. As a simple example, you wouldn't try to divide anything by zero, but a computer would unless it was instructed not to.

The final point is output. As explained last month the computer is equipped with a printer. This is its most usual way of communicating, or displaying results. These features are shown in the diagram on this page.

If you look at 3, you will see that the computer can take information from magnetic tape files (for example your details of income to last pay day) and can return information to files (your income details which have been up-dated by the income received on the current pay-day). In computer language, these functions are known as reading and writing.

The memory section

To many people, a computer is something mysterious, and therefore they become slightly diffident about it. Many exaggerated claims have been made about the work computers can do, but they can do no more than a man could, if he had the same calculation speeds, and file access rates.

A computer has to be programmed and this is where people can plan to use the computer to its capacity.

various components-or peripheral units-of a computer will be covered in future articles. Here we deal with the memory section of a computer-generally known as the

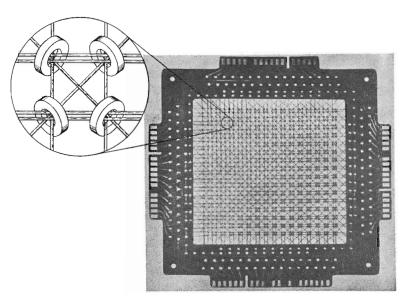
The small ferrite rings mentioned previously can carry an electric current. The circuitry of the control unit is designed so that a current travelling clockwise represents 1, and, conversely, a current travelling anti-clockwise represents 0 or zero. These are the only digits that can actually be represented-0 and 1. But it was mentioned previously that all the characters could be represented Here is an example showing how it is done.



If, in the four blocks shown above:

- a 1 in block 1 = 1
- a 1 in block 2 = 2a 1 in block 3 = 4
- a 1 in block 4 = 8

and a zero in any block = 0then by adding the block number values, 0011 (by adding the values



A typical magnetic core memory (area in circle is enlargement of four of the ferrite rings). Actual size is 6 in. x 6 in. x $1\frac{3}{4}$ in.

of the blocks) is actually 3, and 0101 is actually 5.

Therefore, by having 0 or 1 in every block, we can represent the numbers 0 to 9. Try it yourself (we can go higher than 9, but ignore these).

If we want to include the letters of the alphabet, we use more blocks. The G.E. 140 uses 8 blocks for one character or, as it is called, 8-bit representation, where a bit is 0 or 1 (bit is a contraction of the words binary digit). In this code, for example, the letter A is represented as 0100 0001, the number 1 by 0011 0001, and the number 28 by 0011 0010 0011 1000.

Each group of 8 blocks (or bits) can hold one character. Therefore to represent large numbers, e.g. 100 million, nine groups of eight bits each are necessary.

Memories of computers are quoted in the number of characters which can be stored at any one time. The computer the Department will hire can store 32,768 characters.

How does it know?

How does the computer "know" where to find a particular character or group of characters? It doesn't—it must be told by the programmer through the program.

Each group of 8 bits has its own personal address—just as you have—and when the computer wants the contents of that address, it must be told the address. Addresses, in machine code, run from 0 to 32,767—but programmers make life easier for themselves by giving descriptive names to groups of locations; e.g. TOTAL, INPUT, OUTPUT.

Since the programmer must know where the information is held in the store, he becomes responsible for directing it there by a program. He does this by sub-dividing the store to suit the problem.

For example, he could reserve the first 80 locations of the 32,768 available to retain information from a punched card. He would need to reserve 136 locations to prepare each line of print, as this is the number of characters that the machine can print in one line. Areas must be reserved for data to be read into the memory and for data to be read out from it onto the magnetic tape files.

The actual *program* itself resides in the *store* and can occupy as much as 80% of it.

What is an instruction?

A computer must be told what to do, for example: read a card, print a line, add two numbers, add a series of numbers, check if a number is negative, and so on. These are instructions, and some of them need more than just the instruction itself.

It's useless instructing a computer to add two numbers unless:

- you indicate where the numbers are in the store, and
- where you want the answer put in the *store*.

The instruction, "ADD TOTAL, DETAIL" actually makes the computer add whatever number is stored at the area "DETAIL" to whatever number is stored at "TOTAL". The answer, after the addition, will be stored in "TOTAL". This may be unfortunate, especially if you wanted to keep the original contents of "TOTAL".

of "TOTAL If we write

- (1) TSF SAVE, TOTAL
- (2) ADD TOTAL, DETAIL, this will protect the original contents, because instruction (1) transferred them to another location in the store called "SAVE".

A program can work only if the programmer knows all the rules for processing, including the exceptions. This means that he will depend on others (it could be you) for an accurate and comprehensive explanation of any job that is to be done by the computer.

Further information may be obtained from the Data Processing Section (auto. 2109) or queries in writing may be sent to the same Section at Head Office.

REVIEWS

ALONG the Line in Victoria, another of the popular Along the Line series, features V.R. steam locomotives. Altogether, 51 pictures, including narrow gauge locomotives, are fitted into its 43 pages. Its publication was the result of numerous inquiries following on the booklet Along the Line in New South Wales. The price is 60 cents, from Traction Publications, P.O. Box 438, Canberra City, A.C.T.

The Brighton Electric Line, by the Rev. Leon Marshall-Wood, is a new edition of the history of the V.R's St. Kilda and Brighton electric street railway—as it was Departmentally known. The present edition has been completely revised, with many new illustrations, and the author has

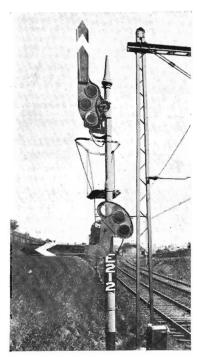
added an account of the Sandringham-Black Rock electric street railway, its Beaumaris extension, and the fascinating horse tramway that preceded them. This is also a Traction Publication, priced at 75 cents.

STEAM CALENDAR

THE 1967 Australian Steam Railway Calendar, produced by the Association of Railway Enthusiasts, is in "a completely new format, on finest quality heavy-weight paper, with 13 new photographs (11" x 8") of Australian steam locomotives". Copies may be obtained at \$1 each plus 10c postage, from A.R.E. Calendars, Box 4810, Mail Exchange, Melbourne, C.1. Money and postal orders should be made payable at King Street Post Office, Melbourne.

November 1966

50 YEARS OF POWER SIGNALLING



This automatic signal at Newmarket was one of the first installed.

(Right) An early picture of an automatic train-stop-and-trip mechanism. This shows a type of timber-insulated rail joint that is now superseded by the cast steel fishplate and nylon insulation.

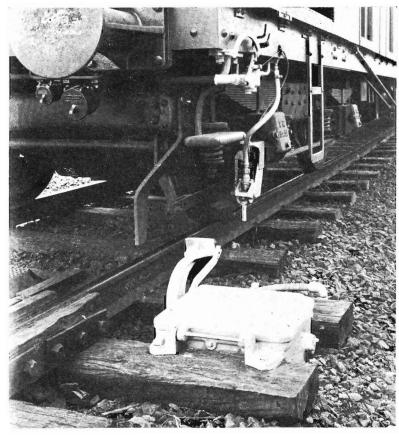
THE Victorian Railways were among the first in the world to introduce automatic signalling. And even by today's standards the system adopted is still up-to-date and versatile.

It was 50 years, last month, since automatic signalling was introduced on the V.R.

The decision to introduce 3-position automatic signalling was made in conjunction with the suburban electrification scheme. The first section—between Richmond, Hawksburn and Prahran—was brought into service on October 4, 1915, 3½ years before the official opening of the first electrified suburban line—May 28, 1010

Power signalling

- enabled the train-stop-and-trip system to be used on electric rolling stock;
- rolling stock;
 improved track capacity by replacing the manual block with automatic block. This permitted the elimination of intermediate signal boxes, and the



switching-out of others that were required only once or twice a day, for shunting services.

Not only has power signalling increased the safe working of trains, but it has done so during the greatly increased density of today's traffic. Had it not been adopted, this increased traffic would have needed many more signal boxes to maintain a safe headway between trains.

LINE RE-OPENED

EREMONIES at both Avoca and Ararat marked the reopening of the 39-mile railway line between those two towns on October 29. The ceremonies were associated with the running of a special passenger train, organized by railway enthusiasts, that was the first revenue-earning train to use the line since July 1959, when it was closed for economic reasons.

At Avoca, following an official welcome, Cr. M. W. Dawson (deputising for the Shire President) cut a ribbon stretched across the track before the train left the station on its way to Ararat.

On the outskirts of Ararat, the train stopped at the Grano Street level crossing where it was welcomed by city and shire officials. A similar ribbon-cutting ceremony was carried out by Crs. R. A. Blachford and L. J. Dawson, before the train steamed into Ararat railway station.

The train, of steam-hauled carriages, made a round trip from Melbourne, via Castlemaine, to Maryborough; to Ararat, via Avoca; and returned to Melbourne via Ballarat.

Special arrangements were made to allow local residents to travel on the train.

APPRECIATION

Sped to Perth

N behalf of my company I would like to express our appreciation of the excellent service provided recently by the Railways in transporting a tractor and self-propelled header harvester to Western Australia.

It was imperative these machines be in Perth by a certain date, and thanks to your organization they were deliverd by you six days after dispatch from these works.

We know this prompt action was the result of the efforts of a number of persons. However, we do especially mention Messrs. C. Edgar, C. Brain and J. Kelly who were of great assistance in arranging dispatch of the machines in question.

Trusting we shall have many more occasions of happy co-operation . . . F. H. Daniel, International Harvester Company of Australia Pty. Ltd., Geelong writing to the District Superintendent, Geelong

School excursion

AST week a party of 48 students with two teachers made an excursion trip from here to Melbourne and Yallourn. It was a complete success and I am assured by the Agricultural Science teacher, Mr. Meldrum, that this was greatly helped by the co-operation given by members of your staff. He has mentioned the names of Mr. W. Crichton, stationmaster, Mr. Gran and Mr. Gourlay at Spencer Street and Mr. A Stewart at Wangaratta railway station.

However, the highest praise goes to the Refreshment car staff and the conductor, Mr. Alan Williams on the Moe train on Thursday the 22nd. Had it not been for their cheerful and well organized effort, the party could not have been fed between Moe and Dandenong on the return trip and the boys would have gone hungry overnight. W. L. George, Principal, Wangaratta Technical School, writing to the Commissioners

Cairns journey

N September 5, I travelled by rail from Spencer Street station to Cairns, Queensland.

