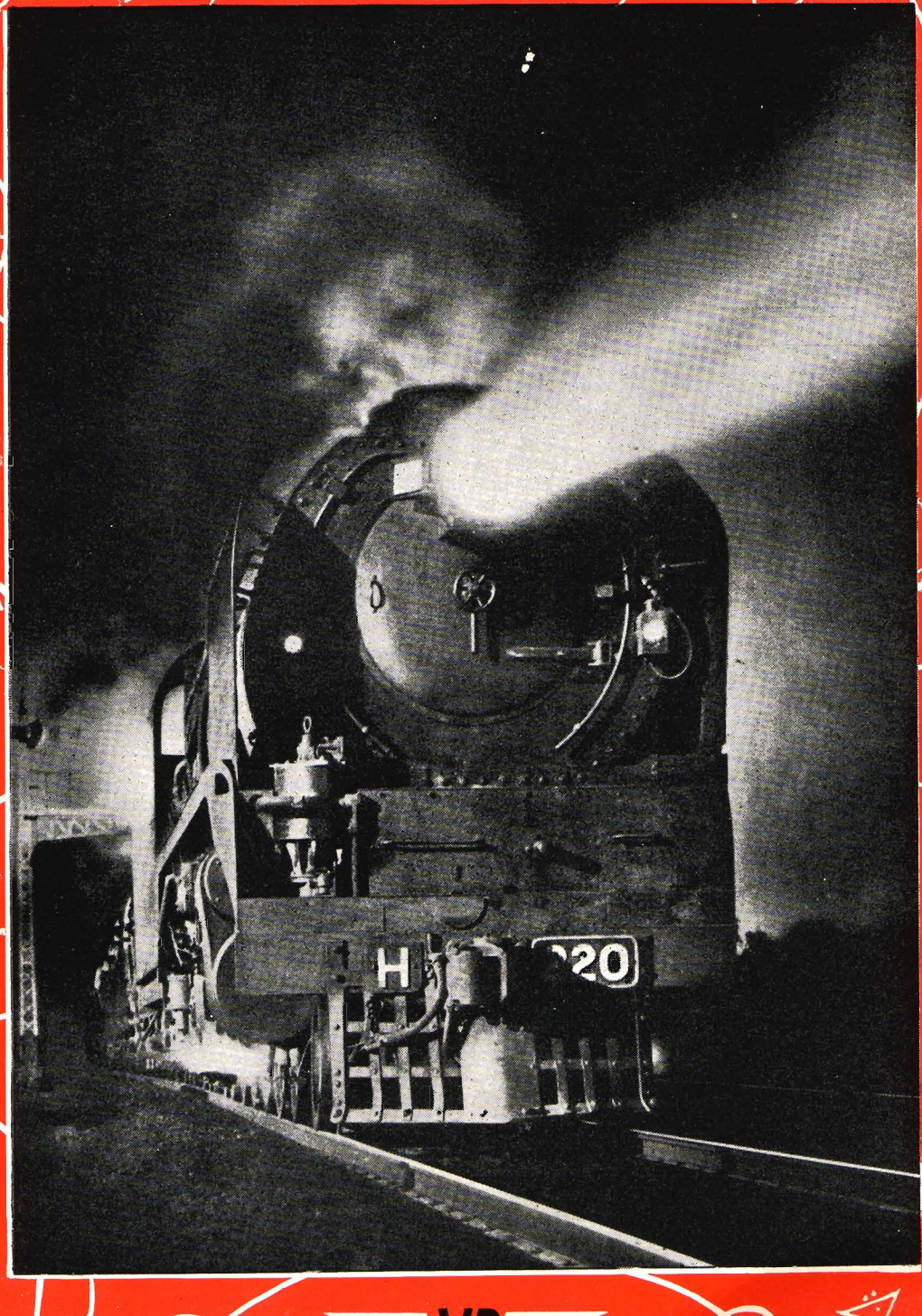


VR News Letter

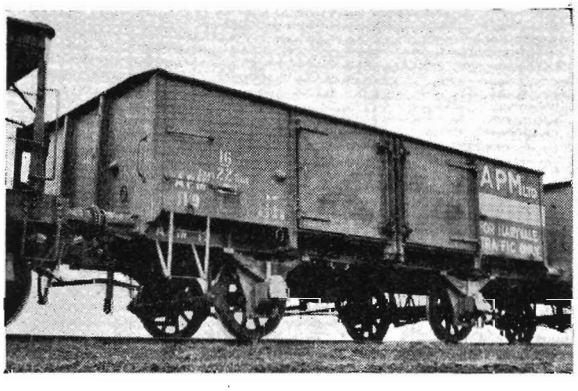
JANUARY 1954

THE MONTH'S REVIEW

Private Owners' Waggons

PRIVATELY owned goods waggons are a common enough sight on railways in other parts of the world, but, except in New South Wales, where they are extensively used to bring coal from the pits to the ports and the Newcastle and Port Kembla steel mills, they are comparatively rare in Australia. All Australian railway systems operate petrol and oil tank cars owned or leased by oil companies and most of them are painted in the company's colours and suitably labelled. But, so far as is known, the first privately owned goods waggons to work over V.R. lines are a number of 22-ton capacity, four-wheel open cars, built for Australian Paper Manufacturers Ltd., for special traffic to and from their Maryvale, Broadford and Fairfield mills. A.P.M. chose the standard V.R. design for HY waggons, and they were built by A. E. Goodwin Ltd., of N.S.W. They are suitably inscribed and marked with the owners' initials on each side, and are separately coded A.P.M. and numbered for traffic purposes. Many are used to haul brown coal from Yallourn to the company's mills.

Incidentally, standard V.R. underframe and axle-boxes of HY type have also been supplied by Goodwins to the Port Kembla works of Electrolytic Refining and Smelting Company of Australia for 4ft. 8½ in. gauge flat cars to transport ingots from ships to various parts of their works and to the associated works of Metal Manufacturers Ltd., there.



Privately owned A.P.M. truck.

Two Million Miles

THE Department's diesel-electric locomotives are certainly living up to their reputation for high availability When this was written, the fleet of 22 main-liners had amassed a total mileage of more than two millions. The flag locomotive of the fleet B60, *Harold W. Clapp*, topped a very impressive record with 218,326 miles. Then followed B62 (192,668) and B61 (192,596). The newest addition, B81, had done more than 5,000 miles. For the high degree of availability and troublefree running, a good deal of credit is due to the maintenance staff at the Diesel Shop, North Melbourne, who turn out the blue and gold greyhounds in good condition for the road. Engine drivers, who graduated on black coal-burning locomotives, have shown adaptability in handling the new form of motive power.

The Good Neighbour Policy

A CONTRIBUTION towards international goodwill was made recently by the Railways when a group of visiting lignite experts from Asia and the Far East, under the Colombo Plan, came to Victoria to investigate the mining and use of brown coal at Yallourn and Bacchus Marsh. The itinerary arranged for them included a short lecture on the Department's brown coal dust fired locomotive, X32, and a visit to North Melbourne Locomotive Depot to see X32 being fuelled and lit up. For their benefit the engine was driven up and down the tracks for a short distance. They were tremendously impressed both with the possibilities of pulverized brown coal as locomotive fuel and with the extensive use already made of it as powerhouse and industrial fuel.

Cattle in Comfort

WHEN it comes to the movement of highly valuable stock, the railway is more often than not entrusted with it. That happened after the recent dispersal sale of prize stud cattle at Shelford, near Inverleigh. The most valuable beast, *Tarrington Jollyman*, a Hereford bull (Vern Talisman-Tarrington Jewel), which fetched the record Australian price of 6,100 guineas, was entrained for Spalding, in South Australia. Fifty-three more of the higher priced animals went by train and relaxed in well-bedded comfort, most of them in single truck accommodation. They were fed and watered at Newmarket and at other spelling points, and finally sent on to destinations as far north as Queensland. Not a single hitch occurred in any of their transport arrangements. Incidentally, the complete catalogue of 127 cattle brought 125,000 guineas, which is believed to be an Empire record for a dispersal sale.

Locomotives For The Scrap Heap

DESIGNED by one of the Department's most brilliant engineers, the late Mr. A. E. Smith, the A2 locomotives, after many years of magnificent service are slowly, if surely, disappearing from the railway scene. The original fleet of 124 Stephenson gear locomotives has been reduced by almost half, and of the 60 Walschaert gear A2's there remain only 44. After an investigation into the age and general condition of steam locomotives, a scrapping programme was drawn up. In conformity with it, A2's are being scrapped at the rate of 15 to 20 yearly, as are also the D1, D2, D3 and D4 locomotives. The Y's and the E's will go to the scrap heap at the rate of three to five a year. As previously recorded in these columns, S301 (*Sir Thomas Mitchell*) has been scrapped. The other three S's will remain in service until defects of age appear that are inevitable and uneconomic to remedy. Then they, too, with all their grace of line and mechanism, will disappear.

Bouquet From Bairnsdale

NINETY-NINE deputations out of a hundred want something, often intensely, and sometimes with some warmth of expression, especially if they suspect their case to be not wholly watertight. Less often, and more's the pity, they come to say thank you. That this occurred quite recently when the Chairman of Commissioners stopped at Bairnsdale on an inspectional tour is worth noting. The deputation was from the local Chamber of Commerce and the Shire Council which, after amiable discussion of topics from Royal Tour train arrangements to freight charges, spoke praise and appreciation of the new diesel train service to and from Melbourne.

OUR FRONT COVER

shows H220 (*Heavy Harry*) pounding into the new year with a heavy goods train for the New South Wales border. The train is emblematic of the confidence with which the Railways face 1954 and all that it may bring.

LOOKING UP

In this, the second instalment of a series of extracts from a recent speech, the Chairman of Commissioners, Mr. Wishart, refers to substantial improvements made in passenger and freight services, and underlines the contribution of main-line diesel-electric locomotives to speedier schedules, greater popularity of train travel and increased freight business. Mr. Wishart goes on to discuss railway finances and removes misconceptions about what is sometimes miscalled "the drift in railway finance." He quotes figures to show that the railway customer is still getting his service at less than cost.

WE have made substantial improvements in passenger service. Passenger traffic continues to be an important railway activity; we carry nearly half a million passengers every day. Rail traffic is increasing as road safety and comfort decreases and parking difficulties in Melbourne increase with the greater numbers of motor vehicles on the road.

As those of you who have travelled to South Australia know, *The Overland*, hauled by diesel-electric locomotives and comprising modern roomette and twinette sleeping cars and very comfortable day coaches, now compares favourably with the most modern trains in the world.

We have cut an hour or more from the passenger runs to Adelaide, Bairnsdale (now a buffet car train), Warrnambool, Mildura and other places; and the overall times of passenger trains to other centres will shortly be improved as further diesel-electric locomotives become available. Timekeeping has also improved substantially with the diesels, oil burners and the R class engines. It is, of course, impossible to keep time with poor coal, and for a long time past we have not been able to obtain enough Maitland even for the *Spirit of Progress*.

We have resumed Sunday cheap excursion trains which we have not been able to run for 12 years, and they are proving very popular.

Diesel rail-cars, which we regard as traffic builders, are also extremely popular wherever they have gone into service.

We have reduced the transit times of goods substantially. Overnight delivery is being given to a large number of country towns. A better than 48-hour service is being given to Adelaide and Sydney; we cut 16 hours off the Melbourne-Adelaide goods schedule.

The use of steel, weatherproof containers for goods, ensuring safe and prompt handling and door-to-door delivery, is bringing us greatly increased business between Melbourne and Sydney, and cheap rates for truckloads are also attracting more business to the railway.

In the last 12 months or so we have also improved livestock transport (we carry on the average 26,000 head of stock every day) and further improvements are planned.

ALL these improvements in service are giving some badly needed help to our financial position. You have no doubt heard and seen many references to what is called the "drift in railway finance" and the heavy burden that the State has to carry because of its unfinancial railways.

But do you know the reason for it? Simply that the railways have not passed on to their users anything like the full amount of the heavy increases in wages and material costs in recent years.

All other businesses and industries, unless they were making huge profits and could absorb the extra costs, have had to pass on to their customers the extra costs as they occurred. Not so with the railways. When Mr. McDonald was introducing his 1952/53 budget, he said that, at that stage, only about half the increased costs had been passed on to the railway users.

In the current year (1952/53) by comparison with 1946/47—only six years ago—our expenditure has increased by more than £20 million for increases in wages and materials, etc. In the previous year, costs outside our control increased by nearly £6 million. £12½ million of that £20 million were due to statutory increases in wages, quarterly wage adjustments, the 40-hour week, £1 increase in the basic wage, etc. The average wage in the railway service had risen from £274 a year in 1940/41 to £771 last year.

Another £6 million has to be found for increased cost of materials. Coal that, pre-war cost us less than £1 per ton, now costs up to £8, and it is not by any means up to pre-war standard. Fuel oil that cost £8 a ton in 1950 rose in 1951/52 to £26. Hewn sleepers that used to cost about 7/- each now cost 18/-. We cannot get enough and we are using many sawn sleepers at still higher cost. We have just received the first of an order, placed reluctantly for 200,000 steel sleepers at a cost of over £4 each (£800,000 for one order) to help to prevent further speed limitations. Some further examples of heavy increases are: dogspikes from £17 to £68 per ton, rails from £12.7.6 to £30.2.6 per ton and steel tyres from £9.6.7 to £22.10.1 per ton.

Other factors outside our control, including increased superannuation and payroll tax, account for another £1½ million. That makes the £20 million for increased costs, in 1951/52 compared with 1946/47 that I referred to previously.

In the same period we have had five increases in fares and freights. On each occasion on which rates were increased the additional revenue fell far short of meeting the additional costs which had to be met.

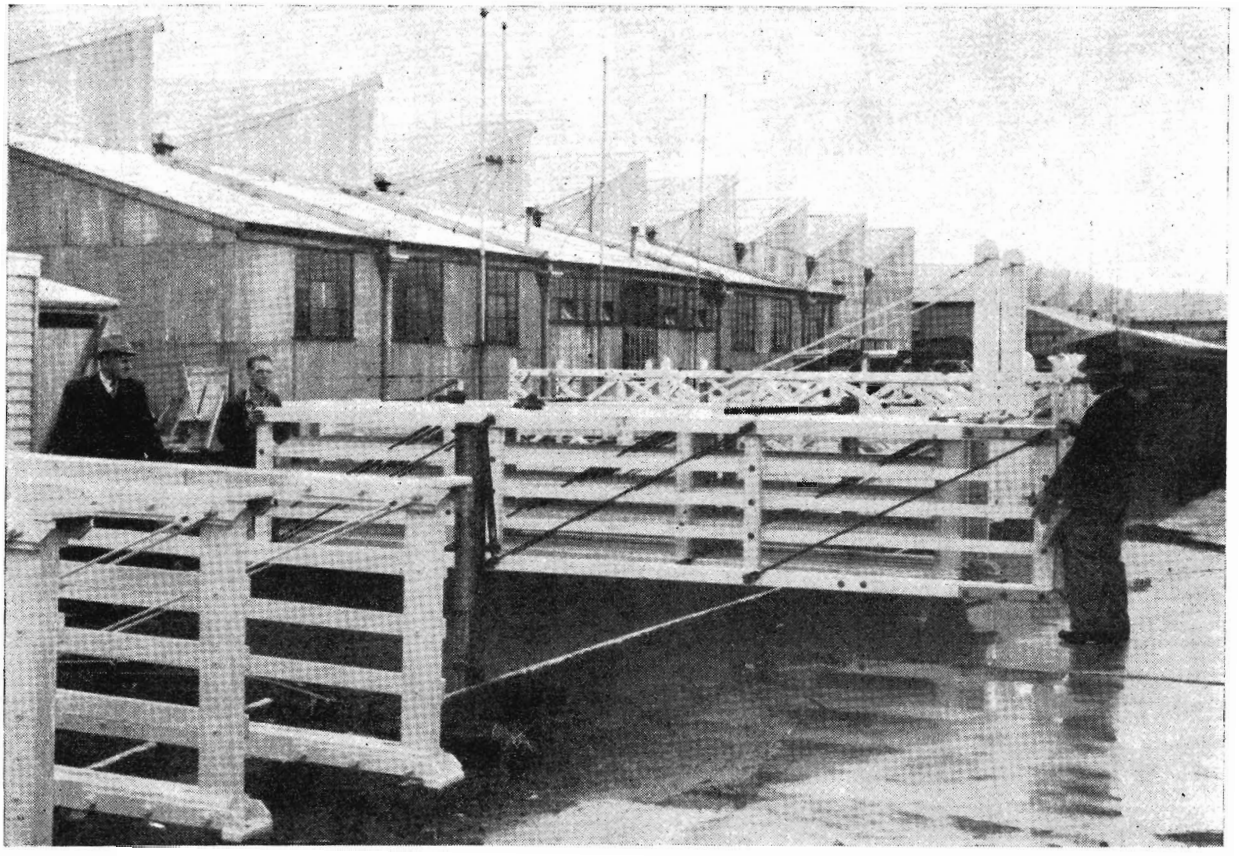
With the last increase in August 1952, the total amount of new revenue from the higher charges since 1946/47 is just under £17½ million, or £2½ million less than the total amount of the additional costs outside our control that have had to be met. That amount of £2½ million represented the railway deficit as originally estimated for this year.

Since the budget was submitted in August 1952, however, we have had to face a further increase of £650,000 for increases in the cost of coal and oil and other things. The small increase of 2/- in the basic wage announced recently adds £160,000 to our annual wages bill (every 1d. increase per day means £40,000 per year to our wages bill), and the estimated deficit for this year is now £3,680,000. To that extent the railway user is getting his service for less than cost.

THERE have been heavy increases in expenditure apart from wages and materials. As in the case of rolling stock, we were unable, due to the shortage of staff and materials during the war and the early post-war years, to do anything like the amount of track maintenance that should be done and, in consequence, speeds have had to be reduced on many lines in the interests of safety.

In the last year or two we have overtaken some of the arrears—we got approximately £1 million more this year for maintenance—but there is a huge leeway still to be made up, and it is going to involve a lot of money which will necessarily affect railway financial results.

(to be continued)



In the last financial year no fewer than 210 motor cars or trucks ran into crossing gates or adjoining fences. These new gates, made at Spotswood Workshops, replace those damaged beyond repair.

LEVEL CROSSING PROBLEMS

More care by road users generally would, inevitably, be reflected in fewer accidents at level crossings and minimize the heavy expense that otherwise will have to be incurred in providing more safety measures.

THIS is one of the important points stressed by the Chairman of Commissioners (Mr. Wishart) in a recent report to the Minister of Transport on the level crossing problem.

It discloses that, in Victoria, there are 3,441 open level crossings, 264 with gates, lit at night, 59 with flashing lights and 23 others equipped with wig-wag signals, making a total of 3,787.

During the year ended June 30, 1953, there were 275 accidents at level crossings, involving the death of 19 people and injury to 47. Of these accidents, 17 occurred at crossings equipped with flashing lights or wig-wags, involving four deaths and injuries to five people.

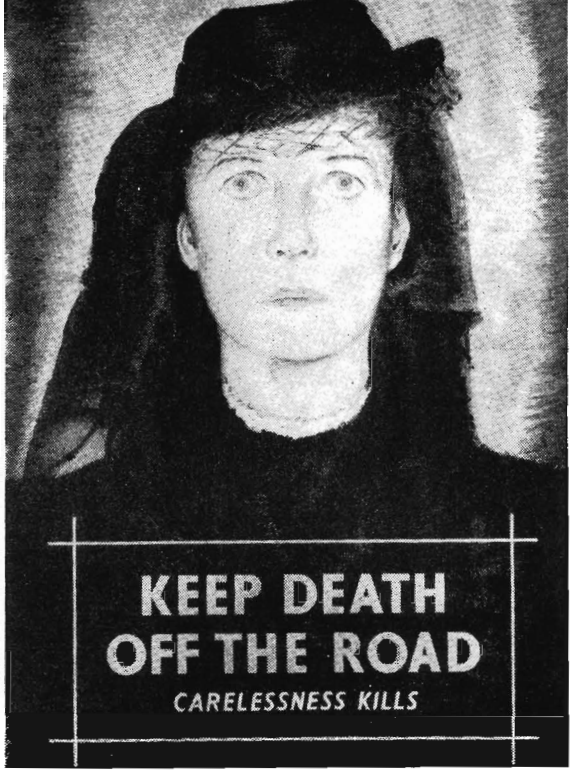
There were 210 collisions with closed gates or with adjacent fencing, resulting in injury to ten persons. Of these mishaps, about 60 per cent occurred in daylight.

There was thus an average each week of four vehicles colliding with railway gates or adjacent fencing, and one accident every three weeks at crossings equipped with mechanical warning signs.

For the year ended December 31, 1952 (the latest period for which road accident figures are available from the Government Statist), there were 16,562 road accidents in Victoria in which 570 persons were killed and 12,471 injured; or a total of 13,041 casualties. In the same year there were 280 accidents at level crossings, in which 30 persons were killed and 78 injured, a total of 108 casualties.

The number of accidents at railway level crossings thus represents only the very small figure of less than two per cent of the total number of road accidents, while the actual casualties at level crossings represent less than an unspectacular one per cent of the total number on the roads as a whole.

For many years questions of safety at level crossings have been dealt with by the Level Crossing Committee, comprising three railway representatives and one from the Royal Automobile Club. This committee inspects level crossings throughout the State and its recommendations for improvements are invariably adopted. These include flashing light signals, the removal or regrading of embankments to provide a better view of approaching trains, the clearance of trees or shrubs which may affect the view, and alterations to adjacent sidings. A considerable amount of improvement work is in hand at a number of crossings. Approval has been given for the installation of mechanical warning signals at 15 additional points.

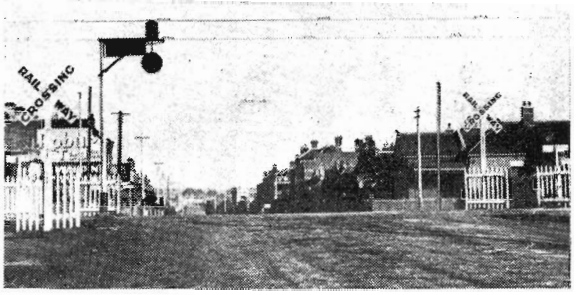


This telling poster was displayed in various sizes in Great Britain a few years ago as a grim reminder of the tragic toll of the road.

The Commissioners have, so far, borne the full cost of mechanical warning signals and other improvements at level crossings. It appears to be generally and tacitly accepted that they should not only continue to pay it, but also undertake, at their own cost, the grade separation of rail and road traffic at crossings. In other parts of the world, however, railway systems bear a very small portion of the cost of such work at level crossings. In U.S.A., national funds have been used very largely on crossing improvement work. Under the National Recovery Act, 1933, 400 million dollars were set aside for work on highways, including the abolition of level crossings. Two years later, a Federal programme provided 160 million dollars, and in 1940/41 another 50 million dollars for grade separation and improved protection of crossings. In Switzerland, the arrangement was similar to that in pre-war Germany : where a crossing was abolished, the railways' responsibility was limited to a sum equivalent to the gatekeeper's wages. In England, where there are now few level crossings, the Ministry of Transport authorized many grants out of road association funds towards the cost of grade separation. In Canada, a railway grade crossing fund (to which grants were made from consolidated revenue and by the provincial government) existed for many years both for that purpose as well as for the installation of safety appliances.

In Western Australia, the cost of flashing light signals on main roads is borne by the Main Roads Department. On other roads, the Railway Department contributes 25 per cent. of the cost. In Tasmania, the cost of standard warning signs at level crossings is financed from motor registration fees, and the installation and maintenance of flashing light signals comes out of the State's allocation from the Commonwealth tax on petrol.

The Victorian Railways Commissioners have on many occasions recommended to successive governments that a fund be established to provide for protection at level crossings.



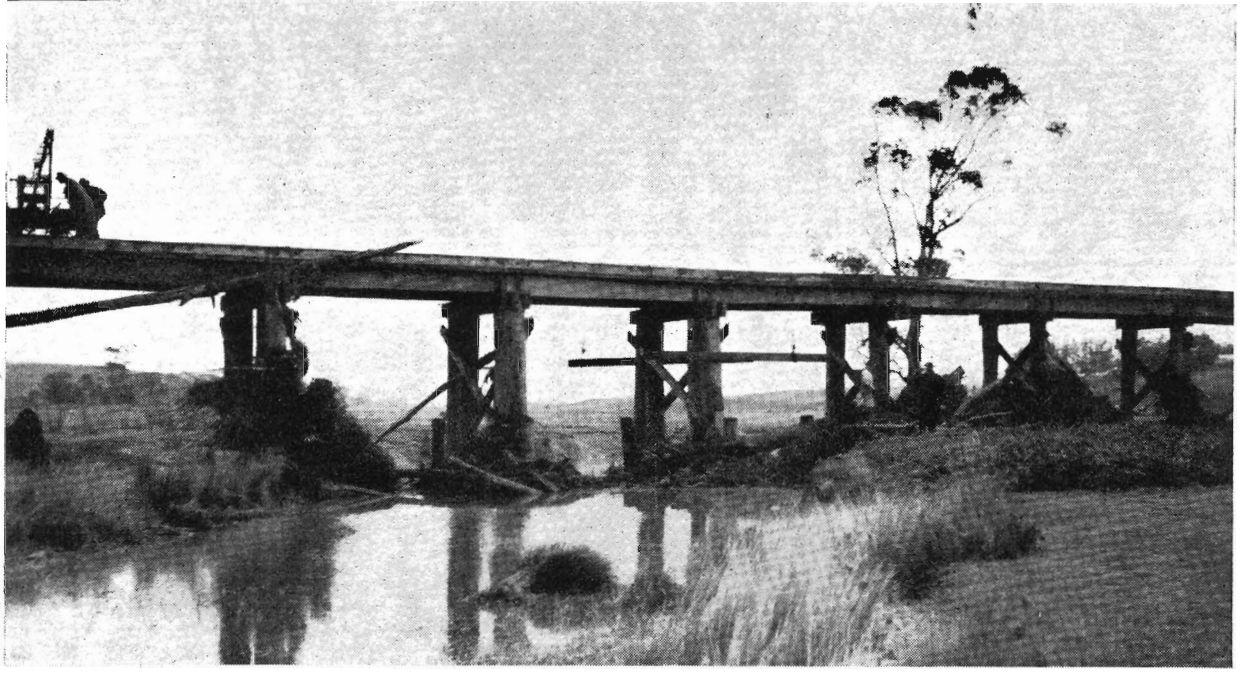
Wig-wag signal.

The abolition of all crossings in Victoria would not only be impracticable from a physical aspect, but would entail a huge and unwarranted expenditure. For example, nearly £1 million would be necessary for grade separation at five of the busiest gate crossings in the metropolitan area—Napier-st., Footscray ; Melbourne-rd., Newport ; Heidelberg-rd., Clifton Hill ; Glenhuntly-rd., Elsternwick ; and Pt. Nepean-rd., Moorabbin. But this would not appreciably increase the road safety factor, as relatively few accidents occur at such crossings.

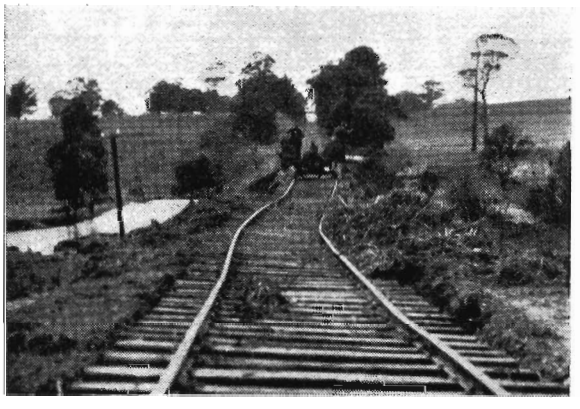
For some time past, the Standards Association has been reviewing the Road Signs Code, which determines standard signs for all kinds of road hazards, including level crossings. Included in the recommendations made to the Association by Australian railway authorities, and other interested bodies, are the erection of " stop " signs (as in New Zealand) at certain crossings at which road vehicles should be obliged to stop before passing over the crossing.

It is considered that the adoption of this recommendation would, if properly policed, enforce more care on road users at level crossings. A mandatory stop at level crossings is already included in regulations in Queensland and South Australia.

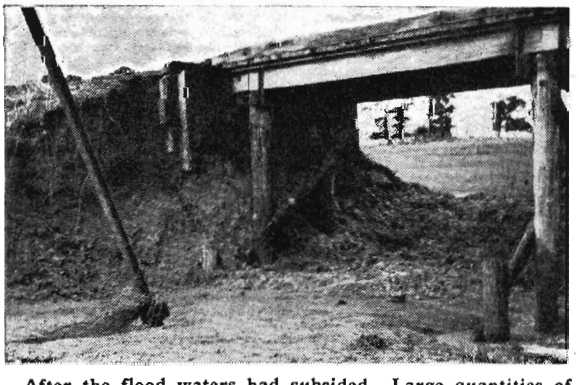
Flashing light signal.



The railway bridge over the Barwon River, near Forrest. Normally only a small stream at this spot, the river became a torrent following the release of water from the new lake in the Otways.



Inspecting the damaged approaches to the Barwon River bridge, where the flood waters had washed away the ballast and slewed the track out of position.



After the flood waters had subsided. Large quantities of earth were washed away from the bridge abutments during the flood.

FLOOD AND FIRE

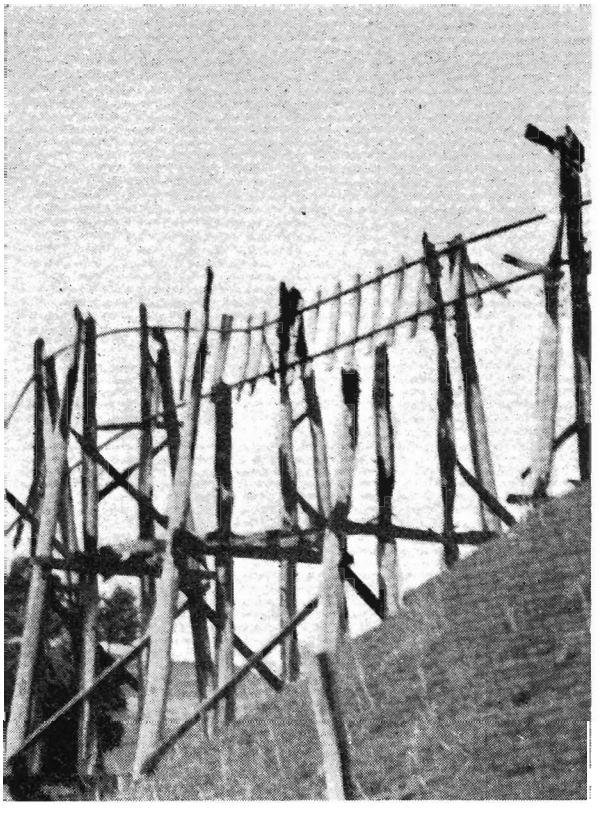
AN engineer's lot, like that of W. S. Gilbert's policeman, is not a happy one, for, every now and again, something quite abnormal crops up to undo his work. For the bridge engineer, flood and fire are two factors which cause trouble. Neither is predictable with certainty, and an element of risk is always present.

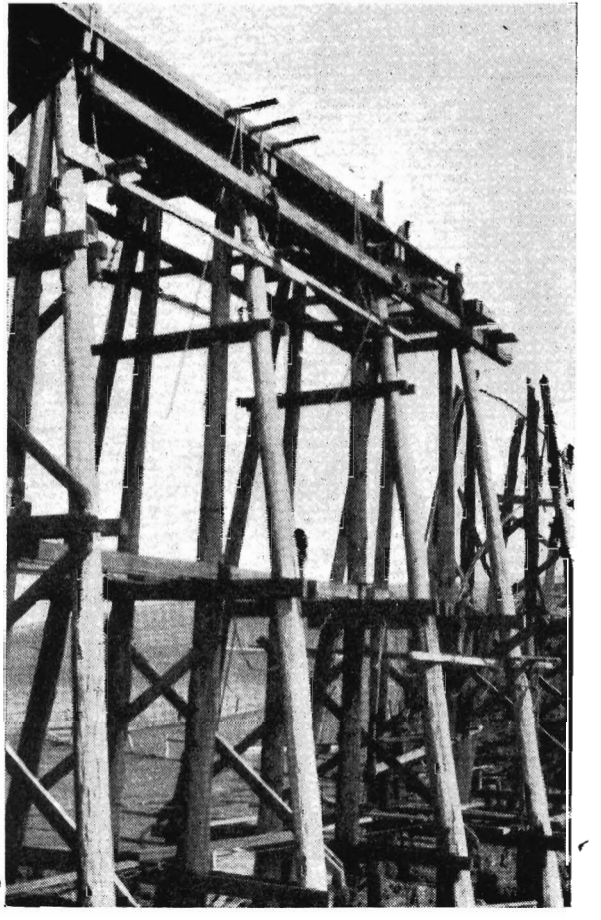
When designing a railway bridge over a river or creek, the engineer studies carefully the impact of the stream upon the bridge structure, and then builds a bridge which will withstand all likely flooding. But the vagaries of the weather can, and sometimes do, bring about conditions with which no reasonable amount of planning or foresight can be expected to cope.

For instance, phenomenally heavy rainfall in the Otways caused a huge landslide which, in turn, became a barrier to the flood waters and created a new lake banking up millions of gallons of water. Later, the barrier gave way and the released water rushed down to the Barwon River, flooding the surrounding countryside. The railway bridge was in the way, but it withstood the rush of water remarkably well. All that was necessary to make good the damage was to pack more earth against the abutments and repair the track at the approaches.

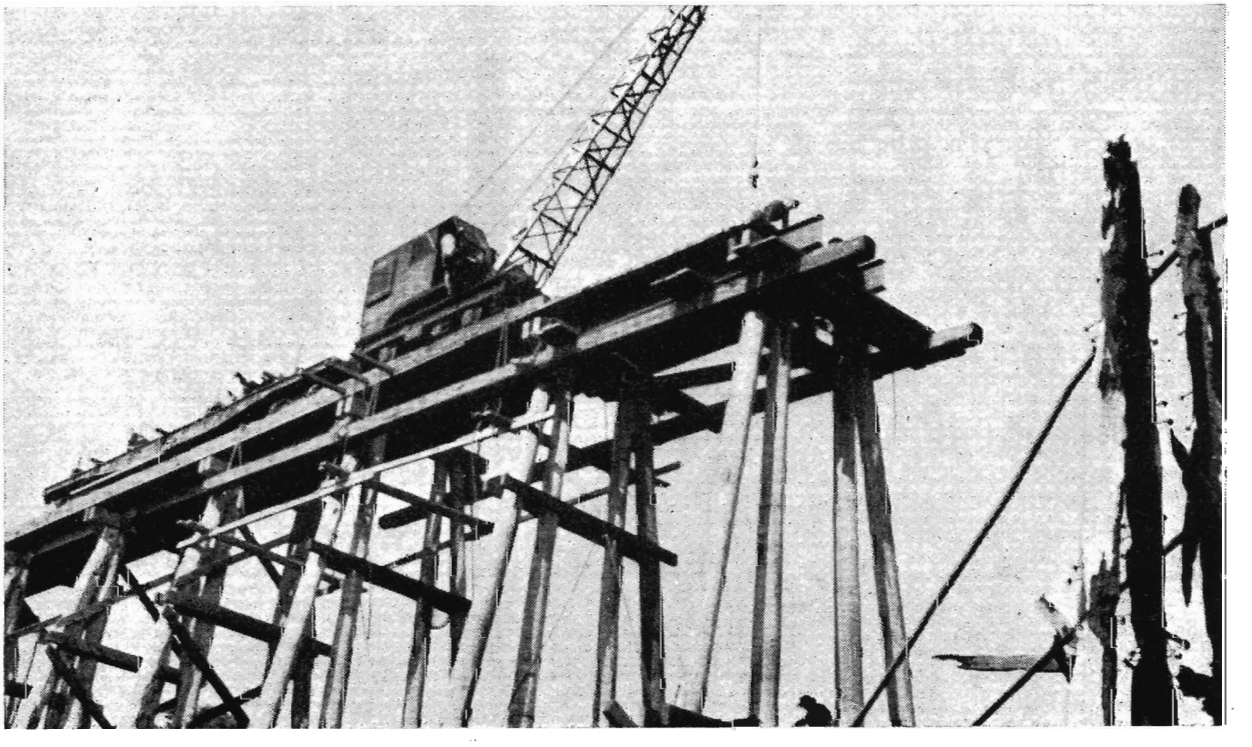
Fires, like floods, are unpredictable in their devastating onrushes. They start or are started by a variety of causes. The fire spreads and, finding a railway bridge in its path, promptly does its utmost to destroy it. The Smythe's Creek Viaduct on the Linton line was just such a bridge. It has recently been rebuilt after being burnt out.

In all such cases, the bridge engineer must act speedily to inspect the bridge and to repair or replace a damaged structure so that rail services can be restored.

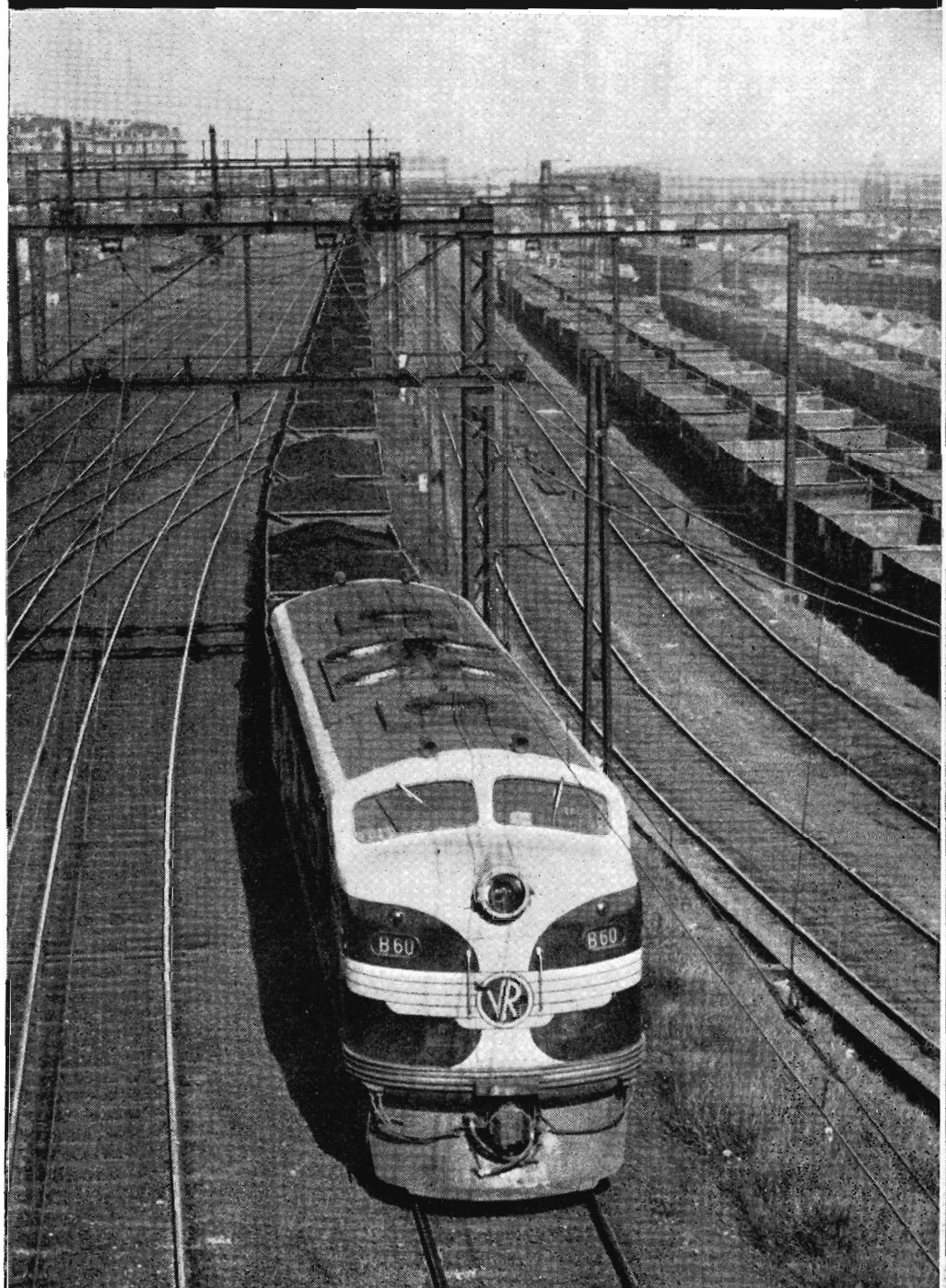




Burnt timber and twisted rails (above) show the damage, caused by fire, to Smythe's Creek viaduct. This resulted in the temporary suspension of the Ballarat-Linton rail motor service. At right and below are photographs of the work of rebuilding the viaduct. *Photographs: V. R. Moll.*



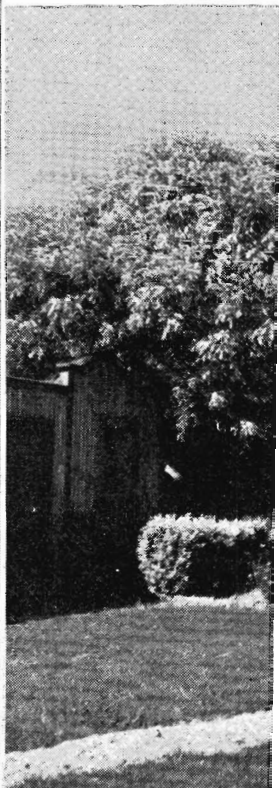
AROUND THE SYSTEM



ANOTHER DIESEL RECORD: B60, *Harold W. Clapp*, arrived in Melbourne recently with 1,501 tons of brown coal, the heaviest load of its kind ever hauled by a single locomotive in Victoria

THE HOLIDAY *SPIRIT*: Pa

BEAUTIFYING SPENCER-S
plantation scheme.



WATTLE BLOSSOM TIM
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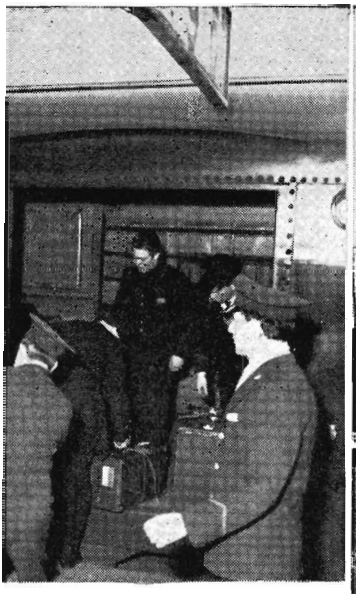
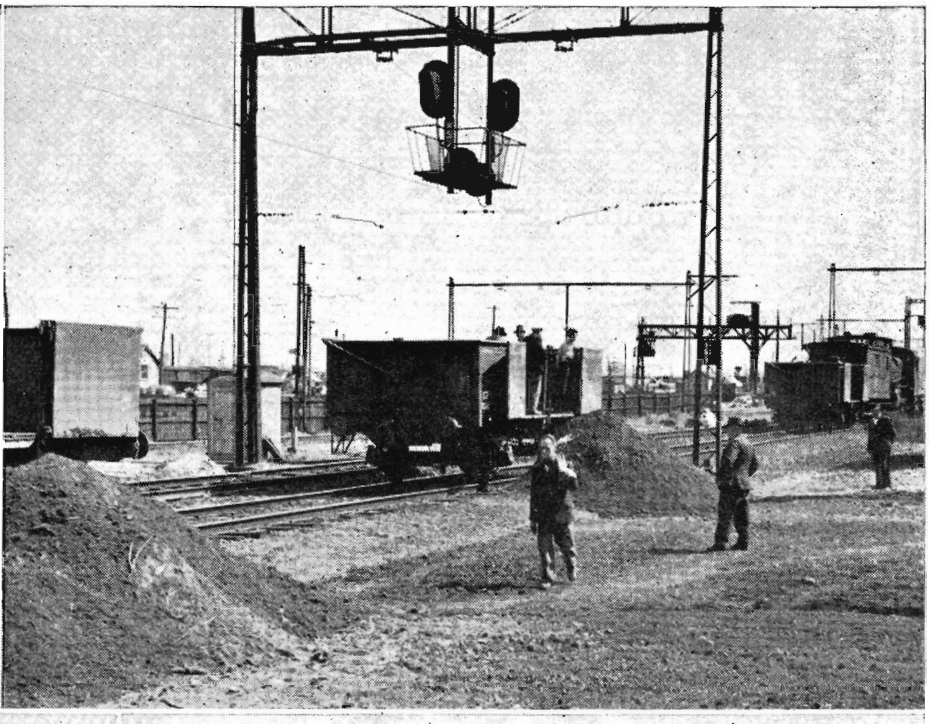
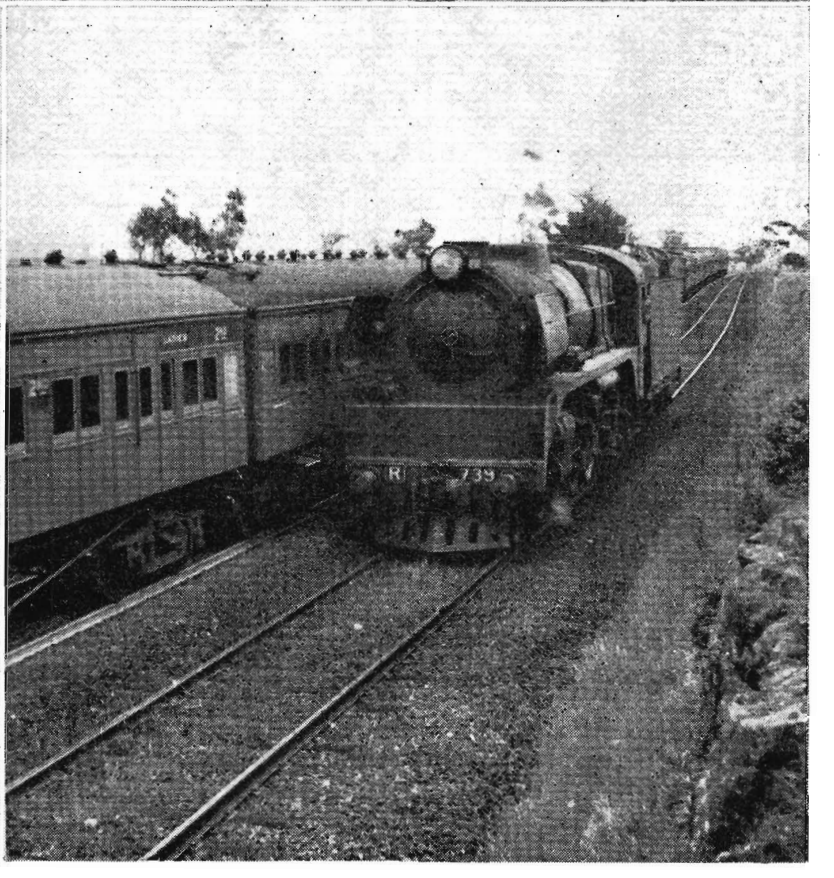


luggage being unloaded at Spencer-st.

ıck loads of garden soil for a new

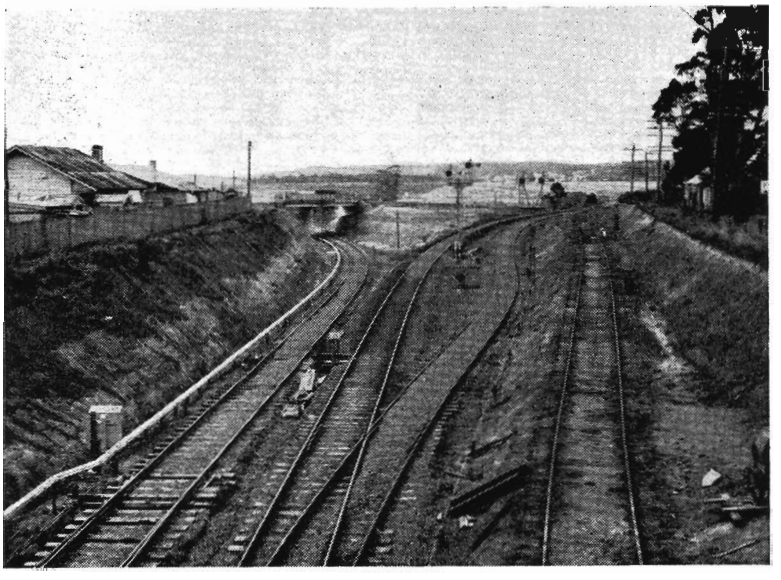


e is no more attractive station in the suburban
e is in full bearing.



RELIGIOUS FESTIVAL: More than 4,000 people went in seven trains to Sunbury recently for the Eucharistic Festival. Two of the stabled trains are seen here,

X52 hauling a load of 1,100 tons of briquettes and brown coal on the Moe spur line. The photograph was taken about a mile from the Yallourn marshalling yards. A modern air-conditioned building accommodates S.E.C. and railway staffs.



This photograph was taken from the Princes Highway bridge, Moe. At left is the Moe-Yallourn spur line. The second track is the main Gippsland line and the third the connection to the Thorpdale branch. The fourth is the original and now disused Thorpdale branch line, which will be taken up. *Photographs: John Buckland*

SPUR LINE SPEED-UP

DESIGNED to keep in step with extensive developments in the Latrobe Valley, the Moe spur line has proved its worth since it was opened for traffic on September 6, last year. The usual travelling time from Yallourn to Moe by the old route was 35 minutes; on the spur line, even with existing speed restrictions, it is now 18 minutes. Over the old route, X and C class locomotives, banked in the rear, used to haul 1,040 and 940 tons, respectively. Unassisted, each now hauls 1,100 tons over the more direct and better graded line. The diesel-electric locomotive takes 1,500 tons. Recently, a new weekly combined tonnage record, 40,233, was set for the carriage of brown coal and briquettes. Another record was broken when 304 trucks of brown coal, 5,326 tons, were handled in a day.

LINES FROM OTHER LINES

One of British Railways named expresses, *Red Rose*, near Hatch End, Middlesex. Hauled by a *Patriot* class 4-6-0 locomotive, it covers the 193¼ miles from Euston to Liverpool Lime-st. in 3½ hours non-stop.

Irish Railway Board

AFTER prolonged negotiation, an agreement has been signed under which the Eire and Northern Ireland governments have acquired the 114-year old Great Northern Railway for £4,500,000. The Board of the new undertaking consists of 10 members, five being appointed by each government.

Diesel Wheel-truing Machine

A NEW device in operation at the Canadian Pacific Railway diesel servicing shop at Nelson, British Columbia, is a diesel wheel-truing machine, that enables locomotive wheels to be machined without removing either wheels or bogies from under the locomotive. The new machine restores, by means of specially designed milling cutters, the normal contour of the tread and flange of wheels worn by frequent sharp curves in mountainous country. It is a floating milling machine suspended from a universal joint designed to machine both wheels on an axle simultaneously. Four pairs of wheels on a diesel locomotive unit can thus be reconditioned, and the machine prepared for the next unit in a 8-hour shift. All movements are controlled from electric push button control panels on each side of the machine.

New Locos in U.S.A.

CLASS 1 railroads in U.S.A. put into service 1,409 new locomotive units in the first seven months of 1953, compared with 1,917 in the same period of 1952. These comprise, for the current year, 1,397 diesel units and ten steam and two gas-turbine-electric locomotives. For last year the figures were 1,901 diesel units and nine steam, two electric and five gas-turbine-electric.

Transporting Welded Rails

IN preparation for the continuous welding of rails through its Stampede tunnel, near Seattle, the Northern Pacific Railroad recently carried out the remarkable operation of moving a string of rails 2,640 ft. long over a distance of 850 miles. This was from its welding plant at Big Timber, Montana (where 140-lb. flat-bottom rails in ordinary mill lengths were welded into half-mile lengths) to the tunnel. The rails were moved on a train of 60 open-ended 40-ft. ballast waggons. At the site, the half-mile lengths were further welded into 2-mile lengths for laying in the tunnel. To date, the Northern Pacific has 42 miles of continuously welded track.

Dining Car Prayer Cards

A tent-like card is now appearing at each setting on dining tables of Illinois Central trains. On one side there are three prayers from three different clergymen, and these are changed each month. On the other side is a message from the President of the railroad, in keeping with the theme of the cards. Each month's card is a different colour to distinguish it easily from the previous month's card.

Diesels for Belgium

THE Belgian National Railways have ordered 55 diesel-electric locomotives of Bo-Bo wheel arrangement, 84 tons weight and 1600 h.p., and 40 locomotives of Co-Co wheel arrangement, 108 tons weight and 1600 h.p. The majority of the locomotives are to be fitted with train-heating equipment, and the remainder are to have space for later installation. These will be Belgium's first main-line diesel-electric locomotives.

AMONG OURSELVES . . .

Mr. J. M. Allsop (left) and Mr. H. F. Brown, president of the Metropolitan District Rifle Clubs' Union, discuss competition plans.

Rod and Rifle

FISHING and shooting are the two outstanding sports, so far as Mr. J. M. Allsop of the Accountancy Branch is concerned, with a decided accent on shooting.

Mr. Allsop first took up his rifle about 1910, and after the First World War, he joined the South Melbourne Rifle Club which then shot over the Port Melbourne Range. He was elected secretary in 1922, and stayed secretary until 1950 when, owing to the increasing pressure of work associated with the Metropolitan and State Rifle Associations, he resigned. Club members immediately elected him a life member and club president.

Meanwhile, in 1930, he was elected secretary of the then Metropolitan Rifle Clubs' Association which embraced about 20 clubs shooting at Port Melbourne Range. In 1937, this group was transferred to Williamstown Range where it continued as a separate unit until the outbreak of World War Two. At the end of the war all rifle clubs in the metropolitan area, including some as far distant as Mornington, amalgamated. At the general request, Mr. Allsop agreed to carry on as secretary of the new Metropolitan District Rifle Clubs' Union, an office he still holds.

Since World War Two, Mr. Allsop has concerned himself with the administrative side, adding to his other offices a seat on the Council of the Victorian Rifle Association, as nominee of the Secretary, Southern Command.

At the Annual and Queen's Prize Meetings held by the State Association, Mr. Allsop as chief statistician of the Association, is responsible for determining the winners of the more than 4,000 prizes offered.

During his shooting career, Mr. Allsop won his club championship five times, and was a regular competitor in the principal prize meetings of the Victorian and other State associations.

While shooting has always been his first interest, Mr. Allsop finds time to be chairman of the Coburg Recreation Reserves Committee and a worker for and life governor of several leading charitable institutions.

Mr. Allsop is a keen trout fisherman. On a fishing trip about 18 years ago, he managed to take a photograph of the Hermit of Alexandra. When the Hermit died some months ago, Mr. Allsop was able to supply a metropolitan newspaper with the only known photograph of him.

Victoria's Double Win

THE Australian Railways' ambulance competitions at Mt. Evelyn resulted in a triumph for Victoria, the V.R. team, North Melbourne Locomotive No. 3, winning the championship shield, and Mr. H. A. Barker (Accountancy) annexing the senior individual title. Mr. A. V. Curtis (Queensland) and Mr. K. B. Warnock (Western Australia) filled second and third places, respectively. Victoria, with a points score of 435½, won convincingly from Queensland (421). Then followed Western Australia (411½), Tasmania (406), South Australia (378½) and New South Wales (370).

Mr. Barker, who has his 11th year first aid certificate, has made only seven appearances in competition work. He was a member of the Accountancy team that won the State title last year and was third in the senior individual event.

The championship shield and trophies were presented by Mr Commissioner Meyer to the winners at the interstate annual dinner. In announcing the results Mr. Meyer said the interstate teams represented the ultimate in first aid skill, but there were thousands of railway first aid men who unselfishly devoted many hours of their leisure to provide a service within the service for alleviating suffering and saving life. The first aid movement also promoted good fellowship and sportsmanship.

Track Competitions

WINNERS of first prizes in the track competitions for the year ended June 30 last were the following gangs :

Tracks with rails over 75 lb. ; No. 25 Fernbank (Ganger J. A. Jones), No. 7 Yendon (Actg. Ganger H. V. Page), No. 11 Malmsbury (Ganger C. J. Hall), No. 9 Wandong (Ganger F. J. Tully), No. 1 Murtoa (Actg. Ganger G. Stevenson).

Tracks with rails 75 lb. and under : No. 20 Traralgon (Ganger J. Phelan), No. 2 Amphitheatre (Ganger M. L. O'Neill), No. 6 Knowsley (Ganger F. Giri), No. 7 Mansfield (Ganger W. G. Morris), No. 3 Wingeel (Actg. Ganger E. J. Carr).

Unto The Fourth Generation

RAILROADING is in the blood of the Pritchards who have carried the railway tradition into the fourth generation. Mr. Daniel Pritchard, who was born at Edgbaston, near Birmingham, was a contractor for public works, and one of the first railways in England, between Wigan and Parkside, was constructed by him. He was also engaged on the Harecastle Tunnel, under the famous Telford, and on the London and Birmingham railway. His son, Mr. Daniel Badderley Pritchard, was trained as an engineer on these works, and to get further experience, he later joined James Horne and Company, who were then working on the Crown-st. tunnel and Lime-st. extension, at Liverpool. Subsequently, he worked as an engineer on the South Wales Railway and on many other lines then under construction. By this time, a well seasoned engineer, he decided to try his luck in the colonies, and, selecting Australia as a field for future practice, he arrived in Melbourne in 1852. Almost immediately, he was appointed to superintend the building of the first railway in Victoria—Melbourne to Hobson's Bay. Later, he went to Ballarat and started on his own account as an engineer. Among other things, he surveyed and estimated for projected extension, railways from Ballarat to the western district. On leaving Ballarat, he went into private practice in Melbourne as a civil and consulting engineer. He was elected a member of the Institute of Civil Engineers, London, in 1865, and before he died from injuries sustained in a fall, he helped to establish the *Australian Mechanic and Journal of Science and Art.*

His son, Mr. Frank Pynor Pritchard, who was with the

Engineer-in-Chief's Branch (now Railway Construction Branch) was a well known engineer in the early ' eighties and ' nineties when lines were being constructed in Victoria under Act 821. His eldest son, Mr. Frank R. Pritchard, now the Department's Estate Officer, is carrying the railway torch handed down by his great-grandfather.

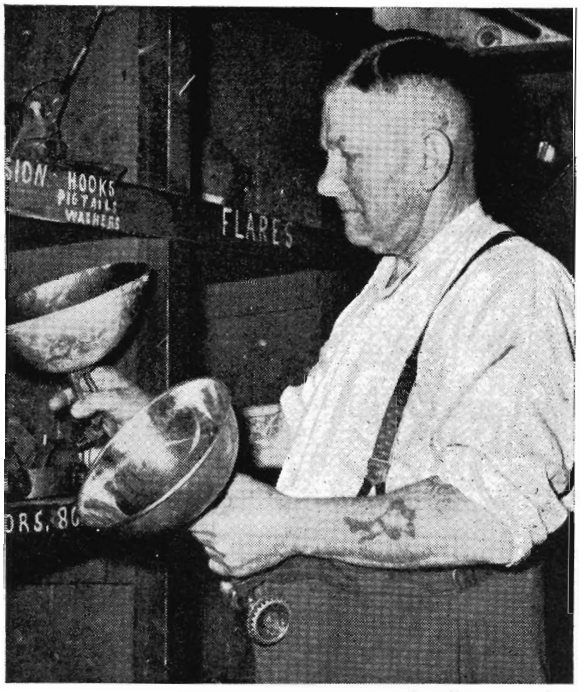
Railway Fishermen

IN April and May next year 800 fishermen from Victoria, New South Wales, Queensland, South Australia and Tasmania will visit Lakes Entrance for the annual angling carnival and convention of the Australian Anglers' Association. Most of them will go by train. Mr. J. A. Furnell, of the Traffic Branch staff, Head Office, is the honorary secretary-general of the convention and, with Mr. H. Jesson, of the Rolling Stock Branch, is busy organizing the carnival, the first of its kind to be held in Victoria. The previous one was held at Coolangatta, Queensland, and 141 Victorian fishermen went to it. Most of them travelled by train to the northern State's "fishing paradise."

Hobson's Choice

MR. O. HOBSON, who has been stationmaster at Eaglehawk since 1940, will retire next month after 43 years' service. He joined as a porter at Flinders-st., and after being yard porter at West Footscray and shunter at Newport, became operating porter at Marong. Then followed a long period of service at country stations. From Drouin he went to Little River as assistant stationmaster and, in 1924, took charge of Shelley, the highest railway station in Victoria. While he was there, the late Mr. M. A. Remfry, former Chief Traffic Manager, and Mr. G. Rogers, the present C.T.M., were district superintendents. After nine years at Shelley, Mr. Hobson went from the cattle to wheat country at Dookie and then to Longwarry.

When Driver L. Jude stepped from the footplate of the Mitiamo goods train at Kerang recently he completed 42 years of railway service, 29 driving locomotives. He began in 1911 as a cleaner at Ballarat, and before becoming a driver, he fired various country trains. He went to Kerang from Bendigo in 1924, and except for a short period at Swan Hill, remained at Kerang until his retirement. Drivers and firemen, station and goods office staffs and trackmen farewelled him and presented him with a watch.



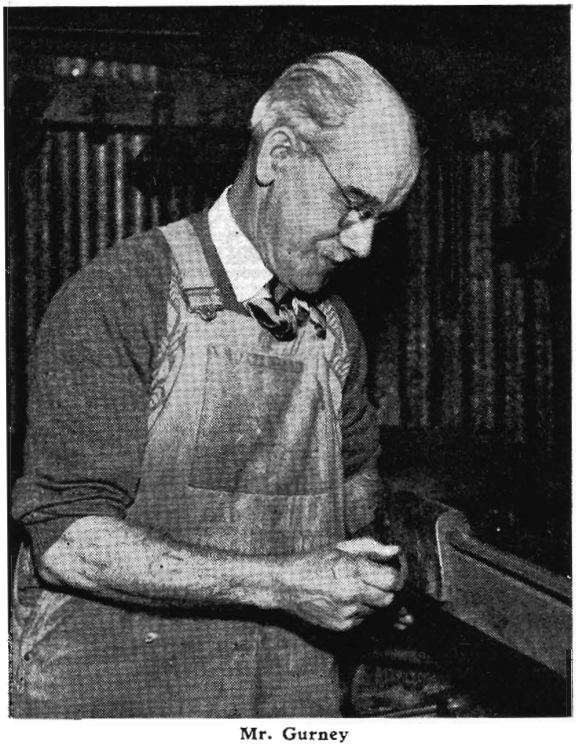
A flagman for about 33 of his 49 years' railway service, Mr. G. S. Darlington retired recently. He joined the Department at Wallan and his first job was "billy boy" with a platelaying gang. After many years in the country on construction and maintenance work he was transferred to a repair gang at Richmond in 1912. Two years later he enlisted in the first A.I.F. for active service in World War One, and was seriously wounded. When he returned, he was appointed to the Electrical Engineering Branch's overhead construction staff. He belongs to the Bentleigh sub-branch and is a life member of the Returned Servicemen's League. As a young man he played football with Ararat and Horsham and was also a professional runner. He intends to devote most of his retirement to gardening. At his farewell he was presented with a gold wristlet watch and a silver rose bowl for Mrs. Darlington.

In The Blood

"DO young men get the excitement and satisfaction out of railroading that they did a quarter of a century ago?" This was asked recently by the president of one of America's biggest railway companies. He is justifiably proud of the fact that five generations of one family and one hundred years of railroading are no uncommon combination on his railway system and emphasizes that, when son follows father in this manner, one can be sure the fathers are men who get solid satisfaction, as well as good pay, from their jobs. When one sees fresh, young faced firemen and drivers on the footplates of V.R. locomotives these days it is definite evidence that railway work today is as progressive, exciting and important as ever. It is not uncommon in the Department for son to follow father on the footplate, but it would be interesting to learn of families who can go further back than this. A search of the railway family tree may even disclose five generations of drivers in Victoria. *News Letter* would like to hear from V.R. men with a long family history of locomotive driving on the Victorian system.

Leading Hand Fitter Retires.

MR. Walter James Gurney, leading hand interlocking fitter at the Signal and Telegraph Depot at North Melbourne, who retired recently, was one of those English technicians and tradesmen whose skill helped the Department to modernize the signalling system of Melbourne suburban railways. As a lad, Mr. Gurney was an apprentice with the Sykes Lock and Block Company, of Clapham, England, who not only made interlocking machines and signal equipment for the British railway companies, as they were then, but also met orders from railway systems overseas.



Mr. Gurney

Mr. Gurney, senior, was the company's out-door inspector. After his son learned his trade in the workshops he was transferred to the out-door staff on installation work and this enabled him to see a great deal of the U.K.'s maze of railways.

When Mr. Gurney came to Victoria in 1911 and joined the Department as an interlocking fitter he was stationed at the old signal shops at Newport for four or five years before being transferred to the signal and telegraph depot at Flinders-st. For the past 16 years he has been a leading hand fitter at North Melbourne.

Mr. Gurney is very proud of his nine grand-children, seven boys and two girls. They are all, so he says, avid readers of *News Letter*.

Thanks

FOR the loan, by the Department, of a model C class engine, and other display material and for special station lighting, all of which, with the help of the local railway staff, contributed to the success of the recent Back-to-Echuca centenary celebrations.

The Organizers of the Celebrations

To station staffs at Spencer-st. and Bendigo for excellent picnic train arrangements and organization in connection with the Society's recent picnic at Bendigo.

—Mr. R. E. Hodge, Secretary, Victorian Railways Mutual Benefit Society

To Echuca's stationmaster, Mr. R. R. Higgins, for providing trucks for scenes filmed by the Melbourne Repertory Film Unit at Echuca wharf, during the recent Back to Echuca celebrations.

Mr. R. Beckett, Melbourne Repertory Film Unit.

For an enjoyable week's holiday at The Chalet, Mt. Buffalo, and for the consideration shown by the management to non-smokers.

Miss A. Simmonds, Croydon, N.S.W.

For the courteous and efficient service received from the conductor on the Bairnsdale-Melbourne express during a recent journey, especially in handling the luggage of women passengers.

Mr. J. R. Sullivan, Morwell East

For the efficient service consistently given by the Surrey Hills station staff.

Mr. H. O. Stehn, Cornell-st., Burwood

* * *

WE Pay For News And Photographs

CONTRIBUTIONS are invited from railway men and women throughout the State. News Letter pays on the basis of 10/6d. for each accepted news item or photograph. Very important items rate higher. Examples of the type of contributions required are:

Unusual hobbies.
Railway men and women who do something important in civic affairs.
Outstanding sports and games records.
Exceptional loadings handled.
Examples of outstanding railway service.
Ordinary social items, although acceptable, are not paid for.

★ THE THINGS THEY SAY ★

IT isn't making a name for ourselves that matters, but that we reach high places without trampling on the innumerable folks along the road who call us friends.

—Charles W. Tobey

* * *

The only way to have a friend is to be one.

—Ralph Waldo Emerson

* * *

Hope is like the sun, which, as we journey towards it, casts the shadow of our burden behind us.

—Samuel Smiles

* * *

I believe the first test of a truly great man is his humility.

—John Ruskin

* * *

It is to the credit of human nature, that, except where its selfishness is brought into play, it loves more readily than it hates.

—Nathaniel Hawthorne

The best cure for restlessness for far places is to go there and find them full of people who would like to get back home.

—Concrete (Wash.) Herald

* * *

When you are getting kicked from the rear it means you're in front.

—Bishop Fulton J. Sheen

* * *

A problem well stated is a problem half solved.

—Chas F. Kettering

* * *

We tend to place too much faith in figures. You recall the sad story of the man who was drowned in a stream that averaged only two feet deep.

—Henry J. Taylor

* * *

It takes a very conscientious man to tell whether he's tired or just lazy.

—C.B.S.

SPORTS

Country Cricket Carnival

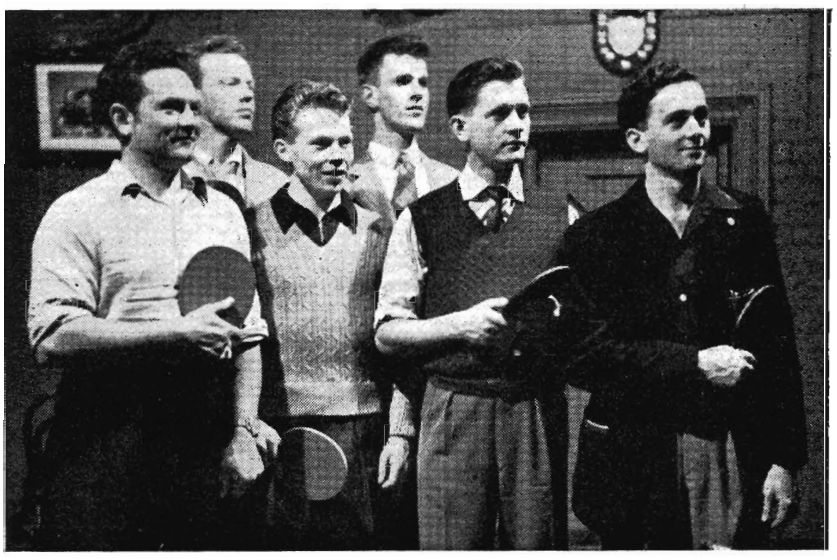
ALTHOUGH rain washed out the last day's play, Benalla and district had gained sufficient points to become outright winners of the annual country cricket week carnival with a score of 10 points. Then followed Seymour and Warragul-Korumburra, 5 each, and Bendigo, 2. The results were as follows Seymour: 138 (W. Beeby, 46, I. Cowling, 33 n.o., J. Dunn, 8/45) d Bendigo 73 (D. Blow, 33 n.o., L. Withers, 5/30, W. Beeby, 5-19). Benalla 106 and 0 for 5 (T. Daly, 20, T. Miller, A. Vyner, D. Walker, 17, W. Carson, 6/34) d Warragul-Korumburra, outright, 37-73 (J. Morgan, 18, P. Morton, 15, T. Miller 9/39, J. Beeby 3/10, A. Vyner, 3/10. Benalla 205 (J. Beeby, 64, T. Miller, A. Vyner, 35, G. Kruss, 24 n.o., L. Withers, 2/37, B. Letts, 2/50, d Seymour 166 (C. Rodway, 37, I. Cowling, 36, W. Beeby, 30, A. Vyner, 3/42, T. Miller 3/51.) Warragul-Korumburra 222 (J. Hogan, 92, D. Cronin, 3/53, J. Dunn, 3/67. d Bendigo 86 (J. Blow, 29, J. Hogan, 2/14, P. Morton, 2/15, W. Carson, 2/22).

V.R.I. Cricket Carnival Team

ALL the Australian railway systems will be represented at the interstate cricket carnival to be held in Brisbane from 17th to 29th January. The V.R.I. team is as follows: R. Sawyer (Loco. cpt.), C. Hovey (Geelong, vice-cpt.), D. Debnam, G. McLean (The Yard), C. Dunn (Northern Lines), N. Turl, J. McTaggart (Newport 'shops), P. Smith (Loco.), E. Williamson, L. Hill, B. Murray, R. Kitchen (Flinders-st.), L. Fisher, A.R. Wood, (Geelong), S. Withers (Toolamba), B. Letts (Shepparton). The official party will comprise Messrs. W. J. Crowe (manager), A. Dvrier (president of the V.R.I. Cricket Association), W. Goodsir (vice-president, V.R.I.C.A.), W. Clanchy (scorer), C. Tozer (Property Steward), D. Blackmore (Newport delegate), R. Richards (Northern Lines delegate).

Hurricane Batting

FEATURES of the last round of cricket matches for the Commissioners' Cup were some excellent batting and bowling performances. Reg Sawyer, League football umpire, indulged in some hurricane hitting for Loco against Newport's bowlers. His 107 included 15 4's and two sixers. J. Williamson, of Flinders-st., was also in brilliant form with the bat in the match against Northern Lines. His 112 not out was one of the best batting displays in V.R.I. cricket for the past two seasons. Dale Anderson, Melbourne League football team's full forward who plays with Loco, showed that he is a versatile sportsman by taking five wickets for 12 runs in the match against Newport. Dale plays with Melbourne Seconds in the district pennant competition and many good judges of the game predict a bright future for him. Even the Victorian Shield team may not be beyond him, as his bowling continues to show steady improvement. Other good bowling performances were registered by K. Carlton, of Flinders-st. who took 6/46 against Newport, and W. Wilson, of Loco, who took four Melbourne Yard wickets at the cost of only 28 runs. This month's round of fixtures is as follows: January 5-12, Flinders-st. v. North Loco, Northern Lines v. Yard. January 19-26, Newport 'Shops v. Flinders-st., North Loco v. Yard.



V.R.I. Table Tennis Association players who competed in the teams' championship final: left to right—L. Brylski, D. Mathews, W. Sheehan, N. McNoe, K. O'Shannassy, W. Laurie. Mr. Sheehan won the singles championship.

Photograph: (F. Schiller)

Snooker Champions Beaten

FOR the first time in four years, the V.R.I. Billiards Club suffered defeat in the Melbourne Clubs Amateur Billiards Association's snooker competition.

The V.R.I. club was defeated by South Yarra in a close and interesting match. Continuing a series of social games, club members visited the Seymour V.R.I. recently and won a friendly match against the locals.

Interstate Fixture

THE V.R.I. Social Bowling Club will again be represented at the next inter-system carnival in Tasmania from February 25 to March 10. It is anticipated that another keen struggle will take place between Victoria and New South Wales for the championship title, which at present is held by the latter. In 1949, Victoria defeated N.S.W. by 10 points, but in 1950 and 1952 N.S.W. were victors by three and seven points, respectively. So, there appears to be little between the teams from these two States. The Victorians will be anxious to make the score—two all.

Railway Anglers

RECENT heavy rain has spoilt trout fishing for members of the V.R.I. Anglers Club but good catches in the bay have been reported. Now that the weather is improving, greater use will be made of the club's boat which is moored at The Strand, Williamstown. Railway fishermen who would like to join the club should get in touch with Mr. W. J. Crowe, of the Guards Depot, Jolimont.

Honour For V.R.I. Sportsman

RAILWAY sportsmen were very pleased to hear of the appointment of the evergreen Herb Matthews as non-playing coach of South Melbourne League football team. Herb, who tied with Des Fothergill, of Collingwood, for a Brownlow Medal, was one of the most courageous and brilliant footballers ever to don the famous red and white jersey. It is fitting that South are looking to their former champion to lead them to a long awaited premiership. Herb has always taken an active part in V.R.I. sport, having been a consistent performer in both football and cricket competitions. In more recent years he has concentrated on cricket. He is captain of Flinders-st. and his vigorous batting has on more than one occasion been an inspiration to his team.

Wholly set up and printed at the Victorian Railways Printing Works, Laurens-st., North Melbourne, for the Publishers, The Victorian Railways Commissioners. 3268—53.

1954

Terminating dates of Pay Fortnights shown in Red.
Public Holidays shown thus ○
(Good Friday 1955—April 8)

1954

	JANUARY						FEBRUARY						MARCH					
Sun.	...	3	10	17	24	31	...	...	7	14	21	28	...	7	14	21	28	
Mon.	...	4	11	18	25	...	...	○ 1	8	15	22	...	1	○ 8	15	22	29	
Tues.	...	5	12	19	26	...	...	2	9	16	23	...	2	9	16	23	30	
Wed.	...	6	13	20	27	...	...	3	10	17	24	...	3	10	17	24	31	
Thur.	...	7	14	21	28	...	...	4	11	18	25	...	4	11	18	25	...	
Fri.	○ 1	8	15	22	29	...	...	5	12	19	26	...	5	12	19	26	...	
Sat.	2	9	16	23	30	...	...	6	13	20	27	...	6	13	20	27	...	

	APRIL						MAY						JUNE					
Sun.	...	4	11	18	25	...	...	2	9	16	23	30	...	6	13	20	27	
Mon.	...	5	12	○ 19	26	...	...	3	10	17	24	31	...	7	○ 14	21	28	
Tues.	...	6	13	○ 20	27	...	...	4	11	18	25	...	1	8	15	22	29	
Wed.	...	7	14	21	28	...	...	5	12	19	26	...	2	9	16	23	30	
Thur.	1	8	15	22	29	...	...	6	13	20	27	...	3	10	17	24	...	
Fri.	2	9	○ 16	23	30	...	...	7	14	21	28	...	4	11	18	25	...	
Sat.	3	10	○ 17	24	...	...	1	8	15	22	29	...	5	12	19	26	...	

	JULY						AUGUST						SEPTEMBER					
Sun.	...	4	11	18	25	...	...	1	8	15	22	29	...	5	12	19	26	
Mon.	...	5	12	19	26	...	...	2	9	16	23	30	...	6	13	20	27	
Tues.	...	6	13	20	27	...	...	3	10	17	24	31	...	7	14	21	28	
Wed.	...	7	14	21	28	...	...	4	11	18	25	...	1	8	15	22	29	
Thur.	1	8	15	22	29	...	...	5	12	19	26	...	2	9	16	23	○ 30	
Fri.	2	9	16	23	30	...	...	6	13	20	27	...	3	10	17	24	...	
Sat.	3	10	17	24	31	...	...	7	14	21	28	...	4	11	18	25	...	

	OCTOBER						NOVEMBER						DECEMBER					
Sun.	...	3	10	17	24	31	...	...	7	14	21	28	...	5	12	19	26	
Mon.	...	4	11	18	25	...	...	1	8	15	22	29	...	6	13	20	○ 27	
Tues.	...	5	12	19	26	...	...	○ 2	9	16	23	30	...	7	14	21	28	
Wed.	...	6	13	20	27	...	...	3	10	17	24	...	1	8	15	22	29	
Thur.	...	7	14	21	28	...	...	4	11	18	25	...	2	9	16	23	30	
Fri.	1	8	15	22	29	...	...	5	12	19	26	...	3	10	17	24	31	
Sat.	2	9	16	23	30	...	...	6	13	20	27	...	4	11	18	○ 25	...	

GOD SAVE THE QUEEN

1954

V.R. NEWS LETTER

February 1954

THE MONTH'S REVIEW

Queen Charming

THIS month, we welcome the first reigning monarch of the British Commonwealth and Empire to visit Victoria. It will be no perfunctory welcome, no mere duty, no accordance of lip-service. It will be a full-throated, full-hearted acclaim to a charming and lovable young woman who is holding down the biggest job in the world, a job in which a slip or a wrong foot might conceivably throw the policies and relations of governments into confusion. That the Queen is above policies and isms and, because of it, is nearer the hearts of all her peoples, by no means implies that she is not acutely aware of them ; nether does it suggest that in a world of highly sensitive politics, she does nothing except on the advice of her ministers of whatever British country she may be in. The monarchy, if limited constitutionally, has, indeed, considerable discretion, but it has invariably been exercised, in modern times, for the benefit of the common people. That largely explains why, in a growingly democratic age, in which the word democracy itself has acquired many meanings (some not at all democratic) the British Royal House has, simultaneously and paradoxically, gained so much in stature and popular esteem over the last century. The rest of the explanation lies in the personalities of our sovereigns which have gained for them such sobriquets as "the Good," "the Peacemaker," the "Father of his Peoples."

The railways, in common with the airways and the owners of the good ship *Gothic*, are fortunate in having been called upon to give their service to the sovereign and her consort whose whole lives are dedicated to service. Much meticulous planning has gone into the composition and furnishing of the train that will carry Her Majesty, His Royal Highness and their entourage comfortably and to schedule, from point to point, but complete success of its operation will, in the ultimate, depend on the equally meticulous performance of every railwayman involved. Experience of the past induces the unquestioned belief that Royal progress will be completely smooth.

Royalty In Photographs

AFTER having travelled more than 5,000 miles to the four corners of the State, the *Royalty in Photographs* BPL car returned to Melbourne recently. The collection of pictures illustrating the life of Queen Elizabeth and the replicas of the Royal insignia were then displayed at Cheltenham, Frankston, Mornington, the Flinders Naval Depot, Altona and Healesville, but the Melbourne tour was curtailed because of the impending Royal visit. On the six months' tour of Victoria, the car was attached to passenger and goods trains and converted diesel-electric rail motors. The blue and gold car, emblazoned *Royalty in Photographs* in red and gold lettering attracted large and enthusiastic crowds wherever it went.

V.R. Best Seller

WHEN the Department decided to discontinue issuing photographs and specifications of V.R. locomotives in loose sheet form and make a booklet of them for sale, nobody had any idea that it would prove as popular as it did with both young and not-so-young railway enthusiasts. The initial issue of 5,000 copies of *Power Parade* sold like the proverbial hot cakes. The demand was stimulated even further when a metropolitan newspaper columnist, himself a railway fan, gave it a high commendatory mention in his daily gossip feature. Subsequently the Tourist Bureau in Collins-st. was besieged by youngsters demanding copies of *Power Parade*, and a young woman member of the staff confessed after one day of handing out copies at 6d. a time over the counter that she felt a little staggered. Many have also called at the Public Relations and Betterment Board office counter for copies. Arrangements were also made for selling it at railway bookstalls.

Sunday Excursions

RAILWAYMEN and public alike have every reason to be satisfied with the restoration of Sunday trains at popular fares. Traffic naturally reacts to weather, but even in the depths of winter, a Sunday train excursion was sufficiently attractive to persuade three or four thousand Melbournites away from a cosy fire and into the country for the day. The approach of milder weather naturally pushed up traffic figures. Although November was unexpectedly showery, there were some sunny week-ends, and Sunday trippers varied from 7,734 to 8,791. When this was written, the largest number registered on September 6, was 9,697. December figures were more or less static, but after the holidays, the tendency was for figures to rise. As expected, the number of "up" travellers on Sundays exceed those on the "down" and the tendency is growing. People who have spent the week-end in the country find the returning Sunday evening train a boon.

Team Work

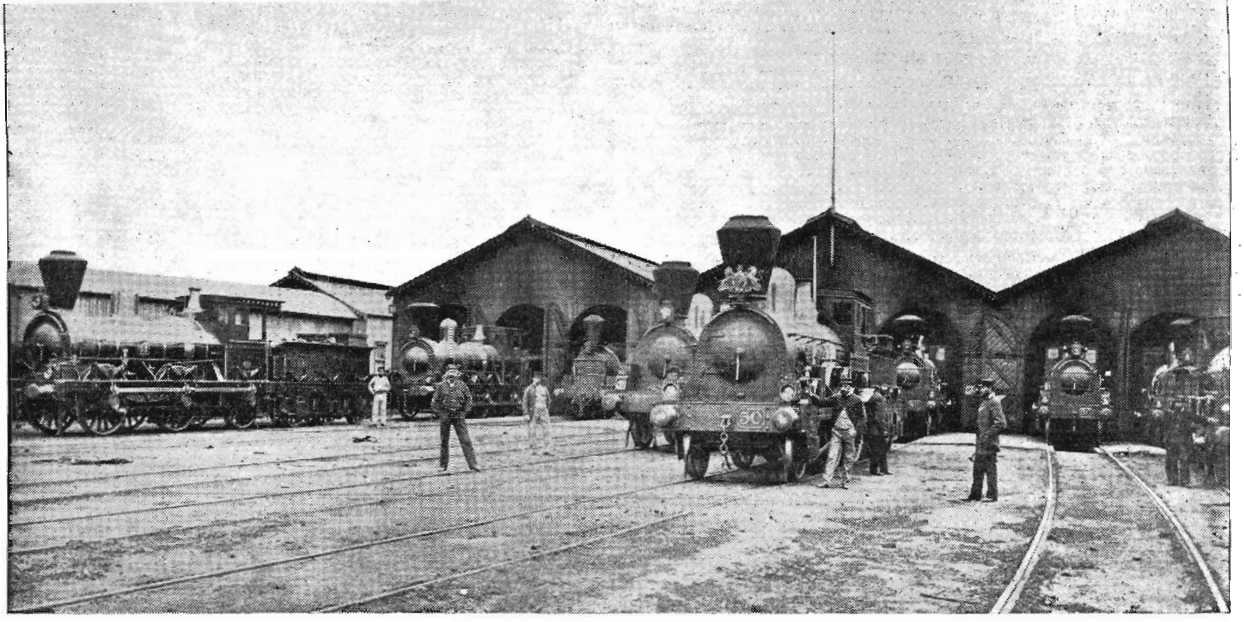
ORGANIZED team work always wins out. Nine hundred and fifty Collingwood schoolboys went by special train to Yallourn recently at the invitation of the local League football club, as part of Collingwood's premiership celebrations and as a goodwill gesture to the schoolboys who support the famous club. The various schools were told that the boys would have to take their own lunch on the trip to Yallourn, but would be fed at the club's expense at the Warragul Refreshment Rooms on the way back. But, through a misunderstanding, more than 200 of the 950 boys arrived at Flinders-st. without anything to eat. Immediately, the Refreshment Services Branch flashed a message through Train Control to Warragul and, when the train arrived there, an appetizing snack for each of the foodless boys was ready. On the way home all the 950 boys lined up in an orderly queue at the Warragul Refreshment Rooms and collected the specially prepared and originally arranged snacks. The distribution took only eight minutes.

Horse Sense

THE OVERLAND, the last word in comfort and luxury for interstate passengers, has attracted a new type of customer—the racehorse. Recently, seven well known Victorian racehorses, including the highly regarded performer, *Planetarium*, travelled in a horse box attached to the express. They had engagements at the Adelaide Cup meeting. Incidentially, it was the first time that racehorses had patronized *The Overland* since the war. Trainers are beginning to see the advantages of the rail over the hazards and discomforts of the road. The train trip to Adelaide is not merely faster ; it is cheaper than road float. Also, horses arrive rested and in first class condition. It might, indeed, pay to watch their performances afterwards. *News Letter*, however forbears to give tips, other than to put your horse on a train.

Into The Dawn

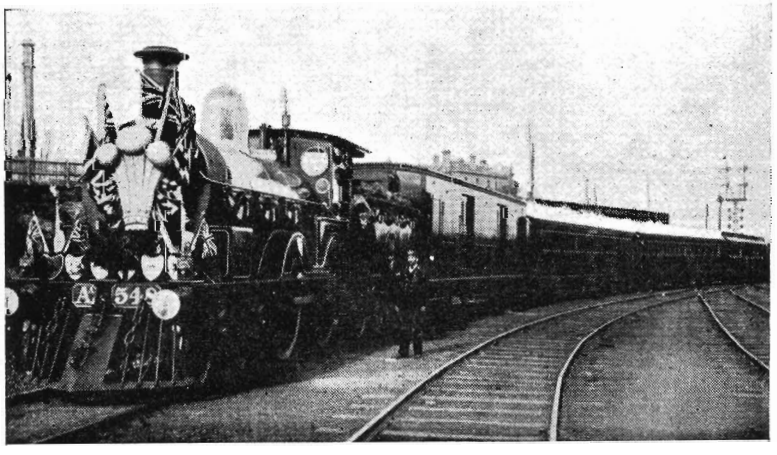
THE photographic study of "*The Overland*" express that appeared in November's *News Letter* has attracted considerable attention, including that of the manufacturers of the diesel locomotives, the Clyde Engineering Company, of New South Wales, who have been loud in praise of it. A framed print of it now graces the editorial office of the *Stawell News*. Recently the owner of the newspaper, Mr. W. Fleetwood Smith, wrote to say that his journal "wholeheartedly endorsed the statement that the photograph is one of the best pictures so far taken of the express." He added : "the diesels have certainly captured the imagination of country residents, and every opportunity is taken to watch them at vantage points around Stawell." The photograph, which has also been sent to London, New York and other places abroad, is the work of John Hirons, the Department's art photographer. It is already familiarly known by all the publications staff as the *Into the Dawn* picture.



Duke of Edinburgh's 1867 visit. The photograph, taken at old Spencer-st. locomotive shed, shows No. 50 (later B class passenger engine) that hauled the Royal train to Bendigo.

ROYAL TOURS

THE eagerly awaited visit to Victoria of Queen Elizabeth and the Duke of Edinburgh this month will be the eighth tour of this State by members of the Royal family. The first, in 1867, was made by the Duke of Edinburgh, the younger son of Queen Victoria, who predeceased his illustrious mother. The Duke travelled to Australia in the wooden ship of the line, *H.M.S. Galatea*. A special train was made up for the occasion and the Duke travelled in it to provincial towns, including Bendigo, Geelong and Ballarat. In those days the railway system extended only from Melbourne to Echuca, and from Melbourne to Ballarat, via Geelong. The Duke, therefore, had to complete his country itinerary by horse coach. The next Royal visit was in 1881, when the Dukes of Clarence and York, sons of the Prince of Wales (later Edward VII) arrived in Australia in *H.M.S. Bacchante*. Then followed in 1901 the visit of the Duke and Duchess of Cornwall and York, who became King George V and Queen Mary.



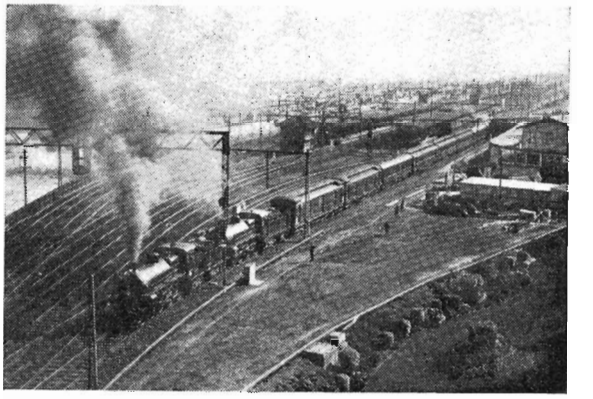
The decorated locomotive of the Royal train prepared for the 1901 visit of the Duke and Duchess of Cornwall and York.

They travelled here in the *Ophir*, a converted Orient line mail steamer, and opened the first Federal Parliament of the Commonwealth in Melbourne on May 9, 1901. The Royal tour plans were organized on a lavish scale. The Duke and Duchess landed from the old paddle steamer *Hygeia* at St. Kilda pier and, travelling to the city along St. Kilda-rd., made a triumphal tour of Melbourne's "golden mile." They passed beneath a number of magnificent arches, one of which looked like an old Norman gateway. It was built of 8,000 butter boxes, representing the then daily output of the Victorian dairying industry.

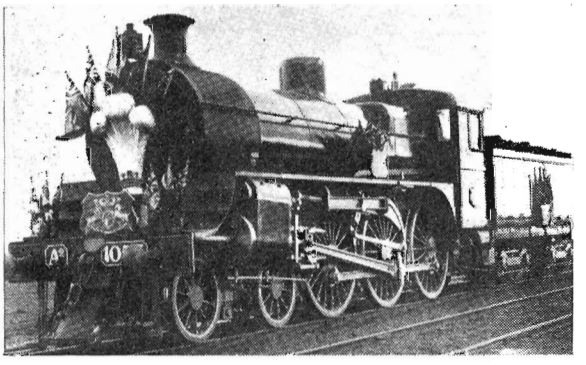
One of the features of the procession organized for the Royal visitors was the show put on by more than 200 stock-

men wearing the common garb of the bush in those days, a red Rob Roy shirt, white moleskin trousers, black leather leggings, and a brown slouch hat. The Duchess was so delighted with the display that she asked for a stockwhip as a memento of a memorable occasion.

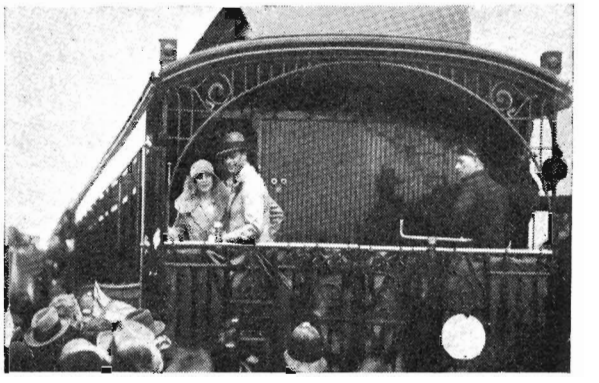
The next member of the Royal family to visit Melbourne was Edward, Prince of Wales (later King Edward VIII), who was here in 1920. The Duke and Duchess of York, later King George VI and Queen Elizabeth, visited Australia in 1927 to open the first Federal Parliament at the new seat of government, in Canberra. In 1934 the Duke of Gloucester was in Victoria, for the centenary celebrations. Eleven years later, accompanied by the Duchess of Gloucester and their sons, Prince William and Prince Richard, he returned to Australia as Governor-General. But for illness, King George would have visited Australia in 1949 with the Queen and Princess Margaret. A tour was later arranged for The Princess Elizabeth and the Duke of Edinburgh, in 1952, but it was postponed by the death of the King.



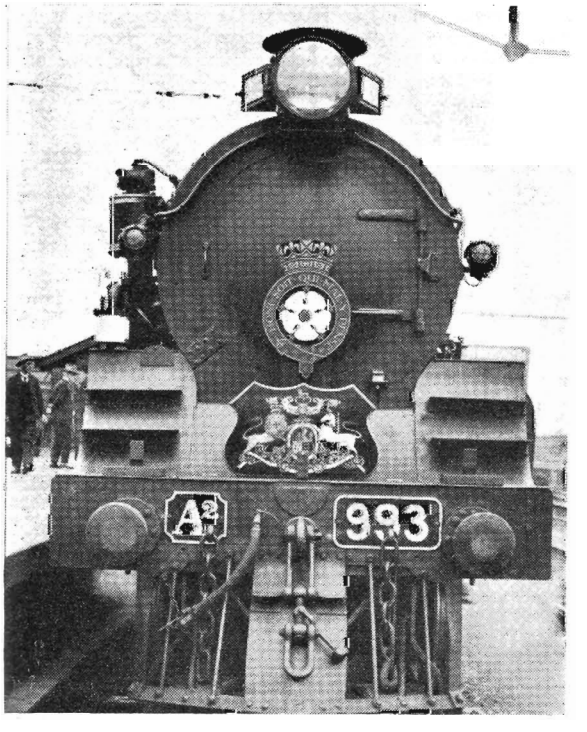
The Royal train leaves Spencer-st. with the Duke and Duchess of York on the 1927 Victorian tour.



The A2 locomotive decorated with the crest of the Prince of Wales (later King Edward VIII) for his visit in 1920.



The Duke and Duchess being greeted at a country station.



The Duke of York's crest and coat-of-arms on the front of an A2 locomotive.

Preparing R704 for the postponed 1952 Victorian tour of The Princess Elizabeth and the Duke of Edinburgh.

LOOKING UP

In this, the third and last instalment of points from a speech given at the end of the last financial year, the Chairman of Commissioners, Mr. Wishart, explains why the Transport Regulation Board is withdrawing a small number of road operators' temporary goods permits, now that the Railways, with new rolling stock and an improved staff position, are able to handle a great deal more traffic.

Mr. Wishart points out that with still more deliveries of new rolling stock an even higher standard of service can be expected. The Railways are already hauling heavier loads, and running goods trains at higher sustained speeds.

He concludes on an optimistic note and predicts that the Department will soon be in a better position than ever to fulfil its obligation of efficient and dependable service.

I would just like to say a word or two about road transport. In recent months there has been a great deal of misapprehension and irresponsible talk about what the Transport Regulation Board is doing.

The facts are that the Board is simply observing the provisions of the Transport Regulation Act, which requires it, before granting authority for road transport, to have regard to the adequacy of existing transport facilities.

Now that the railway has improved its capacity, the Board is withdrawing a number of temporary goods permits—less than 100—which have been in existence for a period when, because of the shortage of rolling stock and staff, the railways were not in a position to handle the traffic offering.

What most people fail to realize is that more than 60,000 full-term licenses "as of right" and 2,000 full-term discretionary licenses are not affected in any way.

It is the policy of the present Government that, where the railways are able to give efficient service, they should carry the traffic offering. With all the new rolling stock we have in service and the improved staff position, we are now able to handle a great deal more traffic than we are carrying.

Our capacity will further increase as more deliveries are made of the new rolling stock on order, and our ability to give a higher standard of service will also progressively improve.

That our efficiency has increased is evidenced by the fact that last year, compared with 1940/41, when operating results showed a small surplus, we handled an increase of 60 per cent in goods ton miles (a standard measuring stick for goods traffic) with an increase of only 11 per cent in train miles.

We are hauling heavier train loads—up to 2,200 tons—and getting heavier loads in our trucks, running goods trains at higher sustained speeds than previously, and that all means more efficient operating. We are out to carry everything that offers, low grade and high grade goods and passenger traffic.

Primary produce and low grade bulk commodities have always been carried by rail at low rates, ranging at present from 1.6 pence per ton mile for superphosphate to 3.5 pence per ton mile for hardwood timber. We carry over 9 million tons of goods a year—nearly 30,000 tons a day. Seventy-five per cent of it represents low grade commodities, but they produce only 45 per cent of the total revenue.

It is generally accepted that primary produce and other low rated bulk commodities must be carried by rail because rail is the cheapest medium for the purpose. The road doesn't want them. But the rates we are charging do not cover the cost of the service* and to help the overall position we must obtain a share of the higher class goods which can afford to pay higher rates. In all railway undertakings due regard is paid in fixing rates to the value of the commodity.

For a considerable range of high grade commodities the rail rate is dearer than the road, but despite that fact, we claim that in the national interest the railway, in which over £70 million is invested, should, where it is able to give efficient service, continue to carry a proportion of such traffic.

To the extent that high grade traffic is diverted to the road, either the primary producer must pay more for his service or the taxpayer must pay more in the form of the railway deficit. But, there is necessarily a limit to what the rail non-user can or should be asked to bear.

Victorian Railways' goods rates for a wide range of traffic are less than in New South Wales. For some commodities, particularly primary produce, they are only about one-half of what they are in that State; and for a wide range they are also less than in Queensland. In the case of most primary products the ratio of freight to value, that is to say the portion of your return that goes to pay rail freight, is less today than it was pre-war.