I approached the long rail journey with much trepidation, as I've always been a confirmed road and air traveller. However, I had a most enjoyable and relaxing journey.

The N.S.W. and Queensland Railway officials were very polite and anxious to please at all times; but the Victorian railway employees were outstanding in their civility and courtesy.

I was so impressed with the excellent service offered by the Victorian Railways that I felt I just had to let you know.

Mrs. D. Hatfield, P.O. Box 49, Ascot Vale, writing to the Commissioners

Lacrosse team

THE members of the Victorian Junior Lacrosse Team express their appreciation to the Railways Department, for the assistance and co-operation extended to the manager on their recent trip to Perth . A. Cugley, Oakdene Crescent, Murrumbeena, writing to the Secretary

Ormond

I wish to draw your attention to a station assistant at Ormond—Mrs. Orr. Her personality, pleasantness, and her whole approach is something I will always remember her for. She is to be commended for her work and appearance. Her helpfulness on Friday 23rd when the S.E.C. stoppage was on, will always be remembered by my daughter and myself . . Mrs. J. T. Baker, (a visitor from Tasmania) writing to the Secretary

Footscray

I would like to convey to the stationmaster on duty at Footscray between 4 and 4.30 p.m. on September 30, 1966, my appreciation of his kindness and assistance to me when I was taken ill . . .

—A. J. Davies, Linacre Road, Hampton, writing to the Commissioners

Moe

On behalf of the committee members and staff of Albert Street State School, Moe, I would like to extend to you our sincere thanks for the wonderful co-operation and assistance given us in connexion with the running of a special train to the Melbourne Show on September 19. This was a most successful day, and much of it was due to the Moe stationmaster, Mr. Small, and his staff, who went out of their way to make it the success it was. We are also most appreciative for the assistance given us by your staff at the Showgrounds. W. Wulffers, Hon. Secretary, Moe State School, writing to the Commissioners

CONTAINER TRENDS IN AMERICA

Container sizes are slowly becoming standardized. Most of the containers now being ordered are either 20 ft. or 40 ft. long.

There are 120,000 containers of varying sizes and shapes now in use by American shippers. About 21,000 of these are in sea-going trade, and 7,000 of them are of a standard size as laid down by the International Standards Organization.

Sea-Land Service Inc. has ordered six specialized ships for container cargo and expects to order 40 ft. containers this year. The Isbrandsten Line is investing millions of dollars in the container service and has on order 3,280 containers, all 8 x 8 x 20 ft. It is quite possible the undercarriages will be made so that two 20 ft. containers can be married to make one 40 ft. container.

A new type of Flexi-Van has been developed in which the landing gear and a fifth wheel, which fold underneath the regular Flexi-Van, will now be set on a sub-frame. This will make the Flexi-Van easy to stack aboard ships and easier to handle. The new van will also be six inches lower in height than the regular

Flexi-Van, making the width and height both eight feet. The lengths will continue to be 20 ft. and 40 ft.

One of the important, and as yet unresolved questions on containerization has to do with whether or not containerization can move ahead much longer without the establishment of a large container pool, operated on behalf of a multitude of shipping subscribers to the pool's services. The pools would offer standardized containers on a lease basis.

It is quite clear that the operating costs of American railroads are materially lower where containers, rather than trailers, are being carried. This is especially true when flatcars are being used to carry the trailers. It appears that the centre of gravity of the trailer on a flatcar is higher than with a container. This increases the wind resistance at speeds of approximately 60 m.p.h. to such an extent that three times as much fuel and motive power is required, compared with the situation where containers only are being hauled. (The aerodynamic drag generated by the intersurface friction between the car deck and trailer bottom is enormous).

November 1966 173

<u>AMONG OURSELVES.</u>

Horsham retirement



Ganger P. L. McNamara (left) is shown presenting Mr. and Mrs. G. Troeth with farewell gifts to mark Ganger Troeth's retirement. At right is Stationmaster R. H. Travers. There was a large attendance at the function and speakers were Messrs. Ted Wangeman, Joe Wilson, Les Timmins, Jack O'Shea, Doug Courtney, Syd Witney, Peter Gleeson, George Merrifull, Ossie Rule, Roy Ward and Miss Nell Ryan.

Mr. Troeth had 42 years service and had been stationed at Horsham for the past 22 years. (Photograph; "The Mail Times")

Examined 4,000

P to the time of his retirement last month, Block and Signal Inspector C. (Charley) Wisken estimated that he had conducted about 4,000 safe working examinations throughout the State. He started in the Department in 1921, and was the first lad porter appointed to Parkdale. In 1928, Mr. Wisken became a signalman, first at Stawell and then at other locations. After coming to the metropolitan area in 1936, he worked at every signal box on the Frankston line. From 1946-52 he was Safe Working Instructor at the Institute where he tutored about 3,000 men for their certificates.

An enthusiastic gardener, Mr. Wisken will be doing a lot of work on

his property in the Dandenong Ranges where the cheerful whistle of *Puffing Billy* will always remind him of the days when he set up the safe working arrangements for that popular tourist attraction.

1942 apprentices re-union

THIS is a reminder that the silver anniversary re-union of the 1942 apprentices will be held on February 24, next year, at Arthur Woodhead's Ballroom, 789 Sydney Road, Brunswick. The programme will begin at 7.30 p.m. with cocktails, followed by a hot dinner and excellent entertainment. Full particulars from Mr. G. A. Perlstein (Newport Workshops or 'phone 36/7121).

Jolimont romance



Pictured after their marriage at St. John's Roman Catholic Church, Mitcham, are Mr. and Mrs. C. Brown, both of whom are at Jolimont Workshops. Mr. Brown is a production assistant, and his wife, formerly Miss Pauline Carleton, is a typist in the Accounting Office.

Will swap loco, negatives

N a letter sent to the Federal Office of the A.F.U.L.E., Mr. Paul R. Douglas has asked to be put in touch with anyone who is interested in "trading locomotive negatives" with him. His address is 2012 Broadway, Vancouver, Washington, U.S.A.



Mr. Wisken holds up the "rod' and "fish" that were among the gifts presented to him on his retirement. The "fish" would ensure he'd always have something to show for his angling, he was told.

Orthopaedic Hospital Auxiliary

THE Railways Employees' Orthopaedic Hospital Auxiliary, for the year ended September 1, collected \$5,462, bringing the total amount paid to the hospital, since 1946, to \$74,495. At the hospital's Day Special School Section (the establishment of which was made possible by the auxiliary) enrolment of pupils has increased from 25, in 1964, to 39.

New Secretary to Auxiliary

R. R. J. Attrill, of Newport Workshops, who founded the Orthopaedic Hospital Auxiliary and has been honorary secretary ever since, has found it necessary to retire from that office and hand over to a younger man. Mr. Attrill started the auxiliary in 1946 while his daughter Betty was a patient in the hospital. It is interesting to note that the collections made in the first year were \$120 and now are 45 times as much—a tribute to Mr. Attrill's energy as well as to the generosity of railwaymen. He expressed his thanks to "everyone in the Department-from the Commissioners down-for the help that was so freely given to make the Auxiliary the success that it is "

Mr. G. Gladman, the new honorary secretary, is a car builder at Newport Workshops. Two of Mr. Gladman's other interests are scouting and first aid. He is a member of the Workshop's No. 2 first aid team as well as the St. John Ambulance Corps, and Cubmaster of 2nd Newport Scouts.



Mr. Attrill (left) discusses balance sheet of the auxiliary with Mr. Gladman.

Accountancy re-union

group of Accountancy Branch men are organizing a re-union of staff (either in the Department or retired) who have worked at the Newport Workshops Accounting Office. It is planned to hold the function soon after Christmas.

Further information may be obtained from Messrs. D. Cavan (auto. 1921), F. Kelly (1830), A. Toogood (1594) or F. Killeen (87-7311).

In Ceylon celebrations

AILWAYS are certainly a tradition with the Melder family. Trainee Engineman M. A. J. (Mark) Melder of South Dynon Loco



Depot worked on the Ceylon Government Railways for nine years before coming to Australia. While in Ceylon he took part in the railway centenary celebrations in 1964. For these, they ran a replica of Ceylon's first train. engers and crew were in period costume, and Mr. Melder was the fireman.

Mr. Melder This was almost a case of history repeating itself as Mr. Melder's great grand-father was the driver of Ceylon's first train, in 1864. Mr. Melder's grandfather was a guard, his father (now retired and in Australia) was a driver, and his eldest brother is now a driver in Ceylonand also a reader of News Letter. Another brother, Joseph, is a trainee engineman at South Dynon.

At Ballan



Goods Trucker David McPherson, shown filling and trimming a signal lamp at Ballan, finds the air somewhat more bracing there, than in Queens-land, from whence he came four years ago to join the Department. His head-quarters are at Ballarat.

RECENT RETIREMENTS

ROLLING STOCK BRANCH

Mayne, P. C., Jolimont Jones, D. A., Ballarat North Perry, E. C., Jolimont Benvenuti, G., Jolimont Walters, W. H., Newport Walters, W. H., Newport
Georgiou, A., Shelter Shed
Morris, L., North Melbourne
McKinnon, N. F., N. Melb. W'shops
Page, G. F., Newport
Stevenson, H. C., Newport;
Dwyer, G., E. R. Depot
Harvev, W. H., Bendigo North
Triffon, N., North Melbourne
Woolfe, M. J., Warragul
Hempel, H. R., Dimboola
Montalto, M., Shelter Shed
Kimontas, A., N. Melb. W'shops
Mater, W.F. C., Jolimont
Barca, A., Newport
Barrett, J. P., Newport
Baker, S. J., Newport

TRAFFIC BRANCH

TRAFFIC BRANCH
O'Connor, J. P., Melbourne Goods
Zahra, T., Dynon
Nicholls, E. L., North Geelong
Matheson, A. T., Ararat
Love, A., Melbourne Goods
Wallace, J., Melbourne Goods
Carter, A. J., Ringwood
Gilpin, W. E., Melbourne Goods
Thorburn, H. R., Coburg
Spiers, R. H., Spencer Street
Fulton, J. S., Beveridge;
Hudson, W. J. H., Spencer Street
Tarry, A. A., Head Office
Maloney, R. C. Seymour
Morley, W. R., Spencer Street
Lucas, J. E., Sandringham

WAY AND WORKS BRANCH

Bastrefield, L. J., North Melbourne Cavanagh, B. J., Tallangatta Caldwell, C. H., Tongala Caldwell, C. H., Tongala
Burrough, J.. Spotswood
Linton, F. W., Toorak
Sheahan, T. A., Spotswood
Keegle, P. C., Warragul
Templeton, W. R., Maryborough
Rayne, R., C/- Bonding Supvr.
Martin, W. J., Spotswood
Bailey, G. E., Hamilton
Popovic, Z., Special Works
Moralis, N., Special Works
Moralis, N., Special Works
Symons, R. F., Spencer Street
Carrolan, T. D., North Melbourne
Spiers, E. C., Laurens Street

STORES BRANCH

Rigbye, R. C., Reclamanation Depot

NEWS LETTER REGRETS

TO RECORD THE FOLLOWING

DEATHS

ROLLING STOCK BRANCH Liddicoat, F. C., Benalla Longridge, A., Ballarat Loco. Laue, M. J., Bendigo North Hayes, J. J., North Melbourne Workshops

WAY AND WORKS BRANCH Ludekins, B. W., C/- Head Gardener Galati, G., Special Works Mills, H. S., Fairfield Grammatikakos, G., Special Works

REFRESHMENT SERVICES BRANCH Kilborn, N. C., Central Store;

175 November 1966



Bendigo's new bowling green

NE of the oldest V.R.I. centres became the latest one to own a bowling green, when the Bendigo Institute's two 4-rink greens were opened on Saturday, September 24.