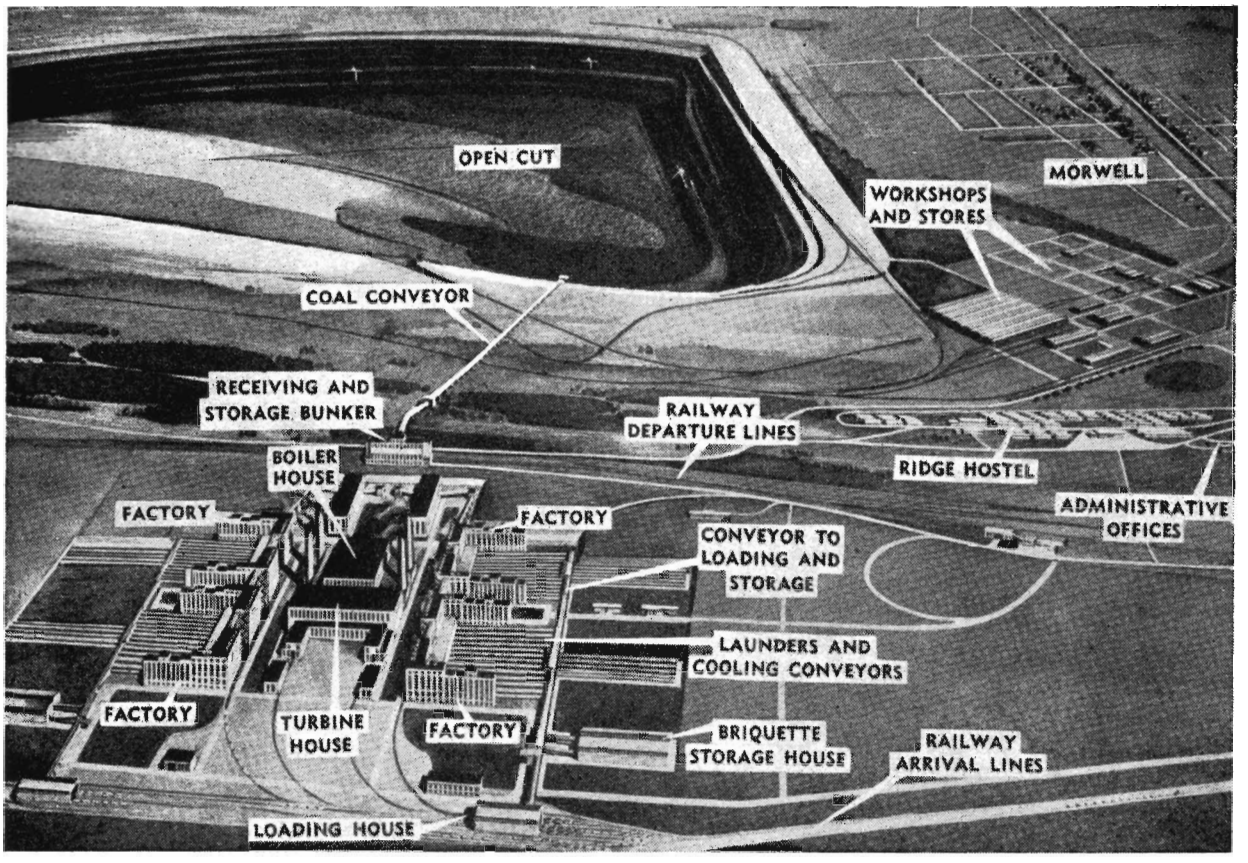
It is not generally known that we give liberal concessions to country industries. There are substantial reductions for raw materials on the "down" journey and for manufactured products on the "up" journey. These concessions are estimated at £600,000 per annum.

A word or two about the review which is being made of some non-paying spur lines. To see if it would improve the general financial position, the Government has asked the Transport Regulation Board and ourselves to look into the question of whether the traffic in the areas served by those lines could be handled more efficiently and more economically by road transport. That investigation is now in progress.

If it should be considered that any line should be closed, people in the area concerned will be given an opportunity of submitting a case for retention. On most of the lines passenger traffic has for years been catered for by road and the goods business is so small—amounting to not more than 30 tons a week in some instances—that no difficulty would be experienced in handling it by road. In such cases co-ordination at the junction station may result in far better service.

I hope you will have realized from what I have said that the Victorian Railways are rapidly regaining their ability to give efficient service. There is still a good deal to be done but, with a further improvement in our staff position and the progressive delivery of the balance of rolling stock on order, we will, I am sure, be in a better position than we have been for many years to achieve our aim to give efficient, dependable service.

* This is also true of the new rates recently authorized.



Diagrammatic plan of the S.E.C.'s Morwell briquette project. Loop lines for briquette transport will connect the factories to the main Gippsland line.

BROWN COAL DEVELOPMENT

The opening of the spur line linking Moe with the new marshalling yards at Yallourn and the use of the electrified first section of the Gippsland line, between Dandenong and Warragul this year, again give prominence to the railway's part in the distribution of a vastly increased briquette output when the Electricity Commission's Morwell project is fully under way.

BRIQUETTE output from four Morwell factories will fill two 16-ton railway trucks every five minutes throughout 24 hours daily. This will involve running a full train-load of briquettes from Morwell every 1½ hours, in addition to the three or four briquette trains a day now running from the Yallourn factory to Melbourne.

Immediate train running benefits (heavier hauls at faster speeds) have ensued from the Moe spur line with its 1 in 110 grade for "up" traffic. Diesel-electric locomotive B 68 recently left the marshalling yards at Yallourn hauling a record load of 1,482 tons of briquettes and brown coal in 58 trucks. Within a few days this record haul was broken by B 60, *Harold W. Clapp*, which brought 1,504 tons of brown coal from Yallourn to Newport Power Station. It is no longer necessary for coal trains to be double headed over the more circuitous route from Yallourn to Moe, via the Haunted Hills, with its steep grades of 1 in 50.

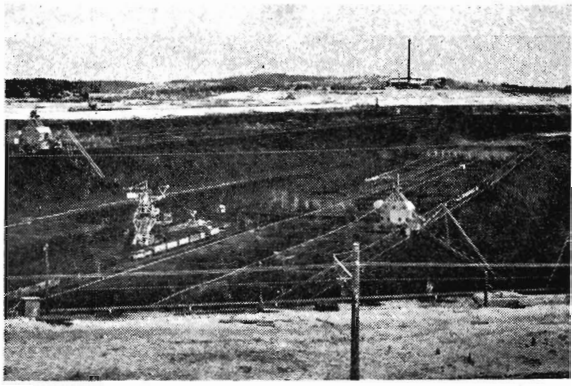
It is here appropriate to review the State Electricity Commission's scheme for the further development of Victoria's vast brown coal resources. Unfortunately, the tightness of loan money has seriously retarded plans for the important Morwell project, which provided for a new large-scale open cut on a brown coal deposit of great extent and the erection of four new briquette factories, each of which will have an annual output of 650,000 tons.

The first of these factories was to have been in operation this year and the remainder were to have come into production progressively at about yearly intervals. The foundations for the first two factories are practically completed and all the machinery and plant for two factories have been delivered. Delivery of equipment for the third and fourth factories has, however been indefinitely postponed.

Morwell's total annual output of 2,600,000 tons of briquettes, with four factories in production, will be nearly 4½ times the annual output of the Commission's existing factory at Yallourn. In each there will be 10 electrically driven four-stamp briquette presses, operating at a pressure of about 10 tons to the square inch. Each press will be capable of producing from 280 to 320 tons of briquettes every 24 hours, and the daily output of each factory will be 2,300

tons. Four factories will turn out more than six tons a minute for 24 hours a day. The new Morwell factories will supply fuel for the Commission's power stations in Melbourne and provincial centres, as well as a good deal of the solid fuel requirements of industry. They will also supply briquettes for the Victorian Gas and Fuel Corporation's project to produce town gas from briquettes and pipe it to Melbourne from a new works at Morwell. In the initial stages, the new gas works at Morwell is expected to absorb about 126,000 tons of briquettes a year, as well as about 64,000 tons a year of raw brown coal from the Morwell open cut. Consumption of briquettes and brown coal will increase progressively during the next decade.

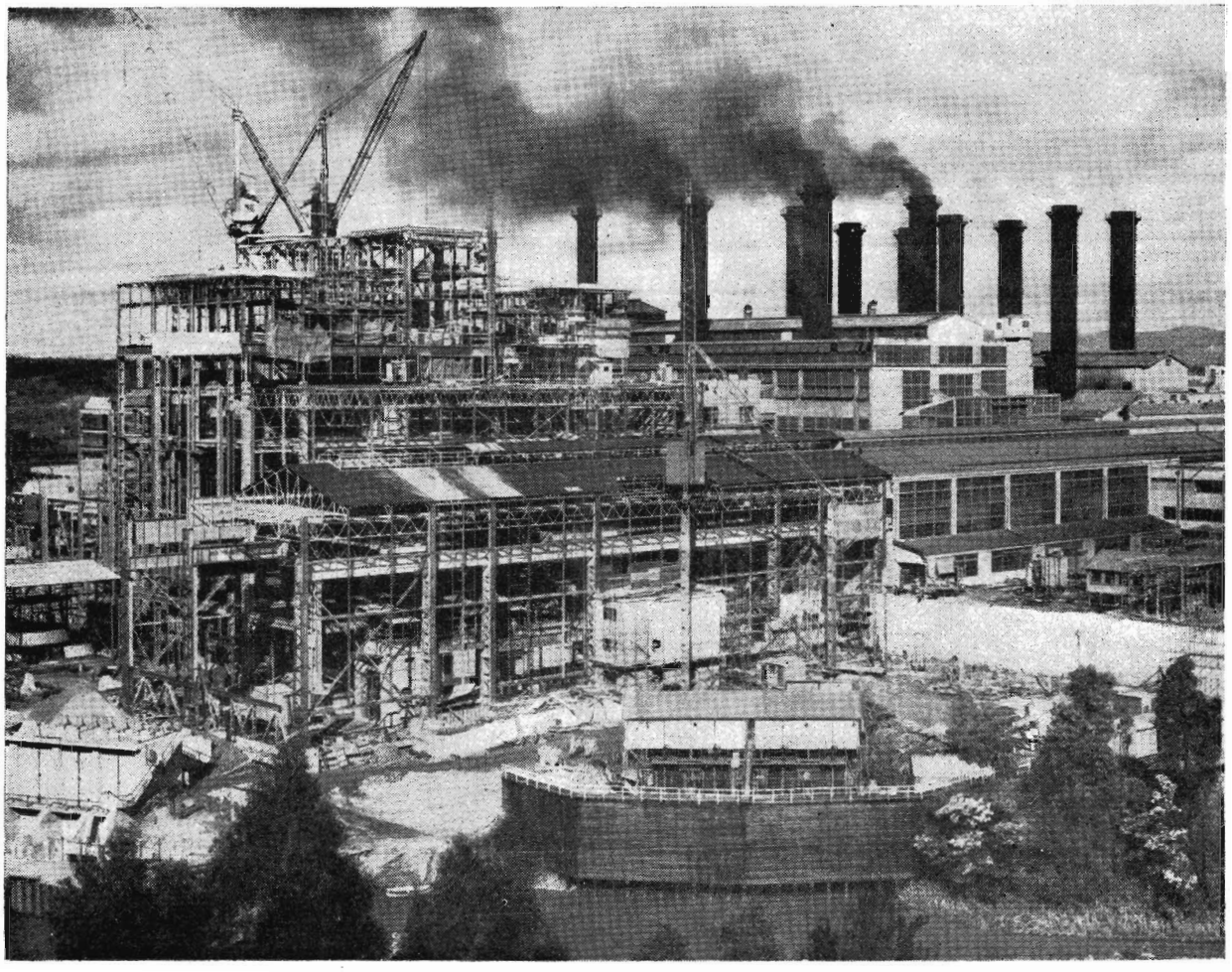
About three million cubic yards of overburden to the new open cut have been excavated, including a gullet cut 8,000 feet long, 200 feet wide and averaging 35 feet in depth. Four dredgers have been ordered for overburden removal and coal winning. Both are of the bucket-chain type. The overburden dredgers will have a capacity of 700 cubic yards (solid measurement) an hour, and the other will be capable of winning 600 tons of coal an hour. The other two dredgers are German made, of the bucket-wheel type. One, nearing completion, will be capable of scooping 600 tons of coal or 600 cubic yards of overburden an hour. The second will be about twice as big as the largest coal or overburden dredger yet bought by the Commission, either for Morwell or Yallourn, and will excavate overburden at the rate of 1,700 cubic yards an hour. For the transport of overburden



General view of Yallourn open cut.

to the disposal area, the Commission has bought from Germany nine electric locomotives and 70 overburden trucks.

To supply increasing fuel needs the output from Yallourn open cut will be progressively expanded from its present figure of about 6½ million tons a year to about 10 million tons a year. This will be equal to about two-thirds of the tonnage (although not the heat value) of the 1952 output of all N.S.W. black coal mines.



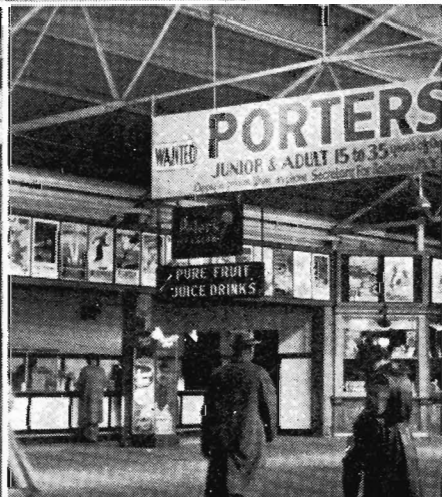
This large extension to Yallourn Power Station will increase its generating capacity from 175,000 to 275,000 kilowatts. Another extension of the same size is to be added to the other end of the power station.

AROUND THE SYSTEM

TEST RUN: R
washed coal, c

PARLIAMENTAR
Left, from left
ter, Mr. J. H.
M.L.A., meet
Mr. Smith wa
driver and Mr.

DAY'S OUTING: Some of the 132 children from the Glenroy State School who left by train for the Healesville fauna sanctuary recently

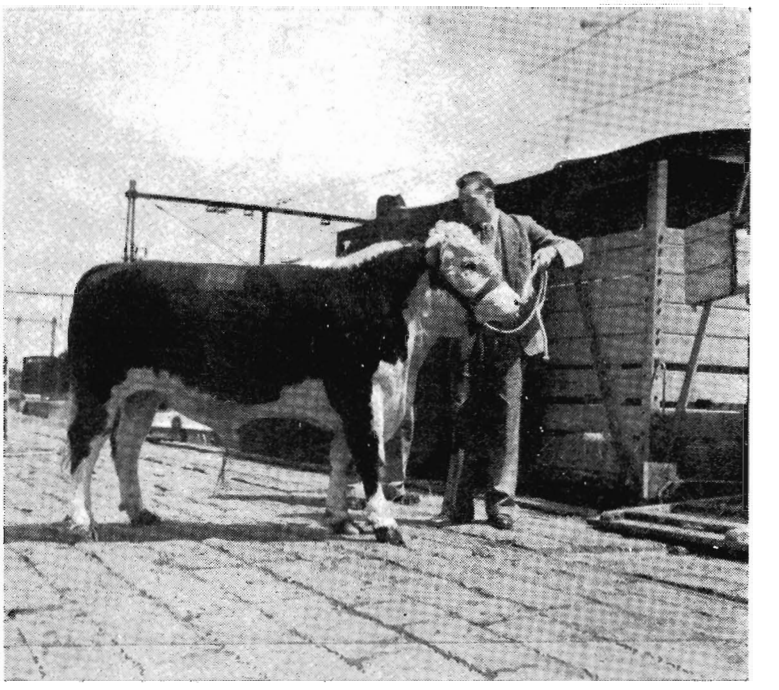


POSTER DISPLAY: New posters have bri
on Spencer-st. concourse.

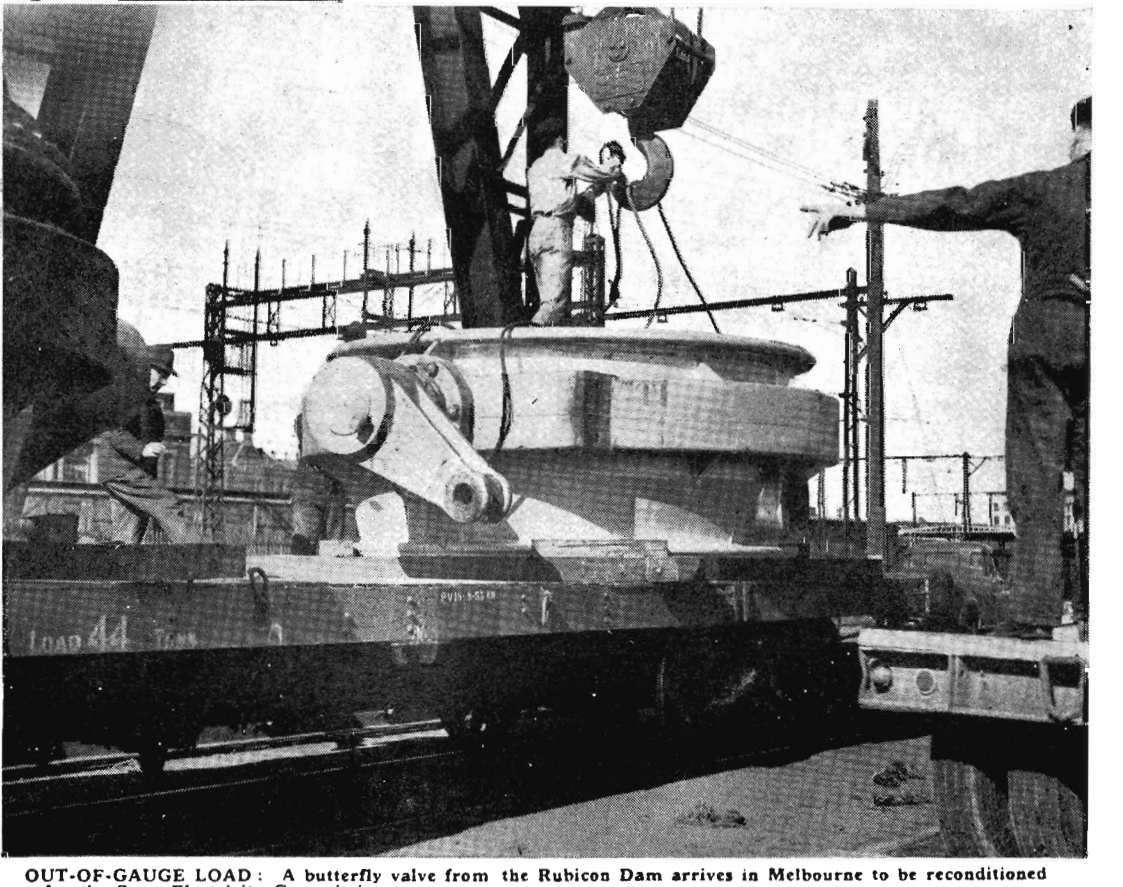
red with the new
the Goulburn.

IT TO YALLOURN:
t—Assistant Minis-
and Mr. G. White,
driver Brereton.
ormer V.R. engine
was a booking clerk.

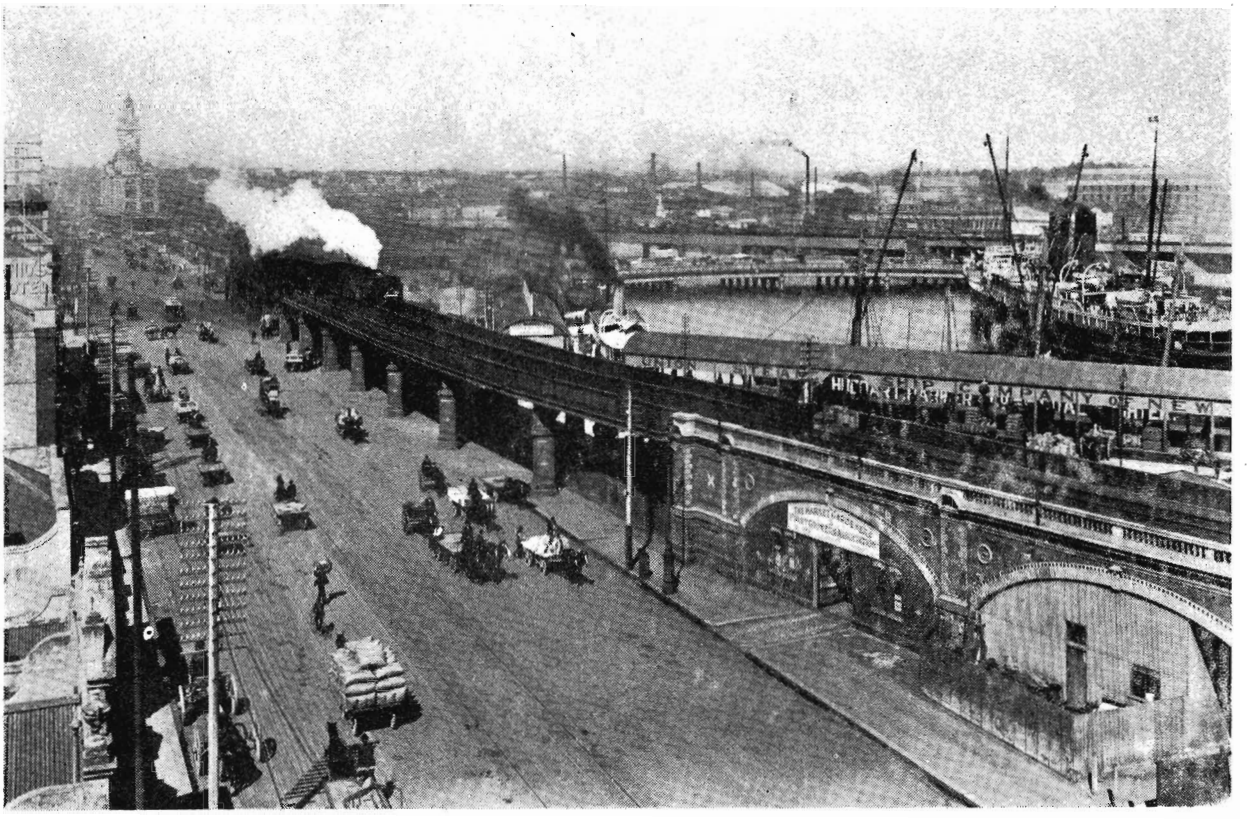
up the gallery



TRUCK TO ITSELF: One of the high priced Hereford bulls sold at a recent stud dispersal sale at Shelford being railed at Newmarket.



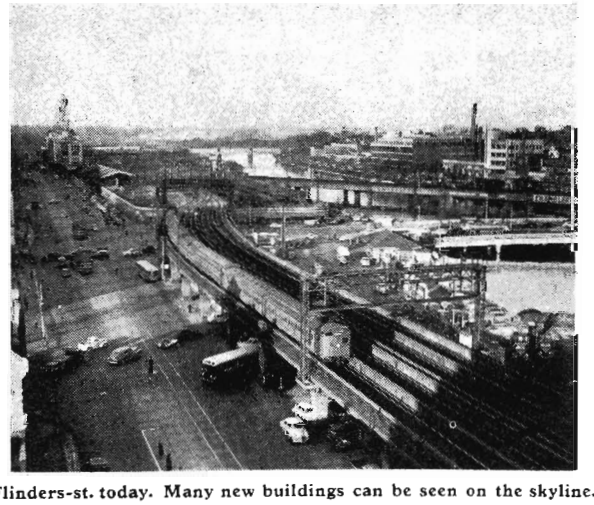
OUT-OF-GAUGE LOAD: A butterfly valve from the Rubicon Dam arrives in Melbourne to be reconditioned for the State Electricity Commission.



Flinders-st. yesterday. Cable trams, horse-drawn vehicles, telegraph poles, ships, suburban steam trains and the viaduct with only two tracks give some idea of the age of this picture. It was taken about 1911.

FLINDERS-ST. VIADUCT

(Condensed from a history of the Victorian Railways, compiled by L. J. Harrigan.)



Flinders-st. today. Many new buildings can be seen on the skyline.

AS far back as early 1859, three city railway stations were operating. They were: Flinders-st. (opened September 1854), by the Melbourne and Hobson's Bay Company; Princes Bridge (opened February 1859), by the Melbourne and Suburban company; and Spencer-st. (opened January 1859), by the Victorian Government Railways.

Each was the terminal of its respective system, but they were not connected. The gap between Flinders-st. and Princes Bridge stations was less than 10 chains. Spencer-st. and Flinders-st. stations were three-quarters of a mile apart.

On three occasions the Hobson's Bay Company brought out plans to connect the systems. In October 1858, the Company prepared a scheme to link with the Victorian Railways by a horse tramway along Flinders-st. In June 1860, junction with the suburban railway through a tunnel under Swanston-St. was discussed. In September 1862, the Company proposed to build a central general terminus as an extension of its own station in Flinders-st., that would join the Hobson's Bay and Suburban Company's lines, and a connexion with the Victorian Railways by a line carried on a viaduct along Flinders-st. to Spencer-st. However, none of these plans was adopted at the time.

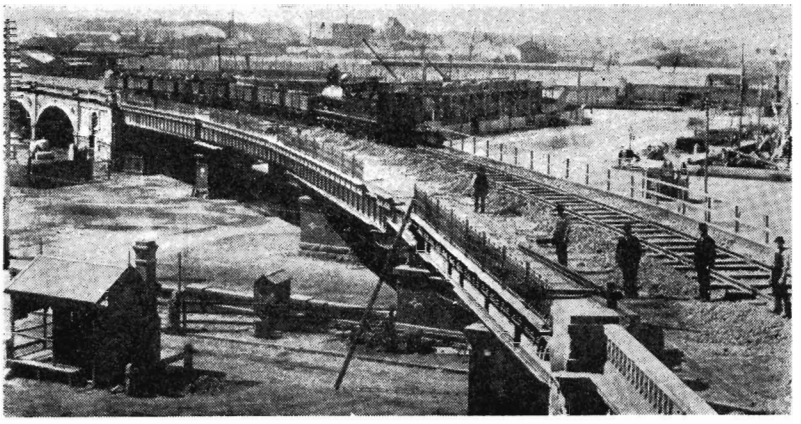
After the amalgamation of the Hobson's Bay, the Melbourne and Suburban, and the St. Kilda–Brighton Railway Companies in 1865, the three systems were connected at Flinders-st. station in October 1866. Princes Bridge station was closed, and remained so until April 2, 1879, when the station was re-opened by the Railway Department as the metropolitan terminal of the Gippsland line. (The purchase of the Hobson's Bay United Company by the Government had been ratified a few months earlier.)

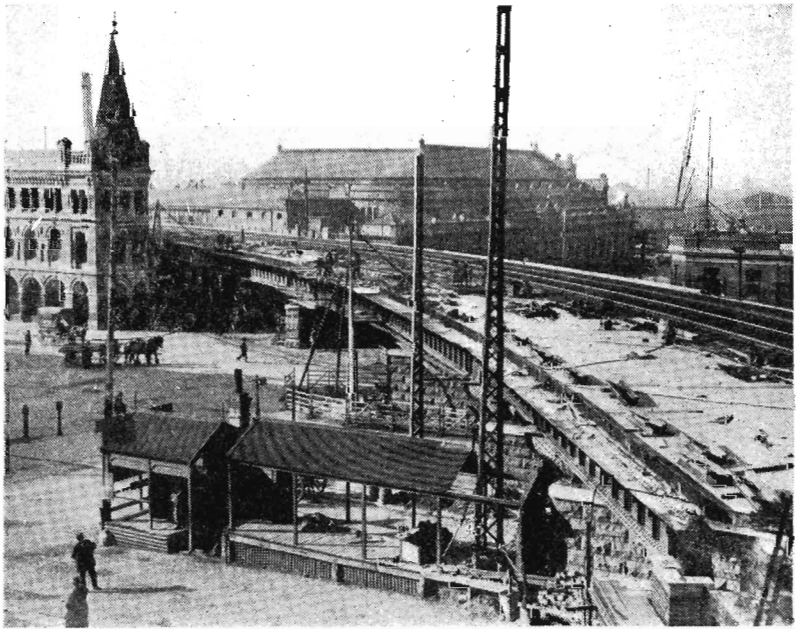
In December 1879, Spencer-st. station was connected with Flinders-st. station (and with Princes Bridge yard) by a tramway—officially so called—along the south side of Flinders-st. The tramway, for goods traffic only, was worked at night to avoid interference with road transport. Engine No. 34 (formerly the Geelong Company's *Titania*) was selected to haul the train because of its light weight. A bell was fitted to the engine, and tolled continually as the train progressed. The use of the whistle was prohibited so that nearby residents would not be disturbed. Speed was restricted to four miles an hour, and a shunter, displaying a red light, preceded the train. Despite all precautions, however, several persons were killed on the line. In fairness to the railwaymen, it must be mentioned that the track was often used at night as a couch by revellers a little the worse for wear.

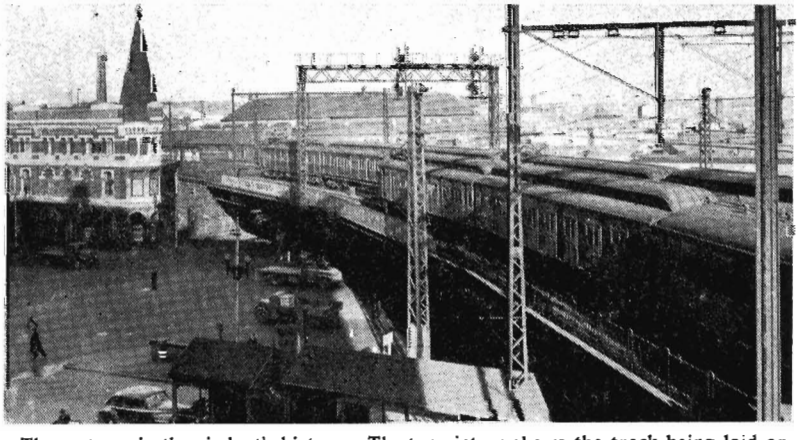
The tramway remained working until 1891, when the Flinders-st. viaduct was opened. Construction of the viaduct, which began about December 1888, was carried out by private firms, and the permanent way was laid by the Railway Department.

Single-line working began on November 23, 1891, and double-line on December 20, 1891, with speed restricted to 15 miles an hour. Traffic was confined to goods until the end of 1894. Suburban passenger trains from Williamstown and Essendon then ran to and from Flinders-st., instead of Spencer-st., where an island platform had been built to allow these trains to be worked on to the viaduct. This platform was demolished when the present suburban platforms (Nos. 11, 12, 13 and 14) were built in 1924.

The viaduct was renewed and strengthened and two additional tracks laid in 1917, giving the four tracks as we know them today. These extra tracks enabled the viaduct to be used for those suburban trains which had previously terminated at Spencer-st. Thus Flinders-st., with Princes Bridge, became the terminal for all suburban trains.







Three stages in the viaduct's history. The top picture shows the track being laid on the original viaduct. Next shows the widening of the viaduct for two more tracks, and, last, the viaduct as it is today. These pictures were taken from about the same spot and show the curve from Flinders-st. into Spencer-st.

LINES FROM OTHER LINES

Lindsay Hassett, captain of the Australian cricket team, signing his autograph for Mr. R. Christian, stationmaster at St. Pancras, London, before leaving by the Tilbury boat train. Mr. Christian is one of a group of stationmasters on British Railways who wear a top hat on formal duty.

Better Engine Maintenance in U.K.

BRITISH RAILWAYS steam locomotives are running more trouble-free miles than ever before. The average mileage run, without mechanical failure, for the four weeks to June 13, was 32,878, compared with 19,174 for the corresponding period in 1949, 20,365 (1950), 26,319 (1951) and 32,183 (1952). The improvement is due to the introduction of the standard examination system.

N. Z. Suburban Electrification

NEARLY 80 years after the first steam train began running from Wellington to the Hutt Valley, multiple unit electric trains are now in operation between Wellington and Taita (13 miles) as the first stage of electrification to Upper Hutt. The total expenditure on the electrification will be about £5½ million, part of which has been spent on improvements to stations and passenger access to them.

New Bedroom Cars

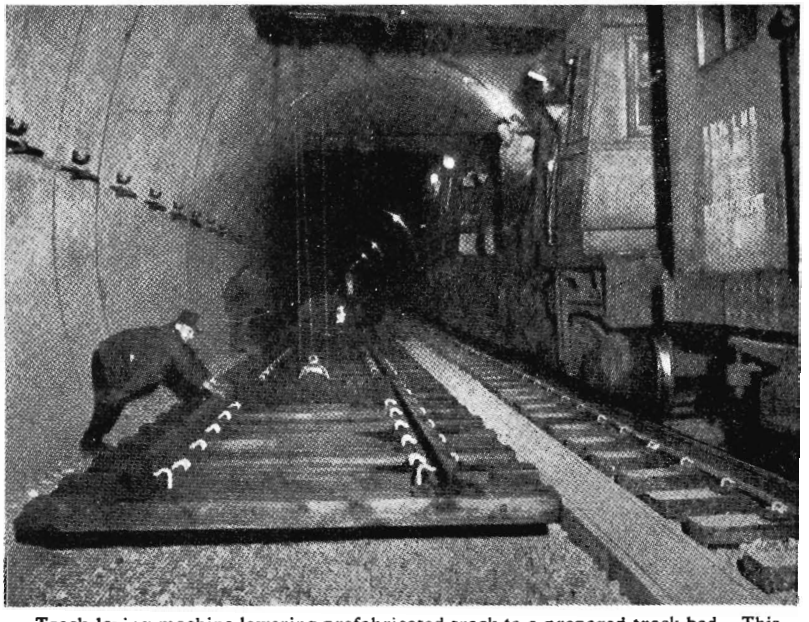
THE Illinois Central Railroad has added six all-bedroom cars, costing well over a million dollars, to its fleet of modern rolling stock. These cars, the first of their type, reflect some 2,000 items of passenger preference disclosed in a study made by various railroads, the Pullman Company and the manufacturers. Each car has 11 bedrooms designed to provide passengers with plenty of room. Folding chairs have replaced the conventional sofa type of seat, giving the bedrooms the effect of the larger drawing rooms. The lower bed is pulled out from the side wall, and the upper comes straight down from the ceiling on a metal track. Toilet facilities are enclosed in an annexe but the washstand is in the room proper. With triple mirrors and a vanity cover that fits over the sink, the washstand becomes a useful dressing table.

Through Six Time Zones

THE Canadian National Railways claim to be the only system in the world whose trains operate in six distinct time zones. Beginning in Newfoundland, where Newfoundland time is effective, and going westwards, Canadian National trains also operate in Atlantic, Eastern, Central, Mountain, and Pacific time zones.

Dormitory Cars

THE French National Railways are placing in service a limited number of special coaches with dormitory-type sleeping accommodation suitable for parties of young people travelling to and from the winter sports centres in the French Alps and the Pyrenees. Each vehicle is divided into two large compartments, together providing 60 berths. Berths, all of which have a mattress, pillow and blanket, are arranged in tiers of three along the sides of the coach, with another tier of two along the centre.



Track-laying machine lowering prefabricated track to a prepared track bed. This picture was taken during work on the new tunnel at Woodhead, on the Manchester-Sheffield main line. The work involved laying 20,000 tons of ballast, 1,000 tons of rails, and 13,000 sleepers.

RAILROAD MAGIC

After an investigation of modern railway developments in the U.K., the European Continent, Canada and the U.S.A., the Outdoor Assistant to the Chief Traffic Manager, Mr. J. R. Rewell, and the Engineer of Special Works, Mr. L. A. Reynolds, have returned from their eight month's mission deeply impressed with the advances that have been and are continuing to be made in scientific railway operation.

THROUGHOUT the world, they inspected many modern type hump marshalling yards, where a train after arrival is pushed over a hump and divided into cuts for the various classification roads. The normal method of operation is by a route selection machine, the route for each particular cut being set-up by pressing a button corresponding to the route to which the cut of trucks is to be sent. Speed is controlled by retarders next to the running rail, with which the retarder operator can exert pressure on the wheels.

The mission saw the latest retarders at the Kirk Yard at Gary, Indiana, U.S.A., and the Airline Yard at Milwaukee, where the speed of the descending vehicle is measured by radar or track circuit and the amount of retardation applied is automatically controlled by the actual speed.

Push Button Signalling

Mr. Rewell and Mr. Reynolds were especially interested in numerous signalling installations. The latest type is a push-button system, whereby a route is set up by depressing or turning buttons at the entering and leaving points. The route is set up and locked and the signals cleared.

At Cologne, two railway bridges over the River Rhine were destroyed during the last war. One with double track has been rebuilt and, with the aid of the push-button system, is now being used to handle 600 trains every 24 hours to and from the Cologne station. On the track diagram in the signal box at Cologne, the track occupancy is not shown in the usual manner of extinguishing lights as the train travels, but is indicated by an illuminated scheduled train number and, as the train moves through the control sections, the number travels across the diagram. In this signal box the movement of trains is controlled by trainmasters, with a signalman setting up the roads under his direction.

Centralized Traffic Control

This, however, is a small phase of the centralized traffic control system that has been developed in the U.S.A. By this method, traffic up to 200 miles away is controlled from one office, the points and signals being operated in response to a code sent out from the controller's desk. Many examples were noted of double tracks signalled in both directions, which permits fast trains to be diverted to adjacent tracks to overtake slow trains, after which they are returned to normal tracks.

Railroad Exhibitions

During their stay in America, the mission attended a railway exhibition in a huge hall at Atlantic City sponsored by the Association of American Railroads and the Railroads Supply Manufacturers Association. All types of mechanical equipment were exhibited and, in a nearby yard, there was a display of cars trucks and locomotives. They saw a similar exhibition at Chicago. The 9,000 delegates at the Atlantic City exhibition included railwaymen from North and South America, the Australian Commonwealth Railways, Victoria and New Zealand.

Dieselization

One of the greatest single factors in the economic operation of American railroads, the mission discovered, is the extensive use of multiple operated diesel-electric locomotives. Some railroads have become completely dieselized. Diesels haul goods trains of 100 to 150 bogie vehicles with loads of five to ten thousand tons. They saw trains more than a mile long. Another thing that impressed them was the use of radio in yards to enable yard masters to communicate with train crews. Radio is also being used between drivers and guards.

Some of the rolling stock inspected included high speed trains with air-conditioned, stainless-steel-fitted and fluorescently lit carriages and with such amenities as tavern and coffee shop cars. Most of the long distance trains have parlour cars, with very comfortable lounge chairs, and modern sitting cars, known in the States as chair cars. These have reclining, adjustable seats with foot rests and are the railways' answer to the luxury road motor coach.

Radio Service

Some American passenger trains are equipped with a loud speaker system for the conductor to make announcements about station stops and luggage arrangements. One of the crack passenger trains, *California Zephyr*, has radio diffusion in its sleeping cars, giving the passenger the choice of five programmes.

Another railroad refinement that has proved very popular with American train travellers is the elevated deck, that is known as the Vista or Super dome. It enables passengers to get a bird's eye view of the magnificent scenery of the Colorado Rockies and the Sierra Nevada Ranges. Timetables of the passenger trains fitted with the dome are so arranged that the best of the scenery on the journey is seen in daylight hours.

★ THE THINGS THEY SAY ★

One of the main pleasures of travel by rail is the absence of all responsibility. There is no mental strain. We do not experience hair-breadth escapes on every few miles of the journey, as inevitably occurs on the roads.

—from a letter to "The Daily Telegraph" (London)

* * *

Even if you have money to burn, you can't take it with you.

—A. Lawrence Lowell

* * *

Next to knowing when to seize an opportunity, the most important thing in life is to know when to forego an advantage.

—Disraeli

The penalty of success is to be bored by the people who used to snub you.

—Lady Astor

* * *

I judge people by my liver.

—Hannen Swaffer

* * *

We women are wearing our best frocks tonight and therefore we are as old as we look. You men, of course, are old when you stop looking.

—Miss Pat Hornsby Smith, Parliamentary Secretary to the U.K. Ministry of Health

AMONG OURSELVES.

Mr. Scott makes his last trip.

Colourful Career Ends at Last Floor

HEAD OFFICE STAFF hurrying to clock in after lunch will miss the portly figure and cheery personality of Mr. F. W. (Fred) Scott, relieving liftman, general cleaner and watchman, who retired recently. In his younger days Fred, as a comedian, played opposite the late Gus Bluett in *Going Up* and *Aladdin* and, as a partner in the comedy team of Scott and Meyers, appeared in vaudeville with Jim Gerald. He is, perhaps, better known for his humanitarian work during World War Two in helping to relieve the distress of relatives of Australian prisoners-of-war in Malaya and in other Asian countries overrun by the Japanese.

At his Mitcham home, Mr. Scott heard on his short wave set late one night the name and regimental number of an Australian prisoner-of-war, who had been allowed to broadcast an assurance to his relatives that he was alive and "in good health." Mr. Scott jotted down his name and later got in touch with his relatives. They were so overjoyed and so profuse in their thanks, that he decided it was worth sacrificing sleep to bring relief to the minds of other worried next-of-kin. So, for the rest of the war, Fred crouched nightly over his wireless set from eleven to two-thirty waiting for P.O.W. messages. He estimates that he wrote about 3,000 reassuring letters to relatives. As a result Mr. Scott received many letters of gratitude from them and little gifts and souvenirs from the men themselves. The souvenirs included photographs of high ranking Japanese officers surrendering their swords to Australian staff officers.

Another of Mr. Scott's war-time activities was his work for Red Cross. He helped the Brunswick branch of the organization to raise £7,000 in ten days.

Work for Charity

INDICATIVE of the great interest taken by Bendigo railwaymen in civic and charitable affairs is the work done by the Mitchell-st. Popular Girl Committee for the Bendigo Easter Fair. Nominees of four of the city's business streets compete each year to raise funds for the Bendigo Base Hospital and the Benevolent Home.

This year's committee officials include the following railwaymen: president, Mr. H. Sutton (driver); vice-presidents, Messrs. R. Kitt (driver); A. Cronin (goods sorter), W. Gilmore (lighter up), W. Clarke (retired); secretary, Mr. P. McQuillan (signalman); assistant secretary, Mr. L. Cornwall (signalman); and treasurer, Mr. E. W. Johnson (senior clerk, Bendigo Loco. Depot). Mr. Sutton is in his third year of office, Mr. McQuillan in his fifth year, and Mr. Johnson in his tenth year.

The Mitchell-st. Popular Girl has won the last three contests, raising as much as £4,100 in a year.

Printers' Annual Social

A PLEASANT feature of the recent annual smoke social held by the V.R. Printing Work's staff at the V.R.I. was that all the artists, except one, were railway printers. Arthur Hicks was an entertaining magician, Kevin Baker and Charlie Thorpe were very bright in a comedy sketch and Bob Humpris sang in his usual tuneful style. Among the guests was the manager of the printing works, Mr. M. McKenzie. It was good to see so many retired railway printers at the function. They were given a warm welcome.

Railway Picnics

FOR the first time since the war, the V.R. Signal and Telegraph staff are able to hold an annual picnic outside the suburban area. This month a large number, with their families, will go by diesel-electric hauled train to Bacchus Marsh for a picnic and sports gathering at Maddingley Park. The children are to be most thoroughly entertained with a merry-go-round, flying boats, miniature train and Punch and Judy show, and the Newport Workshops brass band will be there, too. To commemorate the Victorian visit of Queen Elizabeth and the Duke of Edinburgh, the committee will distribute a special souvenir picnic programme. The V.R. car builders had an enjoyable outing at Seaford recently. About 500 excursionists went from North Williamstown and Newport to the popular bayside beach and sports ground.

"Old Rowley" Steps Down

ONE of Bendigo's most popular railwaymen, Mr. Rowland Cornall, enginemen's instructor, retired recently after 48 years' service. He joined the railways as a lad labourer in 1905, became an engine cleaner three years later and, in 1914, at the age of 25, was the youngest driver in the service. After driving locomotives of all types in various parts of the system he came to Bendigo in 1934 as night depot foreman. He liked the golden city so well that he decided to stay. In his younger days, Mr. Cornall was a successful footrunner and engaged in most sports. Now he plays golf and bowls with all the zest and enthusiasm of a young man. Known in the Bendigo district as "old Rowley," he was farewelled by a large number of his colleagues and presented with a gold wristlet watch and a crystal cabinet.

Going Home

PORTRESS Joan Mann, who has been at Moreland for more than two years, left recently to visit her parents in Birmingham, England. Her railway friends farewelled her at the V.R.I., gave her a dressing case and referred to her popularity with train travellers, especially elderly people and mothers.

For the traffic arrangements for the Australian Grand Prix at Albert Park.

Brigadier C. M. L. Elliott, president, organizing committee, Australian Grand Prix

For the courteous service received from *Spirit of Progress* staff, and particularly those on the dining car.

Miss K. Nicholes, of Toorak

To the Tourist Bureau, and especially Mr. Harkins, for help and advice, beyond the usual range of duty, before and and during the visit to Melbourne of the South Australian Public Service Table Tennis Team.—

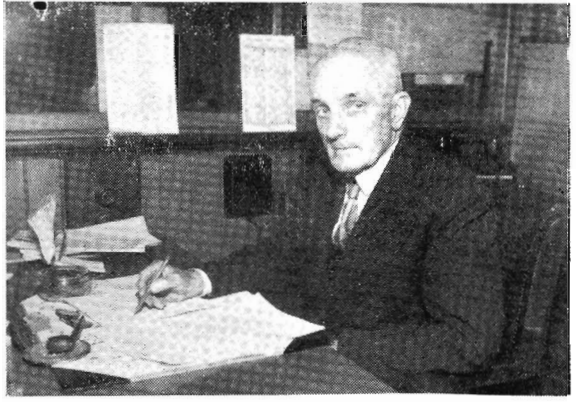
Mr. R. Carlile, secretary, Victorian Public Service Table Tennis Association.

Best Wishes from U.K.

WRITING from Yorkshire, England, where she is holidaying, Miss Frances Elliott, a member of the Refreshment Services Branch staff at Korumburra, wishes to be remembered to all her friends in the V.R.

Preferred Railways To Politics

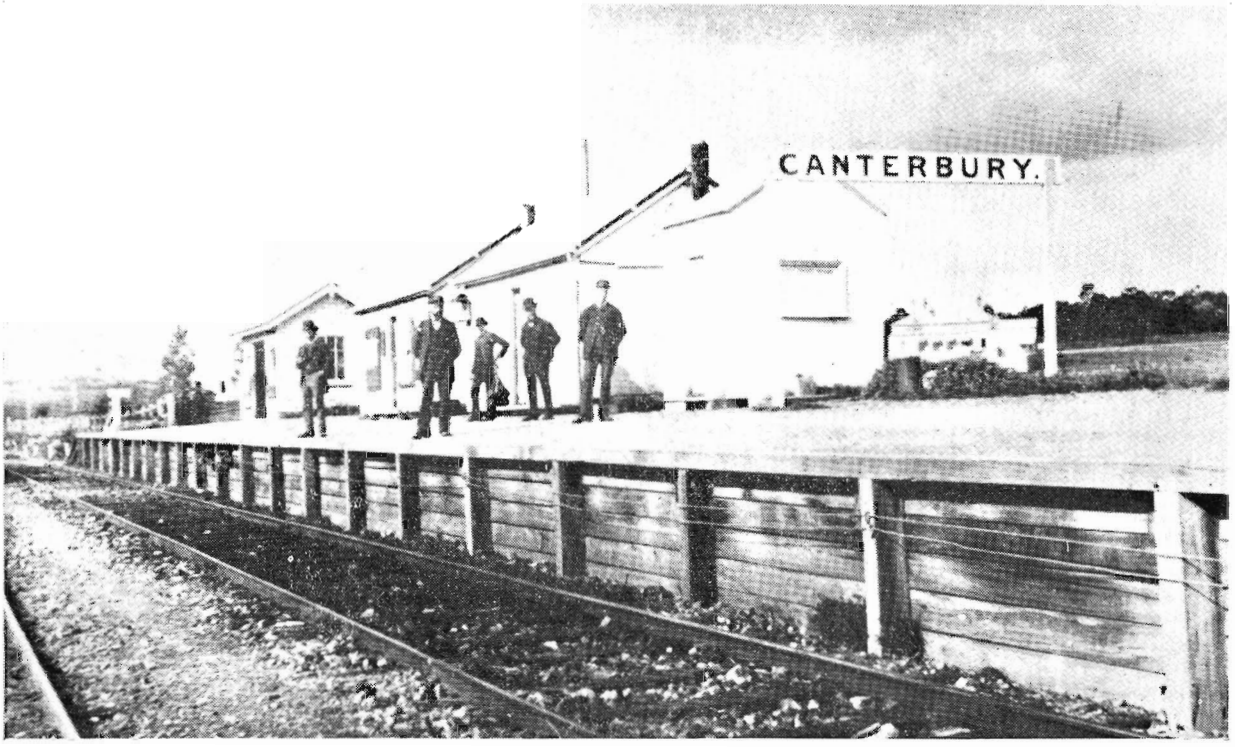
WITH the retirement of the Live Stock Agent (Mr. Duncan O'Toole), the Department loses a colourful personality. Had he not decided on railroading, he could well have taken up politics. He had many opportunities. He joined the railways as a junior clerk at Footscray in 1906, and stayed for six years before going to Richmond, Footscray, Camperdown and, in 1918, as assistant stationmaster, to Sunshine. After getting experience as relieving stationmaster, he went to Bendigo as Traffic Inspector in 1936. There he became a member of the Chamber of Commerce and was appointed to the Council of the School of Mines. For seven years he was clerk-in-charge of Bendigo Goods. In World War Two he was lent to the Commonwealth Land Transport Board for special duties. Back again, he went to the Live Stock Agent's Office, and was Acting Live Stock Agent from June 1951 until his appointment as Live Stock Agent in 1952.



Mr. O'Toole.

For 13 years Mr. O'Toole was a member of the Footscray City Council, and, ultimately, was elected Mayor for two successive terms. One of his achievements was the building of a new £64,000 Town Hall from the profits of one year's sale of electric power. It was, in fact, his civic magnum opus. When he retired from the Council with several presentations, the one he valued most was a writing table from the municipal staff. Even the street cleaners subscribed to it.

Mr. O'Toole was secretary and president of the Seddon branch of the Australian Labour Party, treasurer of the Footscray Football Club, and a patron of numerous sporting clubs.



This photograph of Canterbury was taken about 1891. The station was opened for traffic on December 1, 1882.
Photograph: Stationmaster D. M. Greer, Canterbury.

Tennis Form

GOOD early season form indicates the strength of the V.R.I. Tennis Association's team for the interstate carnival in Adelaide in March and April. At present, Northern Lines, led by Keith Williams, are leading in the A grade section. A feature of this year's competition is the good showing by the young Spotswood Workshops B grade team. Although composed mainly of inexperienced players, the team is doing very well against more seasoned opponents. The V.R.I.T.A. Committee has made arrangements for a screening of the 1953 Davis Cup film on Thursday night, February 18. The Tennis Association will be featured in a radio Sports Parade on Friday, March 19. Tickets for the film night and the sports parade will soon be available from the secretary, Mr. H. W. Jones, General Storehouse, Spotswood (Auto. 1151).

As there are so many first class railway tennis players in country districts it is hoped to have at least some of them included in the team to represent Victoria in the interstate carnival. Applications for team selection close with Mr. Jones on February 6. Players will be required to meet such personal expenses as hotel accommodation and make a contribution of £3.3.0 towards the cost of entertainments.

New V.R.I. Centre

RAILWAYMEN, who have been stationed at Traralgon, will remember the departmental portable buildings used for so many years as a V.R.I. centre there. Enthusiasm and enterprise have now overcome problems, and a new building worthy of the institute is being erected. It is of brick and will cost about £14,000. Of this amount, about £4,000 has already been subscribed by institute members. It is hoped also to lay down a bowling green soon. On present plans, the new building will be ready for occupancy before the Queen and the Duke of Edinburgh visit Traralgon.

Flinders-st. Cricket Leaders

FOR the first time for several years the cricket competition for the Commissioners' Cup has not been interrupted by wet weather, and good wickets have yielded some high scoring. Although pitches have favoured batsmen, some very good individual bowling feats have been registered. With the ranks of railway cricketers reinforced by some first class senior and junior players, it is not surprising that the standard has been particularly high this season. In the V.R.I. competition there are such players as Neil Turl, of Newport Workshops, who is one of the mainstays of the Fitzroy first eleven. Neil is used as a bowler by Newport, as well as opening batsman, and he has developed quite a lot of skill with the ball. Recently he took the hat trick in the first day's play against Melbourne Yard. Other railway cricketers of note are Bruce Murray, Prahran first eleven, Ron Jenkins, of Williamstown's first eleven, Bob Durant, North Melbourne seconds, Dale Anderson, Melbourne seconds, and Keith Carmody of Hawthorn-East Melbourne seconds. When this was written Flinders-st. were the undefeated leaders in the V.R.I. competition with nine points. Then followed North Loco, 6 pts. and Newport 'shops, three points. Northern Lines and Melbourne Yard have not yet opened their account. February's fixtures are 2-9 : Newport 'Shops v Loco, Flinders-st. v Northern Lines. 16-23 : Northern Lines v Newport 'Shops, Yard v Flinders-st.

V.R.I. Carnival Bowls Team

THE tenth interstate Railways Institutes' bowling carnival will be held at Launceston, Tasmania, from February 25 to March 10. Teams from Queensland, New South Wales, South Australia, Western Australia, Tasmania, Commonwealth Railways and New Zealand will compete. The Victorian team is as follows : the Comptroller of Accounts, Mr. L. J. Williamson, president of the V.R.I. Bowling Club ; Messrs. C. Allen, clerk, Way and Works Branch ; R. Anderson, investigation officer, Commercial Branch ; M. T. Berry, guard ; A. Cowling, clerk, Way and Works Branch ; J. Emmerson, goods checker ; R. E. Fuller, engineer, Signal and Telegraph Division ; O. Hauser, fitter and turner, Rolling Stock Branch, J. Hewitt, clerk, Traffic Branch ; T. Jenkins, driver ; W. B. Johnson, assistant stationmaster ; H. Jolliffe, sub-foreman ; F. S. Kent, Rolling Stock Branch ; L. Lehman, fitter ; G. McGillivray, depot sub-foreman ; A. G. Polson, boilermaker ; F. T. Snell, iron machinist ; H. Watts, bonding foreman ; J. Williams, foreman ; E. C. Woolcock, fitter ; W. K. Jarvie, foreman, Signal and Telegraph Division.

Social Bowls

THE annual report of the V.R.I. Social Bowling Club discloses an excellent past season from every point of view. Membership increased and the credit balance exceeded £350. A comprehensive programme was arranged for metropolitan members and country visitors. In all 16 matches were played. Six of these were Sunday afternoon fixtures at the Albert Park V.R.I., Black Rock, and Melbourne (Windsor) clubs. Electric light matches were arranged at the Brighton, Elsternwick, Heidelberg, Kew, Middle Park, Northcote, Richmond Union, St. Kilda and Toorak Bowling Clubs. The club was always represented by a minimum of six rinks and, on more than one occasion, seven, eight and, even nine, rinks turned out. The fixture at Richmond Union was played during Country Bowls Week, and the V.R.I. representation was confined entirely to country players.

New Bowls Club

MANY railwaymen in the South Oakleigh district have joined the new local bowling club and have been very active in working bees formed to get the club firmly established. One of the most enthusiastic of the railway bowlers is Booking Clerk Jim Nead.

Women Athletes Do Well

THE V.R.I. Amateur Athletic Women's Club is having a good season. The A1 and 2 teams are in first and second places, respectively, in the inter-club competitions, and the other grade teams are doing well. It is a tribute to the club that so many of its athletes were selected for the last month's trials to select a team to represent Victoria at the interstate carnival in Perth at the end of this month. The Victorians will leave by train on February 19. The following V.R.I. representatives took part in the trials : Bernice Kewming, Marlene Smith, Maureen Murnane and Joy Lawrence, 100 and 220 yds.; Marlene Middlemiss and Pat Johnson, 80 metres hurdles ; Marlene Middlemiss, high jump and long jump ; Loraine Murphy and Judith De Lacy, javelin and shot put ; and Loraine Murphy, discus.

Blue Belt Judoist

BEFORE he took up Judo (modern version of Ju-Jitsu), Stuart Mahoney, Stores Branch clerk, was a boxer and wrestler. He fought as a middle-weight with the V.R.I. boxing team that visited Adelaide in 1939, and, in 1947, was runner-up in the light heavy-weight section at the Victorian wrestling championships. Stuart was introduced to Judo at the V.R.I., where he received his first instruction from Aub Bailey in what has been described by the Japanese as "the art of defence and attack without the use of a lethal weapon." Judo exponents qualify for the white, yellow, orange, green, blue, brown and black belts, and Stuart now holds the blue belt. This means that he has become proficient in leg, hip, shoulder, hand and sacrifice throws, arm locks, strangles and immobilization holds. In Victoria there are 14 Judo clubs, including two for women.

Wholly set up and printed at the Victorian Railways Printing Works, Laurens-st., North Melbourne, for the Publishers, The Victorian Railways Commissioners. 3297—53

VR News Letter

MARCH 1954

THE MONTH'S REVIEW

The Royal Way

WITH the Royal Tour of Victoria now in progress, it is, perhaps, appropriate to recall the Queen's liking for rail travel which was given so much prominence during her Canadian visit with the Duke of Edinburgh. According to British railway sources, the Queen derives her predilection for the railway from her illustrious ancestor, Queen Victoria. On June 13, 1842, there happened something very important in the history of railways. Queen Victoria, accompanied by Prince Albert, made her first railway journey between Windsor and London. It was made in 25 minutes and the Queen expressed herself as being "quite charmed" at the privacy and lack of dust. Some of the newspapers published florid and enthusiastic accounts, but others were sternly critical, and a question was asked in the House of Commons about the Royal Person being "exposed to such risk." The Queen's tacit retort was to use the Great Western for her return ten days later, this time taking the infant Heir Apparent with her. These were the first of the Queen's many hundreds of train journeys.

Transport Institute's Loyal Address

IT is, doubtless, of interest to Victorian members, associates and students of the Institute of Transport that the parent body, in London, presented a loyal address to the Queen, during the Coronation "season," as it has been called. The address, which was prepared by Waterlow's in their traditionally tasteful and dignified style, was hand drawn and illuminated in red, blue and gold on manuscript vellum. A gold paper seal and white silk tie ribbon completed the document. It conveyed to Her Majesty the loyalty and devotion of members of the Institute and recalled that the latter was founded in 1919 for "promoting knowledge of the science and art of transport in all its branches. Its growth and the spread of its membership throughout the Commonwealth and Empire have, it is believed, made a valuable contribution to the progress of transport by land, sea, and air, and to the establishment of closer understanding and friendship among Her Majesty's peoples. Members of the Institute are profoundly grateful that their humble efforts have earned Her Majesty's encouragement and patronage." The thanks of the Queen have been conveyed to the president of the Institute, the Rt. Hon. Sir David Maxwell Fyfe, Q.C., M.P., Secretary of State for the Home Department.

Wheat Traffic Dieselized

THIS season's wheat traffic was largely dieselized. Operating in single and multiple units, the Department's fleet of diesel-electric locomotives speeded up the big seasonal wheat lift and, at the time of writing, the planned movement of 20,487,000 bushels of wheat was ahead of schedule.

In the first six weeks of the season 23,205 truck loads (17,403,000 bushels) were moved from the producing areas. Although the season was later this year and loading was slowed down to the discharge rate of trucks (owing to tardier buying for export) the movement of wheat was a million bushels greater than for the corresponding six weeks of last year when the truck load figure was 21,767 (16,332,000 bushels).

Diesel-electric locomotives were used to transport all bulk wheat from Korong Vale and Donald to Dunolly and from Bendigo and Seymour to Melbourne and Geelong. Diesels, as well as steam locomotives, also brought large quantities of bulk wheat from the north-west to the big storage centre at Dunolly.

Initially, diesel main-liners were used as single units to haul 900-ton loads of bulk wheat on each of four trips daily; and, incidentally, a 900-ton load hauled between Korong Vale and Dunolly was the largest tonnage every handled by a single locomotive on this part of the system.

As "Operation Wheat" gathered momentum, diesels running in pairs were swung into the traffic, and on each of four trips daily, they brought into Dunolly 59 trucks of wheat weighing 1800 tons. Between Donald and Dunolly multiple operated diesel main-liners hauled 1,500-ton loads on each of three trips daily.

R Class Locomotive Shows Its Mettle

COMPREHENSIVE tests were recently made by the Locomotive Section of the Rolling Stock Drawing Office staff on an R class locomotive to find out whether the Department's principal coal burning unit is as efficient as human ingenuity can make it. First, modifications were made to the grate and blast pipe for standing tests to determine whether it could use less fuel; but these yielded no benefit. It was then decided to carry out running tests with the locomotive as originally designed, and compare results with those from a typical coal burning locomotive of known efficiency; actually A2 888. Test runs were made both ways between Melbourne and Seymour. The same made-up train was used and all running conditions were kept as uniform as possible for the two locomotives. Results clearly showed that, while actually working, the R class locomotive, despite its 12½ per cent greater weight, used practically the same amount of coal as an A2, but developed more work units. Including lighting up, the R class locomotive used slightly more coal, probably because of its larger grate area and the greater amount of water to be heated up in the boiler. Running times however, were much less for the R. It was found that it could haul the train to Seymour without stopping, whereas the A2 had to pull up for fire cleaning and taking water. The advantage of the R lies in its non-stop running and in its capacity to haul many types of trains on time with an inferior grade of coal. This, an A2 cannot do. R class locomotives are, therefore, giving better performances as power units.

Change, but little Decay

WHEN a car builder was renovating one of the old swing-door type suburban cars at Jolimont recently, he found attached to a seat spring, a label in a good state of preservation and legibility. It had been addressed by H. P. Gregory and Company, importers of wood working and general machinery and engineers' supplies, Bourke-st., to the Sandhurst Rolling Stock Company, of Sandhurst. Gregory's had apparently supplied the springs for car seats made by the Sandhurst firm. Railway historian Leo Harrigan later unearthed some interesting facts about the railway life of the car. Known today as 82T, it was built by P. Ellis, of the Sandhurst Rolling Stock Company, and went into running on April 4, 1890. It is, therefore, nearly 64 years old. In 1910 it was lengthened from 45 to 57 ft. 3 in., and changed to second class as 96B. When the suburban system was electrified, it became 56T and, in 1924, when the make-up of electric trains was standardized, it was restored to first class as 82T.

A Grand Old Man of the Mountain

CHRISTMAS 1904 saw a small party of men and women toiling up the rough bullock track from Porepunkah to the Buffalo Plateau. Mr. Edward Carlile, of Wandiligong, had visited the plateau and blazed the trail, and the members of the Field Naturalists' Club of Victoria, with Mr. J. Mansfield as their guide, wondered what surprises nature had for them on the forbidding heights of the mountain top. Among the party were young Mr. and Mrs. G. Coghill.

When Christmas Day 1953 dawned Mr. Coghill was again there. For nearly 50 years Mr. Coghill has been a constant visitor to Mt. Buffalo and his enthusiasm has

ROYALTY GRACES THE FOOTPLATE : With obvious interest, the Duke of Edinburgh watches the Queen handling the controls of the steam locomotive that hauled the Royal Train on their last tour of Canada. *Photograph: Herald Feature Service*

remained undimmed. One of his reasons is that Christmas time is still springtime at Buffalo, and the late spring induced by the high altitude means later blooming of wildflowers there than on the plains below. A member of the Field Naturalists' Club of Victoria for 70 years, he has held all its offices and still retains his association with it. In his opinion, as a botanist, the green flowered mint bush (Prostanthera Walterii) which flowers at Christmas time is unique to the area. Other favorites are the yellow kunzia and scarlet kunzia which also bear flower at Christmas. He is enthusiastic about the masses of blooms which greeted him on his visit last year. Despite his 83 years he is still a keen walker, and his rambles to Reed's Lookout and Mansfield Lookout help to keep him fit for his daily walk to and from business in the city.

Art In Industry

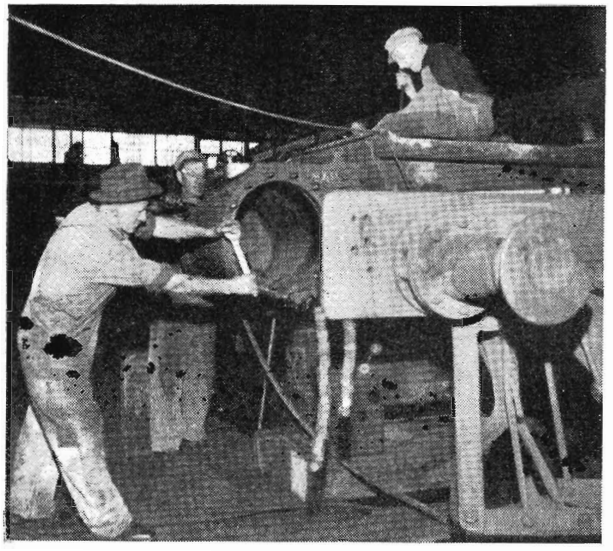
TODAY, more than ever, industry demands the services of the artist, particularly in the field of publicity. Pamphlets and posters convey their message so much more effectively when the skilled brush and trained sensitivity of the artist have shaped their content and brightened their appeal. Most Departmental publications, whether they inform on trains or tourism, or both, are produced with the help of a competent and carefully chosen group of artists who specialize in various forms of expression, traditional and (since even a railway must keep abreast of the times in its art as well as its mechanics) modern. It is of interest that one of them, Geoffrey Barwell, a young up-and-coming modernist, has just gained his diploma of art, at the Melbourne Technical College, for the design of the new Mt. Buffalo folder now in circulation. We congratulate him on his success and ourselves on our choice.

Sartorial Elegance

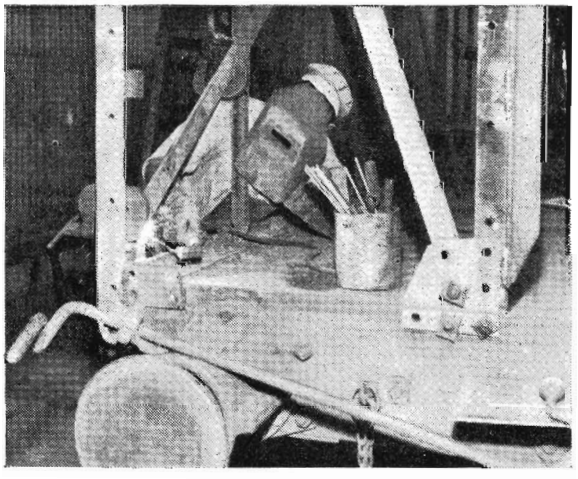
MOST little boys dislike the barber's high chair and the cold, creepy feel of clippers and scissors. Robert, the small son of Mr. John Sartori, the Cobden butter factory company's secretary, is no exception in his allergies. Nevertheless, his resourceful mother has found a way round the difficulty, so that his hair is tidied up without tears. Robert's passion is trains, and so, on the maturing date of the haircut, he is taken to the station to see the local goods train shunting. Robert sits on the platform wholly intent on the proceedings and wholly oblivious to any fiddling with his hair that may be going on at the deft hands and scissors of his mother. The train crew have adopted Robert as their mascot. A triumphant wave of the cloth, that is untucked from Robert's collar, signals the crew that operation haircut is over, and all go their ways in peace.

OUR FRONT COVER

shows the manager of the North Melbourne Workshops (Mr. E. Stephenson), supervising the attachment of the Royal coat of arms to the front of B60, *Harold W. Clapp.*



At work on locomotives: (left) Fitter N. Geddes and Fitter's Assistants C. Finlay and A. Speedy overhaul D3 619, and (right) Fitter's Assistant W. Mitchell bores out a D3 cylinder.



Welder R. Thomas rebuilds a louvre truck after heavy repairs have been carried out.

Truck axle box brasses are metalled by Metaller W. A. Beard.

BENDIGO NORTH WORKSHOPS

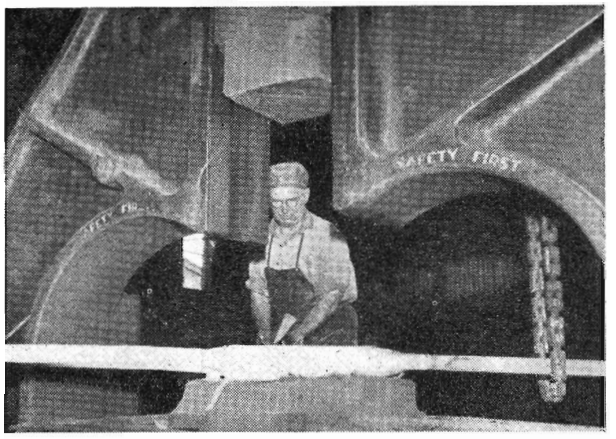
DECEPTIVELY small at first sight, Bendigo North Workshops grow much bigger on closer acquaintance. For here are nearly 500 men, mainly skilled craftsmen in the steel or wood-working trades, engaged on all manner of jobs from repairing carriage cushions to overhauling locomotives and building boilers, under the direction of Mr M. W. Noonan, the Workshops Manager.

Bendigo North Workshops were opened in 1917 with a planned staff of 200, and, in 1919, locomotive construction was begun there. Eight DD's and five A2's were built. Later, numerous trucks were produced. But it became increasingly evident that the production of small numbers of complete units at several workshops within the Department was not an economic proposition, and the policy was adopted of specializing at country workshops on the manufacture of components for maintenance and construction, as well as overhauling and repairing locomotives, cars and trucks. This policy of manufacturing components in various factories was extensively adopted in many industries during the war to get greater and more economical production. It is probably best exemplified in the manufacture of aeroplanes and motor cars.

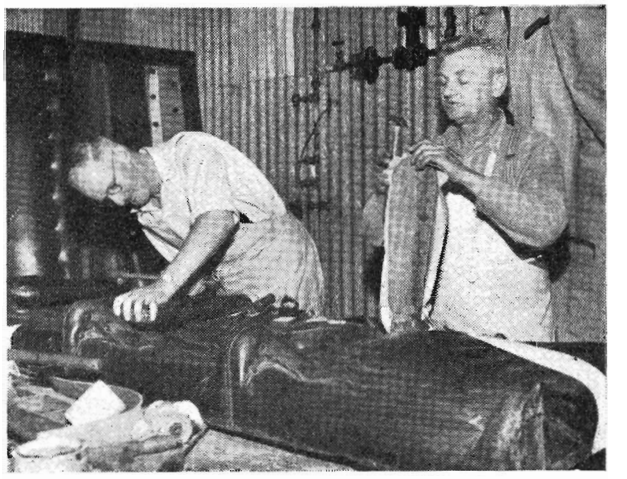
Today, Bendigo North Workshops make a wide variety of components for rolling stock. Of some items, such as machined piston valve liners and cylinder release cocks, the workshops make the whole of the Department's requirements. New boilers for D and K class locomotives are also manufactured there.

Locomotives are overhauled and major repairs, beyond the capacity of the locomotive depot, are done. Old locomotives are broken up and any usable parts salvaged.

When a locomotive is overhauled, it is lifted from its wheels and stripped right down to the main frame. The various parts, as they are taken off, are given a caustic bath and thoroughly examined for possible defects. All parts, including the boiler, are reconditioned or replaced, and the



Blacksmith J. Dunstan works on forgings to be made into spring beams for car bogies.



Car seats are repaired by Upholsterers J. Ware and C. Stevenson.

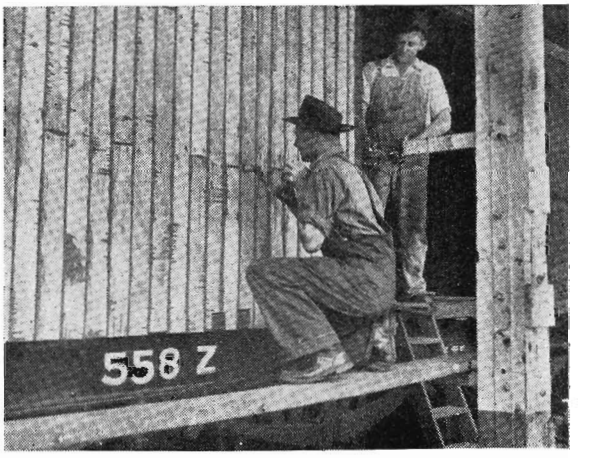
locomotive is rebuilt and tested. Usually, the overhaul takes 5 or 6 weeks.

Recently the workshops have been engaged on a big program of repairs to louvre trucks and Z vans. This entails stripping down, rebuilding where necessary, and repainting the vehicles. The trucks are turned out again at a rate of ten a month. Heavy Z van repairs total about 50 a year. Another 50 vans requiring lighter repairs are also handled. Workmen's sleeping cars are repaired, repainted and fitted with stoves at these workshops.

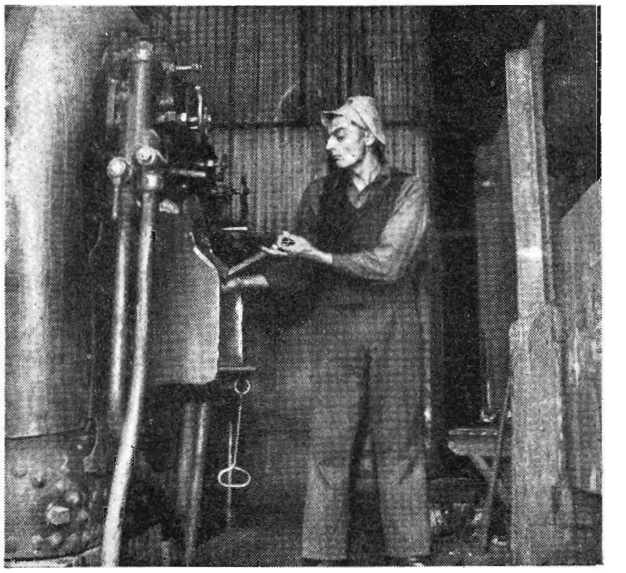
Country carriages for overhaul have all their fittings removed, all external wood work cleaned off and revarnished, upholstery repaired, roofs re-canvassed and exteriors repainted. Twenty-six cars were handled in this manner during 1953, and it is planned to overhaul substantially more during 1954.

These are the more spectacular jobs, but, everywhere throughout the 'shops, there is activity on some aspect of railway work essential to keep rolling stock rolling.

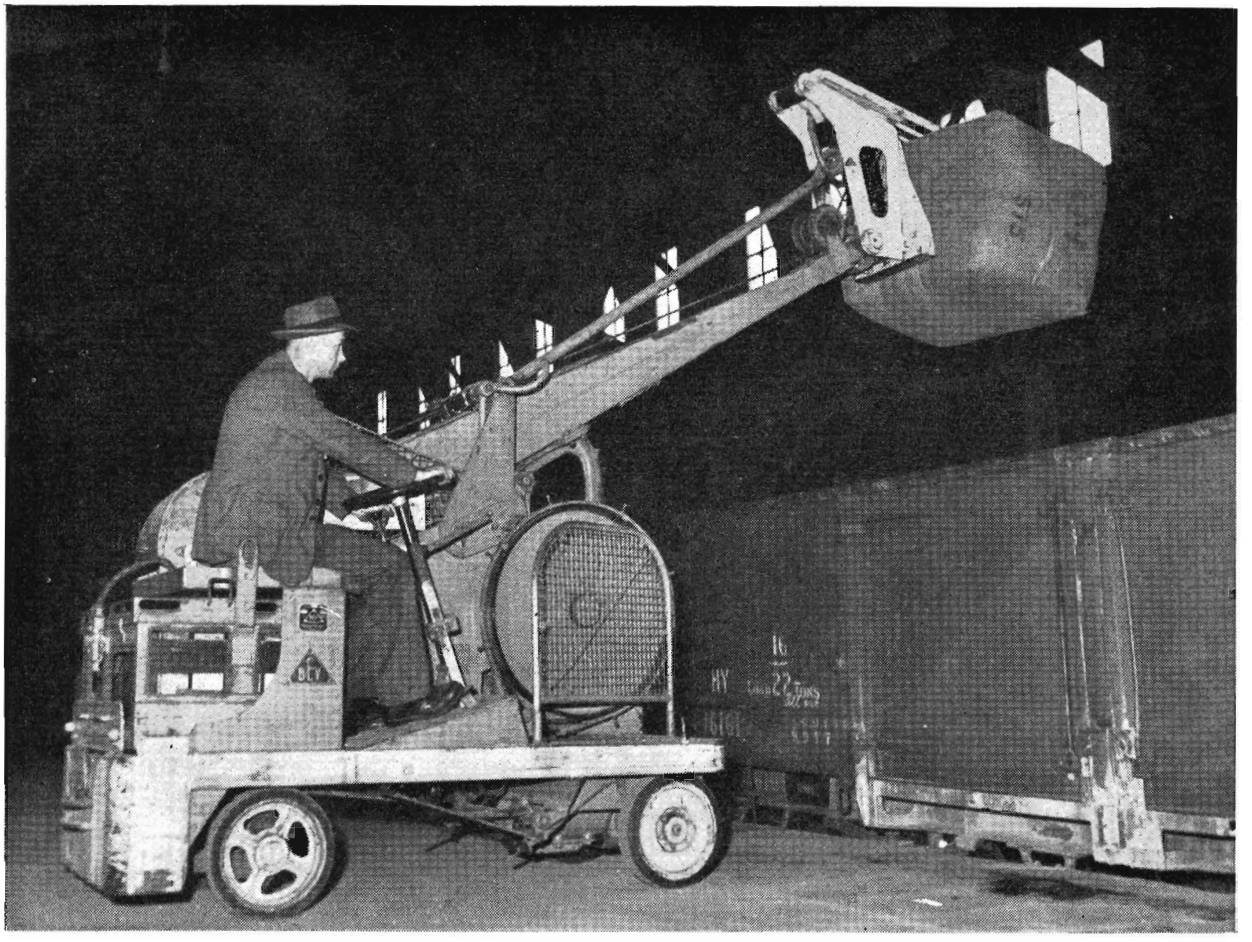
The good work done at the workshops is largely due to three main factors : first, a strong local patriotism that is reflected in the remarkably small labour turn-over (some employees have been there since the workshops started) ; second, the inventive skill of past and present staff who have evolved an amazing number of gadgets for use in various sections of the 'shops ; third, the calibre of the men who have managed the workshops over the past 36 years.



Car Builders R. Mitchell and W. Carroll overhaul a Z van.



Apprentice Boilermaker R. P. Rasmussen and Boilermaker's Help L .Mahony assemble louvres prior to refitting to frame of louvre truck. At right, Stoker A. J. Purden stokes the stationary boiler which supplies steam to the workshops.



Bale-stacking truck makes wool loading easy.

MECHANIZATION

As freight trains hauled by fast diesel-electric and steam locomotives, such as the R class, are progressively speeded up, so are modern methods adopted for the handling of the increasing volume of goods sent by rail.

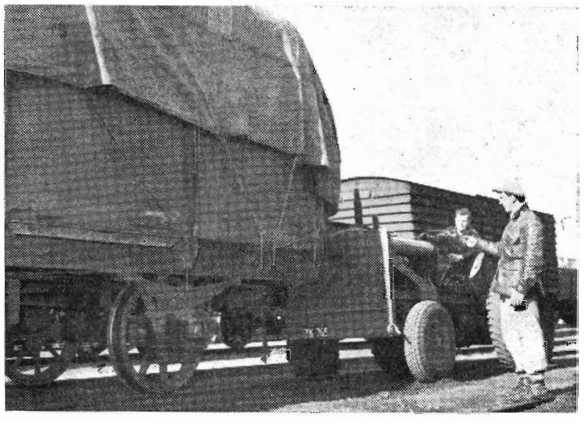
A TREND in railway operation today is the greater mechanization of goods handling. A Mechanical Handling Committee has been appointed to determine where modern equipment should be installed to produce quicker and more efficient Victorian railway service.

Much has been done at the Melbourne Goods Depot since the old tower crane was the medium for handling heavy consignments. This was a fixed crane on a brick base, with a heavy hoisting chain. It required four men to work the handles. Consignments above this crane's capacity had to be diverted to South Wharf to be dealt with by the Harbour Trust's crane.

One of the first steps to improve goods handling was to fit the Department's jib cranes with electric motors. Then followed the purchase of two 15-ton, electrically operated gantry cranes and the installation at the Montague Shipping Shed of an overhead transporter type of crane for heavy loading lifts.

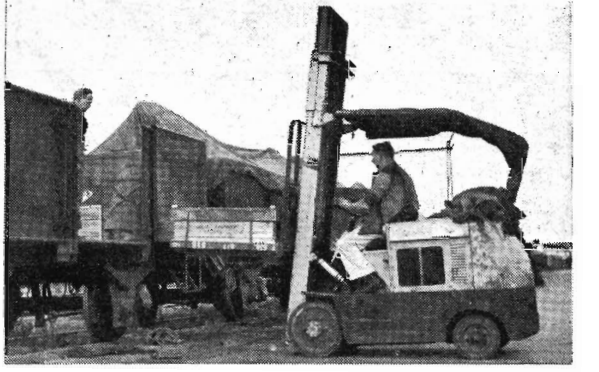
No mechanically operated goods handling units did more to speed up work than the portable motor crane. The "busy bee" of the goods yards, the motor took the crane to the goods. Heavy consignments can now be loaded or discharged at all sidings without having to be specially placed in the crane roads. The result was, and is, a quicker release of inwards trucks and better methods of loading and stowing outwards trucks.

Other notable purchases have included a 30-ton gantry crane for Kirwan's Siding, two 8½-ton gantry cranes for Dynon Siding and one 15-ton gantry for Graham Goods Siding.



Tractors are used for shunting in goods yards.

Tractor hauling a trailer load of goods.



Fork-lift truck speeds up goods loading.

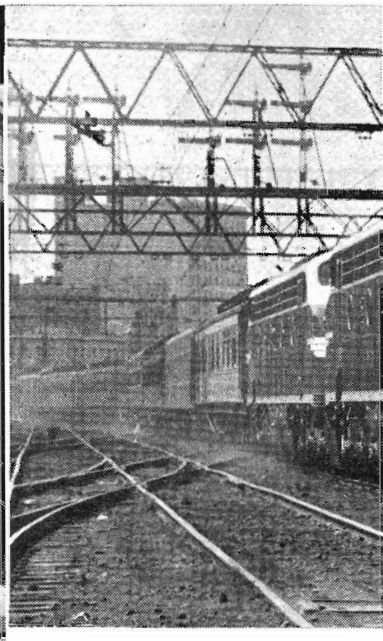
Another efficient unit is the wool bale loader which has proved invaluable in speeding up the handling of wool in the Melbourne sheds.

Shunting in the Melbourne Goods area and at Port Melbourne and Victoria Dock was once done by horses. This was fairly satisfactory when mainly 10-ton railway trucks had to be handled, but when large trucks came into general use the work became too heavy for horses. The " horse shunter " on the piers was the first to go. It was replaced by solid rubber-tyred tractors. Subsequently pneumatic-tyred tractors took the place of horses. Shunting was thus speeded up, and pilot engines were released for other important yard work.

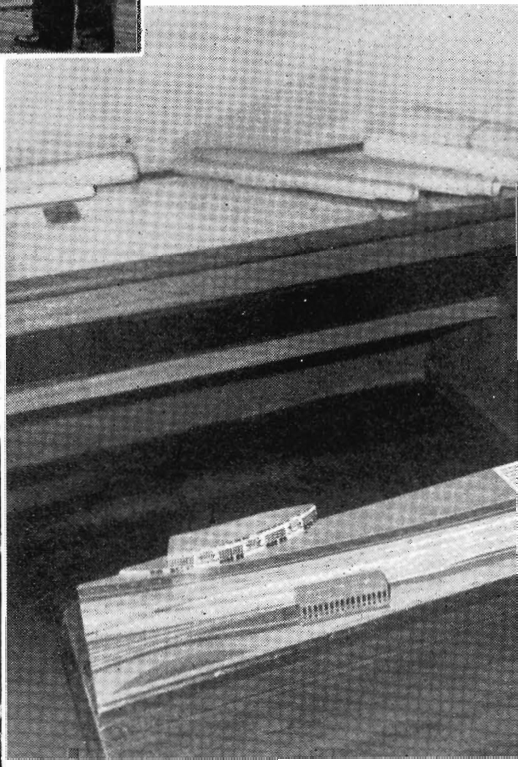
Petrol-electric mobile crane unloading car bodies.

AROUND THE SYSTEM

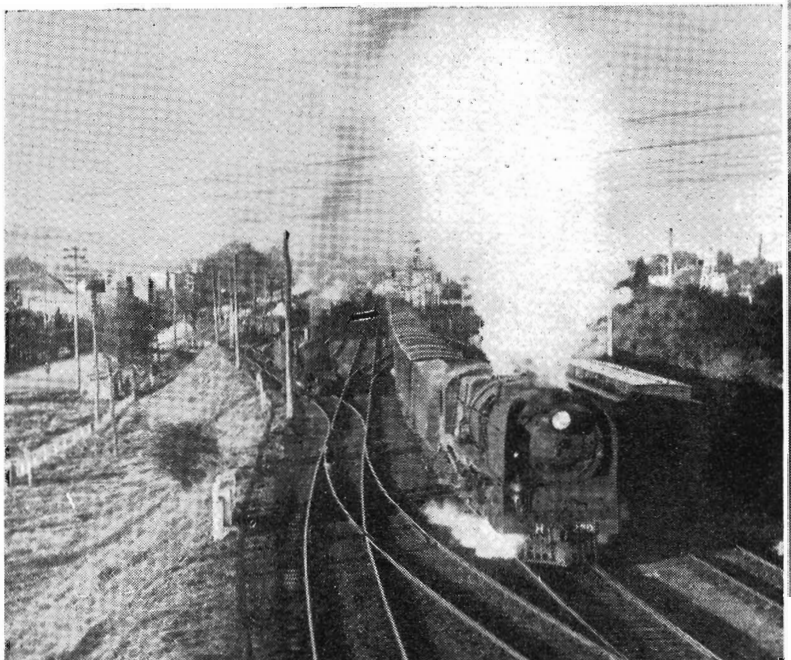
ROYAL TOUR DECORATIONS: Erecting one of the four 11-foot diameter medallions that form part of the Flinders-st. station decorations. To affix the medallions a recently developed gun was used that fires a specially shaped nail through the wooden batten into the masonry.



REHEARSAL FOR ROYAL TOUR: of the Royal train, leaving Spencer Royal train.

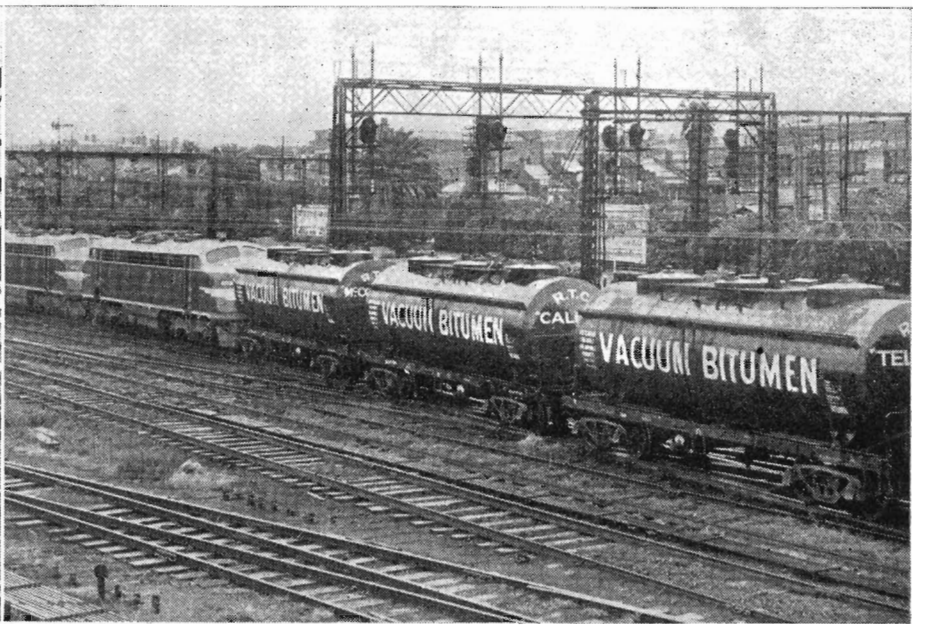


SUBURBAN PLAN: Part of a scale model of the p overs between Richmond and Flinders-st., which w Richmond platforms that it is planned to build are M.C.G. stands and the Jolimont sub-station.



STOCK TRAIN (*left*): H220 leaving Seymour hauli

ecial train, with a similar load to that traversed the complete route of the



HOT TRAFFIC: Fast goods leaving Melbourne Yard for Adelaide with three of the Vacuum Oil Company's insulated tank cars for the carriage of hot bitumen. Preheated at Altona to about 400°F., the bitumen arrives in Adelaide, 23 hours later, hot and ready for immediate use. The tank cars have been named after famous road builders: *McCormick, Calder, Telford, Macadam, R. M. Smith* and *Callaway*.

rearrangement of tracks and the system of fly- eded for increasing suburban traffic. The new xtreme right: at the other end are part of the

stock special No. 44 with 51 trucks of cattle.

MODERN "OVERLANDING": Race horses for the Adelaide Cup meeting being loaded at Spencer-st. into *The Overland*. This is the first time since the war that race-horses have travelled to Adelaide by the express.

PLAN FOR MELBOURNE'S TRAFFIC

All sections of the community are agreed on the necessity for a Melbourne underground railway, but its enormous cost and the labour problem will defer a start on it for at least six years. Meanwhile, what can be done to meet the intensifying problems of traffic congestion, especially at peaks, as Melbourne grows?

The answer is supplied by a railway short-term plan for the years immediately ahead. Here is a summary of the plan, based on evidence recently given by the Chairman of Commissioners, Mr. Wishart, before the State Public Works Committee.

THE most serious problem arises in catering for the heavy peak traffic to and from the outer suburban areas served by the Box Hill and Caulfield groups of lines. Apart from the lack of suburban rolling stock, it is not possible, with existing facilities on those lines and at Flinders-st., to run sufficient trains at peak periods, sufficient long-distance expresses, or to maintain satisfactory time-keeping. The most pressing need is increased track capacity between Jolimont Junction and Burnley, Jolimont Junction and South Yarra, and on some of the outer sections of line.

To improve the situation progressively, the following major works are planned for the years immediately ahead—

(1) Completion of the duplication of the Caulfield line from the "up" side of South Yarra towards Melbourne, including extensive rearrangement of the existing Richmond station and the provision of flyovers between Richmond and Flinders-st.

(2) Completion of the duplication of the Camberwell-Ashburton line.

(3) Duplication of the Heyington–Eastmalvern line.

(4) Provision of two additional tracks between Richmond and Burnley with grade separation at Green-st. and Burnley-st. and one extra track signalled for two-way operation between Burnley and Camberwell. These works will also necessitate rearrangement of tracks between Richmond and Flinders-st., including flyovers in connexion with the proposed underground railway.

(5) Power signalling between Glenhuntly and Mordialloc and equipment of Moorabbin as a terminal station.

(6) Additional and improved crossing facilities between—

  (a) Ringwood and Ferntree Gully;
  (b) Ringwood and Croydon;
  (c) Heidelberg and Eltham;
  (d) Eastmalvern and Glen Waverley.

(7) A third track signalled for two-way operation between Caulfield and Moorabbin, including grade separation at certain crossings.

BUT for the war, when the full resources of the Department were concentrated on military effort, and the staff and material shortages of the early post-war years, some of these works would doubtless have been completed before this. It is now unquestionable that all of them must be carried out as expeditiously as funds and manpower will permit.

Early construction of an underground city railway would relieve the congested conditions at Flinders-st. but it would not contribute anything towards relieving the serious traffic difficulties on the two important groups of lines mentioned earlier. The works proposed for that purpose are being designed in such a way as to conform with plans for an underground railway and other expansions on suburban lines.

Concurrently with the progress of the works outlined, more electric trains and the additional power required to run them must be provided. Contracts have been let for 30 new suburban trains, and, later consideration will be given to the best means of getting still more suburban electric rolling stock. Additional power has been ensured for the appropriate time.

In the light of difficulties in handling suburban passenger traffic at Flinders-st. both now and increasingly as Melbourne develops, there is no doubt that an underground city railway will ultimately be essential. It is estimated that, by 1965, Melbourne's population will have grown to $1\frac{3}{4}$ million, with an increase in city workers of 43,000. By 1980 it will have reached 2 million, and city workers will have increased by approximately 73,000.

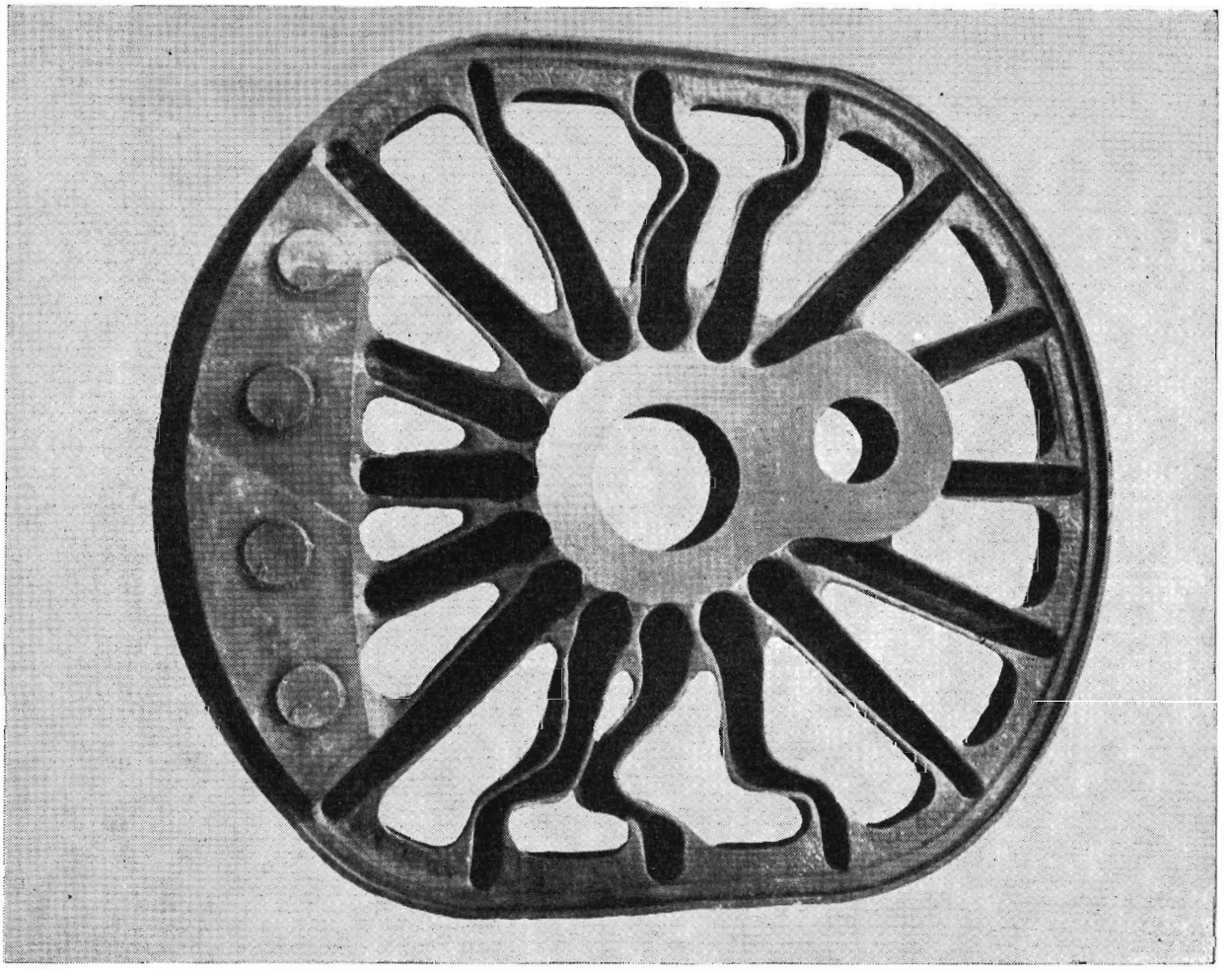
MOST of Melbourne's population growth is taking place in the outer suburbs, beyond the radius of the tramway system and it is very desirable that long-distance passengers who work in the city should be given the quickest possible transit, and not be obliged to change from one form of transport to another on the way. An underground railway would enable the majority of city workers and others dwelling in outer suburban areas to be carried direct to and from the heart of the business and shopping area and their home stations.

But, to afford some relief at Flinders-st. station before an underground railway is built, it is proposed to construct a flyover between Richmond and Flinders-st. to enable more Frankston line trains to use Nos. 10 and 11 East platforms and also facilitate the operation of increasing brown coal and briquette traffic from the Latrobe Valley through Flinders-st. without interference with suburban passenger traffic.

From a railway point of view, extensive rearrangement of platforms and tracks at Flinders-st. would meet the position for some years, although in a much less satisfactory manner, but apart from its heavy cost it would undoubtedly lead to an impossibly congested condition, in peak periods, on the approaches to the station.

IN addition to the works proposed, railway plans include extensive improvements to country passenger and goods facilities, such as completion of the regrading, duplication and electrification of the Gippsland line; relaying and reconditioning country lines; rearrangement of the Melbourne goods terminal, and provision of a large amount of new rolling stock, including a substantial number of modern air-conditioned carriages for country traffic.

The expenditure involved in carrying out the major works referred to, apart from a city underground railway, is of the order of £60 million, and, with the likelihood of a limited allotment of loan money, and the problem of getting sufficient engineering and construction staff, it is most doubtful whether a start can be made on the proposed underground railway before 1960.



A locomotive coupled wheel of the new SCOA-P design, showing the distortion of spokes and rim after severe drop testing.

NEW WHEEL DESIGN

ONE may be excused for assuming that the above photograph is that of the coupled wheel of a locomotive after a serious mishap. But, this is not strictly so. It is a museum exhibit of a SCOA-P locomotive wheel made by K. and L. Steel Founders and Engineers Ltd., of Letchworth, England. It has been tested to destruction by dropping 25 times on a solid surface from heights of four to 22 feet. The mishap was therefore synthetic. A spoked wheel of conventional design, but of otherwise similar dimensions, was only able to withstand little more than half this gruelling test before failure through disintegration.

This new design of wheel centre was developed in the Locomotive Section of the Rolling Stock Drawing Office, Victorian Railways, in conjunction with Mr. F. G. Paynter, of the Steel Company of Australia Pty. Ltd. Hence the name, SCOA-P. It was first introduced on the V.R.'s R class locomotive. It has also been adopted for the 60 J class locomotives now being manufactured for the Department by Vulcan Foundry, at Newton-le-Willows, Lancashire. The design possesses quite a number of important advantages. Although lighter in weight, tests have proved that the wheel has a much greater lateral strength compared with the conventional spoked type. The heavy cross section of the usual shape of spoke, meeting the solid section at the base, gives rise to segregation of the metal and weakening of the casting, which results, at times, in failure in service, especially in wheels of the larger diameter. These disabilities are eliminated in the SCOA-P wheel, which has a thin walled V-shaped section for the spoke and a channel section for the rim, both having bulbed edges. The shapes of spoke and rim facilitate moulding also, and a clean, sound casting results. Wheels of this design yield and bend, but they do not break.

World patents for the SCOA-P wheel are held by the Steel Company of Australia Pty. Ltd., and the company has already granted manufacturing licences to organizations in Queensland, the United Kingdom, Belgium, Italy and West Germany. Applications for licenses from manufacturers in Spain, Norway, Sweden and Denmark are at present being considered. SCOA-P wheel centres have been delivered, or are on order, for 550 locomotives, involving the supply of more than 6,000 wheels. They have been applied to steam, diesel-electric, and electric locomotives.

AMONG OURSELVES.

Mr. Wearne arranging a display of dahlias at Bendigo station for the Bendigo Centenary Celebrations. All the dahlias were grown by local railwaymen.

Bendigo Horticulturist

SPECIALIZING in carnations and daphne, Acting Leading Porter E. Wearne, of Bendigo, finds that horticulture is not just a bed of roses. Two years ago he had 4,000 carnation plants, but heavy rain killed them off. He is now building up his collection again.

He has 90 daphne plants in his garden from which he takes cuttings to propagate new plants. Last December, he put down about 5,000 cuttings. Mr. Wearne spent 11 years on daphne propagation before getting the right method, but even now he still loses a few cuttings.

As a regular exhibitor at the Bendigo Flower Show, he has carried off many prizes for carnations and dahlias.

Some years ago, he served as secretary of the Bendigo Horticultural Society for a term of 18 months, but had to relinquish office because of shift work. Now he spends his off-duty time in the garden, assisted by his wife who is very keen also.

£364 for Lord Mayor's Fund

IN a letter to the Secretary, The Right Honourable The Lord Mayor of Melbourne, Councillor R. H. Solly, has expressed his thanks for the donation of £364.2.5 made by the staff of the Department in response to the 1953 appeal by the Lord Mayor's Fund for Metropolitan Hospitals and Charities.

New Apprentices

AN excellent response was made to the Department's recent campaign for apprentices. For the 162 vacancies advertised there were 677 applications, almost equally divided into city and country lads.

At the Institute concert hall the successful lads were welcomed to the service by the Acting Chairman of the Staff Board (Mr. P. Farnan) who told them they were joining the State's largest industry in which they would get both a thorough trade instruction and excellent opportunities for advancement. The Chairman of the Board of Selectors (Mr. O. Keating) told the youths that they would always find the door open for discussion of their problems. The lads are well up to the high standard of V.R. apprentices.

From Sheep Station

Typical of the new apprentices is Frank Hanrahan, a 17-year old lad from Ballarat, who has started as an apprentice electrical mechanic at Jolimont Workshops. He spent the first 13 years of his life on a sheep station at Skipton. Although he had missed schooling (through closing of the local school) and had to take a correspondence course for two years, he finished second in the merit certificate class at Humffray-st. school, Ballarat. Interested in art (he won a part time scholarship at his school), he paints in both oil and water colour. He is also an amateur radio technician and has built a number of short-wave sets. His acquired knowledge should prove useful in his new job.

Railwaymen Top I.O.T. First Year Course

RAILWAYMEN did particularly well in the first year of the certificate course in Transport Administration conducted by the British Institute of Transport (Victorian Division) at the Melbourne Technical College. The subjects comprised Elements of Transport, English and Mathematics. Nineteen students, including nine railwaymen, obtained passes in all three subjects. Mr. Eric Quinlan, Stores Branch clerk, Newport Workshops, was awarded first prize of the year, a £5 cash award and a certificate. Mr. P. T. Donohue, Claims Division clerk, filled second place. Other successful railway candidates were Messrs. D. G. Allen, D. P. Kellond, F. M. Mitchell (Claims Division), S. C. Joy, M. J. Sypott (Traffic Branch), I. G. Jelfs (Way and Works Branch) and A. W. Weeks (Commercial Branch).

Mr. Quinlan

Mr. Donohue

Dux of The Class

MR. ERIC QUINLAN has spent all but one of his 19 years' railway service at Newport Workshops. His job, as a Stores Branch clerk, is concerned with the vital matter of supplies. Mr. Quinlan's hobbies are hiking and photography. As a member of the Youth Hostels' Association, he has developed into an experienced bush walker and usually spends his leave in the alpine regions of Victoria. He took part in the search for the missing skiers at Marysville last winter.

Of the transport course, Mr. Quinlan says: "this is something that has been wanted for many years. It is going to make us better railwaymen and, at the same time, give us a better appreciation of the whole field of transportation. The Institute of Transport is on a very high plane and is recognized throughout the English speaking world. Those who complete the course successfully should be fully qualified for more senior positions as they become available."

The Runner-Up

MR. P. T. DONOHUE, who came second in the course, joined the Department as a junior clerk and has been in the Commercial Branch for the whole of his 17 years' service. He is a son of a steam and electric train driver. Mr. Donohue, who was with Dr. Clive (Flying Doctor) Fenton's radar maintenance unit in World War Two, is an expert in tracing passengers' missing luggage. Mr. Donohue also found the Institute of Transport course most interesting. He is highly impressed with the instructors

and with the broadening of outlook that the course imparts. "One does not become less railway minded by coming in contact with other transport workers," he says "but one realizes that a definite job has to be done by all, and, by working in harmony and, without wasteful, uneconomic competition, we can advance the interests of transportation generally and make the industry more prosperous."

Ballarat Loco. Social Club Picnic

BALLARAT Loco. Social Club's recent picnic at Eastern Park, Geelong, was their most successful picnic for five years.

The main sporting event of the outing, the Loco. Handicap of 130 yards, was won by Fitter Stan Jacobi. A total of eighteen events catered for all tastes. Driver W. Davis, club secretary, and J. Parkin, president, report that members are already looking forward to their next outing.

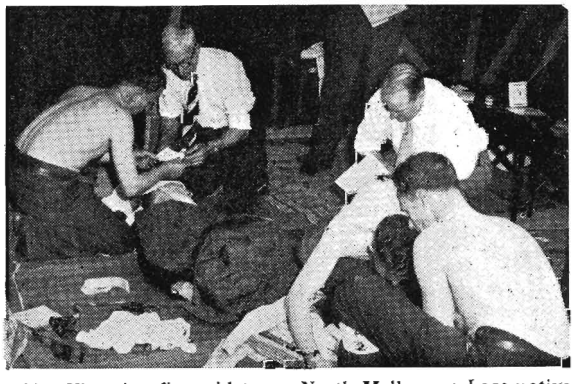
Rolling Stock Branch Retirements

MR. ERNEST HYATT, who as Locomotive Examining Officer, Rolling Stock Branch, was well known to all enginemen throughout the State, retired recently because of ill health. He began duty as an engine cleaner at Geelong and graduated from fireman, driver, night depot foreman and enginemen's instructor. He served with the First A.I.F. in World War One.

Another well known member of the Rolling Stock Branch to retire recently was Mr. Tom Lockhead, sub-foreman turner at the Jolimont Workshops. He was well known as an entertainer, who compered all of the Sunday afternoon concerts at the V.R.I. during the last war, given for troops on leave. Interested in industrial safety, he once won a competition for the best final line to a limerick, conducted by the *Industrial Supervisor*, an American safety-first magazine.

Blacksmiths' Picnic

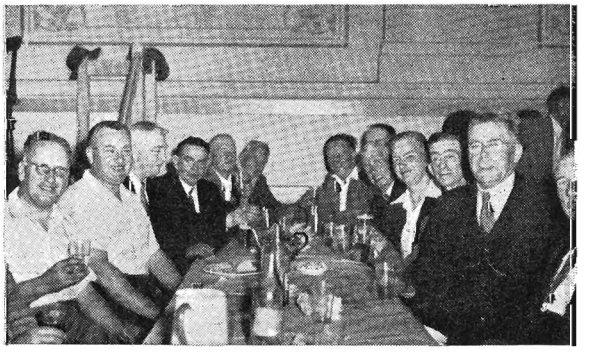
THE Blacksmith's Shop Social Club at Newport Workshops is enthusiastic about their first annual picnic at Bacchus March recently. A special diesel-hauled train conveyed the picnickers who had ideal weather. President Ted Stubbs and Secretary Don Thomas say that the 300 members who went were highly pleased with the transport arrangements.



The Victorian first aid team, North Melbourne Locomotive Depot No. 3, winners of the Australian railways ambulance competition at Mt. Evelyn. Left to right : R. T. Klemke (leader), L. Wignall, H. Nelson, H. Jones. The patient is C. Andrew and the adjudicator, Dr. R. C. Geeves. The team is here seen competing in the improvized materials event.

Bairnsdale Christmas Party

SIXTY-FIVE children, the sons and daughters of Bairnsdale railway staff, were entertained at a Christmas party by the Bairnsdale Railwaymen's Social Club. There was a decorated Christmas tree, party caps and balloons, ice cream, soft drinks and sweets. Father Christmas duly arrived, bowed beneath the weight of a bulky bag of toys, one for each child. Games and music took up most of an enjoyable evening.



Founded over 30 years ago, the Flinders-st. Terminating Society holds an annual presentation ceremony for members who retired during the year. Recently, more than 200 railwaymen, union officials, interstate visitors and retired V.R. men were got together to see 14 members (11 electric suburban guards, a goods guard, a signalman and a special checker) receive gifts from Guard George Taylor, of Flinders-st. The retired guests of honour were Guards Billson, Duncan, and Goodwin, of Sandringham ; Carroll, Essendon ; Davis, Frankston ; Edwards and Laing, Coburg ; Kinnon, St. Kilda ; Mantle, Heidelberg ; Hogan, Flinders-st ; Williams, Brighton Beach ; Special Checker McDonald, Spencer-st. ; Special Class Signalman O'Malley, Flinders-st ; and Goods Guard O'Sullivan, Melbourne Yard.

English for New Australians

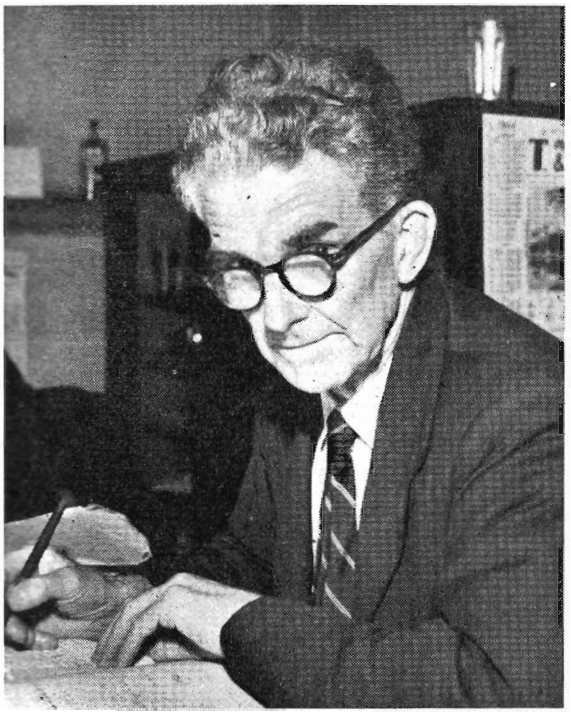
WITHOUT a knowledge of the English language New Australians cannot become Old Australians. They will therefore welcome the arrangements that have been made by the Migrant Education Section of the State Education Department for instruction in English to all European migrants resident in Australia. Classes and correspondence lessons are supplemented by radio broadcast lessons over ABC stations. Booklets are provided free to help listeners with these lessons.

All lessons are free of cost and full information, together with radio booklets, may be obtained from the officer-in-charge, Migrant Education Section, University Grounds, Carlton, N.3, Melbourne.

Boiler Shop's Picnic

THE sixth annual picnic of the new Boiler Shop Social Club was held recently at Chirnside Park, Werribee. There were footrunning events for adults and children, dancing on the lawns, and music by the Newport Workshops Brass Band, under the baton of Mr. J. Harrower, with Mr. J. Dorgan as drum major ; Mr. George Radford compered the entertainment. The Boiler Shop Gift was won by A. Seamons, with J. Augustine and R. Leffanne filling the places. The "forty and over" race was won by L. Dorgan, from A. McFarlane and S. Green. A. Seamons had further success in winning the Apprentices' Handicap, in a close finish from R. Leffanne. The Band Handicap was won by F. Dorgan and the 440 yds. race by W. Merry.

'Shops band plays at picnic.



For many years in charge of the Interstate Goods Section, Mr. Gus Lemke, officer-in-charge of the Goods sub-division of the Accountancy Branch, retired recently. His name was well known to railwaymen from Perth to Cairns. Born at Hotham Hill in 1889, Mr. Lemke joined the Department in 1904. He is an uncle of Bruce Lemke, former Victorian schoolboy tennis champion, of whom star Frank Sedgman once said: "I could never beat him as a junior." Another nephew, Robert Lemke, of Ballarat, is a fine baritone singer and was a finalist in a *Sun* aria competition.

Mice by the Million

MEMORIES of the 1917 mouse plague in the Mallee are recalled by Mr. P. J. Martin, Electric Running Superintendent, who has retired after 48 years' service.

In that year he was a driver at Woomelang where, he said, over half a million mice were caught in two days. To catch those hungry progenitors of Mickey, galvanized iron races were built around the wheat stacks. At each corner of a race was a 6-foot deep pit into which the mice would fall as they ran along the race. When a pit was filled a bag was placed over it and the mice killed with acetylene gas. Despite these efforts hardly a sound bag remained in the stacks; wheat was lying everywhere and had subsequently to be re-bagged. Locomotive wheels would slip as they ploughed through the mice hordes. With the arrival of frosts, the plague disappeared.

Mr. Martin, who was at Jolimont for 28 years, has been Electric Running Superintendent since 1952. He hopes to do quite a bit of fishing in his retirement, and find time for his lifelong hobby of woodworking.

Ouyen's First Aiders

NOWHERE around the system is more interest shown in first aid work than at Ouyen. This was demonstrated when 31 members of the staff, representing the Rolling Stock, Traffic, Way and Works and Stores Branches were presented with certificates.

Picnic to Cowes

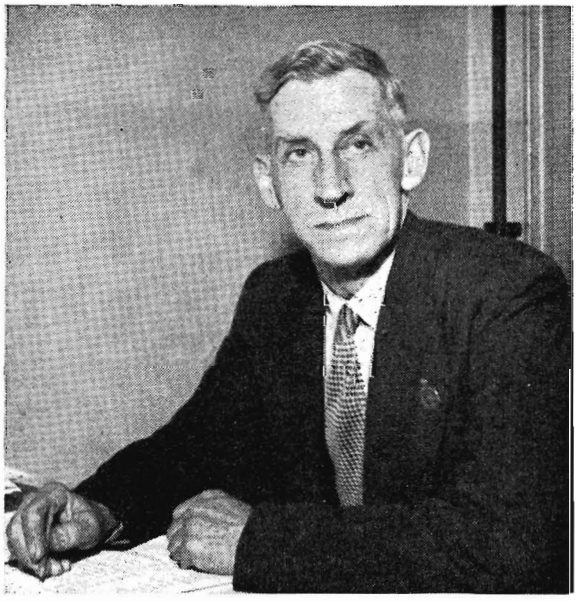
THE second annual outing of the Frankston-Stony Point Picnic Committee was successfully conducted to Phillip Island on Sunday, 17th January. Driver C. Mullen, president, and secretary H. Quanthi report ideal weather conditions and the 150 picnickers enjoyed themselves immensely.

Obituary

NEWS LETTER records with deep regret the death of Mr. P. A. (Bert) Olney, Assistant Manager of the Victorian Government Tourist Bureau. Joining the Department as a lad porter in 1919, Mr. Olney went to the Bureau in 1921 as a telephone inquiry clerk and subsequently handled Bureau correspondence for a number of years. When the Bureau's branch office was opened in Martin Place, Sydney, Mr. Olney was appointed to assist the manager, Mr. L. Wright, and when the latter became assistant manager in Melbourne and Mr. A. E. Williams, of the Brisbane branch filled the Sydney vacancy, Mr. Olney went to Brisbane as manager. From there Mr. Olney went to Perth as manager of the Eastern States Tourist Bureaux. When that office was closed, he returned to Melbourne.

First Aiders Pass On

TWO well known members of the first aid movement died recently, Mr. A. V. Cunningham, coppersmith, Newport Workshops, and Mr. G. Hardy, fitter's assistant, Jolimont Workshops. Mr. Cunningham was a member of Newport's No. 2 first aid team for many years. He held the St. John's bronze medallion and the Department's eight-year gold life membership medal, the silver efficiency medal and proficiency certificates up to the 14th year. Mr. Hardy, who was an active member of the St. John Ambulance Brigade, was ambulance officer of the Box Hill division and casualty officer at Jolimont Workshops for the past 10 years.



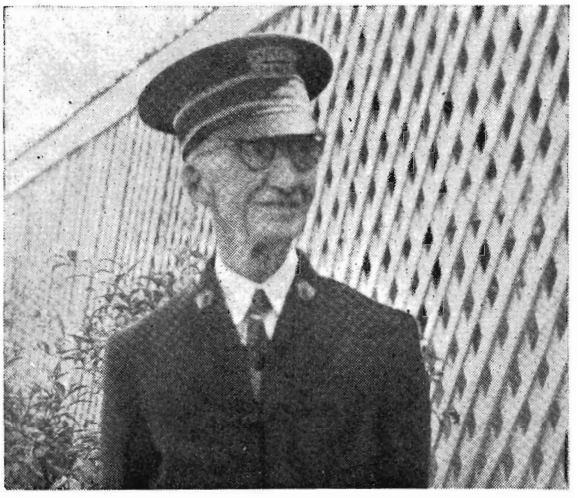
Mr. Milne

Investigations Completed

ASSISTANT Inspector E. O. G. Milne, who was a member of the Investigation Division for about 40 years, retired recently. He served under four Claims Agents and six Chief Inspectors. At a farewell function he was presented by the Chief Commercial Manager (Mr. R. C. Burgess) with a standard lamp. Mr. Milne joined the Department in 1911 as a porter and, after country experience, became a goods checker. He was transferred to the Investigation Branch in 1914 and, shortly afterwards, saw active service in some of the crucial battles in France, as a machine gunner.

Mr. Milne had a wide experience of all types of investigation. For many years he investigated fires and accidents. Also, he had many a battle of wits with pilferers. On one occasion he, and another officer, were sent to investigate butter thefts from goods trains. Boarding a train at Sunshine,

they noticed that several boxes of butter had been thrown to the side of the permanent way. They leapt from the train but, by the time they reached the spot, the butter had been removed by the pilferers from the track and concealed behind a stone wall. In a night vigil they kept the butter under observation and were rewarded for their patience when, early in the morning, a taxi drew up and three men commenced to load the butter into it. Drawing their pistols, the two officers ordered the men to put up their hands. One escaped by running across a paddock, but his companions were arrested.

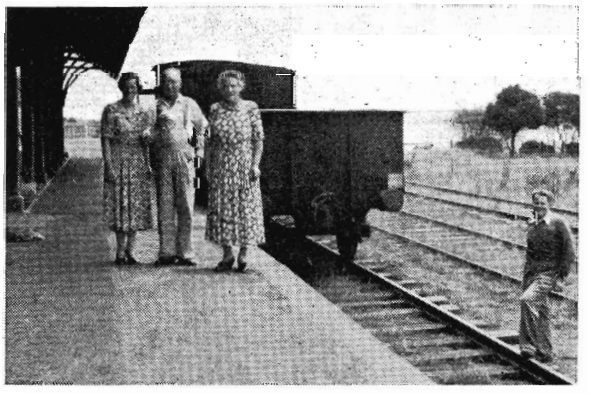


Mr. J. G. Cugley, stationmaster at Victoria Park Goods, retired recently after 43 years' service. Joining the Department in 1911, he began duty at Rochester, and afterwards saw service at many stations, including Quambatook, Burrumbeet and Lake Boga. He returned to the suburban area at Royal Park in 1928.

Retirement after Long Service

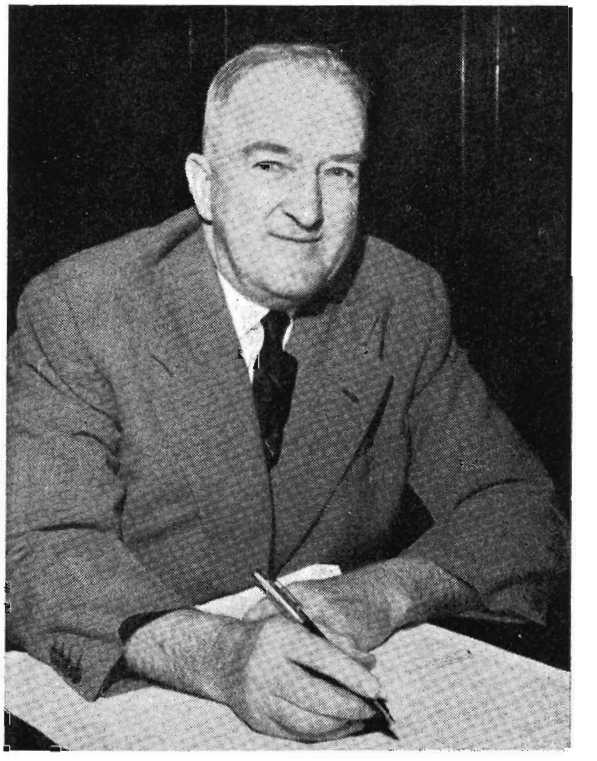
WITH 44 years' service to his credit, Driver W. A. Humphreys recently retired from the footplate to tend the garden at his Moonee Ponds home and carry on his hobby of trout fishing. Mr. Humphreys spent his entire railway existence on locomotives, at first steam and then diesel. The Humphreys family record of service to the Department would be difficult to match.

His father, J. Humphreys, was ganger at Riddell, his brother, Ern Humphreys, is at present Driver-in-Charge, Horsham, and his son, A. J. Humphreys, is electric train driver at Jolimont. A brother-in-law and two nephews are also employed in the Department.



Left to right: Mrs. D. Donohue, Queenscliff's new caretaker, her husband, Repairer E. G. Donohue, and the former caretaker, Mrs. McFee. Before she was transferred to Queenscliff, Mrs. Donohue was at Pettavel and Warncoort.
Photograph: T. Murray

Mr. J. E. Dunstan, blacksmith at Bendigo North Workshops, chaired after winning the championship shoot at South Bendigo Rifle Club. At the extreme left is Mr. W. Jones, acting subforeman fitter, also of Bendigo. Mr. Dunstan, who was Club Captain from 1948 to 1950, has been Champion of Champions of No. 3 District Rifle Club Union (covering 11 clubs) and runner-up. Seven members of the South Bendigo Rifle Club work at Bendigo North Workshops.
Photograph: J. C. Clamney



Mr. J. M. Reid, clerk, Electrical Engineering Branch, who retired recently, served in a variety of grades during his 49 years of service. He joined the then Transportation Branch in November 1904 and was a block recorder at Camberwell and Hawthorn signal boxes until December 1908 when he transferred to the Telegraph Branch as an acting clerk at Elwood Depot. Later, after a period as motorman, he was promoted to clerk at Head Office. When, in 1919, the Telegraph Branch was absorbed by the Electrical Engineering Branch, Mr. Reid served in all sections of the branch. His main interest outside the service was hockey. He played with Camberwell Hockey Club for many years, and later was president for 17 years. He also managed several interstate trips.

INTERSTATE CRICKET CARNIVAL

The Victorian interstate cricket carnival team. Left to right: back row: L. Fisher, R. Wood, B. Debnam, J. Williamson, R. Kitchen, N. Turl, J. McTaggart, L. Withers, L. Hill, P. Smith. Front row: C. Dunn, B. Murray, C. Hovey (vice-cpt.), W. Crowe (manager), R. Sawyer (capt.), B. Letts, G. McLean.

ALL Australian railway systems, except Tasmania, took part in the interstate Railways Institutes' cricket carnival, held in Brisbane earlier this year. The Mick Simmons challenge cup, retained by New South Wales in the last four carnivals, was won by Queensland for the first time since 1936.

Although the various matches were played in fine weather, overnight tropical rain turned the wicket into a "sticky" which suited the Queensland batsmen who have mastered the art of playing off the back foot and forbear to reach forward for the ball when it is playing tricks. The Queensland bowlers were also helped by the humid atmosphere. However, it was generally agreed that the representatives of the northern State fully deserved their win. They defeated all opponents convincingly, and their cup win was a most popular one.

An exciting contest for the Roy Tait memorial bowl, awarded to the runners-up in the competition, took place between Victoria and New South Wales. The bowl perpetuates the memory of Roy Tait, of the N.S.W. Railways, who did so much to foster interstate railway cricket tournaments. Victoria and N.S.W. were level on points before the final match to decide the destination of the bowl. Batting on a wet wicket, N.S.W. were dismissed for the moderate total of 66. Victoria went in very hopefully but found runs hard to get. Wickets fell rapidly, until the stage was reached when every run was cheered. With only five required to win, L. Hill, a metropolitan representative, was joined by B. Letts, of Shepparton. Hill, who has far more success with the ball than the bat, was, however, defending in dogged style, and gave every indication of being able to score the necessary runs if his partner could keep the other end intact. But, after scoring another valuable run, Letts was caught at short leg off Dolbel's bowling, thus leaving New South Wales the winners of the bowl by four runs. The wrecker was Dolbel, who took 7/22.

Good Bowling

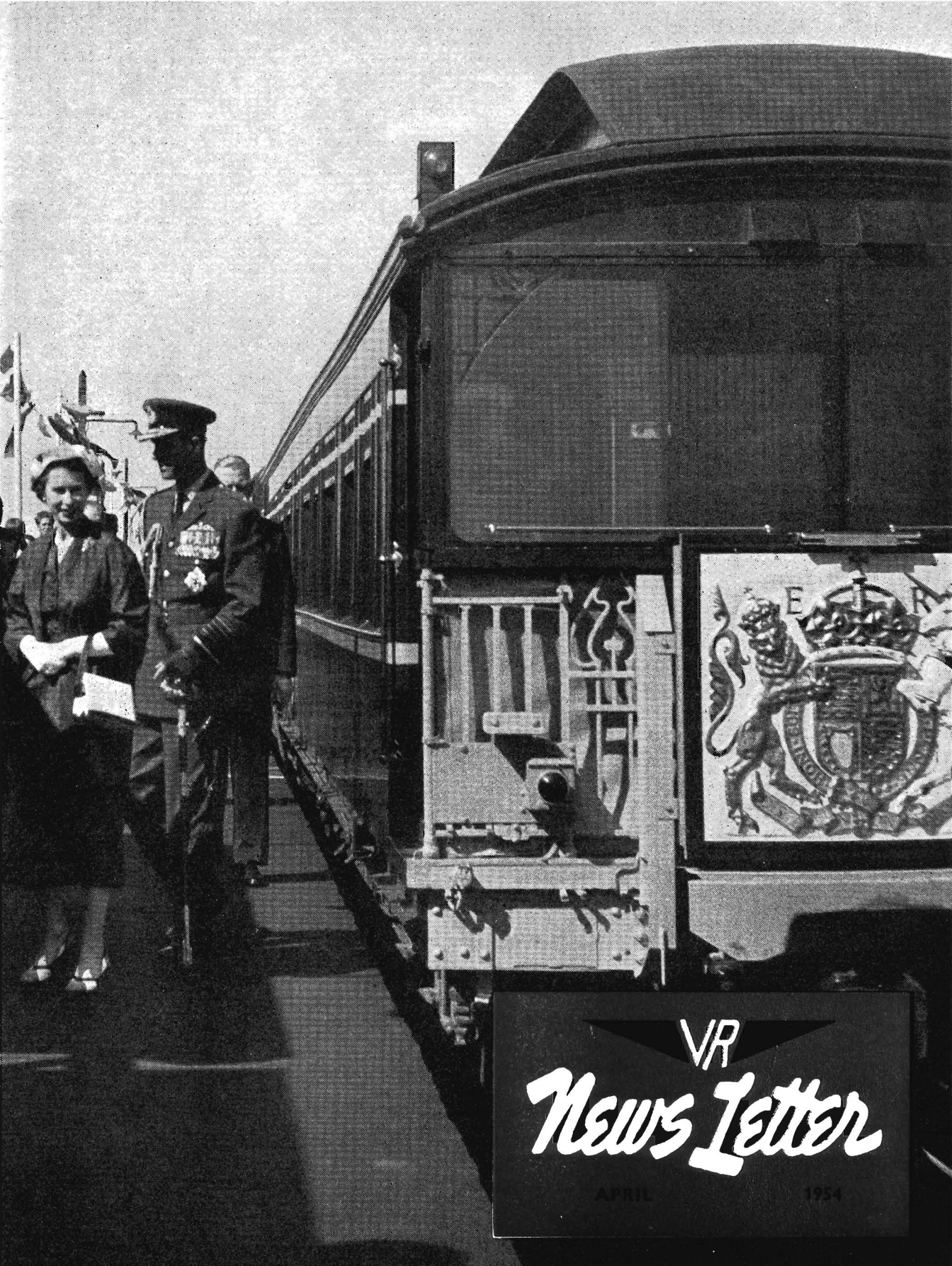
QUEENSLAND'S undefeated record in the carnival was due mainly to the splendid bowling of the left hand spinners, Quelch and Rehren and medium paced bowler Stenhouse. Quelch is a leading first grade Brisbane bowler and is on the fringe of interstate selection. His figures in inter-club cricket have been consistently good this season.

Victoria's best player was Les Hill, who plays for South Melbourne second eleven. He won both batting and bowling averages. He had a batting average of 33 runs and a bowling average of 6.5. Highest scorer in the Victorian team was Neil Turl, of Newport Workshops, who plays with Fitzroy's first eleven. His 80 in an innings against Western Australia was a magnificent effort. Next best with the bat was Bruce Murray, Prahran first eleven player. His highest score was 69 not out, also against the Western players.

Country Tennis Week

THE V.R.I. country tennis week will be held at Parkville from March 22-26. Besides the teams championship, there will be an open singles country championship for members of the V.R.I. and a singles championship open to railway staff only. Results will be published in *News Letter*.

Wholly set up and printed at the Victorian Railways Printing Works, Laurens-st., North Melbourne, for the Publishers, The Victorian Railways Commissioners. 3353—53.



VR News Letter

APRIL 1954

The Queen waves gaily to a section of the large crowd of women and children that gathered outside the Rochester station on the day of the royal train's arrival.

THE MONTH'S REVIEW

Head Office Strongpost

THE formation of a Head Office strongpost on the lawn at the rear of the Head Office building, to greet the royal couple on their journey to Warburton on March 6, was the outcome of a suggestion which the Commissioners adopted. About 1,500 staff and their families turned up to line the track from the south end of Spencer-st's. No. 8 platform to the beginning of the viaduct. They had a magnificent view of the Queen and the Duke who stood on the rear observation platform and waved as the train crawled (thanks to Driver Frank Myers) past. Everyone appreciated the suggestor's bright idea, the Commissioners' ready acceptance of it and the Queen's very gracious agreement to come once more to her train platform, towards the end of what must have been an extremely heavy day for her.

Phoenix in Lilliput

SINCE 1915 a departmental scale model of a C class steam locomotive has figured in innumerable exhibitions and processions But *Operation Phoenix* has now manifested itself in a one-third scale model of a B class diesel-electric locomotive.

A faithful replica of its original, the model is 20 feet long and four feet eight high.

Almost every section of Newport Workshops had a share in the job. The coppersmiths shop contributed sheet-metal work, the foundry castings for wheels, and the electro-plating division odds and ends.

The main work was done by the pattern shop staff under Foreman Patternmaker Dave Yates who nearly forty years ago was responsible for the C class locomotive.

He and his men were quite determined that the new model would be worthy both of Newport craftsmanship and of its place in Melbourne's floral procession, as a tribute from Victorian railwaymen to Her Majesty Queen Elizabeth. The small headlights of the model will light up, and both driving cabs are fitted with Lilliputian seats and instrument panels. The bogies, brake gear, and wheels are made of aluminium, steel and wood, and are accurately scaled down.

Breakdown Vehicles Dispersed

BECAUSE the heart of the city was closed to vehicular traffic at various times during the royal visit, special arrangements had to be made by the Electrical Engineering Branch to disperse its fleet of emergency vehicles to deal with possible overhead faults in the suburban area. Emergency bases were set up at Burnley, Jolimont sub-station and North Melbourne. Special stickers notified road users

OUR FRONT COVER

shows H.M. Queen Elizabeth and H.R.H. the Duke of Edinburgh leaving the royal train at Aircraft Siding Platform, to visit the Royal Australian Air Force establishment at Point Cook.

that the vehicles were on essential service. In case the overhead gangs were wanted at Flinders-st. or Spencer-st., the police were told to give them a motor cycle escort. Fortunately, on "Q-Day," at least, the day of the triumphal progress from Essendon when many thousands of people travelled by train, the emergency gangs had a trouble free time.

Incidentally, electrical mechanics and overhead linemen of the Overhead Depot staff in Batman-avenue were responsible for the erection and maintenance of the illuminated crown on the Flinders-st. station dome and other decorations at the station.

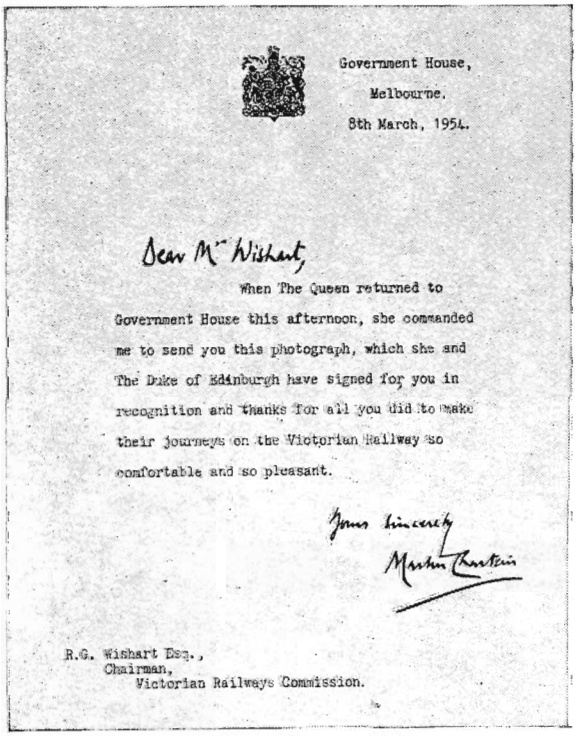
First Aid Precautions

FOR the royal tour of Victoria 17 railway first-aid posts were established in the country and 16 in the metropolitan area. Experienced first aiders who manned them had additional equipment to cope with any possible emergency.

Considering the many thousands of people who travelled by train to pack strongposts along the route of the royal progress, the number of people who sought first-aid treatment for injuries sustained in crushes was astonishingly small. Flinders-st. staff had their busiest time after the fireworks display on the first evening of the royal visit to Melbourne. The station concourse was jammed with a great mass of people, and many were treated for bruises and abrasions. Four were sent to hospital. The Department's first aiders expected to work at top pressure at both rehearsals and on the final day of the schools' display at the Melbourne Cricket Ground. Fortunately, they had a relatively quiet day, which went to show that Melbourne was on its best behaviour.

Royal Thanks

AFTER the conclusion of the royal tour of Victoria, by train, the Queen directed that this letter of appreciation and a specially autographed and framed photograph of Her Majesty and the Duke of Edinburgh (reproduced on page 10) be sent to the Chairman (Mr. Wishart).



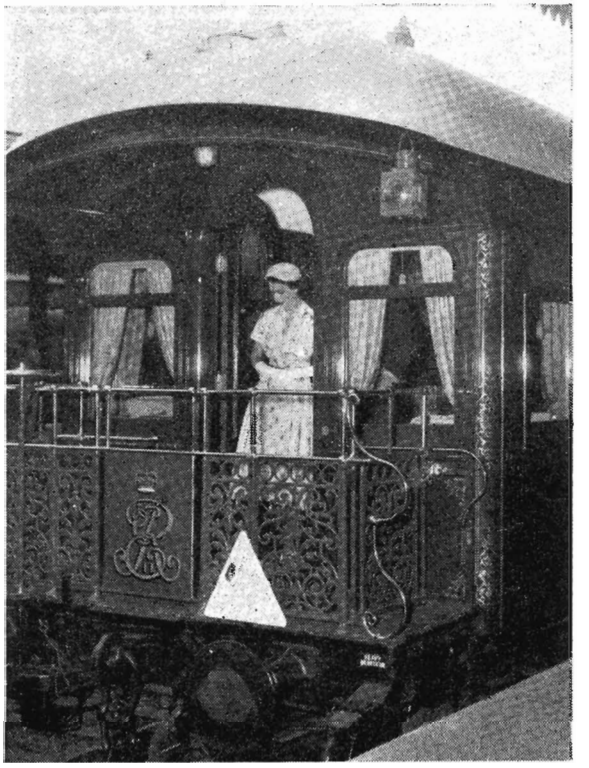
Government House,
Melbourne.
8th March, 1954.

Dear Mr Wishart,

When The Queen returned to Government House this afternoon, she commanded me to send you this photograph, which she and The Duke of Edinburgh have signed for you in recognition and thanks for all you did to make their journeys on the Victorian Railway so comfortable and so pleasant.

Yours sincerely
Martin Charteris

R.G. Wishart Esq.,
Chairman,
Victorian Railways Commission.



Her Majesty The Queen at the doorway of the royal coach as the train left Central Station, Sydney, for Newcastle on February 9.

The Best Way

PROOF that train travel is basically the safest and least tiring way to get from A to B was clearly not needed by the N.S.W. royal tour authorities. At one stage doubt arose whether it would be safe for the Queen and the Duke of Edinburgh to fly through a heavy storm to reach Evans Head from Williamtown, and an emergency train was ordered to stand by in case the flight had to be cancelled.

Again, on their one-day visit to Wollongong, they left their car at Bulli to return by rail, because, as the Minister-in-Charge of the tour explained, "it was infinitely better for the Queen to be able to relax on the train rather than go back the same way by car."

One incidental feature of the royal progress by train in N.S.W. was the record sale of platform tickets at Sydney Central Station. People swarmed to buy them in the hope of adding to their glimpses of the Queen and the Duke.

N.S.W.'s Royal Train

THE mother State's train, which made history by giving the first reigning British sovereign in Australia her first "feel" of Australian rail travel, was, like Victoria's, a splendid *equipage de royaute*. It had two air-conditioned cars, a Commissioner's car, a Premier's car and the air-conditioned Royal car containing a lounge, two bedrooms, a sitting room, a dining room and an observation platform. It was carpeted in deep red. All carriages were painted externally tuscan red, with a yellow band. With its two Alco 1600 h.p. diesel-electric locomotives, the train was 469 ft. 4 in. long.

A coat of arms in colour was mounted on the front of the leading locomotive. Cedar escutcheons, with the royal coat of arms in gold and silver, were mounted on each side of the royal car.

When the royal train returned to Sydney from Bathurst, the driver, fireman, guard and senior travelling inspector were presented to the Queen and the Duke.

HOSTS TO ROYALTY

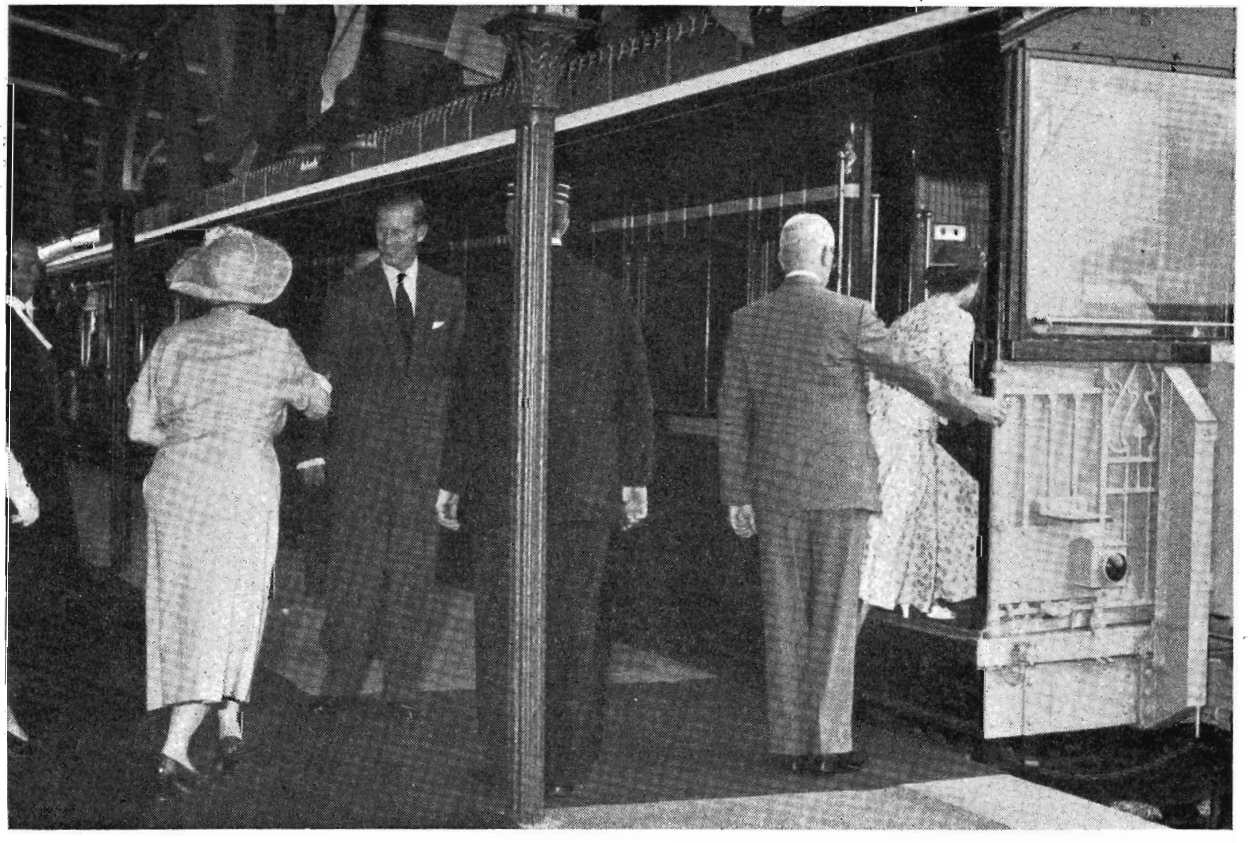
The royal train at Goorambat.

THIS year of grace, 1954, will go down in history as a memorable one for the Victorian Railways. Not only is it the centenary year of Australian railways which began in this State, but it also marked the first Victorian train journey by a reigning monarch of the British Commonwealth.

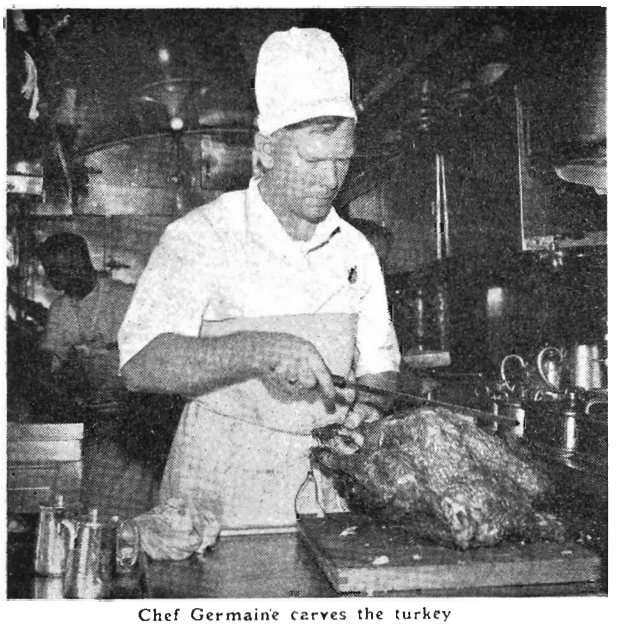
During four days last month, the Victorian Railways had the signal honour of looking after Queen Elizabeth and the Duke of Edinburgh on the royal train. Not all railwaymen were privileged to help, directly, in the planning, preparation and carrying out of royal train journeys, but those who did observed the highest traditions of railway planned service.

Plans for the tour were, of course, based to some extent upon those made for the proposed tour of 1952 which was postponed owing to the death of King George VI. Even so, a great deal of meticulous work was involved in framing timetables, repainting and refurbishing cars and so on, preparing decoration, planning menus, and a host of other details, major and minor.

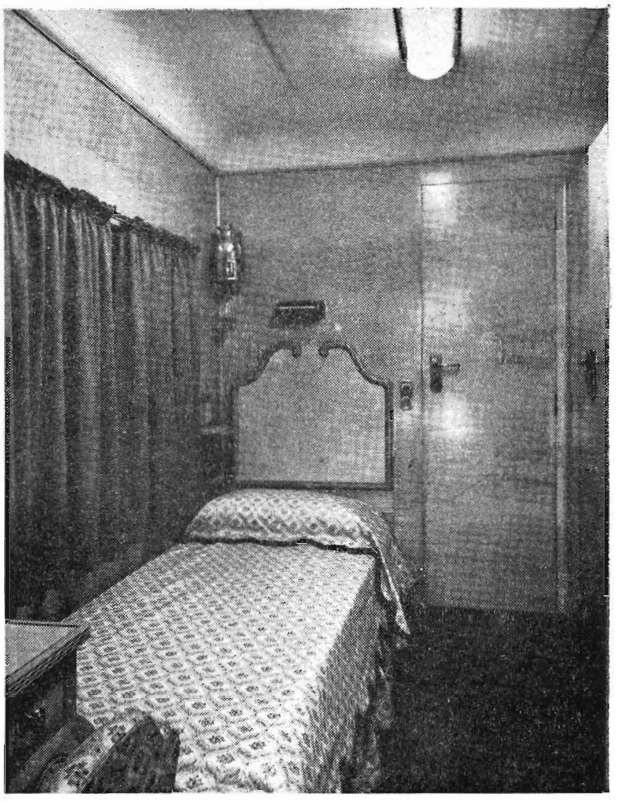
The royal party went by train from Sale to Melbourne, from Melbourne to Goorambat, from Tatura to Echuca and back to Melbourne, by way of Bendigo, Castlemaine, Maryborough, Ballarat, and Geelong, and, finally, from Melbourne to Warburton and back, under the best possible conditions and with the maximum of comfort and convenience. Previously the Duke of Edinburgh had gone in a royal "trainette" to Crib Point and back to present the Queen's Colours to Flinders Naval Depot. The success of the tour, from a professional railway point of view, was the fruit of, and a tribute to, the complete co-operation of all branches. That it was a success from the royal party's standpoint was abundantly evident from Her Majesty's subsequent thanks.



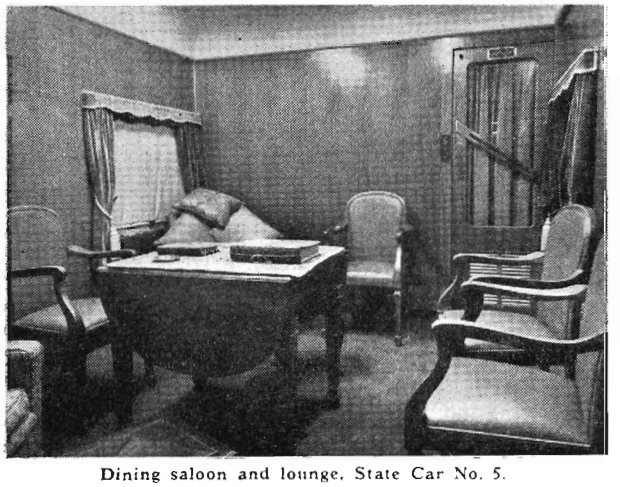
Queen Elizabeth boards the royal train at Sale for her first rail journey in Victoria.



Chef Germaine carves the turkey

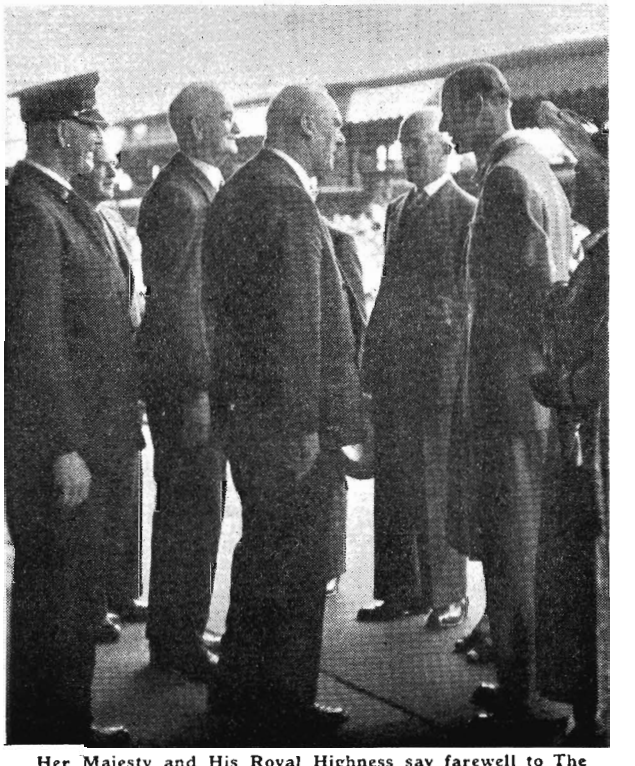


Queen Elizabeth's bedroom in State Car No. 5



Dining saloon and lounge, State Car No. 5.

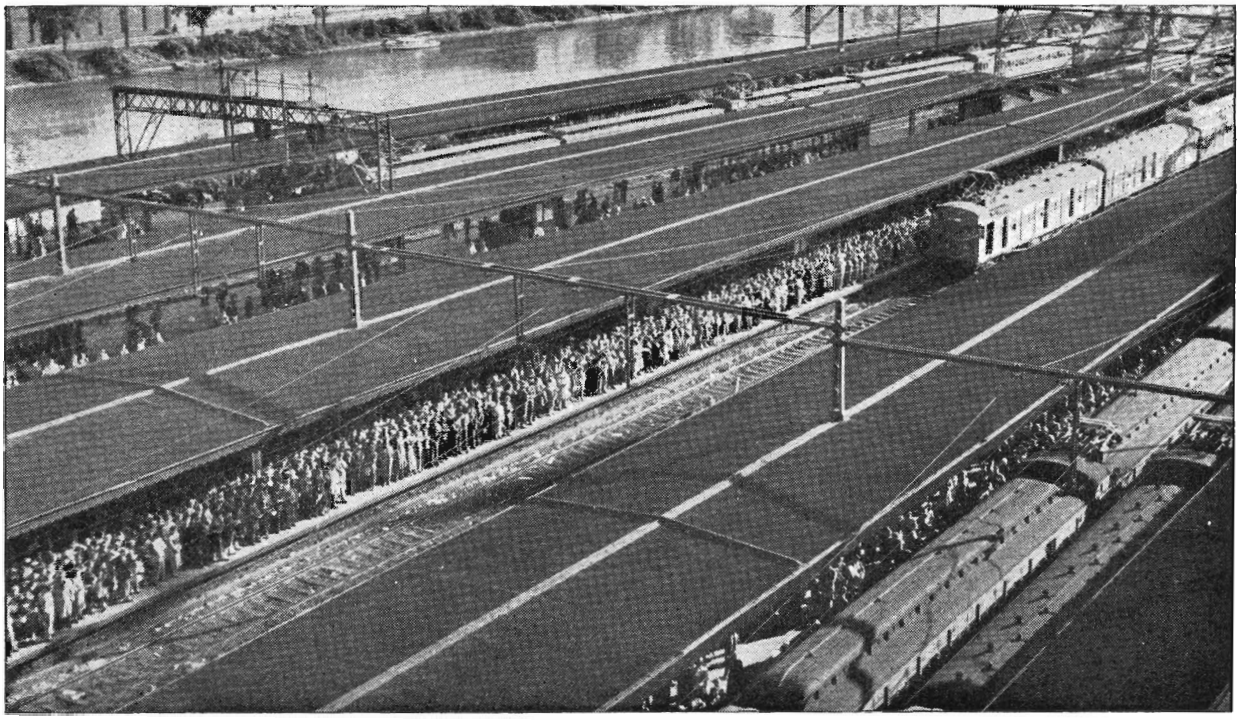
The royal train telephone exchange



Her Majesty and His Royal Highness say farewell to The Chairman and Heads of Branches before leaving Flinders-st. station at the end of the royal train tour.

HOW TRAFFIC WAS HANDLED

In bringing, in their centenary year, a great mass of people from every corner of the State to see the Queen and her Consort, the Victorian Railways undertook what must be regarded as the biggest sustained passenger transportation task in their history.



Flinders-st. station platforms were packed with people waiting for trains to take them to their home stations after the first day of the royal progress through Melbourne.

FROM the arrival of the Queen and the Duke at Essendon and the first triumphal progress to Government House, until the completion of the Victorian visit, people flocked in their thousands to the various functions arranged for the royal visitors.

Every available passenger car was used on the arrival day. It was the same when the Queen and the Duke went to Flemington to see the Queen Elizabeth Stakes and the Duke of Edinburgh Cup races run. Seventeen seven-car race trains were run on the forward journey and twenty for the return. The first train left for the course at 8.15 a.m., about two hours earlier than for normal raceday traffic. Later, when the Queen and the Duke visited Kooyong for the tennis test between Australia and South Africa, many extra trains were run on the Eastmalvern line.

A special train service was also necessary for the dedication of additions to the Shrine of Remembrance ceremony. Frequent trains were run on all suburban lines to reach Melbourne from shortly after 7 a.m. onwards.

The suburban service also worked at top pressure to cater for the crowds that poured into the Melbourne Cricket Ground for the ex-service men's and women's organizations rally and the school children's display. Of the 17,000 children who took part in it, 12,000 were brought from various suburbs in 14 special trains. Special trains also took the children to the ground for two rehearsals, beforehand.

Wherever the royal couple went, whether to a state banquet, civic ball, the Heidelberg Repatriation General Hospital or to St. Paul's Cathedral, excited crowds thronged the barricades to get a glimpse of them. Most of these people travelled by train, and services obviously had to be augmented.

Even the one day air trip to Mt. Gambier and Hamilton kept the railways busy. Large parties of children had to be taken by train to various stations to man strongposts along the royal route to Essendon.

When the Queen and the Duke left by air for Sale (they entrained there for the Gippsland tour) a large number of children from the Broadmeadows district went by train to Essendon to see them off. When the Duke boarded his royal "trainette" at South Yarra for his visit to Flinders Naval Depot there was a large crowd outside the station, while many people were on the opposite platforms. Children from peninsula schools went by train to Crib Point to see the sailor Duke. Special trains also brought children from Eltham and Hurstbridge districts to Heidelberg to see the Queen and the Duke when they visited the Repatriation General Hospital.

Seventy-two special trains were used to bring over 40,000 people from country towns to the provincial centres visited by the Queen and the Duke. Besides the regular Sunday

excursion trains from and to Melbourne, extra day-return excursion trains were run on three Sundays for country people to see Melbourne's illuminations and decorations and (on the last two Sundays) the royal train itself which was on show at Spencer-st.

The influx of Western District people to Hamilton resulted in a heavy concentration of traffic. With 13 specials stabled and waiting to be dispatched from the single platform at intervals of 15 minutes to destinations north, south and west of the State after the royal visit, the station yard resembled Jolimont in miniature. An amplifying system, installed in the station yard, expedited the handling of trains, and the public address system was used to advise waiting passengers when they could board their trains. All trains left on time.

The royal visit to Benalla, Shepparton, Tatura, Echuca, Rochester, Bendigo, Castlemaine and Maryborough on March 5 coincided with the Labour Day holiday week-end, and involved a two-pronged traffic operation at widely separated points. It imposed a severe strain on rolling stock resources, but relief was afforded by 70 cars lent by the South Australian Railways.

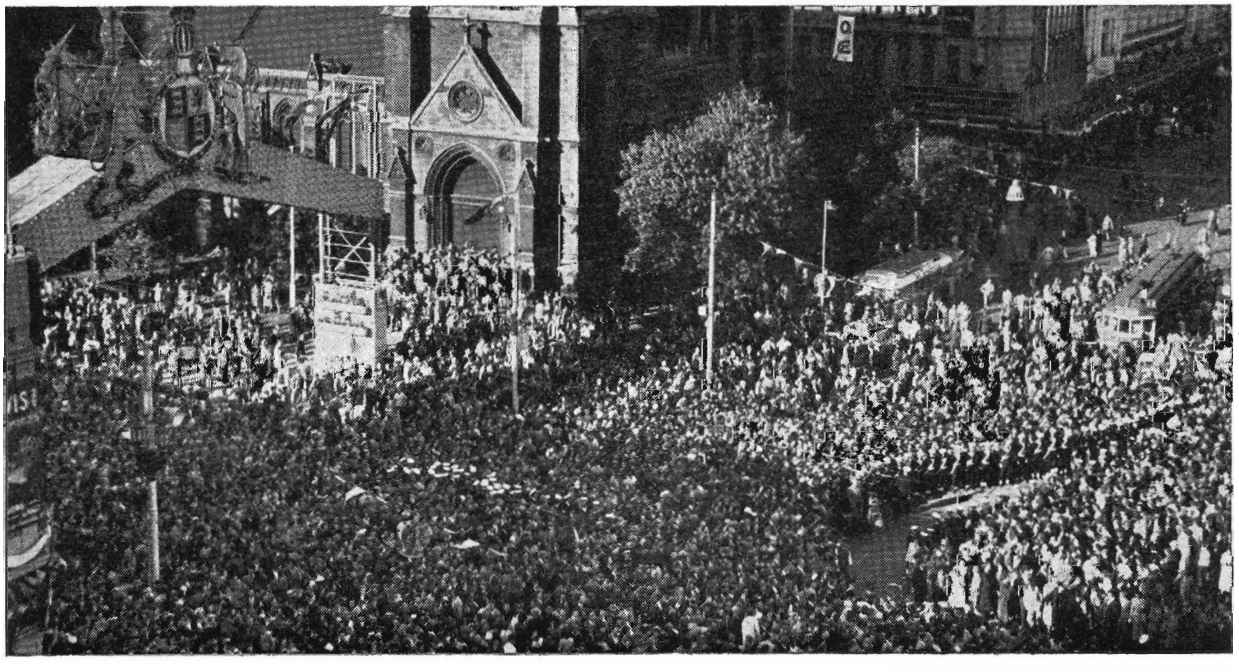
The Ballarat and Geelong royal visits followed, next day. From far distant parts of the State empty cars travelled through the night and, wherever practicable, were serviced and cleaned at depots en route. Eight specials were scheduled to take 5,000 people from Linton, Ballan, Stawell, Avoca, Horsham, St. Arnaud and Rainbow to Ballarat and about 4,000 people travelled in seven specials to Geelong from Colac, Camperdown, Queenscliff, Timboon and Melbourne.

The movement of such a large number of country people to provincial centres visited by the Queen and the Duke involved a great deal of meticulous time-table planning. There were occasions when cars, after having brought people to a particular centre and returned them home, had to be marshalled many miles away on another line in time to set out on a similar operation. Success or failure depended entirely on punctual train running.

And everything, every train movement went without hitch or incident. It was indeed a triumph for railway organization and teamwork.

Waubra Junction residents wave to the Queen and the Duke as the royal train passes on the way to Ballarat.

Castlemaine's children greet the royal visitors. Thousands of children from other country towns also came by train to Castlemaine to see the Queen and the Duke. Because of an outbreak of infantile paralysis, the royal visitors did not leave the train at either Castlemaine or Maryborough. They stood on the observation platform so that country people would not be denied the pleasure of seeing them.



Many thousands of people travelled by train from the suburbs to the city on the day of the arrival of the Queen and the Duke in Melbourne. (*Above*) The scene outside St. Paul's Cathedral.

ROYAL PROGRESS

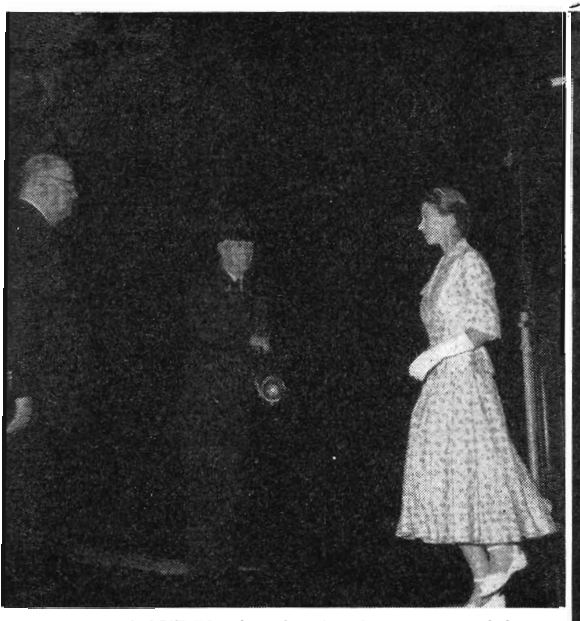
SAILOR DUKE GOES BY TRAIN: The Duke detrains at South Yarra station after visiting the Flinders Naval Depot. He is being met by the Minister of Transport (Mr. Coleman). At right is R.S.M. J. Dunlea.

SALE VISIT: The royal visitors, about to entrain, v escorted to their special coaches by the Chair (Mr. Wishart) and S.M. J. Polkinghorne.

TATURA'S WELCOME: The station was decorated with bunting, flowers and shrubs for the royal visit. The Queen and the Duke are here seen with Station-master J. F. Kelly. At right are The Lady Pamela Mountbatten and Captain Viscount Althorp.

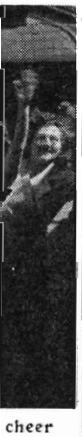
REFRESHING FAREWELL: Refreshment servic the royal visitors as the train leaves Ballarat.

TOUR IN PICTURES: Accredited photograph train after having covered royal tour hig country. Railway photographer John Hirons other tour pictures featured in this issue.



GIPPSLAND TOUR ENDS: As the Queen stepped from the train she was welcomed by the Chief Secretary (Mr. Galvin). Conductor J. P. Keppel stands by.

NORTHERN RAIL TOUR: The Queen and the Duke are obviously happy as they have a few words with Mr. Coleman before boarding the royal train which took them from Spencer-st. on their long tour of northern districts. In the background is Stationmaster F. Arblaster.



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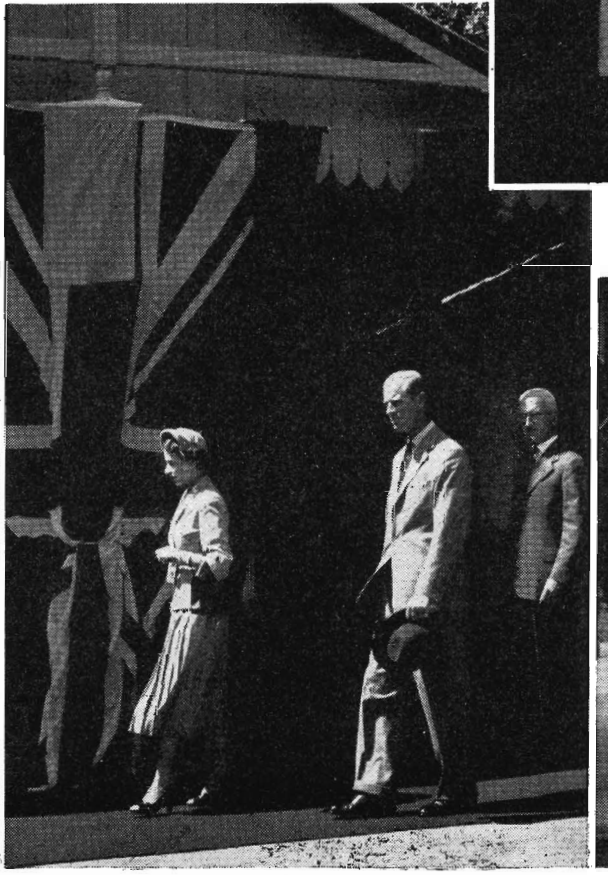
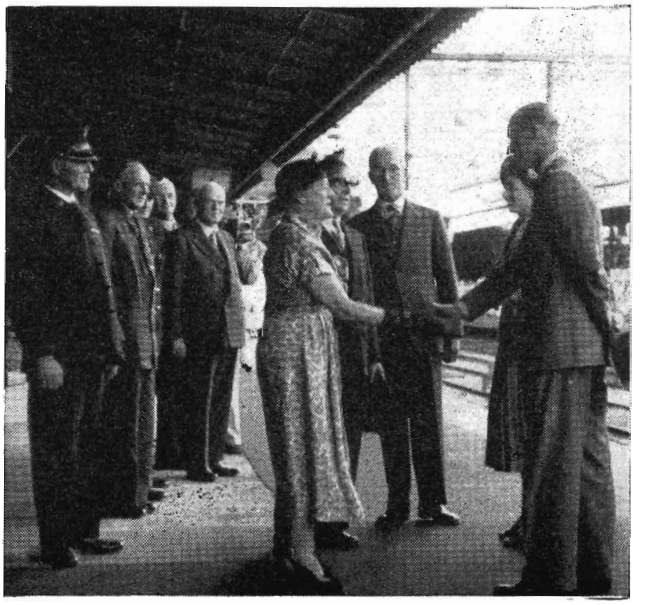


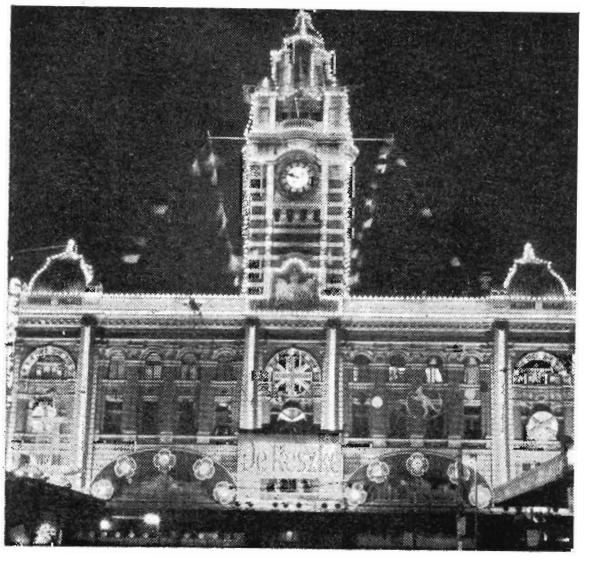
TOUR'S LAST STAGE: Refreshed after their rest at Warburton, the Queen and the Duke were escorted by Mr. Wishart to the royal train which brought them back to Melbourne.



TOUR'S END: When the royal train returned to Melbourne, the train crew and heads of Branches were presented to the Queen. Mrs. Coleman, wife of the Minister of Transport, joined in the farewell to the royal couple.

The signed photograph which the Queen, through her assistant private secretary, Lieut.-Colonel Charteris, sent to the Chairman of Commissioners, Mr. Wishart.

With its main features outlined in amber coloured globes, that gave a rich, golden light, the Flinders-st. station building was most impressive. The crown surmounting the dome (*above*) was 18 feet in diameter and weighed 2¾ tons. Made at Spotswood Workshops from steel pipe framing on a wooden base, it was sheeted with gilded masonite and plaster. The jewels in the crown were represented by red, blue, and green globes which continually twinkled – an effect obtained by motor driven switches. To outline the crown and dome 2,050 globes were used; on the Elizabeth-st. end (*below*) were 1,650 globes.



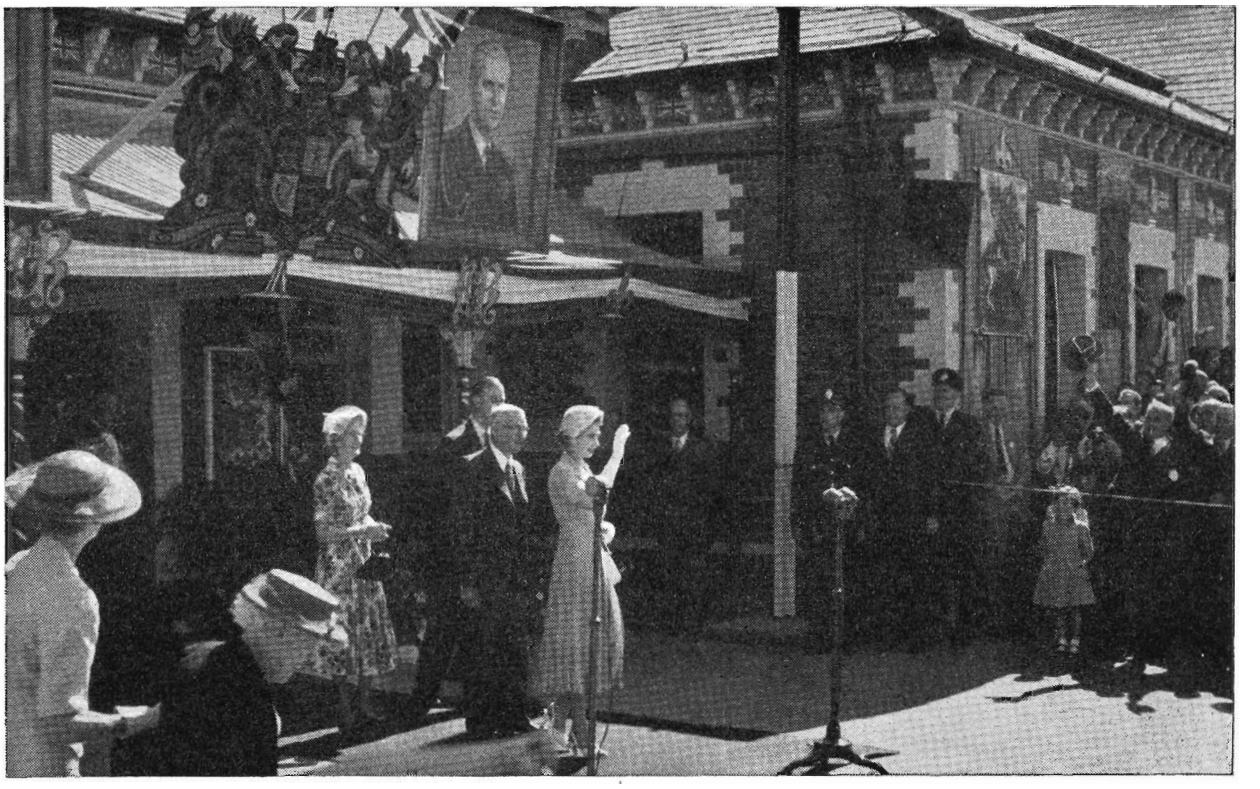
RAILWAY DECORATIONS

Decorated railway buildings, many of which were focal points in the royal tour, played their part in creating the gay atmosphere that, everywhere in Victoria, greeted the Queen and her Consort, last month.

IN designing the decorations the guiding principle observed by the Department's technical staff was to allow the structure of a building to decide the form of its decoration. As a result, harmonious and pleasant effects were obtained without impairing spontaneity in the note of welcome.

All told, 28 stations, the Victorian Government Tourist Bureau and its branch in Bendigo, were officially decorated. Before plans were made, Departmental architects visited each station to ensure that its decorations would be co-ordinated with those of the local committee.

General decoration was done by the Way and Works

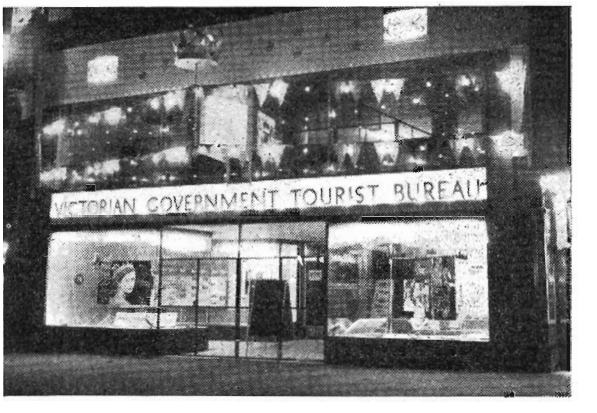


The welcome at Benalla. This station's exterior decorations were the work of a New Australian, Mr. Danko Martek. (See back page).

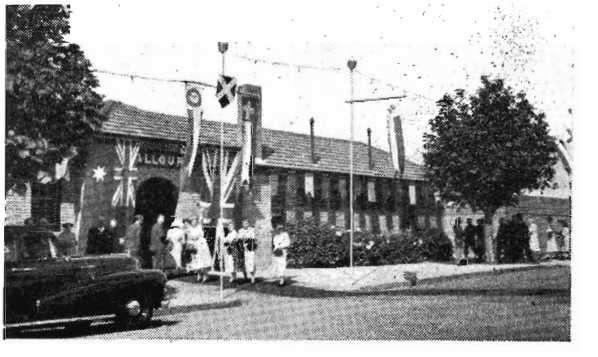
Branch and the illuminations by the Electrical Engineering Branch. In variety, the work ranged from the 1000-foot long Flinders-st. station building to the Department's floral float in the Pageant of Floats. Among the materials used were 4,000 pennants, 2,600 yards of bunting, 800 yards of royal red art felt and 300 national flags.

Aboriginal motifs, Benalla station.

Photograph: C. R. Hansford

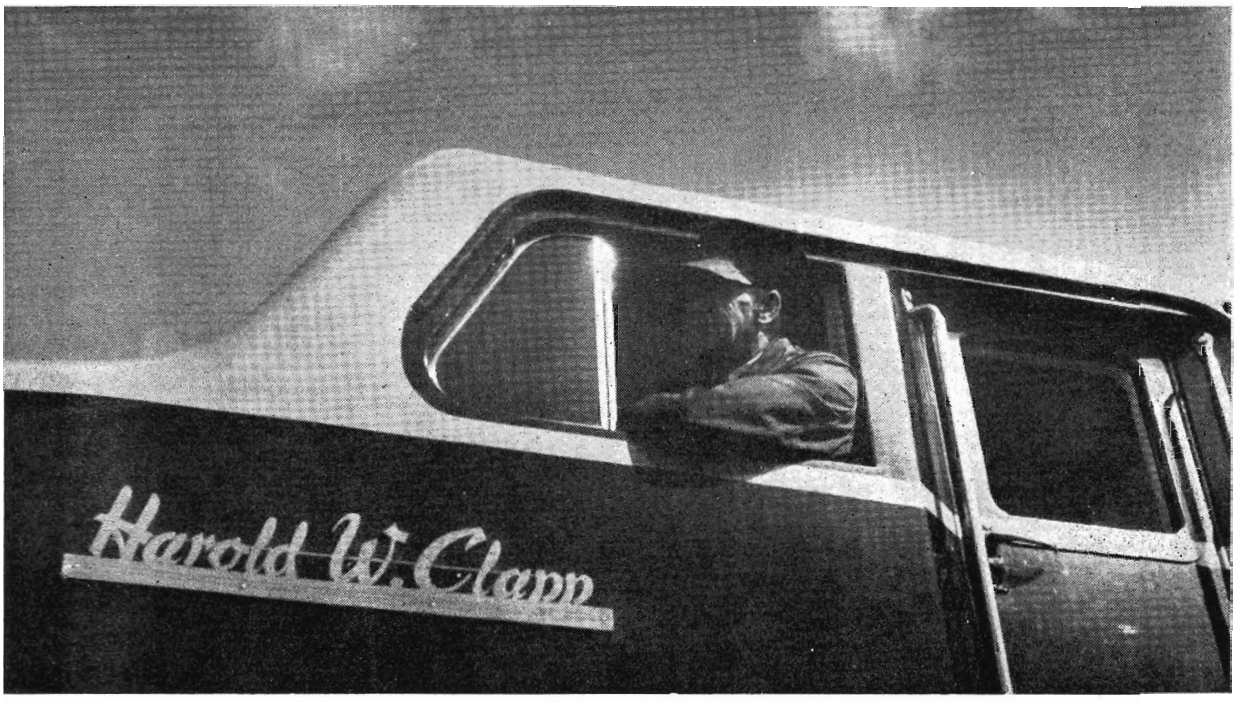


Simplicity and dignity were keynotes at the Tourist Bureau.



Large flags struck a colourful note at Yallourn

(*Above*) Nearly a million flowers were used for the department's float that took part in Melbourne's Floral Pageant on March 8. Next day the float was exhibited at Spencer-st. (*Below*) Some of the massed flowers and shrubs that brightened Spencer-st. station.



Mr. Myers

ROYAL TOUR PERSONALITIES

Veteran Driver

SINCE he joined the Victorian Railways in 1910, Driver Frank Myers has been associated with most of the famous people carried over the system. His first taste of special tour work came when he fired the engine of the train conveying the Duke and Duchess of York (later King George VI and Queen Elizabeth) during their visit to Australia. When the Duke of Gloucester toured the State the locomotive of his train was under the control of Driver Myers. Since 1935, as special class driver, most of the out-of-the-ordinary driving jobs have been handed to him. One of these was on the Pacific class locomotives on their trials, and, since the introduction of the diesel-electrics, he has naturally been in constant association with them.

His only regret is that one notable visitor who did not ride behind his engine was General McArthur, whom he greatly admired.

Driver Myer's philosophy can be summed up in his modestly expressed opinion: "I am only a test driver. There are seven hundred other chaps at the loco. depot as capable as I am, so why make a fuss about me?"

Rapid Promotion

KEVIN JAMES WHELAN, 24 year-old fireman on the royal train, is no stranger to Driver Myers. They have teamed together on steam and diesel-electric locomotives. They brought the first diesel-electric locomotive B60—*Harold W. Clapp*—from Wodonga to Melbourne.

Kevin joined the Department in 1948 as a cleaner-fireman. In two years he became a fireman and, last year, a fireman-driver. At present he is driving pilot engines in the Melbourne Yard.

This modest young railwayman with a shock of red hair says he did not dream that promotion would be so rapid. "With so many veteran drivers retiring these days there is a great opportunity for young men in the service," he adds. He used to play football, but nowadays devote all his time to his career.

Guard Golfer

GUARD H. P. DAVIDSON began as a lad porter at South Melbourne, in 1922. In the same year he became a guard and saw service at Serviceton, Daylesford, Castlemaine, Bendigo and Korong Vale. Last year he was appointed Commissioners' Tour and Supervising Guard.

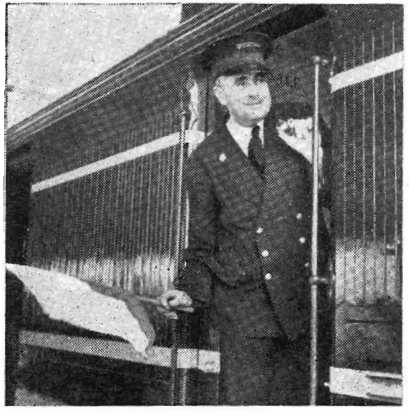
Mr. Davidson is a Bendigonian. His daughter, Miss Norma Davidson, is a typist at the railway goods sheds, at Bendigo. He is an ardent golfer and a member of the Belvoir Park Club, Bendigo, and a country member of the Victorian Railways Institute Golf Club.

Varied Career

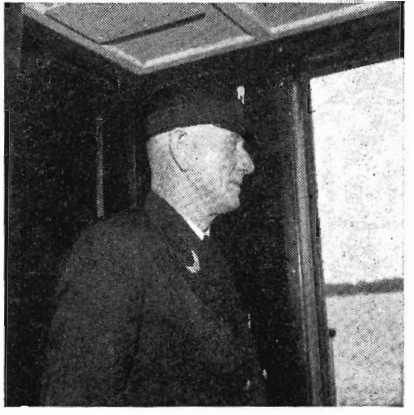
IN his 37 years' service, Conductor J. P. Keppel has seen much of the system and has met royalty, governors and many distinguished people. He joined as a supernumerary lad porter at East Camberwell in 1917 and, after going to Wodonga in 1920 as a car cleaner, became successively porter, and conductor (2nd class). After a period of duty at Mildura he went to Spencer-st. in 1925 as a ticket checker and platform indicator porter. After two years at Ballarat as conductor (class 2) he again returned to Spencer-st., and in 1937 was promoted to conductor (class 1).

Mr. Keppel has become a familiar figure to train travellers. He has been conductor on country passenger trains, *The Overland*, *Spirit of Progress*, Reso and other special and Commissioners' tour trains. He was with two previous royal tours, those of the Duke and Duchess of York, and the Duke of Gloucester.

As conductor of State cars, his duties brought him contact with Australia's first native-born Governor-General, Sir Isaac Isaacs, and Victorian Governors, Lord Huntingfield, and



Mr. Davidson



Mr. Keppel

Mr. Freeland

Sir Winston Dugan. He was also conductor of the special train that took General McArthur and his staff to Albury on their way to set up headquarters in Brisbane during the war.

Has Many Mementoes

THE conductor of the royal car, Mr. D. J. Freeland, started as a lad porter at Highett in 1924. After experience at metropolitan and suburban stations he went to Leongatha as acting junior clerk and to Dandenong as relieving lad porter. From acting operating porter at Yallourn he rose to acting conductor at Spencer-st. in 1936 and, ultimately, to conductor (1st class) in 1947. His duties have enabled him to meet the Duke of Gloucester, Lord Gowrie, Lord Huntingfield, Lord Somers, Lord Wakehurst and other Victorian and interstate governors.

Mr. Freeland's most treasured possessions are a gold tie pin he received from the Duke of Gloucester, signed photographs of some of his distinguished passengers and the knitted woollen outfit that Lady Brooks (wife of Victoria's popular Governor) presented to his baby son, Gregory. Conductor Freeland's hobby is fishing.

With Reso and Commissioners Tours

CHEF L. B. Germaine entered the Department in 1930 and was on tour with the Duke of Gloucester during his visit. He has also been associated with Reso tours and Commissioners' tours. Before becoming a chef he was a dining-car waiter. His hobby, apart from cooking, is building his home at Blackburn.

Chef-Gardener

CHEF C. D. DUNKLEY-SMITH began in 1938 at Ballarat Refreshment Rooms. He saw service in the war with the 9th Division in the Middle East. Afterwards, he became chef at Seymour and later at Mt. Buffalo Chalet. He did a six months' course at the William Angliss Food Trade School, and practical work at the Hotel Windsor was followed by further service at Mt. Buffalo and on the dining car of *Spirit of Progress*. His hobby is gardening.

Experienced in Royal Tours

CHIEF STEWARD S. WATERHOUSE, entered the Department in 1921 as a waiter. He was associated with the tours of the Duke and Duchess of York in 1927 and of the Duke of Gloucester in 1934. Mr. Waterhouse has also been on tour with the Commissioners and was regularly on Reso tours. He was relieving manager at Mt. Hotham Chalet for various periods after 1940.

Served General McArthur

STEWARD A. WATT is no stranger to special trains. From 1923 to 1929 he was on Reso train work and for five years was assigned to Commissioners' train tours. He was steward when Douglas Jardine's Test team toured Victoria, and, among other celebrities, he had General McArthur as a passenger from Melbourne to Albury.

Like Chef Dunkley-Smith his hobby is gardening.

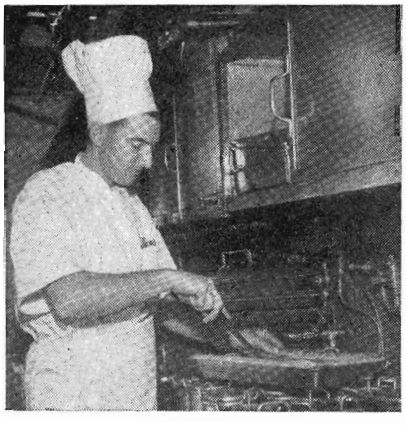
Recognition Of Good Work

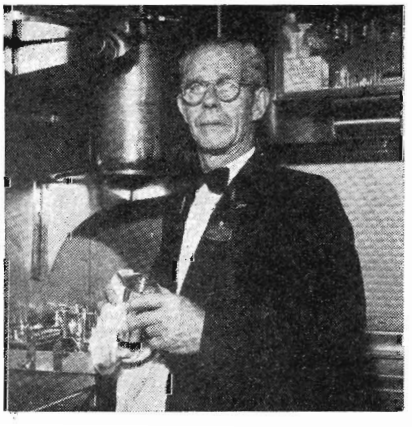
RAILWAYMEN actively associated with the running of country and suburban trains for the royal visit responded in the traditional manner to the call for a special effort. The extra work involved in the huge volume of royal tour traffic admittedly imposed a strain on all engaged in it, and the Commissioners recognized that work. The payment of a special allowance of up to £2 was authorized to staff involved between February 24 and March 6.

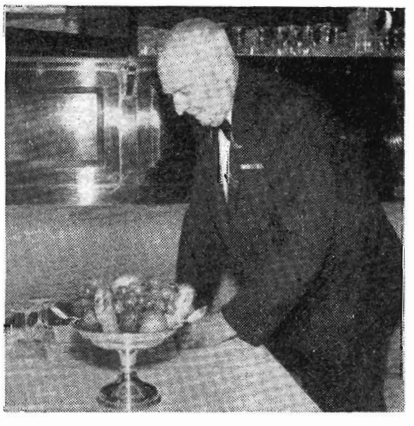
Mr. Dunkley-Smith

Mr. Waterhouse

Mr. Watt







Particularly memorable was the royal visit to Echuca, where the mayor, former railway clerk Jack Lord, proved a lively and informative host. Echuca's 16 original and striking arches of welcome caught the eye of the observant Queen. "Fancy going to all this trouble for us when our stay here is so short," the Queen remarked to the Mayor. "Your Majesty, even if you were here for only five minutes we would not have spared ourselves to make your visit a memorable one," was the mayor's retort.

Railman Mayor's Disappointment

HAD an outbreak of poliomyelitis not prevented the Queen and the Duke of Edinburgh from alighting from the royal train at Maryborough, the Mayor, Cr. Jack Pascoe, a goods clerk at Maryborough, would have been presented to them by the Chief Secretary (The Hon. L. W. Galvin, M.L.A.), a former railwayman. As it was, the Mayor read an address on behalf of the citizens of the Borough of Maryborough and the Shire of Tullaroop.

Cr. Pascoe has been a councillor for 16 years. He is chairman of the Central Highlands Regional Planning Committee, a member of the Maryborough Technical School Council, chairman of the Water Trust and Sewerage authority, president and secretary of the Maryborough Highland Pipe Band and a member of the Maryborough Highland Society.

As president of the Maryborough Centenary Committee, he will play an important part in this year's centenary celebrations, the highlight of which will be the re-enactment on July 10 of the original naming ceremony by Commissioner Daly.

Leader of the Band

MR. A. SWIFT, foreman fitter at Bendigo North Workshops, played an important part during the Royal visit to Bendigo. He is bandmaster of the 38th Batt. (Northern Victorian Regiment) Band, which was the main band to perform.

Thirty years ago Mr. Swift joined the Bendigo Municipal Band as a cornet player. Since then, his interest in band work has grown. He was bandmaster of the Ararat Citizens' Band for six years and of the Bendigo Municipal Band for four. He is now president of the Bendigo group of the Victorian Band League.

Incidentally, the presidents of four Bendigo bands are also on the workshops staff. They are: Mr. W. White (fitter), Bendigo Municipal Band, Mr. L. Thomas (fitter), Hopetoun Band, Mr. T. Hilson (fitter), Boys' and Citizens' Band and Mr. E. J. Taylor (boilermaker), Eaglehawk Citizens' Band. All told, there are 15 active bandsmen working in the 'shops, including Mr. L. Ryan (blacksmith), who is bandmaster of the Hopetoun Band.

Benalla Station Decorations

THE original and effective exterior decorations for the royal tour at Benalla station were the work of Mr. Danko Martek, a New Australian on the Bonegilla Migrant Centre staff. These were additional to the Departmental decorations. The accent was on Australian motifs, especially in the foregrounds. Mr. Martek studied interior decorating in Yugoslavia before the last war. In painting the Australian scenes he conformed largely to the aboriginal style and combined it with modern technique. Kangaroos, emus and other Australian fauna were painted on sheets of masonite. These were placed end-on-end to represent totem poles.

On calico, masonite and three-ply shields he painted the royal coat-of-arms and those of the Australian States. In the background were two spears and an old battle axe. He spent much time studying history and copied scenes from books on the Wars of the Roses and the Crusaders. He also copied portraits of early English Kings and Queens. There was a large "welcome" sign in front of the railway station and another, "God bless the Queen", on the road to Murchison. Mr. Martek was official adviser to the Benalla decorations committee and many of his ideas were adopted for the general street decoration scheme.

Helped to Make Tour a Success

FORMER and present officers of the Department were well represented on the various organizing committees for the royal tour.

Mr. N. G. Wishart, secretary to the Cabinet Reception Committee, was formerly of the Transportation Staff Office. Selected to assist the State Director during the visit of H.R.H. the Duke of Gloucester in 1934, his experience qualified him for the more responsible post of Chief Administrative Officer for the Cabinet Reception Committee for the royal tour.

The State Transport Officer, Mr. A. G. Coulthard, was a Stores Branch Officer. He was Assistant State Transport Officer for the royal visit of 1934. Working in close association with him as Accommodation Officer, was Mr. Cliff Williams of the Victorian Government Tourist Bureau.

Three railwaymen members of the band of The Royal Melbourne Regiment: left to right, Boilermaker D. C. Eads, Newport Workshops (drum major), Clerk J. Threlfall, Tottenham Goods (cornet) and E. T. Driver K. R. Agnew, Jolimont (solo euphonium). The regimental band had the honour of playing outside the Melbourne Town Hall for the arrival of Queen Elizabeth and the Duke of Edinburgh and also took part in the changing of the guard ceremony at Government House. Mr. Threlfall was one of the bandsmen from the regiment chosen to play the fanfares at the Royal Ball. The Royal Melbourne Regiment, which celebrates its centenary this year, is affiliated with The Royal Fusiliers City of London Regiment, and the bandsmen wear similar uniform. The regimental march is *Waltzing Matilda*.

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VR News Letter

MAY 1954

THE MONTH'S REVIEW

Transport's Big Problem

IS transport taking full advantage of technological advances in engineering, as they become available, in the interests of economic operation? The question was posed by Mr. Commissioner Meyer in his inaugural address as Chairman of the Victorian section of the Institute of Transport. The overall answer is: it cannot, since its major equipment, compared with that of many other industries, is so durable and so expensive that economic pressure often precludes, or at least delays, the substitution of the newer and better for the part-worn old. If you have built a magnificent ship that cost you five million pounds, you cannot scrap it in a year or two just because somebody has invented another ship that will sail twice as fast with half the fuel cost and without rolling or pitching. Mr. Meyer, however, made the point that the negative answer necessarily applies much more to the older transport forms of shipping and railways than to aircraft and road vehicles, mainly because of the relatively heavier financial commitment over the larger life of the former.

The Rate Of Progress

AIR transport has, of course, progressed spectacularly with the rapid advance and availability of lighter and stronger alloys, the general design of aircraft, navigational aids and the development of engines from the old radial type up to the jet. All this has happened in 30 years. Road transport evolution has been much more gradual; but the improvements in machine tool technology (on which mass production is based), road building and maintenance techniques have been more universally adopted in a relatively shorter time than, for example, it is taking shipping and railways to discard coal as a direct fuel (although coal burning ships have dropped from 64 to 15 per cent. of Lloyds Register, in 25 years). Diesel and electric traction is, of course, making considerable headway, but, except in America, not at a very much greater rate than is demanded by the replacement of more or less normal scrappings. In Victoria, we have taken quick advantage of a fortuitous combination of circumstances—the urgency to scrap and replace and the availability of money to do it—to get the best out of modern steam technique as well as to adopt diesel motive power to the economical limit.

The Urgency of Solution

ALTHOUGH Mr. Meyer would not, as a railwayman, he said, presume to offer overall solution to the problem of taking greater advantage of rapidly advancing technology, in transport as a whole, he did underline the urgency of the problem, especially in Australia with its "circumscribed capital resources and with all the contradictions of uneconomic duplication of transport in some directions and inadequate facilities in others." Progress towards solution will necessarily depend on the co-operation of transport executives and their technicians and advisers who should have full consciousness of the balance between the technical and economic factors, but, as Mr. Meyer suggested, free discussion by such a body as the Institute of Transport, which is an educative body, can contribute helpfully.

Bouquet

THE following is published without comment. It is addressed to the Minister of Transport by a widely travelled Melbourne business man who decided to go by *The Overland* to Adelaide instead of (more normally for him) by air. "I was agreeably and pleasantly surprised," he wrote. "I travelled in a roomette, and the accommodation and service compared favourably with any of the de luxe trains of the United States. In addition, my contacts with the railroad employees, from Mr. Edwards, who arranged my accommodation, and the conductor, down to the porter who carried my bags, were pleasant and cordial and beyond criticism. In writing this note to you, I thought it might provide a bright spot in the flow of critical letters which I know must pass your desk, and perhaps it would encourage the men and women who are working so hard for the success of this operation to know that at least one traveller would like to express his personal "Well done!".

Mr. John Elliott Knighted

VICTORIAN railwaymen and especially those who met him when he was here to investigate and report on the system, will join *News Letter* in congratulating Sir John Elliott, Chairman of London Transport Executive, who received a knighthood in the New Year's honours list. After his return to England Mr. Elliott's promotion was rapid. In 1950 he was appointed Chief Regional Officer of the London Midland Region of British Railways and in the next year he succeeded Sir Eustace Missenden to the chairmanship of the Railway Executive. When that body ceased to exist under the terms of the Transport Act, last year, Mr. Elliott became chairman of London Transport, the only remaining executive with a chairman directly responsible to the British Transport Commission.

Incidentally, Mr. J. R. Rewell, Outdoor Assistant to the Chief Traffic Manager, who, recently returned from an eight months' fact-finding mission abroad, says that Sir John Elliott retains a deep interest in the Victorian Railways and follows their progress in *News Letter*.

Auto-Coupler Conversion

THE Department's auto-coupler conversion programme is going ahead according to schedule. Side buffers have been removed from a number of U and UB waggons which have been auto-coupled and provided with shunters' steps. The auto-coupling of shunting locomotives is also being done. Ultimately, every truck and locomotive in service will have auto couplers.

The elimination of side buffers from a truck will reduce its weight by 8 cwt., and, in a goods train of normal size, this will mean a total reduction of about 20 tons.

"Narrow Palace On Wheels"

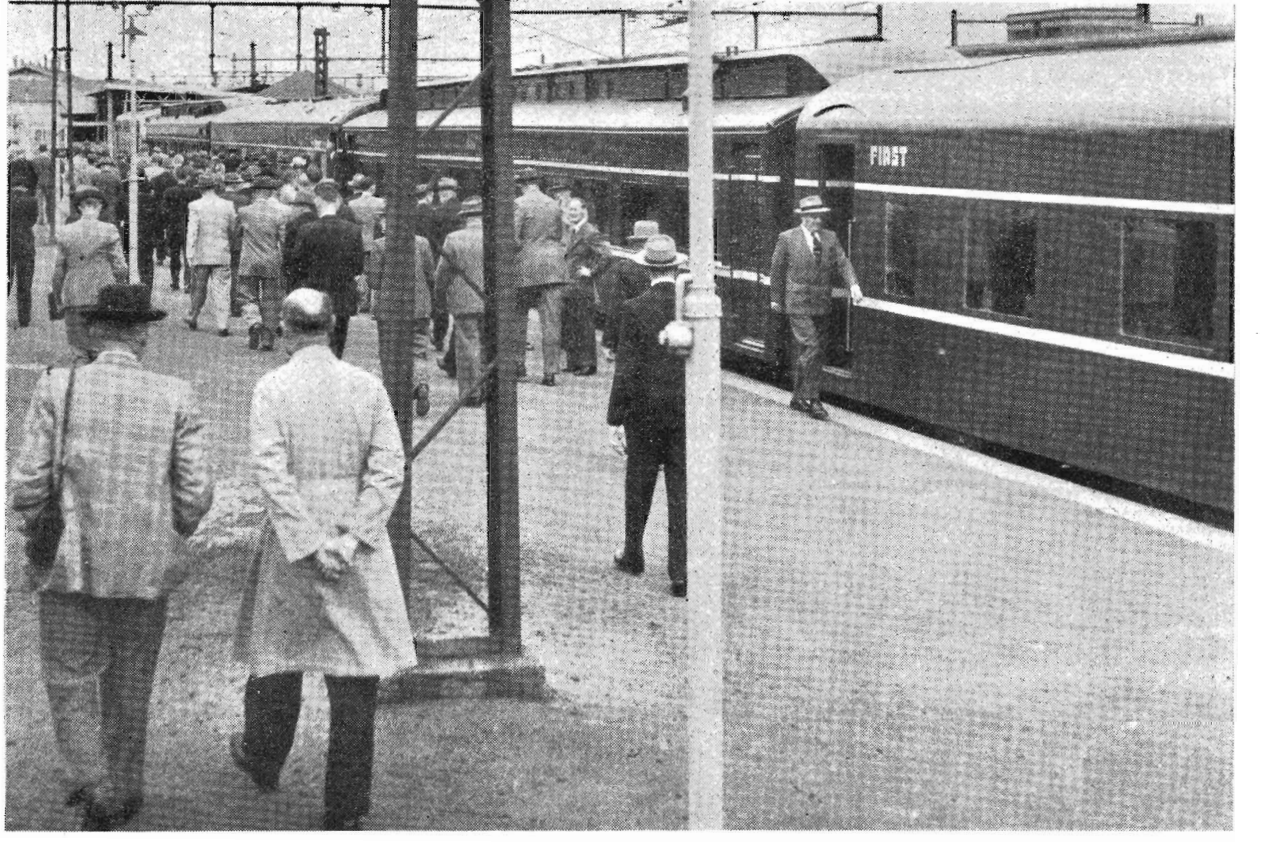
THE eulogistic comment by an English press correspondent who travelled on the royal train that it was "a narrow palace on wheels" is unquestionably the finest tribute that anyone could pay to the skill of the railway craftsmen who built it.

No effort was spared by the Department to ensure that the train which conveyed the Queen, her Consort and household to provincial centres would be fit for a Queen. That it ran so smoothly and efficiently and won such high praise from the royal party and Australian and overseas press representatives for its attractiveness and comfort, was abundant proof that the men who got the glittering diesel-hauled train ready for the road did their job well.

Cars had to be painted, refurbished and, in some cases, given the modern touch. In addition, a wide range of equipment had to be installed. There was a time limit set for all this work. However there was not a man in any of the workshops involved in the work who was not keen

OUR FRONT COVER

shows S 301 (*Sir Thomas Mitchell*) being scrapped at Newport Workshops. Since it went into service on February 1, 1929, the locomotive had registered 1,413,227 miles.



Railwaymen return to Spencer-st. after a trip to Geelong in the royal train

to be associated with it in some way or other. Those selected were the envy of their workmates.

The success of the royal train was their reward. They did not seek any other. At the same time the workshops' staffs appreciated very much the thoughtful action of the Commissioners in inviting them to make a special trip on the train recently to Geelong and return. The men were pleased to have with them Mr. Commissioner Brownbill, the Acting Chief Mechanical Engineer (Mr. G. F. Brown) and the Acting Assistant Chief Mechanical Engineer (Mr. W. O. Galletly). Afternoon tea was served on the train on the homeward journey.