The Bendigo centre has been established for many years, and was one of the original seven Institutes built by the Commissioners.

The two greens are on the Melbourne side of the V.R.I. building, off Mitchell Street. One of the greens extends from Mitchell Street towards the station building, and the other is parallel with the street. Cyclone mesh fencing has been provided, and the entrance gate from Mitchell Street is in wrought iron with the initials B.V.R.I.B.C. worked into the gate design. A large blue and white sign, showing "Bendigo V.R.I. Bowling Club", has also been erected.

The question of Bendigo obtaining its own greens was first raised in February, 1963. The actual construction (under Way and Works Branch supervision) was done by Mr. J. Harris of Ballarat, who has a very high reputation for building bowling greens, and is the Ballarat representative of the R.V.B.A.

In warm sunshine, before an assembly of over 100 guests including the Mayor of Bendigo (Councillor T. R. Flood) the greens were opened by Mr. L. A. Reynolds, General President of the V.R.I. Also present were representatives of the V.R.I. Social Bowling Club and the R.V.B.A. The first jack was rolled by Mrs. W. Gilmore, secretary of the lady associates, and the first bowl put down by Mrs. R. Oldham, wife of the club president, who is a signwriter at the Bendigo North Workshops. The club secretary, Mr. R. J. Purden, is also a Workshops man.

Bendigo district has always been well known for its railway bowlers and well represented in interstate



Mr. L. A. Reynolds, General President of the V.R.I. (second from left) opens Bendigo's new bowling greens. Others in picture are (from left) the Mayor of Bendigo, Cr. T. R. Flood, and Messrs. R. Oldham and R. J. Purden, club president and secretary respectively. (Photograph: Bendigo "Advertiser")

V.R.I. teams. The club's band of competent bowlers, the enthusiasm of its president and secretary, and the energetic committee—not forgetting the ladies—should ensure future success.

Golf

UR Benalla Centre was again fortunate in being able to conduct the 10th North-eastern Golf Tournament on the Golden Vale course. In spite of overnight rain and a not very pleasant morning, 60 competitors—representing Melbourne, Bendigo, Seymour, Shepparton, Avenel, Euroa, Violet Town, Wangaratta, Numurkah, Strathmerton and, of course, Benalla—were prepared to brave the elements by hit-off time, 12.30 p.m.

Continuing in the devastating form he had displayed at Rosedale during Country Week, and with the added advantage of playing on his home track, Jack Manning coasted home to an easy win in the North-eastern Championship. Fred Townsing, of Shepparton, with a net score of 68 won the A grade handicap, while a second local—Reg. Wapling—took out the B grade handicap, returning a net 73. Still a third Benalla player, Lance Bullied, won the only other major event, the J. H. Jupp Memorial Trophy. Two Melbourne competitors, Bob Vendy and Geoff Williams won the "nine holes out" and the "nine holes in" trophies respectively. The various prizes won were presented by Messrs. F. Jones, R. Richards and E. J. Williamson (V.R.I. Councillors) who represented Central Council at this fixture. To the Golden Vale Club for the use of the course and to the Golden Vale

Associates, who served such excellent meals before and after the Tournament, the organizers—Peter Hale and his helpers—are greatly indebted.

Cricket

PLAYERS are again reminded that applications for selection in the team to represent Victoria in Brisbane, from February 12 to 24, next year, must be received by the Sports Secretary, V.R.I., Flinders Street, by Saturday, December 2. It is essential that applicants realize that it is their responsibility to obtain the necessary leave to attend this carnival. Inquiries whether leave can be granted should be made through normal Departmental channels before any application is submitted.

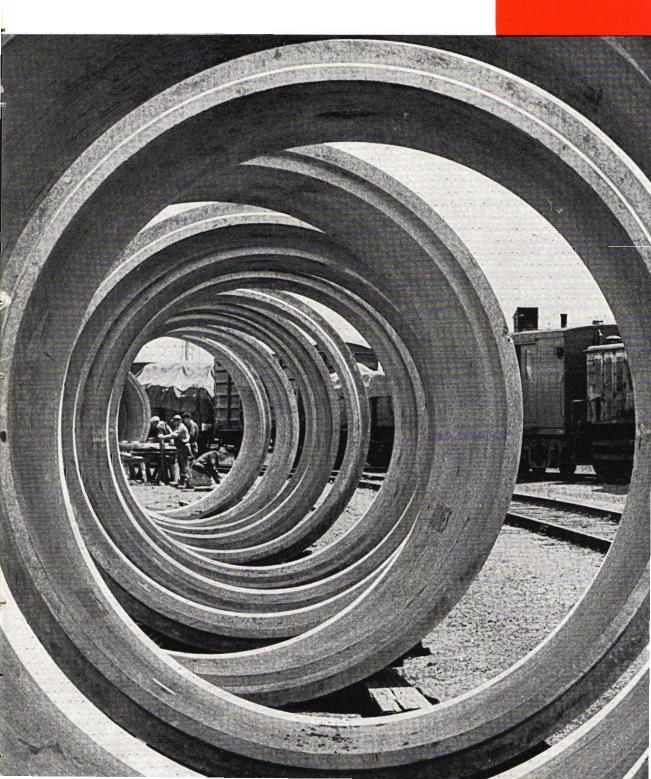
Bowls

THE V.R.I. Social Bowling Club has lined up some very interesting country trips during the 1966-67 season. On November 20, they go to Seymour and on December 11 to Ballarat. On January 22 next, Maryborough is visited, followed by games at West Geelong (February 12) and Bendigo (March 12). As well as these country visits, night games have been arranged at the Victoria, Elsternwick and Northcote clubs, and weekend matches will be played against AP-VRI, Sunshine, and Flemington-Kensington bowling clubs. As you can see, it is a fairly interesting and varied syllabus, and any railwayman who enjoys a good game of social bowls (whether he be a champion or a beginner) should join the V.R.I. Social Bowling Club immediately; after all the yearly subscription for metropolitan members is only \$2.00 and for country members \$1.00.









THE MONTH'S REVIEW

SEASONAL GREETINGS TO ALL NEWS LETTER READERS ANDBEST WISHES FOR THE NEW YEAR

Money for works programme

THE Department has been allotted \$16,450,000 by the State Treasury for the 1966/67 works programme—almost the same as last year.

Details of the principal amounts to be spent are:

- \$1,750,000 towards further progress on the reconstruction and re-arrangement of Melbourne Yard as a modern hump mar-shalling yard. This year, work will be extended beyond the preliminary stages to several stages of the project closely associated with the design, and leading up to starting the hump.
- \$550,000 for further work on duplicating the Newport-Geelong line. This will enable the Newport South Junction-Rock Loop section to be completed and provide for progress with earthworks, bridges and track laying in the Laverton-Werribee section.
- \$350,000 to complete the second of two additional tracks between Richmond and Burnlev.
- \$406,000 towards the Department's share of grade separation works at level crossings at Canterbury, Maryborough, Oakleigh, Foster, Gheringhap, Hamilton, Kaniva, Kilmany, and Loch, and towards acquiring land in preparation for grade separation work to be done in later years at Garvoc, Paisley, Shepparton, Winchel-sea and Yarraville.
- \$3,460,000 for track relaying and renewal of points and crossings. This will enable 187 miles of country tracks and five miles of metropolitan tracks to be relaid, and 14 miles of country tracks to be reconditioned. The amount also provides for the renewal of points and crossings at 75 locations.

- \$2,010,000 for completing the second batch of thirty 7-car Harris Trains (27 of which are in service) and towards the construction of 10 additional Harris type motor carriages. The extra motor carriages will allow 10 Harris Trains to be increased to eight cars to improve peak period services on the Belgrave, Lilydale and Glen Waverley lines.
- \$2,135,000 towards buying diesel locomotives. During the year two X class 1,800 h.p. locomotives (balance of an order for six) and 10 T class 900 h.p. units will be brought into service, enabling a further reduction to be made in the mileage of lines on which steam locomotives still operate.
- \$2,825,000 to be spent on new rail wagons. This will complete the purchase of 100 bogie aluminium hopper wheat wagons and provide for the construction, in Departmental workshops, of up to 200 bogie vehicles of various types, including louvre vans, flat wagons for carrying steel or containers, bulk flour vans, and other special-purpose vehicles.

The balance of the allotment will be used for many other items of a smaller nature throughout the State, among them being \$100,000 for housing improvements.

N class booklet

commemorative booklet on the N class locomotive has been produced by the Australian Railway Historical Society (Victorian Division). Of 24 pages and well illustrated, copies may be obtained for 80 cents (posted) from A.R.H.S. Sales Dept., Box 5177AA, G.P.O., Melbourne.

More No-smoking accommodation

N the second series of Harris, 2-door carriages now being built, two-thirds of the accommodation will be no-smoking and the remainder smoking.

News Letter Index

N index has been printed separately. Readers who require a copy may obtain one by application to the Senior Clerk, Public Relations and Betterment Board, Room 98, Railway Admini-strative Offices, Spencer Street. Ask the Man in Grey

recent request to the Man in Grey at Spencer Street came from Western Australia. The writer asked for the address of the "best ferret breeder in Victoria", as he wished to replace a ferret that had died. He was duly supplied with some names and addresses.