Pride In The Job

PRIDE in railway craftsmanship was the keynote of the comments made by the men whose skilled hands produced the royal train. Here are some of them :—

Sub-Foreman H. W. Wignall, North Melbourne Workshops : "The whole of the undergear was thoroughly checked, from split pins to nuts and bolts, on trial runs."

Car and Waggon Builder L. J. McGilton : "We helped to make wardrobes in the Queen's bedroom and the partitions along the corridors. We learned our trade in the railways. Naturally, we are proud of our work."

Foreman Welder E. R. Nicholson : "The experience gained in building *Spirit of Progress* was used to good effect in the work done on the royal train."

Timber Foreman R. J. Tongue, Stores Branch, Newport Workshops : "The royal train gave us a wonderful opportunity to prove that Australian timbers are unexcelled for beauty and durability. They were very much admired by overseas press representatives."

Foreman Painter Martin Healy, North Melbourne Workshops : "In my 49 years' railway experience I have never known a job to be as well done in such a comparatively short time. The men under my supervision worked like Trojans. I was proud of them."

Foreman Car Builder S. Bates, Newport : "Among other things we did was to install the wireless set in the royal car, make extra dining chairs and assist in the installation of the telephone switchboard. I was impressed by the spirit of co-operation. It was inspiring."

Foreman Upholsterer L.E. Sitlington : "No. 5 State Car is equal to anything in the trade for comfort and durability."

Mr. F. Carey, secretary of the Australian Federated Union of Locomotive Enginemen : "The royal train proved that railway tradesmen are among the world's best craftsmen."

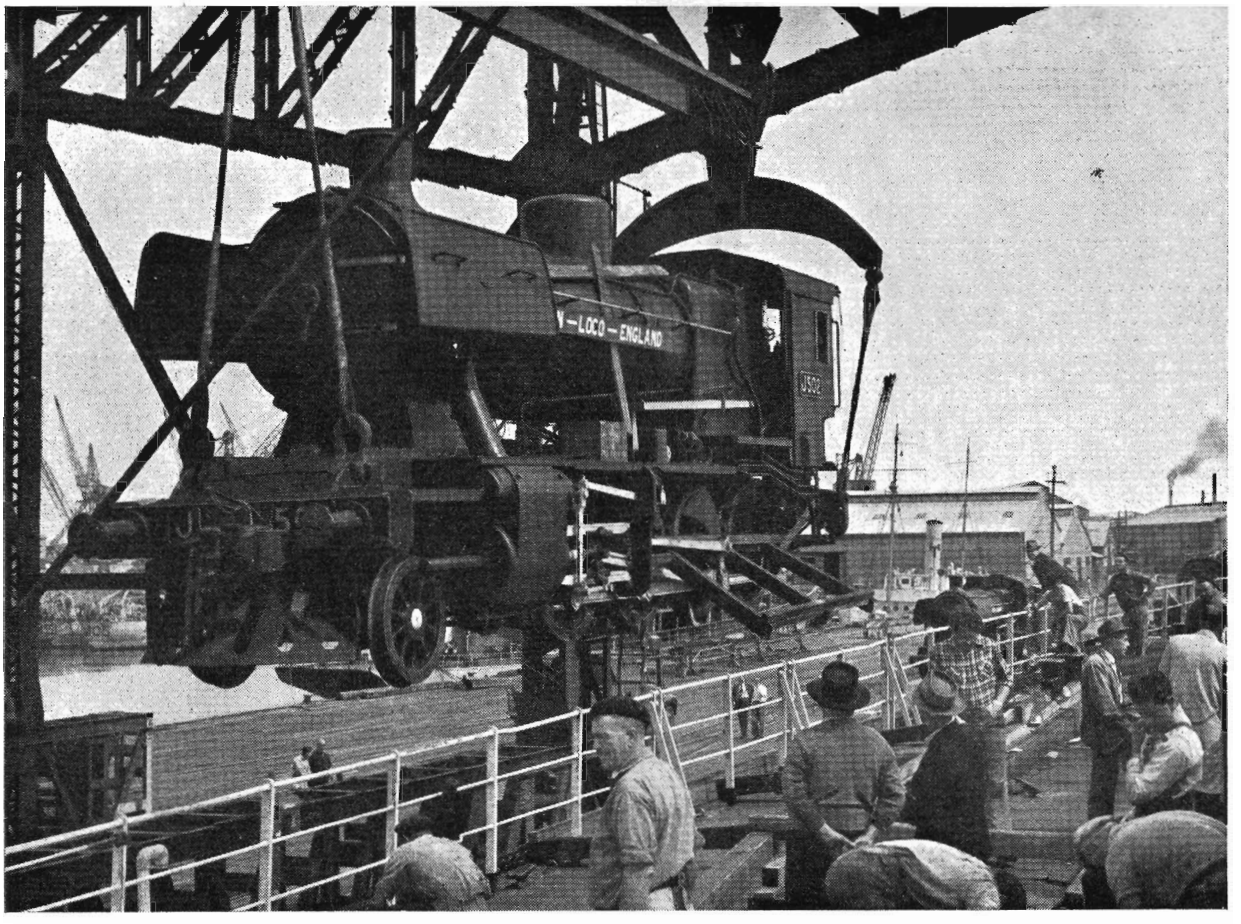
Aerial Survey Progress

RAILWAY aerial photographs reveal many features which are not recorded by ground survey, and are especially valuable in the study of level crossings, bridges and culverts, water courses and other details. Early in 1947 the first contract for the survey of 150 miles of track was placed. It included the Gippsland line between Dandenong and Traralgon. It was done in a matter of weeks, and plans for line duplication were immediately put in hand.

The first camera used had a lens focal length of 8½ in. This was later changed to one of 12 in. and the shutter was given a speed of 1/200 second. At a height of 1,800 feet, the lens gave a plate scale of 150 ft. to an inch.

Fifty thousand negatives and prints covering the State-wide network of railways have been made and a check survey of the suburban system is now in hand to enable stereoscopic viewing.

The system of aerial survey adopted by the Department has not been used elsewhere in Australia. It has been found to be faster and less costly than standard methods of ground survey.



One of the new J's being unloaded at Williamstown.

THE NEW J CLASS

J class locomotives, the first deliveries of which were made recently, embody most of the modern mechanical improvements which have proved successful in larger designs.

APART from mixed traffic, they will be very suitable for light main and branch line country passenger work. Ultimately, they will displace the D1, D2 and D3 classes, which, with upwards of 50 years of excellent service behind them, have now reached the end of their economic life.

The new locomotives are being built by the Vulcan Foundry at Newton-le-Willows, in Lancashire, which has not previously made engines for the Victorian Railways. Of the 60 ordered, 30 will be equipped to burn coal and the remainder fuel oil.

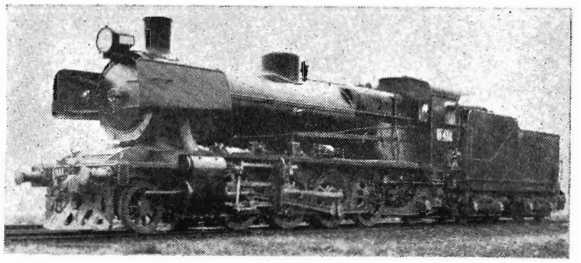
The most striking feature of the J class locomotive is its considerably greater height in relation to the frame, compared with other locomotives. The boiler has been raised and the rear end of the frame cut away so that any future change to standard 4 ft. 8½ in. gauge can be made without a drastic redesign of the firebox. One of the advantages of the J, compared with the N, is the elimination of the trailing truck with its added weight and increased maintenance costs; another is that its consequent reduction in overall length permits the J to use the smaller turntables on branch lines without uncoupling the engine and tender.

Designs, detail drawings and specifications for the J's were prepared in the Department's Rolling Stock Drawing Office. The J is the consolidation type, with the same wheel diameters and wheel arrangement as the K, 2-8-0, but there the similarity ends. The J is about 12 tons lighter than the N, but develops the same tractive effort. The cylinders have been redesigned to provide steam passages as direct as possible, giving a minimum obstruction to flow, and thus improving the efficiency of the locomotive.

Improvements in design have reduced both the time required in the running sheds for the preparation and disposal of the locomotives and time and costs in maintenance. They also give maximum accessibility to controls and crew comfort.

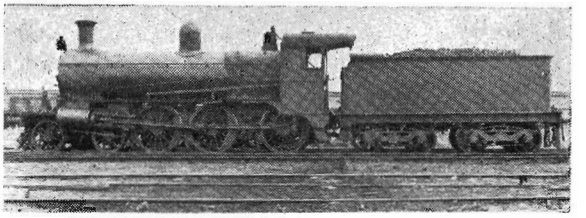
The latest type cowcatcher and German design smoke

deflectors are fitted. Nathan injectors and mechanical lubricators are also provided. Hulson type rocking grates suitable for the lower grades of coal have been adopted for the coal burners, together with the latest type Ajax firedoor and a self emptying ashpan and self cleaning smokebox. On the fuel oil burning group the latest steam heating and atomising equipment has been fitted.



The J is 12 tons lighter than the N (*above*).

The relatively large steam dome contains a balanced type regulator valve with conical seats and a centrifugal type steam separator to provide steam as dry as possible. The superheater comprises a modern type steam collector in the smokebox with a set of 21 superheater elements. The latest type of riveted piston bull ring with forged steel piston centre and fabricated 10 in. diameter piston valves are provided. The valves and pistons are lubricated by oil delivered through atomisers from the mechanical lubricators. Two steam turrets in the front of the cab supply steam to the auxiliaries. They have main shut-off valves that can



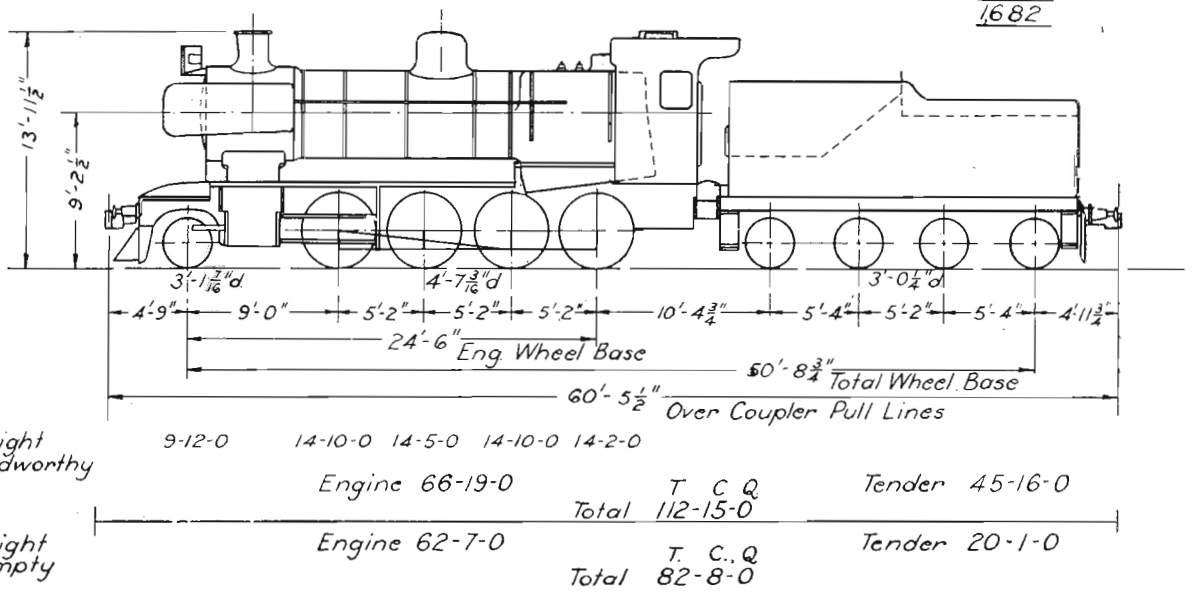
D class (*above*) will be replaced by the J.

be operated from the back of the cab. A manually operated blow down valve on each side of the firebox permits the discharge of sludge from the boiler. Coale safety valves, of the pop and muffled type, are fitted.

Of one-inch mild steel plate, the main frames are supported by cast steel and fabricated frame stays with standard type horn blocks, spring gear and compensating beams. Axle-boxes have plain bearings with Mintex hub liners. The coupled wheel centres are the new SCOA-P type. Whenever possible standard parts used on other locomotives, such as connecting and coupling rods, crossheads and motion gear are fitted. Westinghouse brake equipment is the A-6-ET (engine and tender) type which embodies all the functions required in modern locomotive brake service for complete control of moving trains.

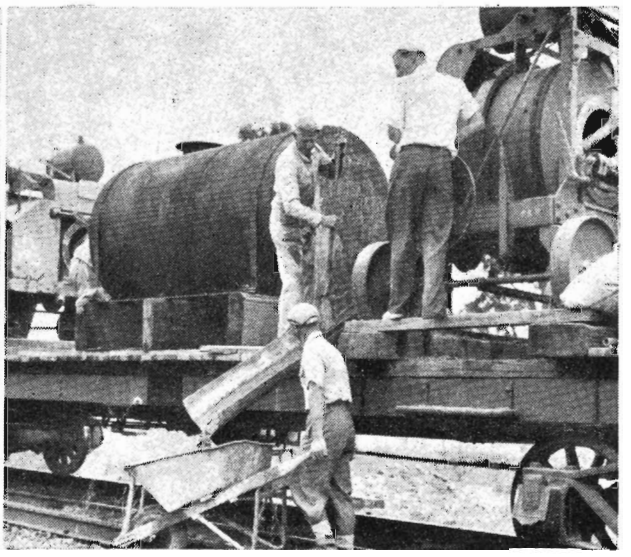
Redesigned to incorporate a cast steel transom with integral centre plate and mild steel frame bars with cast steel horns, the tender bogie has been strengthened considerably. The axle box is the one piece type with plain bearings for 9 in. x 4½ in. journals.

ENGINE		VALVE GEAR		BOILER	
Cylinders (2)	20"d x 26"	Walschaert		Work. Press. 175 lb. per sq. in.	
Tractive Effort (85%)	28,650 lb.	Piston Valves	10"	Grate Area	31 sq. ft.
Factor of Adhesion	4·48	Travel	4 5/8"	Heating Surface	(sq. ft.)
		Lap	1 1/16"	Firebox	118
		Lead	1/4"	Arch Tubes	9
				Tubes & Flues	1,317
				Superheater	238
					1,682



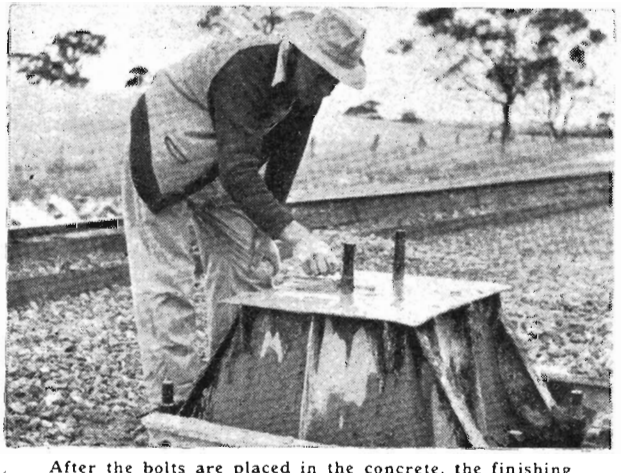
Weight Roadworthy	9-12-0	14-10-0	14-5-0	14-10-0	14-2-0	
	Engine 66-19-0					Tender 45-16-0
			T C Q			
			Total 112-15-0			
Weight Empty	Engine 62-7-0					Tender 20-1-0
			T. C., Q			
			Total 82-8-0			

Diagram showing essential particulars of J class coal burner.



The plant train, on which concrete for the foundations of the overhead structures is mixed, carries two 400-gallon water tanks, about 300 gallons of water in drums, 100 bags of cement, 40 cubic yards of screenings, and 20 cubic yards of sand. The mixer produces about five cubic yards of concrete an hour. Special forms are placed in the foundation holes, and the concrete is then poured in.

When the foundations are close to the track, the concrete is poured direct from the mixer through a metal chute.



After the bolts are placed in the concrete, the finishing touches are done by hand.

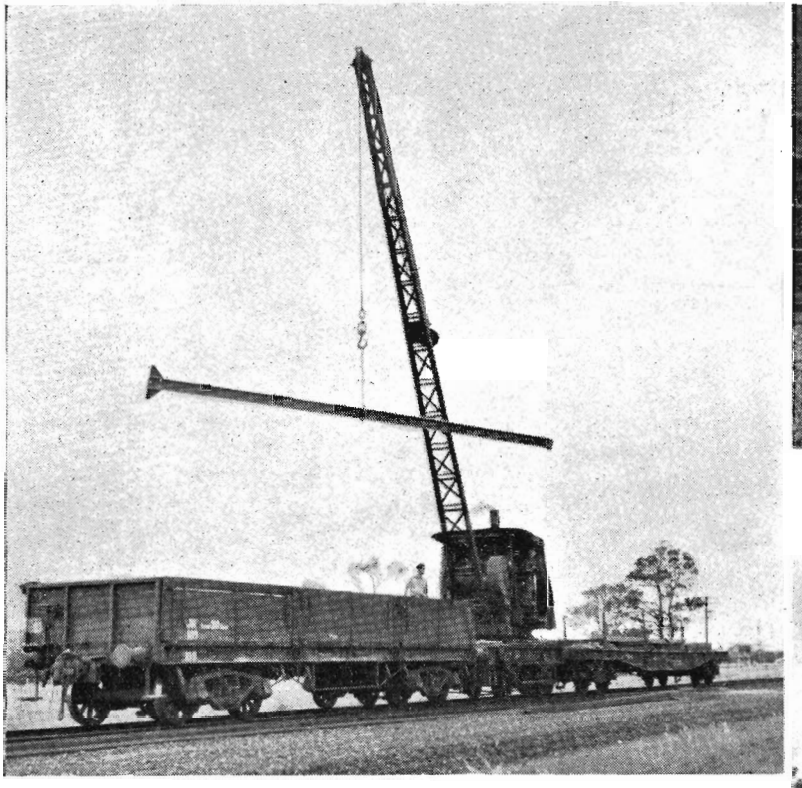
STREAMLINED OVERHEAD STRUCTURES

THE new overhead structures used for the electrification of the Gippsland line were specially designed for simplicity and economy.

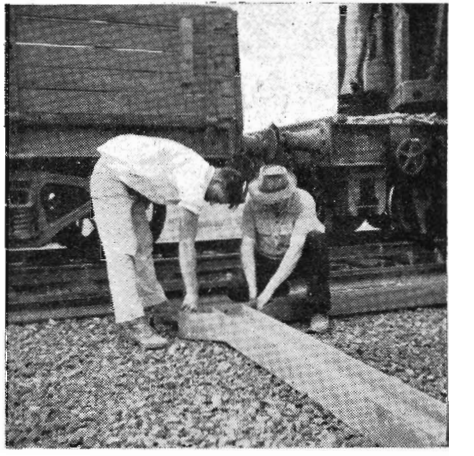
The familiar lattice form of mast used on the Melbourne suburban lines has been replaced by a simple "I" beam structure which is bolted to a steel plate on a concrete foundation, instead of being embedded in the concrete block. This form of construction saves 16 per cent. in fabrication and erection costs and 12 per cent. in total weight of steel used; and the newer structure gives a far better surface for painting than does the lattice form. It also yields the appreciable saving of 25 per cent. in the quantity of concrete used for foundations.

The vertical and horizontal members of each structure are bolted together on the ground, and the structure is then lifted into position by crane and bolted to the foundations.

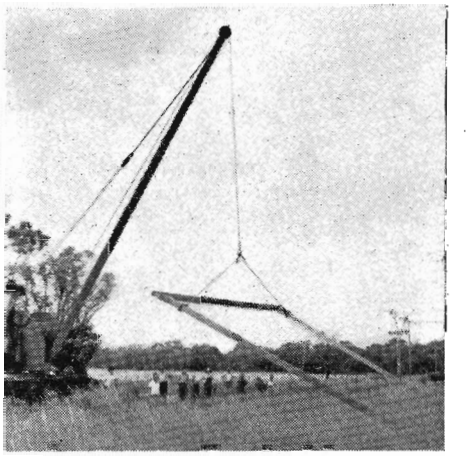
A total of 2,100 structures, entailing 2,600 tons of steelwork, is necessary to serve the 79 route miles between Dandenong and Traralgon. The new structures have also been used on the Alamein line duplication to replace the original wooden poles.



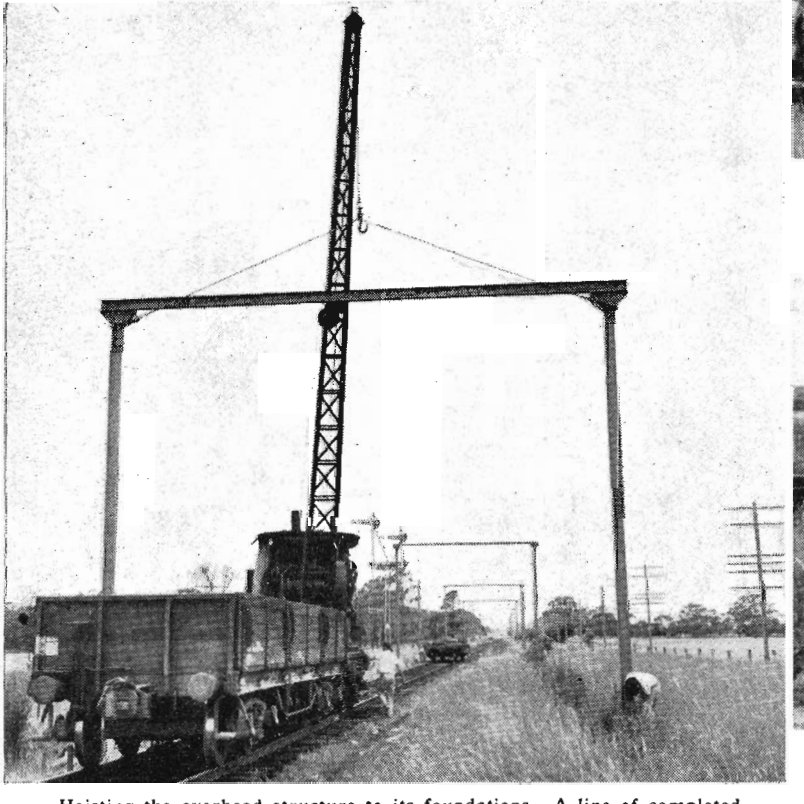
Unloading the beams from a QR truck with a steam crane. The work is done mainly on Sundays to avoid interference to traffic.



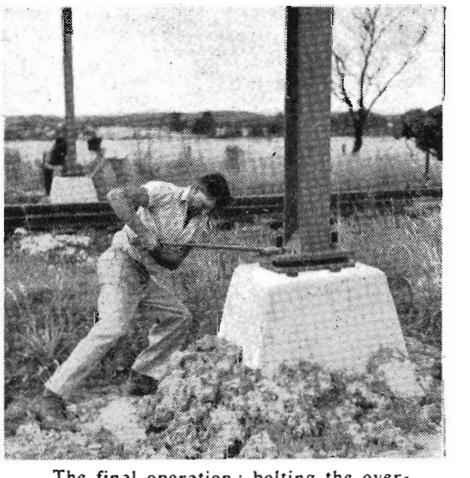
After unloading at the site, the beams are assembled and bolted together, ready for the crane to lift them into position on their concrete foundations.



The assembled structure is hoisted and swung into position across the track. The 3-ton steam crane makes short work of this.

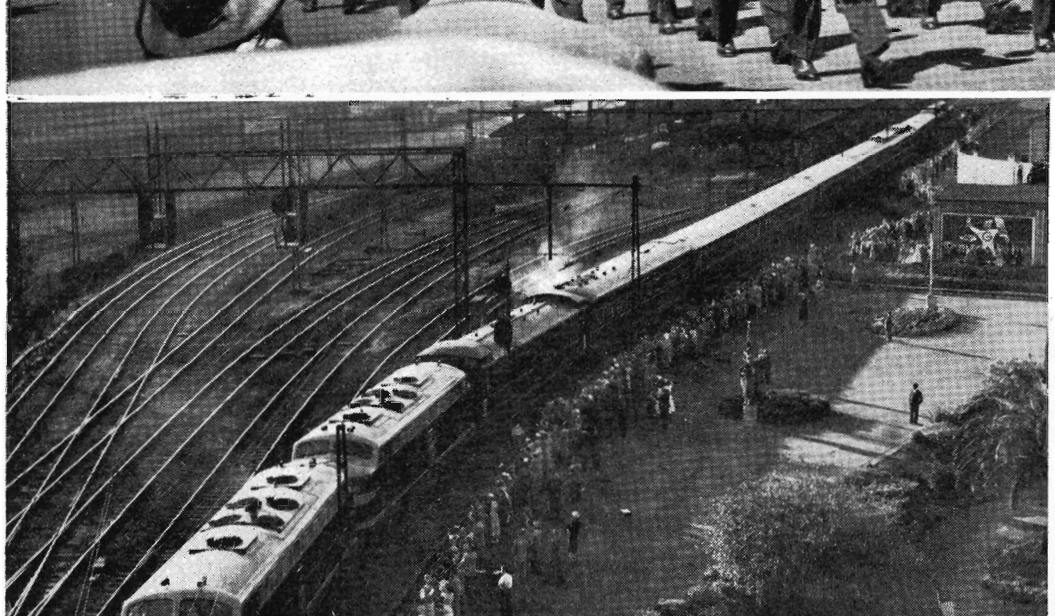


Hoisting the overhead structure to its foundations. A line of completed structures can be seen in the background. This particular section of track has not yet been duplicated.



The final operation ; bolting the overhead structure to its concrete foundation. Everything is then ready for the overhead construction gang to attach the insulators and string the catenary and contact wires.

AROUND THE SYS



FLORAL FESTI
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model B class di
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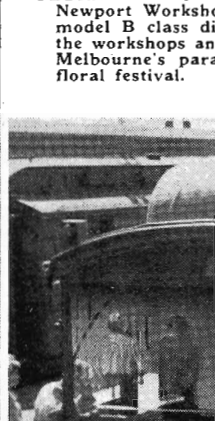
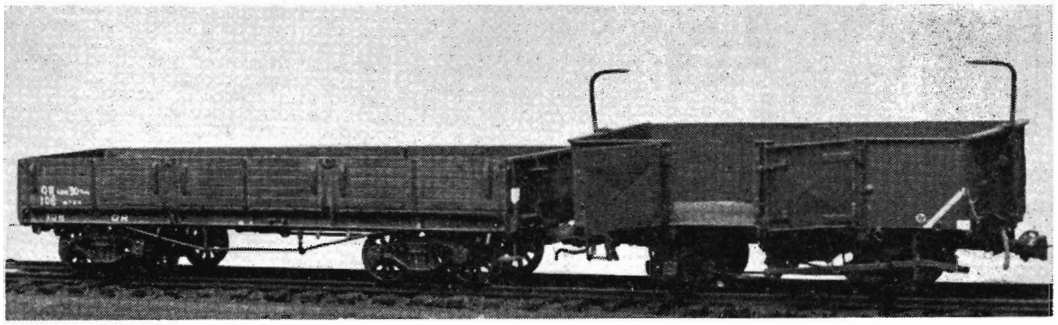


RAILWAY STRONGPOST : A close view of the Queen and the Duke of Edinburgh, and the royal train itself, was had by about 1500 members of the Railway Head Office staff and their families who lined the track from the south end of Spencer-st's. No. 8 platform to the viaduct when the train slowed down to a crawl on its way to Warburton.

ROYAL TRAIN ON S
of the royal tra
queue extended
to No. 6 platfor

E M

Appropriately enough, marched ahead of the ric locomotive built at ed for the first time in oats at the royal visit



PRIZE WINNING MODELS Mr F Niquet's and Mr. A. R. Lyell's models of QR and GY trucks won Victorian Model Railway Society's awards recently. The GY has opening doors and working handbrakes. The models, which were made in home workshops, were judged by Mr. Commissioner Brownbill.

MOVED BY THE SPIRIT: *Left to right*—S. Sandhu and H. Singh, Indian students of Malaya, were met by I. Singh when they arrived in Melbourne recently by *The Spirit* after courses in N.S.W.

Spread over two week-ends in March the public exhibition cted almost 35,000 people. On one of the four days a stationmaster's office, Spencer-st., along the concourse
Photo: The Age

TO THE SPA CENTRE: Three hundred delegates of the Australian Natives Association went by special train to Daylesford recently for the annual conference. Before the train left Spencer-st. they discussed the agenda with the Chief President (*second from left*).

ROYAL TOUR PUBLICITY

ONE feature of the Department's royal tour displays was the richly designed full-size poster of welcome to the royal visitors. Printed in eight colours, it appeared on all metropolitan and country stations, and excited considerable admiration. The royal tour involved a good deal of publicity for special railway services. A two-colour poster advertised cheap fares from the country to Melbourne and to centres visited by the Queen and the Duke, and an attractively designed little "stuffer" folder was widely distributed to give people useful and detailed information about these cheap fares.

A special time-table booklet, including photographs of some of the places that the Queen and the Duke visited, was designed and printed for the royal train, and a souvenir running time-table for staff use was also produced. These and subsidiary time-tables for the train running staff all bore the royal coat-of-arms and were printed in distinctive colours.

News Letter reproduces on this page samples of the wide range of publications that were issued.

ON THE ROYAL TRAIN

by John Freeland

In his 30 years of railway service, Conductor John Freeland's job has brought him in touch with many highly distinguished travellers ; but his greatest moments were spent as a member of the staff of the royal train which carried the Queen and the Duke of Edinburgh on their recent tour of Victoria. Here, he writes a human story of what, to him, were the highlights of the tour.

ALTHOUGH the cheering has now died away, a few impressions of the greatest event in the history of the Victorian Railways are, perhaps, not amiss. It was a magnificent railway effort. I thought it so good, that I was filled with regret that every railwayman was not able to see or participate in the royal train arrangements.

For many months we all knew that we were going to take the Queen on a rail journey, and we worked and prepared for it, but it wasn't until Her Majesty walked slowly on to the platform at Sale and took a look around, that we suddenly realized that here was the Queen of Britain and Australia in our midst, and we railwaymen were about to take her in our care. It was an inspiring moment ; inspiring, too, is the best way to describe the journey to Melbourne. Thousands of people at the centres where we stopped and thousands more between stops cheered the royal couple on their way. The running lines between Dandenong and Melbourne were so lined with crowds that several times the train had to slow to walking pace. Those of us on the train could feel this terrific upsurge of mass emotion, and often had to grit our teeth to stop being visibly affected.

The highlight of the tour from the railwayman's angle, was the next night at Goorambat. There, railway organization was at its best. A train of sleeping cars was in position for the sitting passengers on the royal train, with the Carey car for showers and stores, the Melville car for electrical recharging purposes, an ABW car for staff quarters, a tanker of water and a van. The royal train was driven to a stopping point and, within minutes, contact was made between the two trains without any fuss or bother. Attractively made steps were quickly in position, and the pressmen and tour officials walked the short distance from one train to the other. Both the royal train and the water tanker were connected to a pipe line just below ground level.

At appropriate intervals, all cars were connected and watered without waste of time and effort in manhandling great lengths of hose. Similarly, reserve power supply was spaced at intervals and quick and easy connection was made with cars needing extra supply. I was working No. 5 State Car, and about ten minutes after we arrived, knowing the huge amount of electrical energy consumed by this car, I inquired from our electrical people how soon I could be changed over to reserve power. I was told that I was already over. Just like that ! The whole station area was levelled off, gravelled and brilliantly lit.

After 30 years of varied railway working, I thought that I had passed the stage of getting excited by railway matters, but I was amazed, by all I saw. About midnight, when most had retired for the night, I took a stroll around the trains and the set-up left me filled with admiration for the planning and work that had been done.

As well as being watered, the cars were re-iced and a small, energetic band of car cleaners cleaned the trains from stem to stern. It was done without noise, and the trains presented a glittering spectacle next morning to the hundreds of people who had gathered nearby to see the royal couple. At 9 a.m. hoses and electrical points were disconnected, and at 9.25 a flag was waved and we were on our way. When we got to Dowling Forest that night, the train that we had left behind at Goorambat was again in position, and the previous night's routine was repeated. Just to show that Goorambat was no fluke, the arrangements at Dowling Forest went off just as well. Everything was in its right place and everything was effective. I wish that I could build a better word picture for those who were not there. Railway teamwork was at its acme of perfection.

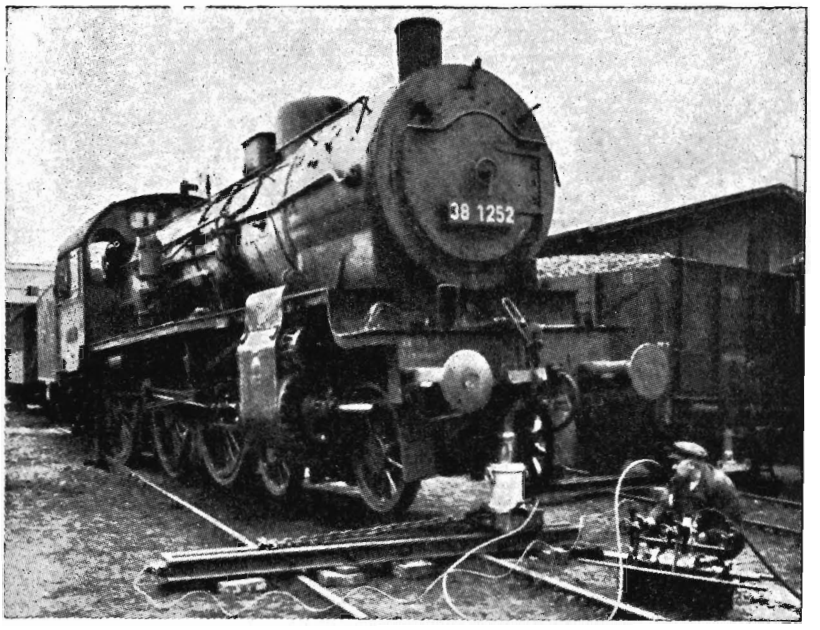
This servicing of the train was repeated at each stop we made, by the same energetic little band of workers. The interior of the train was maintained in the same glittering condition as the outside. Conductors and dining car crews serviced and maintained all the inside of the train, each man being responsible for the car to which he was appointed. Press men entraining at stopping points were confronted by a stool and boot brushes at the ends of the sitting cars so that they could remove the dust picked up from the dry countryside from their shoes. Only a small thing, maybe, but it shows that nothing was forgotten.

Of the Queen, I need not say much. The press has adequately covered her every appearance, but to the few of us who worked close to Her Majesty, she was a delight. She and all her staff made each of us feel as if we were one of her household, which, indeed, I suppose we were. She made every effort to see the people and for the people to see her. I saw her on a couple of occasions put down her cup of tea and run along the corridor to the end of the car to see and be seen. Once she nearly bumped into Conductor Joe Keppel in her spontaneous rush to get to the observation platform. The Queen had a very friendly personal staff who I thought would be doing the waiting on Her Majesty. When I enquired of the sergeant-footman about it he told me that we railwaymen could do the work if we wished. We certainly wished. The Queen's personal maid told me that, if I wished, I could do the Queen's state room for her. Thus were we railwaymen given every opportunity of serving Her Majesty.

The royal couple were easy to serve at table, and had small and simple appetites. For one dinner they had roast chicken and a savory, and the next night soup and a crumbed cutlet. Breakfast consisted of bacon and eggs, which, together with hot coffee and tea, were served, in English style, in hot dishes on the buffet. Hot plates and toast were on the table, and the Queen and the Duke, unattended, helped themselves. At other meal times Stewie Waterhouse, from *Spirit of Progress*, waited on them in fine style. From the Queen's staff, I understand that the royal couple live just as simply at Buckingham Palace, and dress for dinner on State occasions only. I never saw the Queen otherwise than fresh and well turned out. The electric iron hardly got cold while Her Majesty was on the train. She wore one outfit for the whole of the day, but her maid would press Her Majesty's skirt, jacket or coat when it was necessary, as it often was. Sitting in a motor car doing a hot tour of the various centres would crease up any one.

I could mention a lot of names of railway officers and men connected with the tour, but I would like to pay a collective tribute to them all. Each one did a wonderful job from the organizing to the actual physical work. To the heads of Branches, their staffs and workmen, 'I dips me lid.'

LINES FROM OTHER LINES



Re-railing a locomotive by means of bridge rails and traversing jack. The re-railing bridges are used for the lateral movement of locomotives. This equipment has been standardized on the German Federal and other European railways. The types of power units vary, but in all cases the lifting jacks are operated either by hydraulic power or compressed air. Some of the jacks have a capacity of 150 tons with a height lift of 19.4 inches.

Encouraging Pallets

TO encourage transport on pallets, no charge is now made by British Railways for the carriage of owners' pallets on which goods are loaded, or for the return of the pallets to the senders.

British Railways themselves use pallets for moving goods from point to point in 39 depots, while plans have been authorized, or are under consideration, for extension to 35 more. Vans have been provided with specially strengthened floors and with a wide doorway at one end of each side for loading and unloading palletized traffic. Partitions prevent movement of the load during transit.

Train Radio Extended

THE Atchison, Topeka and Santa Fe Railway is to install train radio over the 451 miles of its principal main line between Chicago and Kansas City. Radio units will be fitted in the cabs of 85 diesel-electric locomotives and in 78 cabooses. There will be five transmitting stations, and contact with them will be possible within a radius of 15 miles. Radio installations are now being applied to important double main lines, most of the installations hitherto having been on single-track lines.

The Great Northern Railway has placed contracts for the installation of train radio over 924 miles of its principal main line from Minneapolis to Havre, Montana, which is single track throughout. This will include the equipment of 37 fixed sending and receiving stations, and of equipment in the driving cabs of 15 multiple-unit diesel electric locomotives and 20 cabooses.

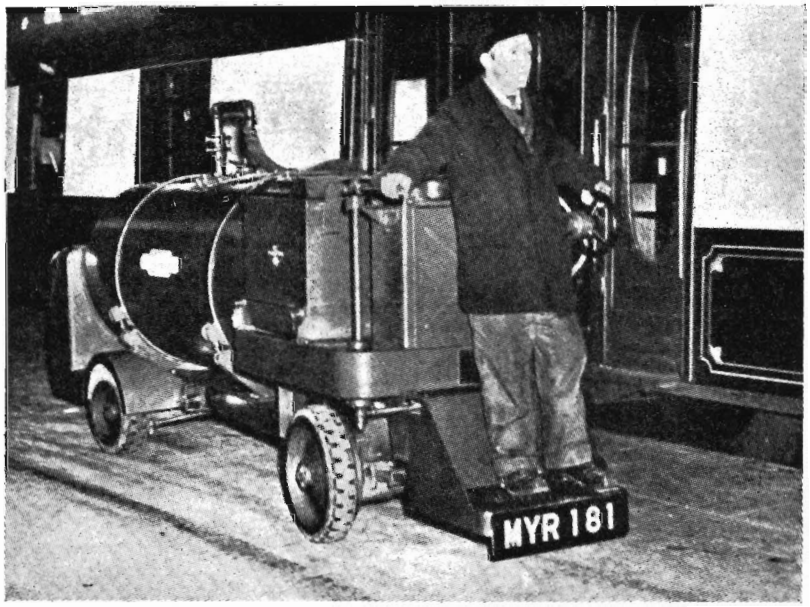
More Dome Cars

THE Great Northern Railroad is ordering 22 dome cars for its streamline *Empire Builder* service between Chicago, Seattle and Portland, at a cost of more than $6 million. Four dome cars will be placed in each of the five train sets which provide the daily service. The remaining two cars will be used as spares. The Great Northern placed completely streamlined trains in its *Empire Builder* service in 1947. In 1951, the trains were completely re-equipped with new cars, and the original train sets, plus additional new cars, became the *Western Star*, a second daily streamliner between Chicago, Seattle and Portland.

Electrification in Austria

THE 1954 electrification programme of the Austrian Federal Railways comprises the extension of the Innsbruck-Bregenz electrification to Lindau, in Western Germany, where the Austrian railways connect with the German; the electrification of the Villach-Klagenfurt section, and that of the line branching at Wels from the Salzburg-Linz main line and connecting at Passau with the German Federal Railways.

According to a Parliamentary statement, there is Cabinet agreement that all main lines connecting Vienna with the south and west, as well as all connexions between them, should be electrified. It would take seven or eight years to carry out this scheme in its entirety.



Battery operated water tank of 275 gallons capacity, used by British Railways to replenish the water tanks of long-distance passenger rolling stock.

AMONG OURSELVES . . .

Mr. Commissioner O. G. Meyer has been elected chairman of the Victorian section of the Institute of Transport and is therefore now a member of the Council of the I.O.T. Congratulating Mr. Meyer upon his appointment, the secretary of the parent body in London, Mr. F. W. Crews, has assured Mr. Meyer that the staff of the Institute looks forward to cooperating with him in promoting the objects of the I.O.T. "We offer you our congratulations upon your election and hope that you will have a happy and fruitful period of office," adds Mr. Crews.

Transport Administration: Correspondence Course

THE fees for the correspondence course in transport administration, conducted by the British Institute of Transport (Victorian Division) are £4.10.0 for English and £5.0.0 for Elements of Statistics. It was previously announced that these charges represented the fees per term for each of three terms a year. This is not so ; they are the fees for the course.

Yallourn's Popular Foreman

THE popularity of Mr. C. A. Potter, yard foreman at Yallourn, who retired recently after 45 years' service, was evident from the large number of railwaymen and State Electricity Commission officials who came to say goodbye to him in the R.S.L. hall. Mr. Stoddart, M.L.A., told him specially of the Minister of Transport's personal appreciation of his long and honourable service to the Department. Mr. Potter was presented with a pair of chrome and leather easy chairs. He has been succeeded by Mr. W. Cameron, formerly of Lilydale.

Printers' Picnic

FAVOURED by fine weather (Inigo Jones in a long range forecast gave assurance of a sunny day), the recently held V.R. Printing Works picnic at Keast Park, Carrum, was a most successful and enjoyable outing. The guests included the then Comptroller of Stores (Mr. L. C. Stewart), who judged the sand castles competition, his assistant, Mr. C. Weate, and the Printing Manager, Mr M. McKenzie. Many retired railway printers were also there. The Printing Works Handicap was won by Leading Hand Compositor Les Gale, from Bob Humpris (monotype) and Len Nicholls (machinist). The old buffers' race went to M. Croker, who defeated J. Smith and Gordon Bennett.

£6,300 For Frankston Hospital

THE Railway Employees Orthopaedic Hospital Auxiliary's recent visit to their hospital and hostel at Frankston again brought a spot of brightness to the small patients. All the children received presents, sweets, ice cream and fruit, and a mouth organ band played in all the wards. The secretary of the auxiliary, Mr. R. J. Attrill, says that the next purchase for the hospital will be mobile beds for each ward. The existing ones are obsolete. He adds that the railway pay day contributions now amount to £80 and the total collected up to March 31 is £6,300.

Memorial Prize Winner

MR. JOHN L. V. ROSE, who joined the Department after he came from England two years ago, has won the V.R.I. storeman's duties examination senior grade award, the W. R. Brown memorial prize. Mr. Rose is at the Storekeepers Office, Newport Workshops. A judo enthusiast, he holds the yellow belt.

V.R. Floral Float Wins First Prize

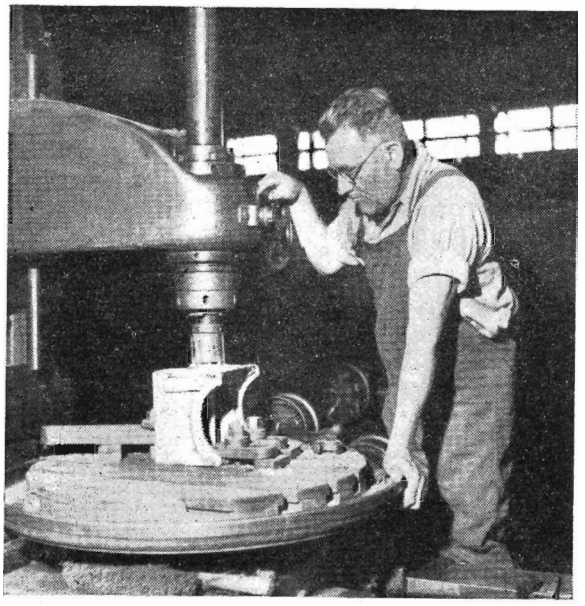
THE Department's exhibit in Melbourne's Floral Pageant of a B class diesel-electric locomotive surmounting a brilliant floral design was greatly admired and was awarded first prize for the best floral float. The model was made at Newport Workshops and was preceded in the procession by the 'shops band. The Newport bandsmen and the prize winning float are featured in the centre spread of pictures in this issue of *News Letter*.

Workshops' Pioneers

MR. J. S. DUNSTAN, fitter's assistant, and Mr. E. G. Trembath, iron machinist, are two of Bendigo North Workshops' oldest inhabitants, in terms of service, that is. Both of them worked on the building of the 'shops in 1917. Bare walls and clay floors greeted them when they started as lad labourers, or driller boys as they were then called. Since then they have both spent most of their service at the 'shops.

They recall that work on cutting away the hill where the

Mr. Dunstan fits a hose pipe on louvre truck.



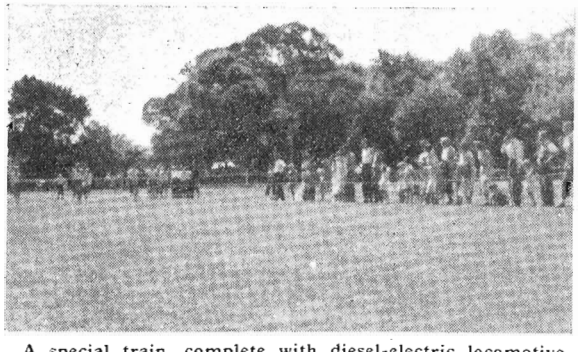
Mr. Trembath machines a loco axle box keep.

'shops now stand was begun in 1911, and that locomotive DD 612 was the first engine to go over the workshops' pit for repairs. That was on November 17, 1917. The first apprentices at the workshops were Mr. R. J. Wild, now an instructor at the Bendigo School of Mines, and Mr. W. Shepherd, now at North Melbourne Workshops.

Mr. Dunstan is very active in church and lodge work, and is one of the trustees and a vice-president of the Kennington swimming pool. Mr. Trembath is interested in first aid and lodge work. He holds the 8th-year gold medal in first aid.

High Posts For Former V.R. Men

MR. R. E. B. LEE, who was the Department's Auditor of Revenue from 1935 to 1948 and, at one time, special officer and investigating accountant attached to the Secretary's Branch, has been appointed Assistant Commissioner of the Western Australian Government Railways. Mr. Lee left the Department in 1948 to become Comptroller of Accounts and Audit in the W.A.G.R. Another former member of the V.R. Accountancy Branch, Mr. J. N. Turner, who joined the W.A.G.R. in 1949 as Chief Statistical Officer, fills the vacancy created by Mr. Lee's promotion.



A special train, complete with diesel-electric locomotive, took North Melbourne Locomotive Depot employees to Bacchus Marsh recently for their yearly picnic. The main item on the sports programme, the Loco. Gift, was won by New Australian C. Komodromus, from Jack Lloyd and Andy Regan. Jim Allen won the committeemen's race, Tom Keogh and Jim Dennis filling the places. The children had books, sweets, ice-cream, rides on a steam train and a merry-go-round, and a Punch and Judy show. The picnic ended happily with a barn dance on the oval. *Above*: **One of the picnic races.**

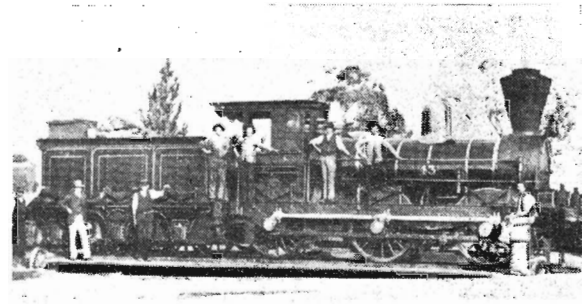
The Book of Judges

JANUARY *News Letter* paragraph, "In The Blood," about a five generation American family of railroaders, brought instant response from Mr. T. A. Judge, who is employed at Jolimont as fitter's assistant.

The history of the Judge family is largely that of the Victorian Railways. In 1860, Thomas Judge decided that firing steamboats between Geelong and Melbourne was less lucrative than a job on the land, and he joined the Railway Department as night lighter-up at the old Spencer-st. locomotive shed. Appointed a driver in 1864, he drove locomotives on the new line being constructed northward to Echuca which was finally reached in 1867. His son, George Judge, joined the railways in 1882 and decided that he also would make the footplate a career. When he retired in 1920, he had attained the grade of driver-in-charge. Tom Judge, the third generation of Judges to choose railroading reflected in his career the modern trend.

At first engaged as a fireman, in 1917, he afterwards transferred to the rail motor service, where he remained until 1944 when he was forced to leave running operations for health reasons. He still maintains contact with his former work as a fitter's assistant.

The Judge family history book is brought up-to-date by fourth generation Driver George Judge, at present stationed at Tallangatta.



Locomotive O 43 at Echuca, about 1890. Mr. George Judge, in white trousers, is standing near the rear of the tender.

Thanks

FOR the "splendid help given by the staff of the Inwards Parcels Office, Spencer-st., to the Royal Children's Hospital in personally delivering many parcels of toys for the festive season."

The Manager and Secretary, Royal Children's Hospital

For "willing and efficient co-operation in the large task of transporting about 17,000 children to the Melbourne Cricket Ground for the display before Her Majesty The Queen and His Royal Highness The Duke of Edinburgh. I desire to express the thanks and appreciation of The Minister of Education and myself."

The Director of Education

For the "magnificent job in transporting children by special train from Nyora to Warragul and return for the Royal visit." *Mr. M. Super, Lang Lang*

For "the most helpful co-operation from all those good folk of the Victorian Railways who were associated with the movement of our Junior Legatees . . . . from the city to the country and vice versa," during Legacy's Christmas holiday camps.

Mr. C. Owen, president, Melbourne Legacy

For the efficient handling and prompt delivery of perishables and young plants: "credit where credit is due."

Mr. A. L. Earl, Earl's Premier Plant Farm, Frankston

For the receipt, each month, of *News Letter* which is filed in the Society's library and which "we look forward to enjoying in the future as we have in the past."

—Upper Canada Railway Society, Toronto

The Christmas Eve special parcels express from Cathkin to Alexandra. The steam goods train did not run that day. Stacked on the trailer is an assortment of goods, ranging from fruit to motor springs. Left to right: Repairer R. Stillman (driver) and Repairer Barry Dunn ("guard").

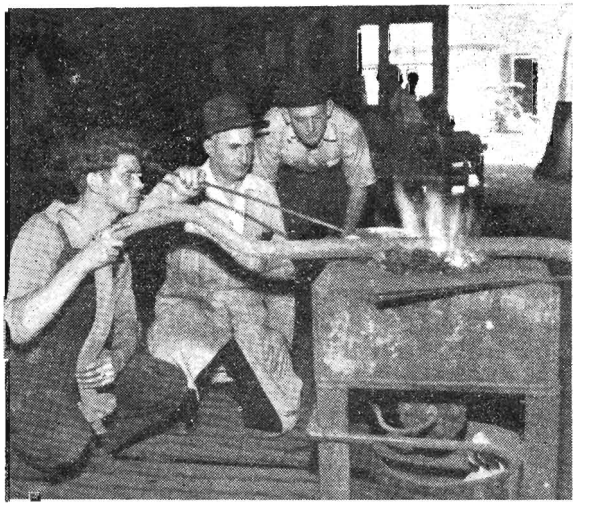
Photograph: A. S. M., J. M. Dunn

Driver J. Schmidt has stepped from the footplate for the last time after 43 years' service. He joined the Department as a cleaner at North Melbourne, and had been at Wodonga since 1924. Through unfortunate illness, he missed his last rostered locomotive trip. Above, Mr. Schmidt, seated in the chair presented to him, is farewelled by his colleagues, some of whom, seen in this picture, are: A. Reid, A. Brebner, W. Welch, M. Church, E. Molloy, and R. Murphy.

This little Australian terrier, *Penny*, belongs to Yard Porter David Brown, of Terang, and is known as the trick railway dog of the Western District. He carries flags and shunters' gloves and is a great favourite with the staff. *Penny's* main claim to fame is his rat catching ability. If, occasionally he goes for an unauthorized ride in a goods train, he is so well known that he is always returned to his owner.

Photograph: Gerhard Loechert

Miss Norma Hegarty, formerly a clerk at Dunolly, feeding the pigeons in Trafalgar Square, London. Miss Hegarty, whose father is A.S.M. at Bet Bet, has just returned from an 18 months' trip abroad. She visited England, Scotland, France and Switzerland. She is convinced that the Victorian Railways uniformed staff are the tidiest and neatest of all the railway staffs she saw in her travels.



Mr. J. C. Chamney, sub-foreman coppersmith at Bendigo North Workshops, (*centre*) shows Apprentices I. Connor and A. Morris how to braze an injector pipe. Mr. Chamney is one of a number of active riflemen at the 'shops. He is secretary of No. 3 District Rifle Club Union, and represents the Union on the Victorian Rifle Association. He was captain of South Bendigo Rifle Club from 1936 to 1948, and came fifth in the Tasmanian King's Prize in 1949. Mr. Chamney is also an enthusiastic cabinet maker, having built much of his own furniture. He is also interested in pipe organs.

15 stone Stuart Mahoney is thrown by 8 stone Allen Parker in a Judo work-out at the V.R.I.

SPORTS

Victoria Wins Denniss Cup Bowls

ALL the Australian railway systems and New Zealand were represented at the Australasian Railways Institutes Bowling Association's carnival in Tasmania recently. Victoria defeated every team in the competition and won the Denniss Cup and also scored the highest percentage; 741 points for and 520 against. New South Wales finished in second position with 701 points for and 618 against. The Victorians also scored 23½ rink wins compared with N.S.W.'s 20. The singles final was won by A. Simpson (N.S.W.). He defeated H. Openshaw (Commonwealth) 25 to 12 in a game which occupied 20 ends. Two new trophies were presented for competition. It was decided to award the Kiwi trophy to the team finishing second in the Denniss Cup competition and the Paxton trophy to the most successful rink at the carnival. The next will be held in Perth, W. A. in 1956.

Cricket Semi-Finals

FAVOURED by ideal weather, the cricket finals for the Commissioners' Cup at Royal Park produced a very high standard of play. Although conditions favoured batsmen, some surprisingly good bowling performances were registered. The finalists were Flinders-street, Newport 'shops, North Loco. and Northern Lines. In the first semi-final the consistent Flinders-street team defeated Newport 'shops. Main contributors to Flinders-street's score of 194 were Ross 97 and Williamson 40. Jenkins of Newport 'shops was in great form and troubled all batsmen with his accurate bowling. His three wickets for 60 runs did not reflect his real ability with the ball as he did not bowl with any luck. At one stage, however, he was right on the spot and got the "hat trick." North Loco. owed much of their success in the semi-final against Northern Lines to the dashing batting of Howlett who collared the bowling at a vital stage of the match and in the last few minutes of the innings scored 57 runs. He was well supported by Casley who scored a sound 54. But for McMillan (5 for 44) and Dunn (2 for 18), North Loco. would have exceeded their first innings winning score of 212. Northern Lines replied with 160. Kevin Carmody gave an outstanding performance by batting through the innings to score 73 not out. Next best with the bat was Headon with 31. Anderson was North Loco's best bowler with 6 for 44. Casley took 2 for 37.

Hockey Season

THE V.R.I. Hockey Club, which was moderately successful in its first season in the Victorian Amateur Hockey Association's competition, hopes to do better this year. The matches are played at Ormond Park, Moonee Ponds, on Saturday afternoons. Hockey is an international winter game and, as it is very popular in Europe, V.R.I. club officials believe that many New Australian railwaymen can be induced to take part in the sport here, particularly as many of their compatriots are attached to other clubs. Those wishing to join the club are asked to get in touch with Mr. P. Johnson, Jolimont Workshops (auto. 1804).

New Club House For Amateur Athletes

THE Department has made available at reasonable cost a standard wooden portable building which has been erected at Jolimont, near the sub-station, and will be used as a club house for the V.R.I. Amateur Athletic Club. It will also be used to store the club's sports equipment.

Wholly set up and printed at the Victorian Railways Printing Works, Laurens-st., North Melbourne, for the Publishers, The Victorian Railways Commissioners. 547—54.

VR News Letter

JUNE 1954

THE MONTH'S REVIEW

Gippsland Line Electrification

THE part duplication of the Gippsland line and its electrification from Dandenong to Traralgon (79 miles) and Moe to Yallourn (about five miles) is going ahead well. It is expected that electric working will be introduced on the first completed section, from Dandenong to Warragul (42¾ miles), next month. The other two sections of electrified track, Warragul to Yallourn, and Moe to Traralgon will be done in progressive stages, so as to complete the entire project by June, 1955. Double line running is in operation between Longwarry and Yarragon (18 miles) and between Nar-Nar-Goon and Tynong (3¾ miles), and further sections will be brought into use as they are duplicated. Power signalling is being carried out in conjunction with the duplication work. At present it is in use on the Nar-Nar-Goon–Tynong section.

Suburban System Projects

SUBURBAN duplication works are also going ahead. The double line track of the Riversdale–Ashburton section of the Camberwell–Ashburton line is expected to be in operation by September, but the more difficult section, between Camberwell and Riversdale, which includes the flyover to carry down Ashburton line trains over the Box Hill lines, is not expected to be completed until late next year. All retaining walls, earthworks and bridges for extra tracks on the Richmond–South Yarra section are finished. Four of the six tracks are in their new positions, and work on the others is in hand. Work is also in progress on improved crossing facilities at Macleod on the Eltham line. It involves a second platform and interlocked points and signals operated from a new signal cabin on the platform. These will reduce greatly the time taken to cross trains, give a more frequent train service on the Heidelberg to Eltham single line section, and improve the time-keeping of trains.

Metallurgical Magic

MEDIEVAL alchemists dreamed of turning dross into gold. Mr. Robert Densham and his staff at the Reclamation Depot, Spotswood, daily perform the modern equivalent of converting waste into new metal. Scrap bearings come from depots and workshops and, after analysis by laboratory metallurgists, the metal is remade and issued for further service. Since the inception of the Reclamation Depot in 1927, no new bearing metal has been purchased. Last year the output was 115 tons, worth £100,000. Other metal scrap is sorted and classified into various grades. Usable bronzes are sent to Newport foundry, melted down and made into ingots of the required composition for further use.

First Superheated Locomotive

ANOTHER historic V.R. locomotive has come to the end of the road, D3 668. It was the first superheated engine to appear on the Victorian Railways. It was experimentally equipped as such when it was built at Newport Workshops to Rolling Stock Drawing Office designs. It went into service as DD 882, in May 1914. In the same year it was lent to the South Australian Railways to demonstrate the advantages of superheating. In later years, the locomotive was numbered DD 509 and 720, and D2 720, before it was finally rebuilt into D3 668, in August 1933.

Old State Cars

STATE Car No. 1 that has figured in three Royal visits to Victoria has been sent to Newport Workshops to be scrapped. Built at the 'shops in February 1890, it was originally known as *Enterprise*, a sleeping car, but was altered to become State Car No. 1 in 1900, a year before Federation. Royalty first used the car when the Duke and Duchess of Cornwall and York (later King George V and Queen Mary) visited Victoria in 1901 to open the first Federal Parliament in Melbourne. During its railway career No. 1 State was also in the make-up of the Royal trains for the visits of the Prince of Wales (later King Edward VIII) and the Duke and Duchess of York (later King George VI and Queen Elizabeth).

Actually, the first State car was the old dynagraph car. Built in Melbourne in 1858 by William Grant, it went into service as carriage No. 69A (first class) in 1859, the inaugural year of government railways, and soon was selected for use as the Governor's State coach. As such, it traversed all lines for nearly 20 years. It went into discard in 1880, when it was superseded by two more dignified State cars. It was equipped, in 1890, as a dynagraph car, and continued in service for more than 40 years. The carriage was originally painted dark chocolate, trimmed with gold lines. Interior decoration included spring and hair-padded seats and arm rests, upholstered in imitation morocco leather and panelling with gilt beadings. The four compartments accommodated 24 passengers. On the outside of each door was an oval-shaped panel, featuring the V.R. monogram.

The Railway Sausage

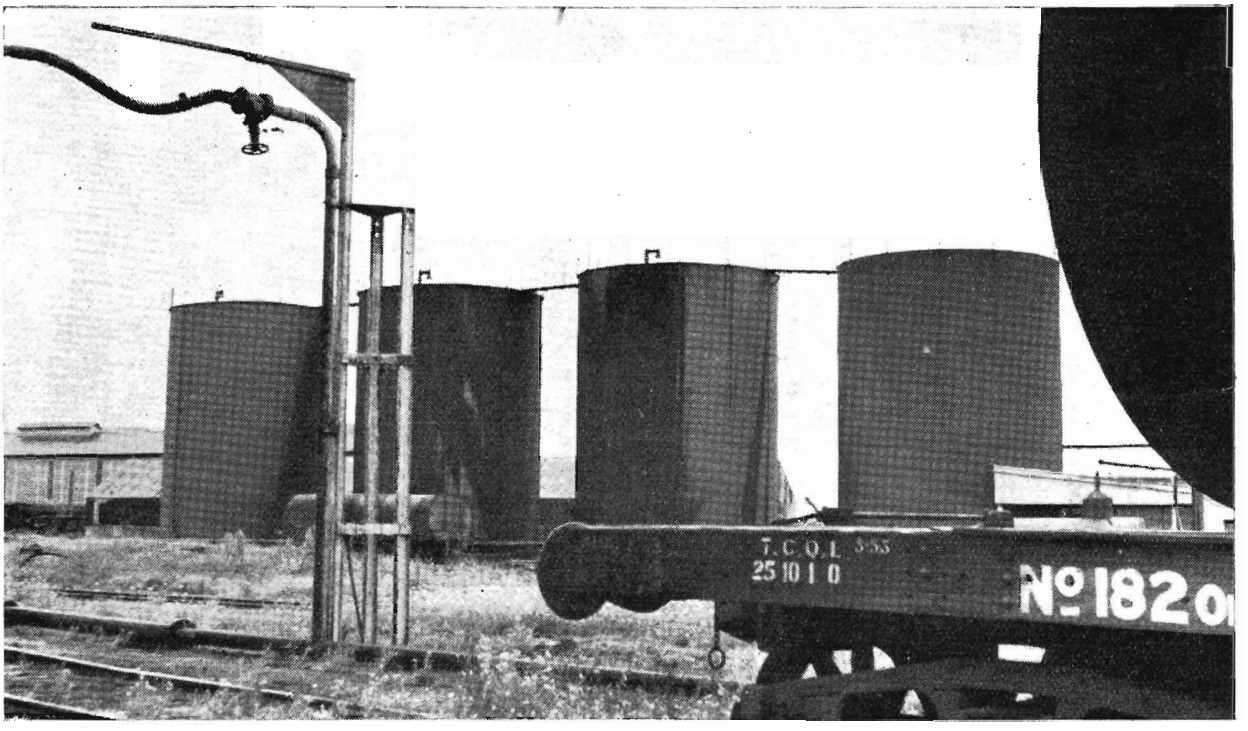
FOR generations, railway food, or some particular item of it, has been carped at by critics and derided by humourists. It has happened all over the world. In Britain, for instance, the railway sandwich has, as they would say there, "copped it"; now it is the turn of the Victorian sausage. But if English criticism and humour has, by fanciful overstatement of some legendary defect, endeared the sandwich to the travelling public who still buy it in millions and like it, the harsher exaggeration here has struck a discordant, clumsier note; so clumsy, in fact, that it impelled one old gentleman, immediately he had read the first criticism, to telephone the Department, with some warmth, that he had daily, and sometimes twice daily, eaten at railway refreshment rooms throughout Victoria for 56 years, and that he wouldn't eat anywhere else, sausages or no sausages. "They'll do me", he said. A country vicar who, in 15 years, had also patronized most of the State's railway refreshment rooms, more or less simultaneously wrote that he "would rather have a meal in them than in the average cafe". He, by the way, had an especially kind word for the sausage-and-mash at the Bendigo refreshment room, which he knew best.

Department Defended

Indeed, quite a body of opinion, which, on years of patronage, is much better founded than is an individual criticism apparently based on one meal, seems to be rallying to the Department's defence of refreshment room food in general and sausages in particular. As the country vicar points out, there may be the rare occasion when all does not go well in the kitchen, but most people will agree with him that railway food is generally wholesome and well cooked. It is obviously absurd to generalize a criticism or a shaft on a single instance of perhaps something hot that has cooled off because of a delayed train, or of a sausage that has met an oddly cultivated palate. Anyhow, the Victorian Railways are not apologizing for their meals or their sausages. The demand for them is sufficient criterion of public opinion on their quality.

OUR FRONT COVER

shows R703 approaching Broadmeadows with about 6,000 sheep (59 truck-loads) for the early live-stock sales at Newmarket.



Oil tanks at Newport Workshops.

OIL TAKES OVER

THROUGHOUT the world oil is persistently challenging coal as the key fuel for railway transportation. Working to faster schedules, steam and diesel traction demand oil in increasing quantities, both as fuel and lubricant.

To meet requirements, the Victorian Railways have a bulk handling installation at Newcastle-st., Newport, which ensures expeditious movement of the oil from wharf to rail tanker. Built during the war as a defence measure, this depot was taken over by the railways in 1947 from the Royal Australian Navy.

Fuel oil is first pumped from the ship to the three storage tanks at Newcastle-st. which have a total capacity of 18,000 tons. A pipeline then takes it at the rate of 1,000 tons weekly to the smaller tank depot at Newport, where it is loaded into rail tank waggons for distribution to locomotive depots throughout the State. During cold weather the oil is heated to 150 degrees Fahrenheit to ensure fluidity in loading and discharge, the heat being retained by the oil during transit.

Fuel for diesel-electric locomotives and diesel-shunters is supplied from a separate bulk installation at North Melbourne Locomotive Depot. This is replenished from stocks held by oil companies.

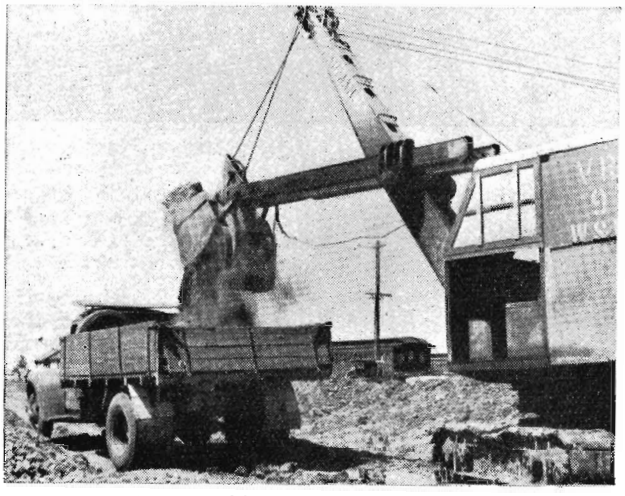
To transport operators, lubricating oil is as important as the less refined fuel oil, but modern equipment is discriminating in its appetite for lubricants ; steam, diesel, electric and road stock all differ in their needs. Oil suitable for steam equipment has characteristics not always present in that used by high speed diesel engines. Again, electrical equipment used on suburban cars and in power stations, internal combustion engines in rail motors and road trucks, all differ in their taste for oil.

To ensure that each mechanical unit receives its correct diet is an important duty for the chemists at Newport laboratory. Continuous tests are made to see that oils supplied by contractors maintain the characteristics necessary for their specific duty.

No section of the railways can escape the thraldom of oil ; lifts, cranes, trollies, even typewriters demand their regular ration.

Filling oil tank waggons at Newport.

ON THE TRACK



A mechanical shovel (*above*) empties its bucket into a waiting motor truck. With a bucket capacity of five-eighths of a cubic yard, this shovel can load between 600 and 700 cubic yards in an 8-hour day. The earth which is removed is used at other points along the track for filling for embankments or to build up the new track formation.

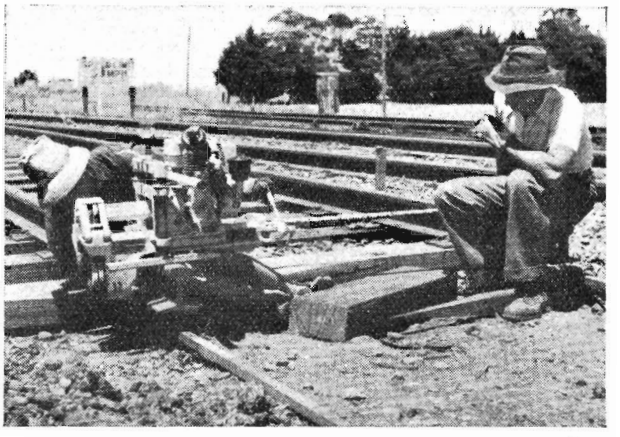
Below : Bulldozer levelling filling which has been deposited by motor truck to make a new formation. The bulldozer also helps considerably to consolidate the formation.

Mechanized equipment such as this is essential for the speedy handling of the huge volume of earthworks required on the Gippsland duplication project.

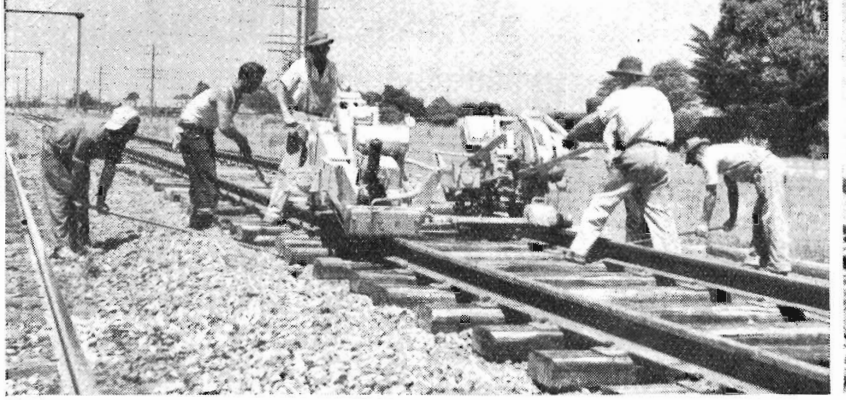
OVER the past few years, mechanization in the Department has been developed tremendously. New and improved machines have been acquired for use in workshops and depots, at goods sheds, in locomotives and offices, and on the track. Milling machines, electric cranes, mechanical stokers, teleprinters, dogspike drivers, and all the rest have this in common : they lighten manual labour and enable the work to be done more efficiently.

On the track, mechanization, playing a most important part, is best exemplified on the regrading and duplication of the Gippsland line, where the machines illustrated, as well as various other kinds, are being used. The concentration of mechanical earth-moving equipment on that line is the biggest ever employed on a Victorian Railway undertaking : bulldozers, graders, scoops, shovels, tractors and motor trucks, each carrying out a job for which it is particularly suited. There are dogspike drivers and rail borers for laying the track, tie tampers and track jacks for ballasting, and cranes and concrete mixers for constructing bridges and overhead structures.

As a result of this mechanization, earthworks are formed with little pick and shovel work, the sledge hammer plays a small part in driving dogspikes, and the packing of ballast is achieved with a minimum of muscular effort.



Rail boring machine, when set up on the track, bores a 1¼ in. diameter hole through the web of the rail in a minute and a half.



Above : Mechanical 'dogspike drivers in action. The machines customarily work in pairs, one to each rail. Each machine has a gang of three men, and at least 600 dogsipkes can be driven in an hour. Advantages over the hand method are that dogspikes and rail head are not damaged by hammer blows.

At top right is a close-up of one of the machines.

Right : The Nordberg power track jack, which has a maximum lift of 24 in. for straight track. The lift for one 'leg' of track is 14 in.

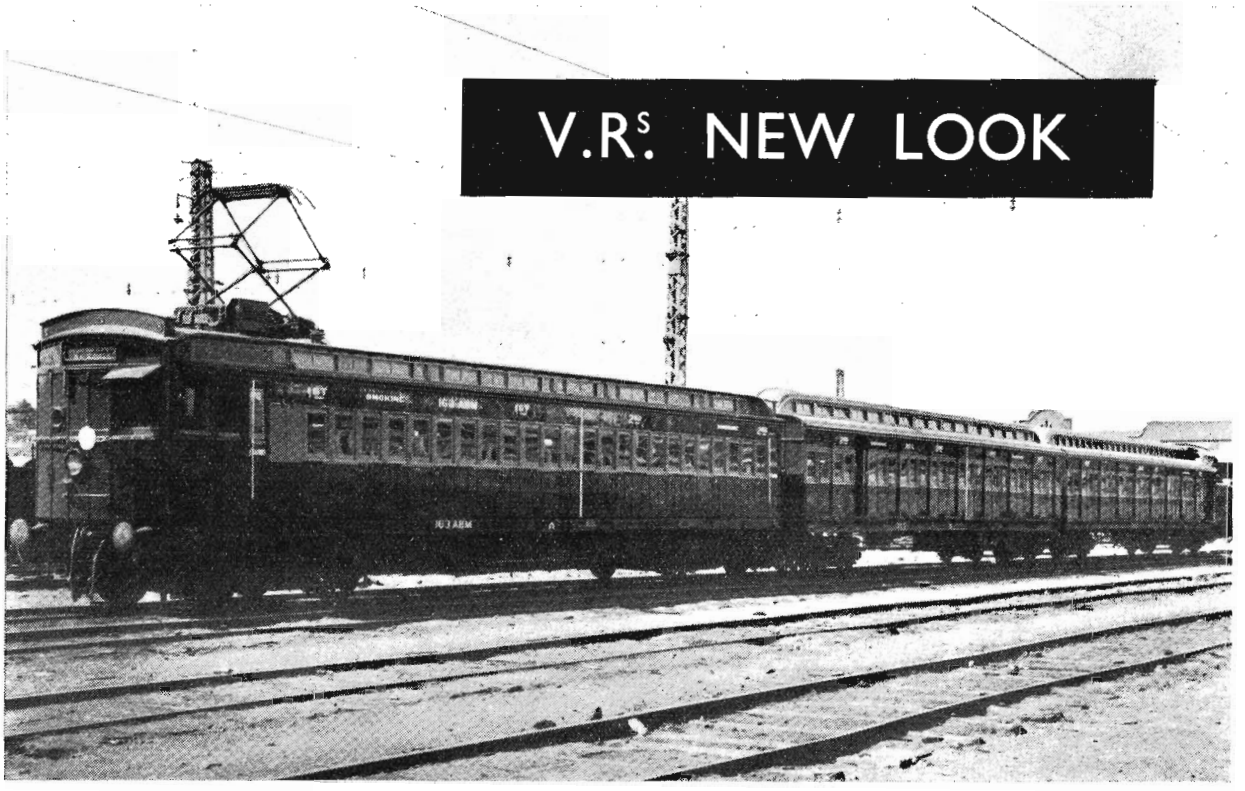
This machine does away with the slow method of lifting with hand-operated track jacks. The foot of the jack is positioned between the sleepers, strong claws grasp the heads of the rails and they are lifted to the required height to allow the ballast to be spread.

Recently, a ballast train with 22 hopper trucks of metal (about 500 cubic yards) was discharged over new track, and, by using the Nordberg machine, all the metal was packed under the track by the end of the day's work.

The Jackson tie tamper (*above*) is an ideal machine for about 2 in. or 3 in. lifts on an established track, and especially for work at points and crossings. The sleepers are packed very tightly at the rate of about two minutes per sleeper.

The Matisa machine (*at right*) can pack a sleeper, inside and out, in 12 seconds. On an average, the machine completes 60 to 70 chains in an 8-hour working day. The Matisa machine is a self-propelled unit mounted on a 4-wheel trolley. It is powered by a diesel engine with four gears in both directions, and is capable of travelling at up to 12 miles an hour. There are two sets of tamping mechanisms, one on either side of the machine.

V.R.s NEW LOOK



Three newly painted suburban cars in Jolimont Yard.

Train travellers, in the past few months, have noted with considerable approval more and more repainted and refurbished cars on country and suburban lines. Many of them look as good as the day they went into service. They are the first instalment of "Operation Spruce-Up."

Since the war, people unjustifiably have said some hard things about the condition of railway passenger car stock. It is true that some cars, particularly the old swing-door type, are showing evidence of the ravages of time. After all, 323 of the 893 suburban cars are over 40 years of age and many of the swing-door type are over 60 years old.

Until recently, it has not been possible to give them a new lease of life because of manpower and material shortages and lack of money. But with an easing of these restrictive factors, the Department has been able to go ahead with reconditioning.

All the Department's metropolitan and country workshops are sharing the work. At Jolimont, five suburban cars weekly are having their bodies strengthened and repaired, and are being repainted internally and externally. With Newport's aid the output will be increased to six a week very soon.

The cars are also passed through the specially designed washing machine at Jolimont at the rate of 28 a day. Interior washing and cleaning is done at the Flinders-st. wash docks. "Operation Spruce-Up" provides for all cars to be washed over a period of one month.

Newport, North Melbourne, Ballarat and Bendigo workshops are all repainting country passenger cars and the combined output is at the rate of more than 250 cars a year. The cars are afterwards kept clean by frequent washings, both internally and externally.

The paint pot is also being used on the Department's 22,000 trucks. They are being spray-painted at North

Painters lining up the body of a suburban sliding-door car at Jolimont Workshops.

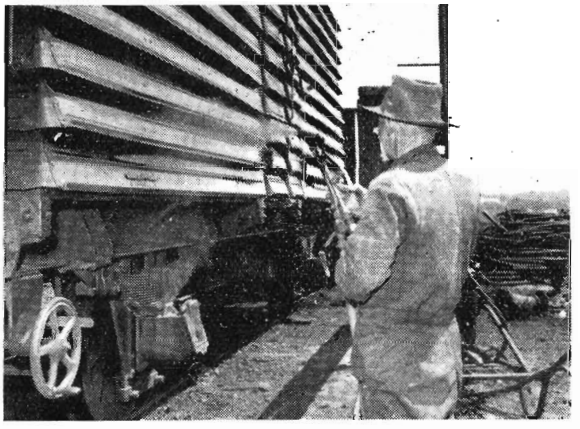
the rate of 100 a week. It will take about four years for every truck to be given a new coat of paint.

Z vans are also being repainted at the rate of about five a week and all the six or seven hundred vans should be done in approximately three years' time.

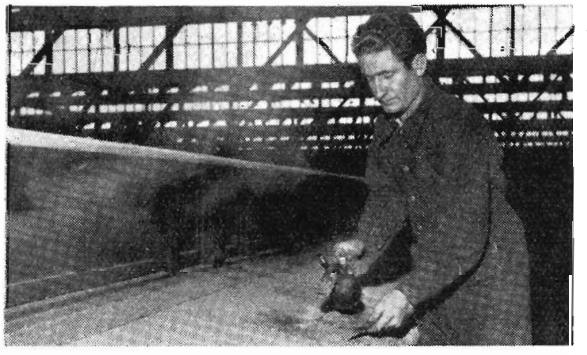
Locomotives are not being neglected in the general spruce-up. B 60, *Harold W. Clapp*, which was the leading diesel-electric for the Royal train, was repainted for the Royal tour and B 85, the last of the 26 diesel main-liners, was given a freshening coat for the Royal tour.

The R class locomotives are having their red smoke deflectors and lines repainted, and all steam locomotives are repainted after a major overhaul. They are also kept as clean as practicable by a still limited staff.

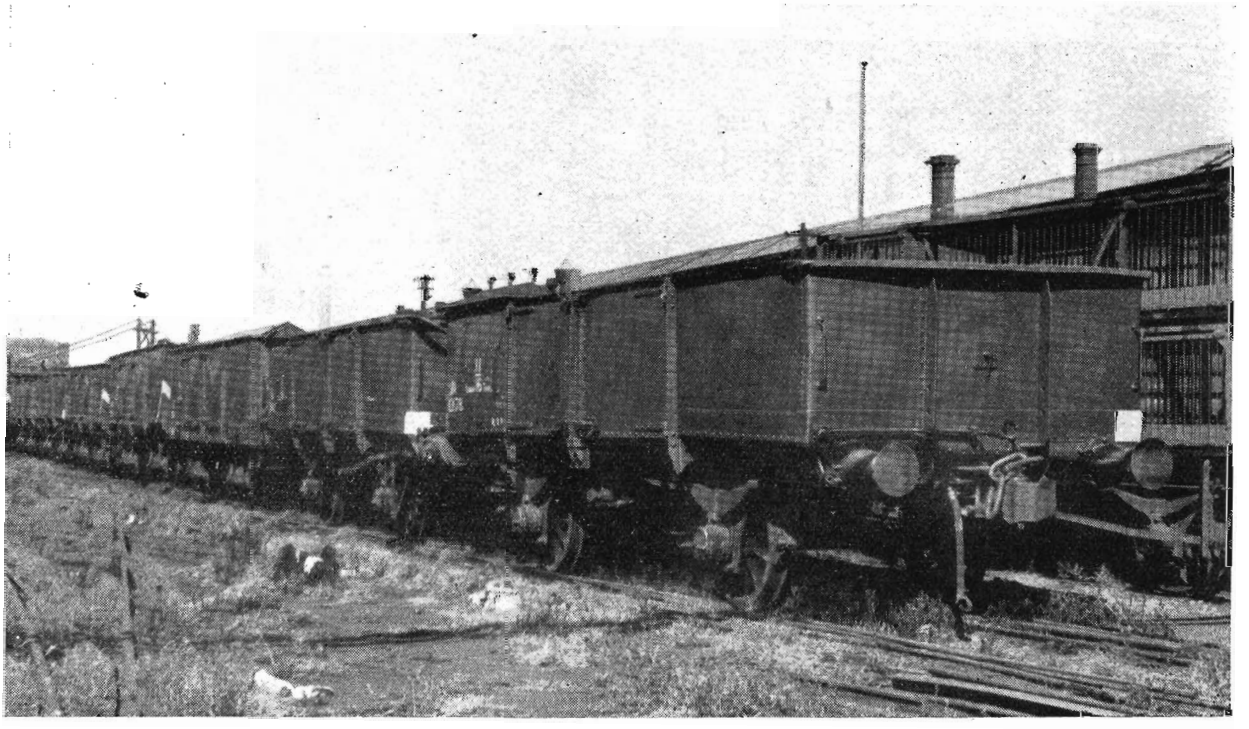
Repairing a W type country passenger car at Ballarat Workshops.



An air-controlled spray gun being used to repaint a louvre truck at Bendigo Workshops.



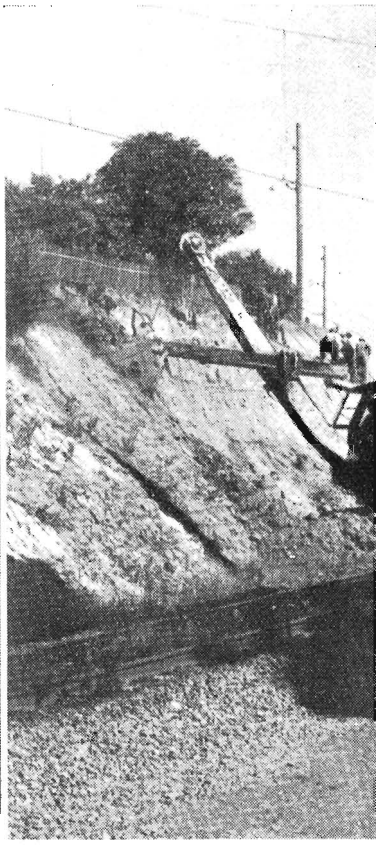
Removing old paint from the wing roof of a passenger car at North Melbourne Workshops.



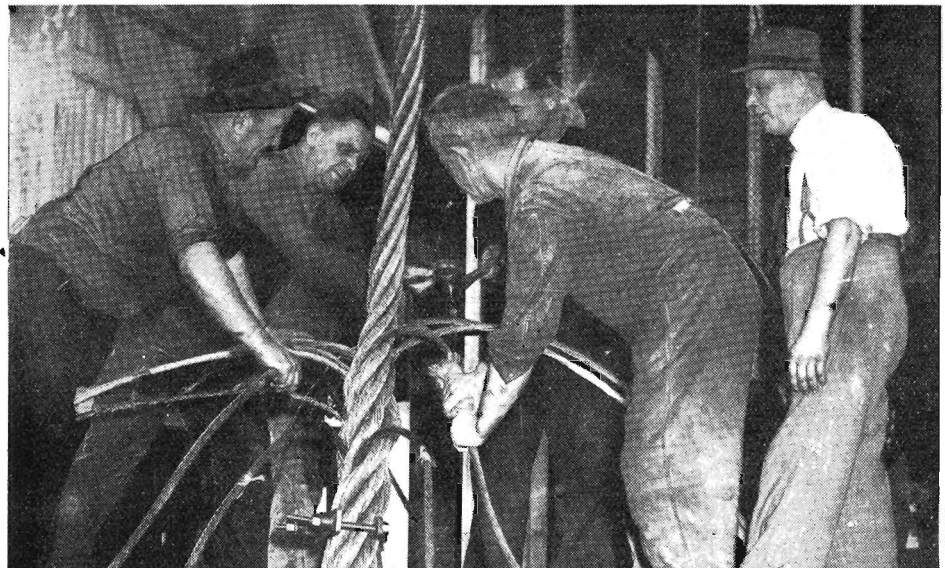
A rake of freshly painted trucks at North Melbourne.

AROUND THE SYSTEM

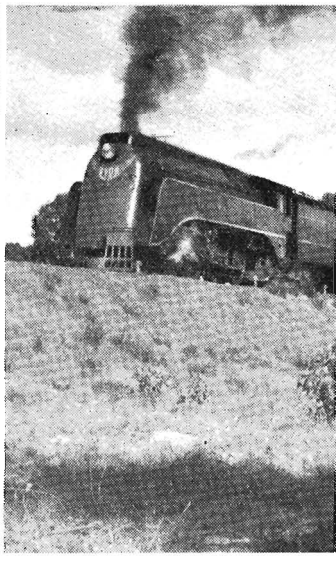
REUNITED BY SPIRIT: When Mrs. E. Poole (*right*) arrived at Spencer-st. from Queensland she met her brother, Mr. R. Gibson, for the first time in 53 years.



START OF FLYOVER: Earth

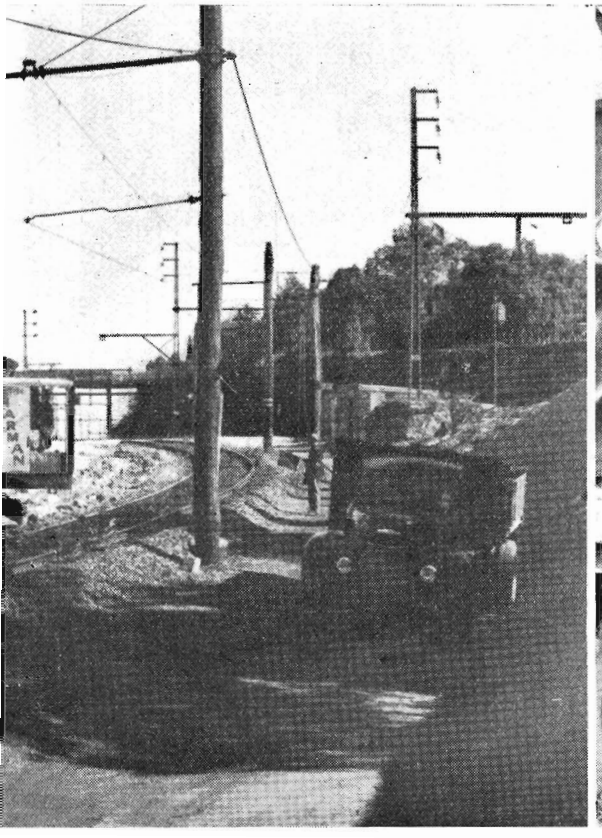


SPLICING: A steel wire rope, 10 in. in circumference, with a guaranteed strength of 305 tons, being spliced at Newport 'shops. It will be used to lift R and X class locos.

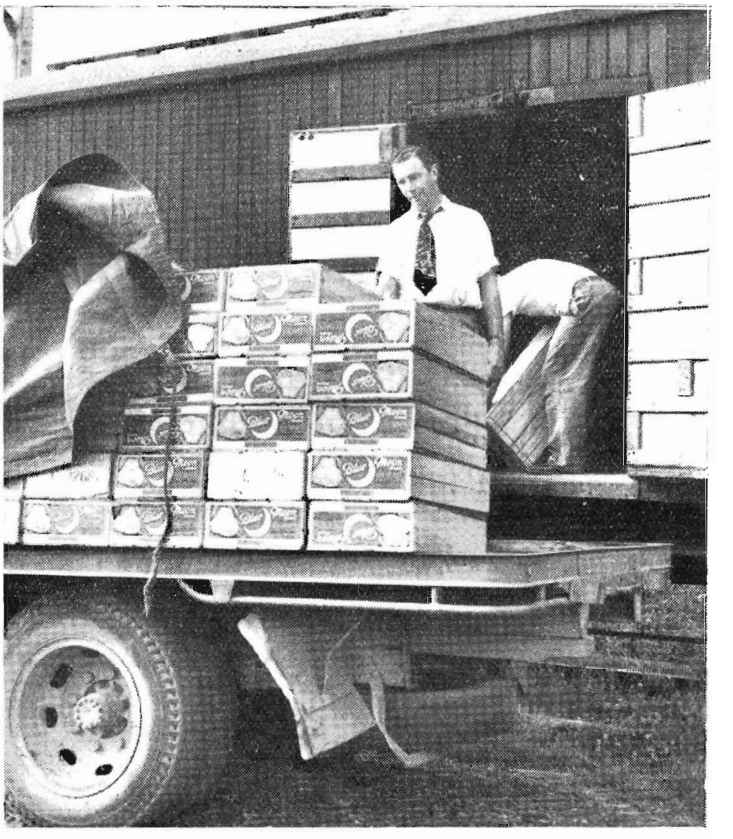


NEW ROLE: S 302 (*Edward Henty*) after an overhaul. *Photograph: I*

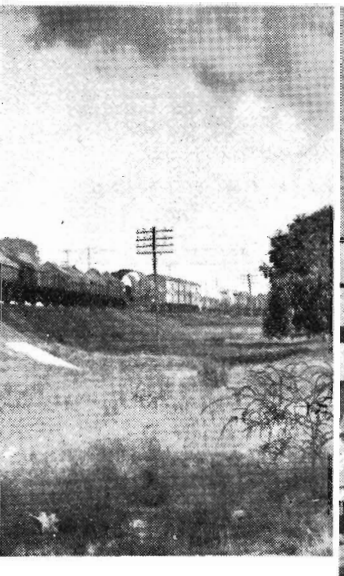
OFF TO THE SHOW: (*Right*) Tw being loaded at Newmarket into truck-loads of prize cattle.



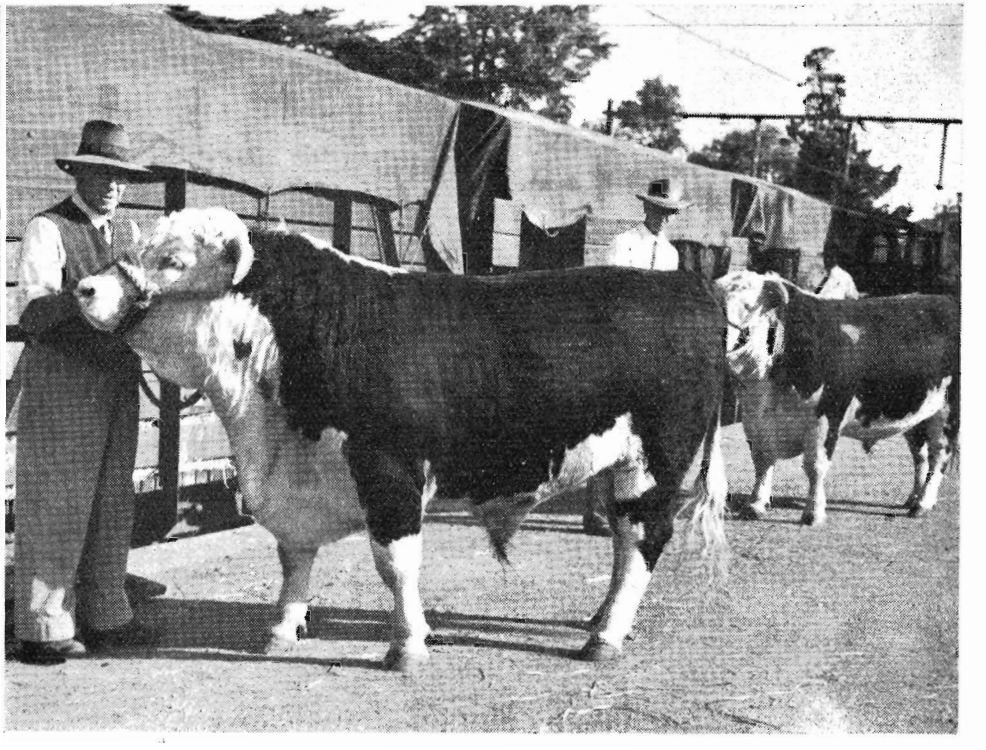
zing shovelled for the new flyover at East Camberwell.



PEARS FOR BRITAIN: Loading them into an iced truck at Blackburn.



run with a goods load to Seymour
es.



ords for the Sydney Royal Show
l live-stock train comprising 23

Setting up the brass for machining.

TRUCK BEARINGS, NEW STYLE

One of the benefits derived from the improved method of manufacturing truck bearings is that delays to fast goods trains, because of hot boxes, is minimized.

DIESEL-ELECTRIC traction and high speed steam locomotives have imposed many new problems on railway engineers. That of improving axle bearing surfaces is of world wide application.

In locomotives and carriages, roller bearings have proved a solution, but their initial cost prohibits general use on goods waggons. These are still fitted with metalled brass bearings. Engineers at Newport Workshops, in collaboration with laboratory metallurgists, have, however, evolved an improved method for manufacturing these bearings. Rough bronze castings from the foundry are ground to size on a disc grinding machine. The operator then bores the inside face, cuts them to length and proper radius in one operation on a horizontal milling machine fitted with a multiple cutter spindle. The properly dimensioned casting is now ready to receive its metalled bearing surface.

Thermostatically controlled gas heated melting pots keep the metal in a liquid state and at the proper temperature to adhere to the prepared casting. The casting is inspected and any small imperfections removed before further processing. The metallers operating the metalling pots place the brass into molten solder which is kept at a temperature of 260 degrees. Owing to the disparity in the specific gravity of the brass and the solder, the castings float, like bits of wood, on the surface of the molten metal. This process is known as "tinning."

When coated sufficiently with solder they are removed and surplus solder is brushed from all surfaces, the bearing surface assuming a bright mirror-like finish.

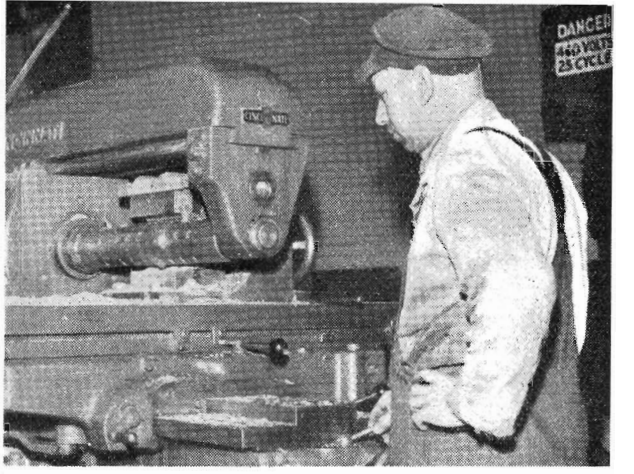
A further check is then made for defects; faulty adherence of metal means uneconomic life for the bearing. The tinned brass is then ready to receive its coating of bearing metal. It is placed in a mould or mandril which allows the correct amount of molten bearing metal to flow on to it. This metal is kept at 360 degrees for efficient working.

As soon as the metalled brass is cool enough to handle, the ragged edges of metal caused by overflow are removed.

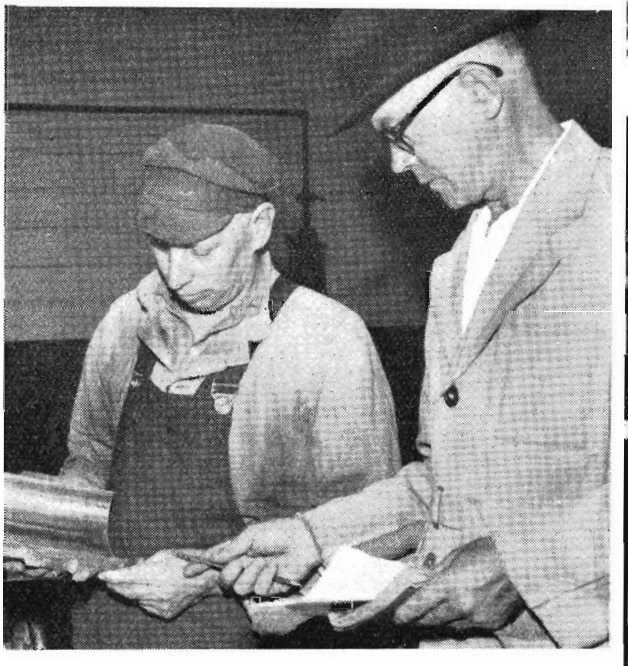
The metalled brass is again inspected for defects before being dispatched to store.

These operations are further refined when the latest and heaviest type of truck brass is being treated. Instead of being ground in the initial operation, they are machined to ensure maximum accuracy. To enable the output of 100 brasses a day to be maintained, 500 lb. of bearing metal is used. Nothing is wasted. Surplus solder and bearing metal removed from the castings is returned to the melting pots for further use. Metal removed during the various machining operations is sent weekly to the Reclamation Depot, Spotswood, for re-use or sale.

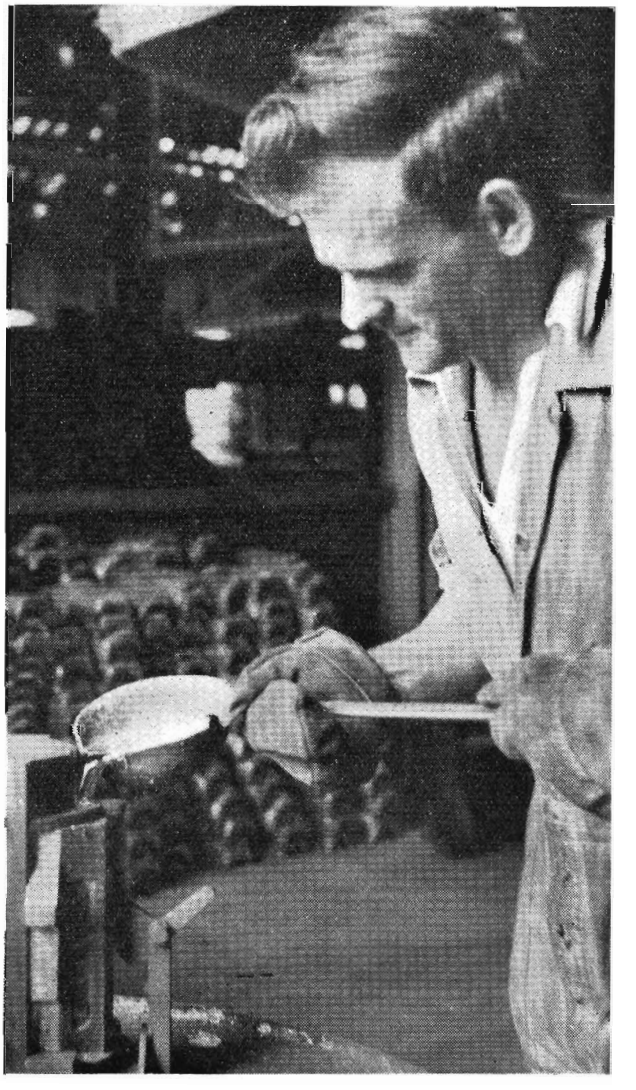
The constant aim is to reduce the possibility of the smallest defect occurring which might lead to the destruction of the bearing when it is subjected to the weight of the loaded waggon and the stresses and strains of daily work.



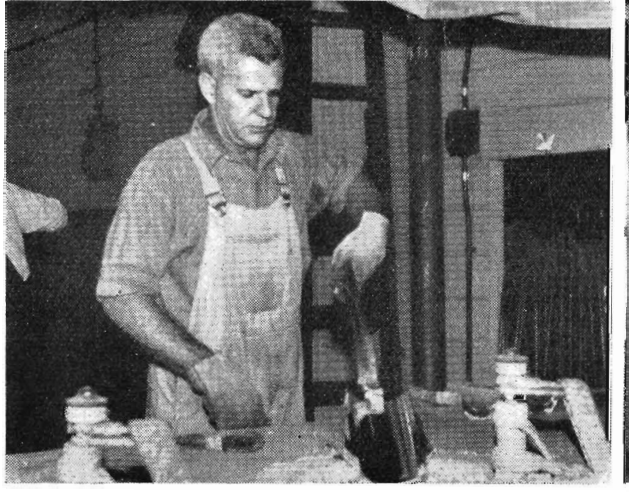
Brass being machined in horizontal milling machine.



Inspecting the surface of the brass after machining.



Filling the brass shell with molten metal.



Gas-heated metalling pots with brasses being tinned.

AMONG OURSELVES . . .

Mr. Colwell

Mr. Stockley

Mr. MacDonald

Meteoric Rise

FOLLOWING the retirement of the Chief Electrical Engineer, Mr. H. P. Colwell, and the tragic death of the Assistant C.E.E., Mr. C. G. H. McDonald, in last year's San Francisco air disaster, Mr. A. C. Stockley has been appointed Chief Electrical Engineer and Mr. D. L. MacDonald, Assistant Chief Electrical Engineer. They are both experienced, efficient, and popular officers.

Mr. Colwell, who will remain in the Branch as a consultant until the end of this month, has had a distinguished railway career. In 15 years he rose from a first-year apprentice at Newport Workshops to the head of his Branch. As a 16 year-old apprentice fitter and turner he attended the Working Men's College (now the Melbourne Technical College), where he did brilliantly. After taking the full day course in electrical engineering at the college, he became an engineering assistant. In 1919 he was appointed Assistant Chief Electrical Engineer, and head of the branch a year later, a rise regarded as unique in the Department.

Mr. Colwell went abroad in 1925 and 1937 to study the latest developments in railway operation, particularly electrification, and power station operation. His travels took him to the United Kingdom, the Continent and America. In 1949 he was a member of the V.R. mission to South Africa to study main line electrification in its relation to the Gippsland line project.

Mr. Colwell's extensive knowledge of electrical engineering and his ability as an administrator were recognized by the State Government which appointed him as one of three to review the expenditure of the State Electricity Commission following the Sawyer Royal Commission. He also assisted the commission that recommended the establishment of the Yallourn brown coal project. For many years he was chairman of the Professional Officers Classification Committee.

In his 34 years as Chief Electrical Engineer, Mr. Colwell has worked with 10 Commissioners and 36 Heads of Branches. Keenly interested in education, he is on the Councils of the Essendon Technical School and Lowther Hall, Church of England Girl's Grammer School. Another interest is his home workshop, in which he has turned out many a first class radio set.

New Chief's Record

THE new Chief Electrical Engineer, Mr. A. C. Stockley, was born in London and received his electrical engineering education at London University. He came to Australia in 1921, after serving in the British Army during World War One, and joined the Department as a draughtsman in the Way and Works Branch. In the same year he was transferred to the Electrical Engineering Branch. Mr. Stockley advanced rapidly from electrical engineering assistant to sub-station engineer in 1937, and last year was appointed Assistant Chief Electrical Engineer. He became head of the Branch early this year.

As a young engineering assistant, Mr. Stockley was granted leave in 1927 to visit England and investigate the latest developments in electrified rail transport in the U.K. and the Continent. As a special trainee he was attached to the great electrical manufacturing firm, Metropolitan Vickers Ltd., of Manchester, and widened his experience of equipment manufacture and maintenance. In 1946 he again went to England, Switzerland and Sweden and investigated modern developments in sub-station equipment, electric rolling stock and electric traction generally.

During the time he was sub-station engineer, Mr. Stockley acted as consultant to the Grain Elevators Board on electrical equipment for the Geelong terminal elevator. In the last war he supervised the installation of electrical equipment for R.A.A.F. gunnery training ranges in Victoria and was a voluntary instructor officer in the Air Training Corps.

Worked on Suburban Electrification

A NATIVE of Ballarat, the new Assistant Chief Electrical Engineer, Mr. D. L. MacDonald, has had a brilliant career. He won his way by scholarships through Wesley College and to the Melbourne University, where he took his degree of Bachelor of Electrical Engineering.

Mr. MacDonald joined the Department in 1921, and was lent to Merz and McLellan, consulting engineers for the Melbourne suburban electrification scheme. Upon completion of the contract, he continued on overhead construction work. In 1926, Mr. MacDonald was granted extended leave for experience in the U.S.A. For the next two years he worked with the Pennsylvania Railroad and gained experience in both steam and electric transportation. He was also with the Illinois Central Railroad in both operating and maintenance sections of the Chicago suburban electrification. Before he became Assistant Chief Electrical Engineer, Mr. MacDonald, as Power Station Engineer, worked on the modernization of Newport A Power Station.

£1 Bonus

EXPANDING with railway business is the demand for more staff. It is a healthy sign of public confidence ; demand for service indicates that the railways are giving it efficiently, dependably and increasingly, and the complete success of the Department's long-range rehabilitation plan hinges, largely, on more men coming forward.

In itself, this is of interest to railwaymen whose restored pride in their service is evident : the £1 bonus scheme for

a new employee adds concrete interest. Any serving or retired railwayman or woman who introduces a newcomer to the grades of blacksmith, boilermaker-welder, car painter, car and waggon builder, clerk (junior), coppersmith, electrical fitter, fitter, iron machinist, porter (junior and adult), shunter, springmaker, trainee engineman, turner, and upholsterer, will be paid the bonus, provided the nominee completes six month's continuous service.

Nominations should be addressed to the Secretary at Spencer-st. Administrative Offices, before the nominee's application is lodged, or accompany the application.

He Will Be Missed

TRAIN Examiner R. G. Child, of North Melbourne Workshops, who recently retired through ill health, had 47 years' service. He was well known in the Melbourne Yard and also at Korong Vale, Geelong, Traralgon and other country centres. Mr. Child took great interest in racing; but if his assessments of form and performance were purely academic, they gave such accuracy to his forecasts that he was invariably known to his friends as "Long Shot Reg."

Miss Phieler.

Linguist

THE language difficulties of New Australians are frequent. The Commerical Branch is therefore fortunate in having Miss Carrie Phieler with her knowledge of French and German to overcome these troubles.

After two years in Australia she is determined to become an Old Australian as quickly as possible. To accelerate the process she is studying for her B.A. at the University, taking political science and English literature. Before coming to Australia, Berlin was her home city, and she wants to return for a short holiday to see her grandparents who are still there. "Oh, but only for a short holiday, I like Australia very much," she hastens to explain. Another branch of Miss Phieler's family has been in Melbourne since 1865; that also helps along the rapid assimilation of Australian outlook.

Packaged Holiday Resorts

CONTRARY to the avowed aim of every railwayman to encourage travel by train on holidays, a cheerful saboteur has been found in our midst. Mr. Jim Davern, of the Stores Branch, has produced the startling alternative of painting a scene typical of Melbourne's nearer ranges on the outside wall of his Gardenvale home garage. And he has succeeded so admirably that it requires very little to imagine oneself there. Mr. Davern is an enthusiastic amateur artist, using water colours as his main medium. Among his more unusual efforts are reproductions on brooches. Art was not always his hobby; in his younger days he was a bantamweight in the Victorian Railways

In the Gardenvale ranges.

Institute boxing competitions.

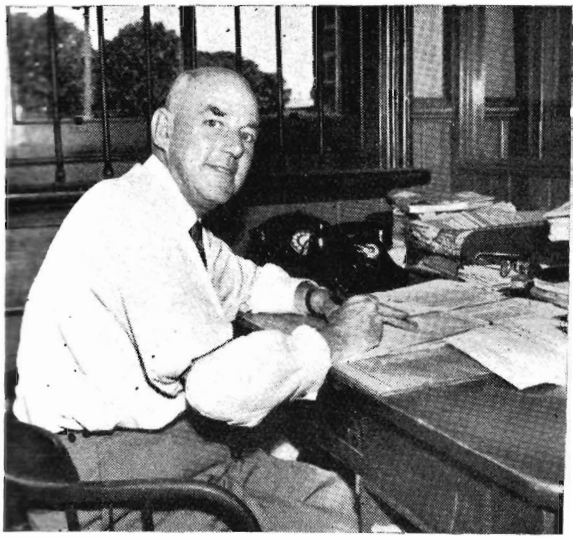
Sketching and walking are two hobbies which combine to keep his leisure fully occupied. At the age of 50 he can still walk twenty miles in a day.

Dealt In Millions

THE Comptroller of Stores (Mr. L. C. Stewart), who retired recently after 49 years' service, joined the Department as a junior clerk at Melbourne Goods in 1905. He was transferred to the Stores Branch, Head Office, seven years later. From shipping clerk he rose to personal clerk to a former Comptroller of Stores (Mr. C. W. J. Coleman), chief clerk, assistant comptroller of stores and, ultimately to comptroller upon the retirement of Mr. H. S. Sergeant in 1947.

During the last war Mr. Stewart was a member of a subcommittee appointed by the State Government to control the dispersal and storage of foodstuffs and essential requirements throughout Victoria for use in an emergency. In the immediate post-war years when Victoria experienced an acute shortage of coal for locomotive, power station, gas and industrial use, Mr. Stewart administered Government contracts for over one million tons of imported coal, valued at £10

Mr. Stewart.



Mr. L. T. Harding, clerk-in-charge at Bendigo Goods, is one of Bendigo's many railway bowlers. He has played with South Bendigo for the past eight years. Mr. Harding has been on the committee of the local V.R.I. for about 10 years, was secretary of the Bendigo Legacy Club for a couple of years, and is now on the Junior Legacy Club Committee.

million. In addition, a contract for 600,000 tons of Queensland Callide coal was let in 1951. Seventy eight shipments were received up to the time of Mr. Stewart's retirement.

He also handled the contractual side of *Operation Phoenix* (the Railways £80 million rehabilitation plan). Other important contracts administered by Mr. Stewart were for pre-cut houses and materials for hostels to accommodate railway staff recruited in the U.K. and Europe.

Mr. Stewart, who has been succeeded by Mr. F. Orchard, intends devoting more time in his retirement to his favourite hobby, fruit tree pruning.

Diamond Wedding

THE diamond wedding of Mr. and Mrs. J. Wickham was recently celebrated. Messages of congratulation were received from Her Majesty the Queen, the Governor General, the Governor of Victoria and the Prime Minister. Mr. Wickham, who is 84 years old, was a leading hand fitter at Newport Workshops. One of his sons, Mr. F. Wickham, is a fitter and turner at the same 'shops and another son, Mr. N. S. Wickham, is an electrical fitter in the Way and Works Branch.

Naturalization

MANY enquiries lately have led *News Letter* to outline what a new Australian railwayman, not of British birth, ought to do to acquire citizenship of Australia in the fullest sense.

Normally, his first step is to lodge a Declaration of Intention to Apply for Naturalization. The form of declaration may be obtained from and subsequently lodged (after an applicant has lived in Australia for 12 months) with the Commonwealth Migration Officer, (Department of Immigration, 8 Elizabeth-st., Melbourne C.1.) who will also supply details for those cases in which these general rules do not apply. For example: there are special provisions for ex-servicemen who were with the Allied Forces, women married to Australian nationals and boys and girls under 21.

As a general rule, an adult cannot be naturalized until he (or she) has lived in Australia for five years. No matter how long the period of Australian residence, no one can be naturalized until at least two years after making the "Declaration of Intention." Therefore, if he or she wishes to become naturalized at the earliest possible moment (that is, five years after arrival) the Declaration should be made no later than three years after arrival. Every day's delay beyond three years means a postponement of naturalization. Those making Declarations of Intention need not know or speak English, but they will have to learn the language before finally applying for naturalization. There is no compulsion for anyone to become a naturalized Australian; Australian citizenship is regarded as a privilege.

A Record ?

SIGNALMAN J. KELLEHER, who retired recently, spent 37 years in the same signal box—at Tooronga-rd. He began in the Department in 1911 and entered the Tooronga box in 1916. Since then he has seen, from his box at the level crossing, the horse give way to the motor, the steam to the electric train, and the open paddock to red-tiled roofs. Mr. Kelleher will continue, in retirement, his lifelong hobby of gardening.

S. M's. Ill Luck

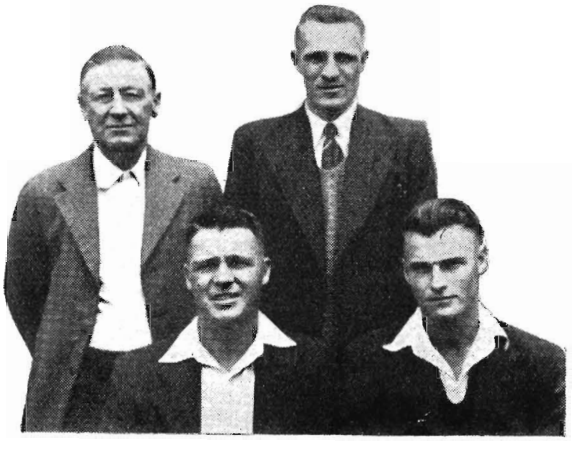
STATIONMASTER E. A. J. O'Loughlin, of Newmarket, who retired recently after 43 years' service, says he will always remember his first appointment as S.M. at Nullawil in the Mallee. His furniture and the personal belongings of his wife and two daughters were in a private carter's van which caught fire at South Brunswick. Everything was destroyed. The O'Loughlin family arrived at Nullawil with only the clothes they were wearing. Some time later the then Chairman of Commissioners, Mr. Harold Clapp, inspecting the station, was delighted to hear that the O'Loughlin's had recovered from their misfortune. Before he left he dryly remarked to Mr. O'Loughlin: "I hope you have your furniture and clothing insured against fire." Mr. O'Loughlin, as president of the Nullawil progress association, played a leading part in getting a recreation ground, there.

The Four Johns

ANOTHER railway family have responded to the challenge in the January *News Letter* paragraph, "In the Blood." The Johns family of Warragul submit their claim for recognition with four members all qualified as drivers in the steam service. At the end of 1953 their combined service to the Department was 80 years, and, as three of the family are still young men, they should easily break the century before they complete their railway careers.

Mr. L. W. Johns, the father of the group, joined the service in 1911 and, with the exception of two years, made Warragul his headquarters. He remembers when the brown coal output was one train a day before the present development took place at Yallourn. He recently retired and now devotes more time to his favourite hobbies of gardening and fishing.

His three sons, also stationed at Warragul, are A. G. Johns, H. J. Johns and R. C. Johns who progressively took up railway jobs in 1936, 1943 and 1945.



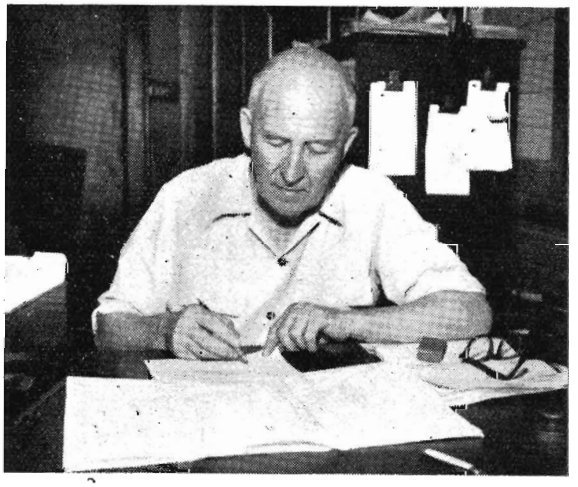
Left to right (standing): Mr. L. Johns, Mr. H. Johns. Seated: Mr. A. Johns, Mr. R. Johns.

Crack Shot

MR. S. C. ELLIS, clerk in the Stores Branch at Bendigo, has been actively interested in rifle shooting for many years. From 1922 to 1948 he represented South Bendigo Rifle Club in interstate competitions. He was treasurer of the club from 1915 to 1949, and captain from 1917 to 1926. He is now a life member both of the club and of No. 3 District Rifle Club Union.

In an Empire match in 1933, the club made a record score of 962, top scorer of the match being Mr. Ellis. The following year, the team, of which he was again a member, broke the Australian record by scoring 1,184 for 12 men over three ranges. Both these records will stand because they were made with Mark VI ammunition which has since been replaced by the modern Mark VII.

Apart from demonstrating his skill with the rifle, Mr. Ellis has spent much time in guiding the local V.R.I. Between 1915 and 1948 he was secretary of the V.R.I. for 25 years, 17 of them in a consecutive term. As well, he has been a member of the V.R.I. billiards team since 1917.



Mr. Ellis

Thanks

FOR "the excellent service and co-operation received from the Department on the occasion of the Stratford State School's excursion to the Zoo. The time-table was splendid, there was very little waiting time and the train returned to Stratford on the tick of time"—

Mr. A. J. Poletti, Head Teacher, State School, Stratford

For the efficient rail transport of more than 1,000 "Good Friday" perishable parcels "all of which reached their destinations safely and on time. We appreciate the really wonderful co-operation which our dispatch service received from your staff at Spencer and Flinders-sts. outward parcels offices."—

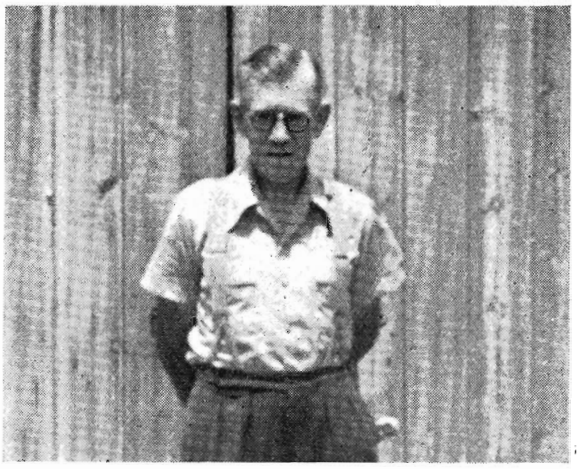
The managing director, Seafresh Seafoods Pty. Ltd., South Melbourne.

For the ready service and unfailing courtesy available from all members of the Railway staff at Red Cliffs.

—J. B. Grellis, president, Red Cliffs Chamber of Commerce

His Last Dog-Spike

AFTER 44 years' service with the Department, Mr. James Crouch drove his last dog-spike recently. He joined the Department as a supernumerary in 1910. Enlisting for active service in the first world war, he served with distinction in the 8th Infantry Battalion at Gallipoli, and later in a light railway unit in France. He was mentioned in despatches. On his return he became a repairer. He was stationed at Kaniva in 1920 and then moved to Lillimur for six years. Later, he transferred to Miram as ganger,



Mr. Crouch outside the tool shed at Queenscliff.

where he stayed until 1948. Finally he went to Queenscliff, where he retired. Mr. Crouch has been actively associated with the R.S.L. and was president of the Kaniva branch for some years. His son, John, is an assistant engineer in the Rolling Stock Drawing Office.

From Porter to Inspector

MR. HARRY D'AMBROSIO, Block and Signal Inspector, who recently retired from the Department, joined in 1908 as a lad porter, and, in 1911 was promoted to signalman. He served at various places in the suburban area. He became special class signalman in 1924 and block and signal inspector in 1939. As block and signal inspector he examined between four and five thousand men.

39 Years On One Length

NUMBER eleven track gang and Tynong and Nar-Nar-Goon station staffs gave Ganger Jack Pavalach a rousing farewell when he retired recently after 42 years' service. He joined the Department as a supernumerary labourer, in 1912, and went to Nar-Nar-Goon as repairer two years later. After a short time at Nandaly and Mirboo North he returned to Nar-Nar-Goon as ganger, in 1927, where he remained. Altogether, he was 39 years on the Nar-Nar-Goon length, for 27 as ganger. He won three first awards, one second and one third for the best kept length in the Gippsland section. On behalf of his friends, Leading Hand C. Wickham presented Ganger Pavalach with a smoker's stand and a silver cake dish for his wife.

The new motive power arrives at Korong Vale station yard. Left to right: P. Whitfield, driver-in-charge; R. Pianto, fireman, N. Phillips, fireman, W. Burgers, diesel-electric locomotive instructor; R. Slattery, driver, G. Jennings, diesel-electric locomotive instructor, K. Brown clerk.

The Victorian team which won the Denniss Cup at the recent inter-system bowls carnival in Tasmania. Back row—left to right: H. Jolliffe, F. S. Kent, F. Snell, W. K. Jarvie, J. Williams, W. B. Johnson, A. Cowling, A. C. Black, R. Anderson, J. T. Emmerson, J. Hewett, R. E. Fuller. Front row: C. Allen, G. McGillivry, O. Hauser, W. E. Elliott, L. J. Williamson, H. Watts, A. G. Polson, T. Jenkins, E. C. Woolcock.

SPORTS

Country Tennis Week

SIXTY country tennis players from various parts of the State competed in the recent tennis week in Melbourne. The matches were played on the V.R.I. courts, Parkville. The teams championship was won for the second successive year by Maryborough. The team was led by Rupert Craigie, who was making his 20th appearance at the carnival. It was a closely contested final, Maryborough scoring three rubbers, three sets and 72 games to Wodonga's three rubbers, three sets and 65 games. The open singles event drew entries from 58 competitors. After the preliminary rounds were concluded, I. Zotti (Seymour), B. Walsh (Wodonga), T. Fitzgerald (Wodonga) and R. Craigie (Maryborough) were left to contest the semi-finals. Zotti defeated Walsh, 9-4; and Craigie qualified to meet the former in the final by beating Fitzgerald, 9-4. In a match in which there were many fine rallies, Craigie won the title, the score being 6-4, 6-5. There was an entry of 32 players for the Railways singles championship. In the semi-finals, Zotti defeated H. Hunt (Seymour), 9-5, and Fitzgerald downed F. Jones (Little River), 9-4. The final match was very keenly contested. Fitzgerald won the first set 6-3, lost the second 1-6, but recovered to win the final set, 6-2, and the match. At the conclusion of play on the final day, Mr. Commissioner Meyer presented the trophies to the winners in the club house pavilion.

Rail Clerks In Stawell Gift

TWO Claims Division clerks, Bruce Rowell and Jack Coats, ran in this year's famous Stawell Gift. The latter was trained by Bob Edwards, who is also a clerk in the same division. Coats was defeated in his heat, but Rowell won his off the 7¼ yards mark and, in doing so, defeated Hutchinson and Hart, two former Stawell Gift winners. In his semi-final he was defeated by Gardner, who ran a dead heat in a Stawell Gift and was defeated in the run-off. Rowell, who is only in his second year of professional running, won his heat in this year's Bendigo Thousand. In last year's Stawell Gift he ran off 9½ yards and was beaten in his heat by L. J. Bell, a subsequent winner of the Broken Hill Silver City Gift. Bruce graduated to professional ranks from the Coburg amateurs. Last year he played football with the Carlton Seconds, but will forsake the field this year to concentrate on running.

Jack Coats, who was also a member of the Coburg Club, had a splendid record in amateur ranks. A middle distance A grade runner, he ran second to John Marks in the 880 yds. Victorian championship and, as a junior, won the Victorian one-mile and half-mile titles. When he first became a professional he ran in middle distance events. He won two 880 yds. events at Maribyrnong and another at Keilor and finished third in the 880 yds. championship at Geelong.

Ballarat's Grand Slam

ALL three events, the fours, pairs, and single-handed championships at the recent Country Bowls Week carnival in Melbourne were won by Ballarat representatives. One hundred and four country bowlers competed in the tournament, which was played on the V.R.I Albert Park, Middle Park, St. Kilda, and Windsor greens. Twenty-six teams entered for the fours championship, Bendigo had five teams, Ballarat and Seymour, 4 each; Geelong, Ouyen, Donald, Maryborough and Wodonga 2 each; and Dimboola, Ararat and Wangaratta, one each. Because of the large number of entries it was necessary to divide the competition into seven sections. Sectional winners were Ballarat No. 2, Seymour No. 2, Wodonga No. 2, Bendigo No. 3, Donald No. 2, Ballarat No. 1 and Ouyen No. 1. In the semi-finals, Wodonga No. 2, defeated Ballarat No. 1, and Ballarat No. 2 proved too strong for Donald No. 2. Ballarat No. 2 won the final from Wodonga No. 2. The championship rink comprised T. Day, J. White, S. Williams and M. Wallis. The pairs championship resulted in an easy win for Ballarat's representatives, Day and Wallis, who defeated Maryborough's best, Johnson and Green, 25 to 5. All the visiting bowlers entered for the single-handed championship. Two Ballarat bowlers, A. Polson and O. Hauser contested the final. The latter won the title in an even game, the score being 26 to 21. The trophies were presented by Mr. Commissioner Meyer at the V.R.I. bowling club pavilion.

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VR News Letter

JULY 1954

THE MONTH'S REVIEW

The Passing of The S's.

BUILT at Newport Workshops in 1928–30 and streamlined in 1937 to haul *Spirit of Progress*, the famous S class fleet of locomotives are reaching the end of the road after millions of miles of magnificent service. S301 (*Sir Thomas Mitchell*) was the first to disappear from the railway scene : it was scrapped in October last year. When this was written S303 (*C. J. Latrobe*) had been recommended for scrapping, and S302 (*Edward Henty*) was awaiting examination at Newport Workshops. S300 (*Matthew Flinders*) was stored at North Melbourne Locomotive Depot. Since April 23, *Spirit of Progress* has been hauled by a diesel-electric. (See picture on page 7).

A start has also been made on scrapping the C class locomotives. The first to go is C20. The C's, which were the first of the 2–8–0 consolidation type, were wholly designed by the Rolling Stock Drawing Office, and were built at Newport Workshops. A prototype C was made at Newport Workshops in 1918, and it proved so successful as a general purpose locomotive that 25 more were built between 1921–26. During the acute coal shortage in the immediate post-war years, all the C's were converted to oil burning.

Reso Train Revived

THE revival of the Reso Train, last month, marked another step towards pre-war normality. Fifty-four well-known men, representative of city and country interests, were taken on a week's inspectional tour, mainly of Murray Valley primary and secondary industries. They covered Mildura, Echuca, Tongala, Tatura, Wangaratta, Rutherglen, Alexandra, the Eildon Reservoir and surrounding districts. They lived, ate and slept on the train for a week, mixed freely with one another and with those they met, and, gained without doubt, greater and more helpful knowledge of development in those areas. Local councils and other bodies, such as the Department of Agriculture and the State Rivers and Water Supply Commission, primary and secondary industries, co-operated to show and explain to Resonians just what was being done. The Reso Train, itself, was as comfortable as the Department could make it. A tour on the train automatically qualifies a passenger for membership of the Brotherhood of Resonians which, today, is a very live body of more than 200. Since the late Sir Harold Clapp inaugurated the train, 34 years ago, there have been about a thousand members of Reso.

W.N.'s 60th Birthday

FIRST issued in 1894, the Department's *Weekly Notice* will be 60 years old on the ninth of this month. New South Wales was earlier in the field, and so also were the main British Railway companies. No. 1 *Weekly Notice*, a copy of which is in the possession of the well known railway enthusiast and safeworking authority, Mr. C. D. Gavan Duffy, of Camperdown, has on its first page a general notice that " the system hitherto used in the issue of circulars will cease, and all instructions, except those relating to train movements, live-stock traffic, and other urgent matters, will be communicated to the staff bv the pamphlet, to be known as the *Weekly Notice*."

From earliest days, it had been the practice of the Department to issue instructions to the staff by what were known as A and C circulars. Some of the more permanent or admonitory circulars were collected and published in book form, but those of more local interest were kept in the memorandum files. As these have vanished, it is difficult to discover what went on in the early days.

The excitement of the new issue, was apparently, too much for the printer, who numbered two clauses 13 and left 14 out.

B60's Second Birthday

B60, *HAROLD W. CLAPP*, which headed the Royal train during the Queen's tour of Victoria, will be two years old this month. The first of 26 diesel-electric main-liners, it went into service on July 14, 1952, and by the middle of this month, will have registered 330,000 miles. Incidentally, the combined mileage of the diesel main-liner fleet, by mid-July, will total about four and a half million miles. The round-the-clock trouble-free running of these locomotives is an outstanding feature of today's traffic operations.

When B60 notches up 360,000 miles, it will go into the diesel shop at the North Melbourne Locomotive Depot, where, for the first time, the cylinder head, pistons, cylinder liners and connecting rods will be removed and examined. These components will be sent to the Engineer of Tests at Newport Workshops for inspection and checking of wear. It is expected that they will be good for further use without replacement, and that B60 will be available for traffic within 10 days.

Normal inspections of diesel-electric locomotives are carried out every seven and a half thousand miles. A locomotive is withdrawn from traffic about eight o'clock in the morning and is ready to go back into running about five o'clock, the same afternoon, duly certified A1.

High Transport Cost Trends

THE recent symposium organized by the Institute of Transport in Melbourne on this subject, the reason for the trends and the remedies, consisted of an opening paper on the economic aspects, followed by papers on the shipping, rail, road and air viewpoints. Mr. Commissioner Meyer's paper on the railway side of the subject was a forthright attempt to cover the rail factors. Introducing the subject, he made some interesting comparisons of track mileage to population showing ratios of 1·4, 3·07 and 3·6 miles per 1,000 head of population for U.S.A., Canada and Australia respectively, and pointed out that, using Victoria as an example, 80% of the present track mileage was in operation 50 years ago when railways provided the only practical means of transport for early developmental demands. However, to achieve economic stability now, in a commercial sense, this developmental stage of over-provision had to be justified by adequate traffic volume ; although, again, taking Victoria as an illustration, this was not the case over approximately 50% of the existing lines. Added population and consequent increased activity in all fields would help, but only as a long range solution.

Practical Remedies

THERE had been, Mr. Meyer explained, a precipitous rise in railway operating costs in the 12 years between 1940/41 and 1952/53 from mounting labour and material costs. The progressive obsolescence of equipment, and consequential drop in efficiency had aggravated the other upward pressures ; and perhaps the most damaging national effect of it, and of the consequent inability of the railway to pull its full weight, was the natural recourse to alternative means of transport, involving waste of both capital and effort.

OUR FRONT COVER

shows the Nordberg power track jack in operation on the Gippsland line. It does away with the slow method of lifting with hand-operated track jacks.

Mr. Commissioner Meyer addressing the Institute of Transport

In Mr. Meyer's view the outstanding practical and short-term field for improvement in costs is the arrest of obsolescence by rehabilitation, concurrently with the adoption of proven technical developments. Economy derived from the increasing adoption of diesel-electric motive power has already shown its value in this direction. Less spectacular, but nevertheless vital, track maintenance and terminal handling have also yielded economies through increasing mechanization, as Mr. Meyer pointed out, but there is a vast field still open for the application of technical advances.

The expansion of rail facilities, in association with developmental projects where the rail medium is pre-eminently suitable, is another, if long-ranged factor in solving the problem. It would not only put meat on the skeleton but add some red blood of traffic volume as well. Good examples are the duplication and electrification of the Gippsland line, and the new standard gauge route with which the Commonwealth Railways will serve the Leigh Creek coalfield. The ultimate standardization of gauges in Australia is, of course, another solution that has been recognized for many years.

Overcoming Carriage Sway

FURTHER travel refinements are being planned for *The Overland*, which is already one of the most modern express trains in the world. The roomette sleeping car *Chalaki* has now been fitted with cast steel bogies incorporating Monroe hydraulic shock absorbers to damp the action of the coil springs. This type of bogie will eventually be fitted to all cars on *The Overland*.

The modern trend in the suspension of vehicles, both rail and road, is towards all-coil, rather than a mixture of coil and laminated springs. However, when the suspension is entirely on coil springs there is a tendency towards violent oscillation which has to be countered. Shock or sway absorbers can be of friction or hydraulic type, the latter, (which includes the Monroe) now being more commonly used. They consist of a cylinder filled with oil in which a piston floats and allows oil to by-pass through a restricted orifice thus delaying movement.

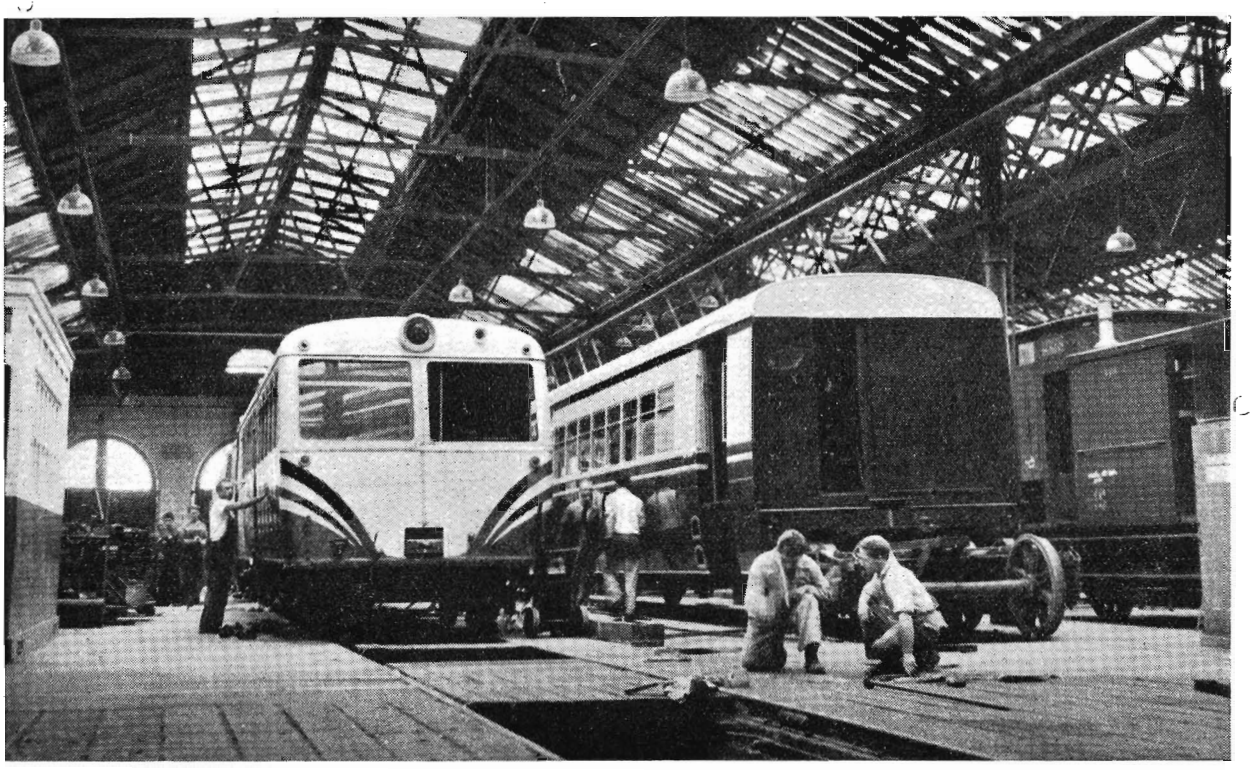
Fuel Costs

WHILE fuel oil and distillate costs have shown a downward trend recently and are continuing to decline, the cost of black coal and pulverized brown coal has increased to such an extent that the economics of railway operation now favour the use of more liquid fuel in the Department's locomotives.

With its fleet of 26 diesel-electric main-line locomotives, 13 diesel-electric shunting locomotives, 76 oil burning steam locomotives and 39 diesel rail-cars, the Victorian Railways are in excellent position to take advantage of these fuels. In addition, the Department has ordered 25 more diesel-electric general purpose locomotives and 30 of the 60 J class steam locomotives that are being built in England will be oil fired.

The cost of Yallourn precipitator dust has also increased so much that economics now favour the conversion to oil firing of locomotives that were originally listed for pulverized brown coal firing. Consequently, the Victorian Railways now propose to restrict activities with the pulverized brown coal fired locomotives over the next few years to an extension of current research. X 32, the only brown coal fired locomotive in service, will continue to run and it is anticipated that a converted R class locomotive will be operating soon.

RAIL-MOTOR SHOP



A section of the Rail-Motor Shop in the east block of Newport Workshops.

THE growing railway fleet of rail motor stock needs special maintenance and overhaul facilities. A section of the paint and waggon shops at Newport has now been converted into a rail motor maintenance division.

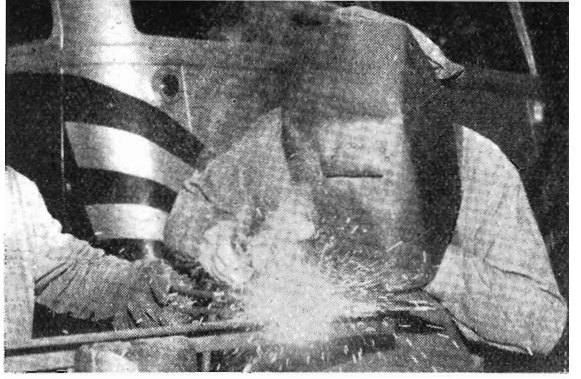
Rail motors sent to the shop for overhaul are lifted from their bogies by a 5-ton electric gantry crane and then stripped into their component parts. The bogies are broken up into their various components, each of which is thoroughly checked and replaced with any necessary new parts. Any improvements in design since the previous overhaul are now carried out.

Interior and exterior fittings are stripped from the body which is handed over to car builders and painters for attention. Seating and electrical fittings are sent to the proper shops, and generators, starter motors and other specialized electrical equipment are sent to the Train Lighting Depot at Dudley-st for attention. Gear boxes, reversing boxes and fluid couplings all receive the closest inspection before re-assembly.

After painting and varnishing, the bodies are re-equipped and placed on their bogies. Overhauled power units are installed and the motors are ready for the track. Before taking up normal running again, the rail motor is sent on a test trip from Newport to Woodend. Final adjustments are made and the motor is sent back into service.

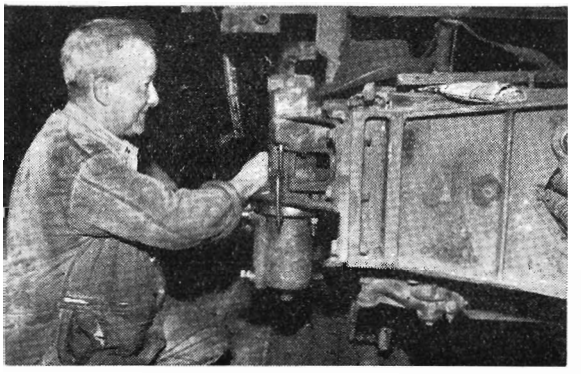
The shop overhauls and maintains diesel and petrol type rail motors, trailers and inspection cars. Its present capacity is six thorough overhauls and three routine examinations at one time. Diesel-electric rail motors requiring heavy body repairs are sent to Newport, otherwise normal maintenance is carried out at Jolimont.

Overhauling one of the radiators of a 280 h.p. rail-car. There is one of these radiators at each end of the power cab.



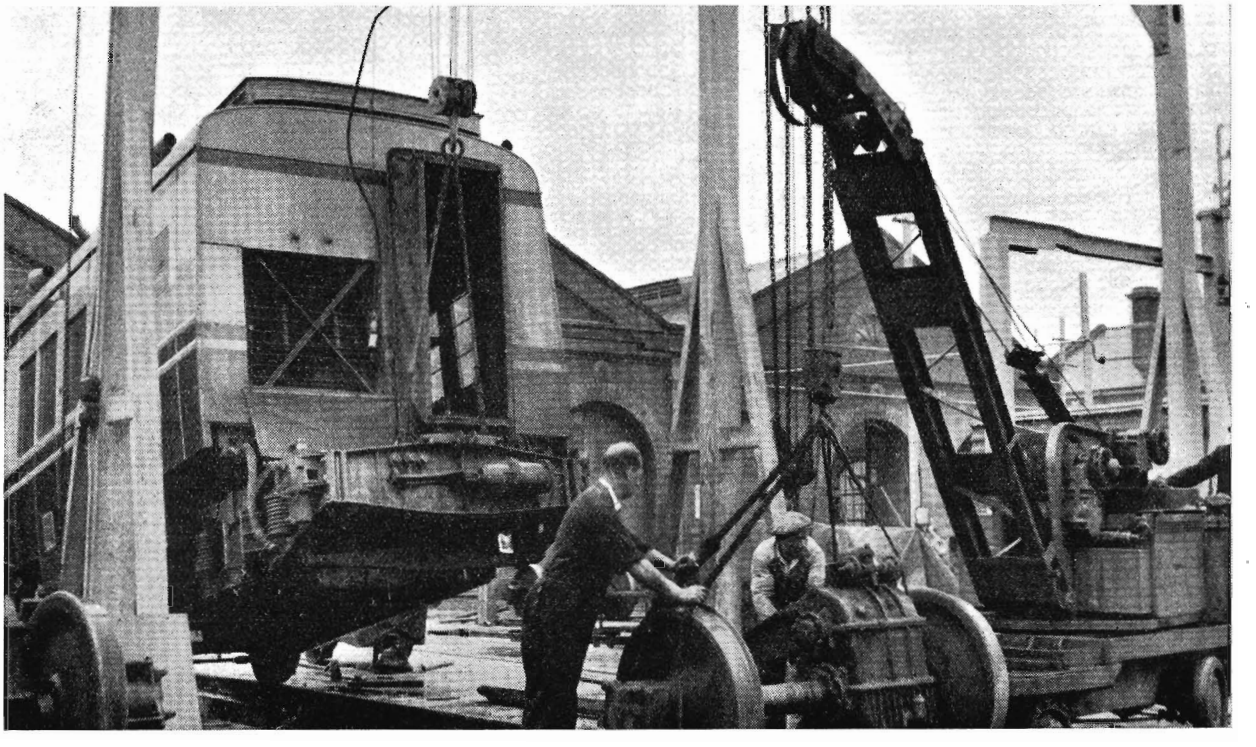
Welding work on a rail-car part. The operator is wearing an anti-glare mask.

Assembling the airline to the watering system of a rail-car.



Maintenance work on the side bearing stabiliser of a power bogie of a 280 h.p. rail-car.

Cleaning the roof of the power unit of a 280 h.p. rail-car preparatory to changing the colour scheme from silver to gold.



A mobile crane transferring the driving wheels of a 280 h.p. rail-car centre bogie.

The branch line train standing in the shed road at Redesdale.

Pruning Goes On

REDESDALE LINE

The Redesdale Junction to Redesdale branch line was closed to traffic on June 29.

THIS spur was opened for traffic in 1891. Branching from the main Bendigo line, it winds through a pleasant countryside to Redesdale. Before the depression years, mixed trains were run from Redesdale to Kyneton and return, on Mondays, Thursdays and Saturdays. On other days a motor trolley ran between Redesdale Junction and Redesdale taking newspapers and mail. But traffic continued to decline, and the train service was reduced, ultimately, to one goods train weekly. This originated at Woodend, each Monday, and left Kyneton at 10.15 a.m. on the down journey and Redesdale at 1.15 p.m. on the up trip. The train consisted of two or three trucks hauled by a light locomotive.

There was no turntable at Redesdale, so the weekly goods train ran tender first on the down journey and funnel foremost on the up trip. There was no water supply at Redesdale and trains had a water truck attached to the locomotive.

The branch line is a little more than 16 miles long. A stretch of 1 in 50 grade is on the up section between Barfold and Emberton.

About eight years ago a bush fire swept over a section of the track near Emberton, and destroyed some trucks in the siding, a bridge over the line at the station and considerable fencing along the line. Because of the gaps in the fencing, the driver of the weekly goods train had to keep a sharp watch for sheep and cattle on the track.

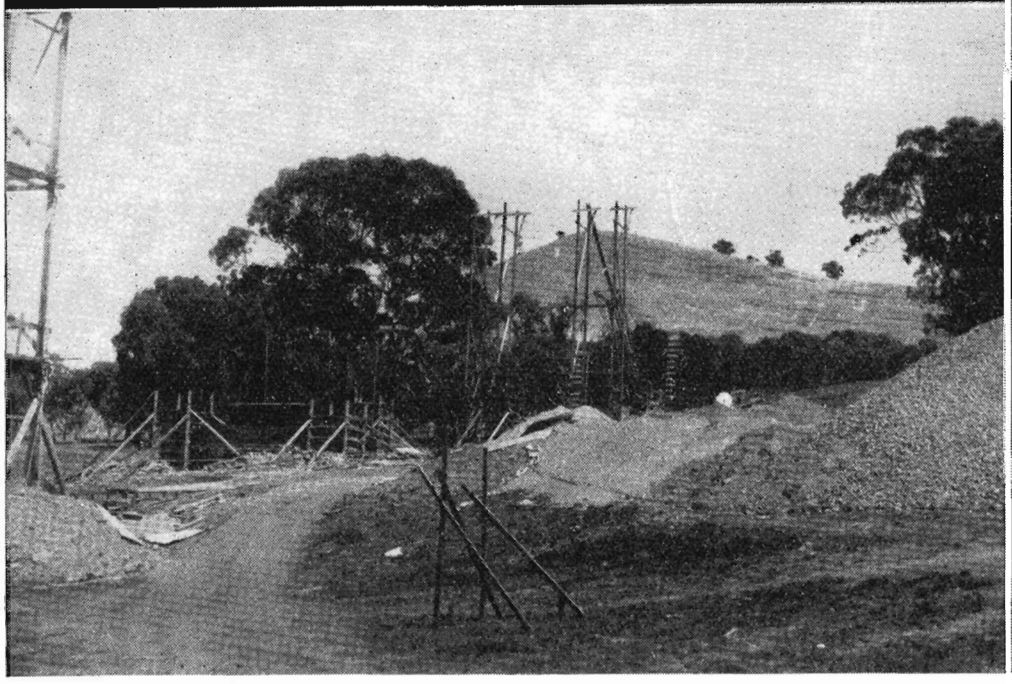
The busiest time of the year for the spur line was in November when big lamb sales were held at Barfold's sale yards. Special trains were run to bring the district's livestock to the metropolis

Kyneton was the market town for branch line travellers.

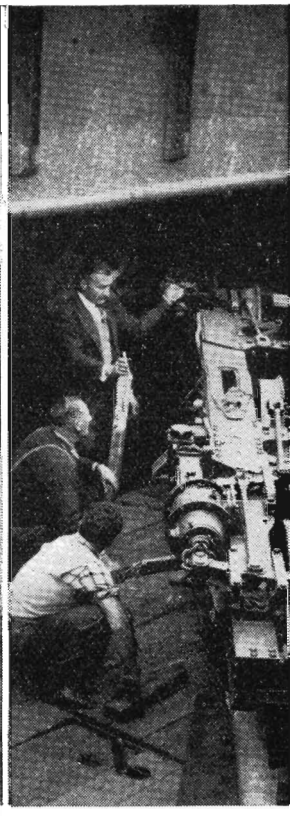
The train crew that knew the line so well.

"FORGET THE SNORTING STEAM," wrote William Morris, prophetically, half a century ago. Now with the passing of the famous streamlined S class locomotives, steam has given way to the new diesel-electric traction on *Spirit of Progress* between Melbourne and Albury. S301, *Sir Thomas Mitchell (above)*, was the first of the S class fleet to be scrapped. It had run more than 1,400,000 miles. This is one of the most impressive departmental photographs of the engine.

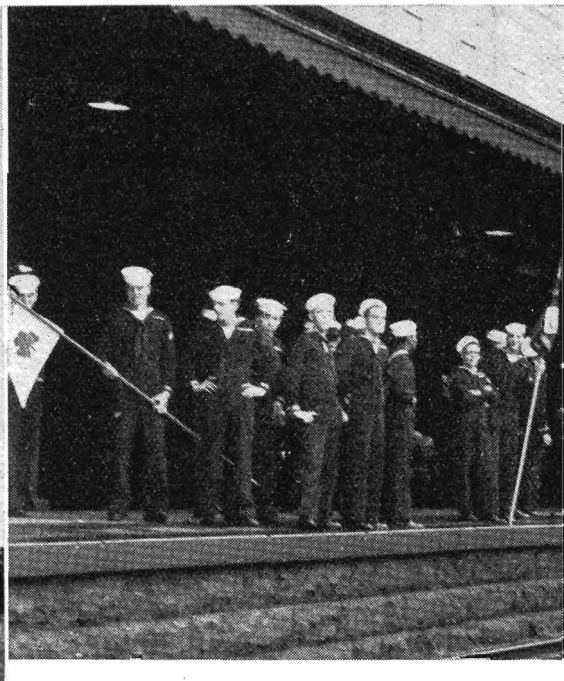
AROUND THE SYSTEM



BRIDGE BEGINNINGS : 1,270 ft. long and 90 ft. high, when finished, it will span Brankeet Creek, near Bonnie Doon.

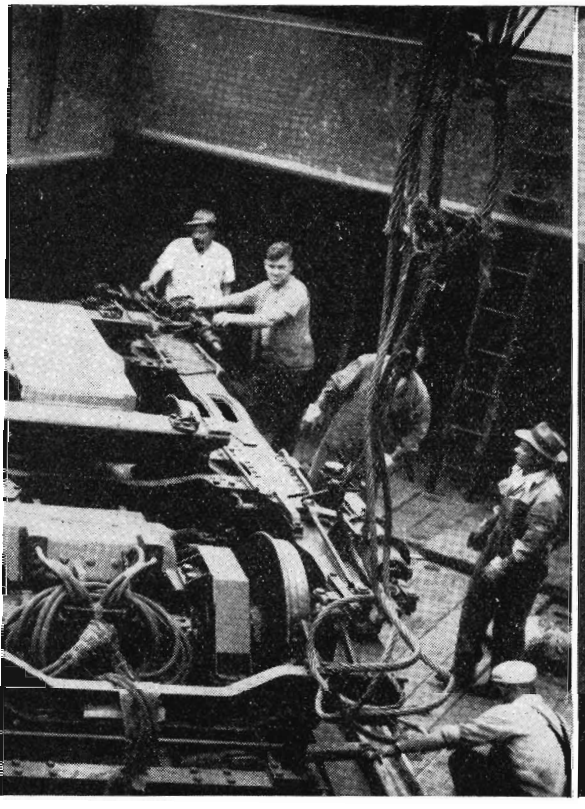


LAST OF THE 25TH : One



GOBS GO BY TRAIN : U.S sailors waiting at Flinders-
the Coral Sea ar

J ON TEST RUN : (*Left*) One of the new J's hauling a
Seymour and back. The J's are used mainly on good



bogies of imported electric loco, L1174, ready for unloading.

LAST WAR HONOUR ROLL: Unveiling ceremony in the Car Shop at Newport.

eir special trains to Port Melbourne after y march.

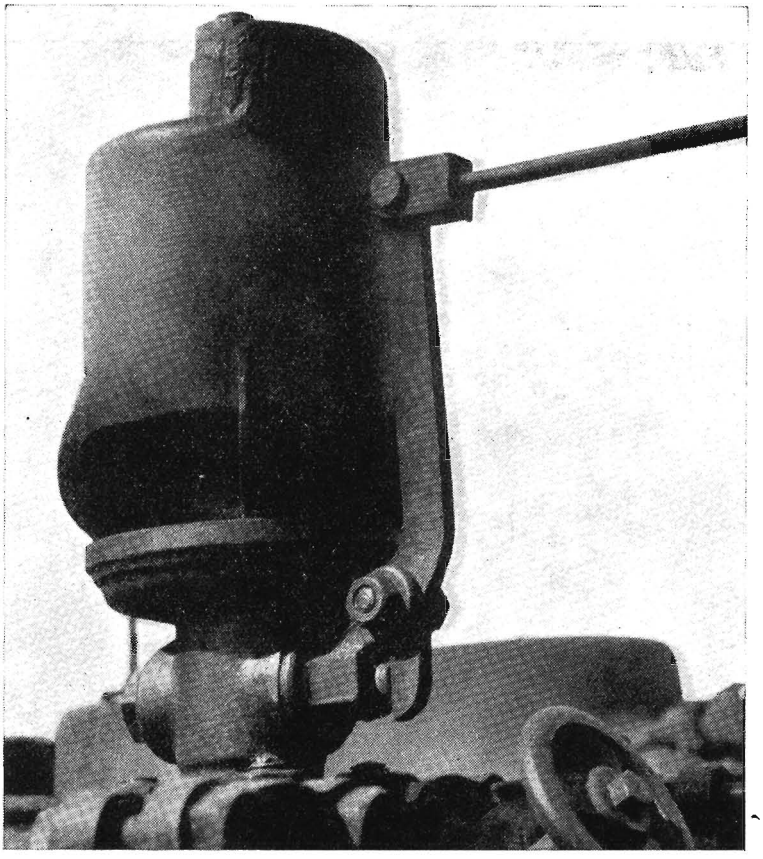
AUSTRALIANS MARCHED, TOO: After the Coral Sea anniversary march, W.R.A.N.S. left by train for Crib Point.

d up the Glenroy bank on a test run to

WHISTLES AND HORNS

Musically, locomotive whistles and horns are most intriguing. What, for instance, are the tones emitted? What are the combinations of notes, where two or more are used, and how was this combination selected? A recent check-up by the Rolling Stock Engineer's Office gives the answers. The conductor of the V.R.I. Choral Society, Mr. Fred Ziegler, was included among the investigators.

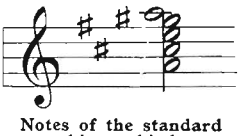
If the chords shown in the illustrations for this article are played on a piano or organ, they may not sound quite the same as on the whistles or horns, because of varying overtones or harmonics. Harmonics will differ for individual whistles or horns, as it is not practicable to manufacture completely identical component parts, particularly where rough castings are involved, such as for the five-chime steam whistle.



The five-chime whistle on the J class locomotives.

THE main types of whistles and warning horns in use on the Victorian system are:

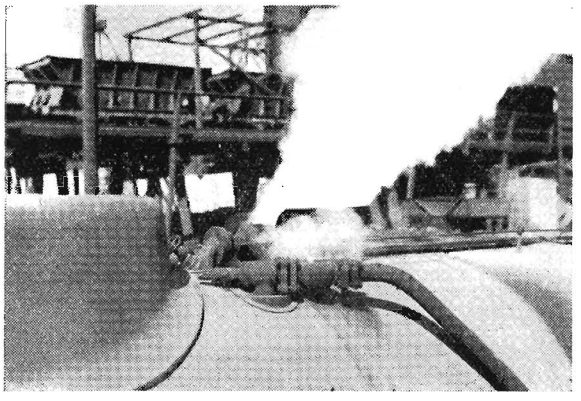
Steam Locomotives: A standard chime whistle is fitted to all of them. An iron casting forms the bell, which has five closed-ended chambers of sector shape, subtending various angles to complete the full circle of 360 degrees. The chambers are graduated in height, and the whole five are disposed around an annular steam orifice.



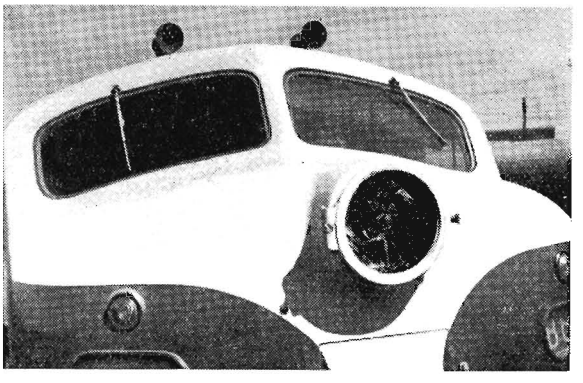
Notes of the standard chime whistle

On many locomotives the whistle is mounted vertically, but on some, because of space limitations imposed by the maximum outline of rolling stock, the whistle is placed horizontally. This occurs on the R, S and X classes.

The tones of the five-chime whistle are fundamental, major third, perfect fifth, major seventh and octave. These correspond, at the lower boiler pressures, to the A major seventh chord. Four of these tones together give the pleasing "common chord", but, by adding G sharp, a dissonant, challenging effect is produced which says in unmistakeable terms: "get off the line".

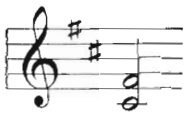


The horizontally mounted chime whistle in full blast on an R class locomotive. It is mounted horizontally to keep it within the maximum outline of rolling stock. Both the driver and the fireman can use a separate chord to blow the whistle.

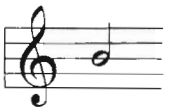


The pneuphonic horns on the B class main-line diesel-electric locomotives.

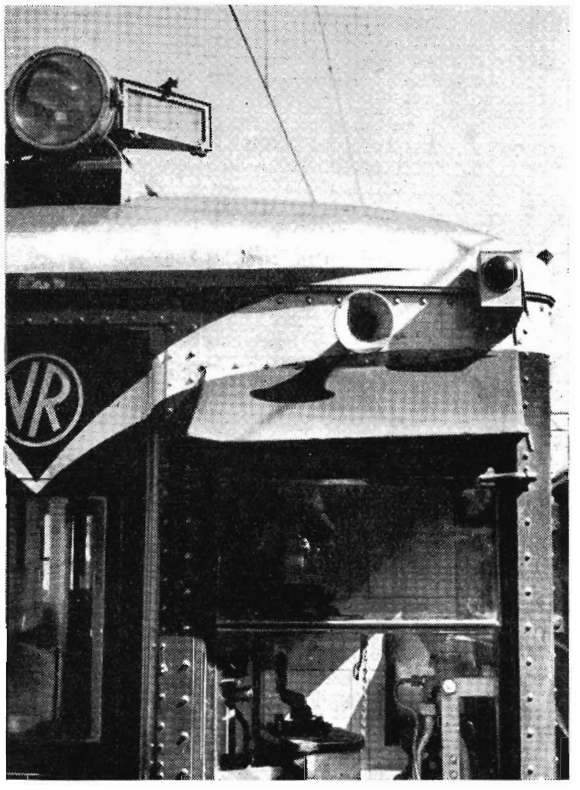
Diesels : The main line B class locomotives are fitted with a pair of pneuphonic horns of the vibrating diaphragm air-operated type. Their tones have an interval of a major fourth. Diesel (Walker) rail-cars will, eventually, all be fitted with pneuphonic horns of similar characteristics. A set of horns is provided at each end of both B class and rail-motor vehicles. Diesel-electric rail-motors (converted from petrol-electric) have a Strombos horn of the vibrating diaphragm type, giving the note B natural.



Notes of the pneuphonic horn

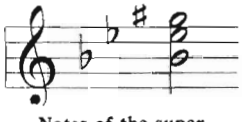


Note of the Strombos horn



The Strombos horn on the diesel-electric rail-motors (Nos. 55–64).

Electric Locomotives : The new L class have super Typhon three-tone warning horns at each end. Two of the horns face forwards, and one backwards. They are air-operated and have a fundamental tone of a B flat, with an interval of a perfect fourth and an augmented sixth. In this combination again, the augmented sixth, G sharp, provides that challenging dissonance.

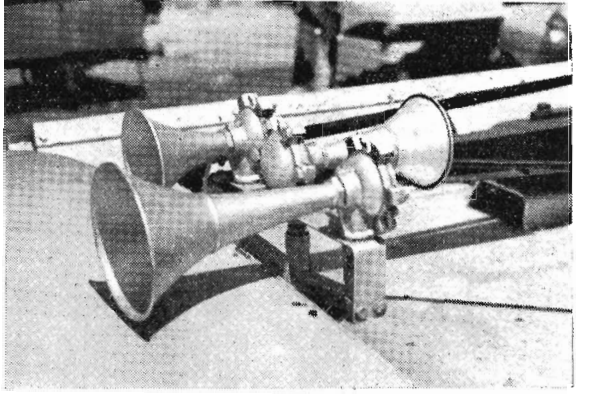


Notes of the super Typhon 3 tone horn

These tones have been specially selected to avoid confusion with road motor horns.

The electric suburban goods locomotives, Nos. 1100–1111, and the F class diesel-electric shunting locomotives have the single tone type whistle similar to that used on the suburban motor coaches.

Suburban Motor Coaches : An air-operated closed-ended organ flue-pipe whistle is mounted on the front of each coach. The tone it emits is D natural, sometimes E natural.



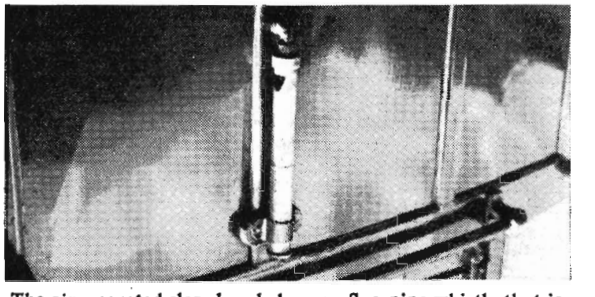
The super Typhon three-tone warning horns on the L class main-line electric locomotives.

Several factors influence the exact tones of whistles and horns. The greater the steam or air pressure the higher is the tone produced. The maximum working pressures for steam locomotives vary from 170 to 220 lb. per square inch. Thus an R class, with a working pressure of 210, has higher tones than a D class, which has a working pressure of 175 lb. per square inch.

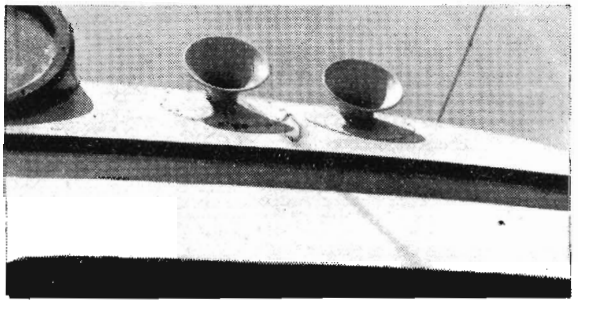
Note of the flue-pipe whistle

Higher atmospheric pressures also produce higher tones. Therefore, they are lower in winter than on a hot summer's day.

Again, the relative motion of the source of sound will give the impression of a higher tone when it is approaching, and a lower tone as it passes and goes away, compared with the sound heard when the vehicle is stationary. This is exemplified by a passing train blowing its whistle continuously. It is known as the " Doppler " effect.

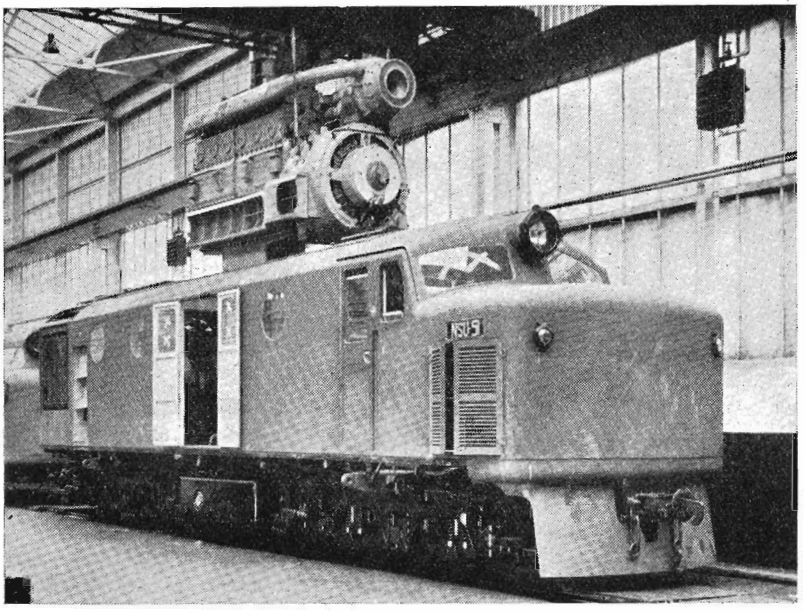


The air-operated closed-ended organ flue-pipe whistle that is mounted on the front of suburban motor coaches.



Diesel rail-cars will all be fitted with the same type of horns as those on the diesel-electric main-liners.

LINES FROM OTHER LINES



Lowering the engine and generator into one of the new diesel-electric locomotives for the Commonwealth Railways. These 3 ft. 6 in. gauge locomotives have a Sulzer 955 h.p. engine, weigh 62 tons, have a top speed of 50 miles an hour, and a starting tractive effort of 27,000 tons. Fourteen are being built for the Central Australia line.

French Railway Electrification

THIS year will be one of further technical progress for the French National Railways, which have just achieved a world speed record of 150 miles an hour with one of their electric locomotives. Further electrification is still the main point of their programme, together with the increased use of diesel locomotives. The experts claim that, on busy lines, electric operation costs only one-quarter, and diesel operation one-half of the operating costs of a steam service. The existing speed limit of 88 miles an hour, for which safety installations are fitted, will be maintained, but the railways will try to increase the average speed of trains. It is now 53 miles an hour, and claimed to be the highest in the world.

Locomotive Livery Restored

AFTER more than 10 years in austerity-grey paintwork, the 16 London Transport Metropolitan Line electric locomotives still in use are being repainted in their original livery of maroon and gold. They are also being given back their nameplates, removed during the war. Names include *Sherlock Holmes*, *Michael Faraday*, *Oliver Goldsmith*, and *Thomas Lord*; the last named owned the cricket ground which bears his name.

100 m.p.h. Wind Tunnel

A new 100 m.p.h. wind tunnel has been brought into use, at Derby, by British Railways. It is designed to help railway scientists and designers in research work over a wide range of problems, such as the dispersal of smoke and steam, the improvement of ventilation of trains and buildings, the cooling of diesel-electric locomotives, wind resistance to fast freight trains, and the design of draught-proof signal lamps.

The tunnel is 65 feet long, is operated by an airscrew driven by a 50 h.p. motor which will create air speeds of over 100 m.p.h., and is of the return flow type in which the velocity of the air can be used as it returns through a rectangular duct.

Scale models of trains and buildings will be used in the tests and altered in detail during experiments, so that results from variations in design can be compared.

Heaviest Shipment

THE heaviest shipment recorded in New York Central annals (and perhaps in those of the railroad industry) was a 450,000 lb. casting which went from East Chicago, Ind., to Davenport, Iowa. The four-truck heavy duty flat car weighed 106,500 lb., making the gross weight on rails 556,500 lb. The shipment was about 20 ft. high, and was handled under special slow orders.

U.S.A. Dieselization

THERE are now about 30 Class 1 railroads in U.S.A. which run no steam locomotives, and they operate an aggregate of over 20,000 miles of route. The largest system is the Southern Railways, with 880 diesel locomotive units grouped in about 564 locomotives, compared with 1,500 steam locomotives in 1938.

The Louisville and Nashville Railroad, which owns more than 320 diesel locomotives, has increased gross ton-miles per train-hour in through freight service by 56 per cent since turning this traffic over to diesel haulage. Freight tonnage per train taken over the whole system has increased by 34 per cent. in the same period. Over the 114-mile Cincinatti-Louisville division, nine 1,600 h.p. freight locomotive units handle all 30 round trips of the daily fast freight service.

13,000-ton Coal Trains

ON the Norfolk and Western Railway (U.S.A.) coal trains made up to 175 bogie waggons are now standard over the 112 miles of the principal main line between Williamson, West Virginia, and Portsmouth, Ohio. The maximum rostered load of these trains is 14,500 tons (all but 13,000 long tons). The Norfolk and Western is the one major American railway which continues to use steam power exclusively, and these trains are powered by heavy articulated locomotives. They are exceeded in length only by the 180-waggon trains of the Duluth, Missabe and Iron Range Railway, which brings iron ore down from the Mesabi Mountains for shipment at Duluth, Lake Superior, but on that journey the gradient is with the load, and the steam locomotives used have only to haul the empties against the grade. The Norfolk and Western line mentioned is, on the other hand, comparatively level.

B.R.'S Big Building Programme

BRITISH Railways plan, in 1954, to build 2,750 passenger vehicles, 53,000 freight waggons, and 325 locomotives. This is two and a half times the number of passenger vehicles built in 1953, 36 per cent. more freight waggons and 50 per cent. more locomotives. The programme reflects the improved steel supply and the determination of the British Transport Commission to replace obsolete vehicles with all speed.

All the passenger vehicles will be of the new standard all-steel design.

AMONG OURSELVES . . .

Well known to the Department's German staff is Clerk Hans Amort of the Employment Office, Secretary's branch. Mr. Amort comes from Berlin, and after the end of the war was, for five years, a personnel officer with the United States occupation forces. In his present job he has helped many new railwaymen from the Continent to overcome those little difficulties that beset the path of new arrivals. The advice he gives to migrants generally is not to form a definite opinion about life in Australia until they have been here for at least twelve months, after which time first impressions may, and probably will, be considerably mellowed. He, himself, had been agreeably surprised by, among other things, the long term loans granted for housing. "When I heard in Germany," he says, "that Australian banks would lend money for a period of 30 years for building a house, I frankly did not believe it."

The Cow Chewed the Mattress

AMUSING stories of life in the Otway ranges, forty years ago, are recalled by Block and Signal Inspector J. C. Clarke who has just joined the ranks of the retired. In 1910 he was relieving at stations on the Colac to Crowes line, which then had four or five trains a day, mostly carrying timber from the great forests then being cleared for settlement. Everyone, incidentally, had a walking stick cut from fiddle back blackwood or other fine timber.

At Banool, on one occasion, he was sleeping in a tent on a straw mattress. During the night the mattress started to move and investigation by the startled sleeper showed that a cow was steadily eating part of the mattress that protruded from the tent.

The timber cutters of those days were both rough and tough. Mr. Clarke remembers a big wood chopping contest at a small Otway settlement, when feeling and bets ran high. At the "local" that night a hot argument started between followers of the rival axe-men. It developed into a furious free-for-all that nearly wrecked the place and was as gory as any staged by Hollywood in a technicolour western.

Mr. Clarke was a safe-working instructor from 1923-33. He is leaving shortly for a trip to Europe.

Flinders-st. Firm Winds Up

WITH the retirement of Mr. R. H. Beagley, the second member of what was long known as the "Flinders-st. station firm of Nankervis and Beagley", a famous railway partnership, which became legendary for service and courtesy, has been finally dissolved. The two stationmasters joined the service as junior clerks within a year of one another, but their paths diverged. They did not meet again until 1935 when Mr. Nankervis went to Flinders-st. as stationmaster and linked-up again with Mr. Beagley. The former retired some time ago on account of ill health.

Mr. Beagley joined the service as a junior clerk at Princes Bridge, in 1905. His salary was £40 a year. After two years there, he became a relieving clerk at suburban stations, and was then transferred to Echuca. He got his stationmaster's certificate in 1913 and, later, operated from Head Office as relieving stationmaster. One of his many country jobs was at Charlton, where he relieved Mr. Nankervis's father. It was while he was at Echuca that he received word of his appointment to Flinders-st., in 1934. Handling big crowds of train travellers became a routine matter for Mr. Beagley. "I had a good colleague and a grand worker in Mr. Nankervis. We developed our team work and this gave us confidence when we had a big job", said Mr. Beagley.

They Saved a Life

THAT a knowledge of first aid can save a life was demonstrated recently when a boy was struck by a motor vehicle at Elwood and had one of his leg's almost severed at the knee. Fortunately an Elwood Depot tram was nearby, and Motorman W. J. Rhodes (a keen first aider) rushed to the boy's assistance. Using the necktie of Conductress W. Ward to apply a tourniquet, Motorman Rhodes stemmed the flow of blood. A doctor, who attended the boy before he was taken to hospital, was full of praise for the skilful way the ligature was applied.

The boy's father was deeply grateful for Motorman Rhodes's prompt action. Writing to the Secretary, afterwards, he said: "the practice of the Railways in training staff in the rudiments of first aid has always been acknowledged as a laudable objective, but it is not until it hits home that the very real debt the public owes to the Department and its staff for this humane service can be really appreciated. The clear thinking and prompt and efficient action of Motorman Rhodes and Conductress Ward were undoubtedly the main factors in saving my boy's life."

Mr. I. J. Bradford, who was St. Arnaud's stationmaster for four years, retired recently. He joined the Department, at Rochester, in 1907, and, after a good deal of country experience, became stationmaster at Pura Pura about 30 years ago. Before going to St. Arnaud, Mr. Bradford was at Tarnagulla, Sydenham, Nyahwest, Derrinallum, Officer, Murrayville, Yarra Junction and Merbein. He will live in retirement at Mildura.

V.R. Posters

VICTORIAN Railway pictorial posters; having won prizes for design and treatment in Australia against all-comers are in the news again. One of them, the "New Overland" poster, sent some time ago to an international exhibition in Paris, is now one of six specially mentioned and retained there. The Department has just heard this from the Club Intercontinental des Transports which sponsored the exhibition. The theme of the posters shown was the locomotive. The Victorian example was designed and drawn by Clive Trewin, one of the Department's commercial artists, whose latest effort, "Hike & Like It", drawn in the contemporary, but not ultra-contemporary, manner, has evoked a good deal of praise.

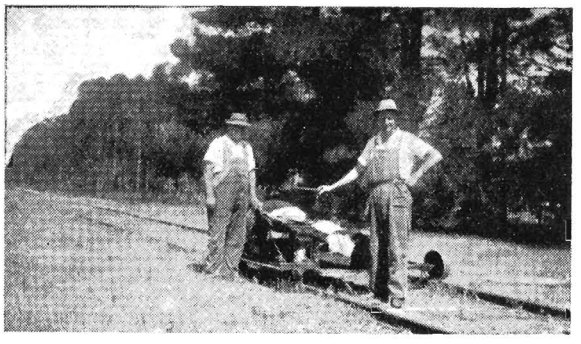
Mr. Hammill

In The Money

HANDLING cash is not only the daily routine for Mr. H. R. Hammill, cashier at Bendigo Goods, it is also his principal spare time interest. As treasurer of the Bendigo Football League, he controls the League finances which, this year, reached a record total of £20,000.

Mr. Hammill played with Kangaroo Flat in the Bendigo Association and with Golden Square in the Bendigo League. He was secretary of Kangaroo Flat Football Club from 1925 until 1935, when it changed its name to Golden Square Football Club. He continued as secretary of the newly named club until the end of 1945 when he took over his present League post.

In his younger days he also played with Golden Square Cricket Club, of which he is now president. His son is the present team captain.



Section lineman R. Harbeck, of Sale, (*left*) with his assistant S. Mewha. They patrol not only railway telegraph lines in a section of Gippsland, but also about 80 miles of postal trunk lines.

Service With a Bath

MR. OSSIE SEHIC, clerk, in the Rolling Stock Branch, Head Office, would have been an industrial chemist in Jugoslavia had not the unsettled conditions of troubled Europe convinced him that Australia offered a brighter and more secure future. He is, incidentally, an accomplished piano-accordionist and played in various night clubs in the Middle East before coming here. Mr. Sehic on his way through Europe was very impressed with the service given to the traveller at Rome's magnificent main railway terminal. When he arrived there after a long and tiring journey from Bologna, his first thought, naturally, was to have a thorough clean-up, before continuing his journey. For 150 lire (about 5/-) he was able to have a hot bath, haircut and shave, clothes pressed and shoes cleaned, and, without extra payment, he could have had light refreshments or a drink, served after his bath.

Ballarat Veteran's Retirement

FOR 35 years, less eight months, Carpenter Thomas B. Pattenden has been a railwayman in the Ballarat district. Ill health, caused by the gunshot wounds he received in action with the 58th Battalion (A.I.F.), in France, in the 1914 war, forced his recent retirement. Looking back, Carpenter Pattenden recalls the time when he was made acting foreman for the Bannockburn to Warrenheip single line conversion and the Trawalla bridge project. Sometimes he acted as district sub-foreman.

MR. F. ORCHARD, who succeeded Mr. L. C. Stewart as Comptroller of Stores, joined the Department as a junior clerk in 1917. His first job was on the telephone switchboard in the inquiry office at the Melbourne Goods Sheds. Mr. Orchard was transferred to the Stores Branch in 1920 and, after gaining accounting and secretarial qualifications, began a rapid and spectacular rise in the Branch. He was promoted to Storekeeper, Newport Power Station, Storekeeper, State Coal Mine, Stores Branch Bookkeeper, Chief Clerk and, this year, head of the Branch. Mr. Orchard, who is 51, is responsible for the ordering, receipt, custody, issue, reclamation, sale and accounting for Departmental stores, the used value of which last year was £18 million.

Mr. Commissioner Brownbill presenting awards

The Ball at their Feet

"YOU young men will mean more to the Railways in the next 20 years than any other group we have in the Department," said Mr. Commissioner E. H. Brownbill before presenting 40 apprentices with awards won in last year's final and supplementary examination at the Victorian Railways Technical College, Ballarat and Bendigo School of Mines, Melbourne Technical College and metropolitan technical schools.

Mr. Brownbill said that some of the apprentices were in line for Departmental scholarships which paved the way to professional status and the highest positions in the service. He reminded them, however, that if they did not win a scholarship, the door was not closed to advancement to the big jobs. There were examples of courageous and hard working apprentices rising to the top after failure to win a scholarship. Supervisory jobs in the various workshops also often led to high appointments.

"Don't let yourselves become just book worms," said Mr. Brownbill. "Have confidence in your own ability, by all means, but learn to appreciate the worth of your mates. If you do, you will not only gain their respect, but their genuine admiration, also, when you win promotion."

After telling the lads of the many big projects that the Department will be undertaking within the next few years, Mr. Brownbill reminded them that they had the ball at their feet. He added that they had already "given it a good kick, but he wanted to see them kick it harder and become an all-star team."

Cleaner to Superintendent

THE rise of Mr. P. L. (Phil) Edmonds from cleaner to Superintendent of Locomotive Running is one of those railway success stories that can be so inspiring to young railwaymen. His career is a striking illustration of where a man can get through hard work, study and a proper appreciation of the Victorian Railways Institute as an educational centre.

Actually, Mr. Edmonds joined the Department as a casual employee in 1909, at Ballarat, and was made permanent the next year. He became an engine cleaner at Ballarat Locomotive Depot and went to Horsham as a fireman. When he was transferred to Melbourne as a fireman in 1912, he attended the Institute's classes for three years and won prizes for engine working, and Westinghouse Brake operation, and got a thorough grounding in safeworking. In 1917 he was appointed driver at Bendigo where his V.R.I. studies began to prove most useful. He was appointed instructor in engine working and the Westinghouse Brake, and also found time to pass an examination at the Bendigo School of Mines in mechanical drawing. Later, as driver-in-charge at Swan Hill, he passed the Depot Foreman's examination. After transferring to Seymour as Night Depot Foreman, and Depot Foreman at Maryborough, he was promoted to Assistant Rolling Stock Superintendent at Flinders-st. and, untimately, became Superintendent of Locomotive Running in 1952. At his retirement recently, he could look back on 45 years of highly successful service.

Mr. Edmonds, with other Rolling Stock officers, was responsible for the efficient running of the Royal train, from the mechanical aspect, and helped to train diesel-electric locomotive drivers.

Signalman Colin MacGregor among his prize winning dahlias. After his recent success at the Ashburton dahlia show, his five exhibits gained first prize at the Victorian Horticultural Autumn Show in the Melbourne Town Hall.

Rucks fly for the ball in the Northern Lines-Melbourne Yard match

SPORTS

Boilermaker Bowlers

THREE members of the Ballarat bowls team, which recently won the Victorian provincial teams bowling championship for the second successive year, are railway boilermakers at Ballarat North Workshops. They are A. C. Black, A. Polson and M. Wallis. Mr. Polson and Mr. Wallis were in the Victorian team which took part in the inter-system bowls carnival at Brisbane in 1952, and Mr. Black and Mr. Polson were in the Victorian team which won the Denniss championship cup at the Tasmanian carnival in Tasmania this year. All the Australian railway systems and New Zealand competed. Incidentally, O. Hauser, fitter, Ballarat North Workshops, was one of the emergencies for the Ballarat provincial championship team.

Polson has a splendid record in championship bowls events. He won the singles championship at the V.R.I. country bowls week two years ago and, in Brisbane, won the Jack Howse champion of champions cup for Victoria. At the country bowls week tournament this year, Polson contested the final of the singles championship with Hauser, the latter winning by 26 to 21. Wallis skipped the winning rink in the fours competition and the winners of the pairs event.

In the Bendigo team, which lost to Ballarat in the final of the provincial teams championship, two members of the Denniss Cup championship team, J. Emmerson and F. Snell skipped rinks. Townsend, leader in Emmerson's rink, is also a railwayman.

An Idea that Won Out

SOME few years ago Eric Muir and George Tolliday, of Dimboola, both of whom are keen golfers, conceived the idea of starting a golf championship in the Wimmera. From a small beginning, it is now one of the most popular events in the country railwayman's sport calendar. The first tournaments were held on the local links, and railway golfers from all parts of the Wimmera competed. It has been decided now to change the venue from year to year, and this years' fixture, on August 15, will be held at Murtoa. The matches have a pleasant social atmosphere, as the organizers diplomatically arrange for events for railwaymens' wives, too. The comparatively few who do not play the royal and ancient game make the day a family picnic. This year's tournament is expected to be well up to the standard of previous years. Entries close with the secretary, Ron Stamp, Dimboola Loco. Depot, on August 10. A good day's golf will cost the men 4/- and the ladies 1/-.

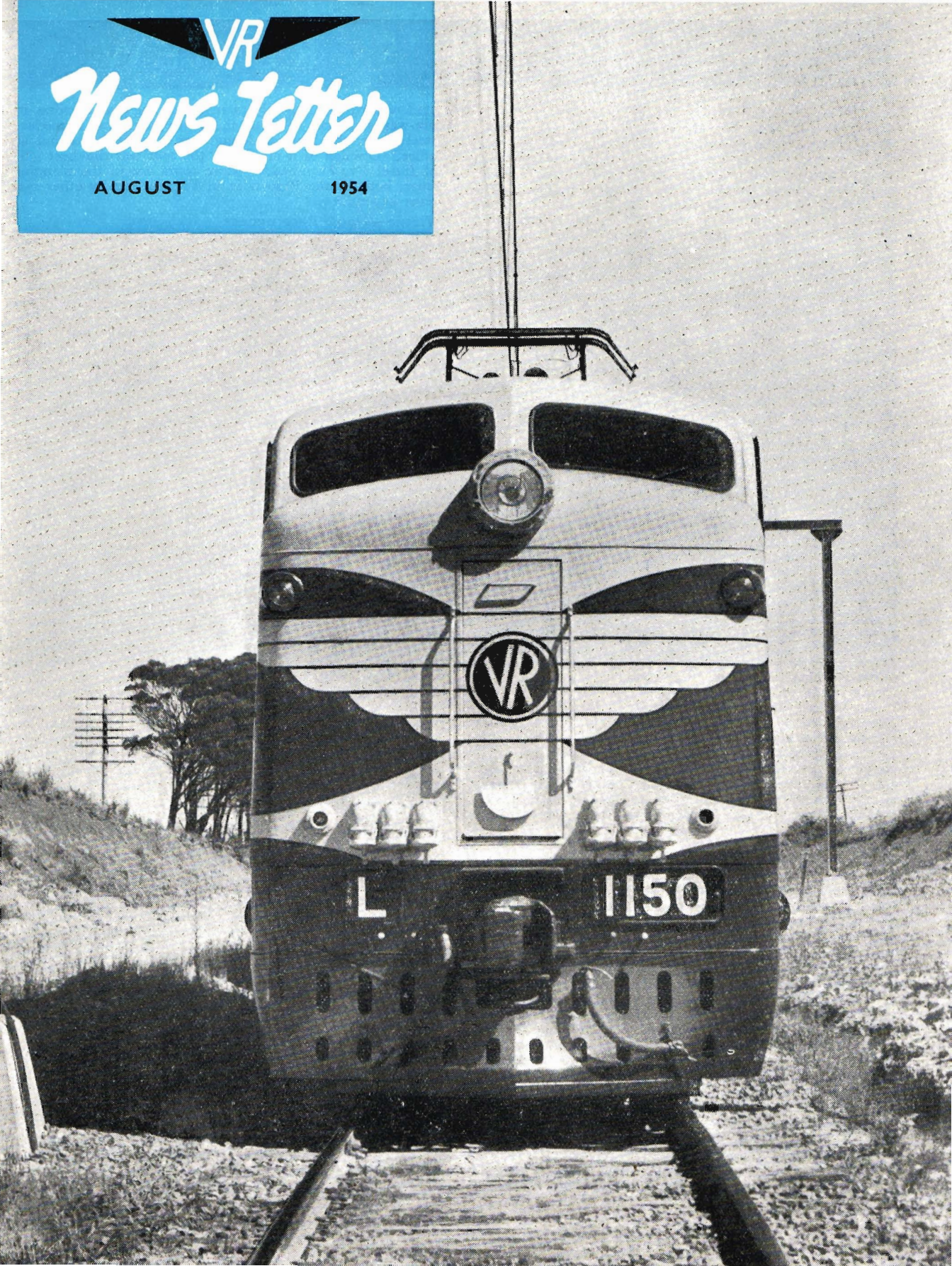
Signalman's Twin Sons

SIGNALMAN LEN YEMM, of E Box, is justly proud of his 21 year-old 6ft. 1in. twin sons, Gordon and Norman. Both are good professional hurdlers and entertainers. Last year, Norman won nine out of the eleven hurdling events in which he competed, including a treble success at the Bendigo Thousand meeting. This season he won the 600 yards middle distance running event at Stawell and his heat of the 440 yards. Gordon has also been successful in hurdling events at Maribyrnong and other professional meetings. A talented saxophonist, Gordon won a talent quest which netted him £80. His twin brother has a very fine baritone voice and has taken part in several amateur theatrical shows. Yemm, senior, who has been in the railways for 34 years, stands well over 6 ft. himself. In his younger days he played as a follower and defender for Hawthorn and, later, Oakleigh. He also played railway competition football.

Wholly set up and printed at the Victorian Railways Printing Works, Laurens-st., North Melbourne, for the Publishers, The Victorian Railways Commissioners. 1252—54.

VR News Letter

AUGUST 1954



THE MONTH'S REVIEW

Railways and Football

GO by train and relax: there is more in the slogan than a good many people think. Nowadays, valuable stud stock and race horses are being sent by rail rather than by other means, because the animals are more relaxed in movement from place to place and arrive in better condition. The same applies to people, footballers for instance. Interstate teams used to go by air to save time. Now they use the train. The South Australian team, who played Victoria in Melbourne, recently, did; the Victorian team who went to play Western and South Australia did. And a note of thanks was received by the Department recently for the way in which the Railways looked after the Young Christian Workers Movement's team who went to Adelaide in June. Even umpires now go by train to important Victorian matches; and their decisions are, of course, presumed to be infallible. And what about the thousands of fans who, Saturday by Saturday, remain faithful to the excellent train services that carry them to the barracking point? On the evidence of lungs, alone, they would seem to arrive, not merely safe and sound, but in the pink of condition.

Diesel's Smart Round Trip

THE efficiency and high availability of diesel-electrics, were strikingly illustrated recently when B76 figured in a round trip of about 800 miles from Melbourne to Wodonga and then by way of Broadmeadows, Newport Loop, the North Geelong Loop, Cressy and Maroona to Hamilton. On the return trip, after leaving Ararat, the locomotive came back to Melbourne over the same Western Plains route.

B76 left Melbourne on a Wednesday morning for Wodonga with empty live-stock trucks for an early morning special train to Hamilton the next day. Hauling 48 truck-loads of live-stock (722 tons), the main-liner arrived at Hamilton at 9.33 p.m., one and a half hours ahead of schedule. Immediately the live-stock was unloaded, the diesel-electric ran light to Ararat, and left early next day with a 702 ton load, mainly of wheat for North Geelong. The round trip was completed with a goods train haul to Melbourne.

The sequel was a letter of appreciation from Dalgety's, of Hamilton, on the success of the special train from Wodonga and its arrival ahead of schedule. The owners of the cattle were also gratified at the main-liner's excellent run, particularly as the beasts were in light condition and losses were cut to the minimum. Incidentally, although the diesel-electric locomotive arrived at Hamilton late at night, a considerable number of local residents went to the station to see and admire it.

Reso Renascentur

WHAT, in effect was the rebirth of Victorian Reso synchronised with the recent reappearance, refurbished and spruced up, of the Reso train. It took 53 well known men of city and country to the Murray Valley on a tour of industrial exploration, and called in at such places as Wangaratta, Rutherglen, Tatura and Alexandra on the way back. Resonians saw and marvelled at the strides that have been made in irrigated dried and citrus fruit growing, at the ball bearing, rice milling and synthetic fabrics factories that have given such a fillip to decentralization and at the remarkable work that is going on at the Eildon Weir to conserve more water. It was primarily what might be called a week's visual post-graduate course in Victoria's constantly changing and expanding economies, leavened with the informative give and take of human contacts with men on the job. All that is precisely what the late Sir Harold Clapp envisaged for Reso, away back in the early twenties; and there is no shadow of doubt that the 53 latest Resonians profited from it, besides having an extremely pleasant and healthy tour. The train, of course, was organized with all its old impeccability of service and comfort, and the train's staff worked indefatigably to maintain and even surpass its pre-war standard. It had three sleeping cars, a modern steel diner, the Norman lounge car, shower baths and an office. Opinion of it all was, "the tour was the best £35 of travel I've ever had." More tours are in the planning stage, both by the Reso train in Victoria and by other systems beyond.

Virtue — and Recompense

WHEN Emerson wrote that the reward of a thing well done is to have done it, he gave expression to an inherent urge towards betterment. It is natural to want to make or do something better than it has been done before, for its own sake; to emerge from comfortable and complacent ruts and make new tracks. But most big organizations like to add tangibility to the reward of virtue. It is so with the Railways. Many suggestors have been given monetary awards for ideas that, subsequently, have been adopted. Three recent cases come to mind. An improvement to the starter motor of the diesel-electric rail motor brought its suggestor £50; a better way of reconditioning dynamotor high-tension commutators, £80; and the design of a spring buckle removing device put £100 in the inventor's pocket. Not all suggestions, of course, are technical. A good many concern traffic, office routine, accounting, publicity and in fact, all multifarious activities of a railway. Many suggestions are not accepted. Either they do not save time or money, or do not better the service—or somebody else has got in first. Even so, the intention of the suggestors is good; their minds are reaching out towards betterment; and possible disappointment that the virtue of such remains its own reward ought to be a stimulant to repeated intention. At any rate, an *insert* to this month's issue of *News Letter* offers opportunity for it.

The Rice Bowl

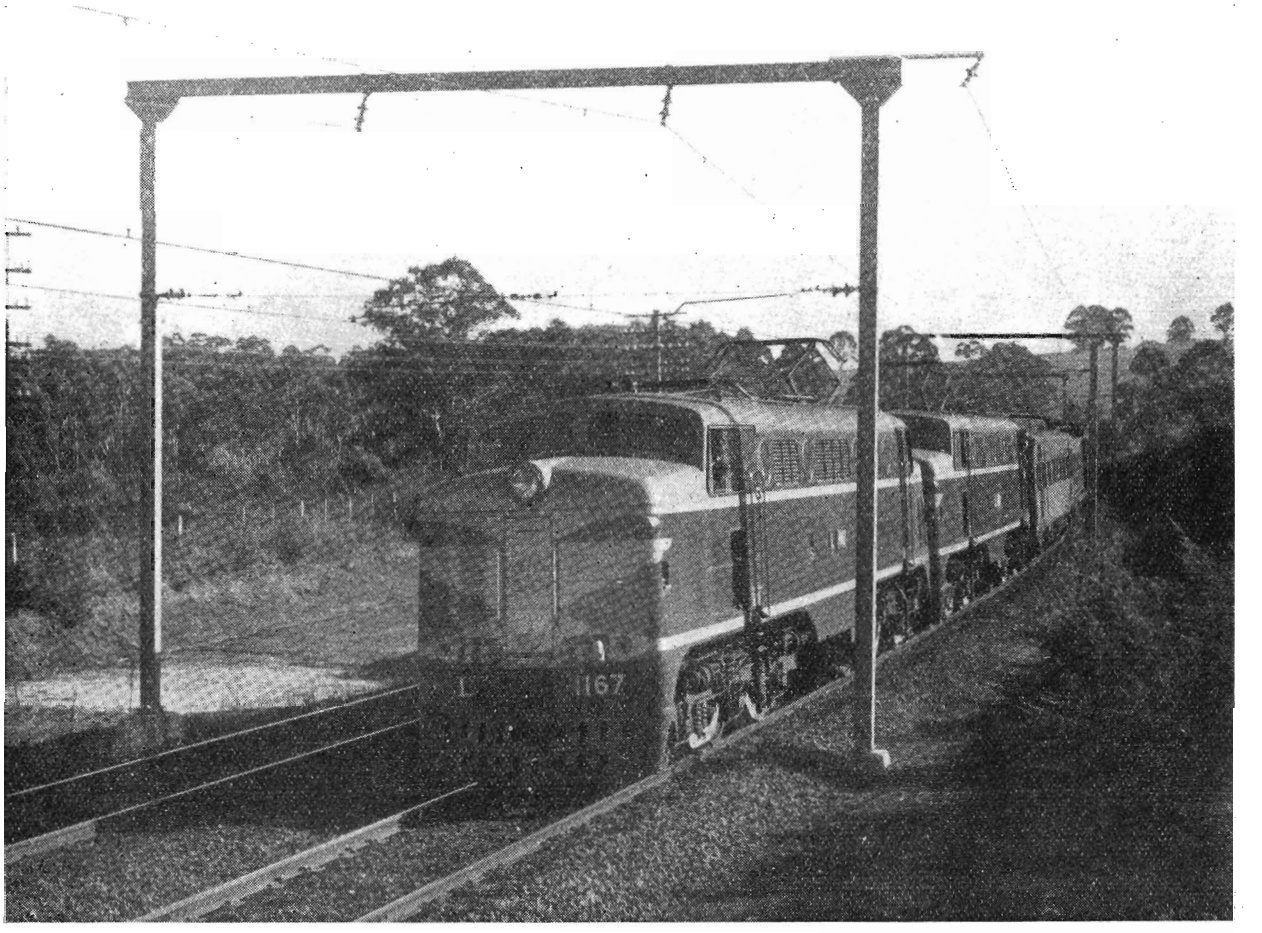
THE Railways are filling a most important role in developing one of Australia's promising rice bowls, on the Wakool River, in the Riverina. The crop is railed from sidings at Moulamein, Wakool, Burraboi and Niemur to the rice mill at Echuca which, of course, has to be kept well supplied if it is to operate efficiently. Although this season's crop did not quite reach expectations, 196,031 bags of rice, weighing 12,217 tons, were hauled to the mill in 603 trucks by D3 engines. The Department has been complimented on its expeditious handling.

Old Faithfuls

ON August 1, 1911, a brand new A2 class locomotive (now No. 826), left Newport Workshops for fast passenger and goods train traffic. Since then it has notched up 965,000 miles. Like many other old warriors, it is not yet ready to fade away; so its cowcatcher, speed recorder gear and staff exchange apparatus have been removed and more prosaic hand rails and footboards fitted for the more sedate role of shunting locomotive. In adddition, sanding equipment has been provided for the trailing coupled wheels. Old 826 has been allotted to the Newport Yard, where it will be able occasionally to associate with its modern successors, the B's and the L's. Locomotive A2 (No. 834), with a mileage of 927,000, has been similarly equipped for shunting.

OUR FRONT COVER

shows electric locomotive L 1150 on a test run recently between Dandenong and Narre Warren. The first electrified section of the Gippsland line from Dandenong to Warragul was opened for traffic last month.



Two L class locomotives haul a test train prior to the inauguration of electric traction to Warragul.

PRELUDE TO A GREAT PROJECT

A further step towards the final development of the long awaited Latrobe Valley power project was taken on July 21 when a special train powered by an L class electric locomotive left Spencer-st. for Warragul.

The passengers were given a preview into the future as the train effortlessly annihilated the 61¼ miles to Warragul. On arrival, local civic leaders welcomed the train and after a short ceremony the new service was declared officially open.

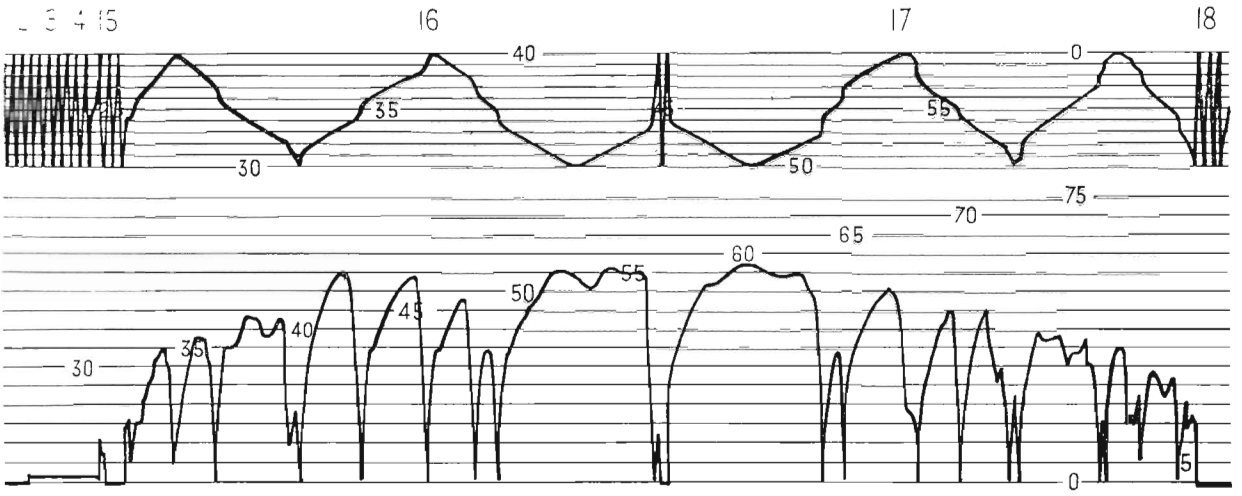
The greatly expanding traffic from Gippsland demands increased rail passenger and goods services. To meet this demand 25 main-line electric locomotives were bought from the English Electric Company. With their maximum permissible speed of 75 m.p.h. and tractive effort of 25,200 lb., at 30 m.p.h., these locomotives are ideal for both passenger and goods traffic; and it is expected that their use will save 66,000 tons of coal annually.