Doncaster transport

MONG comments made, last month, by the Minister of Transport, Mr. E. R. Meagher, after receiving a deputation from the Bulleen Progress Association, was the suggestion that, ultimately, a service to Doncaster would consist of an express railway operating on a reservation within a freeway. The Minister also drew attention to the fact that the Shire's planning provisions should include a recognition of the necessity for providing feeder roads and reservations for stations and adjacent car parks. However, he emphasized that the final decision in the matter would not be made until the plans of the Metropolitan Transportation Committee had been received and studied.

Going to the Cup
"T walked to Flinders Street station, bought a 25 cent train ticket to the racecourse, and was there in 12 minutes. I arrived three-quarters of an hour before people I'd seen waiting at the heliport, and if I ever use any other form of transport on Cup Day may I be boiled and burned? —(Ron Saw in Sydney "Daily Mirror")

(Writer has taken half the cost of

the 50 c return—Ed.)

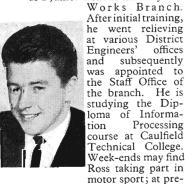
FRONT COVER

SUBWAYS FOR SAFETY: Cover shows reinforced concrete pipes that will form part of a subway system to give safe access for hump yard employees across the area near Dudley Street. In addition, the subway will hold, racked along one side, the cable runs and ducting, and air and water pipes to distribute the required power, etc., to the various parts of the yard. Each section of pipe is 9 ft. in diameter and 6 ft. long. Altogether 79 sections will be used in two In the backsubways. ground, carpenters are preparing form work for the concrete cradle to support the pipes.

PEOPLE BEHIND THE COMPUTER

ERE are brief sketches of the programmers and assistant programmers in the Data Processing Section, all of whom were selected from within the Department.

PROGRAMMER Ross Allardyce joined the Department in 1963 as a junior clerk in the Way and



sent he is building a dragster.

RECRUITED in Germany as a station assistant, Programmer Wolf Gelbert has been six

years in the Department. He was appointed a yard assistant at Dandenong in 1961, and transferred to Benalla in the following August. After promotion to signalman at that location he returned to the metropolitan area in January 1964.



N 1958, Programmer Ken McConville began with the Traffic Branch as a junior clerk in the



staff office. In 1964, he made a private tour of U.S.A. and Canada, and gained experience with data processing while working for the Dominion Insurance Co. in Toronto. Ken's recreation is flying—mainly in Piper Cherokees.

PROGRAMMER Michael Ligudzinski began his Departmental career in 1964, as a junior clerk



in the Superintendent of Freight Operations Division of the Traffic Branch. Michael is studying the Diploma of Information Processing course at the Caulfield Technical College. Hobbies are bay fishing and skin diving.

All four programmers—Michael Ligudzinski, Ken McConville, Wolf Gelbert and Ross Allardyce were selected last year from more than 40 Departmental applicants for the position of programmer.

A SSISTANT Programmer Peter J. Russo joined the railways last year and worked as a regis-

tration clerk in the Grain Shed at Melbourne Goods. He also had experience as an annual leave clerk in the Timekeeper's Office at the same location. Peter has been in the Data Processing section since May, Music. this year. radio, fishing, and life saving are his recreations.



THE Accountancy Branch was the starting point for Assistant Programmer Kevin Dwyer. He



joined it in 1964, as a junior clerk, and worked in the Ticket Supply, Ticket Collection and Cashier's offices. Last May, he began with the D.P. section. When off the job, Kevin combines photography with bush walking.

NOTHER Assistant Programmer who came to the D.P. section by way of the Accountancy



Branch is Raymond Harvey. He worked in the Cashier's office for eight months last year, and then in the Cash Office, until his transfer to the D.P. section last May. A second year Accountancy student, Raymond plays soccer, swims, and owns a vintage car--a bullnose Morris-Cowley that he rebuilt.

THE Jolimont Workshops was Assistant Programmer Malcolm Hill's first contact with the

He Department. started there, two years ago, as a junior clerk in the Senior Clerk's office. Afterwards, he worked in the Timekeeping Office and has been in the D.P. section for about seven months. Malcolm is keen on music—he plays the standard banioand week-ends see him out yachting on the bav.



A SSISTANT Programmer Valentine Ligudzinski began his railway career by joining the Way and Works

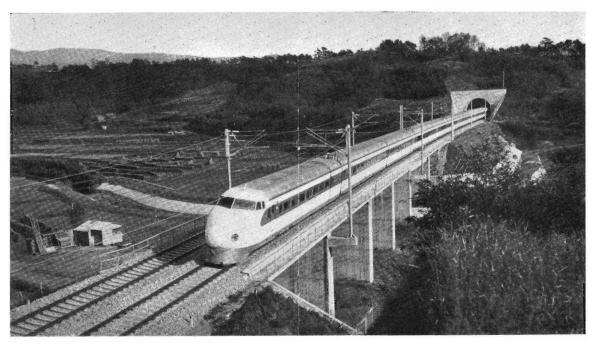


Branch, a year ago, as a junior clerk. Appointed to the staff office of that Branch, he worked on annual leave records until last May when he transferred to the Data Processing Section. common with his brother, Programmer Michael, Valentine is an enthusiastic angler and skin-diver.

In the next issue, the careers of the remaining staff will be covered.

LONG DISTANCE PASSENGER TRAINS

In this section of a report on long distance passenger trains, Mr. G. F. Brown, Deputy Chairman of Commissioners, discusses those of Japan. In the next issue, those in U.S.A. and Canada, as well as trains of the future will be covered.



Hikari super express emerges from tunnel.

When railwaymen talk about passenger trains, the conversation usually turns to Japan, mainly because of the technically advanced new Tokaido line.

Most long distance trains in Japan are operated by Japanese National Railways. The demand on long-distance passenger travel in Japan is constantly increasing. In 1964, the overall capacity of the long-distance services was increased by 15.6 per cent., yet passengers carried during the same period rose by 25.2 per cent.

Motive power is being continually modernized—to speed up trains, to use rolling stock more efficiently, and to readily meet the fluctuations in traffic demands. Trains made up of multiple-unit rail-cars—either diesel or electrically operated—are replacing most locomotive-hauled passenger trains.

Undoubtedly the most publicized and the best of the Japanese trains, are the *Hikari* super expresses that run the 320 miles over the new standard gauge Tokaido line between Tokyo and Shin-Osaka (New Osaka)

station. To provide the level track necessary for the high speeds on this line, more than 70 miles of tunnels and bridges were built.

Tunnel problem

The long tunnels are a major problem, owing to the rise in air pressure as the train enters the tunnel at 130 m.p.h., and particularly when two trains pass in the tunnel.

To prevent the rapid build up of pressure within the carriages, special sealing devices are fitted on doors, vestibule connexions, and the intakes and exhausts of the air-conditioning system.

Even with these precautions, the pressure causes slight ear discomfort when the train enters a tunnel.

The *Hikari* trains complete the journey in 3 hours 10 minutes, averaging more than 100 m.p.h. Even at 130 m.p.h. the journey was most comfortable, owing to the excellent track and the smooth riding qualities of the fully air-conditioned train.

Both the second-class and firstclass carriages are attractively designed and very pleasing to the eye. Each 12-unit train consists of two first-class and 10 second-class carriages; each carriage is driven by four electric traction motors—one to each axle.

While quite comfortable, the seats were not as roomy as those in V.R. saloon carriages, but this was to be expected as they were designed for Japanese. When the back of the seat was inclined, the seat pad did not cant, which also lessened their comfort.

Provision of catering services by private firms on Japanese trains is a common practice. On *Hikari* a very efficient buffet was operated, under contract, by the Imperial Hotel. A good variety of foods was available, with liquor and hot drinks. The buffet was staffed by five female attendants—two of them mostly occupied in providing refreshments throughout the train.

'Phone on train

Novel features of the buffet were a public telephone for the use of passengers, and a speedometer mounted on the end wall.

Ever since they began, in 1964, these trains have been very well

patronized. Each can carry 987 passengers, and J.N.R. officials state that the average occupancy of first-class carriages is 90 per cent and second-class 80 per cent.

There is no doubt that the speed, comfort, cleanliness and safety of the *Hikari* expresses make them serious competitors with other forms of transport. It is claimed that many passengers are changing from air to rail for travel between Tokyo and Osaka.

Limited expresses

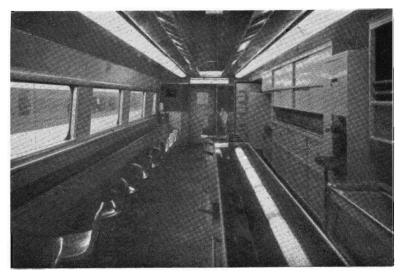
In addition to the *Hikari* super expresses, the new Tokaido line also carries the Kodama limited expresses which take $6\frac{1}{2}$ hours between Tokyo and Shin Osaka. These trains, also of the electrically powered rail-car type units, serve the 10 intermediate stations between Tokyo and Osaka.

The Kodama trains are very well equipped. Facilities include dining car, parlour car, air-conditioning, public telephone and reclining seats equipped with radio earphones for each passenger.

Other limited express trains have first and second-class carriages, all with reserved seats. Night trains have first and second-class sleeping carriages for passengers travelling beyond Osaka. Passenger facilities are similar to those on *Kodama* trains.

Stations along the old Tokaido line—which is 3 ft. 6 in. gauge and electrified—are served by various limited and ordinary express trains.

The ordinary express trains operating on country lines through Japan are generally inferior to the limited expresses in speed, accommodation, and facilities. Sleeping carriages are available on most ordinary express trains running at night. Quite a few of the sleeping carriages on the lesser lines are of the old Pullman



Buffet car on Hikari super express.

style, with open berths concealed by drapes on both sides of a central passageway.

Another long distance train trip that we made while in Japan was on a limited express train between Osaka and Toyama. It was of 222 miles over 3 ft. 6 in. gauge, at up to 60 m.p.h. The riding qualities of the train were excellent. This however, was not surprising because, once again, the condition of the track was first-class.

One interesting feature was that, although the track was electrified, the train consisted of 14 diesel-powered rail-cars. It would seem a better proposition to operate a conventional air-conditioned train, hauled by an electric loco as far as Tokama—where the electrified section terminates—and substitute a diesel loco from there.

The maintenance costs on the 14 sets of diesel engine driving equipment would, from our experience, seem to be much higher than that of maintaining the conventional train with a front-end power unit.