The scheme, up to its present stage of fruition, has involved the construction of 16 substations, each equipped with either a 1,500 k.w. or 3,000 k.w. arc rectifier. In addition, 12 tie stations have been built to equalise the load between substations. In the event of a fault, circuit breakers in these tie stations will operate at high speed to prevent serious damage in the overhead circuits.

To view the capital outlay involved in its proper perspective, the vast undeveloped power potentialities of the Latrobe Valley coal deposits must be kept in mind. When the State Electricity Commission's four new briquetting factories are completed and in production the railways will have to carry about 2,500,000 tons of briquettes and brown coal annually, compared with the present traffic of 1,500,000 tons. For this, double tracks are obviously necessary. Electric traction on any railway, is the most economical above a certain point in the graph of traffic density. That point is expected to be reached and passed by Gippsland line traffic, before very long.

Work is now proceeding on the regrading and duplication of the line between Dandenong—Nar Nar Goon, Tynong—Longwarry and Yarragon—Moe. Electrification on the Warragul—Traralgon, Moe—Yallourn sections is scheduled for completion in 1955.

With the completion of the master plan covering the Latrobe Valley area there is little doubt that in the future even greater demands will be made on the transport system connecting it with the metropolis.



The dips on the bottom half of this speed recorder chart indicate the stops made on a rail-motor trip from Melbourne to Werribee and back. The top half records running and stationary times.

SPEED WITH SAFETY

A little known unit in the safety organization which guards the lives of railway travellers is the speed chart checking section. It is tucked away in a remote corner of the Administrative Offices, Spencer-st.

EVERY fortnight, hundreds of strips of specially prepared paper from the speed recording equipment on steam and diesel-electric locomotives and diesel rail-cars are delivered into the skilled hands of three checkers who are all men with practical driving experience. So that a continuous check can be made, charts are cut from the recorders at least once a fortnight; or when locomotives are sent to workshops or depots for repair or overhaul.

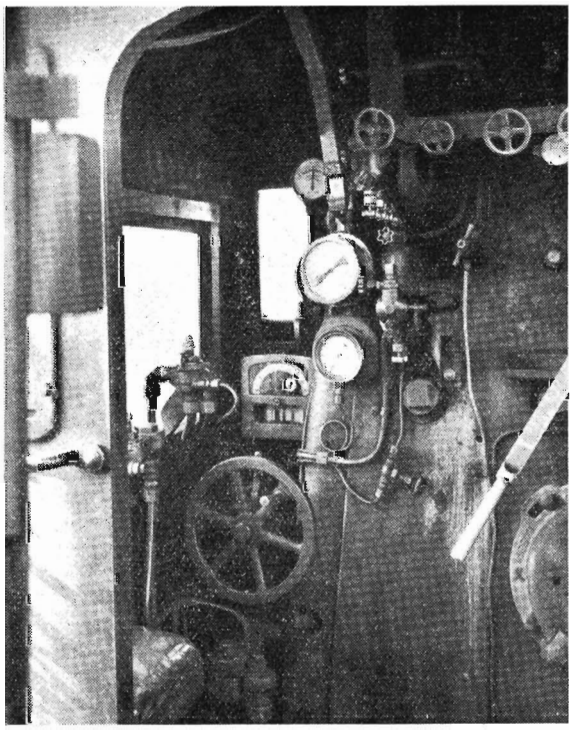
Each strip with its sinuous pencilled line is compared with a master chart. The checker can see at once whether the locomotive has been driven within the speed restrictions imposed by safety regulations, precisely where it has slowed or stopped, and how long it has stopped for.

Accurate and reliable indication of speed is essential to efficiency. It helps trains to run to time, and when a recording device is used, it gives an indisputable journey log. The records furnish a basis also for reliable operational statistics.

Four different types of speed indicators and recorders have been adopted by the Victorian Railways; the Flaman, the Chicago Pneumatic (C.P.R.), the Hasler and the Elliott. The Flaman speed recorder indicates, by a pointer on a dial, the successive running speeds in miles per hour. It records on a chart, which unrolls at a rate proportionate to the distance travelled, the speeds, the distances, the time of running and duration of the stops. The Elliott indicator and recorder consists of a small generator of the A.C. inductor type mounted directly on to an axle box cover, and driven from the end of the axle. It is connected to the instrument by a cable.

Of the four types of speed recorder, the Hasler is the most interesting. The Hasler speed recorder chart has holes punched by points in the winding roller along the edge at the top and bottom. Each space between the punctures corresponds to half a mile of distance travelled; but, during stops of the vehicle, the distance between two points corresponds to half an hour.

Near the top of the paper chart, below the distance punctures, the hour of the day from 1 to 24 is punched into the

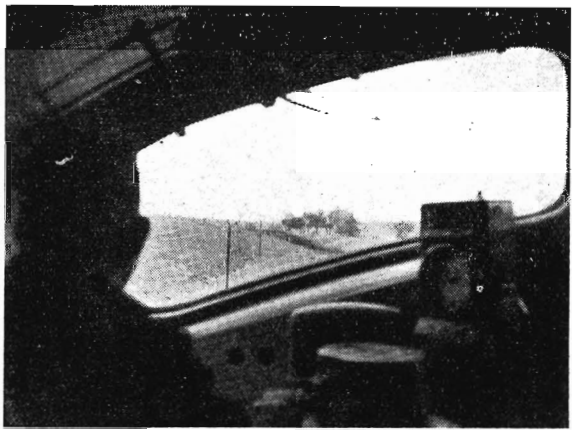


Flaman speed recorder in the driving compartment of a steam locomotive.

paper ; the point below each hour represents the exact point on the minute record. At the upper portion of the chart, a small steel ball mounted in a stylus holder traces the diagram. Each up and down movement takes 10 minutes, and, as there are ten spaces, each line represents one minute. The lower portion of the chart gives a continuous record of speed fluctuations.

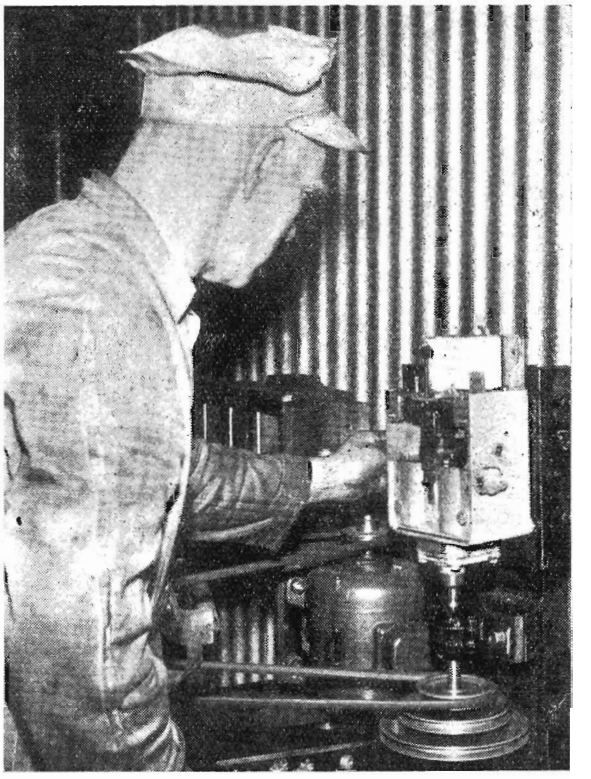
Three branches of the Department are interested in the stories the charts disclose. The track engineer and the Engineer of Structural Design of the Way and Works Branch insist on certain speed restrictions, temporary or permanent. Unless these are observed at crossovers, curves, or on bridge structures, or tracks under repair, there is a possibility of damage to both track and equipment. The Traffic Branch is vitally concerned in delays or other upsets to their timetables, and permanent records of these are supplied by the charts. The Rolling Stock Branch is furnished with a ready means of checking the performance of their locomotives or other motive power. In the case of accidents or derailments, the charts provide evidence that may establish the causes.

Perhaps the most interested of them all, however, is the little group of checkers, who are familiar with every mile of the routes over which these records have been taken. They wistfully recall their own experiences, and relive their own days as enginemen while they scan the graphs which have played so prominent a part in their lives.



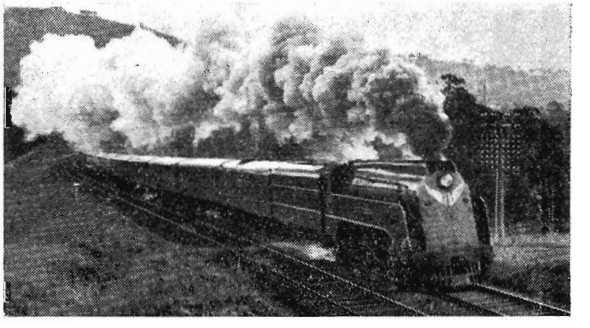
The C.P. (Chicago-Pneumatic) speed indicator and recorder in the driving compartment of a B class diesel-electric locomotive.

Removing the speed recorder chart in the cabin of a diesel-electric locomotive so that a check can be made.



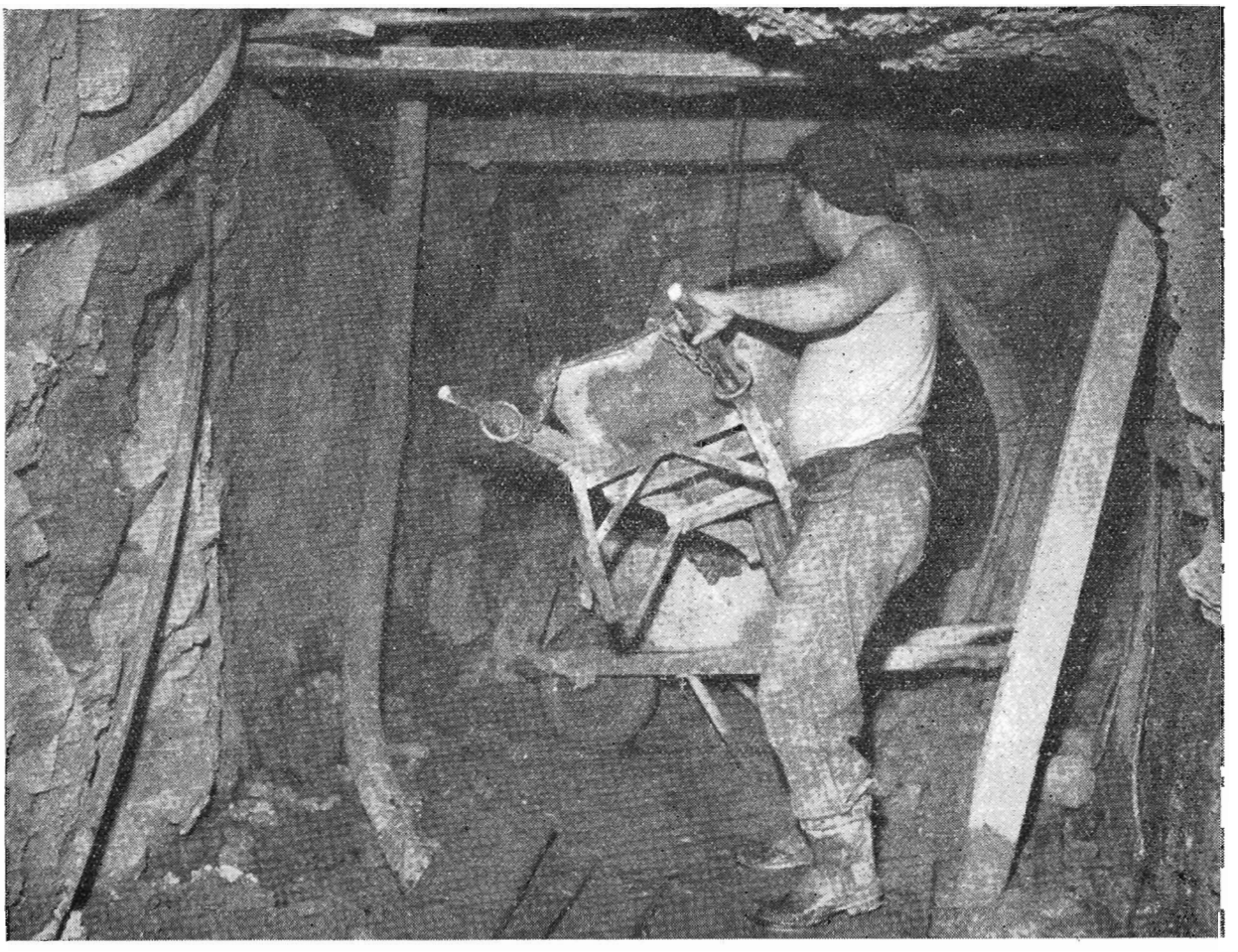
This machine, operated by a fitter at North Melbourne Locomotive Depot, simulates actual service conditions, and tests the efficiency of the recorder.

Speed chart checkers at work comparing charts with standard tables of sections on which locomotives have run. The lines on the chart should correspond with those on the tables.



Speed with safety.

OPERATION MOLE



This photograph was taken at the time of the diversion of the drain down Flinders-st. on the east side of the subway. Excavated soil was hoisted to platform level and removed in a railway truck.

MONEY, manpower and material difficulties having been overcome, it fell to the Railway Department, in collaboration with the Melbourne City Council, to begin, in 1952, work on the Degraves-st. pedestrian subway. The first practical step was to raise the 20,000 volt cables on the river bank, opposite the St. Kilda platform at Flinders-st. Station, to make room for a 5 ft. diameter barrel drain to run from Flinders-st. under the station building and empty into the river. It became a deviation of the main drain that ran down Flinders-st. through the area to be occupied by the subway. The construction of the barrel drain involved tunnelling under all the tracks and platforms.

Since then the subway project has gathered momentum. For several months past Flinders-st. has reverberated to the cacophony of pneumatic drillers, the whirring of concrete mixing machines and the dull thud of picks and shovels biting into sub-soil. Passers-by have watched surface workings with keen interest, but what they have been unable to see is the mole-like activity beneath the roadway surface.

This has gone on according to schedule. Under No. 1 platform, Flinders-st., an excavation extending the full width of the Degraves-st. barrier entrance and 15 feet below platform level is rapidly taking shape as the new subway. The retaining wall for the west side of the subway is being built, and two ramps for the stairways from platform level to subway floor have already been excavated from No. 1 platform. On completion of the retaining wall, the existing stairways from Nos. 2 and 3, and Nos. 4 and 5 platforms will be rebuilt to connect with the new and widened project.

Considerable excavations were necessary for underpinning the station foundations. Men on the work discovered relics of early Melbourne in the form of bottles, old boots and other debris mixed with the soil 10 feet below the level of Flinders-st.

The rapidly thinning wall of earth separating the Department's from the City Council's work has been broken through and the men on the scheme are now working side by side to bring the subway to completion.

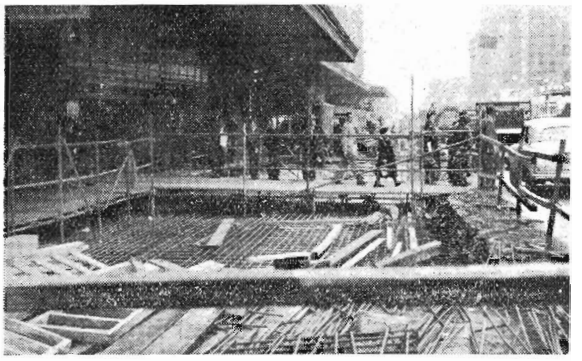
When completed, the subway will extend from the station's centre entrance to Degraves-pl., off Degraves-st., on the opposite side of Flinders-st.; a separate entrance will be available from the Mutual Store basement and two stairways will enable the public to descend from street level on the north side of Flinders-st. Under Flinders-st. the subway will be flanked by two rows of shops. The existing railway subway at the centre entrance is 15 feet wide. This subway will

be widened right back to Nos. 4 and 5 platforms, and the new width of 25 feet will be in one span. The subway will then open out to 32 feet 6 in. at the new check barriers, where it will join the Melbourne City Council's construction under Flinders-st. roadway. Data for determining the desirable width of the new subway and, the number of barriers to be provided, was obtained by making a tally of passengers using the station's centre entrance, and from a study of a model of the proposed subway.

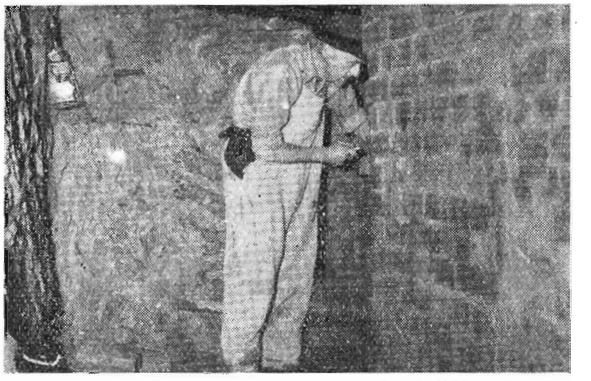
Provision is made in the plan also for a new stairway leading to No. 1 platform from the east wall of the subway. This will give ready access to Princes Bridge Station from all platforms. A further new stairway will run from the west side of the subway, under No. 1 platform, to street level. It will open on to the south footpath of Flinders-st.

A new suburban booking office will be built in the subway under the south footpath of Flinders-st. and just outside the new barriers facilities for booking at street level will still be provided in the existing building.

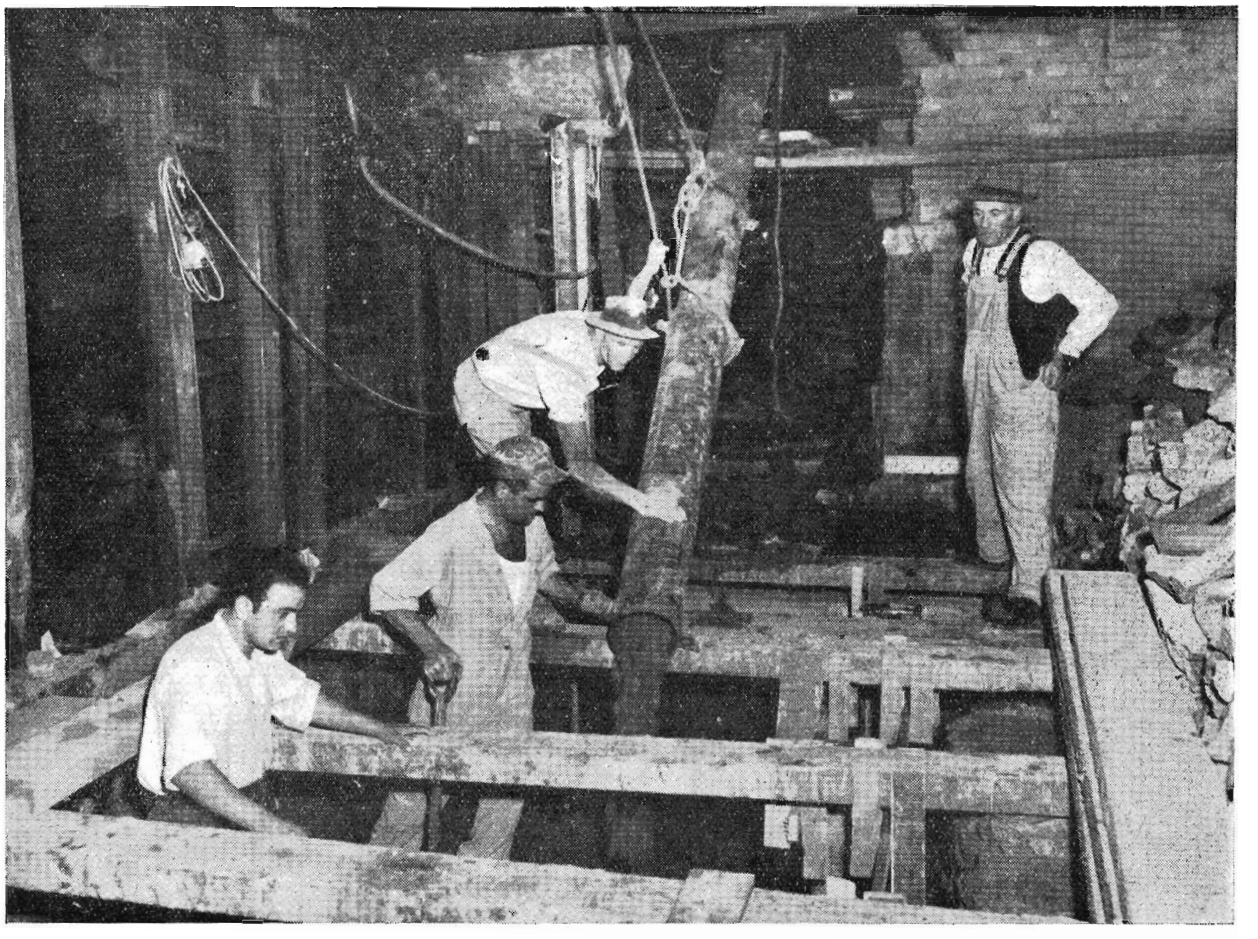
It is expected that the subway will be completed and ready for use this year.



Reinforced concrete roofing for the subway in Flinders-st

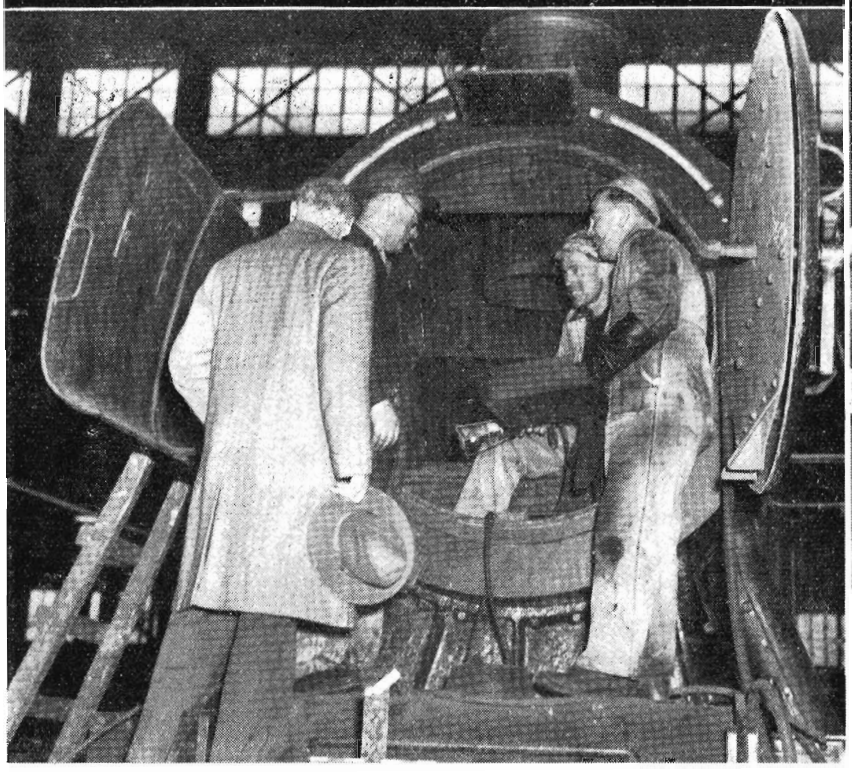


Underpinning the foundations of the station buildings for the subway construction.



Pouring concrete in the foundations of the western abutment, between No. 1 and No. 2 platforms.

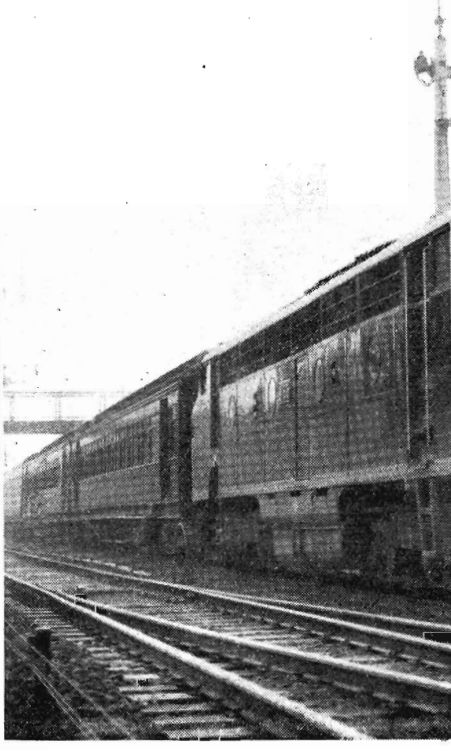
AROUND THE SYSTEM



LOCO. ENTHUSIAST : The U.K. High Commissioner (Sir Stephen Holmes) inspecting the smokebox of a locomotive at Newport Workshops.

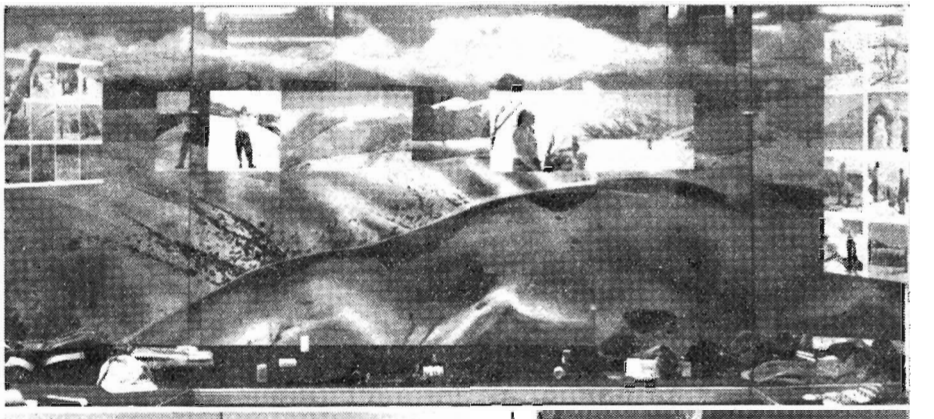
PORTLAND BOUND : The Governor (Sir Dall
5 State car, which was recently attached to t
regal couple were given a rousing welcome a
hospital.

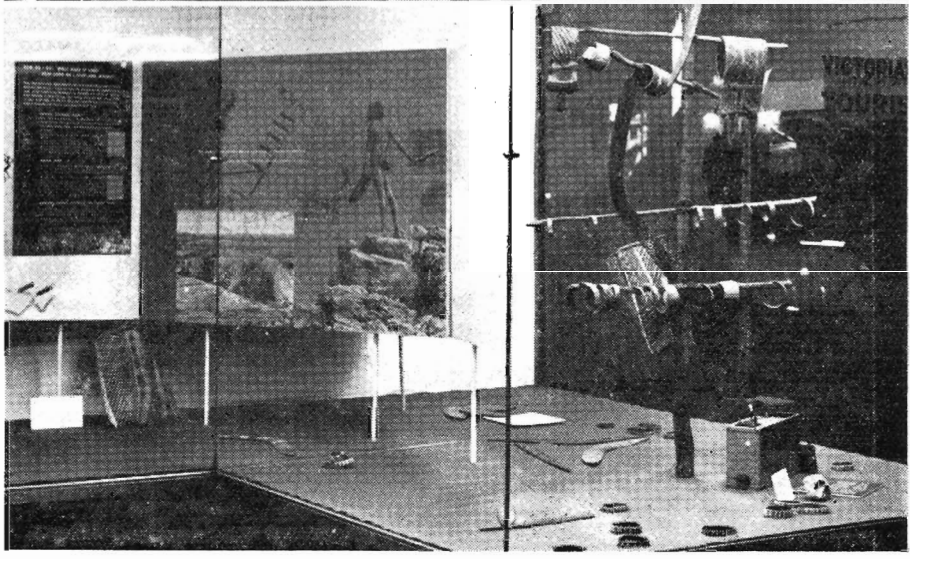
STATION REHEARSAL : Some of the choristers, who took part in the recent 'varsity choral festival at St. Kilda, hold an impromptu rehearsal.



RESO TRAIN REVIVAL : The first post-war
turn to Melbourne after a tour of the Murray

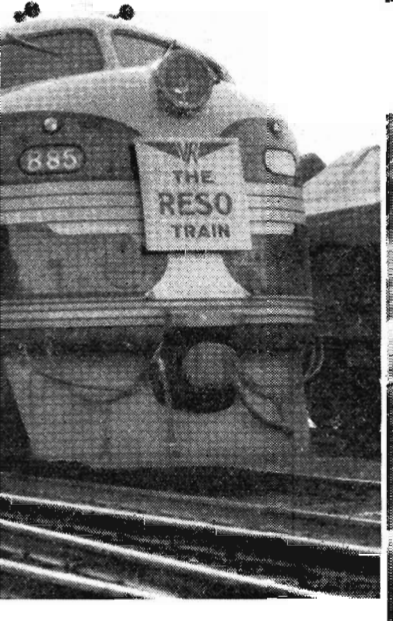
ks) and Lady Brooks about to board No.
.m. train from Melbourne. The vice-
nd, where the Governor opened a new



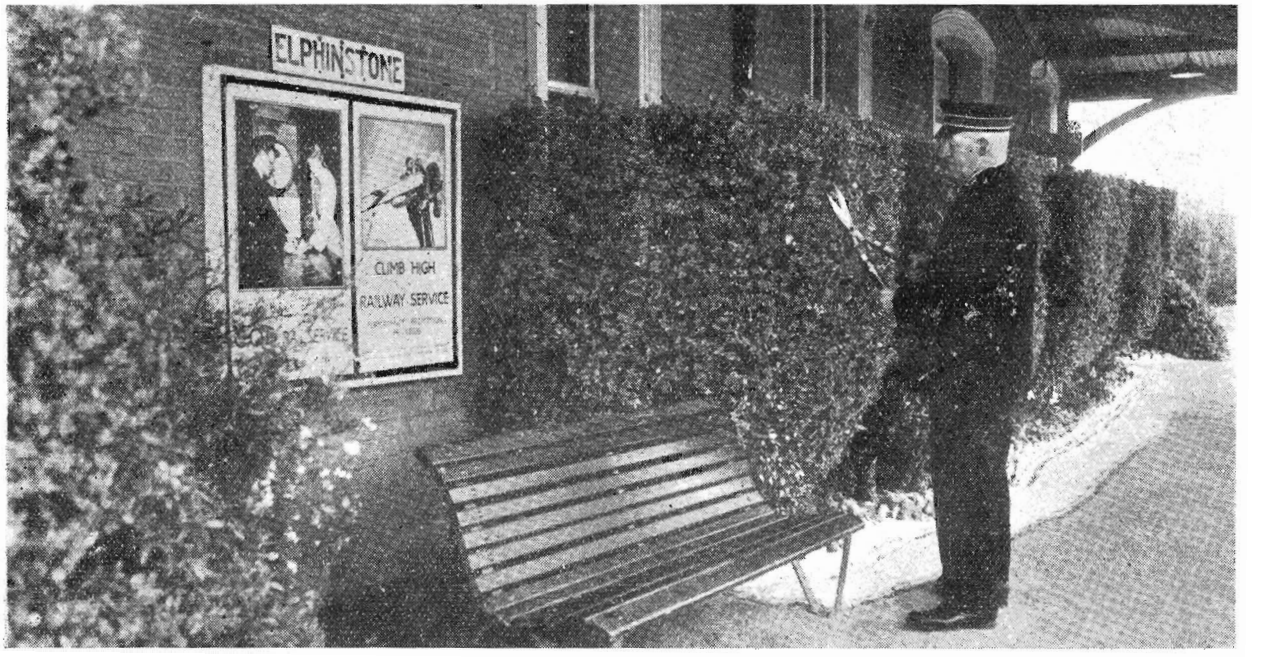


SNOW AND SUN : (*above*) The Tourist Bureau's window display advertising snow resorts and, *lower*), central and north Australian tours, featuring aboriginal art and crafts.

(*Below*) BACK FROM CAMP : Looking very fit after their war exercises at Seymour, members of the 6th Infantry Brigade march from Spencer-st. after returning by special train.



n passing through Tallarook on the re-



The trim hedge is a feature of the station buildings at Elphinstone. S.M. Dempster expertly wields the shears.

BEAUTY THAT PROFITS

There's not a pair of legs so thin, there's not a head so thick,
There's not a hand so weak and white, nor yet a heart so sick,
But it can find some useful job that's crying to be done
For the glory of the garden glorifieth everyone—Kipling.

TO encourage staff to beautify the environment of stations, depots, barracks and rest houses, the Railway Commissioners annually allot money prizes for tree planting and gardens. That some areas are better favored than others is taken into consideration, and separate prizes are given for new and existing work in districts with and without piped water supplies. The whole state is divided into six districts, each of which is allotted its share of the prize money. Some allotments are made for locomotive and works depots; others for barracks and rest houses.

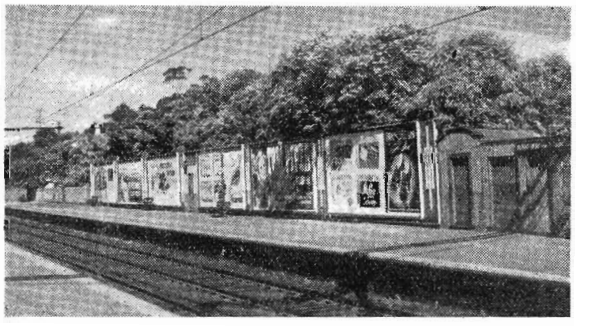
Since 1948 the number of competition entries has remained almost static at the disappointingly low figure of thirty. In 1950 it struck the record low of twenty-three. During 1953, there were welcome new entries from Avenel, Woori Yallock, Seville, Wandin and Nyora. In the workshops and depot section, the first attempt of the Pattern Shop staff at Newport Workshops met with success and was suitably rewarded.

Prize money available for distribution to the various sections has increased from £203 in 1948 to £1053 in 1953; but of the latter total only £275 was paid out owing to lack of entrants.

Head Gardener Frain at Spencer-st. supplies suitable shrubs to any station or location that wants to improve its appearance. Often, water shortage during the hot weather in some places deters railwaymen from attempting any gardening there, but Mr. Frain is satisfied that even the worst possible area will grow some plants that can be supplied from the Departmental nursery: and he is quite prepared to advise the enthusiastic but amateur gardener on what to do.

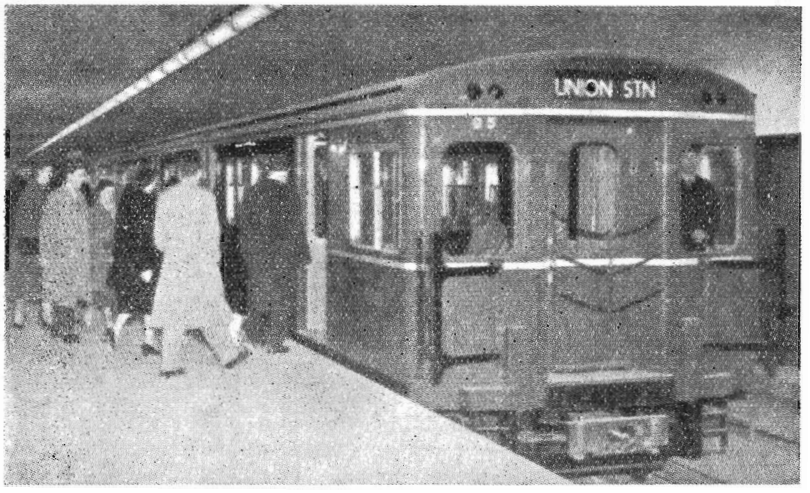
Very little new work on station beautification has been done over the last four years, but, with the easing of the staff situation, gardening will probably attract more interest. That is why the Commissioners have again allotted a total of £1053 as prize money, this year.

Clerk R. N. Jones helps to beautify Preston Station.



Royal Park is attractivei n wattle blossom time.

LINES FROM OTHER LINES



Passengers boarding a train on the Yonge-st. subway, Toronto, Canada. This underground railway was opened at the end of March. It has been designed to cater for the movement of 40,000 passengers an hour in each direction.

Diesels for Nigeria

TEN 750 h.p. diesel-electric locomotives on order by Nigeria from the English Electric Company are similar in design to those on order for the Gold Coast Railway. They have two 4-wheel bogies, with each axle motored. The driving compartment is at one end only, but has two driving positions that enable the locomotive to be driven in either direction without the necessity for turning. The locomotives are to be used on sections of the Nigerian Railways where serious water shortages occur.

Forest Conservation Coach

THE Canadian National Railways have converted a sleeping car into a lecture coach for the Canadian Forestry Association. The coach will travel through Quebec, Northern Ontario, New Brunswick and Nova Scotia on its mission to teach the safeguarding of forests. Fire prevention and fire fighting are the first consideration. Many of the communities through which the coach will travel depend on lumbering for their livelihood.

Veteran Locomotive

THE oldest steam locomotive in regular service in U.S.A. is a 4-4-0 of the 14-mile Stockton Terminal and Eastern line, California. It was built in 1867 and shipped from the Eastern States, round the Horn to California for delivery to the Central Pacific Railroad. The Central Pacific became part of the present Southern Pacific Lines, which later sold the engine to its present owners.

Grinding Corrugated Rails

MEASURES taken by the German Federal Railway to eliminate roaring rail in so far as it has been established that corrugation is the cause, include rail grinding trains. The first of two such trains was put into service recently. Of the 28,000 miles of through running lines in Western Germany, some 11,000 are so corrugated.

The rail grinding trains, hauled by diesel locomotives, are equipped with generators, compressors, a fuel cistern, workshops and living accommodation, and are designed to move at 2 m.p.h. with their grinders in action.

Gas-Turbine Shunter

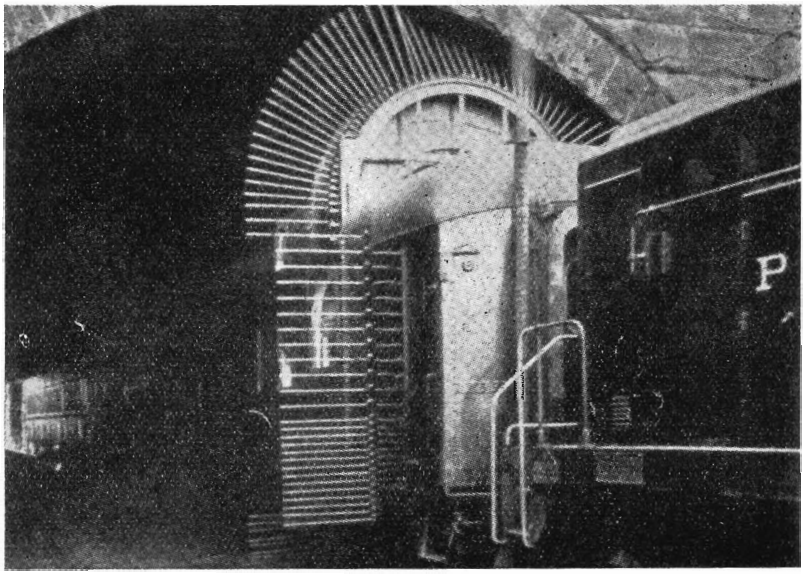
THE Davenport-Besler Corporation is building for the U.S. Army Transportation Corps a 30-ton shunting locomotive powered by a Boeing dual gas-turbine plant. It is of the two-axle type, with 40 in. wheels, a wheelbase of 6ft. and an overall length of 24ft. 6in. The drive will be a three-speed hydro-mechanical transmission.

Railroad Clearance Car

THE Pennsylvania Railroad has introduced a specially designed car for measuring track clearances. Accurate information is constantly required to decide whether bulky out-of-gauge loads will pass. The car, believed to be unique, cost more than $250,000.

Aluminium rods, 3 ft. long and steel tipped, project from the sides and roof of the car in the form of an arch. As the train moves slowly towards a structure to be measured, the rods are brushed backwards by contact to conform to the contours of the structure. A system of cables and gears transfers the deflection of each rod to a magnified dial inside the car. The rods are each capable of giving readings to one-eighth of an inch.

The clearance car can cover an average of 100 miles of track each day. The time taken for measurement is about five minutes for a bridge and 30 minutes for a mile-long tunnel. Frequent inspection is needed on some sections of the track, because the centrifugal force of the high-speed trains may cause rails to creep towards the outside of a curve for a distance of as much as three inches.



The Pennsylvania Railroad's clearance car emerging from a tunnel. The aluminium arms can be seen brushed back to conform to the profile of the structure.

AMONG OURSELVES . . .

Mr. Wishart.

Chairman's Term Extended

THE rank and file of the railway service as well as the public heard with very much pleasure the Government's recent announcement that the Chairman, who was to have retired early next year, has been asked to continue his term for another two years. Mr. Wishart, in co-operation with the former Chairman of Railways Commissioners, Mr. N. C. Harris, prepared the blueprint of the Department's £80 million rehabilitation scheme (*Operation Phoenix*). When he succeeded Mr. Harris, as Chairman, it was his responsibility to implement progressively the recovery plan; probably the greatest of its kind in the history of Australian railways. Under Mr. Wishart's administration, *Phoenix* is soaring, and the railway economy is sounder today than it has been for many years. The future is indeed bright. The extension of Mr. Wishart's term as Chairman, will, as the Government has said, give him the well deserved opportunity to see *Operation Phoenix* completed in all its major aspects.

Institute Of Transport

IN order to encourage additional members of the staff to obtain the benefits of membership of the Institute of Transport, the Commissioners have approved the extension until June 30, 1955, of the payment by the Department of 75% of the entrance fees and first year subscriptions of student and graduate members who joined up to that date, as well as 50% of further annual subscriptions.

More Clerical Help

WITH the new construction programme rapidly gaining impetus, more male junior clerical staff are wanted. *News Letter* is advised that lads between the ages of 14 and 20, who are selected, will, unless they are in possession of a proficiency certificate, junior technical certificate or equivalents, be required to pass a departmental educational examination of similar standard. Successful applicants will get £346 to £631 a year, according to age. Applications from junior employees should be sent to the Secretary through the Head of the Branch. This is a good opportunity for the rising generation.

The Call for Blood

FOR many years, little groups of blood donors in the Department have given their generous pints to the Red Cross Transfusion Bank, but the little groups could be much bigger. The Red Cross explain that modern demands for blood, that daily saves life in serious accident or on the operating table, are so heavy that it is impossible, from the present number of donors, to accumulate a reserve stock to last more than 48 hours. There are doubtless many more public spirited men and women of the Railways who would gladly, as Shakespeare's Henry V puts it, summon up the blood, but who do not know how to go about contributing what is summoned up. They may easily discover from L. Miles, Room 31 Flinders-st., J. Brown, Room 133 Head Office, R. Tobias, Care Metropolitan Superintendent, Flinders-st, or L. Smith, V.R. Printing Works, North Melbourne.

At Head Office last month, Mr Commissioner Meyer presented 100 first aid awards, ranging from first year to gold life membership, to metropolitan railway men and women. It was encouraging, he said, that 25 per cent of the railway staff were now first aiders. The Chief Medical Officer, Dr. M. A. Rees, complimented the senior men for their skilful handling of accident cases.

Crimea War Relic

COMPOSITOR J. Griffiths, of the V.R. Printing Works, North Melbourne, who was with the 4th Welsh Regiment, at Gallipoli, in World War One, has a rare Crimea War medal with Bar in his possession. It belonged to his grandfather, Mr. J. Griffiths. Dated 1854, the medal commemorates the battle of Sebastopol and bears on the other side, the head of Queen Victoria. Three of Mr. Griffiths's brothers saw active service in the first world war. One was with the 13th Australian Light Horse Regiment ("The Devils's Own").

His Last Account

MR. P. A. BIRD, who since 1949 was in charge of the Passenger Sub-Division, Auditor of Revenue Division, Accountancy Branch, retired recently after 49 years' service. He joined the Department in 1905 as a junior clerk in the old Auditor of Receipts Branch and in 1937 was appointed Audit Inspector. In 1942 he assisted a former Auditor of Revenue, Mr. R. E. B. Lee (now Assistant Commissioner of the Western Australian Government Railways) with a huge volume of war work and then returned to station auditing. These duties took him to practically every station in the system and also to The Chalet, Mt.

Buffalo National Park, and Mt. Hotham and Mt. Feathertop, when the latter were under the control of the Department. During his railway career, Mr. Bird was associated with the production of a new design of parcels ledger for stations, suburban train book and the pro-rata classification sheet to account for the interim passes issue.

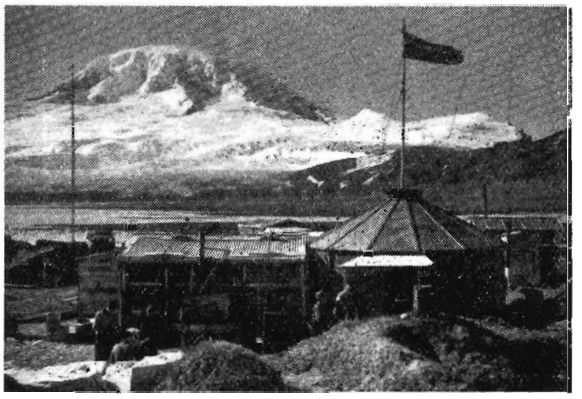
A veteran of World War One, Mr. Bird saw active service in Egypt and France. In his younger days he played baseball and cricket for Williamstown, and represented Victoria when the famous American baseball teams, the New York Giants and the Chicago White Sox, were here in 1914.

Dog Man From Antarctica

FROM time to time many unusual careers have been recorded in *News Letter*, but none, until now, has claimed for the Department a dog trainer from Antarctica on its staff. With his table piled with sheets of statistics, Leon Jennings-Fox of the Rolling Stock Accountant's office at Spencer-st, is still finding it hard to believe that in March, 1954, he was on icy windswept Heard Island, 2400 miles south-west of Australia, looking forward to the appearance of the tiny Danish icebreaker *Kista Dan* to bring him home from voluntary exile.

Leon is a dog lover. His mother had Alsatian kennels in South Australia for many years, and it was Leon's job to train the dogs as efficient guards against bandit raids on rubber plantations in Malaya. It was perfectly natural, therefore, for him to volunteer as dog trainer in charge of the 75 huskies domiciled on Heard Island, ready for the Australian Antarctic Expedition to McRobertson Land. Bare of vegetation, Heard Island is swept by winds of up to 110 miles an hour, and averaging 60. In winter the thermometer registers minus 20 degrees Fahrenheit.

Mr. Jennings-Fox with one of the Alsatian dogs he trained in Adelaide for the use of forces fighting the terrorists in Malaya. He later used similar methods to train huskies for sledge work on Heard Island. Each of these dogs was known to their master by such names as Binder, Thurber, Terror and Harbottle.



The comfortable camp headquarters established on Heard Island, with the Australian flag flying at the masthead. In the background is the island's highest peak — snow-capped Big Ben.

Dogs undergoing rigorous training in Blizzard Alley, leading off the main glacier created by ice flowing from Big Ben.

Big Eaters

DESPITE these conditions, Leon found plenty to do. Huskies are hard workers and voracious eaters; during Mr. Jennings-Fox's stay, they consumed 100,000 lb. of seal meat.

It was his job to break them in for sledge work, the expedition needing three working teams each of nine dogs. It was Leon's daily task to take the dogs to the icy surface of a glacier about three miles from the camp for their training. His special pupils were the lead dogs (or king dogs) of the team. On their intelligence and courage human safety and life often depended.

Island Cinema Shows

FOR the little community of scientists on the island, the hardest task was to organize amusements. Leon recalls that, in 15 months, they screened 26 feature films and 20 shorts on the camp screen, sometimes two or three times a week. Favourite films were seen six or seven times before they became unbearable. The scientists only link with the outside world was the radio. Here nature, in the shape of static from the Aurora Australis, played a strange trick. Broadcasts from everywhere in the world were clearly received, except from Australia; Radio Moscow was especially strong.

After life on Heard Island, Leon is still a little strange to the noise and clamour of civilization, and he often wonders how his dogs are faring.

He admits that he still loves them.

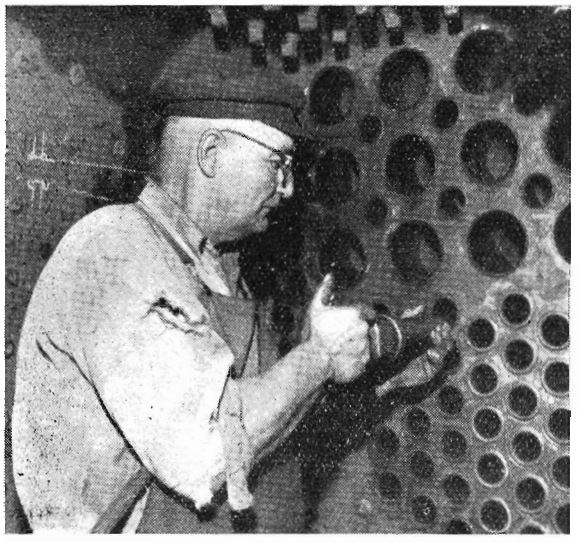
Track Competitions

THE Commissioners have approved the same prizes as last year's for the Best Kept Lengths Competitions, for the year ending June 30 next, in each district. The prizes, first £98, second £52, third £26, and most improved £52, are offered for (a) tracks with rails over 75 lb. and (b) those with rails of 75 lb. and under.

Man of Many Parts

AS a boilermaker at Bendigo North Workshops for the past 33 years, Mr. E. Duus has played his part in the 'shops fine record, except for about 15 months of the last war when he was on loan to the Commonwealth Government. Those months were spent near Oodnadatta.

Mr. Duus devotes his spare time to community service. This year he is president of the Bendigo Base Hospital Board, having been a member of the Board for 14 years



Mr. Duus at work on an N class loco.

and on the Contributory Fund Committee for 10 years. For 15 years he has been on the executive and finance committees of the Bendigo School of Mines, and he has been president of the Bendigo Trades Hall Council three times: in 1932, 1942 and 1952. He is a Justice of the Peace and, on Sundays, acts as a lay preacher. Despite all this, he still manages to find a little time for gardening.

No Regrets

GEORGE Harrigan, Northern Ireland bricklayer in the Way and Works Branch at Bendigo, is one of the many new members of the staff recruited in the United Kingdom who are very satisfied with their work and prospects here. So much does he like Victoria, that he is trying to get his bricklayer brother and his family out.

Three Centuries of Railway Service

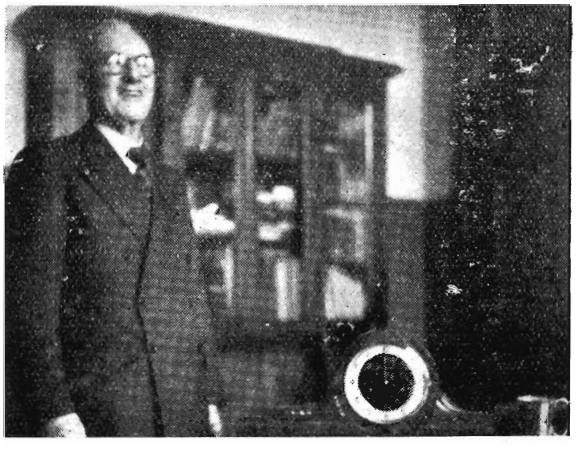
SIGNAL Adjuster J. A. Kenny's first job when he joined the Way and Works Branch in 1905 as a lad labourer was to carry water for the men working on the Clifton Hill-Northcote loop line. Known Departmentally as a "water nipper", he says he carried two buckets of water at a time; one for the thirsty and the other for the hard working tobacco chewers of those pioneering days.

Transferring to the Signal and Telegraph Branch in 1910, as a labourer in the construction gangs, Mr. Kenny went to Geelong as Assistant Signal Adjuster in 1921 and was at Ouyen, Cressy and Colac before going to North Melbourne in 1948, where he finished his railway career. His father, the late Mr. J. Kenny, who was a special ganger when he retired after 36 years' service, was the head of a family which had 303 years of railway work on the record cards.

As a member of the District Council of the Returned Servicemen's League, Mr. L. J. Eales, delivery checker at Bendigo Goods, spends a lot of his spare time in travelling. There are 27 District Boards to visit, as well as the yearly State Conference to attend. He has been vice-president of the Eaglehawk branch of the R.S.L. for seven years.

Mr. Eales is a keen gardener, specializing in gladioli and hyacinths. Although he usually has about 2,000 gladioli and 1,000 hyacinths in his garden, he is unable to exhibit at the Eaglehawk R.S.L. Flower Show as he is a committee member.

Drivers J. O'Donnell and C. Clancy, both of whom are now in retirement, were farewelled by their Wodonga colleagues at a smoke social recently. Mr. O'Donnell started as a cleaner at Bendigo in 1911 and was at Benalla, Beechworth, Crowes and Port Melbourne before finishing his railway career at Wodonga. Mr. Clancy came to Wodonga soon after he got his driver's ticket in 1936. He retired this year on account of ill health. Mr. O'Donnell was presented with a watch and Mr. Clancy with a chiming clock. In the above picture Messrs. Clancy and O'Donnell are fourth and seventh from the left, respectively.



Joining the Railway Construction Branch in 1907 as a 3/6d. a day clerk, Mr. J. E. Galvin was appointed chief clerk in 1937. At his farewell recently, on retirement, Mr. Galvin was presented by the Chief Engineer of the Construction Branch (Mr. R. W. McCall) with a mantel clock and a pewter mug.

Thanks

For a refund on a ticket surrendered by mistake. "I have travelled on the Railways a lot during the past few years and have never met a discourteous railway official yet. Maybe, there is none."—

Mr. A. M. Simmons, Inverloch

For the co-operation of the Victorian Railways. "Improvements in railway services have kept pace with our expansion, and, in general, deliveries are satisfactory."

W. B. McCann, Chairman, Australian Cement Ltd., Melbourne

For the train arrangements for the Davis Cup challenge round at Kooyong and the assistance and co-operation received from railway staff.

Mr. J. A. C. Andrew, secretary, Lawn Tennis Association of Australia.

For the efficient way a consignment of cattle was transported by rail from Mortlake to Newmarket recently. "Work like this creates confidence by graziers in railway staff."

Mr. C. McDonald, Lochaber, Mortlake.

For kindness and courtesy shown by Ballarat station staff in arranging for a passenger with an injured leg in plaster to get a seat in a first class carriage.

Mr. W. J. Nicholls, Barkly-st. South, Ballarat

For courtesy shown when travelling to Port Fairy recently.

—K. J. Kittson, Lower Bridgewater

For the help given by the "Man in Grey" at Spencer-st. in locating a missing child.

Rev. J. K. W. Mathieson, Supt. Methodist Peace Memorial Homes for Children

For the "courtesy and helpfulness of the Victorian Tourist Bureau which renders it always such a pleasure to have business dealings with it."

Miss Daisy C. Watt, Darling Point, Sydney

To the Port Melbourne station staff for giving every help to the inwards and outwards traffic of his firm.

The Director, Robert Hutchinson Ltd., Queen-st., Melbourne

For the efficient rail transport of dried fruit harvest hands to and from Mildura and Redcliffs, Robinvale and Swan Hill and Nyah West districts. "Growers organizations in these areas have also expressed appreciation of the general arrangements in the railway movement of harvesting labour."

Mr. N. J. O'Heare, Regional Director, Department of Labour and National Service.

For the excellent illustrated address on the Victorian Railways given recently by Mr. J. R. Rewell, Outdoor Assistant to the Chief Traffic Manager, to the Northcote class, Council of Adult Education.

Mr. N. D. Anderson, Director of Classes

For the Tourist Bureau's assistance in the arrangements for the entertainment of officers and men from the U.S. aircraft carrier *Tarawa* and destroyer *O'Bannon* during their recent visit to Melbourne for the Coral Sea battle anniversary.

Mr. P. M. Hamilton, executive officer, Australian-American Association.

For the hospitality of the staff and the enjoyable holiday at The Chalet, Mt. Buffalo, "a credit to every member of the genial and courteous staff."—

M. J. Maguire, Taralga, N.S.W.

For the facilities for tourists and walkers at Mt. Buffalo. "I was most impressed with the natural beauty and the amenities."

Mr. J. Hammond, Canberra

THE THINGS THEY SAY

IF a rail disaster took place in Australia which resulted in the death of 1,856 persons and the injury of 39,405, the whole world would be stunned. According to *Facts* these were the number of killed and injured on Australian roads during 1952-53, but because the death and casualty roll is spread over twelve months we accept the position as a rather regrettable but normal phase of our national life.

—Industrial and Mining Standard

* * *

"Our job may be difficult and is often exacting, but surely it is immensely worth-while. Our job is to carry Britain to prosperity." *—Sir Brian Robertson, new Chairman of British Transport Commission, in a message to all staff of British Transport*

* * *

Great numbers of moderately good people think it fine to talk scandal; they regard it as a sort of evidence of their own goodness.

—Frederick W. Faber

* * *

Men can live without air for a few minutes, without water for about two weeks, without food for about two months, and without a new thought for years on end.

—Kent Ruth

* * *

The essence of courage is not that your heart should not quake, but that nobody else should know that it does.

—E. F. Benson

Lord, when we are wrong, make us willing to change. And when we are right, make us easy to live with.

—Peter Marshall

* * *

Youth is a wonderful thing. What a crime to waste it on children.

—Bernard Shaw

* * *

The way most people meet their expenses today is head on.

—Edward H. Dreschnack

* * *

A wife's most delicate duty is to help her husband to the top without having him hit the ceiling.

—Shannon Fife

* * *

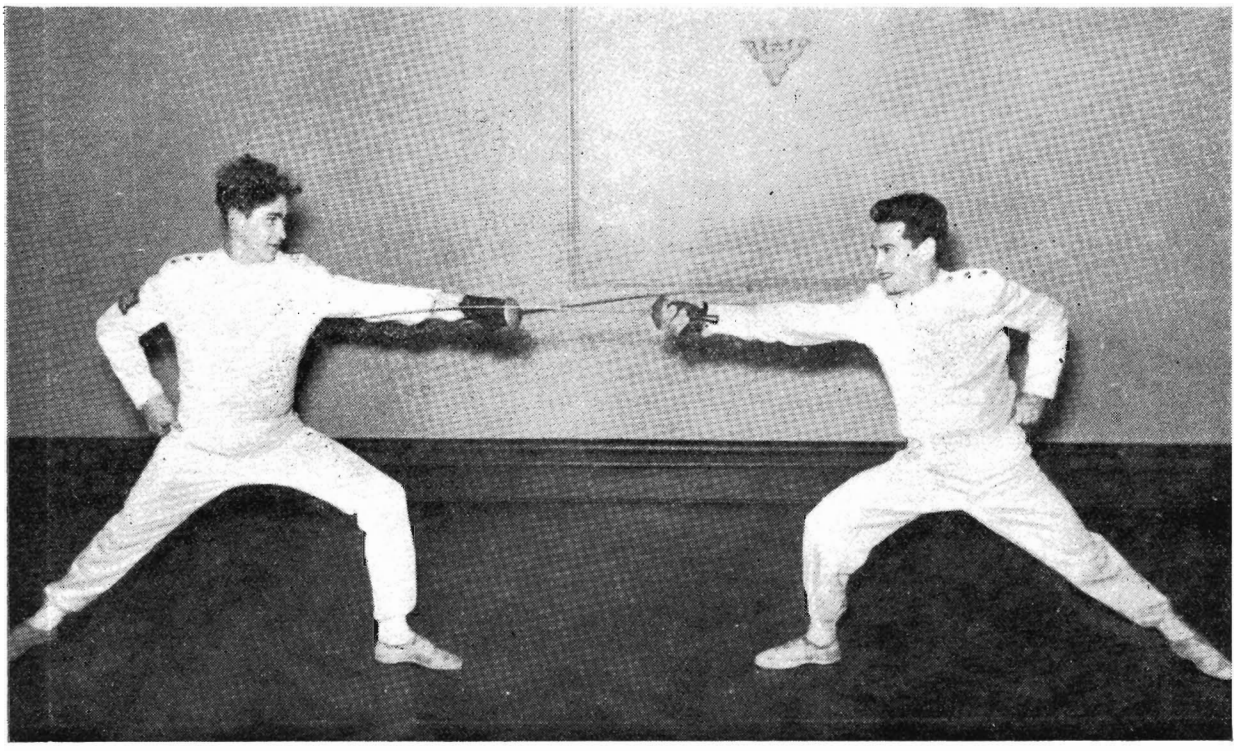
Take time for work—it is the price of success.
Take time to think—it is the source of power.
Take time to play—it is the secret of youth.
Take time to read—it is the foundation of wisdom.
Take time to be friendly—it is the road to happiness.
Take time to dream—it is hitching your waggon to a star.
Take time to love and be loved—it is the privilege of the gods.
Take time to look around—it is too short a day to be selfish.
Take time to laugh—is the music of the soul.

—Irish Prayer

* * *

Vacations are a little like love: anticipated with relish, experienced with inconvenience—and remembered with nostalgia.

—The Pennant



Left to Right: **E. Barany and I. Sagi, a former Victorian epee champion. Both are members of the V.R.I. Fencing Club. In the lunge position, they are demonstrating thrust and parry.**

SPORTS

Tennis Championships

ALTHOUGH the V.R.I. representatives performed creditably at the inter-system tennis carnival in Adelaide recently, they were unable to prevent the powerful N.S.W. combination from once again winning the championship Blanche Cup. Since the inauguration of the tournament, N.S.W. has only been defeated once, and that by Victoria in 1928. This year Victoria, N.S.W., South Australia, Queensland, Tasmania and Western Australia were represented. The matches were played on the Memorial Drive Davis Cup Courts.

Fitter Kelvin Pell, of Bendigo Loco. Depot, keeps not only the engines running, but himself as well. Over the past few years he has won the Bendigo 2-mile race as well as the Maryborough, Echuca, Bendigo, Colac, Dandenong, Warrnambool and Footscray Miles. He has had a number of placings in other mile races. In his spare time, Kelvin plays with Bendigo East Tennis Club.

In the A grade section of the V.R.I. Tennis Association's competition, the North Melbourne Locomotive team, comprising M. Harford, J. Wolff, J. Hunter and D. Bicknell, were successful in winning both the doubles and singles events and annexing the Dunkling Shield. Harford and Wolff, who have teamed together for years and have played pennant tennis, were too strong and experienced for their opponents. Northern Lines and Jolimont had a very keen fight for the Pimms Cup in the B grade section. The result hinged on the result of the last rubber, the doubles, which Northern Lines won. They finished the tournament only two games ahead of their opponents. The men who won the Pimms Cup for Northern Lines were Messrs. R. Sciberras, F. Booth, J. Thompson and W. Nash. Incidentally, the latter, a promising footballer, played his first League game for Hawthorn last month.

A feature of the State championships was the doubles win of Williams and Hazenbrook, of Northern Lines, who turned the tables on their conquerors in the V.R.I. competition. M. Harford and J. Wolff, I. Zotti (Yea) won the singles event from D. Bicknell (North Melbourne Locomotive Depot).

Football Prospects

NOW that the V.R.I. Football Association games are nearing completion it is possible to assess premiership prospects in the football competition for the Commissioners' Cup. North Loco, last year's premiers, and Northern Lines are expected to contest the grand-final at Royal Park on August 3. These two teams are very evenly matched and the last game to decide the destination of the cup for this season should provide football of a high standard. When they first met this year North Loco were the winners, but Northern Lines avenged this defeat in the second round.

Country Golf Week

COUNTRY golfers attached to V.R. institutes are working hard on their games in preparation for the annual country golf week at Melbourne's Rossdale links in September. A big entry is expected, before the closing date on September 13. The present holder of the championship title is Bendigo, and the singles champion is Len Barlow, of Daylesford.

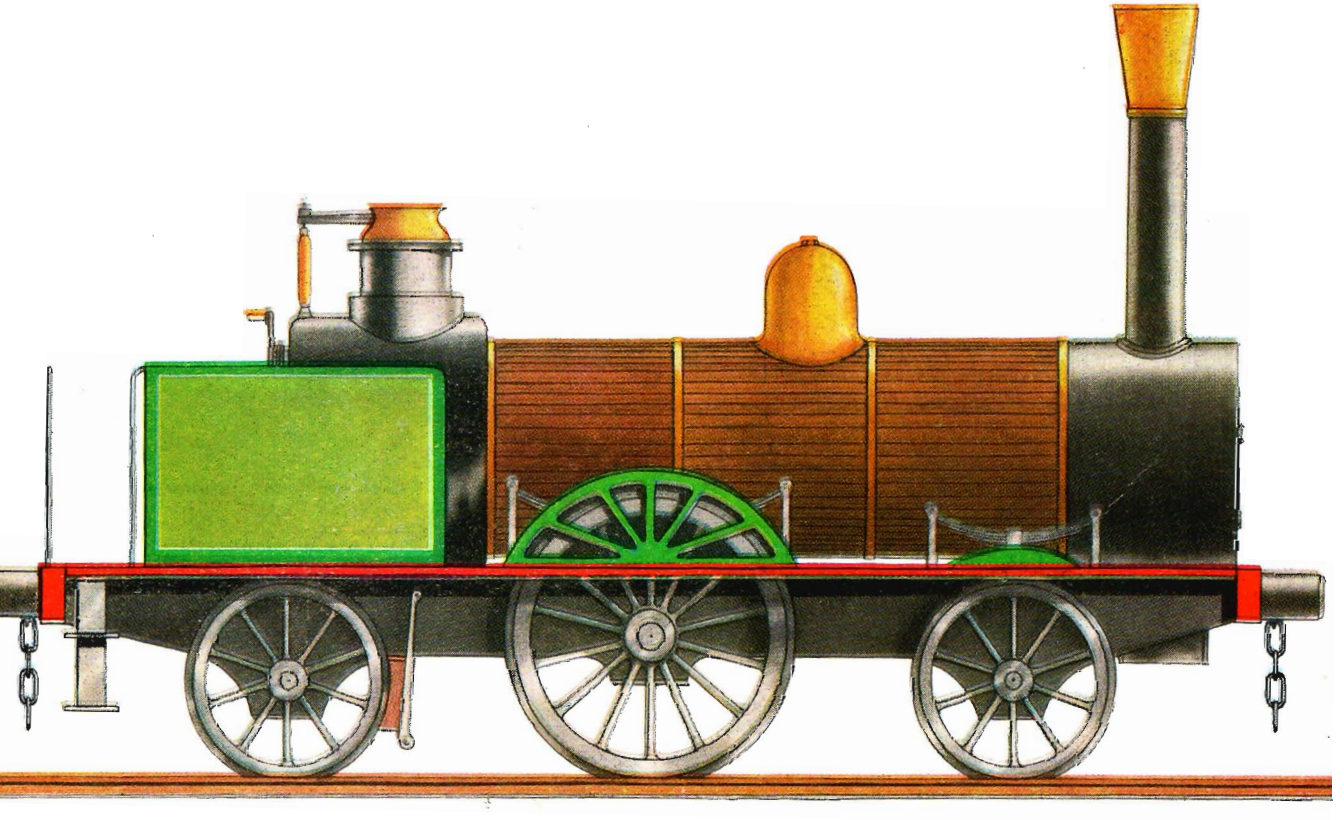
Wholly set up and printed at the Victorian Railways Printing Works, Laurens-st., North Melbourne, for the Publishers, The Victorian Railways Commissioners. 1745—54.

VICTORIAN RAILWAYS

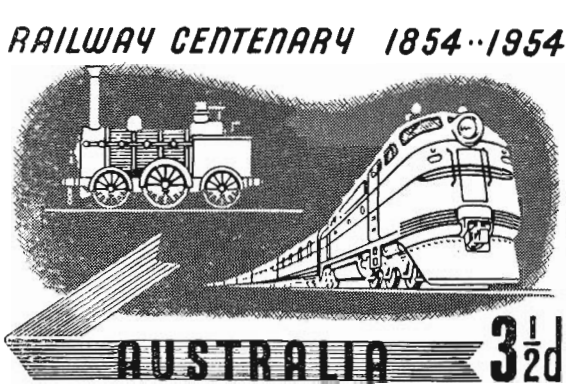
News Letter

CENTENARY NUMBER

SEPTEMBER 1954



THE MONTH'S REVIEW



This is the design for a special postage stamp for issue on September 13 to commemorate the centenary of steam railways in Australia. The original Melbourne and Hobson's Bay Railway Company locomotive featured on the stamp is based on a drawing supplied to the P.M.G.'s Department. The drawing itself was based on the researches of railway historian L. J. Harrigan, of the Electrical Engineering Branch. It is a reasonably accurate picture of the locomotive as it was. The diesel-electric locomotive on the stamp is not that of any particular system, but is a symbol of railway progress over the century.

The Centenary We Celebrate

IT gives *News Letter* very great pleasure indeed to chisel a milestone of its own history, this month, by recording the centenary of railways in Victoria. Not that *News Letter* is 100 years old: on the contrary, it (with its parent, the V.R. Magazine) can claim a mere 30 years of existence. But to give the occasion and itself appropriate stature, a great deal of research into archives and of prying into all sorts of odd corners for pictures has been done. In this we have been greatly helped by railway historian Leo Harrigan whose diligent acquisition of historical knowledge as a hobby and labour of love, has occupied the spare time of many years. *News Letter*, within its comparatively small framework, does not pretend to have done more than pick out some of the more colourful bits and pieces of railway history, but such of them as it presents are at least authentic. In doing so it joins the chorus of acclamation, that the Railways should have passed the hundred mark with so much obvious vigor and so much promise for at least another century of first-class service to the community.

Cavalcade of Trains

FOURTEEN model trains, most of which were built by members of the Victorian Model Railway Society, are the main display at the Railway Centenary Exhibition in the Melbourne Lower Town Hall this month. Driven by miniature electric motors made by the builders of the rolling stock itself, they draw current from a series of practically invisible studs between the rails. The setting, in a form of elongated and brightly lit stage, takes up about 1400 square feet. On a double track run model trains of various periods of Victorian Railway history, from the earliest train to the latest. Most of the models, meticulously built to scale and amazingly detailed, were made by members of the Victorian Model Railway Society, who are co-operating in the exhibition. The setting itself is typical of the Australian countryside, complete with township, railway station, bridges and cuttings. The "traffic" is signalled with colour light signals, and there is overhead wiring for the model L's and suburban electric trains. Miniature flashing lights and warning signs mark a level crossing. There are 600 feet of model track, 12,000 wooden sleepers, 1 cwt. of brass rails, 1,000 yards of wire for power and signalling, and 400 feet of neon tubing for lighting the display.

Milestone in History

SCENES in a way reminiscent of earlier railway days in Victoria, when new lines were beginning to radiate from Melbourne town, were enacted on July 21, when the first electrically hauled passenger train ran into Warragul. There was the same infectious enthusiasm, the same air of optimism concerning the future. But for modern dress, one could almost have imagined oneself assisting at one of those colourful railway ceremonies of the 1800's when the opening of a new line was considered an historic occasion and most fittingly commemorated.

The opening of the first section of the Gippsland line duplication and electrification project is indeed another milestone, in both railway and State history. To quote the Premier (Mr. Cain) in his speech at Warragul station; "the electric train service will materially help to develop the immense resources of the Latrobe Valley with its rich and vast deposits of brown coal".

Warragul's Warm Welcome

THE inaugural train that took 250 guests, representative of industrial, commercial, and primary producing interests, from Spencer-st. to Warragul, was hauled by L 1150, and consisted of seven modern sitting cars and the *Norman* car. Along the approach to Warragul, townspeople had taken up the best vantage points to get a good view of the train and to wave cheerfully to its occupants. Easily the most vocally enthusiastic were the school children who, the Shire President (Cr. Mac Steward) said, would benefit most in the years to come from speedy electric trains to and from Melbourne.

Trains and Prosperity

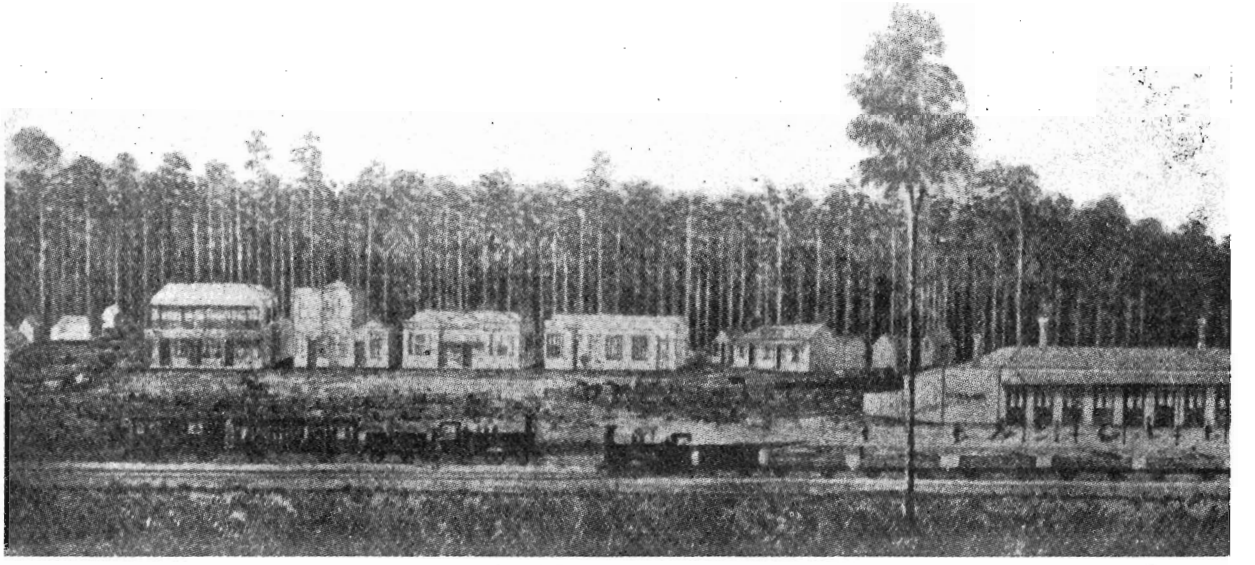
AS the train glided into the station, a band struck up. A red carpet had been spread on the station platform for the guests of honour, the Premier, the Minister of Transport, and the Chairman. The theme of the speeches was the historic importance of the occasion and the vital part that a fast electric train service (as far as Traralgon next year), would play in tapping the enormous natural resources of Gippsland and bringing with it prosperity and an increased population. The Premier aptly reminded Gippslanders of their obligation to patronize the new train service. "The only justification for the electrified line is the wholehearted support of Gippslanders", he said. The Minister of Transport praised the efficiency of the railway service and the administration and echoed the sentiments of all railwaymen in a tribute to the late Assistant Chief Electrical Engineer (Mr. C. G. H. McDonald), who had played such an active part in the electrification.

The Chairman explained the difficulties of achieving substantial overall time-table benefits at present because of speed restrictions and the extension of duplication work, but he promised big improvements as the various phases of *Operation Gippsland* were progressively completed.

New Parade Grounds

THE V.R. publication, *Power Parade*, remarked by a section of the Melbourne press with encouraging commendation, has now succeeded in attracting the notice of some American newspapers. And with the cuttings have come requests for it. One correspondent apparently thought it worth a dollar, nearly, and enclosed one; but suspecting there might, perhaps, be change, suggested that (if any) it would be nice to have it in Australian stamps, since both stamps and railways were equal hobbies. It was done. The little book, which was a railway best seller, is being enlarged into a special centenary edition with pictures and data about all the motive power used on Victoria's railways from the first passenger engine to the latest R's, J's, B's, L's. A very good shillingsworth indeed, it will make its first appearance at the Railway Centenary Exhibition in Melbourne's Lower Town Hall.

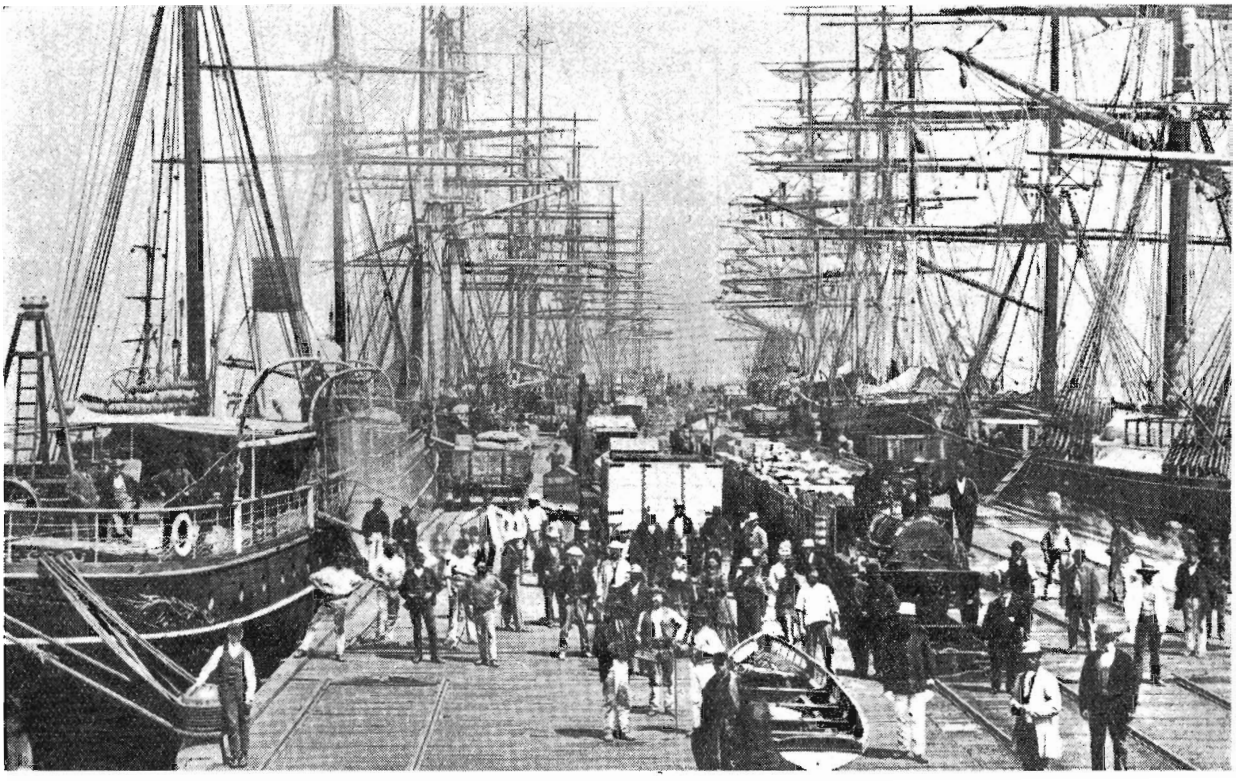
TRAINS—ANCIENT AND MODERN



FIRST TRAIN TO WARRAGUL: (*top*) Electrification was undreamed of and Warragul was just a tiny bush hamlet when the first train from Melbourne arrived there in 1879.

THE LATEST: (*below*) This modern train, hauled by an L class electric locomotive, took official guests to Warragul for the line electrification opening ceremony on July 21.

THE IRON HORSE: A CENTURY'S PEDIGREE



Melbourne and Hobson's Bay Railway Company's pier, Sandridge (now Port Melbourne) about 1883. The old *Edina* is on the left.

The first locomotive engine on a railway in Australia was an improvisation from a 4-horse power pile driver engine mounted on a ballast truck.

WHEN the Melbourne and Hobson's Bay Railway Company was building its line from Melbourne to Sandridge, engine power was required for hauling ballast trucks. Engineer James Moore ingeniously met the demand with his makeshift pile-driver-cum-ballast-truck model, which attained the incredible speed of 18 miles an hour on a demonstration run.

With track work completed, and the locomotives on order in England not due to arrive for several months, the Hobson's Bay Company ordered an engine to be built in Melbourne to enable the service to begin.

Moore again showed his versatility by designing a two-cylinder six-wheeled locomotive. Costing £2,500, it was completed in ten weeks by Messrs. Robertson, Martin Smith and Company, and made a test run on September 9, 1854.

Elegance was omitted from the specifications for this little locomotive, but it served its purpose admirably at first. Speeds up to 25 miles an hour were attained, but serious mechanical faults soon showed up. To keep the service running, the ballast engine was often used as emergency relief, but finally traffic was suspended on December 1, 1854, until the English engines could take over.

Christmas Day, 1854, saw the service re-opened with the first English locomotive, built by Robert Stephenson and Company, hauling the train. By the following April, three other Stephenson engines were running. The four, named *Melbourne*, *Sandridge*, *Victoria*, and *Yarra*, were of 2 – 4 – 0 well-tank type. They operated on coke fuel, but this was later changed to coal.

The railway companies of Victoria gave names to most of their engines. Later Hobson's Bay units were *St. Kilda*, *Rapid*, and *Meteor*, of similar build to the original four.

Passenger engines on the Geelong and Melbourne Company's line, opened in 1857, were of 2 – 2 – 2 tank type. They carried the impressive names—*Oberon*, *Titania*, *Sirocco*, *Typhoon*, *Hurricane*, and *Cyclone*. Four goods engines showed biblical inspiration with the names *Goliath*, *Hercules*, *Samson*, and *Tubal-Cain*. They were 0 – 6 – 0 tanks. A tiny line-inspection engine, built at Geelong in 1855, was known as *Ariel*.

The Melbourne and Suburban Railway Company, opened in 1859, named its locomotives *Richmond*, *Hawthorn*, *Kew*, *Toorak*, *Prahran*, and *Windsor*. The St. Kilda and Brighton Company hired engines from the neighbouring systems. The Melbourne and Essendon Company worked only one engine, the *Essendon*. When the railway companies were taken over by the Government, the names were abandoned.

Operating the early iron horses could sometimes be an uncertain business. At the official inaugural celebrations of

the Victorian Government Railways on January 13, 1859, a special train conveyed the Governor, Sir Henry Barkly, and his staff to Williamstown, and then to Sunbury for the laying of Jackson's Creek viaduct foundation stone. Two other trains carrying guests arrived two hours late. The drivers, unfamiliar with the heavy grades, used too much steam, and had to wait every few miles until their engines generated sufficient power to proceed. Two or three times, the passengers, fearing they would miss refreshments at Sunbury, got out and pushed.

Enginemen had to be hardy in the pioneering years. None of the engines, at first, had cabins or windshields. Crude shelters were fixed up by the crews, until adequate protection was built in.

Victorian Government engines were not named (other than the four *Spirit of Progress* S class, and the diesel-electric B60). Locomotives were, from 1860, classed simply as goods, which carried odd numbers, and passenger, bearing even numbers. From 1886, a letter classification system was inaugurated. Passenger engines were allotted A to N (excepting I, which was never used); goods engines were given O to Y. Some types of locomotives, of which only one or two of each were in service, remained unclassed. The letter Z was applied on three small "silent-motor engines", Nos. 522, 524 and 526, though, originally, they were considered to be passenger engines.

Retention of the odd and even system of numbering continued. Thus, an engine carried letter and number, say, A 192, indicating in two ways it was a passenger locomotive; R 193 gave the double identification of a goods.

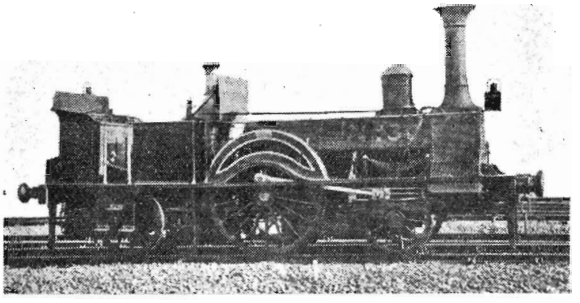
As newer classes began to appear, double lettering for the classes was adopted: E^E, A^A, D^D, A^2, R^Y, and, in 1909, the triple-lettered D^D_E 4 – 6 – 2 suburban tank engine. The odd and even numbering system was abolished about 1911.

The first engine built in V.R. workshops was No. 100 in 1871, at Williamstown. This was a 2 – 4 – 0 passenger, classed E in 1886, then designated to the unclassed group. Another six, of various types, were turned out from Williamstown by 1879.

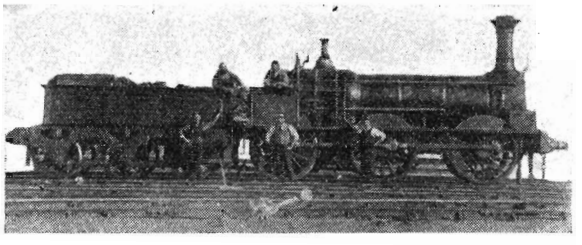
From 1873, a steady flow of engines were delivered from the Phoenix Foundry Company, Ballarat. Of 23 various types, representing 352 engines built for the V.R. by Phoenix up to 1904, none bears any resemblance to their modern successors, such as the C, K, N, R, S, and X.

In 1893, Newport Workshops produced its first engine, little Z 526, now No. 3 steam crane. Since then, Newport has built nearly 600 engines of many classes. The beginning of the 20th century saw the familiar D^D and A^2 appearing. They, it can be said, ushered in the modern era of Victoria's railways: and they remained the backbone of V.R. engine power until the late 1940's.

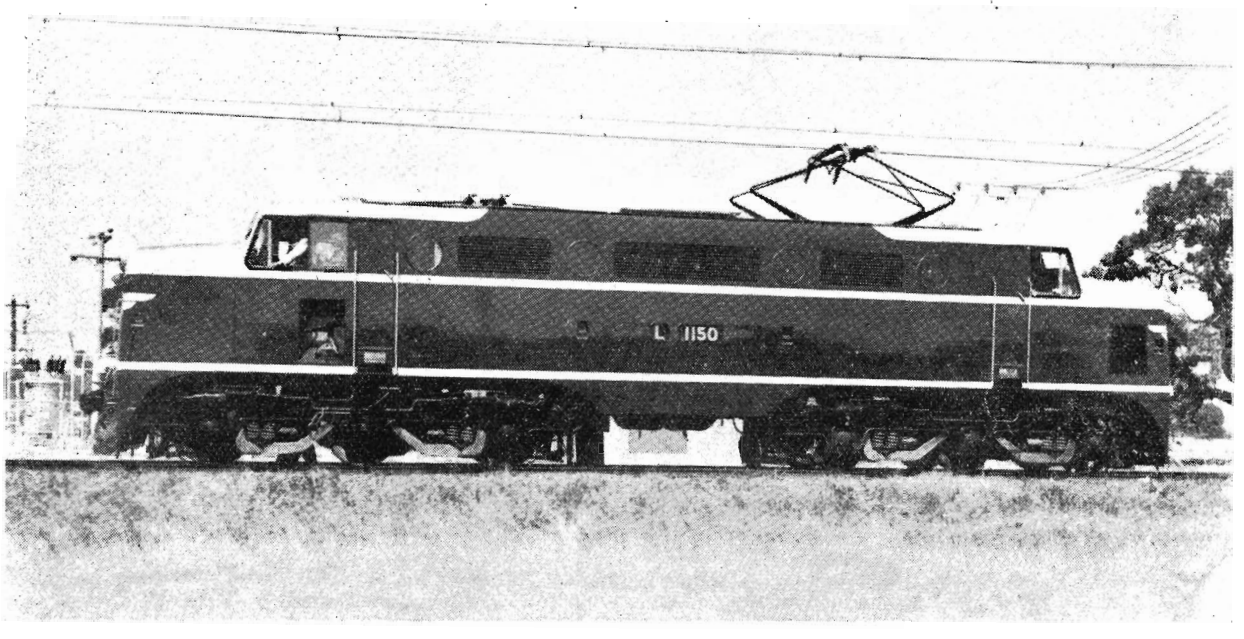
It is a far cry from Engineer James Moore's little engine of 1854 to the sleek streamlined diesel-electric B's and electric L's of 1954.



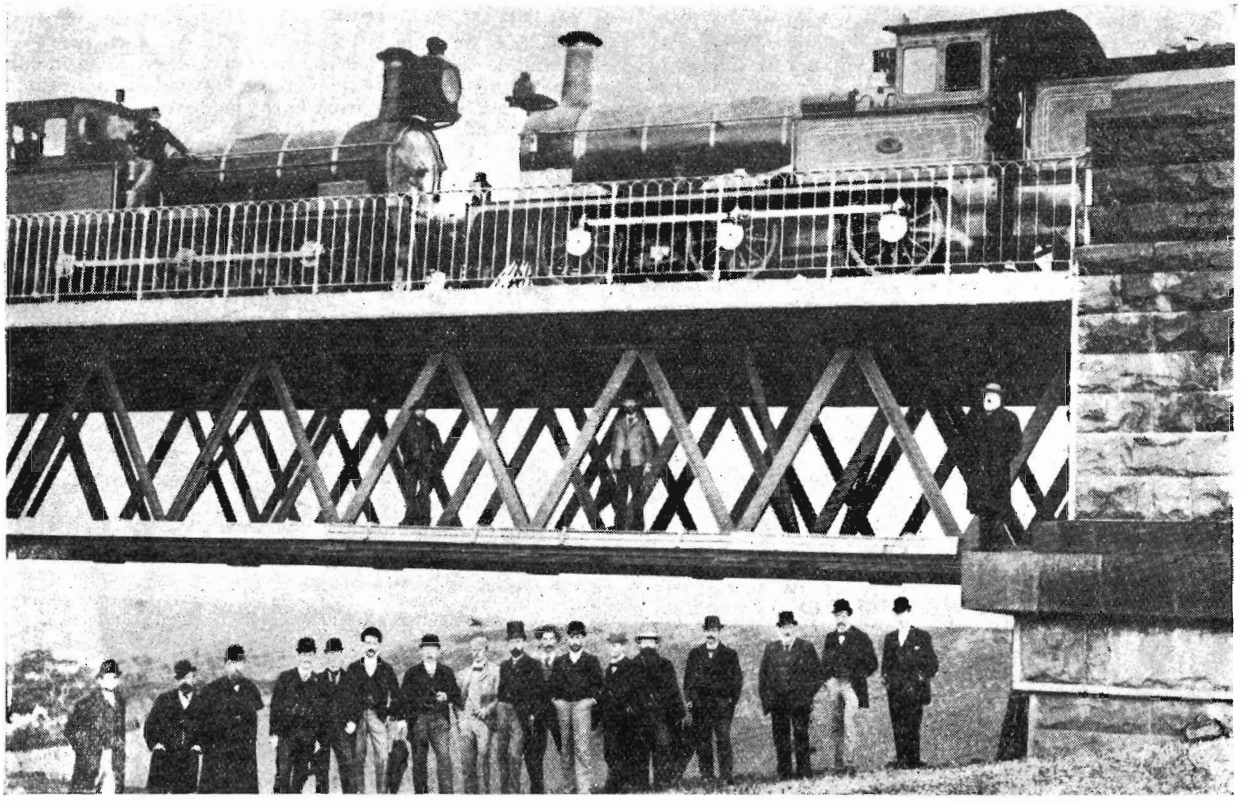
No. 34, formerly the Geelong and Melbourne Co's *Titania*.



One of the V.R.'s first goods engines.



And now the sleek streamlined L class electric loco.



Testing the Moorabool viaduct in 1894.

BRIDGE PIONEERS

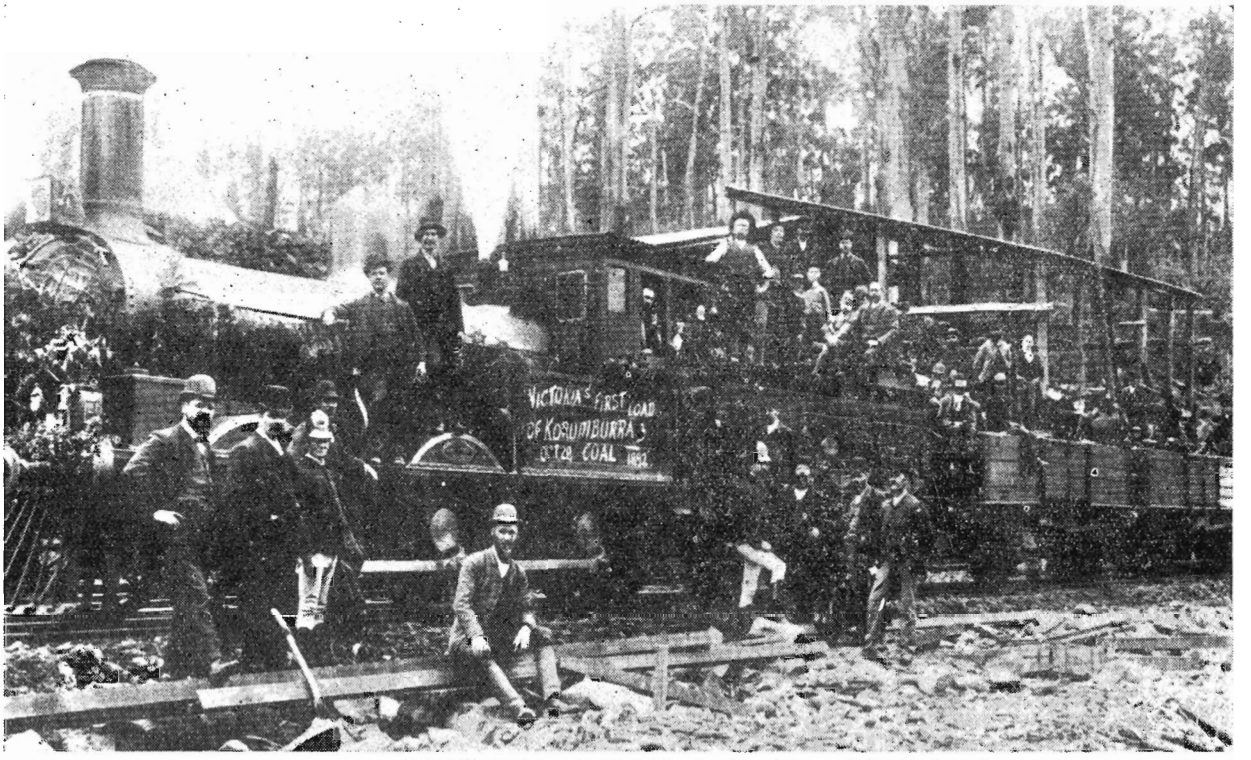
TURNING back the pages of 100 years of railway history in Victoria discloses many stories of the courage, ingenuity and resourcefulness of the Way and Works engineer in overcoming what, at times, were almost heartbreaking setbacks in building bridges and viaducts for the early lines.

One extract concerning the construction of the original Saltwater River bridge is typical ; " there was great difficulty in making a path for the permanent way across the swamp area into which the Moonee Ponds Creek flowed. Excavations from Spencer-st. to the Saltwater River totalled 164,000 cubic yards, the spoil being used for building embankments. Foundations for the bridge over the river required 600 piles driven to a depth of 60 feet. From the river, towards Footscray, the line was carried on a wooden viaduct, 1,150 feet long. The structure was dismantled, later, and an earth embankment built ".

It is interesting to recall that the Department's first passenger engine, No. 1, made a trial trip from Williamstown to Saltwater River. The bridge, at the time, was the largest piece of railway work in the Colony. Materials poured into the Colony for railway lines and bridges as construction of the main trunk lines developed. Williamstown was a hive of industry as ships unloaded rails and fabricated iron and steel for the many bridges and viaducts that were being planned. A contracting company had 2,000 men and 600 horses working along the route to Bendigo. Foundations for the big viaducts at Jackson's Creek (near Sunbury) and, at Taradale, were prepared simultaneously. The work for these, and other engineering projects, became so big that a large workshop and depot was established at Castlemaine. At the same time, the great Moorabool viaduct, nine miles from Geelong, was being built.

Bridges and viaducts constructed in the early days of the railway system have withstood the test of time. They are monuments to the skill and enterprise of the pioneer engineers. Strengthening has since been necessary, of course, as loads have steadily increased over the years with more powerful locomotives and heavier trains. But, as example, such was the solidity of the Taradale viaduct, built as part of the original construction of the line in 1862, that it did not need strengthening until 1933. Similarly, the bridge over Stony Creek on the Williamstown line, built in 1857 as a through type two-track structure, consisting of two box girders with cross box girders supported by the lower flanges, was not subjected to renewal work until 1902. And, only last year the cross girders were removed from the sides where they had rested for 96 years. The Werribee viaduct, near Melton, constructed as far back as 1886, was built to take a double track at some future date. The double track operation never materialized, but the original design made the strengthening of the bridge a comparatively simple job. Only the deck system had to be replaced. The railway engineer of today is carrying on in the traditional manner. Advances have been made in types of materials and techniques, but the fundamental principle of bridge construction and maintenance remains ; the exactitude and soundness of work.

IN THE BEARDED NINETIES



FIRST LOAD: (*top*) It was a big day for Korumburra when the first train load of coal left for Melbourne on October 28, 1892. The train was hauled by R 303, which was built by the Phoenix Foundry Company, of Ballarat, in 1884.

FLINDERS-ST. MORE THAN 60 YEARS AGO: (*below*) No. 16, the locomotive at the platform, was built for the Melbourne and Hobson's Bay Company. It became an N class engine in the early V.R. fleet. No. 17, on the left, was a Victorian Railways C class.

A QUESTION OF TIME

EVER since the present Flinders-st. station was built, at the turn of the century, a favourite trysting place for Melbournites has been " under the clocks ".

Few realize how widely the term could apply to the Flinders-st. terminus which literally abounds with clocks of all descriptions. The accuracy of the timepieces is taken for granted, and their constancy is attributed by many to some form of perpetual motion.

Of all the railway clocks, that installed in the Elizabeth-st. tower is the most prominent. Constructed in Melbourne by Mr. Ziegler in 1909, it is the master clock for others at metropolitan signal boxes, suburban platforms and head office.

Correct time is assured by electrical impulses sent out every minute from the Melbourne Observatory ; these actuate a check apparatus on the railway clock, keeping it in exact synchronization. It, in turn, sends out electrical signals to its slave clocks at the various locations, correcting any slight variations each hour. Along with its comrades, the tower clocks at Swanston-st., Spencer-st. and Newport Workshops, it is hand wound weekly.

Turret clock first erected in 1883 at the Elizabeth-st. entrance to Flinders-st. station.