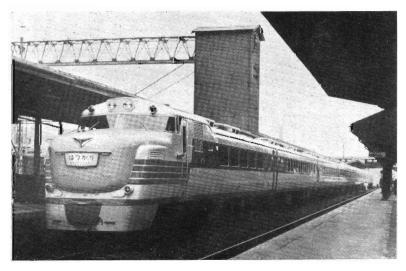
The carriages on this air-conditioned train were cleanly designed, well fitted and carpeted. Seating was quite comfortable, although we noticed the same fault as on the *Hikari* super expresses—the seats did not cant when the backs were reclined.

Conductor bows

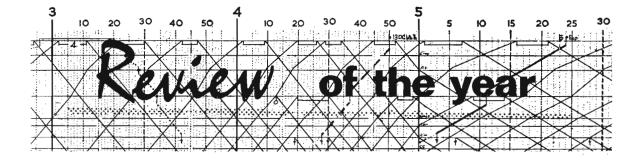
Once again the service was firstclass. When the conductor entered our carriage, he bowed, announced that he would collect the tickets, and went about his job very politely. Girls from the buffet car supplied coffee and sandwiches throughout the train, and they too, went about their work in a polite and efficient manner.

Diesel-hydraulic, rail-car, limited expresses run on all the non-electrified trunk lines. Typical of these trains is the *Hatsukari* running between Tokyo and Aomori. Covering the 466 miles in 10½ hours, it has similar passenger amenities to the *Kodama* type trains.

Overnight limited expresses Asakaze, Sukina and Hayabusa, each consisting of nine sleeping carriages three sitting, a dining car and power car—link Tokyo with various cities on the island of Kyushu to the west. The accommodation in the sleeping carriages consists of roomettes, twinettes, 6-berth cabins and open-type berths. These trains are up-to-date and well equipped to cater for long-distance passengers. However, even the most modern of the overnight trains lacked showers.



Hatsukari limited express



A condensation of the Department's annual report that was presented to Parliament last month.

POR the financial year ended June 30 last, the Department earned \$99,618,882 revenue (\$706,978 less than last year) and working expenses were \$101,151,127 (an increase of \$1,681,391 over last year's figures). This resulted in a net operating loss of \$1,532,245.

Revenue was affected by a decline in goods and livestock traffic, but the factor mainly responsible for the loss on the year's operations was the increased wages bill. Awards made by wage-fixing authorities resulted in an addition of \$2,670,000 to the wages cost by comparison with the previous year.

The Department was also debited with interest, sinking fund charges etc. of \$4,030,673—an increase of \$845,043—to produce a deficit of \$5,562,918.

Revenue vari	ations	were:	
Decreases:			\$
Goods and	Live	estock	
			1,922,000
Sale of electr	ical en	ergy	1,000
		-	1,923,000
Increases:			,
Passengers			369,000
Parcels			96,000
Mails			235,000
Refreshment	Ser	vices,	-
Bookstalls	and A	dver-	
tising			425,000
			57.000
Miscellaneou			31,000
Kerang-Koo	ndroo	k Re-	
coup			3,000
			1,216,000

Loan expenditure

Loan Funds of \$16,299,636 allotted by the Treasury for expenditure during the year were used as follows:

			4P
Additions an	d im	orove-	
ments to	way	and	
works			8,882,396
Rolling stock	equip	ment,	
machinery	and	other	
works			7,358,253
Construction	of	new	
lines, etc.			58,987

FINANCE

The loss on this year's operations—despite the attainment of still higher standards of operating efficiency (see table opposite) and the introduction of higher freights and fares from September 27, 1964—clearly shows how vulnerable the railways are to influences which tend to cancel out the benefit of increased charges designed to meet unavoidable cost increases (such as the heavy increase in award rates).

Apart from the recurring increases in labour costs, the most serious problem is the constant pressure exerted by sectional interests to obtain freight concessions, both direct and through political channels.

Pressure groups

For example, it is estimated that the exemption of decentralized industries from the 10 per cent. freight increases that became effective from September 27, 1964, is costing the Department about \$600,000 in revenue annually. In addition, as a matter of Government policy the published freight tariffs have, for many years, given Victorian country industries specially reduced rates for raw materials and finished products. These cost the railways about \$3,000,000 a year.

Furthermore, over \$200,000 is lost annually through having to concede further freight reductions, by way of special contract agreements, to specific decentralized industries under threat of transfer of their traffic to road under the freedom granted them by Act of Parliament.

In many other fields the railways are forced to concede special rates to compete with road transport, which is subsidized under existing road transport legislation.

Average return less

As a result of these influences and despite revenue benefits from the abovementioned 10 per cent freight increases, the average return per goods and livestock ton mile over the full year actually declined by 1 per cent. compared with 1964–65.

If all concessions to country industry were properly charged to Decentralization funds, the cost of these concessions would be made clear to the public, and the railway accounts would reveal a truer financial return commensurate with the Department's steady increase in physical efficiency and productivity.

In its passenger operations, too, the Department is obliged to grant fare concessions that properly fall within the ambit of social service benefits and which, as such, should not be a charge against railway finances. These embrace the various fare concessions to students, trainee nurses, etc. In addition, the half fare concession to pensioners is only partly covered by the annual subsidy of \$200,000 received from the State Government.

Superannuation

Another factor that causes serious concern is the ever-increasing burden on working expenses of superannuation charges due to the constant liberalization of benefits.

For instance, in 1963 the Superannuation Act was amended to give contributors the right to elect to retire between the age of 60 and 65 on a full pension upon payment into the Superannuation Fund of an amount determined by the Superannuation Board.

Many of the staff have taken advantage of this privilege.

For each full pension, the Department has to contribute a sum equal to $2\frac{1}{2}$ times the amount paid from contributions to the Fund. Therefore for each employe who retires at 60 on a full pension, the Department must contribute its share of pension five years earlier than if he continued in the service until the normal retiring age.

For 1965-66, 31 staff members elected to retire on a full pension before reaching 65. This resulted in an additional charge of \$29,419 against railway revenue.

Total superannuation payments for the year were \$4,944,573—almost 5 per cent. of Revenue—and it can be expected that with the passing of the Pensions Supplementation Act, No. 7417, these charges will continue to mount.

GOODS TRAFFIC

For the first five months of the year, goods traffic showed a substantial increase in tonnage compared with the corresponding period in 1964-65; prospects of breaking previous records for traffic appeared bright.

However, from December, the effects of the general economic decline were reflected in a reversal of the previous upward trend in tonnage. The items particularly affected were iron, steel, briquettes, timber, motor cars and motor bodies.

Moreover, the grain traffic—2,465, 000 tons—decreased by 328,000 tons, or 11.7 per cent., compared with the previous year. This was caused by reduced yields of wheat, oats and barley owing to unfavourable seasonal conditions in certain areas. Flour traffic also declined by 43,000 tons, or 21.9 per cent., because of reduced export trade.

On the other hand, new records were established in superphosphate traffic of 1,056,803 tons (up 6.6 per cent) and cement, 781,663 tons, (up 6.9 per cent.). Intersystem traffic on the Melbourne-Albury standard gauge line also eclipsed previous records, totalling 1,917,651 tons, an increase of 206,515 tons, or 12 per cent.

The net result was an overall reduction in goods tonnage of 319,482 tons, or 2.68 per cent., which was approximately equal to the decline in grain traffic.

B.E. builds traffic

The bogie exchange system, for goods traffic moving over both broad gauge and standard gauge lines, brings more and more interstate traffic to rail, as it obviates costly and time-consuming transfer of loading at break-of-gauge terminals. During the year, about 22,700 wagons of various types were handled at Dynon bogie exchange centre, and 3,000 at Wodonga—an increase of 7,700 and 1,400 wagons, respectively.

The opening of B.E. facilities at Port Pirie (South Australia) in November, 1965, enabled Victorian wagons, of suitable design, to be used between Kalgoorlie (Western Australia) and Brisbane, (Queensland)— a distance of 2,927 miles.

Livestock

Livestock traffic—239,000 tons—was 120,000 tons less than in the previous year and the lowest for very many years. While this reduction was partly caused by the inflation of the 1964–65 tonnage by the abnormally heavy movement of stock from drought areas in New South Wales, a more important factor was the increased activity of road hauliers. The loss of traffic to road transport would undoubtedly have been still more serious but for the introduction, several years ago, of special competitive rates at many livestock centres.

PASSENGER RESULTS

Metropolitan passenger journeys totalled 144.33 million, a reduction of about half a million—while country passenger traffic decreased from 4.90 million to 4.79 million. However, total revenue from passenger traffic was \$369,000 greater than in 1964–65; this apparent anomaly is explained by the increase in fares from September 27, 1964, the benefit of which accrued for only the last nine months of 1964–65, but extended over the whole of the subsequent year.

METROPOLITAN TRANSPORT PLANNING

Overseas it has been more and more widely realized that putting the main emphasis on better public transport is the only answer to increasing traffic congestion. Because of the nature of the service, it has not been possible to make metropolitan public transport self-supporting. The provision of the fixed facilities for public transport is therefore being regarded as an appropriate charge on the whole of the city community. In many cases, e.g. America, special grants are being made by the Government authorities; it is realized that the object is to move people, not motor vehicles.

As the survey of the transport requirements of the Melbourne metropolitan area for the next couple of decades is nearing completion, it is timely to record the disillusionment of large overseas cities which have placed their faith and invested (continued on page 186)

OPERATING RESULTS

Statistics relating to the more important aspects of freight operations are as under:

	1965-66	1964-65	1963-64
Total goods and livestock tonnage Average haul per ton of goods (miles) Total ton miles (goods and livestock) *Average miles per wagon per day *Average ton miles per wagon per day Average tonnage (net) per loaded wagon mile Average ton miles (net) per goods train hour Contents load per goods train mile (tons) Percentage of empty wagon mileage to total	 12,156,405 164 1,989,000,000 35 .51 346 14 .58 3,563 300 32 .81	12,595,661 161 2,028,000,000 36 .91 345 13 .98 3,421 295 33 .18	12,132,015 157 1,906,000,000 35 .82 330 13 .88 3,377 290 33 .74

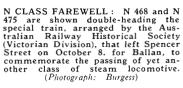
^{*}Based on the number of goods vehicles actually available for service.

December 1966 183



HONOUR ROLL: At Spotswood Workshops, on Remembrance Day, Sister J. Hood. Casualty Officer at Newport Workshops, unveils an honour roll commemorating those from the Spotswood Workshops who served in the Second World War. At left is Mr. P. Gibb, Assistant Workshops Manager.

VIEWS OF NEWS





RE-OPENING: At Avoca, on October 29, the Shire President, Cr. M. W. Dawson, cuts the ribbon for the re-opening of the line to Ararat. Organized by railway enthusiasts, it was the occasion of the first revenue train to use the line since July 1959, when the line was closed for economic reasons. (A. R. E. photograph)





LARGEST; Australia's largest type of rail tanker discharges 35 tons of Butane—a form of liquefied petroleum gas—into a road tanker at Dynon interstate terminal. The rail tanker carried the Butane from Sydney for delivery to a Croydon crockery and tile manufacturer. The vehicle is 58 ft. long, has a diameter of 8 ft. and a capacity of 3 million cu. ft. It has no underframe, and is directly attached to rail bogies that can be interchanged between broad and standard gauge. Two trips were made by the road tanker to empty the rail vehicle.

HIGHLIGHTS

підпіідп	13
Revenue \$9	9,618,882
Of each \$1 earned: 61c came from go	
livestock 31c came from p	
parcels and mails 5c came from ref	rechments
and advertising 3c came from mis	
Working Expenses \$10 Of each \$1 spent:	
72c went on wages roll tax	
2c went on coal, oil locomotives	, etc., for
3c went on electric for traction	al energy
14c went on other and services	materials
7c went on pensions service leave	and long
2c went on other ex	penditure
Route mileage open	4 100
for traffic Average number of	4,189
staff employed Total capital	28,254
	24,000,000
stock carried I Passenger journeys:	2,156,405
Country Metropolitan 14	4,792,505
Principal commodities	14,332,103
carried : Wheat	tons 2,034,895
Briquettes	1,571,275
Fertilizers	1,154,252
Cement	781,633
Coal	557,559
Iron and steel	423 707
bar, rod, etc. Firewood, tim-	423,707
ber, wood-pulp	410,401
Livestock	239,039
Oats and other	
grain	220,421
Barley	209,854
Flour, bran, pollard, etc.	206,336
Motor cars and	200,550
bodies	182,262
Beer	134,395
Wool	133,473
Petrol	132,611
Pulp and Paper ex Maryvale	124,627
Locomotives:	
steam	181
electric	35 185
diesel-electric diesel-hydraulic	30
Passenger carriages	1,806
Wagons, vans, etc.	23,996
Fuel consumed:	tons
Coal	47,330
Fuel oil	30,957
Diesel oil	53,608

(continued from page 183)

heavily in freeways as a solution to their urban traffic congestion.

These lessons from overseas should not be overlooked or ignored in determining priorities for the large amounts of money that will be required in the next two decades to meet essential transport needs in the metropolitan area.

Ratepayers' \$4 million

At the present time, ratepayers in the metropolitan area pay about \$4 million a year through the Metropolitan Improvement Rate. Much of this, in the past, has been devoted to road projects.

Bearing in mind that freeways are designed mainly to meet the needs of workers travelling to and from the central business district in peak hours (outside peak hours the existing road system is adequate), and that 68 per cent. of the central business district work-force use public transport, it would be both fair and logical to divert a similar proportion of the transport component of the Metropolitan Improvement Rate towards improving the fixed facilities—the tracks, etc.-for public transport rather than use the whole of this money, as is done now, for the benefit of the minority who use their cars.

In a rapidly growing State, such as Victoria, it may not be practicable to divert a greater proportion of our total capital resources to the transport sector, but by strict application of the principle that every dollar spent must yield the maximum practicable return, the resources that are available for transport could be spent to far better purpose than they are now.

TRANSPORT REGULATION

For a number of years, the Department has consistently drawn attention to the waste of transport resources and loss of State revenue caused by the failure of the Commercial Goods Vehicles Act to regulate the transport by road of livestock, fruit, vegetables, bulk petroleum products and primary producers' goods carried in their own vehicles.

Under the Act these commodities can be moved by road without limitation—either of tonnage or length of haul—on payment of an annual fee of only \$4.00 and for fruit, vegetables and livestock, without even the payment of road maintenance charges.

The effective regulation of this traffic and the considerable range of goods for which road permits are issued "as of right" would go far towards overcoming the railways' financial difficulties, with consequent benefit to the whole community.

COMMERCIAL **ACTIVITIES**

Intensive canvasses of primary producers and country traders were made by Commercial Agents to promote rail services, and, despite strong competition from road hauliers operating from depots across the border, the Department's business was generally maintained.

Additional traffic, of coiled steel strip, was secured by providing bogie wagons equipped with special cradles to enable the bulky coils (up to 6 ft. in diameter and 16 tons in weight) to be safely transported from Port Kembla to Melbourne and Adelaide.

A satisfactory procedure was devised by Packaging Officers for railing bagged cement, on pallets, from Fyansford to Melbourne in bogie vans.

TRAIN SERVICES

To meet increased traffic offering for the existing overnight express goods service to Sydney, an additional train was introduced on October 18, 1965, leaving Melbourne at 1.30 p.m., Mondays to Fridays, and reaching Sydney at 5.43 a.m. the next day.

In December, 1965, the service to Sydney was further increased by an additional overnight express on Sundays to carry frozen vegetables reaching Melbourne from Tasmania that morning.

From February 5, 1966, the Saturday 2.15 p.m. goods train for Adelaide was altered to depart at 5.0 p.m. and run to an express schedule.

Improvements to intrastate goods services included an additional train from Bendigo to Swan Hill on Saturdays, beginning in September, 1965; a new through service from Melbourne to Mansfield, operated by diesel-electric locomotives four days weekly from November 15, 1965, and an additional service from Bairnsdale each Saturday, from January 29, 1966, enabling goods from the Orbost line to reach Melbourne in time for delivery early on Monday.

From November, 1965, accelerations of up to 23 minutes were made in the services between Mel-bourne and Tocumwal. This resulted from the installation of power signalling between Essendon and Broadmeadows, and the completion of track relaying on the Goulburn Valley line.

Local services between Melbourne and Geelong were improved by the introduction, on December 6, 1965, of an additional express leaving Spencer Street at 5.52 p.m., Mondays to Thursdays, and also by the provision of a mid-afternoon train in each direction on Saturdays, commencing February 5, 1966.

A mini-buffet was introduced on the Mildura Sunlight trains and two-carriage, off-peak trains extended to the Sandringham and Broadmeadows lines.

Diesel success

During 1965-66, steam locomotives accounted for slightly more than one-seventh of the total mileage run by goods trains—the lowest proportion of steam operation yet recorded on the Victorian system.

It is therefore appropriate to draw attention to the greatly improved efficiency in operation achieved since 1951–52—the year immediately preceding the introduction of our first main line diesel-electric locomotives.

In that year, the average ton miles per wagon per day was 216, and the average net ton miles per goods train hour 2,335; the corresponding figures for 1965–66 were 346 and 3,563. As an indication of the operational benefits accruing from the progressive conversion from steam to diesel haulage, this comparison speaks for itself.

ROLLING STOCK

The following new rolling stock was built in Departmental workshops during the year:

Harris trailer carriages ZLP brake vans (for freight	20
service)	6
CSX flat wagons (for coiled steel)	5
ESX open wagons (for sheet steel)	6
SFX flat wagon (for steel plate)	1
JX wagons (for bulk cement)	10
TVX wagons (twin Flexi-van transporters)	3
VLX louvre vans (for general merchandise)	186
incicialidisc)	100

Motive Power

During the year, the number of steam locomotives remaining in service further declined from 220 to 181. Train services in the North-Eastern District and on non-electrified lines in the Gippsland area were fully converted to diesel operation, leaving only five country depots from which steam locomotives are still operating.

Passenger Stock

Construction of new Harris carriages resulted in the number of Harris Trains in service rising to 55, an increase of 5 compared with the previous year; a corresponding number of swing-door trains were scrapped. Existing contracts provide for another five Harris Trains.

Preliminary work was carried out at Newport for building an extra ten motor carriages, which will enable the length of peak period



Part of shopping development at Glen Waverley

trains on the Box Hill line to be increased from seven to eight carriages.

Thirteen additional *Tait* type suburban trailers were equipped with driving controls to provide for the further extension of two-car operation during slack periods.

Four of the older country carriages were specially converted to display vehicles, for hire to organizations and firms undertaking promotional tours by rail. They were initially used for a mobile exhibition of industrial development in the Gippsland area.

By arrangement with this Department, the South Australian Railways built two additional second-class, saloon type, air-conditioned cars for *The Overland* and has two twinette sleeping cars under construction.

Goods Vehicles

Thirty-two of the 100 aluminium grain wagons ordered, were delivered during the year.

In addition to 12 wagons specially built for different kinds of steel traffic, 10 existing wagons were altered to carry coiled steel. Various other wagons were provided, either by the construction of new vehicles or by the alteration of existing ones, to cater for particular types of traffic. Additional open type wagons were grain-proofed, making a total of 6,056 open wagons suitable for bulk loading.

By the close of the year, the number of wagons suitable for use on either broad gauge or standard gauge by bogie exchange had increased to 987.

Workshops and Testing Laboratory

Additional new welding equipment was installed at Newport, and the roller bearing shop was extended.

Repair facilities at Ballarat Workshops were improved by providing a covered area for wagon repairs and a new building for spray painting.

The range of activities at the Newport Testing Laboratory was further diversified by the purchase of several new items of testing equipment.

OTHER WORKS

During the year a total of 135 miles of track was relaid, principally by four mechanized gangs operating in the Ararat, North-eastern and Eastern Districts. Although this was an increase on the mileage relaid the previous year, it was still about 100 miles short of the annual total accepted by the Public Accounts Committee, in its recent report, to raise the standard of tracks to the desirable level within a reasonable period.

Additionally, 205 sets of points and 499 crossings were renewed, while on 41 miles of track on the Sea Lake and Robinvale lines, ballast and sleepers were renewed by a mechanized reconditioning gang.

Progress with the re-arrangement of the Melbourne Yard was maintained, and, although most of the work so far completed has been in the peripheral area of the new yard, its benefits are already apparent in improved operating conditions.

About 10 miles of new track were laid, mainly on the 17-acre site at North Melbourne where the locomotive depot previously stood. A new area for the icing of refrigerator vans was also established on this site.

At Spencer Street, the erection of a roof over the southern end of Platforms Nos. 2, 3 and 4 and adjacent loading docks marked the completion of all major constructional work on the new terminal.

The duplication of the section from Newport South Junction to Rock Loop was well advanced, and work begun on the Laverton-Werribee section.

Power Signalling

Automatic signalling was installed between Essendon and Broadmeadows, replacing a two-position system.