Of the four clocks, the one in the Spencer-st. tower has had by far the most chequered career. Made by Gaunt's of Melbourne, its first assignment was at the Elizabeth-st. entrance to the old Flinders-st. station, where it took up duty in 1883 as the control clock for the suburban area.

When its new tower was built in 1901, it was moved to Princes Bridge, where it carried on faithfully until 1910 when progress again caught up with it. Another home was found for it at Spencer-st., where it ticked its life away, in peace, until 1926. In that year alterations to the station necessitated its removal to a spot about 30 yards from its previous foundations.

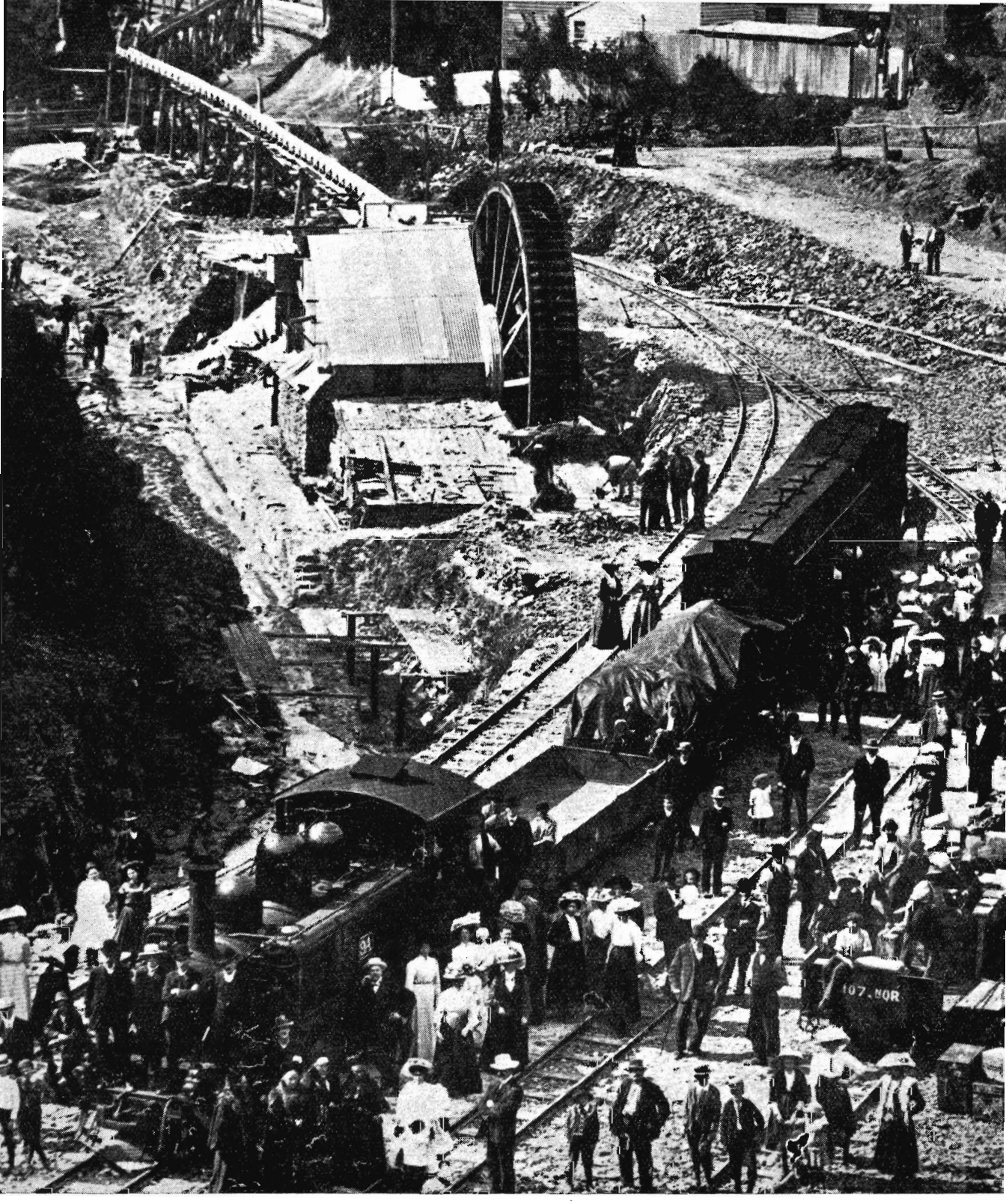
Its site finally settled, the mechanism was once again put into action on Christmas Eve, 1926, by the late Chairman of Commissioners, Sir Harold W. Clapp.

Contrary to popular belief, the mechanism is contained in a small dust proof chamber at the foot of the tower and drives the hands by means of a long vertical shaft up the centre of the tower.

All the tower clocks of the Department, with the exception of the Melbourne Goods clock, are of the " gravity escapement " type, and are shaft driven from mechanism located at a lower level than the clock faces. None of the clocks have striking apparatus. Apart from routine oiling they have given years of trouble-free service, a tribute to the craftsmanship of their makers.

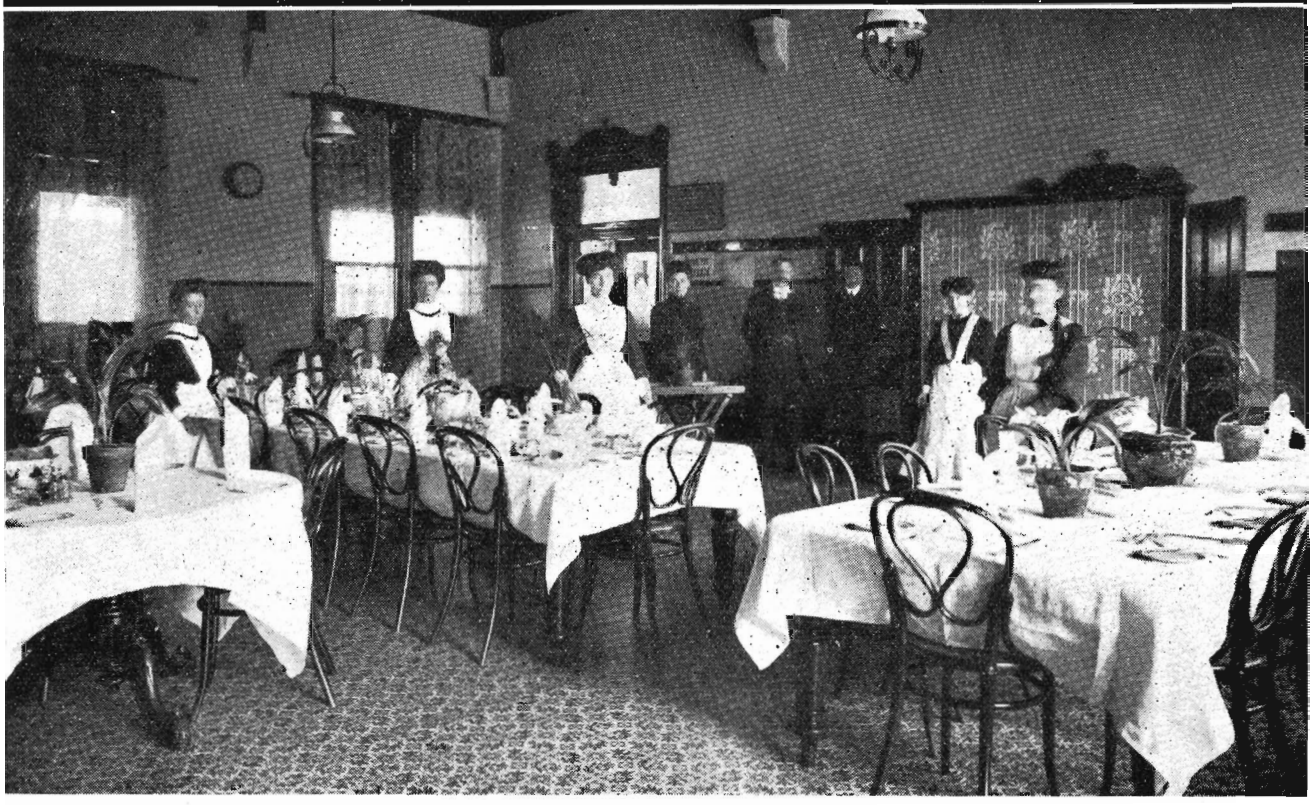
For more than half a century a large proportion of Melbourne's travelling public have set the tempo of their daily progress to and from both business and pleasure by the railway clocks which still appear to have many years of life before them.

Synchronising clocks after repair and adjustment prior to issue to stations and depots.



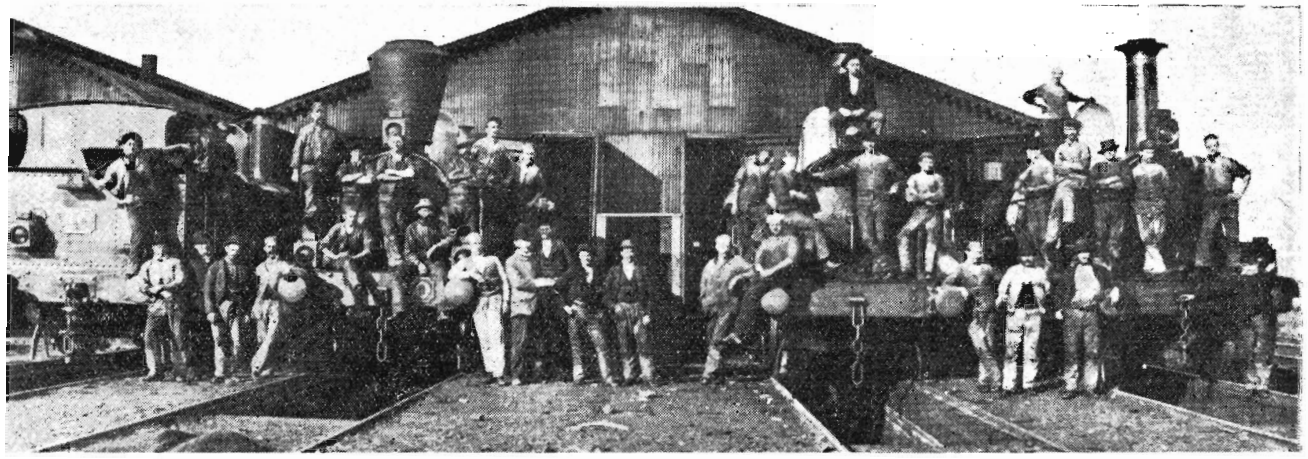
WALHALLA'S FIRST TRAIN: The inhabitants of the picturesque gold mining town of Walhalla, 106 miles from Melbourne, turned out in all their finery in May 1910, to welcome the first train to what was once the richest gold town in Victoria. Walhalla is now the ghost of its original self, and the line which once served it has been closed.

100 YEARS AROUND THE COUNTRY

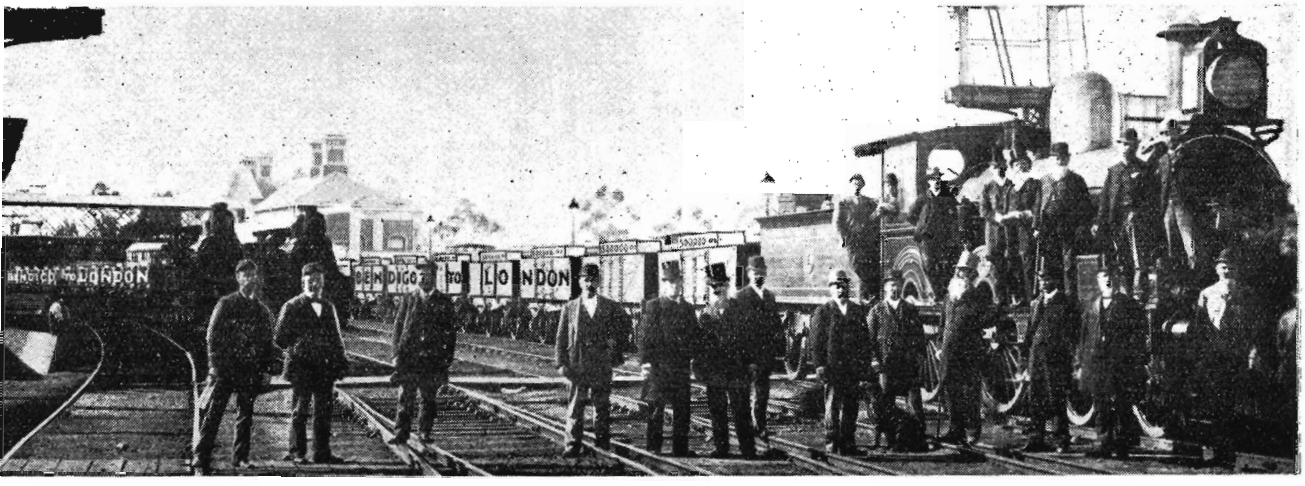


READY FOR BUSINESS: These attractive girls in starched aprons and collars and, with their hair dressed in the fashion of 50 years ago, were on the staff of the Maryborough Refreshment rooms.

THEY STILL STAND: The Bendigo Goods Sheds built in 1873 are still giving good service. Motor vehicles have replaced the horse and drays that drew alongside the platforms in the old days. Today rail clients drive up in cars instead of horse-buggies.



ON HORSE GROOMS: The railwaymen in this photograph are typical of the men who got the early locomotives ready for the road in the old days. The loco on the left is a M class and that next to it a B.



OLD BOOM: This photograph, taken at Bendigo, publicises the large quantities of gold yielded by the Bendigo mines. Gold, carried by the railways, was transported in the guard's van, under escort.

LY WHITTLESEA: The line had not long been opened when this photograph was taken. The station was opened in 1889. The gendarme pe of cap was worn by station staff up to about 1920.

THE "W.N."

For sixty of the hundred years of railroading in Victoria, the Weekly Notice *has flourished. It has become an institution, one of the vertebrae of the service. Although never compiled and published for lighter reading, its earlier issues, to the modern railwayman, are, however, both entertaining and revealing. They are sidelights on the history of their periods.*

THE first was published in July 1894. One of the earliest orders issued admonished drivers not to start or move trains from stations without first receiving a signal from their guard. Apparently the liaison between driver and guard was not all that it should have been. One issue of the *Weekly Notice* contained no fewer than seven reports of "gates smashed by train" which would seem to indicate that the drivers of those days were a little carefree in the execution of their duties.

The contents of issue No. 4 began to reflect the parlous financial condition of the times. The land boom had run its course, work was scarce, and economy in government departments was the watchword of the day. Percentage deductions from railwaymen's salaries, ranging from 7% for the £100 to £150 section to 25% on those receiving £1000 a year were listed. Station staffs were drastically reduced. The stationmaster at Scarsdale was provided with a tricycle so that he could also control Smythesdale, Cardigan, Trunk Lead, Haddon and Nintingbool. Men were giants indeed in those days.

VICTORIAN RAILWAYS.

WEEKLY NOTICE

No. 28.

WEEK ENDING

Monday, January 7, 1901.

1 The WEEKLY NOTICE is sent out every Tuesday, and does not need acknowledgment. Every person whose duty requires him to have a copy will be held responsible for obtaining one. Should it not be received at the usual time this office (Room 7) must be immediately advised. Absence of such advice will be held as proof of receipt. All instructions except those relating to Train Movements, Live Stock Traffic, and other urgent matters, will be communicated to the Staff by WEEKLY NOTICE, but an urgent Circular may be sent out at any time, and must be acknowledged in the usual way

2 Where an Order Book is kept a copy of the WEEKLY NOTICE must be exhibited in it. Supervising Stations will be held responsible for supplying stations under their control.

3 Instructions which also refer to the Loco. Branch will be indicated by a star—thus—*; and those for the Existing Lines Branch by a dagger—thus—†. When the instruction affects both branches, as well as Traffic, the two reference marks will be shown. The Inspectors and Foremen of these Branches will be supplied with copies of the WEEKLY NOTICE and it will be their duty to see that the Staffs under them are informed, not only in respect to the subjects indicated, but also in regard to any other Orders contained therein, which may affect their Branches. The absence of star—* or dagger—† will not relieve Loco. and Engineer's Staff of their responsibility for taking any action or issuing any instruction which may be necessary.

4 LOCO. NOTICE.—Drivers-in-Charge and Senior Drivers at certain stations (who will be instructed by the Chief Mechanical Engineer), should obtain a copy of the Weekly Notice from the Stationmaster, but this will not relieve the Loco. Foremen of the responsibilty of issuing the necessary written orders to all employes in their districts concerning matters which appear in the notices.

W. FITZPATRICK,
CHIEF TRAFFIC MANAGER.

CHIEF TRAFFIC MANAGER'S OFFICE,
SPENCER-STREET, MELBOURNE.

Free Railway Passes issued to the Members of the Houses of the Federal Parliament.

11 The following is a specimen of the free railway pass issued to Members of both Houses of the Federal Parliament, which will be available over the whole of the Government Railways of the Commonwealth.

The passes issued to Members of the House of Representatives have engraved thereon the name of the electorate, while on those for the Members of the Senate the word "Senate" is shown:—

Hawkers.

12 It has again been brought under notice that Indians and others are hawking large quantities of merchandise packed in portmanteaux, which are being passed by the staff as luggage.

Packaged tours and other 20th century holiday attractions had their counterparts in the 19th century railroad organization. Cook's excursions to Adelaide or Mount Gambier at 40/– first class, and 20/– second class, and to Sydney for 60/– first and 40/– second class, all available for a period of one month, were included in *Weekly Notice* items. As a special concession to gold miners, tickets from Maryborough to Ballarat cost 3/–, whilst Ballarat to Ararat was slightly dearer at 4/9.

A sidelight on suburban passenger density in the year 1894 is contained in the November issue of that year. A paragraph states that stationmasters would only be on duty to issue tickets at Glenhuntly, North Road (now Ormond) and Highett stations between the hours of 8 a.m. and 7 p.m. Outside these hours, tickets were issued by the train guard who carried an excess fares book and 10/– in small change.

Nostalgic memories will be revived by *Weekly Notice* instructions stating that tickets were to be issued to city holiday-makers who intended to spend the week-end on a round trip from Melbourne to Queenscliff. Tickets, at 7/6, gave the traveller the privilege of making the round trip in either direction by rail or boat, the old paddle steamers *Hygeia* and *Ozone* supplying the necessary sea transport.

Other famous old ships mentioned in an early *Weekly Notice* were the *Gem* and *The Queen*. With their double ended hulls and twin red and black funnels placed athwartships, the two ships ran the ferry service between Railway Pier, Port Melbourne, and Williamstown. Free travel was granted to holders of periodical railway tickets or gold passes.

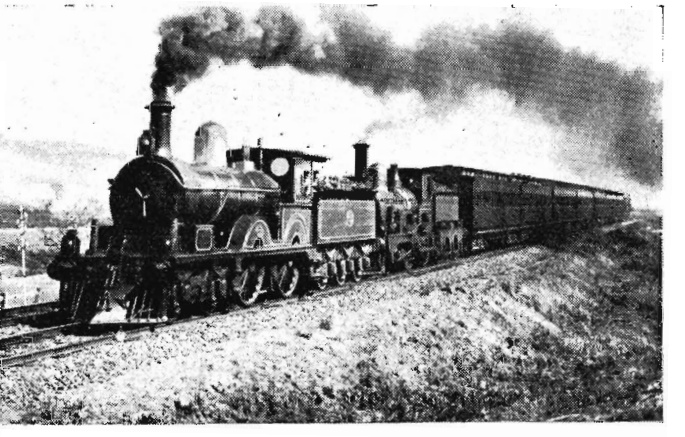
A sign that times were changing and new ideas were being introduced is indicated by an instruction that permission had been granted for stationmasters' residences to be equipped with gas lamps instead of kerosene lamps.

In sixty years from now, no doubt, historically minded readers will peruse a *Weekly Notice* issued in 1954 with no less interest.

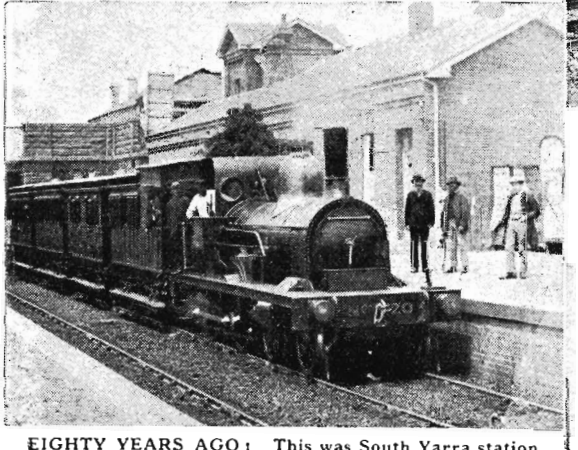
OLD TIMERS

WILLIAMSTOWN'S FIRST BORN: Locomotive No. 100 was the first to emerge from the original Williamstown Workshops. That was in 1871. Here it is seen at Warragul hauling the Commissioners' tour train, shortly after Mr. (later Sir Thomas) Tait was appointed Chairman in 1903. He is standing with his foot resting on the engine. Bearded Mr. Commissioner Fitzpatrick (in light coat) is standing in the middle of the front row.

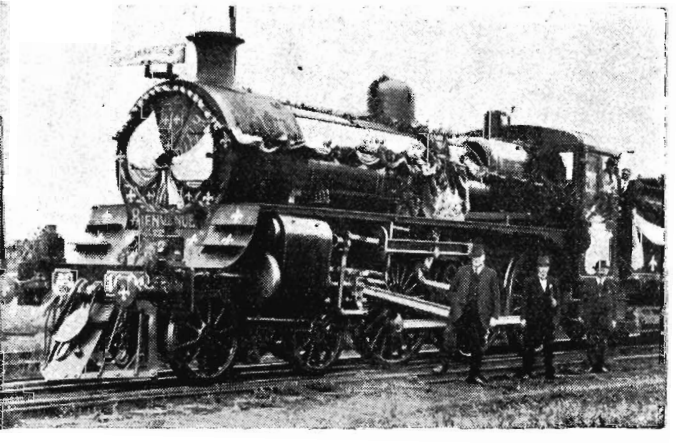
PRE-ELECTRIFICATION: A DDE locomotive hauling a suburban train across the Hawthorn Bridge.



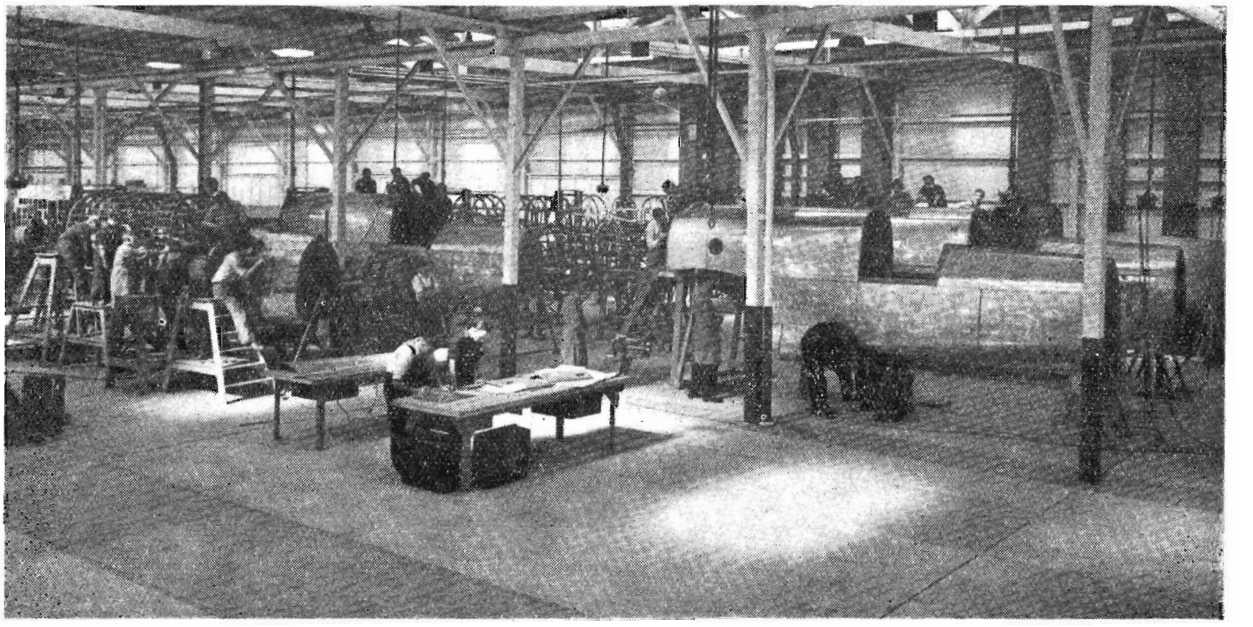
SYDNEY EXPRESS: The photograph illustrates, in the mid years of the century, the development of motive power on the Victorian Railways. New A and B class locomotives are here seen hauling the *Sydney Express* up the Glenroy Bank in the early 90's. The interstate service was revolutionized with the introduction, in 1937, of the modern *Spirit of Progress*, hauled by streamlined S class locos. They too have passed.



EIGHTY YEARS AGO: This was South Yarra station and the locomotive at the platform is a Hobson's Bay unit that later became a C class V.R. engine. There were only two platforms at South Yarra when this photograph was taken. Today there are six.



THE A2 IN ITS PRIME: *(right)* When the French General Pau visited Victoria in 1918, after World War One on a goodwill mission, Victorian Railways gave him an appropriately decorated A2 locomotive to haul his train to country centres. The A2 was then the pride of the system. These locos are being scrapped at the rate of 15 to 20 a year.



War time aircraft production projects at Newport workshops.

RAILWAYS AT WAR

The manufacturing potential of railway workshops has always been in keen demand in times of war.

AUSTRALIA'S first intrusion into an overseas conflict was during the Boer War in 1899. Newport Workshops were immediately pressed into service for the country's war effort. Among many jobs carried out for the Defence Department was the reboring and remounting of a field gun. With modern machines and methods this job would be relatively unimportant but, to the craftsman of the time, it was work demanding the highest degree of skill.

On the outbreak of the 1914–18 war, nominal control of all Australian railways passed to the Commonwealth Government. Newport Workshops designed and built what was claimed to be the first mobile surgical theatre in the world as a donation to the Red Cross Society for use in the battle zones. This was followed by an improved type of army travelling kitchen and six mobile motor workshops.

At the request of the British Government in 1915, a portion of Newport Workshops was equipped to manufacture high explosive and shrapnel shells of 4·5 inch and 6 inch calibres, but difficulty in obtaining adequate supplies of suitable steel and machinery hampered output.

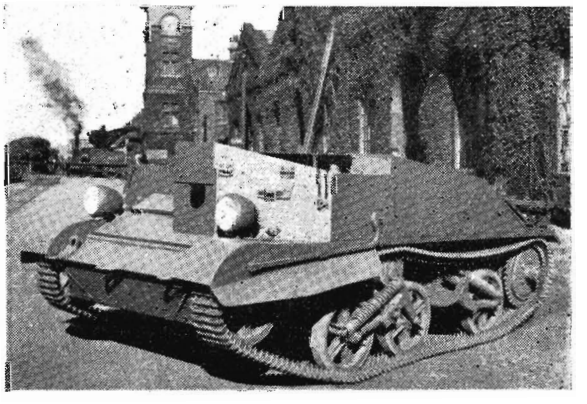
With the cessation of hostilities in 1918, the railway workshop organization quickly returned to its peacetime rhythm. It was not until 1939 that the tocsin again sounded to recall the workshops to war effort.

Victoria's industrial potential had increased enormously, between wars ; even so the railway system was strained to its limits to meet military and civilian traffic needs. Its workshops, however, despite difficulties, produced an amazing array of war material.

An aircraft annexe at Newport built 700 complete rear fuselages, tailplanes and rudders for Beaufort bombers and 364 fuselages for Beaufighters, after providing all jigs and necessary tooling. Later, the construction of Lincolns was also planned in the programme, but the war ended before they could be manufactured.

Bren gun carriers were also constructed, and in 1941 the Department took over the management of the entire project in Australia. Newport produced 1,844 carriers, and 5,141 were made elsewhere under the Department's supervision.

In a special shell annexe at Newport nearly one million shells were manufactured, ranging from 3·7 inch anti-aircraft ammunition to 25 pounder high explosive shells. More than 32,000 shell components were also supplied. Various other items manufactured by the Department for assembly at other locations, included gun components, marine steam engines and many other necessities for the successful prosecution of the war.



Newport produced 1,844 of these Bren gun carriers.

The surgical instruments made at Newport included 400,000 forgings, comprising design and production of tooling for 26 different types of instruments, ranging from forceps and scissors to needle holders and mouth gags. Actually, Newport provided the biggest proportion of the surgical instrument requirements for the Allied armed services in the South-Pacific area.

Even the railway engineers were a little nonplussed when they received an order for eight ocean-going tugboat hulls, each 75 feet long, 18 feet wide and 17 feet deep, complete with propellors. The hulls were built in five sections and hand welded while upside down. The propellors, also made at Newport, were installed before the craft were dispatched on a specially built 32-wheel transport vehicle for launching in the Yarra.

The Electrical Engineering Branch manufactured 12,000 electric meters of various sizes, besides 482 complete sets of generating and battery charging equipment.

A novel item supplied by the electrical workshops consisted of electrically operated moving targets for army tank crews. These units, which were mounted on rails, moved at 40 miles an hour. A target range, constructed for the R.A.A.F., was equipped with targets made to represent Zero aircraft profiles. Complete aircraft gun turrets were mounted on stationary platforms so that actual combat conditions could be simulated.

One of the busiest shops at Newport during the war period was the Tarpaulin Shop which manufactured 279 large marquees, 2,087 tents of various sizes, 25,000 covers for vehicles, stores and tents and several 3,000 gallon water tanks. Repairs to canvas equipment to the extent of tens of thousands of articles were also handled.

As a sideline from actual manufacturing work, Newport carried out urgent repairs to engines and other equipment of nine vessels belonging to the R.A.N., Royal Navy, United States Navy, the Royal Netherlands Navy and the Merchant Service. The work involved considerable casting, forging and machining.

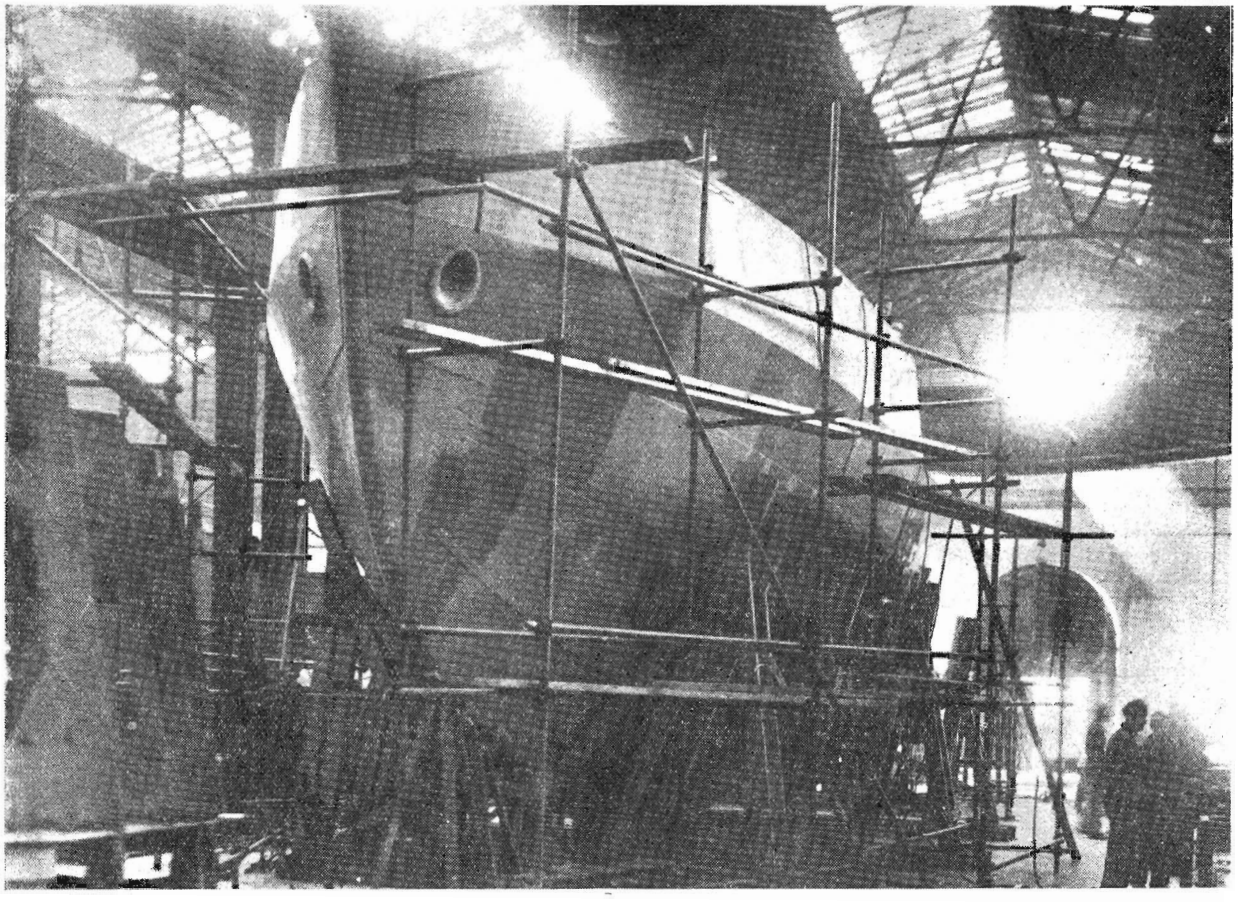
In addition to all this, the workshops pioneered the manufacture in Australia of the Garratt type locomotives and assembled 12 of these engines. Newport also equipped two 3-coach recruiting trains for the R.A.A.F., and converted a car into an 18 bed hospital coach.

Following an urgent appeal from the Government, 14 coaches were withdrawn from traffic on January 24, 1942. By February 6 they were ready for service as an ambulance train, complete in every detail, even to the Red Cross emblem painted on the roofs and sides. The train consisted of staff car, personnel car, office car, dining car, nine ward cars and van. Each ward car contained 39 beds arranged in tiers.

As a defence measure, 98 E class 40-ton gondola trucks were converted for the transport of motor vehicles, tanks, guns and other bulky equipment. Eight "war emergency" equipment trains, including two specially constructed 60-ton wrecking cranes, were placed at strategic points to repair tracks, bridges and buildings had the enemy broken through.

A little publicised section which did a big job during the war was the Railways Printing Branch. At the call of all sections of the fighting forces, they produced training manuals, aircraft recognition charts and numerous publications of a confidential nature.

These were the major jobs carried out by the workshop staffs ; thousands of small parts were manufactured, repair work was carried out for other departments and technical advice was given as required.



Newport Workshops even had a war time ship building programme.

AMONG OURSELVES . . .

Captain Clarke

Railway Planned Service Begins

APPOINTED in 1853 to the ministerial office of Surveyor-General in the Legislative Council of Victoria, Captain (later Sir Andrew) Clarke, of the Royal Engineers, directed the trial survey of Victoria for 600 miles of proposed railway lines. He was one of the early railway pioneers. After the Government, in March 1856, had bought the property and works of the Melbourne, Mount Alexander and Murray River Railway Company, Captain Clarke was appointed co-trustee with Captain Charles Pasley (Commissioner of Public Works).

He established the Victorian Railways Department in May 1856, and formulated proposals for Government railways in Victoria which were ultimately approved. His subsequent report was the guide for Parliament in their decision to build State railways, and it remains today as an authoritative history of the foundation of the Victorian Government Railways. Captain Clarke relinquished office after a change of Government in 1857. Subsequently he was knighted and died in retirement in England.

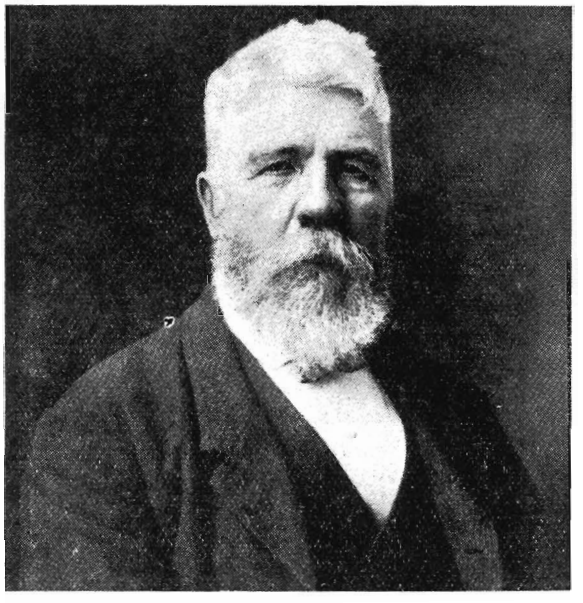
The First Chairman

WHEN the Victorian Railways Department was established in 1856, it was administered by two ministerial trustees, the Surveyor-General and the Commissioner of Public Works. In April 1857, the Board of Land and Works was created to combine the offices of the two Ministers. The Board thus assumed control of the Railways, and so continued until 1883. In that year, the Government authorized administration to be vested in three Railways Commissioners. Richard Speight, who had been General Manager of one of the English railway companies, took office as Chairman in February 1884, with Messrs. Agg and Ford as Commissioners.

The Speight administration was called upon to direct the great "Octopus" Railway Acts of the 1880's. These Acts planned lines to all parts of Victoria, and included the expansion of the suburban system to more or less the present day network. Speight also inaugurated a standardization of locomotives, said to be of outstanding importance for those times. But the land boom of the 1880's also had arisen. The crash was looming by 1890. Because of charges of extravagant and irresponsible management, Speight and his two colleagues were removed from office in 1892. From this resulted the great Speight versus David Syme libel case, which lasted over 18 months. Speight died in retirement in Western Australia about 1902.

First Railway Engineer-in-Chief

GEORGE CHRISTIAN DARBYSHIRE was District Surveyor, at Williamstown. In 1855 he was delegated by Captain Clarke to supervise surveys for prospective railway routes in Victoria. After the government had bought the Mt. Alexander Railway Company in 1856, Captain Clarke appointed Mr. Darbyshire as engineer-in-chief of the newly established Railway Department on May 1, 1856. He directed the final surveys of the lines from Melbourne to Bendigo and Echuca, and from Geelong to Ballarat. He also supervised the preparation of plans and specifications for the work and the ordering of locomotives, rolling stock, bridges, permanent way materials and all necessary machinery and materials for the 150 miles of double track lines. He resigned in May 1860, following allegations (later disproved) of neglect and collusion relating to contracts, and extravagance.



Mr. Darbyshire

Built Early Trunk Lines

THOMAS HIGINBOTHAM succeeded Mr. G. C. Darbyshire in May 1860. He also may be regarded as a foundation member of Victoria's railways. His examination of the railways, then under construction to Bendigo and Ballarat, exonerated his predecessor of charges of neglect. Under Mr. Higinbotham, the trunk railways from Geelong to Ballarat, and from Melbourne to Bendigo, were opened in 1862. Extension to Echuca followed in 1864. He planned and supervised the construction of new lines and extensions to the north-east, north-west, east and south west. In 1874, he was sent on a world tour to investigate railway improvements.

Then on "Black Wednesday", January 8, 1878, Thomas Higinbotham, and many other officers in the Public Service and Railway Department, were retired by the Government. In almost 18 years as V.R. Engineer-in-Chief, he supervised the construction of 800 miles of line.

Mr. Higinbotham

£1 Bonus Still Offered

DEPARTMENTAL demands for staff continue unabated. Despite a steady flow of new blood into the ranks, the rapidly expanding construction programme and increased call by the public on the Department's services makes the recruitment of more staff essential.

To encourage railwaymen to introduce newcomers to the grades of blacksmith, boilermaker-welder, car painter, car and waggon builder, clerk (junior), clerical assistant (junior), coppersmith, electrical fitter, fitter, iron machinist, porter (junior and adult), shunter, springmaker, trainee engineman, turner, and upholsterer, a £1 bonus will be paid, provided the nominee completes six month's continuous service.

Nominations should either be addressed to the Employment Officer at Spencer-st. Administrative Offices, (before the nominee's application is lodged) or accompany the application.

Thanks

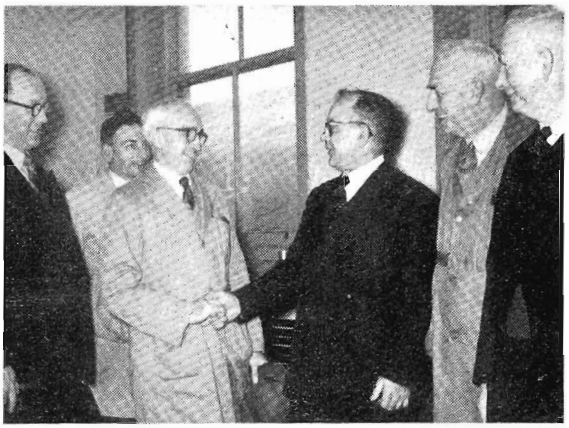
For the excellent service and courtesy of buffet car staff. "I have noted the kindness of the girls to mothers with small children and admired their efficiency and courtesy in all situations."

Jean Mundy, retiring group president of the Country Women's Association of Victoria, Orbost.

Newport's Safety Officer

SAFETY first has been the basic principle of all phases of railway work since the first train ran on the Victorian Railways. The safety of the public is, of course, the first and most important duty of every employee, but each is also taught to be careful in his own job. Accidents to staff not only cause pain and suffering to the victims, but, in the aggregate, they constitute a big economic loss.

The Department is now intensifying its efforts to achieve freedom from accidents as far as is humanly possible. An important appointment, therefore, was that of Mr. J. McCubbery as Safety Officer in the Newport and Spotswood Workshops. Mr. McCubbery, who is a former sub-foreman fitter in the Steel Construction Shop at Newport Workshops, is well equipped to assist supervisors and staff generally in problems of applying safety methods and practices.



Mr. Commissioner Brownbill congratulates Mr. McCubbery on his appointment.

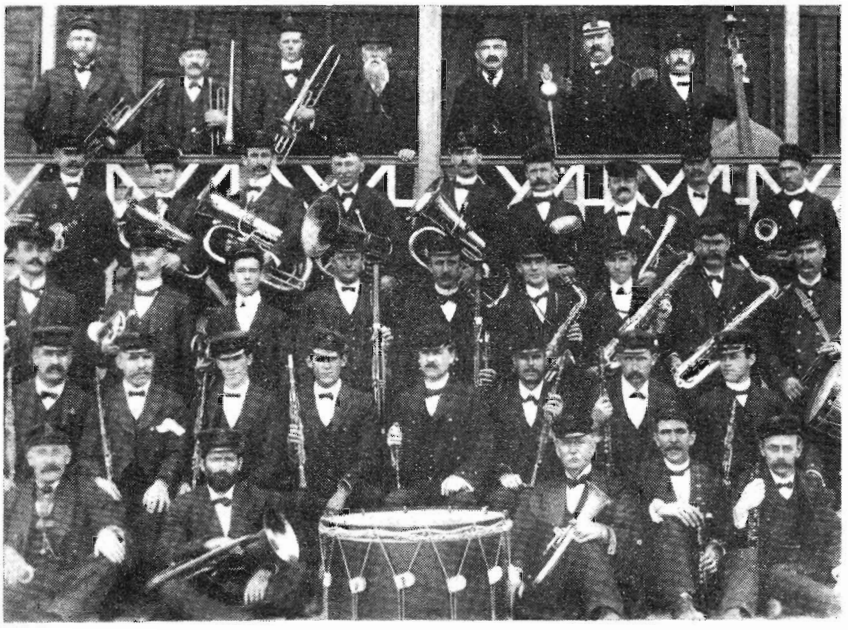
AND THE BAND PLAYED ON

The Railway Military Band of 1906 played in the rotunda at Brighton Beach in the summer months and at railway picnics at Ballarat and Bendigo. The photograph was sent in by Stationmaster O. Hobson, of Eaglehawk, who joined the band when he was a lad porter. He is now in retirement.

Those who have been identified are from left to right, front row: Herrings, Newport 'shops; — — — Wallace. 2nd row: — — — Shunter Collier, — — Signalman H. Middleton, —. 3rd row: Wallace, Stender, Lad Porter O. Hobson, Guard W. Mulholland, — Plumber Armstrong, — Guard G. Barnes, —. 4th row: Jeffreys, — — — — — Guard Phillips, Guard Currie, —. Back row: — — Shunter H. Arthur, Melbourne Yard, Conductor Wallace, Clerk Regan, Melbourne Yard (secretary); Guard G. West, Signalman Raverty.

— Unidentified.

Can you identify any of the bandsmen ?



HOW THE V.R.I. STARTED

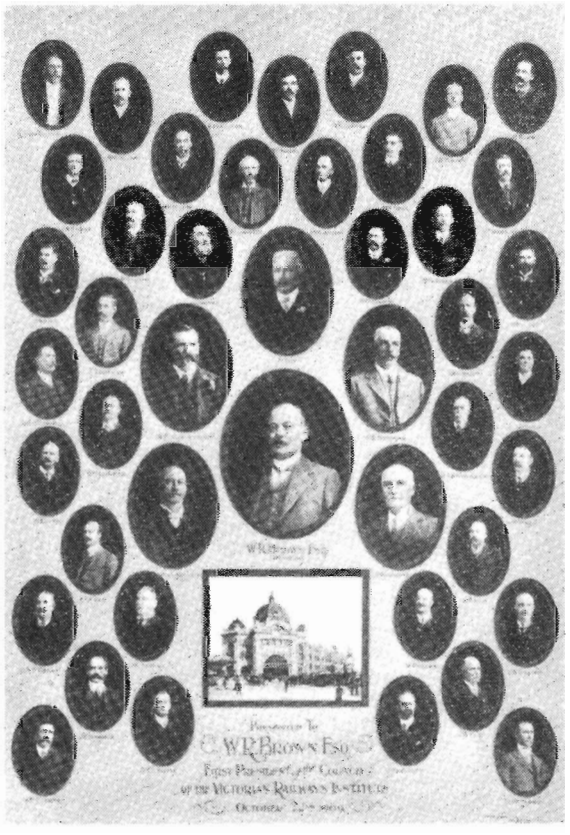
This is the song of the railwayman,
At the close of each day's work.
This is the song that cheers him on,
When dangers round him lurk.
The driver on the footplate sings,
As his engine thunders along.
And the clanging, clattering metals,
Echo back his song.

CHORUS

It's Ho! for the Railway Institute,
A haven of peace and rest.
Where friendship and happiness intertwine,
And the boys are all of the best.
Where the hand you grip is a comrade's,
Where every man is white.
The Victorian Railways Institute,
Is the place for me tonight.

THIS *Song of the Institute*, composed by Messrs. F. B. Smith and J. W. Newington, was sung with great gusto when the Victorian Railways Institute was officially opened by the then Chairman of Railway Commissioners (Sir Thomas Tait) in the new Flinders-st. station buildings on January 22, 1910. It was the culmination of an agitation started in the 1880's to provide social and educational amenities for railwaymen.

Actually, the Institute stemmed from the Victorian Railways Library, which was formed about 1888. In its early days, it was housed in the Sailors' Rest Home (now the offices of the Melbourne and Metropolitan Board of Works). Later, it was transferred to the office of the Engineer-in-Chief, Spencer-st. In 1899, at the request of Mr. Commissioner John Mathieson, the heads of branches investigated the possibility of establishing a centre to provide organized technical education for railway staff, and recommended a railways institute, with accommodation for classrooms and social activities. The then Minister of Railways (Hon. Alfred Richard Outtrim) approved, and suggested that the institute be accommodated in the proposed new Flinders-st. station buildings. That plan was implemented. To finance it, the Commissioners opened a special fund, into which all fines imposed on employees for breaches of departmental discipline were paid, together with an equal amount from railway revenue. By 1909, the fund amounted to £4,347.



This framed photograph of the members of the original Council of the Institute was presented to the first President (Mr. W. R. Brown).

On June 2, 1909, a provisional committee, with William Robert Brown, a member of the then Transportation Branch, as president, began to prepare details of the proposed institute. Enrolment of members began, and more than 3,000 joined. The first meeting of members was held at the Masonic Hall, Collins-st. in October 1909.

At the time of its foundation, the institute included a circulating and reference library of 11,300 books, reading rooms, a billiard room and a gymnasium. Qualified instructors taught accountancy, bookkeeping, shorthand, typing, telegraphy, first aid and railway technical subjects. There was also a large concert hall for the musical society and military band (which later became affiliated) and for use as a ballroom. The original railway library was absorbed.

Since its inauguration, the V.R.I. has become a vital force in the social, cultural and sporting life of railwaymen.

It is just as popular in the country as in the metropolis. The first country branch was opened at Ballarat in 1916. Others followed.

The Commissioners have always given the V.R.I. solid backing. In 1926 they decided to replace temporary institute buildings in the country with modern structures. Membership of the institute throughout the State had then grown to more than 11,000, and the library stock stood at 49,000 volumes.

The depression of the 'thirties gave the institute a severe setback, but subsequent recovery was quick, and, by 1946, membership had grown to 17,000. Further interest in the organization followed the Commissioners' decision in 1933 to resume inter-system sport on a properly organized basis. Affiliation of football, cricket, tennis and other sporting bodies, and participation in well organized institute competitions, strengthened the recreational side of the institute's programme.

In creating a spirit of good fellowship, equipping young men for higher positions in the service and keeping them fit for their daily tasks, the V.R.I. is justly proud of its long and honourable record of service to members of the railway family.

Wholly set up and printed at the Victorian Railways Printing Works, Laurens-st., North Melbourne, for the Publishers, The Victorian Railways Commissioners. 2203—54.

VR News Letter

OCTOBER 1954

THE MONTH'S REVIEW

The Centenary in Print

APART from the last number of V.R. *News Letter*, a tremendous amount of type, pictorial matter and printer's ink has gone towards informing the community on what, last month, we celebrated, and why we celebrated it. The Department itself has published an attractive short history of Railways in Victoria as well as a special centenary edition of *Power Parade*. Both have been selling like hot cakes. Probably, however, more words about the Centenary have gone into the newspapers of Victoria than anywhere else. The *Sun News Pictorial's* impressive 28-page supplement took more than most. As a record, it was compiled in the best traditions and technique of popular journalism, and deserves to live long as a souvenir. To that end, the Department has arranged for an extra 31,000 to be printed and a copy is being distributed with this month's *News Letter*. A copy, also, of the short history will go with them.

Centenary Records

ALTHOUGH this centenary year of railways has not broken every traffic record, there are at least two commodities that have never been railed in such quantity before, in Victoria. They are brown coal and superphosphate. The brown coal tonnage record has been broken three times in less than six months. July saw the peak of 28,418 tons a week. Earlier, a new combined brown coal and briquette weekly tonnage record of 40,819 was set. Other records in this class of traffic were 13,587 tons for a week's transport of briquettes, and a new daily brown coal record of 5,377 tons. The delivery by rail of 558,714 tons of superphosphate during the financial year ended June 30 was another centenary year record.

With the modernization of locomotive power, the Department can look to the future with the greatest confidence and—who knows?—more records.

Anti-bushfire Measures

FREEDOM from major bush fire outbreaks during past seasons has engendered a feeling of complacency in the minds of many. The Department, however, does not share it, and is alert to the necessity for reiterating to both its staff and the general public the basic principles of fire prevention during the dangerous summer months. In a pamphlet to be distributed throughout the State, the Department underlines the importance of firebreaks. Making such breaks inside railway boundaries, clearing stumps and other fire hazards and early burning off are musts in the Railways' prevention programme. The pamphlet (as well as a poster to be displayed) will also stress the dangers of carelessly handling fire in country areas.

The Gippslander

UNOFFICIALLY known, during the war, by the Air Force at Sale, as the *Bairnsdale Bomber*, the 8.35 a.m. Melbourne to Bairnsdale and 1.30 p.m. Bairnsdale to Melbourne trains have now been dignified as *The Gippslander*. The Commissioners approved it as a result of several suggestions. Now taking its place in the select company of named trains–*Spirit of Progress*, *The Overland* and *The Flier*–*The Gippslander* is hauled by an L class electric locomotive to Warragul, R class locomotive to Sale and J class locomotive to Bairnsdale. When electrification to Traralgon is finished, next year, the radius of operation of the L class locomotives will be correspondingly extended. The naming of *The Gippslander* accords due recognition to the growing economic importance of Gippsland and the Latrobe Valley area.

Holiday Train Tours Popularity

THE Holiday Train Association will be 21 years old next year. It started in 1934 when 89 people, who had met and become friendly during a Christmas vacation tour on the south-eastern line, had a reunion at a city cafe and banded themselves into an association. At present there are more than 400 H.T.A. members. Before the last war, steam trains took holiday train tourists to popular country resorts at Christmas and Easter and for week-end trips on other public holidays. On the more extensive tours they slept on the train, and usually had their meals at hotels or cafes.

The war, of course, stopped these tours, but six years ago, they were revived with day trips in modern diesel railcars which had then begun to appear and which were ideal vehicles for the purpose. The move was highly popular with the Holiday Train Association.

This year tours have been made to Healesville, (including the Maroondah Dam and the Sir Colin MacKenzie sanctuary), Eildon Weir, the Glenmaggie Weir and Echuca. The last was heavily booked and was an outstanding success. Two 280 h.p. diesel rail-cars, coupled together, had to be used, the first having been booked out in three or four days. The route was by way of Castlemaine and Bendigo, and back through the Goulburn Valley. The tourist officer on board was kept busy answering inquiries about the next possible trip to Echuca.

Historical Relics

SINCE locomotive design and stages of Victoria's development have more or less synchronised, it is not difficult to understand why the Royal Historical Society recently moved for the preservation, for future generations, of some of the old iron horses that did so much to bring wealth and prosperity to the State. In asking the Minister of Transport to preserve the oldest of the broad gauge locomotives and some of the narrow gauge types that "have played their part in opening up the inaccessible parts of Victoria", the Secretary of the Society, Mr. A. T. Latham, emphasized what other countries have done. At Darlington, in England, the first railway locomotive in the world is preserved. Many other early locomotives and some famous later ones that created speed records are housed in the York Railway Museum. The New South Wales Railways have preserved, in the Technological Museum, Sydney, their first locomotives built by Robert Stephenson and Company. Queensland, also, still has its first locomotive under a small shelter roof in a railway yard accessible to the public.

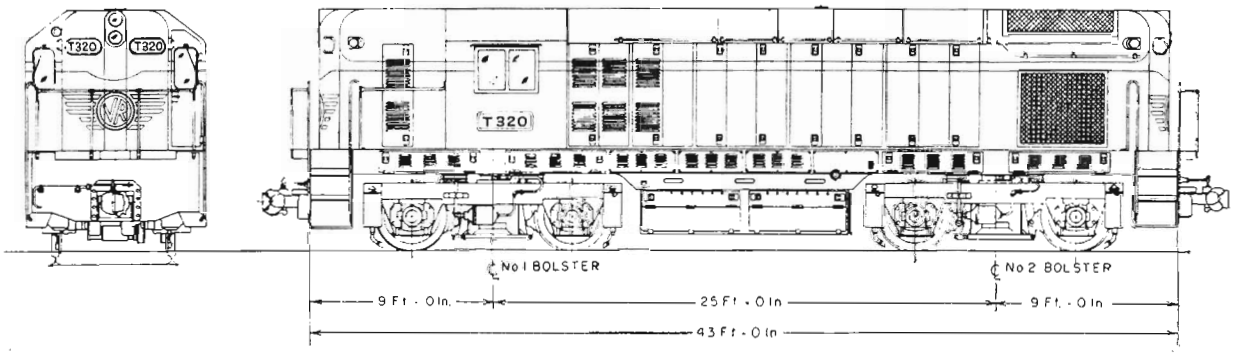
Society's Suggestion

MR. LATHAM suggests that an old narrow gauge V.R. locomotive be preserved at the end of each of the recently closed Wangaratta-Whitfield, Upper Ferntree Gully-Gembrook and Moe-Walhalla lines, on a concrete slab under a roof.

The T class (at one time classified as 94) the oldest available broad gauge locomotive in Victoria, has already been preserved. It was one of the showpieces at the centenary exhibition of rolling stock at Spencer-st last month. It will now be joined at Newport Workshops by NA 3, the "puffing billy" that endeared itself to many thousands of children of six to sixty, on the Upper Ferntree Gully-Gembrook line. The two old timers will remain at Newport Workshops, unless accommodation can be provided for them in what the Department regards as their rightful and most appropriate place, the Museum of Applied Science.

OUR FRONT COVER

shows the interior of the Elizabeth-st tower clock and the driving spindle. The camera has caught the silhouette of the hands and the lights that illuminate the clock face at night.



LOCO CLASS T — 900 H.P. DIESEL-ELECTRIC LOCOMOTIVE

This diagram gives a general impression of the new locomotives and the leading dimensions. The colour scheme is similar to that of the B and L classes and the rail-motor fleet—royal blue with gold trimmings at the front and back, merging into a band along both sides towards the top. The conventional wings and V.R. monogram at front and back are also gold.

AND NOW THE T's

The 25 general purpose diesel-electric locomotives to be built for the Department by the Clyde Engineering Company, of New South Wales, will, ultimately, displace the Y, E, D1 and D4 classes of steam locomotives, now obsolete after up to 60 years of splendid service.

THE locomotive unit will be the Clyde Electro-Motive Division 900 h.p. type, with the Association of American Railroads designation of B-B. This indicates that there are two four-wheel bogies, with a traction motor mounted on each axle.

Controls are at one end only on the left hand side facing forwards, and with switches and gauges are situated conveniently for the driver. Protection devices and alarms, such as warning lights or alarm bells, will indicate wheel slip, hot engine, low oil and when the voltage drops to zero.

The engine is the compression ignition type, two stroke cycle, with unit injection Roots Blower scavenging through cylinder wall intake and with multiple valve exhaust. The eight cylinders are 8½ in. diameter and the stroke 10 in. The engine is similar to the 16 cylinder type fitted to the B class locomotives.

An important feature of the power unit is the hydraulically controlled load regulator, which is very simple in design and efficient in operation. It maintains a constant horsepower output corresponding to each throttle position. The fuel tank holds 670 Imperial gallons.

The main generator, directly coupled to the engine crankshaft through a flexible coupling, converts mechanical energy into 600 volt D.C. electrical energy. This is conducted to the electrical cabinets, and from there is distributed to the four traction motors geared to the axles. An auxiliary D.C. generator, also directly driven, supplies current for control cabinets, lighting and storage battery charging. The engine is started by using the main generator driven as a motor from the battery.

The engine cooling system consists of a direct driven centrifugal water pump on the engine, with radiators, cooling fan, water cooled oil cooler and water tank. The engine lubrication system comprises two positive displacement gear type pumps combined in a single unit. One pump delivers oil for the pressure lubricating system, the other for piston cooling. The engine fuel system has a return flow single D.C. motor driven gear pump protected by a suction filter.

All windows are glazed with safety glass. Cab ceiling and walls are insulated against heat and sound. The two upholstered swivel seats, adjustable for height, are fitted with back and arm rests. The inside of the cab is finished in suede grey dulux trimmed with black. Connexions are provided for electrical portable cab heaters and electric kettle. Westinghouse A-6-ET brake equipment is fitted, with single acting brake cylinders mounted on each bogie, and operating clasp brakes, two on each wheel.

Many of the component parts will be standard with those on the main-line diesel-electrics, thereby keeping stock maintenance items to a minimum.

Known as the T class, the new diesel-electrics will be numbered from 320 and onwards. Their maximum static axle load will be a little over 15 tons, with a total roadworthy weight of about 60 tons. The maximum permissible speed will be 60 miles an hour.

The first of the new diesel-electrics is expected about April next year, with progressive deliveries at the rate of two a month. Interstate transport arrangements for them will be the same as those for the main-liners. Each locomotive will arrive on 4 ft. 8½ in. gauge bogies at Bandiana, and be transferred to 5 ft. 3 in. gauge bogies. Then, after a short trial trip, it will take a goods train to Melbourne.

The T type locomotive has proved remarkably efficient on American railways. Nearly 3,000 of these general purpose diesel-electrics are in service there on more than 150 railroads.

The new locomotives will be a very useful addition to the Department's expanding fleet of modern locomotive power units.

Setting line and distance to reference peg.

KEY MEN OF THE TRACKS

Success in the construction and economical operation of railways has been greatly influenced by the skill and initiative of their surveyors.

SURVEYS for Government railways in Victoria were first carried out, in 1855, by the Surveyor-General, Captain Andrew Clarke.

In 1856, when the Victorian Railways Department was established, Captain Clarke, as Surveyor-General, was appointed a trustee of the Railways. At this time he made recommendations to the Government for the possible routes of main trunk railways.

In 1857 the Board of Land and Works was established, co-ordinating the duties of the Commissioner of Public Works and the Surveyor-General. Railway construction became the responsibility of the Board. A special Railways Construction Branch of the Board was confirmed by legislation in 1892.

Solving problems in duplications, regrading, station yards, sidings and alterations of existing track work are everyday tasks in the survey section of the Way and Works Branch.

In recent years, with more money for trackwork, survey parties have been kept busy on the duplication and reconstruction of suburban and country lines, including work on the new Richmond Station and preliminary survey work on the projected city underground railway.

The new flyover at East Camberwell, which will enable down Ashburton trains to pass over the Box Hill lines, has presented the surveyors with some novel problems because of the confined space in which the project is located.

Chainman driving reference peg.

Duplication and electrification of the Gippsland line is a major job still occupying the surveyors. Duplication is, of course, a much bigger job than electrification.

An accurate check is kept on track alignment by survey parties, each made up of a surveyor and three assistants. With high speeds the order of the day, it is important (for the survey section) to improve the alignment of existing curves. This involves easing the approaches by means of suitable transition spirals and often a slight relocation of the existing curve ; complicated, in many instances, by the existence of bridges, deep cuttings, and station platforms which can only be altered at great cost.

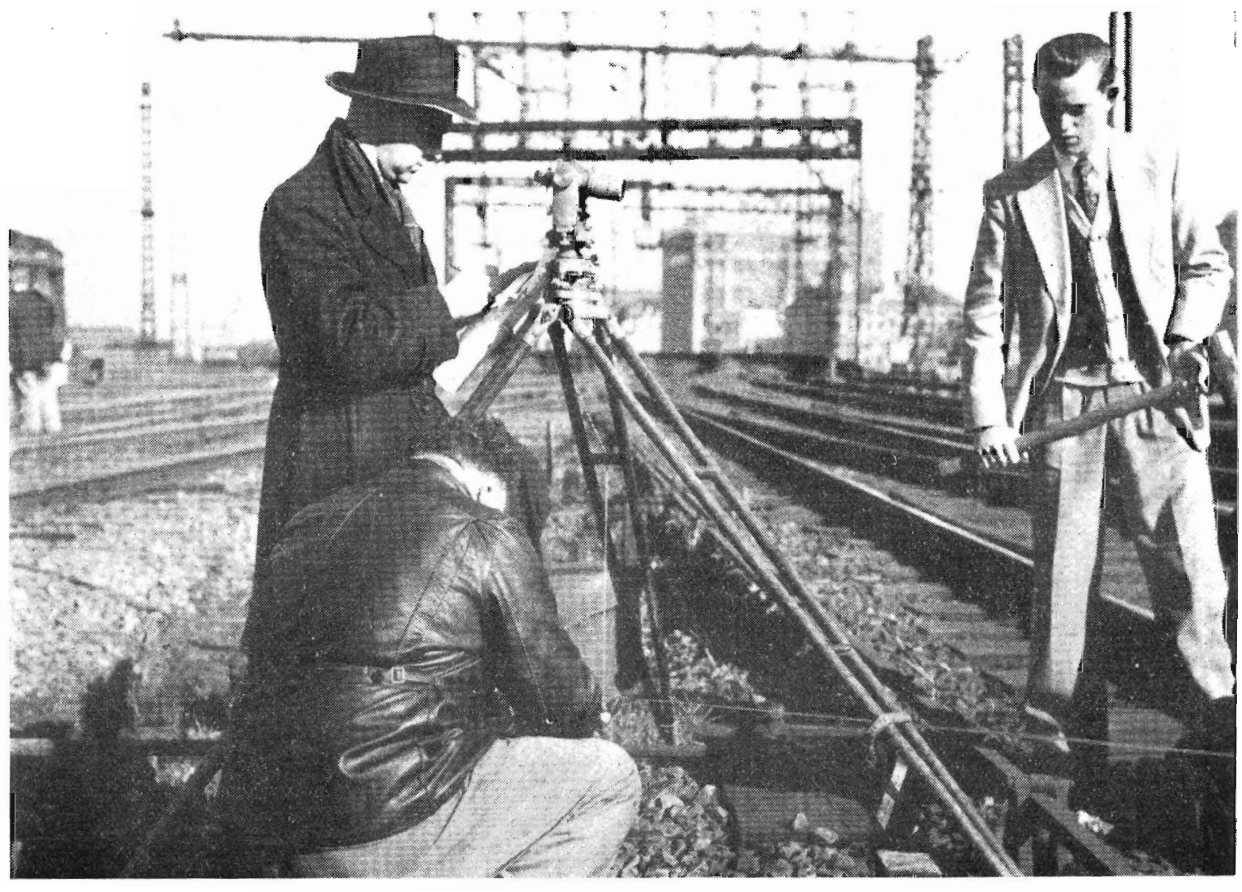
During recent years, realignment has been carried out by the method known as string-lining (stretching a fine wire around uniformly regular points on a curve and measuring the distance between the wire and the curved rail). This greatly reduces instrument work, and, at the same time, admirably fulfils railway requirements of speed and accuracy.

Since World War Two, aerial surveys have greatly assisted the section in setting out new projects and in keeping its records up to date.

While working in areas with frequent train services, the survey parties must make the most of every minute between trains to complete their tasks in reasonable time. Sometimes surveys can only be conveniently done when trains are not running : that is, conveniently for the job but not so conveniently for the surveyor. Again, where work is being set out and a time-table has to be observed, the lot of the surveyors can be hard when weather conditions are unkind. However, surveyors are usually a healthy and cheerful race, which is just as well, because there is always a demand for them when big things have to be done.

(*above*) Setting down base line along Swan-st., Richmond, for the rearrangement of the station.

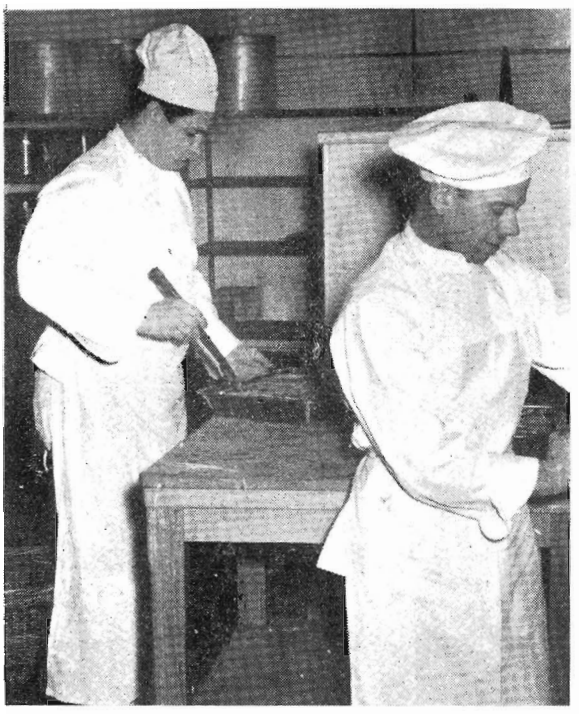
(*below*) Setting out alignment of new tracks at the rear of Richmond station.



Making final check of layout of track work in the Flinders-st. Yard.

RAILWAY U.N.O.

The Newport Workshops canteen is a miniature U.N.O.



Left to right: **Cooks Alfred Drobilic and Stefan Butyn preparing meals in the Newport canteen kitchen.**

Under the genial managership of Mr. H. Lawrence, a representative staff from the major European nations works in perfect amity, preparing meals for hungry workers at Newport and Spotswood Workshops, as well as for the boarders at the Newport Workshops hostel. The meals for Spotswood are sent there in hot boxes.

Presiding over the Newport kitchen is big, smiling Alfred Drobilic who hails from Brno, Czechoslovakia. Before coming to Australia, Mr. Drobilic cooked at the Grand Hotel, Piestany, and the Royal Slavia at Brno. His culinary arts are somewhat restricted by the penchant of Australians for plain cooking. Outside his kitchen he is a keen student of the turf, and after five years in Australia he still cannot understand why the favourites don't always win.

His chief assistant is second cook S. Butyn, a Ukrainian from Tarnopol, Poland. With its Russian, Pole and Ukrainian population, Tarnopol is typical of the many sensitive border points from which sparks are possible to set off the European powder barrel.

Stephan Butyn exhibits nothing of these tensions. As he expertly slices meat he explains that all his life he has been working in a kitchen. From 1940 he served in the Ukrainian army as a butcher. With the cessation of hostilities, he joined the American Army of Occupation in Germany as a cook, moving with them through Nuremburg, Frankfurt-on-Main and Hamburg. Stephan still has happy memories of his time with the Americans. Before coming to Australia with his wife and son in 1950 he was cook at a displaced persons hospital at Hamburg.

Another member of the happy band is vegetable preparer C. Yacoub, of Beirut, Lebanon, who was a fruiterer in his own sunny land before coming to Australia.

A key worker of the canteen is Foreman M. Susnica, formerly of Belgrade, Jugo Slavia. With the British Army at Naples, Rome, Turin and Milan, his knowledge of Italian, Polish, Russian and German was as useful to him then as it is at Newport where many New Australians patronize the canteen.

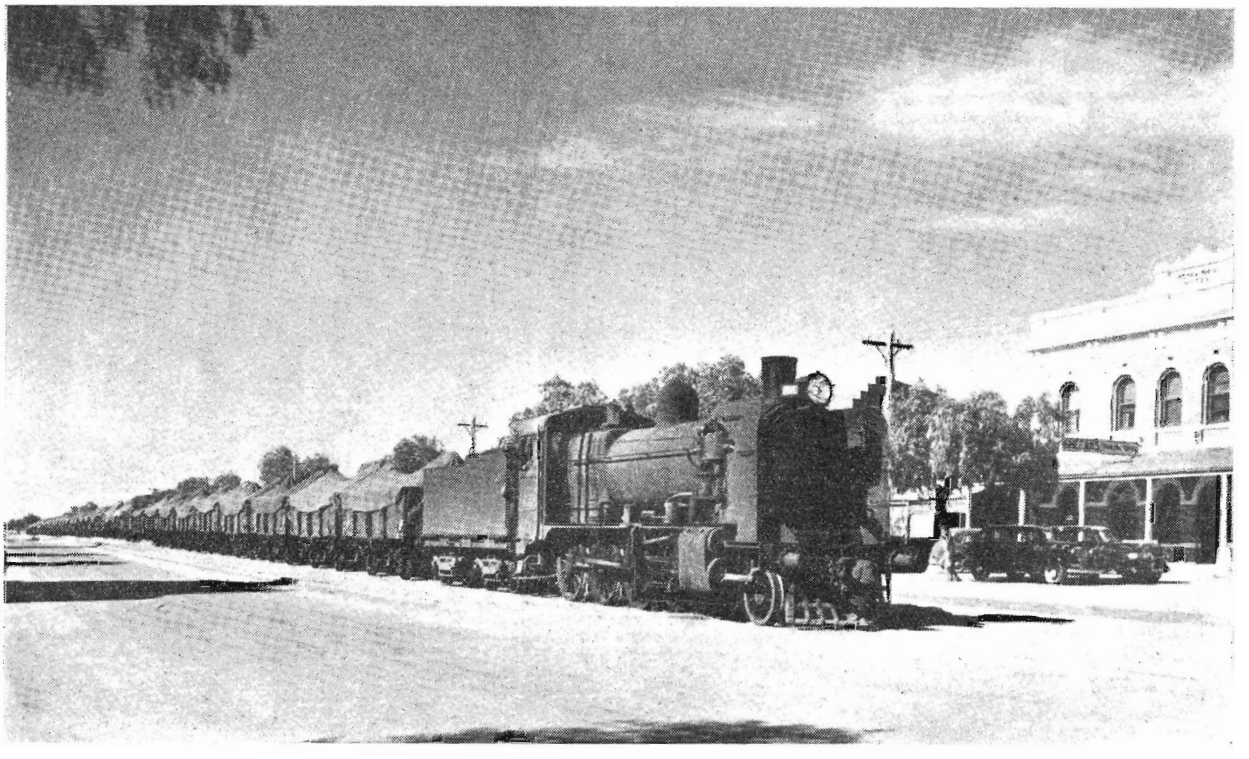
A fellow compatriot is vegetable cook P. Corva. Before coming to Australia Mr. Corva was a full time fisherman at Fasana on the Istrian Peninsula. Fishing in the Adriatic produced salmon, bream, crayfish, eels, and—oh, so many other fish. Mr. Corva waves his hands expressively as he remembers the blue seas, the mountainous coasts of his country, and the fish.

Manager Lawrence successfully combines the qualities of diplomat and caterer in his little U.N.O., and his background supplies the reason. A caterer all his life, first in Scotland during World War One and then at the old Martynside Aircraft Plant in the South of England, wide experience has stood him in good stead during his subsequent 32 years with the Victorian Railways.

Left to right: **Vegetable preparer P. Corva, Mrs. S. Doig, sweets cook, and C. Yacoub getting a meal ready.**

(*above*) **After queueing to select a meal, the workers hand in their tickets.**
(*below*) **Lunch time in the canteen. Meals are served cafeteria style and taken to the tables. The quality of the meals is amply demonstrated by the manner in which the 300,000 satisfied customers each year consume them.** *Photos: G. Thomas, Newport*

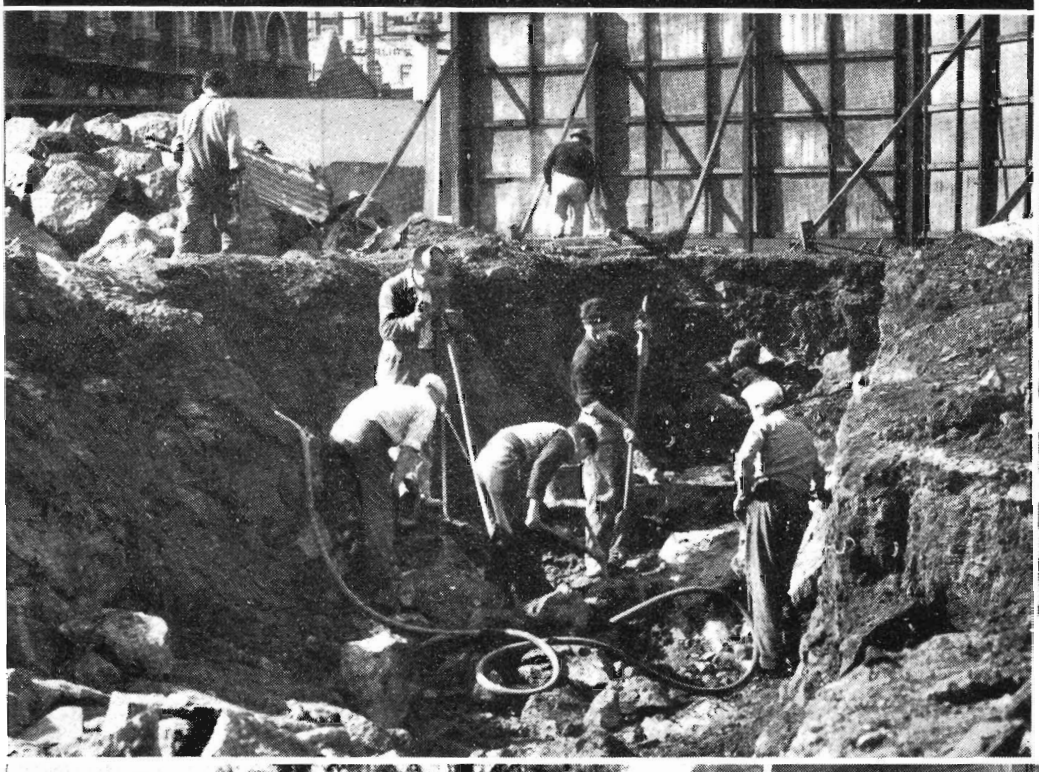
OFF THE BEATEN TRACK



THROUGH PARK : (*above*) Loaded with briquettes, and sometimes firewood, a goods train runs from the Melbourne Yard to Fitzroy siding on Mondays to Saturdays (inclusive). The train runs through Fitzroy's Edinburgh Gardens. *Photo : A. R. Lyell*

AND TOWN : (*below*) Wycheproof, in the Mallee, is the only place on the system where a train runs along a track through the main street.

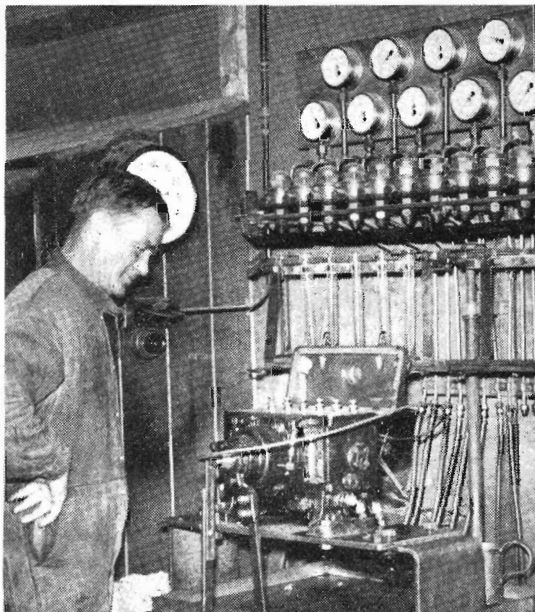
AROUND THE SYSTEM



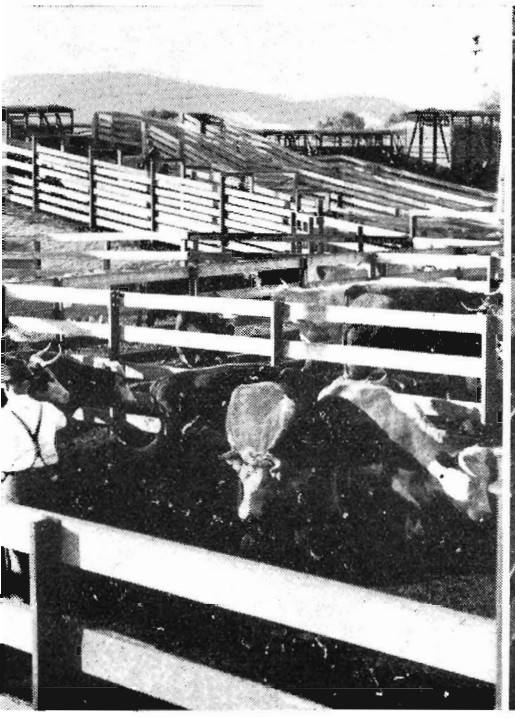
ROUND-UP : Mustering
This station serves a v

EXCAVATING : (*left*)
mond station.

STEEL SLEEPERS : Some of the 200,000, imported from France, are being laid at Tallygaroopna.



LUBRICATION TEST PLANT : This is used at Newpo
things, types of grease for inside roller bearing axle b

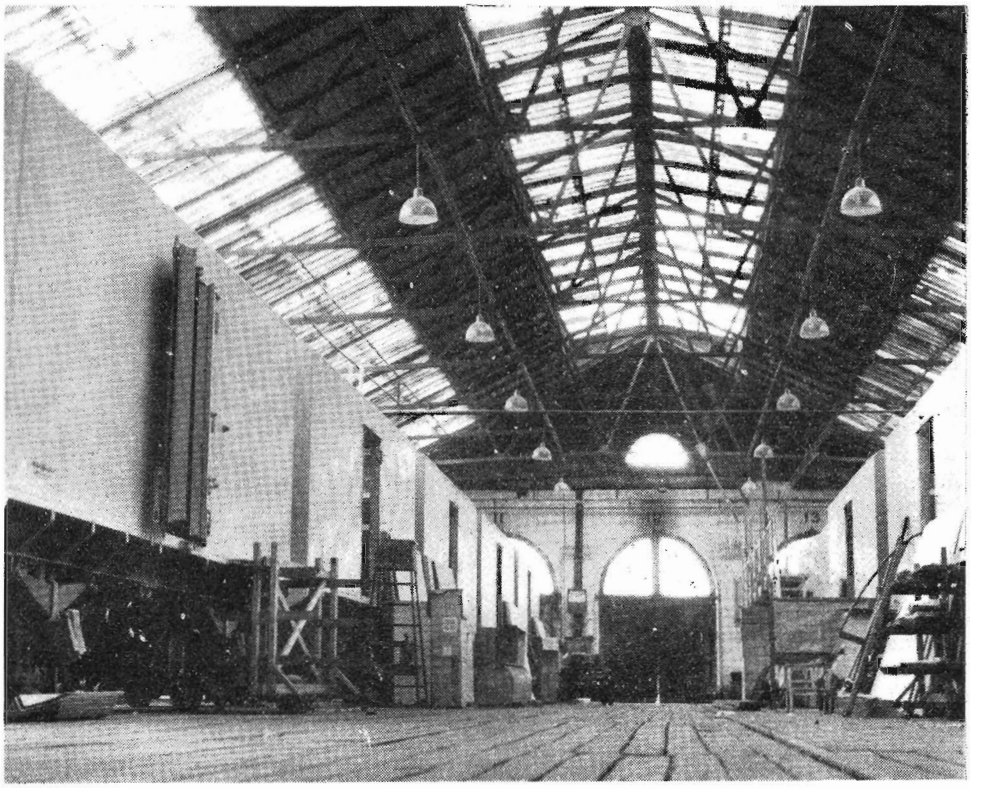


ks before loading them at the Cudgewa cattle race.
g cattle raising district.

FACE-LIFT : Heyington station looks spic-and-span after its new coat of paint and with its re-conditioned platforms.

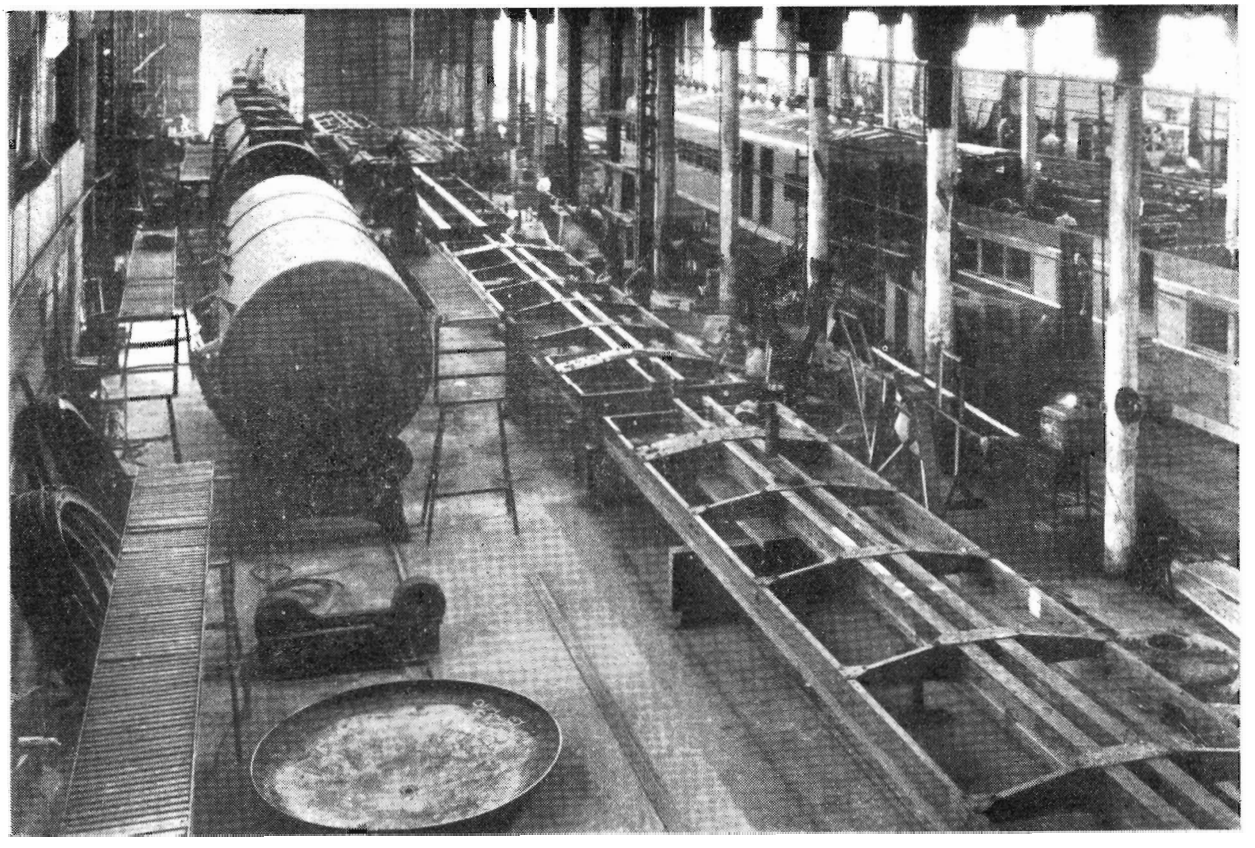
e foundations of the new Rich-

kshops to investigate, among other



T TRUCKS : Some of the Department's 50 new refrigerated trucks in the east block of Newport Workshops. They are now being produced at the rate of about two to three weekly.

TANK WAGGONS



Tanks and frames on the assembly line in the workshops of a N.S.W. engineering firm.

The development of the railway tank waggon is closely allied with the industrial growth of Victoria. As the consumption of oil and petrol increased, so did the size and capacity of the oil companies' tank waggons.

THE 3,000-gallon capacity tanks of the early 1900's have given way to the 10,000-gallon types in which are now transported petroleum products to depots throughout the State.

Actually, the first tank waggons manufactured by the railways at Newport Workshops were four-wheel type, rectangular water tanks, with a capacity of 2,000 gallons. They were used to carry water for locomotive and domestic purposes and furnace oil before the days of the highly developed petroleum industry. These waggons proved invaluable in times of drought.

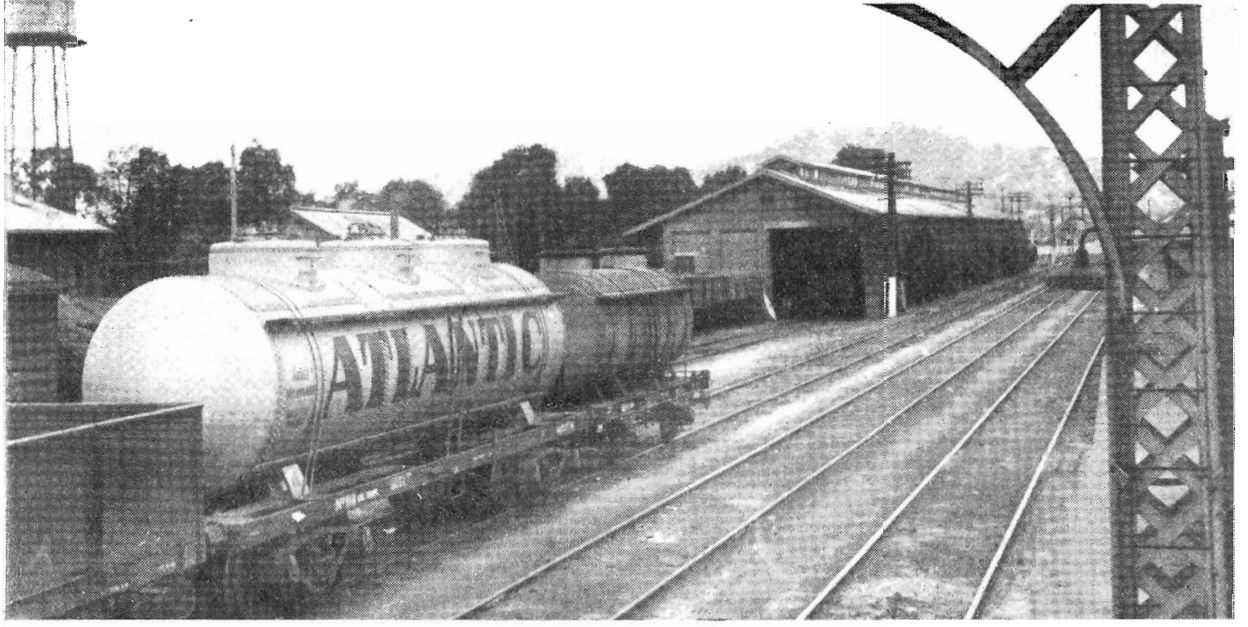
The Department's annual report of 1903 underlines the worth of these waggons. To quote it: "a drought almost unparalleled in its severity and widespread influence was experienced in portions of the north-eastern and in the northern and north-western areas of the State. In order to assist the settlers as far as practicable, water was carried and delivered at very low rates".

When four cylindrical type oil tank waggons of 3,000-gallon capacity were built at Newport Workshops in 1902 for a Melbourne oil company, there were very few motor cars on the road; but, within two decades the oil industry was given such impetus by the development of both cars and secondary industry, that a demand arose for even bigger oil tank waggons.

About 1926, tank waggons of the four-wheel, fixed wheelbase type were built to hold 4,500 gallons. By 1927 the demand had grown to such an extent that standardization became necessary. Representatives of the various companies conferred with the Department's experts, and it was agreed to construct a bogie type waggon and a tank with a 9,000-gallon capacity.

About 1938, the consumption of petroleum products in Victoria demanded still larger tank waggons, and 10,000 gallon capacity tanks began to appear on the system.

In the preceding decade or so, construction had also improved. Up to 1925 tanks were rivetted together. Then, welded types were introduced. Most of today's tanks are welded. All conform strictly to the design and manufacture approved by the Australian and New Zealand Railways Conferences.



The larger rail tank waggon is divided into three compartments and holds 9,000 gallons of motor spirit. The other is a 4,500 gallon capacity tank waggon built at Newport Workshops, in 1926.

Tank waggon traffic has increased more and more in the post-war years. Tanks now carry furnace, diesel, and lubricating oils, kerosene, distillate, motor spirits (highly inflammable products), water, bitumen, weed killing compounds, gases, ammonia, acids, tar fuel, wine and alcohol.

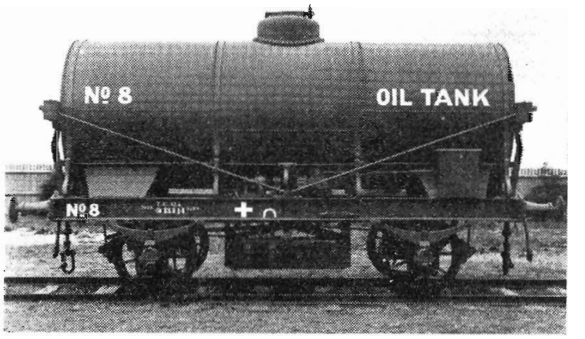
Tanks are classified and grouped according to the types of commodities handled. There are general purpose tanks for oil, kerosene and petroleum products, acid tanks, tanks for gases that exert a pressure up to 300 lb. per square inch, and removable tanks for gases with an even greater pressure than this. Tanks are insulated or uninsulated, lined or unlined.

Heavy furnace oil is carried in tanks equipped with steam pipes so that it can be heated to a fluid condition and more easily handled. Asbestos lagging, or covering, retains the heat in bitumen to enable it to be used immediately it is discharged from the tanks.

The anti-corrosive surfacing of tanks constructed to convey acids has also proved effective. At present the Department is building at Newport Workshops, Weedex tanks with anti-corrosive lining on the inside surfaces.

Until recent years the Department built the underframes and bogies for waggons, and the oil companies had the actual tanks built privately. The assembly was carried out at Newport Workshops. The tanks, of course, were built to railway specifications. Shortage of manpower and materials has made it impracticable for the Department, in more recent years, to build any tank waggons for the companies, and the complete job is now done by private contract.

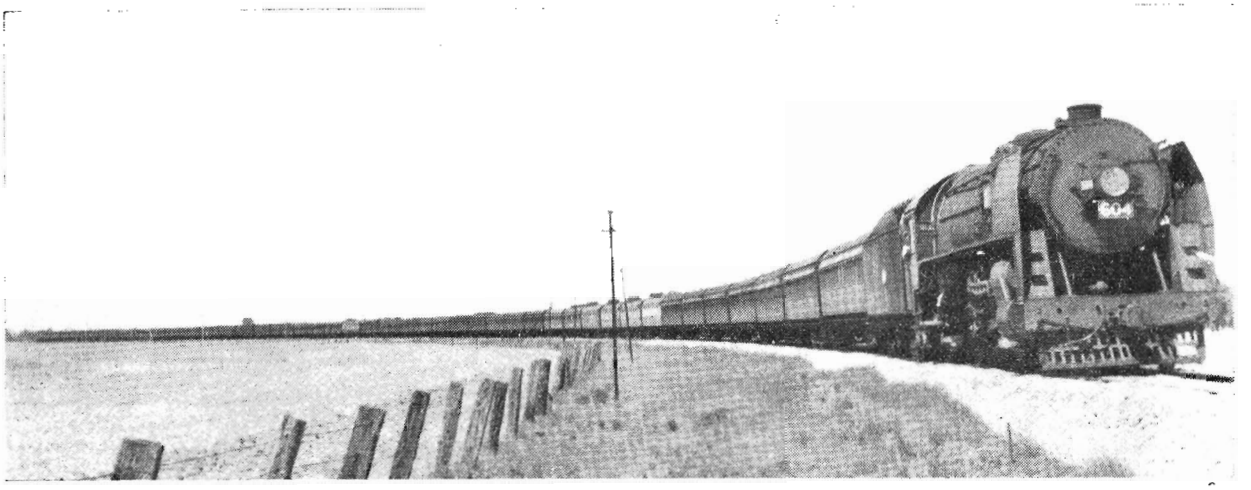
Tanks conveying highly inflammable fluids and gases have, by leakage or collapse, caused serious fires in other parts of the world. That the Victorian Railways have a clean record in this regard is a tribute to the care and attention to detail given in drawing up specifications for tanks and the careful handling of the commodities they convey.



No. 8, one of the first V.R. built rail tank waggons. It has a capacity of 3,100 gallons and is used to haul oil for electrical transformers.

Every week large quantities of road-making bitumen leave Melbourne by rail and reach Adelaide within 24 hours, hot and ready for immediate use. And, every day road builders, up to 100 miles from Melbourne, have hot, fluid bitumen delivered to them ready for road spraying operations. The Vacuum Oil Company owns a fleet of insulated rail tank cars, each of which can carry 10,000 gallons, or 40 tons, of bitumen. Before it is loaded for shipment, the bitumen is brought up to 400 degrees Fahrenheit. Special insulation keeps the fluid drop so small during the journey that the bitumen remains pumpable for a long time after reaching Adelaide. The largest single bitumen consignment, so far, to make the interstate journey is 120 tons.

LINES FROM OTHER LINES



South Australian Railways Pacific locomotive No. 604 hauling an empty car special of 43 carriages. These carriages were loaned to the Victorian Railways for Royal tour traffic. The gross trailing load was 1,133 tons. This is believed to be one of the largest and heaviest passenger trains operated in Australia.

Photograph: J. L. Buckland

Hunt For New Traffic

THE first of the new multiple-unit sets to be built under the £2 million programme of British Railways for using light-weight diesel trains in six selected areas went into service in the West Riding of Yorkshire recently. The two-tone horn of the new trains has been likened to a hunting call, symbolising British Railways' latest drive to "beat the coverts" of potential passenger traffic on all its services. The hunt, it is said, is for more business and greater efficiency, and all departments are in it.

B.R. Southern Region's New Diesel

THE third and most powerful of the Southern Region's (British Railways) main-line, diesel-electric locomotives, No. 10203, was brought into service recently. Built at the Ashford and Brighton locomotive works, this 2,000 h.p. engine, with driving cabs at each end, weighs 132 tons in working order. It has a maximum speed of 90 miles an hour. The new locomotive will be used on express services between London and Weymouth or Exeter.

First Passenger Railway

THE Swansea and Mumbles Railway, which celebrated its 150th anniversary in June last, is not only the oldest surviving passenger railway in the world, but has other claims which lend it a distinction surely enjoyed by no other line only 5¾ miles in length. The railway, which has used animal, compressed air, steam, battery, petrol, and diesel traction in the course of its long life, is now worked by 106-seat double-deck electric cars, the largest vehicles of their type in Britain. Even in its administration the Mumbles Railway is unusual; it is claimed to be the only one in Britain, if not in the world, to be controlled by a bus company.

Gauge Compromise

MORE than 100 years ago, the battle of gauges was raging in Ireland. It began when the Dublin and Drogheda Railway decided on a gauge of 5 ft. 2 in. The Ulster Railway Company had a 6 ft. 2 in. gauge. In the deadlock which followed, the Board of Trade sent over their Inspector General of Railways, Major-General Pasley, formerly of the Royal Engineers.

He tackled the problem with military vigour and undoubted impartiality. After writing to the leading railway engineers of the day, he sifted their answers. From these he discovered that 5 ft. was the narrowest and 5 ft. 6 in. the widest advisable for economy and convenience of construction. By splitting the difference he arrived at 5 ft. 3 in., and there the Irish railway gauge has remained.

Alco Report

THE report of the American Locomotive Company for 1953 discloses that locomotives now form less than one-quarter of the total business. Armaments form over half. Locomotives are now all diesel. The company expects that in a few years the volume of locomotive service operations will largely fill the gap caused by the decline in locomotive sales. These service operations include sales of parts, rebuilding and modernization of locomotives and their main constituents, and the replacement of earlier locomotives by the latest models.

Piggyback Services

THE New York Central System is beginning to haul motor common carrier highway trailers on flat cars, and is building new terminals for this service in five cities. The railroad's engineers are completing plans for terminals at Chicago, Cleveland, New York, Boston and Detroit. The terminals will accommodate 75-ft. flat cars carrying two trailers each.

The Missouri - Kansas - Texas Railroad is also moving towards the creation of a piggyback service which, at the outset, will be offered to motor common carriers in addition to the railroad's own motor transport subsidiary.

Waiting Room For Children

A waiting room for children and young people is to be opened at Innsbruck Central Station. It is the first experiment of this type by the Austrian Railways. In this waiting room, students waiting for trains to return home may do their homework, read the books of the library provided, and play games. The provision of a similar room at Graz is being considered.

Moving Grain In Bulk

SEVERAL years ago the French Railways, in conjunction with flour millers, investigated the possibility of moving grain in bulk instead of in sacks. A type of tank waggon was specially fitted with hopper doors and put into service where the traffic was heaviest. Proving successful, the arrangement is now being extended and, since 1952, 100 more waggons of this type have come into operation. The capacity of the tank is 1,500 cubic feet.