The installation of automatic signalling between Moe and Morwell, with remote control of the Herne's Oak crossing loop, was approaching completion.

The telephone pole line between Melbourne and Ballarat was reconstructed as far as Wallace, and work was proceeding on the remainder of the line.

The teleprinter system in the Head Office was modified to incorporate machines of the latest type together with a teleprinter concentrator. This has enabled each operator to have access to all circuits in order to cope with additional lines. The use of punched tape was introduced for certain teleprinter operations.

Teleprinters, replacing the morse telegraph, were installed at several centres in the northern and southwestern districts.

Under the programme for the progressive improvement of level crossing protection, three additional crossings were equipped with boom barriers, and flashing light signals were installed at 17 others.

To meet the requirements of industries situated close to the railway, new sidings were put in or existing sidings extended.

REAL ESTATE DEVELOPMENT

Princes Gate Pty. Ltd. was proceeding with the next stage of its development scheme, involving the erection of two multi-story buildings above the station.

A scheme to re-develop railway land adjoining Springvale Road, Glen Waverley—for the mutual benefit of the Department, the local Council and private enterprise—was successfully completed during the year.

About six years ago, the City of Waverley submitted a tentative plan to incorporate land then occupied by trackwork, a substation and several departmental houses, in a proposed shopping centre and car parking project.

As finally adopted, the scheme provided parking space for 203 cars (to serve the adjacent shopping area), a roadway, bus bays, a service station site and nine additional shop sites.

In conjunction with the duplication of the Glen Waverley line, the trackwork and other facilities were removed from the land at the cost of the Council, which also accepted responsibility for the relocation of the departmental houses.

The Council's costs in the matter are being financed by a special rate imposed, at the request of the owners concerned, on properties that benefited from the re-development scheme. In addition, the lessees of the shop and service station sites have contributed towards the cost.

The railway land required for the car park, roadway, and bus bays has been leased to the Council on a long term basis at a nominal rental. For the leases of the business sites, on which the lessees have erected valuable improvements, the Department is receiving an appreciable sum in annual rent.

A separate parking area, for 35 cars, is provided for rail patrons who travel from Glen Waverley.

MISCELLANEOUS

Under the long-range scheme for additional substation capacity for the metropolitan train system, and conversion of existing substations from 25 to 50 cycle equipment, a new substation was commissioned at Essendon, and the Glenroy substation equipped with new plant, using semi-conductor type rectifiers.

Revenue from refreshment rooms, stalls, buffet and dining cars and Mount Buffalo Chalet was \$4,399,017 an increase of \$421,267. The refreshment rooms at Echuca, Shepparton and Birchip and the kiosk at Ouyen were closed during the year.

Mount Buffalo Chalet patronage during the 1965 winter was down, owing to disappointing snow conditions, but the overall trading results for 1965-66 were satisfactory. Further building improvements were made, while the kitchen of the lodge at Dingo Dell skiing grounds was completely modernized.

The value of material reclaimed for use within the Department or for sale at the Reclamation Depot, Spotswood, was \$165,696 higher at \$958,866.

For several months before the introduction of decimal currency on February 14, 1966, a multi-lingual public relations campaign was conducted to make travellers familiar with decimal fares and how to tender the existing currency. The fact that the change-over to the new system was so successfully carried out reflects credit both on station staff, for the way in which they rose to the occasion, and also on the public, for its co-operation.

Various forms of publicity were employed throughout the year to promote railway business and to assist in recruiting new staff.

Press, radio and television services were kept fully informed of railway activities by means of a news and pictorial service of high standard.

Over 600 suggestions were submitted by employes and the public for the improvement of the service. Cash awards totalling \$864 were paid for the 88 suggestions adopted, the highest individual award being \$100.

During the year, a Management Services Division was formed by amalgamating the Work Study, Methods and Computer Sections. Projects undertaken by the Division have resulted in improved efficiency and economy in several phases of railway operation.

Increased interest in first aid, resulted in considerably more employees being enrolled for classes. Just under 800, a very high proproportion passed.

GOOD SERVICE

Ballarat

Stawell

I would like to express our appreciation for the prompt service and friendly co-operation given to us by you and your staff during the

to the Stationmaster, Ballarat

three and a half years on this project. Your staff have created a favourable impression with our officers, and their excellent service has been very much appreciated.

—L. J. Slavin, Works Accountant, Lake Bellfield Project Office, writing to the Stationmaster, Stawell

Lost pay envelope

RECENTLY my daughter lost a pay envelope (containing \$90) on the Seymour railway

It was picked up and given to railway officials by one of your employees—Dennis J. Burke—and eventually, with the help and co-

operation of our local (Glenrowan) stationmaster, returned to her intact.

We are indeed grateful for such help, co-operation and honesty.

—W. J. O'Brien, Hansonville, via Glenrowan, writing to the Commissioners

Colac

THE members of the Colac Racing Pigeon Club wish to thank you and your staff for your service and courtesy in connexion with the dispatch and carrying of pigeons to races during the year.

-P. M. Hodges, Hon. Secretary, writing to the Stationmaster, Colac

AMONG OURSELVES.

Revolver in pocket

A MONG interesting incidents of his career recalled by Railways Investigation Officer J. J. McCabe, shortly before his retire-

ment last month, was the occasion when he arrested a night-time trespasser in Ballarat yard. Pending the arrival of local police, the man was detained in the Stationmaster's office. Then, after being searched a fully loaded revolver was found on him. Mr. McCabe joined the Department in 1924, and was a Railways In-



Mr. McCabe

vestigation Officer at Ballarat for just over 40 years. He will be visiting Tasmania soon, and W. A. later. After that, Mr. McCabe's lifelong hobbies of gardening and shooting will occupy much of his leisure.

V.R.M.B.S. Centenary

THE Victorian Railways Mutual Benefit Society celebrated its centenary last month with a dinner and theatre party for its committeemen, representatives and collectors. Held at the Australia hotel, the dinner was presided over by Mr. E. H. Brownbill, Chairman of Commissioners. In proposing the toast to the society, Mr. W. Walker, Secretary for Railways, outlined the value of the society, in providing over the years, sick pay relief and

funeral benefits to railwaymen when wages were much lower than they are today.

The society was formed at a meeting of railwaymen held on September 13, 1866. When membership was much larger than it is today, the society organized an annual picnic that was one of the big events of the railway year.

Dead centre jumps

RAFTSMAN Michael Rose, of the Signal and Telegraph Section at Head Office, will be competing in the Australian Parachuting Championships to be held at Labertouche from December 26 to January 1. By gaining third place in the Victorian championships held last month, Michael earned his place in the team. Actually one of his jumps was a dead centre from 3,300 ft. To make a dead centre, a parachutist must land on a disc just 10 cm. (about 4 in.) in diameter. Only about eight of these jumps have been recorded in Australia; and four of them were Michael's. From the Australian championships, a team will be selected to represent this country at the world championships to be held next year—possibly at Tokyo. At the last of these parachute "Olympics"—held at Leipzig—the Australian team came sixth out of the 35 countries represented.

Accountancy match

A crowd of over 200 that turned up at the Whittlesea Show-grounds on Sunday, October 30, for the Spencer Street v Flinders

Street Accountancy Branch football match, saw a fast moving game in which Spencer Street (4.13.37) was beaten by Flinders Street (7.5.47), which retains the trophy cup until next year. The winning team was captained by Lydio Ricci, and Spencer Street by Ian Gardner—both of them Richmond players. Match organizer and Spencer Street coach was Des O'Donoghue, while Bill Merrifield coached Flinders Street.

Reunion of apprentices



Mr. Nilsson (right) has a chat with Mr. A. Loveless from Bendigo North Workshops.

THE first apprentices to attend the V.R. Technical College, opened at Newport in February 1922, recently held a reunion at which the guest of honour was Mr. O. E. Nilsson, the College Principal who instructed them during their three years of theoretical training, and who has since retired from the position of Chief Inspector of Technical Schools.

Points for trackmen



At the Gangers School, Dandenong, the Instructor—Road Foreman S. Hall—discusses some points with trackmen who attended the school that concluded last month.



When this picture was taken, a spirited rendition of When the Saints Come Marching In was being given at the recent booking clerks' reunion by (left to right) Messrs. Ken Strange, Doug Taylor, Leo Kennelly, Larry Shepherd, Jack Symons and Barney Flynn. Some retired men were among the 75 who attended the event which was held at the Concordia Hall, South Melbourne. Among them were Messrs. George White, Noel Sullivan, Jack Fewster and Archie White. The occasion was taken to make a presentation to Mr. Archie White; he had recently retired from the Spencer Street Parcels Office.

TALKS ABOUT BOOKS

THE ladies will be pleased to hear that another Lucy Walker title has recently been added: The Ranger in the Hills is the moving story of an orphaned 10-year-old boy and his elder sister, who are placed in the care of a rather mysterious character, a prospector, and . readers of Lucy Walker will know what to expect from there on. In case it had been over-looked, this is the second Lucy Walker novel we have added recently, the first being The Other Girl.

Parents of the children who are still reading juvenile literature will be interested to know that all the books which won the major prizes in the Children's Book of the Year for 1966, are available in the library. These include Ivan Southall's Ash Road, Colin Thiel's February Dragon, Eleanor Spence's The Year of the Curfawong, and Reginald Ottley's The Sandhills of Yamboora.

These are only four of the many worth-while titles available in the juvenile section of the library. This section is also being built up in the area of non-fiction, to provide useful texts for school assignments.

The Australian section has recently acquired the new Jon Cleary novel Pulse of Danger, a story set in Bhutan in the Himalayas, the background being the involvement of a group of scientists, (under the charge of an Australian), in the Sino-Indian War. Arthur Upfield's last book has also come to hand. The Lake Frome Monster will be the final adventure of Det. Insp. Napoleon Bonaparte.

This book was actually completed from notes Upfield left after his death in 1964. Northward the Coast is another adventure story from Edward Lindall. This concerns a professional hunter, a couple of Portuguese political refugees and, inevitably, a girl—all trying to keep out of the clutches of the Northern Territory police, while political infighting goes on over the granting of political asylum for the Portuguese.

Finally, the librarian's personal recommendation for the month is A Horseman Riding By by R. F. Delderfield. This a long, but never boring story of an estate in Devon, and of the families on the estate. It takes in a period from the end of the Boer War, through the first World War, and up to the beginning of the Second World War. Because of the period of time-nearly four decades-and the number of families and generations involved, a very large number of characters come into this book. Yet, such is the author's ability to involve the reader with the affairs of his characters, that they are all thoroughly familiar, never to be con-fused with one another. The publishers refer to this as " a magnificent saga of English country life in the twentieth century" and for once I must agree with them. I feel that most readers will find this to be a deeply satisfying novel about real people whom one would be proud to call one's friends. This is a book which may be commended to all readers.

RECENT RETIREMENTS...

ROLLING STOCK BRANCH

Pakainietis, V., Ballarat North Defritaes, S., North Melbourne Lawton, A. P., Seymour Jones, W. C. A., Ararat Sharp, J. F., Ballarat Griffiths, G. T., R.M. Depot Ffrench, D. L., Ballarat North Mason, A. L., Newport Chandler, W. H., Ararat Oldman, S. M., Ararat Clancy, E., Jolimont Wilson, J. J., Bendigo Gasterstadt, A. G., North Melbourne Hughes, J. H., Newport Anderson, H., Newport McDonald, H. L., Maryborough Cohen, P. L., Jolimont

TRAFFIC BRANCH

Curthoys, H. J., Sandringham McQuiliam, P. J., Bendigo Williams, J., Melbourne Goods Rule, J. S., Carrum Campbell, C. S., Newport Goods Lane, W. F., Head Office Leach, W. J., Melbourne Goods Roberts, (Mrs.) J. A., Gardiner Paterson, J., Flinders Street Docherty, G. B. P., Dimboola Jackson, H. W., Flinders Street Henderson, A. V., Brighton Beach Hearn, D. C., Melbourne Goods Snell, M. C., Spencer Street

WAY AND WORKS BRANCH

Sharpe, C. A., Caulfield Hallal, M., Spotswood Calvert, D. L., Spotswood Wilson, T. C., Korong Vale Greer, N. M., Flinders Street Magnolia, G., Newport Zotti, A., Seymour Evans, R., Ironworks Division Lampugnani, L., Spotswood

ACCOUNTANCY BRANCH

McInneny, T., Head Office

COMMERCIAL BRANCH Rawlings, A. L., Head Office

REFRESHMENT SERVICES BRANCH

Portwood, A., Dining Car Depot

NEWS LETTER REGRETS
TO RECORD THE FOLLOWING

DEATHS

ROLLING STOCK BRANCH Urch, A. W., Ballarat North Nicolazzo, M., North Melbourne Pysing, H. R., Bendigo North Wilson, A. G., North Melbourne

TRAFFIC BRANCH Allison, T. M., Spencer Street Sanderson, J. Flinders Street Tominc, F., Spencer Street Prekop, A., Bunyip

WAY AND WORKS BRANCH Rogers, E. F., Flinders Street Lawson, S. F., Special Works Carson, A., Murtoa Sturrock, G., Overhead Depot Pettit, F. C., Spencer Street May, E. J., Benalla



Cricket

THERE were no surprises in the opening round of the 1966/67 season, when Jolimont Workshops and Stores defeated outright Codon and Melbourne Yard respectively, while Loco beat Spotswood on the first inning. In the first game L. Montgomery (Jolimont Workshops) registered a fine double in knocking up 102 n.o., then taking 5/2 and 5/19. G. Geddes was the other successful bowler for Jolimont, recording 4/15 and 3/11. Scores in this match were Jolimont Workshops 5/161 declared, beat Codon 39 and 80.

In the Stores v Melbourne Yard match, R. Dyson 51, and C. Short 34, showed fine batting form for Stores while M. Flavell 29, and R. Stamps 14 n.o., did their best to stave off the inevitable for Yard.

The bowling figures for this match provided a real shock. Rob Dyson, Stores Captain, and South Melbourne First eleven batsman, finished with 7/30—perhaps we have discovered a match winner for Brisbane, they tell me his wrong-un is a beauty. For the Yard, N. Dyer 2/34, J. Fisher 2/37, and J. McAlister, 2/33, did best with the ball.

Because of bad weather on the opening day, Loco v Spotswood Workshops was a one day game, resulting in a win for Loco. Scores were Spotswood, G. Lees put together 53 n.o., and L. Griffin 21; for Loco, M. Kirkpatrick top scored with 44 and J. Parker made 24. The best of the bowlers were G. Allen 2/22 (Loco), Leehane 2/14 and Bevan 2/18 (both Spotswood).

By contrast with the first round, there were a couple of real surprises in the second. As expected, Jolimont Shops, 7/161 (declared) easily beat a weakened Melbourne Yard,



In the Spotswood v Codon match on November 15, K. Hopkinson (Codon) moves across to chop a rearing ball on the rain soaked pitch at Royal Park.

62 and 47 outright. Montgomery was again the star for the winners, making 74 and taking 7/26. Hale contributed 32 n.o., and McDonald ably supported Montgomery with the ball by taking 6/19. For the losers, Hoffman 24 and McAllister 4/43 were best.

First upset

Then came the first upset. Spotswood Workshops, with Lees making 56 and Payne 61 n.o., finished the first day with 6/157 (comp. declaration) and appeared to be in an unbeatable position, but Morrissey 71 and Hopkinson 54 (Codon), had other ideas. By stumps, this young side had 160 on the board to give it victory by 3 runs.

The second upset came in the Loco v Stores game. Again, because of rain on the first day, this match was reduced to a one-day affair. Loco batting first, made good use of the time allotted to them by making 6/124 (G. Allen 64 n.o., and Parker 27 n.o.). The Stores batsmen collapsed and were all back in the pavilion for only 17 runs. Forced to follow on, they did better in the second innings, at stumps being 0/50 (Short 34 n.o., Smart 14 n.o.). The Loco bowlers responsible for the Stores debacle were Wilson 3/7, Parker 1/3 and Douglas 1/7. Position after two rounds was: Jolimont Workshops 20 points, Loco 12, Stores 10, Codon 6, Spotswood Workshops and Melbourne Yard,

Cricketers are reminded that the annual match against the Postal Institute will be played at the South Melbourne Cricket Ground on Monday, January 23, beginning at 10 a.m. Players seeking selection in the V.R.I. team should see that their applications reach Bill Crowe or myself not later than Monday, January 9. Before getting off the subject of cricket, I would like to wish Jack Fisher, captain and Secretary of the Melbourne Yard Cricket Club, a speedy recovery from his injury. Jack was unfortunate enough to break his arm in an accident at work recently.

Golf

Applications are being received from golfers who desire selection in the team to represent Victoria at the inter-system carnival to be conducted by the W.A.G.R. Institute, in Perth from May 7 to 17. It is anticipated the Victorian party will leave Melbourne on the evening of May 4 and return on the morning of May 20. Applications should reach this office not later than December 23.

Colac Golf Course was the venue for the first V.R.I. Western District Golf Championship. The Geelong V.R.I. Golf Club, which organized the event, should be mighty proud of its initial effort. About 60 golfers-from Melbourne, Warrnambool, Colac, Camperdown, Ballarat, Hamilton, Dimboola and Geelongcompeted for the various trophies. But for bad weather, there might have been over 100 starters. Main event winners were A. Clohesy (Western District Championship), I. Patterson (A Grade Handicap), T. Kenny (B Grade Handicap), M. Unwin (9 Holes Out) and R. Vendy (9 Holes In). Reports received from the council party-Messrs R. Jones, F. Jones and R. Richards—emphasized the capable manner in which Norm Roberts (president), Ian Patterson (hon. secretary) and their helpers conducted the tournament.

1967 Country Week Dates

POWLS—from February 20–24. Entries close January 23.

Bowls will be played on the Albert Park-V.R.I., Middle Park, and St. Kilda greens, and the V.R.I. Social Bowling Club has arranged an evening function on Wednesday, February 22, to which all country bowlers participating in this fixture are invited.

Cricket—March 6-10. Entries close February 6.

As usual, cricket will be played on the excellent turf wickers at Royal Park, and there will be a full round of games on all days except Wednesday, March 8—a free day.

Tennis—April 17-21. Entries close March 20.

4	1	~	7
1	ч	h	
л		U	

Terminating dates of pay fortnights shown in Red
O Public holidays (Good Friday, 1968—April 12)

1967

	JANUARY					FEBRUARY				MARCH							
Sun.		1	8	15	22	29		5	12	19	26		5	12	19	26	
Mon.		2	9	16	23	30		6	13	20	27		6	13	20	27)	
Tues.		3	10	17	24	31		7	14	21	28		7	14	21	28	
Wed.	, , <i>,</i>	4	11	18	25		1	8	15	22		1	8	15	22		
Thur.		5	12	19	26		2	9	16	23		2	9	16	23	30	
Fri.		6	13	20	27		3	10	17	24		3	10	17	24	31	
Sat.		7	14	21	28		4	11	18	25		4	11	18	25		
			AP	RIL				MAY						JU	NE		
Sun.		2	9	16	23	30		7	14	21	28		4	11	18	25	
Mon.		3	10	17	24		1	8	15	22	29		5	12	19	26	
Tues.		4	11	18	25		2	9	16	23	30		6	13	20	27	
Wed.		5	12	19	26		3	10	17	24	31		7	14	21	28	
Thur.		6	13	20	27		4	11	18	25		1	8	15	22	29	
Fri.		7	14	21	28		5	12	19	26		2	9	16	23	30	
Sat.	1	8	15	22	29		6	13	20	27		3	10	17	24		
			JU	LY			AUGUST			SEPTEMBER							
Sun.		2	9	16	23	30		6	13	20	27		3	10	17	24	
Mon.		3	10	17	24	31		7	14	21	28		4	11	18	25	
Tues.		4	11	18	25		1	8	15	22	29		5	12	19	26	
Wed.		5	12	19	26		2	9	16	23	30		6	13	20	27	
Thur.		6	13	20	27		3	10	17	24	31		7	14	21	28	
Fri.		7	14	21	28		4	11	18	25		1	8	15	22	29	
Sat.	1	8	15	22	29		5	12	19	26		2	9	16	23	30	
	OCTOBER					NOVEMBER				DECEMBER							
Sun.	- 	1	8	15	22	29		5	12	19	26		3	10	17	24	31
Mon.		2	9	16	23	30		6	13	20	27		4	11	18	25	
Tues.		3	10	17	24	31		7	14	21	28		5	12	19	26	
Wed.		4	11	18	25		1	8	15	22	29		6	13	20	27	
Thur.		5	12	19	26		2	9	16	23	30		7	14	21	28	
Fri.		6	13	20	27		3	10	17	24		1	8	15	22	29	
Sat.		7	14	21	28		4	11	18	25		2	9	16	23	30	