AMONG OURSELVES . . .

Sister Male

Middle East To Newport

UNTIL Sister M. E. Male accepted the appointment of casualty officer at Newport Workshops, about six months ago, she was in the Australian Army Nursing Service. During World War Two, she was with the 4th Australian General Hospital in the Middle East, and, later when the big offensive was launched against the Japanese in the Pacific, she was posted to Moratai and Labuan.

Sister Male is very much looking forward to the work she has taken up. "The fewer casualities I have to treat the more evident it will become that employees are responding to the appeal for greater concentration on safety methods and practices", says Sister Male.

Incidentally, suggestions for the prevention of accidents are welcomed by the Railways Safety Council, Head Office, or the Chairman of the Public Relations and Betterment Board.

Prizes For Beauty

AS an incentive to occupiers of Departmental residences to beautify them, the Commissioners, following their usual practice, have allotted prize money for awards in each district throughout the State, under the following divisions—Best kept departmental residence: 1st £9.0.0; 2nd £4.10.0. Most improved departmental residence (with piped water supply): 1st £6.5.0; 2nd £3.0.0; (without piped water supply): 1st £6.5.0; 2nd £3.0.0.

Service

FAVOURABLE comments have been made by travellers using Ascot Vale station on the neat way the departure times of the trains have been mounted, framed and posted on the barrier gate. It was done by Clerk J. Lesinskis, a New Australian who has been with the Department since 1950. As he has since transferred to Jolimont he has not had the satisfaction of seeing the full results of his labour.

Safety First Exponent

PERCY A. WALLACE, Ballarat's first railway road motor truck driver, who has retired, was, during his career, awarded the silver medal for five years' safe driving, the gold medal after 10 years on the road without an accident, and the silver triangle for 17 years of safe driving. He also holds 15 bars to these medals. All his years behind the steering wheel were free of accident. His send-off at the Works Depot was attended by representatives of all branches. This was not surprising. There was no more popular railwayman at Ballarat than the genial and conscientious Percy Wallace. He was given a fireside rocker and a case of pipes and tobacco. In retirement, Mr. Wallace intends to concentrate on his two main hobbies, gardening and fishing.

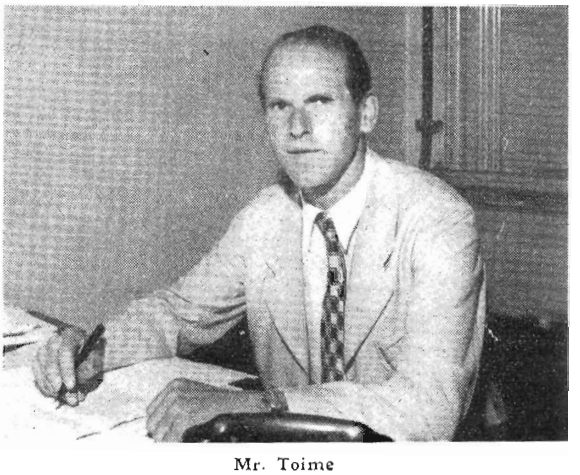
Cranes Save Backs

MEMORIES of improvements made over the years in stores handling were recalled by Office Assistant J. F. Viccars who recently retired after nearly 40 years in the Stores Branch, most of them as a storeman. A storeman's job is now a good and interesting one, with all the heavy work done by mobile cranes and trucks, he says. In his younger days, stores were stacked in bins and placed on shelves which, up to 15 feet high, needed a ladder to reach them. Manhandling 3-cwt kegs of whitelead and 40-gallon barrels of engine oil was typical of the many heavy jobs that had then to be done, but which have since been practically eliminated by modern mechanization. Mr. Viccars has left for a long holiday in Queensland. Afterwards, he hopes to do quite a bit of trout fishing at his favourite spots on the Moorarbool river.

Citizen of the World

A TRUE cosmopolitan is Platform Indicator Maintainer Elmar Toime of the Signal and Telegraph section Laurens-st. North Melbourne. Born in Estonia, which, with his parents, he left during the stormy years after the first World War, Mr. Toime has lived in Switzerland, France, Austria, Germany and Italy, and has now (he hopes) settled down in Australia. The disabilities which, as an alien, he has endured have convinced him of the value of the cosmopolitan outlook and of a generous and humane treatment of foreigners by the communities in which they live.

In Switzerland he worked in the building industry during summer (he had some training as an architect), and in winter, the slack season, was a hotel reception clerk. An interest in dieting took him to a French sanatorium where he also studied massage. When the Allied forces landed in the south of France, in 1944, he was caught in the maelstrom and, after a series of the kind of mishaps that occur in wartime when identification papers are mislaid, he was shipped to Italy. There he worked as an interpreter with the British army. When the war was over, he joined a tourist bureau at Naples, where he wrote and translated tourist pamphlets and took parties over Pompeii, Capri, Amalfi, and other places that have been tourist resorts since the days of Nero. He took one party of forty schoolgirls and two nuns over rough goat tracks and beside precipices to the top of Mt. Epomeo on Ischia. They left the township below at midnight so as to see sunrise over the Bay of Naples from the top. Half way up, a dense fog came down, but by joining hands and forming a chain, he managed to bring them safely, if anxiously, to the top.



Mr. Toime

Mr. Donald

Link with Hobson's Bay Railway

THE centenary of railways in Australia is of great interest to railwaymen throughout the Commonwealth, but particularly so to Mr. James Kenneth (Ken) Donald, clerical head of the discipline and works and public complaints room of the Traffic Branch at Head Office. His father, the late Mr. James Donald, was a driver with the Hobson's Bay Railway Company.

One of Mr. Donald's most interesting stories about the early days of railways concerns his grandfather, the late Mr. James Higgins, who was one of the contractors for the North Brighton to Brighton Beach railway line. For the earth cartage work he gave a job as dray driver to a bright lad called Thomas Bent. The latter ultimately became Minister of Railways and one of Victoria's most enterprising and distinguished Premiers.

As a boy, Ken Donald remembers living at Port Melbourne which had only one Sunday morning train to Flinders-st. to connect with other suburban trains. Late comers and their families who wanted to visit friends in the suburbs gathered at the Graham-st. signal box and travelled in coupled locomotives to the city. Some crowded into a driver's cabin, and the rest sat on the coal in the tender.

Ken's most exciting experience was at Flinders-st. station during the 1908 visit of the American fleet, to which people flocked. One night Flinders-st. station was packed with a seething, struggling mass of people who had visited the ships. Some were knocked down in the crush around the ticket windows. Rescuers had to rip the brass guards off the booking office windows to pass the injured through them for treatment by first aiders who worked far into the night.

Living Up To The Tradition

EVER since the time of Surveyor-General Captain Andrew Clarke, who, by the end of 1855, had surveyed 600 miles of proposed railway lines in Victoria, the railway surveyor has played an important part in the development of the State's railway system.

Mr. Irvine J. Jones, who joined the Department's Estate Office staff as a Lands Officers Assistant (junior) in 1949, has started well in a profession with great traditions. He was among a record number of 14 candidates who graduated as surveyors earlier this year, and won the prize awarded by the Institution of Surveyors to the most outstanding graduate. At a combined meeting of the Surveyor's Board of Victoria and the Institution of Surveyors recently he was presented by the Surveyor-General with a certificate of competency and licence to practice. He also received a cheque and certificate from the President of the Institution of Surveyors. Mr. Jones was awarded a Government free place at Melbourne University, where he is now studying for his degree in civil engineering.

Footplate Memories

MR. A. J. (Bert) Burns realized a boyhood ambition when he became a railwayman. The son of a repairer at St. Arnaud, young Burns lived alongside the railway line, and, in an old exercise book, used to jot down the class and number of every locomotive that puffed past the Burn's cottage. When, in 1905, he had just left school, the line between St. Arnaud and Donald was being strengthened and workers were wanted. He joined. As the line job progressed, young Burns had to leave home for the first time and live in a tent. Later, he went into the roadmaster's office as a lad labourer and was made a permanent hand in 1907.

At this stage of his railway career, Bert Burns got an urge to work on the footplate. His first big step was to transfer

Mr. Burns

to the Rolling Stock Branch as a cleaner at Maryborough. He passsed the " red book " and started firing trains between Donald and Mildura. In those days most of the line between Woomelang and Mildura was unfenced, and it was not unusual for kangaroos, emus and Mallee hens to burst from the scrub and race in front of the engine. Bert also fired trains in the early days of the State Coal Mine, when Wonthaggi was a tent town.

Fight Against Drought

MR. Burns got his first experience of suburban passenger work at Port Melbourne in 1910. Subsequently, as a passenger train relieving fireman, he worked on the Adelaide and Sydney expresses and fired trains to Port Fairy. After studying at the V.R. Institute, he became a driver. His first driving job was on a train hauled by a V class locomotive to Mansfield. In the severe drought in 1915, he was transferred to Ararat to bring out live-stock for agistment. Water for Ararat, at that time, had to be brought from Glenorchy and Beaufort.

Exciting Arrest

ONE of the most exciting experiences Mr. Burns had, was when he was on the footplate of a C class engine hauling the 7.10 p.m. north-eastern goods train. As it

passed through Essendon, he noticed two men climbing into an empty truck, and then into a perishable truck, near the engine. Mr. Burns hastily scribbled a note and threw it to the nearest stationmaster, asking him to have the police advised at Broadmeadows. When the train arrived there, the police had not put in an appearance, so Mr. Burns and the stationmaster entered the truck and detained the two men until the police arrived.

In 1926, Mr. Burns transferred to the Electric Running Depot, and as foreman, gave practical instruction to a large number of drivers in electric train running. He reached the peak of his railway career as Electric Running Superintendent. Now in retirement after nearly half a century of railway work, Mr. Burns intends to garden and golf.

Signed Off

AT a happy little ceremony recently, Mr. O. Keating, Chief Clerk, Rolling Stock Branch, presented Mr. H. G. Ruff with a wristlet watch. Mr. Ruff is retiring from the Department owing to ill health. Known to the majority of the Rolling Stock Branch as "Horrie," Mr. Ruff had made many friends during his Departmental career, partly due to social accomplishment (he liked to trip it on the light fantastic toe in younger days), and to terms of duty as relieving clerk, when he was a familiar figure to staffs at locomotive depots throughout the State.

At the time of his retirement Mr. Ruff had completed the full circle of achievement. He began duty at North Melbourne Locomotive Depot in 1913 as a junior clerk; in 1952 he returned to it as senior timekeeper.

Obituary

WITH the death of Mr. Stanley Peter McIntyre, Ararat has lost one of its most popular drivers. A returned soldier of World War One, and a resident of Ararat for 16 years, Mr. McIntyre drove the first diesel-electric-hauled *Overland* out of Spencer-st.

One of Newport's best known and liked identities, Leading Hand Iron Machinist William James Hollings, of the Erecting Shop, retired recently after nearly 50 years' service. He was associated with the building of the 60 ton wrecking cranes, and, as a suggestor had a number of his ideas adopted. Mr. Hollings (*left*) is here being presented by Mr. W. Featonby, Workshops Superintendent, Newport, with a mantel radio. He also received a crystal dish for Mrs. Hollings. In the centre is Foreman W. Black.

Found His Niche

THOMAS WILLIAM YOUNG, electrical mechanic at Jolimont Workshops, who retired recently, was one of the Department's many returned soldiers. His first introduction to railway work was as a labourer in a cable laying gang when the suburban service was being electrified. He enlisted in the first A.I.F. in World War One and was wounded in France. When he returned to the Department he was employed as a "runner" (he chased materials) at Jolimont Workshops. Of a mechanical turn of mind, he rose from labourer to fitter's assistant and, later, to electrical mechanic.

Staff at Bendigo North Workshops in April 1917. This picture was taken about the time of the opening of the Workshops. Back row (*left to right*): Vinton, A. Lacey, Whitehead, H. Echart, T. Brown, Clarke, R. Skinner, T. Mason, P. McMahon, – – – – – –, A. Thomas. Third row (*standing*): T. Lucas, H. Watson, G. Birchnall, F. Caldwell, S. Tunks, P. Sayers, – – – – – –, J. Ford, C. Hawke, W. Foot. Second row (*sitting*): H. Cross, G. Cowling, Ferris, T. Munro, J. Costick, – – – – – –, J. Tullock (Fitter-in-charge), J. McGee, C. Phillips, E. McNamarra, W. Harrison. Front row: D. Smith, Dangerfield (Works Foreman), W. Seeley, R. Coakes, G. Trembath, J. Fitzmaurice, J. Dunstan, G. Jones, – – – – – –. Messrs. Trembath and Dunstan are still at the shops. – – – – – – unidentified.

Photo: J. Dunstan

North Melbourne Locomotive Depot's team that won the V.R.I. football premiership and the Commissioners' Cup. Back row—*left to right*: J. Way, A. Knight, B. Gibson, L. Quinn, A. Ballingall, J. Baker, H. Moore. *Centre*: F. Moore, (secretary), H. Arthur (committee), N. Barrett, A. Jones, M. Anderson, H. Cassidy, W. Fullerton, J. Brazell, V. Gigloetti, (M. Conolan, J. Howlett, C. McCann, T. Sawyer, committee). *Front row*: W. O'Brien (treasurer), R. Braid, R. Oakley, H. Breeding, A. Boyd, J. Sharp (capt.), L. Harding (president), W. Mitchell (vice-capt.), F. Dwyer (first aid attendant).

Photo: J. Evans

SPORTS

North Loco. Football Premiers

FULL of confidence after having defeated Melbourne yard in the preliminary final, Northern Lines started well against North Loco. in the grand-final of the V.R.I. Football League's competition by scoring a goal within three minutes of the game's opening. The first term ended with Loco. 15 points to their opponents' 14. Two quick goals by Loco. in the second quarter stung Northern Lines into action, but a string of four behinds followed before Edwards broke through for a much needed goal. At half-time, Loco. had a six points lead, and the game was still in the balance. Inspired by the fine play of W. Mitchell, North Loco. launched a series of attacks in the third quarter that virtually won the match. Using the sheltered wing of the North Melbourne ground for the approach goalwards, Loco., through Mitchell, scored two snap goals, and another goal by Sharp, who kicked accurately from 50 yards out on an acute angle. Northern Lines battled hard, but their lightly built forwards were easily brushed aside by the sturdy Loco. defenders. The quarter ended with Loco. 20 points ahead. The defenders of both teams were on top in the last term, the play swinging from one end to the other, with neither team being able to press home attacks. Just before the final bell, however, Atkinson, of Northern Lines, scored the only goal for the quarter. The final scores were: North Loco.: 7–10 (52 points), Northern Lines: 4–11 (35 points). Best players for North Loco. were Mitchell (best on the ground), Jones and Boyd, and for Northern Lines, Kitchen, Ross and Desmond. Mitchell kicked three goals for the winners, Sharp 2, and Way and Boyd, one each. Windley, Walter, Edwards and Atkinson were Northern Lines goal kickers.

W. Mitchell, of North Loco., won the best and fairest player award for the season.

Billiards Success

DEFEATING Brunswick Black by 37 points, the V.R.I. Billiards Club, comprising Messrs. L. Williams, W. Perrins, J. Martin, E. Hartnetts, J. McKain, J. Maher and T. Hoare recently won the Melbourne Clubs Amateur Billiards Association's tournament. The V.R.I. club has won three Association snooker championships in the last four years and were runners up last year. The club has also only missed the billiards four once in the last five years.

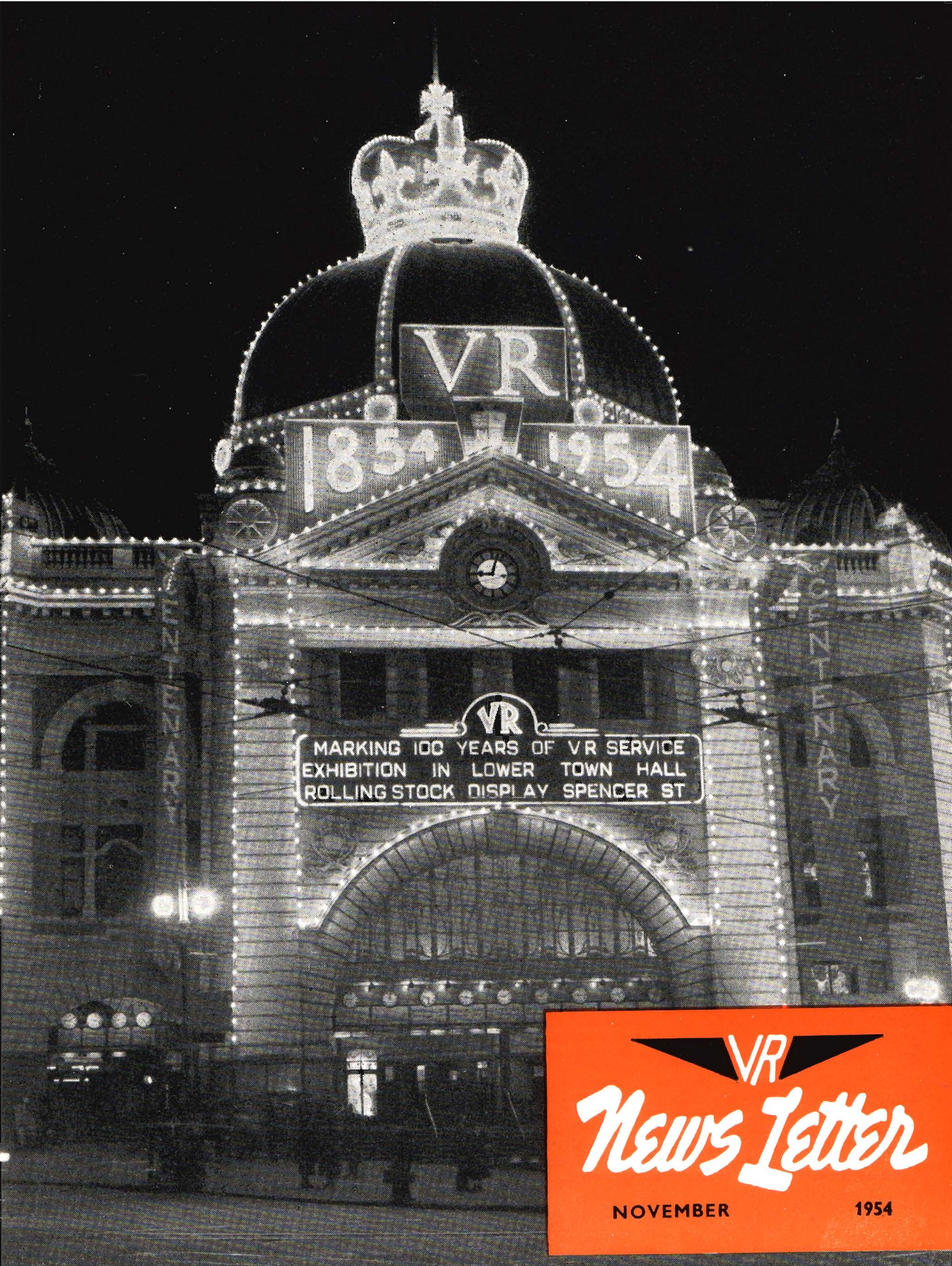
Table Tennis Success

V.R.I. Table Tennis Association teams have done well, after a break of three years from the Victorian Table Tennis Association's pennant competitions. The D5 team, comprising W. Lawrie, N. Macnoe and A. Solomon, defeated South Melbourne for the grade premiership, and the C3 team (P. Constantinidis, K. O'Shannassy and S. White) were runners-up to St. Georges. At the time this was written, the C2 grade team (F. Schiller, R. Schiller, and L. Orosvary) were to contest the grand-final with Kraft's representatives.

Ararat Sportsman

V.R.I. sportsmen were glad to hear of the recent election of car builder Tom Dairs to the presidency of the Ararat branch of the Railway R.S.L. sub-section. While at Ballarat, he was president of the Institute's cricket team for many years, and president of the Ballarat Imperials football team. He also played football for East Ballarat for several seasons before his transfer to the Western District, where he joined the Portland team. Football is too vigorous an athletic pastime for Tom these days, but he keeps himself fit by playing cricket with Ararat's railwaymen. He is captain and one of the mainstay's of the side.

Wholly set up and printed at the Victorian Railways Printing Works, Laurens-st., North Melbourne, for the Publishers, The Victorian Railways Commissioners. 2631—54.



VR News Letter

NOVEMBER 1954

THE MONTH'S REVIEW

This ceremonial spade that Cr. E. C. Rigby presented to the Chairman recently is believed to have been used at the opening of the Geelong and Melbourne railway in 1857.

Diesel-Electrics' Five Million Miles

THE combined mileage of the Department's 26 main-line diesel-electric locomotives now exceeds five million. B60 (*Harold W. Clapp*), the first of the fleet to go into service on July 14, 1952, had notched 364,224 miles when it was withdrawn from service on September 19 to undergo what is called the first F examination to a diesel main-liner. In the F examination, cylinder head, pistons, cylinder liners and connecting rods are sent to the Engineer of Tests at Newport Workshops for inspection and checking for wear.

Despite the high mileage of B60, the connecting rods, gudgeon pins, bushes, pistons, cylinder liners and cylinder heads were in such good condition that they are to be given another cycle of 360,000 miles of running before their removal for further examination.

New Use For Old Trucks

THOSE farmers and graziers, who in the past have excused themselves for ignoring the Railways' annual appeal to them to order at least some of their fertilizer before Christmas, because they lack storage space, should be interested in the Department's latest offer. A number of 10-ton IB steel-bodied trucks, unsuitable for conversion to automatic couplers, are being dismantled. The bodies are for sale, at £15 each, as bulk storage bins, particularly for superphosphate, or maybe, grains. They weigh about two and a half tons, are 18 ft. long, 7 ft. 6 in. wide and 3 ft. deep. These truck bodies will be delivered to buyers at specified railway depots in various places. The price quoted is for delivery to any one of these points. Applications to buy them should be made to the Comptroller of Stores at Spencer-st.

More Wool Railed

AMPLE trucks, prompt oading, expeditious dispatch and fast trains were important factors in the success of this season's wool traffic. When *News Letter* went to press about 340,000 bales had been railed from Victoria, Riverina and parts of South Australia's wool producing areas, representing about a 27 per cent increase on last year's wool business. The wool was consigned to Melbourne and suburban stations and Geelong, and went into wool stores and woollen and scouring mills. A good deal of the wool handled by the railways was also exported.

Still Puffs On

THE appearance of the Department's oldest locomotive T94 at the Centenary rolling stock exhibition, at Spencer-st. station, during the observances was particularly interesting to the staff of the Sunshine Harvester Works, where a contemporary of the old T class engine is still giving good service, although, actually it is six years older than the Department's veteran. Numbered 176 (formerly F176) it was built in 1878 for the Victorian Railways by the Phoenix Foundry of Ballarat. Originally a 2-4-0 tender engine, it was converted to a motor engine in the 1900's. It hauled passenger trains on the old suburban Outer Circle line, along which it was well known as the *Deepdene Dasher*. Today the grand old lady (as Sunshine knows her) may be seen stoutly pulling trainloads of farm machinery from the factory to the Sunshine siding, whence they are dispatched to the four corners of the State.

Pruning The Branches

PRUNING non-paying lines to promote the vigorous growth of a railway system is something that is happening all over the world. There are critics of it, but they are effectively dealt with by a recent spokesman for British Railways who brought into perspective one factor that is apt to be overlooked. When railways were built the transport market was very different, and they were able to offer a service beyond anything that had been dreamed of a few years earlier. Then, came the motor vehicle which, as he puts it, "completely changed the transport pattern in a few years." In many instances, buses and lorries could, and can give, more convenient service than trains that involve greater capital outlay. Thus, more railway lines have run into the red ; and, all the time, local centres of population, which lines had been built to serve, were decentralizing and building up elsewhere. Railway lines involved could not move with them and traffic fell away.

Why Lines Are Closed

FOR these and other reasons some lines have not been paying their way, through no fault of their own or of railway policy generally. British Railways have wholly or partially closed more than 200 branch lines since the beginning of 1948. "The railways," the spokesman points out, "have a duty to the public to meet their expenses out of revenue ; so hard facts must be faced. The closing of branch lines does not mean that the railways are dying on their feet. It means that they are moving with the times, as all progressive concerns must, keeping right up to date and streamlining their services so as to concentrate their great but always limited resources on the places and on the traffic where they

OUR FRONT COVER

shows the Flinders-st. station building illuminated to commemorate the centenary of railways in Australia. Six thousand seven hundred coloured globes were used in this glittering display.

can be of greater use to the economy of the nation." In other words, critics are very soundly enjoined to think nationally rather than parochially. The precept has particular application to Australia.

Children ?

THE great virtue of the observances that marked the railway centenary was, of course, the participation of the public. The Department, far from congratulating itself around a board-room table and letting it go at that, put on shows in Melbourne which people at large could, and did,

Town Hall, Melbourne

Lord Mayor's Fund for Metropolitan Hospitals and Charities
INCORPORATED 1930

5th October, 1954.

R. G. Wishart, Esq.,
Chairman of Commissioners,
Victorian State Railways,
Spencer Street,
MELBOURNE, C.1.

Dear Mr. Wishart,

It is with a sense of deep gratitude that I write on behalf of my Council and the Institutions which this Fund serves to express to you and your fellow Commissioners and the Officers of the Victorian Railways Department our warmest thanks for the magnificent contribution of £5,576/1/-, which I was privileged to receive from you on Friday last, 1st October.

This amount which represents the gross proceeds of the Victorian Railways' Centenary Exhibition recently held in the Town Hall is the largest single contribution other than bequests which the Fund has received for some years.

The Exhibition organised and conducted by your Department in association with the Model Railway Society was of splendid conception - the lay-out, scenery and equipment having been produced with meticulous care and attention to detail.

I was particularly impressed by the units built and provided by the members of the Society. They were in truth miniatures of the trains which I recall having seen in picture and visually during my lifetime.

All those who visited the Exhibition must have been impressed with the development of our Railways, and they will most certainly have a better understanding of the service and part railways play in our community life.

The educational value of the Exhibition in this respect which I feel sure will have most beneficial results over the years, and I hope that the public may at some future date have another opportunity of learning more of the operations of the Victorian Railways.

All who participated in the production of the Exhibition must have been gratified at the great interest displayed by the public, and I extend to the Officers of your Department and to the members of the Model Railway Society my sincere congratulations on a really splendid display.

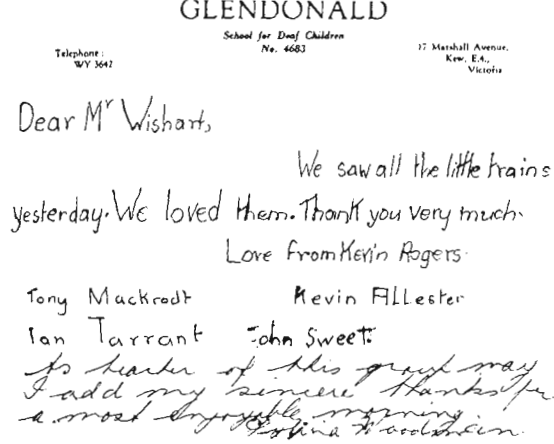
With kindest regards,

Yours sincerely,

Lord Mayor
Chairman.

This letter was received by the Chairman from the Lord Mayor (Cr. Selleck) expressing appreciation of the donation of the proceeds from the model railway exhibition to the Lord Mayor's Fund.

enjoy ; and, moreover, congratulate themselves on owning a well run and highly progressive railway system. The model exhibition, which is described elsewhere in these pages, attracted, during the fortnight, precisely 71,329 people, of whom appreciably less than half (indeed, it was nearer a third) were children. That, of course, is to say, technically children. All who saw the display were children to the degree of the man who buys a model train at Christmas to show his small boy how to play with it. That the public, to use an expression of the theatre, " ate " the show is undeniable. Several times queues extended round the Town Hall corner nearly to



GLENDONALD
School for Deaf Children
No. 4683

Telephone:
WY 3642

17 Marshall Avenue,
Kew, E.4.,
Victoria

Dear Mr Wishart,

We saw all the little trains yesterday. We loved them. Thank you very much.

Love from Kevin Rogers

Tony Mackrodt Kevin Allester
Ian Tarrant John Sweet

On behalf of this group may I add my sincere thanks for a most enjoyable morning.

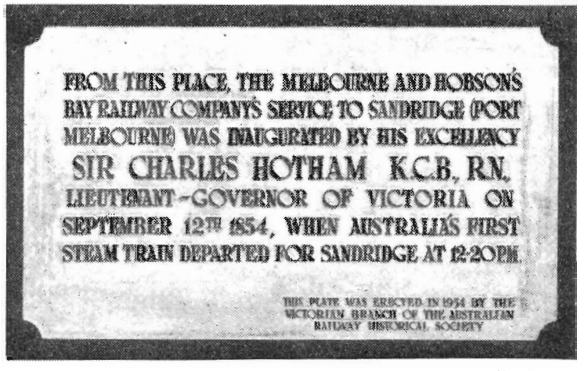
Corina Woodhouse

This little note was received by the Chairman from children at the Glendonald School for Deaf Children who keenly enjoyed their visit to the model railway and the rolling stock exhibition.

Russell-st. A well-known business magnate went at least half a dozen times and one lad still takes pride in having sat through ten shows on end. Letters have poured in asking whether the show could be borrowed to raise money or, in one instance, to illustrate geography lessons. One result of it all was a cheque for £5,576/1/- which our Chairman presented to the Lord Mayor's Fund.

Launching The Second Century

BUT that was by no means all. A three-weeks' rolling stock exhibition at Spencer-st., at which old and new sat wheel by buffer on both sides of No. 6 platform, attracted no fewer than 57,473 people. The weather was kind to them and a sort of picnic atmosphere generally prevailed in which youngsters clambered about *Heavy Harry* and the engines of half a century and more ago, and enjoyed themselves hugely. The Newport Workshops and V.R.I. bands added pleasantly to scene and sound on successive Sunday afternoons. On Centenary Day, September 13th, 421 representative Victorians, including railway men and women representative of various grades and the Railways Commissioners from other States, sat down to dinner with His Excellency the Governor, the Premier and his Cabinet and the Railways Commissioners to launch Victoria's railways on their second century of service to Victoria's public. It was an impressive occasion, worthy of all the achievement that had made Victoria's railways second to none in Australia.



A photograph of the plaque that was presented by Mr. R. B. McMillan, President of the Victorian Branch of the Australian Railway Historical Society, to the Chairman at a dinner to commemorate the centenary of railways in Australia. The plaque will be erected at the approximate spot on No. 1 platform Flinders-st., from which Australia's first train left for Sandridge (now Port Melbourne) at 12.20 p.m. on September 12, 1854.

Photo : A. R. Lyell

V. R. MOTIVE POWER

Condensed from an address by Victorian Railways Commissioner E. H. Brownbill, M. Mech. E., B.E.E., M.I.E. (Aust.), to the Institution of Engineers (Aust).

IN Victoria, it is apparent that the best railway policy is to vary types of power so as to limit dependence on any one fuel. The picture, therefore, is one of steam locomotives burning oil, operating alongside others fired with black and pulverized brown coal, with denser traffic handled by diesel-electric and electric units, which, with their high availability, are more economical than steam locomotives.

The Department, however, has an impressive fleet of modern steam ocomotives, such as J, N, and R classes, which have many years of useful service ahead. Therefore, it is apparent that, for many years, good old reciprocating steam engines will form the majority of motive power units on the V.R. system.

THE steam locomotive has many inherent drawbacks. The chief is that it cannot utilize a high percentage of the energy supplied to it by coal. An overall efficiency of about seven per cent is all that can be hoped for. On the other hand, the steam engine is very cheap in first cost and very reliable in operation. Maintenance costs are high, and, except when the steam locomotive is operated with oil fuel, ash handling and fire cleaning are problems.

In Victoria, we have locomotives burning lump black coal, pulverized brown coal and fuel oil. With lump black coal, quality varies greatly from 20 to 4 per cent. ash, calorific value from 14,000 B.T.U's per lb. to 11,000; and still the engines go more or less satisfactorily.

PULVERIZED BROWN COAL

Exhaustive tests have been carried out on locomotive X32, using pulverized brown coal for firing and, as a result, an R class locomotive has been converted to this type of firing, and will soon enter traffic service. It costs about £15,000 to convert a locomotive to use brown coal dust as fuel. In addition, it is necessary to provide air tight waggons for its conveyance and air tight storage bins at locomotive depots. The burning of pulverized brown coal is past the experimental stage, but in view of the increasing cost of this fuel, and the reduction in the price of fuel oil, economics now favour the oil-fired steam locomotive.

Moreover, the maintenance cost of this type of locomotive is far greater than for the conventional steam locomotive. Consequently, further conversion of locomotives to brown coal burning is not contemplated at present. Roughly, one ton of brown coal dust equals one ton of the type of black coal we are using. Increased efficiency just balances the lower calorific value of brown coal dust.

OIL BURNERS

Oil burning was introduced as an expedient when coal could not be obtained in sufficient quantities. It is a very inefficient way to burn oil which could be consumed in a diesel engine. It must be remembered, though, that the oil for steam burning locomotives is not suitable for use in high-speed diesels. It is, in fact, a residual oil with a solid pour point of 70° F.

Our latest quote for oil is £8.8.8 per ton, compared with £19.11.6 for diesel fuel. Relative efficiencies of the two types of motive power, however, tip the balance in favour of the diesel, even at these price levels. Oil fuel, at this price, with a calorific value of about 20,000 B.T.U's per lb., is cheaper than coal at £8.3.0 (calorific value 11,000), and the further these fuels are transported the greater the advantage to fuel oil. This has led to our changing from coal to oil firing on the last 30 of the 60 J class locomotives from England.

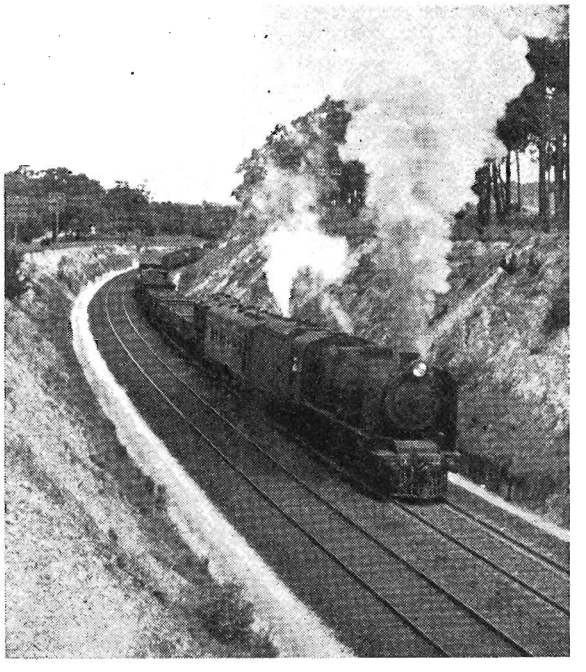
Just how the oil refining installations throughout Australia will affect the locomotive fuel problem remains to be seen. They might easily sound the death knell of black coal, and even severely restrict extension of the use of brown coal dust. By-products from the Lurgi process of gas making from brown coal might also have a marked effect on the fuel situation.

STEAM AND GAS TURBINES

Steam turbines have never really been a success on railways, because space limitations restrict the design; and, secondly, because the rapidly fluctuating load in railway operation, from full to half power, or even idling, and *vice versa*, in extremely short time, acts against efficiency. For, the steam turbine is essentially a constant load machine.

The most undesirable characteristic of the gas turbine is the poor fuel rate on loads less than full, and at idle. The general experience with these locomotives is that overall efficiency is not greatly above the reciprocating steam engine, although on stationary plants efficiencies over 30 per cent. have been reported.

At present it is possible to design them, with certainty of success, for the use of distillate oil or clean gas fuel only; although some gas turbines have run for long periods on



X32, the Department's brown coal dust burning loco.

residual fuel oils. But, these have eventually run into troubles associated with the ash content, even with special additives in the fuel. Trouble is of two kinds ; deposits of ash on the blades and corrosion of blading. Sodium, calcium and vanadium appear to be the chief constituent offenders. One hope of overcoming these troubles lies in the possibility of finding an easily applied effective additive.

The Westinghouse Electric Corporation, of America, in conjunction with Baldwin, who made the mechanical parts, built a 4,000 h.p. gas turbine locomotive that went into running in May, 1950. Three years later, it was felt that there was no further immediate possibility of profitable working for it on the U.S. railways. Accordingly, it was scrapped, after having run a total mileage of about 70,000, and having had about 20 million dollars spent on the project. The Victorian Railways run about twice this mileage each year with each of our 26 diesel-electrics.

The gas turbine locomotive on the Union Pacific Railway uses about twice as much fuel as a comparable diesel-electric, but this is somewhat balanced by the lower price of the fuel. On the section where this locomotive is used, the terrain allows it to work almost continuously at full load. Such a situation is rare, and cannot be regarded as a typical operating condition.

PULVERIZED COAL EXPERIMENTS

Experiments are going on with pulverized coal as fuel. This gives the same trouble as residual oil, only more so. In this connection pulverized Victorian brown coal is probably the best of the solid fuels because of its very low ash content and its comparatively soft nature. A gas turbine has run on it, but it is a long way from being on a commercial basis, yet.

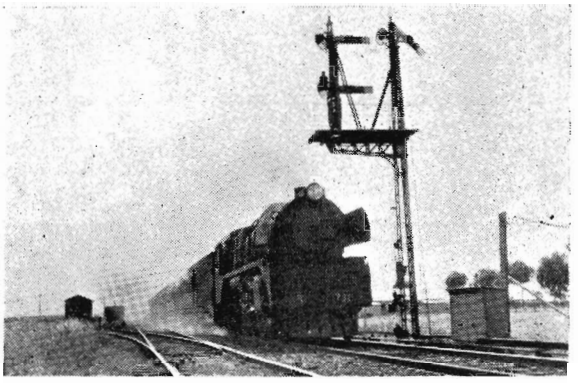
One way to get over this difficulty is to prevent the products of combustion from passing through the turbine by the use of heat exchangers. It is unlikely that the thermal efficiency of this type of engine will be very high, and it is doubtful whether a satisfactory heat exchanger could be made to fit into the space available on a locomotive.

The American Locomotive Company, in collaboration with the Locomotive Development Committee, proposes this year to test a new ash separator on their coal burning gas turbine locomotive. It was found that, during the last long test, although their 4,250 h.p. turbine could carry full load and run as smoothly on coal as on oil, the fly ash separation equipment did not measure up to requirements, and excessive blade erosion took place.

This is a line of investigation of particular interest to Victoria, with its vast brown coal resources, and developments will be watched with great interest.

GAS TURBINE'S FUTURE

Most designs use electric transmission. One is being developed in England using the high pressure turbine to drive the compressor and the low pressure turbine directly coupled to the locomotive wheels. It is claimed that the characteristics of the low pressure turbine are almost identical with those of the conventional steam locomotive. It will be at least 12 months before this locomotive is on the road.

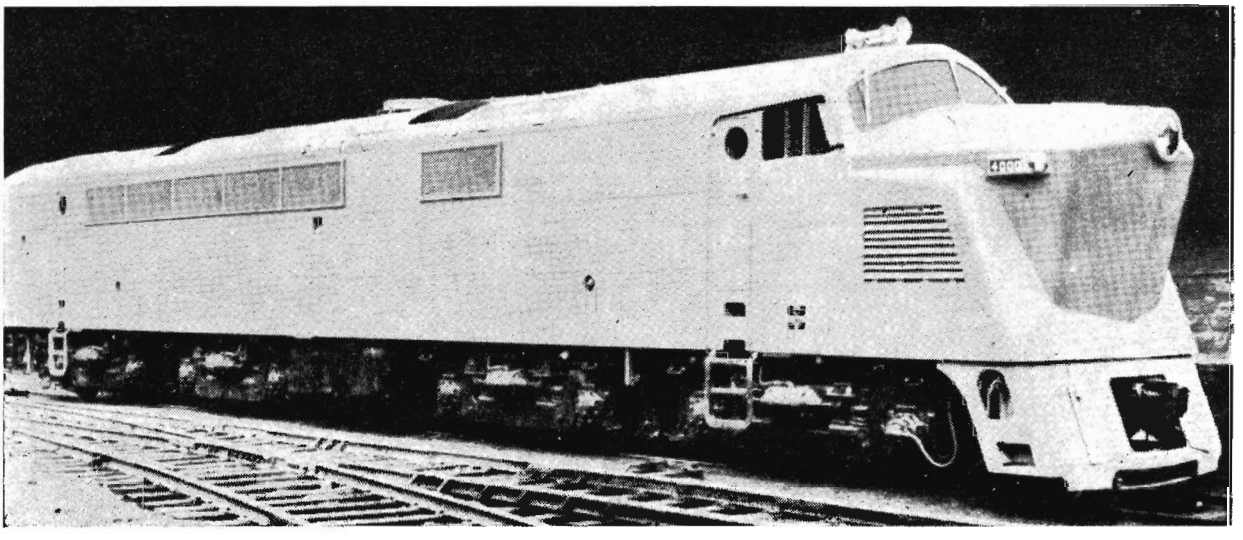


R class loco hauling "*The Flier*".

Many engineers claim that the maintenance costs of gas turbines, with no reciprocating parts, will be much lower than those for comparable diesels. If this be so, and, if the troubles associated with ash can be successfully overcome, we may yet see a gas turbine operating on the Victorian Railways. But, it is a good way off, and, if it does eventuate, it will almost certainly burn pulverized brown coal.

At the moment there does not appear to be any serious threat by the gas turbine to other forms of railway power units.

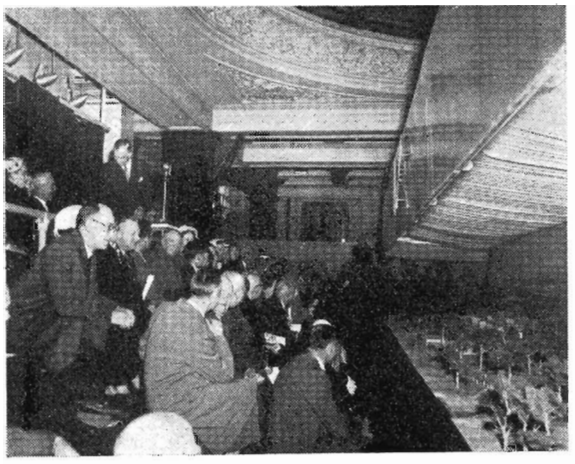
(*to be continued*)



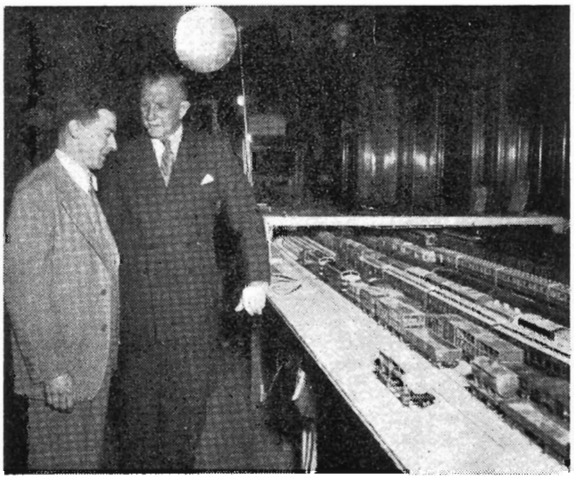
The Baldwin-Westinghouse 4,000 h.p. gas turbine passenger locomotive. It was built as an experiment with full realization that intensive development would be necessary before it could become a commercial product. The locomotive is in one unit, arranged as a single-end operation, and is carried on four two-axle swivel bogies, giving a B–B–B–B arrangement.

MODELS OF PERFECTION

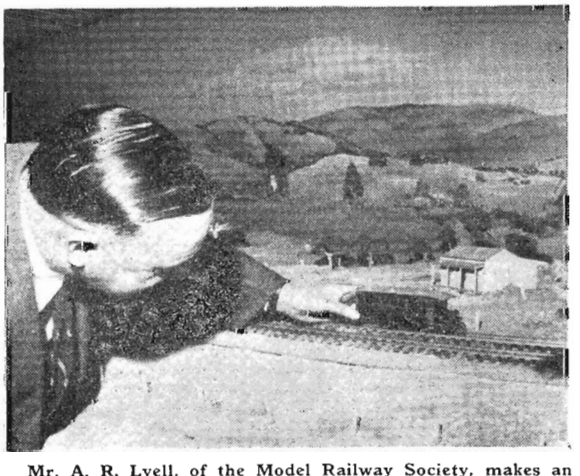
SEVENTY-ONE-THOUSAND-ODD people saw the model railway display in Melbourne during the Centenary Celebrations fortnight. It was the largest, most spectacular and probably most successful display of its kind ever publicly shown in Australia.



Guests at the opening of the exhibition. The Governor (Sir Dallas Brooks) is in the background pressing a button to start the model railway. Up to 400 people saw it at each public session.



In the marshalling yard, backstage, the Governor chats with Mr. N. Cave, engineer in charge. Most visitors behind the scenes were surprised at the size and complexity of the yard. Sixteen roads were used to hold trains awaiting their turn.



Mr. A. R. Lyell, of the Model Railway Society, makes an adjustment to the A.E.C. rail motor. Audiences were invariably amused by this little model.

COVERING 1400 square feet, the model staging was 64 feet long, with about 100 feet of double track in public view. The track was electrified, of 1¼ inch gauge, and ran through a scenic setting typical of Victorian countryside, complete with township, railway station (Kyalgon), bridges and cuttings. The tracks had colour light signals and, at the level crossing, a flashing light signal and warning bell.

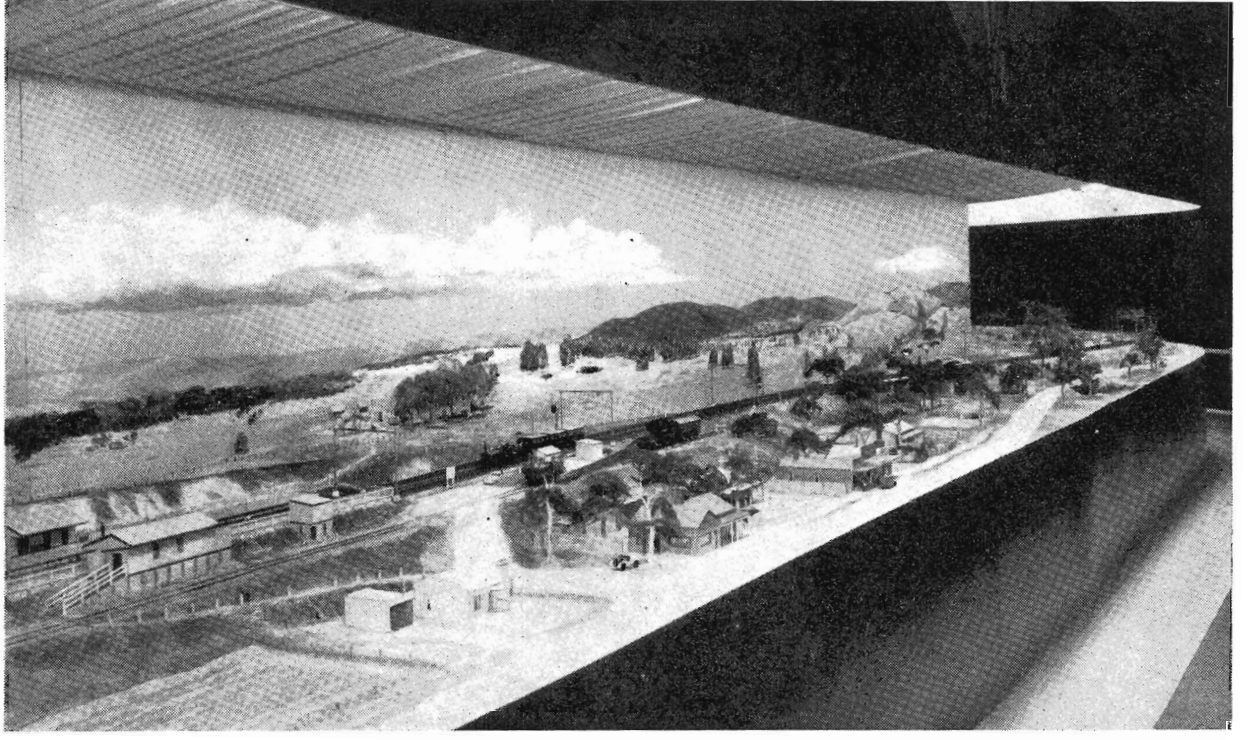
The rolling stock consisted of 14 scale model trains of different periods of Victorian Railway history, from the earliest to the latest. There were 156 vehicles and they were specially built, in accurate detail, by members of the Victorian Model Railway Society, who co-operated with the Railways Department in staging the display. This society has about 60 members, of whom only four are professional railwaymen; the others come from all walks of life.

Both trains and track were built to a scale of ¾ inch to the foot. The locomotives were powered by miniature 18-volt d.c. electric motors drawing current from studs between the rails. The motors were also made by the model makers.

The railway setting was built at Spotswood Workshops by railwaymen from several branches. The landscape, trees, and so on, were the work of Mr. Ronald Titchener, a professional model builder. The total length of track was 600 feet; and 12,000 sleepers and 1,000 yards of electrical wiring were used. The 150 trees dotting the countryside each took a yard of wire clothes line. The wire was twisted into shape, dipped in plaster and coloured; the foliage was made of spray-painted steel wool. Water in a creek under one of the bridges was actually glass; properly lit, it appeared to shimmer and ripple. Realistic shrubs and bushes were, in fact, seaweed.

The show was operated by three railwaymen, and each session took twenty minutes. As each train appeared it was described in a commentary recorded on tape. After Australia's first train (that ran from Flinders-st. to Sandridge in 1854), complete with tiny, red-coated bandsmen of Queen Victoria's 40th Regiment, who rode in a truck, came a mixed train of the 1890's, a goods of 1900, the *Sydney Express* of 1910 and *Spirit of Progress*. *Heavy Harry*, hauling an interstate fast goods, was followed by *The Flier*, *The Overland*, and a brown coal train of 35 trucks drawn by an L class electric locomotive. In such contrast as to provoke, almost always, a ripple of amusement, came an A.E.C. rail motor. It was followed by a petrol-electric rail motor and a 280 h.p. Diesel rail car. A peep into the future showed a suburban electric train of 1955 contrasted with a steam suburban train of 1890. Finally, ancient and modern, the first train and *The Overland*, appeared from opposite directions and completed the circuit.

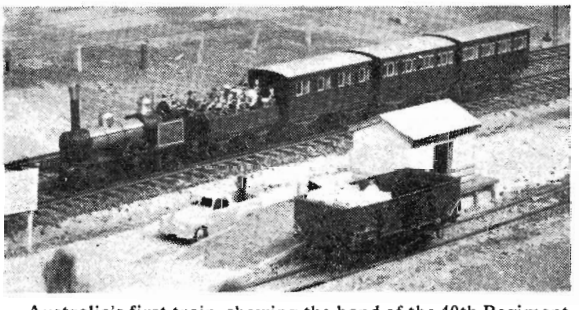
A wealth of realistic detail was given to the scene, especially by the Kyalgon township with its general store (with a bundle of brooms tied to the veranda post), a cafe, shops, hotel, and several houses. Next to a vacant allotment, a moss covered, derelict shop leaned forlornly. An orchard, market garden and a deserted cottage flanked the township. In the yard of a small farm a goat chewed washing on a line. There was



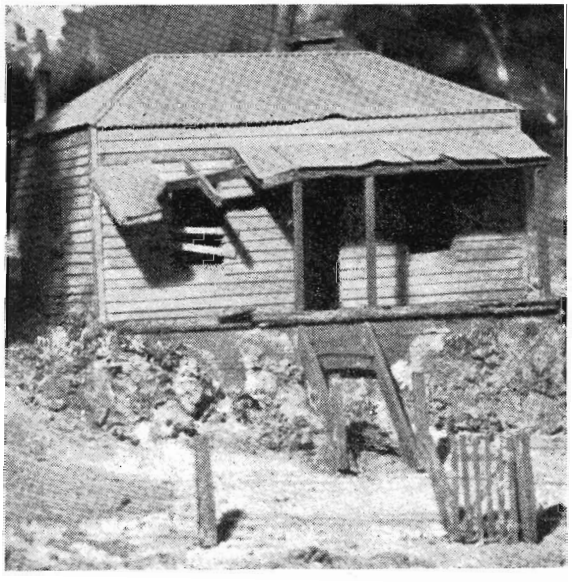
View of the right hand end of the model. Australia's first train is about to pass through " Kyalgon " station.

an occasional rabbit ; a snake emerging from bracken was watched eagerly by a dog ; there were picnickers in the camping ground ; and by the river, a very patient fisherman. And so on, *ad infinitum* and *in excelsis*, and the crowds lingered to examine it all, minutely.

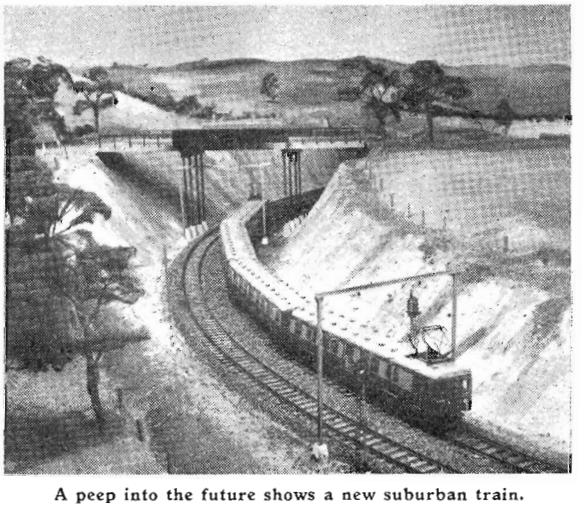
The exhibit brought home to all who saw it how the railways have developed Victoria, and pointed to the vital part they will play in the future prosperity of the State.



Australia's first train, showing the band of the 40th Regiment. As far as research can ascertain, this is an accurate model.



The tumbledown shanty unofficially known as Widow Murphy's cottage.



A peep into the future shows a new suburban train.

CENTENARY HIGHLIGHTS

B60 MODEL: Was used at Spencer-st. station to ad
exhibitions. It was built at Newport Workshops.

COMMEMORATION: *(left)* Railway historian L. J. Har
before members of the Australian Railway Historical
centenary anniversary train trip to Port Melbourne a

ET: The Governor (Sir Dallas Brooks) and Lady Brooks, the Premier (Mr. Cain) and Mrs. Cain, Cabinet Ministers, and their wives, and :han 400 other guests attended the railway centenary dinner given by the Railways Commissioners in the Myer Mural Hall, Melbourne.

NARY PLAQUE: (*left*) The Minister of Transport (Mr. Coleman) unveiling, at Head Office, a bronze plaque erected to emorate the centenary of railways in Australia. It was presented by Mr. E. L. Morton.

the railway centenary

ight) leads the cheering
y left Flinders-st. on a
e original 1854 route.

ROLLING STOCK PARADE: The display of modern and ancient rolling stock at No. 6 platform, Spencer-st., was a big attraction during the centenary celebrations.

Trains disgorge many thousands of people at the Showgrounds platform.

SHOW TRAFFIC

HOPES by the Royal Agricultural Society's organizers that the record entries, new features and an improved showground's layout would result in the 1954 Show setting a new aggregate attendance figure were realized, no fewer than 696,421 people passing through the turnstiles in nine days.

Although the Railways did not set new Show figures the result was extremely satisfactory. Show trains were used by 285,531 people ; 46,108 more than for the previous year. The last day of the Show was a particularly busy one for the Department as, for the first time since 1949, Flemington racecourse as well as Show traffic had to be handled.

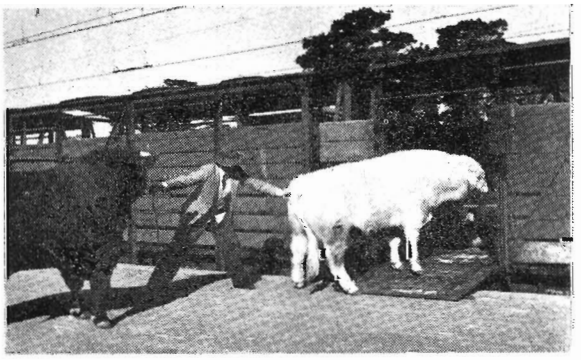
Apart from playing a major part in transporting people to the Showgrounds, the Railways helped the primary producer to get his prize stock to the judges in the best possible condition. Clean cattle trucks and horse boxes were used to bring Show stock from all parts of Victoria, the Riverina, Sydney and Adelaide. The animals were well bedded down on straw packed floors, and fed and watered en route. Tarpaulins were used as canopies for the trucks to protect stock against the weather.

Trucks and horse boxes carrying Show stock were attached, wherever practicable, to fast goods or passenger trains, and promptly discharged at the Showgrounds siding. The Railways give owners of horses every encouragement to enter them for the various events. For instance, those carried in horse boxes on passenger trains are charged the cheaper cattle truck rate. Crates of poultry and birds for the Show were transferred from country and suburban trains and taken to the Showgrounds siding in fast parcels coaches.

A loading day and time was fixed for the return of stock and special trains from the siding were scheduled to connect with fast goods trains from Melbourne. Unsold Show stock were returned to their original loading stations free of charge.

The happy sequel to this big Show-time transport was the customary sheaf of appreciative letters to the Department from exhibitors who commented on the excellent condition in which stock and other exhibits, consigned by rail, arrived at the Showgrounds.

The consensus of opinion was that the Department's Show effort was in the blue ribbon championship class.



Stock being loaded after the Show

WHEAT ON THE MOVE

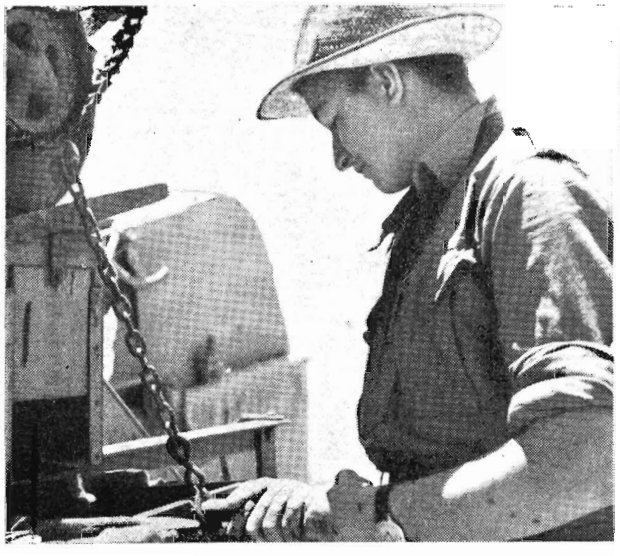
About 12 million bushels of last season's wheat were in elevators in the wheat producing areas when *News Letter* went to press. Of this quantity, about nine million will go into one of the two new storage sheds now being erected at North Geelong.

A considerable quantity of wheat will also be railed to flour mills for gristing.

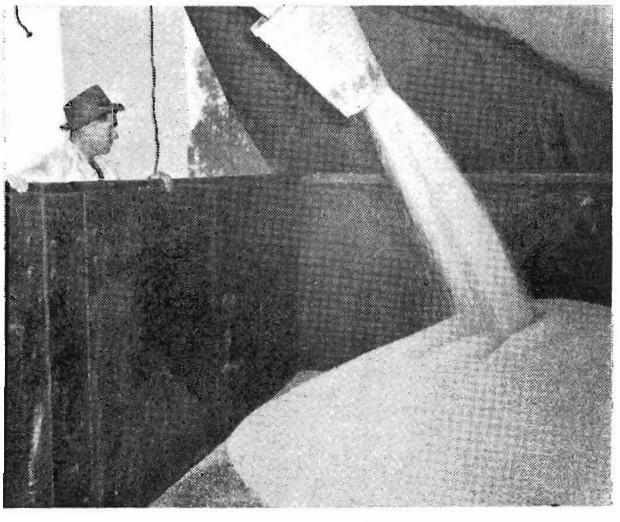
Towards the end of last month seven ships left Geelong with 70,000 tons of wheat for overseas markets, and it is anticipated that 12 others will lift 100,000 tons this month.

Elevators and bulkheads in the producing areas will be emptied in ample time for the intake of new season's wheat.

Harvesting



Bagging wheat from header



Loading truck from elevator at Birchip

Wheat trucks at the Geelong terminal

Loading wheat into ship at Geelong

LINES FROM OTHER LINES

Norway, like Australia, celebrated its railway centenary this year. This attractive poster was circulated all over the world.

Cornish Riviera Express

THE *Cornish Riviera Express* celebrated its 50th birthday, this year. It was the first train to run regularly for more than 200 miles non-stop, a record which it maintained for over 20 years. The special non-stop run made in 1903, when the then Prince and Princess of Wales journeyed to Cornwall to open the first transatlantic wireless station, directed the attention of the Great Western authorities to the possibility of running a regular non-stop service.

Diesel Rack Loco

WHAT is claimed to be the first diesel rack locomotive in the world began service, with the summer time-tables, up the Monte Generoso line by Lake Lugano. This is a diesel-mechanical unit supplied by a Swiss company and powered by a Saurer 12-cylinder oil engine. Average speed up the incline is 7·4 miles an hour. The journey time, compared with that by steam, has been reduced by about 20 minutes to approximately one hour.

First New-type "Talgo" Train

THE Rock Island Railroad is buying a passenger train completely unlike anything else on American railroads. It will combine many of the basic design features of the "Talgo" train and other low-slung, light-weight, high-speed trains of contemporary European design.

As now conceived, the new train will consist of four cars with a total seating capacity of 300. Each car comprises three articulated units. The train will weigh about half as much per seat as the conventional streamlined equipment.

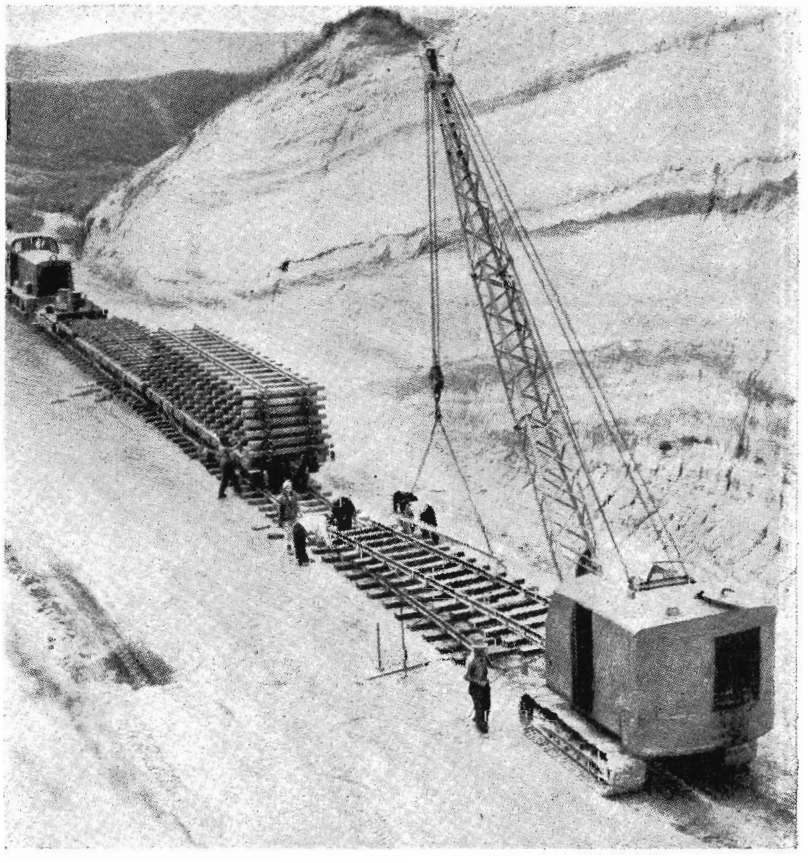
It has been tentatively named *Jet Rocket* and will be used on the Chicago–Peoria service, a distance of 161 miles.

Exchanging Diesels

AN interesting exchange plan is in operation between the Bangor and Aroostock and the Pennsylvania Railroads whereby ten of the B. & A. road shunting diesel units, which find full use only during the winter season when the movement of potatoes in New England is heavy, transfer to the Pennsylvania from May to November. They then shunt on the ore docks at Erie. This ore traffic is also seasonal and comes to an end during the winter months because of the freezing of the Great Lakes. To cope with its maximum winter potato traffic, the B. & A. is also hiring six diesel units from the New York, New Haven and Hartford Railroad for the short period necessary. In this way it no longer has to retain steam locomotives in store merely to handle traffic during the winter rush period.

Road Trailers By Rail

INTEREST in road-rail trailers has tended to obscure their origin. The first trailer-on-flat-waggon service began in U.S.A. in 1926. France took them up in 1934. Postwar progress has been particularly marked in North America, though this traffic has grown steadily in France, and has been started in South Africa. Such services can be divided into two main categories: those operated by railways with their own vehicles or those of a subsidiary company, and those open to other road vehicles. The former is proving particularly valuable, in North America, in providing a rapid door-to-door service for smalls traffic.



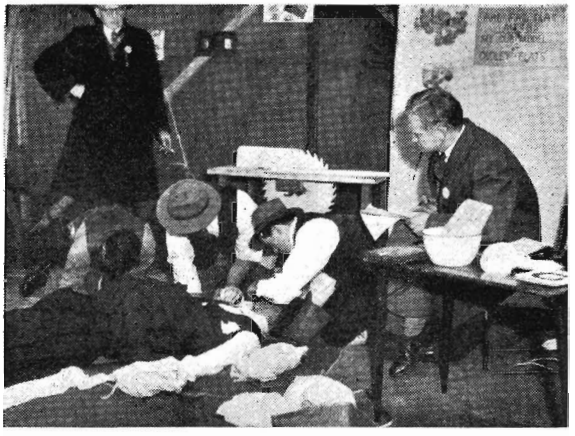
A diesel crawler lowers a track set into position on the Murupara railway, New Zealand. The track was prefabricated for this section because of the remoteness of the area and the difficulty of transporting men to the work each day. Also it enabled the tight construction schedule to be maintained.

AMONG OURSELVES . . .

First Aid Competitions

A feature of this year's first aid competitions at Mt. Evelyn was the success of Ararat's representatives. Ararat No. 2 team won the senior teams event, H. Isaac finished third only five points behind the winner of the senior individual competition, and R. Stainsby, Ararat guard, won the novice individual contest by the very narrow margin of one point. The announcements of the awards and the presentations were made by Mr. Commissioner Meyer at the post-competitions dinner at the V.R.I. The Ararat No. 2 team and Mr. H. A. Barker will represent Victoria in the teams and individual events, respectively, at the Australian Railways' first aid competitions in Adelaide on November 18.

The results were : Senior Teams : Ararat No. 2 (411½ pts.), 1 ; Bendigo North Workshops No. 2 (399½) 2 ; Bendigo North Workshops No. 1 (363½) 3. Novice Teams : North Melbourne Locomotive Depot No. 1 (398) 1 ; North Bendigo Locomotive Depot (372½) 2 ; North Melbourne Locomotive Depot No. 2 (346½) 3. Senior Individual : H. A. Barker, Accountancy Branch, Head Office (107) 1 ; W. C. Jackson, North Melbourne Locomotive Depot (104) 2 ; H. Isaac, Ararat No. 2 team (102) 3. Novice Individuals : R. Stainsby, guard, Ararat No. 2 team (132) 1 ; A. Swift, foreman, North Bendigo Workshops (131) 2 ; L. Wignall, North Melbourne Locomotive Depot (125) 3.



One of the novice supplied material teams being judged

C Box Veteran Retires

BUSY C Box has been almost a second home to Signalman-in-Charge George Ellis. For nearly 24 of his 46 years' railway service he has worked there. He joined the Department as a lad porter at Auburn in 1908, and, after getting country experience, he was appointed signalman when he went to Geelong from Maryborough. Before he retired recently he was presented by Mr. F. Cook, Senior Block and Signal Inspector, with a travelling case and rug.

Our First Printer's Devil

JOINING the Department in 1905 as an apprentice printer when railway printing was done in the Head Office basement, Gordon Bennett recalls that he was paid 1/3d. a day. All composing and folding were then done by hand, and old-fashioned machines turned out a multitude of railway printing jobs. When modernization was decided on, following the transfer of the printing staff to North Melbourne, Mr. Bennett went with the then manager, Mr. Milton Gray, to Sydney, to select the latest equipment, such as automatic feeding and fast running machines.

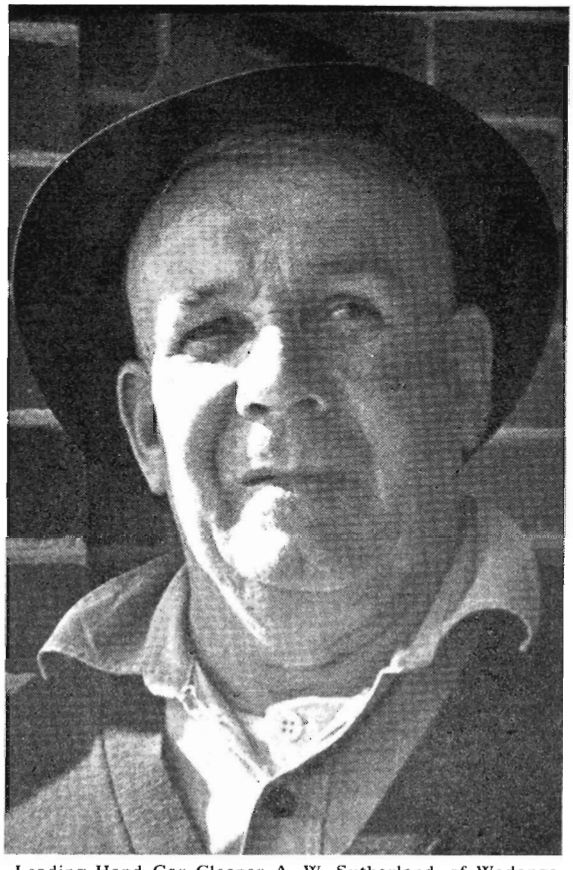
He helped to pioneer three-colour work (the first was for a tourist publication) and, as he rose to leading hand machinist, foreman and, ultimately, to assistant manager, he saw the standard of work so improve that today it ranks with the best in the industry. Mr. Bennett is proud of the fact that V.R. printers have been asked at various times for advice on printing problems.

Mr. Bennett

After 49 years in the railway printing works, Mr. Bennett, the Department's first printer's devil, has retired. At a bright farewell, he was presented with a gold wristlet watch (the gift of the V.R. Printing Works Welfare Association) and a water jug set for Mrs. Bennett.

In retirement, Mr. Bennett will sail and fish assiduously, and with great contentment, in Port Phillip Bay.

Cutting the cake after the recent wedding of Mr. Bruce Wade, fireman, North Melbourne Locomotive Depot, and Miss Jean Murray, Tourist Bureau stenographer.



Leading Hand Car Cleaner A. W. Sutherland, of Wodonga, who retired recently. He joined the Department as a supernumerary porter at Bairnsdale in 1924, and transferred to the Rolling Stock Branch in 1937.

Cleaner To Assistant Superintendent.

IN 1910 two young men began in the railways as cleaners at the Ballarat Locomotive Depot. One of them, Mr. P. L. Edmonds, was Superintendent of Locomotive Running when he retired in April last. The other, Mr. H. L. Hicks, was Assistant District Rolling Stock Superintendent on his recent retirement after more than 44 years' service.

Four years after Mr. Hicks joined, World War One broke out. Enlisting in the 2nd Signal Coy, First A.I.F., he saw active service in Egypt and France. When he resumed railway work at Ballarat in 1919, Mr. Hicks became a driver and, later, passed the driver-foreman's examination. Subsequently, he was Night Depot Foreman at Ararat, Engineman's Instructor at Geelong; Assistant Shed Foreman at North Melbourne Locomotive Depot and Depot Foreman at Benalla. He was then Locomotive Examining Officer, attached to Head Office, until two years ago.

Mr. Hicks drove the train that took the Duke of Gloucester from Ballarat to Donald during his Victorian centenary visit. He also drove an A2 test locomotive that hauled a specially weighed load of 420 tons from Ballarat to Warrenheip when front-end improvements were being tested.

Mr. Hicks

Bore The Palm And Got The Room

AMONG Rolling Stock staff Mr Hicks was known for his skill in palmistry which he acquired from association with Egyptians in his A.I.F. days. On one occasion it proved more than useful. On a visit to Melbourne some years ago, Mr Hicks was unable to get accommodation in a city hotel. Almost in despair, he thought of the bright idea of offering to read the hand of the hotel office girl. She had just become engaged, and the bright future that Mr. Hicks "read" from her hand secured him the best room in the hotel.

As a young man Mr Hicks spent most of his spare time in the gymnasium. He was physical instructor for Y.M.C.A. and other youth clubs at Ballarat, and for many years competed successfully in gymnastic events at South-st., Ballarat. He also trained winning teams. Mr. Hicks recalls the days before World War One when the Kaiser sent an oak leaf garland to the Turnverein Club for presentation to the champion gymnastic team at South-st. A German, Hugo Leschen, of Adelaide, was a noted coach of gymnasts, but the Germans did not always win the garland.

Railway Air Combat Pioneer

IN this age of jet aircraft, bristling with armaments, only the older generation remember the reconnaissance flights, in the early stages of World War One, of slow, unarmed single-engined planes.

While the pilot had his hands full keeping his "crate" aloft, his observer was eagle-eyed for the approach of the enemy. When clashes did occur, observers opened fire with either rifle or revolver. That was before the invention that enabled the pilot to fire machine gun bullets between the revolving blades of the propeller.

A railwayman, who has vivid recollections of the battles in the skies over Egypt and France during World War One, is Works Inspector Maurice Higgins, who was with the Australian Flying Corps. The Corps included pioneer airmen who, subsequently, became big names in aviation. Among them were "Tommy" White, later Federal Cabinet Minister Sir Thomas White and subsequently High Commissioner for Australia in the United Kingdom; "Dicky" (later Sir Richard) Williams, Director-General of Civil Aviation; V.C. winner F. H. McNamara (later Air Vice-Marshal); and the present manager of the Commonwealth Aircraft Corporation, Wing Commander Sir Lawrence Wackett, D.F.C., A.F.C., who became an outstanding aeronautical engineer and aircraft designer.

Invention That Just Missed

AS a young A.F.C. lieutenant in Egypt, Wackett's nimble brain conceived the invention of gear to enable a machine gun to shoot between propeller blades. He asked the railway carpenter, Maurice Higgins, to make him a special type of propeller. This he did but, before its testing, an aircraft, similarly equipped, went into action on the Western Front. With No. 2 squadron, Mr. Higgins later went to England and trained senior N.C.O's in aircraft equipment and maintenance.

From Carpenter To Works Inspector

THE Railway career of Mr. Higgins has been just as interesting and eventful. He joined the Department in 1905 as an apprentice carpenter under Workmaster Reid.

Early in 1914 he went to the Way and Works Depot at Horsham, where he enlisted in the A.F.C. After the war, Mr. Higgins resumed his railway work at Horsham, and afterwards at Colac as maintenance carpenter for the area, including the Beech Forest line. He helped to restore bridges destroyed in one of the worst bush fires in Victoria's history. Later, he was sub-foreman at Cressy, Hamilton, Woodend, and Geelong, until he became works foreman in 1931. His duties then took him to Hamilton, Warrnambool, Seymour and Flinders-st. In 1945 he was promoted to Works Inspector for the Metropolitan District, a position he held until his retirement recently.

Judged D.R.'s

BESIDES being responsible for all maintenance work in the metropolitan, eastern and south-eastern districts, Mr. Higgins supervised the erection of Departmental pre-fabricated houses for railway staff and was the V.R. liaison officer for the Degraves-st. subway project. Since 1946 he has judged the competition for the best kept and most improved district residences. " The modern furniture and the artistic furnishings in some of these railway homes have amazed me at times ", says Mr. Higgins.

He will spend a lot of his leisure motoring and yachting. He has been a member of the Brighton Yacht Club for many years. Mr. Higgins's brother, Fred, is a carpenter in the Signal and Telegraph Division, and another brother, William, was at one time in the Accountancy Branch.

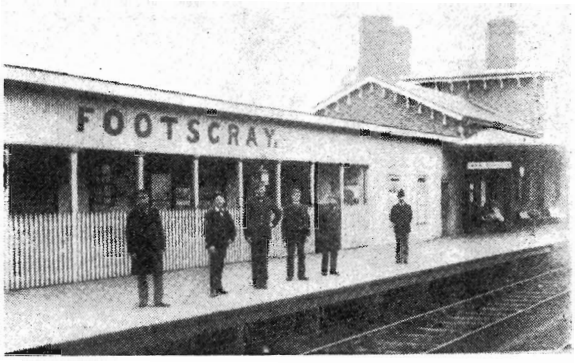
Thanks

FOR the quick and efficient handling of live-stock from Wodonga to Fish Creek and Stony Creek. " The cattle reached their destination in very good order."

Dennys, Lascelles Ltd., Melbourne

To Ringwood station staff for recovering a parcel left in a train.

Mr. R. Buckingham, Surrey Hills



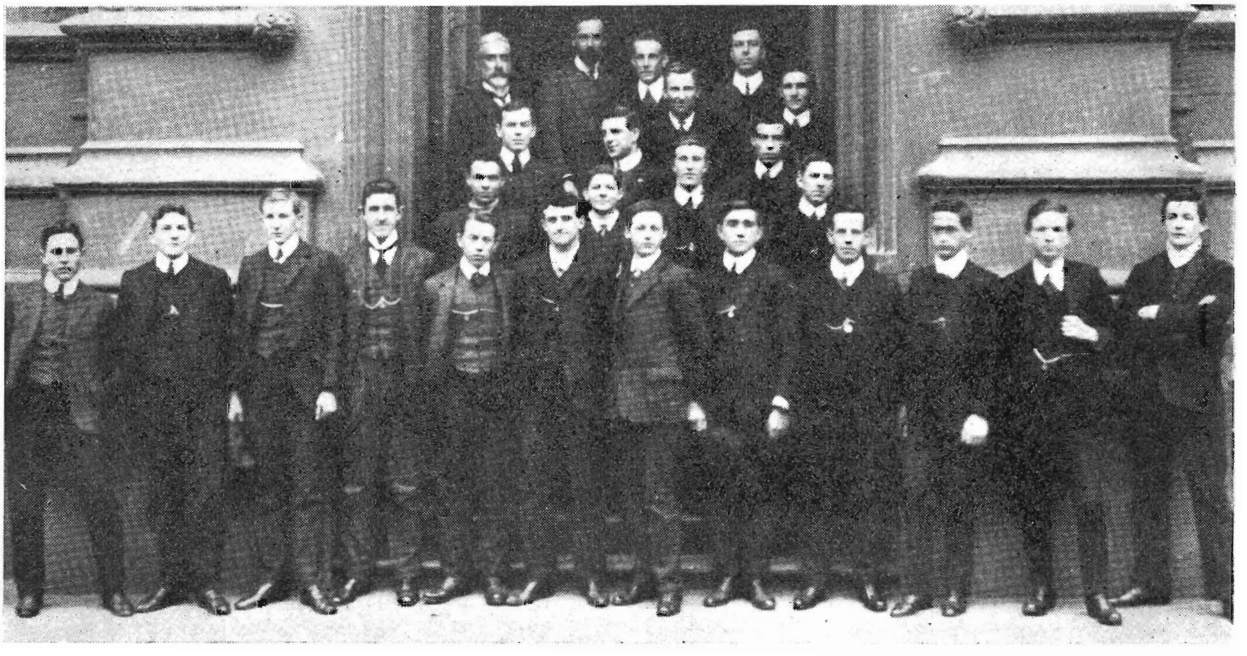
The old Footscray suburban station on the Williamstown line, adjoining Napier-st. The station for the Bendigo main line was at Nicholson-st. The present station, combining suburban and main-line traffic, was built in 1902, and the old stations were demolished.

To railwaymen, particularly the catering staffs at Maryborough and Ballarat, for minimising the inconvenience (caused by an unforeseen traffic delay) to a Melbourne Church of England Grammar School cadet unit returning from camp at Mildura.

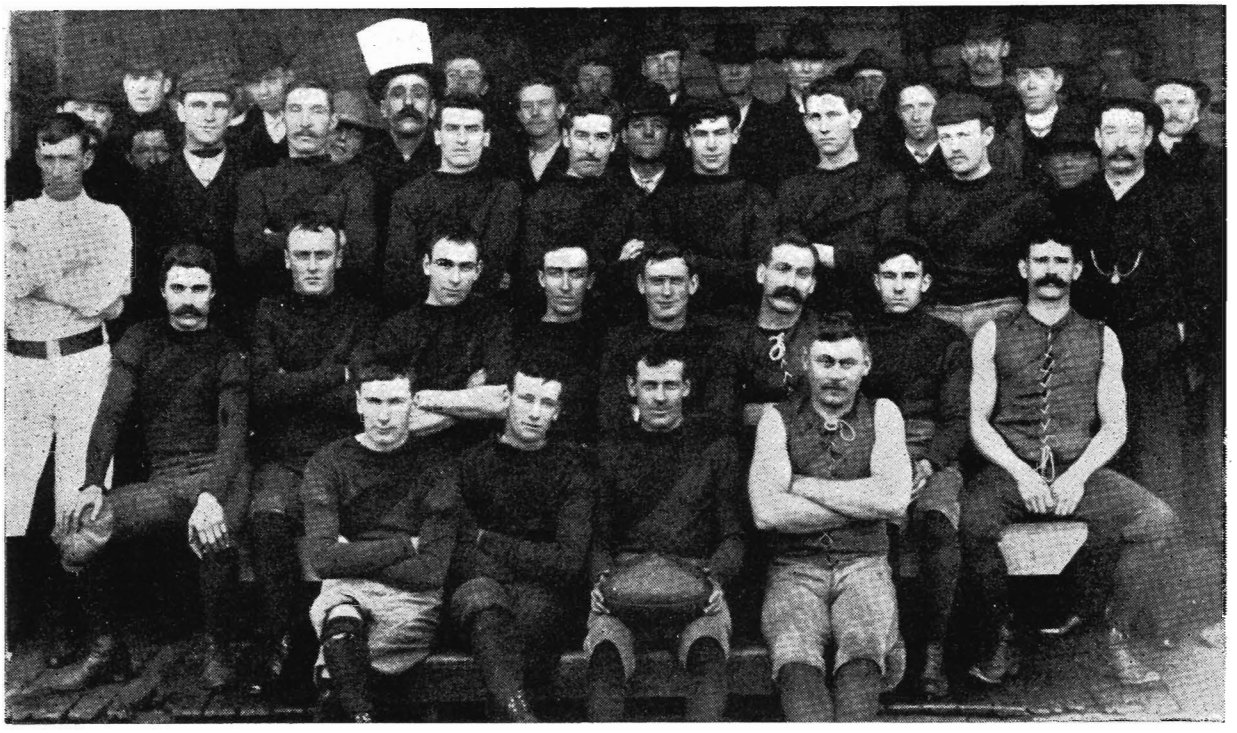
—Lieut-Col. C. B. Covill, Officer Commanding, Melbourne Church of England Grammar School cadet unit

For the efficient handling and transport of a record output of machinery. Arrangements were made for the machines to be loaded by electric crane in the Geelong Yard and also at the wool loading platform when it was not wanted for export wool traffic.

—Mr. R. Averay, Works Manager, International Harvester Company



One of the first batches of 1908 V.R. apprentices to attend the old Workingmen's College, now the Royal Melbourne Technical College. *Left to Right*: Back row: Professor W. N. Kernot, W. Beale, W. Gardner, " Bunny " Holmes. Second row: W. J. Randles, Metropolitan Rolling Stock Superintendent; unknown. Third row: W. Granger, killed in action in World War One; unknown, P. Mills (deceased) foreman, North Melbourne Workshops. Fourth row: C. E. Tucker, car and waggon builder, now Accountancy Branch clerk; R. R. Cannington, Rolling Stock Branch engineer; F. Urban, foreman, Westinghouse Brake Shop, Newport; N. Ward, maintenance engineer, Newport Power House, State Electricity Commission. Front row: R. L. George, foreman electroplater, Newport; W. T. Tonkin, car and waggon builder, Shelter Shed, North Melbourne; E. J. Michaelson, boilermaker; A. C. Ahlston, Chief Mechanical Engineer; R. Densham, foreman, Newport; R. V. Hawkesworth, equipment examiner, Jolimont; unknown, A. E. Patterson (retired), Water Supply Engineer; unknown, N. Martin (deceased), District Superintendent, Seymour; N. A. Donald, sub-foreman, Foundry, Newport.



North Melbourne Locomotive Depot has always produced good football teams. Here is the 1906 premiership side. Perhaps some of the older loco men may be able to identify some of the players.

SPORTS

Demon Railwayman

IAN McLEAN, 24 year old clerk in the Metropolitan District Engineer's Office, Flinders-st., is making a name for himself in League Football. He was one of Melbourne's best in the grand final against Footscray. In his fourth season with Melbourne, Ian, who has developed into a brilliant wingman, won a place in the Victorian team, this year, and played in all three games in Western and South Australia. He was rated among the best players.

Ian came to Melbourne from Bendigo, which has produced many star League footballers. Besides playing football he also played cricket with Bendigo in the A grade competition. The McLean's are a railway family. Ian's father was stationmaster at Bendigo until he retired about two years ago, and two of his brothers are in the Department, one, Alec, a clerk at the Graham goods siding, and the other, Norman, a guard. Until her marriage, Lola, his sister (there are four boys and six girls in the McLean family) was a clerk in the Traffic Branch at Head Office.

Impressed by his play and conduct on the field, some Melbourne supporters have tried to tempt Ian from the railway service with offers of employment, but Ian feels that, for the young man with ambition, the Department offers a preferable career. He intends to carry on the McLean railway tradition.

Challenge Match

QUITE a number of strollers in Albert Park on Show Day, impressed by the good standard of play at a football match, stayed to watch the game. It was a challenge match, nominally between Flinders-st. Accountancy Branch staff and their colleagues at Head Office. Both teams however, were chosen from somewhat wider areas. Flinders-st., who fielded Ian McLean, Melbourne's star wingster, proved too good for Head Office, despite the efforts of Jack Bruce and others. Among Flinders-st.'s most vigorous players was veteran Fred Slade. Final scores were 12–9 to 7–8.

Judo Night

IT was Judo night at the V.R.I. recently, when the grading and presentations took place under the auspices of the National Australian Judo Association. Mr. Frank Deller welcomed the Judo enthusiasts.

Dan, or black belt grades, were awarded. Second Dans went to Tony Gordon, Bill Southall, and First Dans to Aubrey Baillie, Keith Nevin and Stuart Mahoney (all of whom are V.R.I. instructors) Zanthos Demetrie, Alan Goldby and Mathias Komp. Other belts awarded were four brown, two blue, eight green, nine orange, sixteen yellow and nine white. The only girl to be graded was awarded a yellow belt.

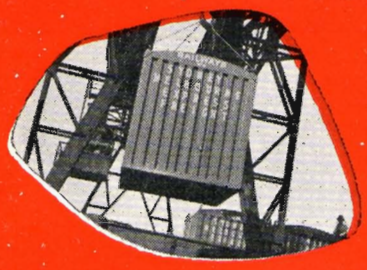
Fifteen of those graded were members of the V.R.I. An inter-club contest was won by Kano Club, which defeated the V.R.I. in the finals by two points to one. The V.R.I. team comprised Stan Mitchell (blue belt), Gerald De Roach (green belt), and Larry La Rose (green belt). The latter is a Stores Branch employee.

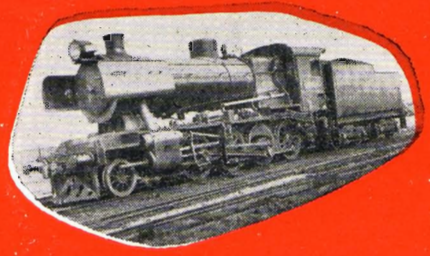
The evening ended with an exhibition of Judo in its various forms by candidates for Dan grades, and a display of self defence Judo moves by Aubrey Baillie and Keith Nevin.

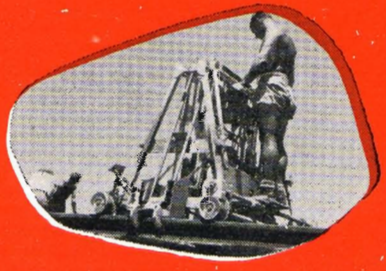
Blanche Cup Tennis Win

A recent reference in *News Letter* to Victoria's one and only success in 1928 in the inter-system tennis competition for the Blanche Cup has prompted apprentice fitter and turner J. P. Lynch, of Newport Workshops, to remind *News Letter* that the N.S.W. team which was defeated, in that year, included crack interstate player Aubrey Willard. Members of the victorious Victorian team still with the Department are the Claims Agent, Mr. A. W. Cobham, who captained the cup winning combination, Mr. L. Arnold, signal and telegraph division, and Mr. George Lynch, Melbourne Goods.

Wholly set up and printed at the Victorian Railways Printing Works, Laurens-st., North Melbourne, for the Publishers, The Victorian Railways Commissioners. 3018—54.







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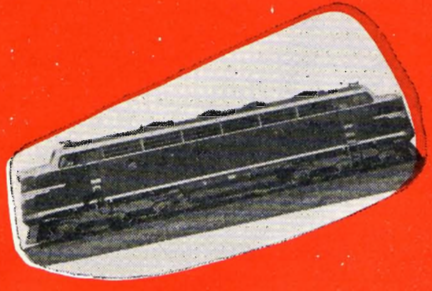


NEWS LETTER

DECEMBER

1954

THE MONTH'S REVIEW

Phoenix Soars

OPERATION PHOENIX will be pushed ahead in the current financial year, with an allotment of £8½ million from loan funds. Some of the largest items of expenditure will be absorbed in the plan to improve the capacity of Melbourne's suburban train service. One of its major works is the duplication of lines between Flinders-st. and South Yarra, which involves a new station at Richmond. For all this, and including the cost of land acquisition, £400,000 has been allocated. Track duplication on the Camberwell–Ashburton and Heyington–Eastmalvern lines will absorb £150,000 and £70,000, respectively, and £18,000 will be spent on converting the power supply for electric trains from 25 to 50-cycle. The concurrent provision of additional sub-stations to cater for increased traffic will take £488,000.

Gippsland Line Works

PROVISION has been made to complete the extension of electrification from Warragul to Yallourn by June, 1955, and for further progress on the remainder of the line to Traralgon. Duplication of the Dandenong–Moe section will also continue to be pushed forward, and for both works a total of £812,000 has been allotted.

Other big items of expenditure from Loan Funds include £400,000 towards completing the erection of 1,500 pre-cut homes for railway staff, £250,000 for the new Dynon Goods terminal, £140,000 for mechanical equipment for the Way and Works Branch, and £188,000 for workshops' machinery. Provision has also been made for a multitude of smaller works, such as train crossing facilities on suburban lines, beginning four new suburban stations, more sidings, new stock yards at various places, new and better staff amenities at workshops and depots, and mechanical coal and ash handling equipment.

Rolling Stock Programme

A good deal of loan money (£2,883,000) will go towards buying 30 new suburban trains and assembling the motor coaches at Newport Workshops; towards 27 general purpose 900 h.p. diesel-electric locomotives (£759,000), 60 light line J class locomotives (£450,000) and 40 bogie vans (£50,000). An amount of £682,000 has been provided for work at Newport Workshops, which includes the construction of country steel cars, refrigerator, open goods, and bogie louvre trucks and powder vans, and equipping country and suburban cars and QR trucks with new cast steel bogies. Also, £107,000 will be devoted to Victoria's share of the cost of four additional twinettes and roomettes, now being made by the South Australian Railways for *The Overland* expresses.

Snail's Progress

MORE of those neat, attractive little pre-cut homes, components for which were imported from England, are being erected in the suburbs and country for members of the railway staff. The early pre-cuts housed new railway workers recruited in the United Kingdom by a V.R. mission to alleviate an acute shortage of train running and workshops' staffs. Later, a quota of these dwellings was fixed for the accommodation of railway workers already in the Department. The pre-cut scheme derived its name, *Operation Snail*, from the government's realistic view that, since there was not the remotest possibility of finding accommodation for new settlers while Victoria's housing shortage persisted, the only answer was to import workers with, as it were, their houses on their backs.

New Erection Scheme

COMPONENTS for 3,234 pre-cut homes were then imported, 1,500 for the Railways and the remainder for the State Electricity Commission, State Rivers and Water Supply Commission, and other government instrumentalities. The Departmental erection of nearly 1,000 of the early homes was supervised by a Melbourne firm of architects, but about a year ago a new system was introduced. Contracts for the erection of pre-cuts were let to private firms and the work was supervised by the Department. The new plan has proved highly satisfactory.

Latest news on the progress of *Operation Snail* is that 470 more pre-cuts are to be erected in suburban and country districts. Contracts have been let for 440, of which 280 are either going up or are up. Eighty are already occupied or are ready for railway families to move in. Some of the pre-cuts erected in the early stages of the scheme are to be repainted. Many of the occupants have improved their homes by laying out attractive gardens with flowering shrubs.

Rationalizing Livestock Sales

RAIN at the right time put the livestock industry in a flourishing condition. It gave a fillip, particularly to the fat lamb market and to rail livestock traffic as well. An innovation, much appreciated by all organizations connected with the production and selling of livestock, is the division of sale days at Newmarket. Previously, all classes of sheep and lambs were brought to market for Tuesday sales; now Tuesdays are reserved for lambs and store sheep, and Thursdays for lambs and fat sheep. The new arrangement has overcome some of the difficulties associated with heavy traffic concentration and has helped to spread livestock trains over several days of the week.

Action Speaks Quicker Than Words

BEFORE the advent of mechanization, goods handling in railway yards was a slow and laborious job. Today it is different. The accent is on speed. A good illustration is the handling of the all-steel 5½ ton freight containers at Dynon Depot. A carrier arrives with a steel container for the Melbourne–Sydney fast goods train. The railway goods loader gives a signal to the gantry crane operator and is hoisted to the top of the container in the truck. He attaches steel cables to the container's hooks and steers it into position in the rail truck. He then unhooks the cables and is lowered to the ground by the gantry. Having seen the successful delivery of the container, the truck driver leaves the depot. He glances at his wrist watch. Loading has taken less than two minutes, rather less than it takes to describe.

Quam Succedeaneum Felix Faustumque

WHEN the *Cyrenia* was leaving Nelson Pier, Williamstown, recently its bows struck the columns of the 100 ton gantry crane which, in a few seconds, was reduced to a tangled mass of twisted girders. The crane, which was designed and built in Scotland, was erected to unload the N, R and J class locomotives imported from the United Kingdom for the Victorian Railways. It had lifted 185 of these locomotives, 60 N's, 70 R's and 55 J's, without mishap.

Faced with the problem of unloading the remaining five J class engines (each weighing about 62 tons), and with less than a week to prepare lifting tackle, the Department's rolling stock engineers selected the Harbour Trust's steam crane, known as *Jumbo*, as a suitable substitute for the wrecked crane. As *Jumbo's* capacity is strictly limited to 60 tons, it was necessary to leave the engine's pony truck temporarily on deck to reduce the weight of the load. Two five-inch 60-ft. long wire rope slings were passed around the single hook of the crane to the four lifting points. These had to be accurately determined so that the engine would remain truly level during the lift from ship to wharf. *Jumbo* completed the lift from ship to rails in six minutes, compared with 20 minutes taken by the gantry crane. The other great advantage of the smaller steam crane is that its central hook allows engine or tender to be turned end for end during the lift, so that they can be correctly mated in readiness for making up the train. For the lifting of the J's, *Jumbo* proved a happy and successful substitute.

The Department uses a wide range of tyres

RAILWAYS AND RUBBER

MENTION the word railways to a person and he will immediately associate it with the word steel. Although steel still holds its position of predominance in railway economy, rubber is fast overtaking it as an essential material.

Modern mobile equipment with rubber tyres is being increasingly used. Small platform trollies and giant earth movers are alike in their dependence on rubber to cushion their wheels. The largest tyres stocked at the Department's Batman-ave. store are 13.50 in. x 32 in. These are used on mobile cranes and cost about £70 each. As a comparison, the smallest ones used are 10 in. x 3 in. for welding set trollies.

The annual consumption of new tyres for all classes of equipment used by the Department is over 600, but this by no means comprises the total replacements. Wherever possible tyres are retreaded. This is carried out by private contractors, after a careful examination has been made to ascertain if the side walls of tyres justify further use. Frequently it is impossible to retread the more expensive tractor and crane tyres after the rough use they get from crossing rail tracks and crossings in goods yards.

A pointer to current railway construction activity is the larger number of wheelbarrow tyres used. During the last twelve months 60 new tyres were used.

Up to the present time, steel tyres have been used exclusively on railway rolling stock, but even this sphere is being invaded by rubber. French railways have been experimenting since the war with the Michelin type wheel which combines a steel flange and rubber tyre. High mileage, silence and increased riding comfort are claimed for this innovation.

The Michelin wheel to all appearances is a standard steel railway wheel centre complete with flange. The rubber tyre is secured to the rim of the wheel as in normal motor lorry practice. It consists of an outer cover with a metallic supporting frame and an inner tube of circular section which is inflated to a pressure of between 114 and 128 lb.

On special cars built for the Swiss Federal Railways, this type of wheel was fitted with an electrical contactor which, in the event of the tyre deflating below 92 lb., immediately caused a warning panel light to flash.

V. R. MOTIVE POWER

Condensed from an address by Victorian Railways Commissioner E. H. Brownbill, M. Mech. E., B.E.E., M.I.E. (Aust.), M. Inst. T., to the Institution of Engineers (Aust).

CONCLUDING his survey of Victorian Railways' motive power, V.R. Commissioner E. H. Brownbill discusses some of the operating advantages of diesel-electric and electric locomotives. Their low maintenance costs, he says, are at present, identical.

THE diesel engine is by far the most efficient heat engine available at present for application to the locomotive. For the higher powers, the normal transmission is electric and the overall thermal efficiency at the wheels is about 26 per cent, much greater than the 7 per cent for steam. Some large units have been manufactured using mechanical and hydraulic torque converter transmissions, but they have not been in service sufficiently long to be regarded as having passed the experimental stage.

Above 200 h.p., normal mechanical clutches and gears give trouble, and characteristics of torque converters indicate that, though efficiency is reasonably high at a particular speed, it, falls off rapidly when the speed varies. This has led to a number of torque converters being incorporated in one drive and arranged so that each operates at its most efficient speed. There may be a future for this type if it proves to be thoroughly reliable. Probably it will first find favour in shunting engines.

Unfortunately, the initial cost of a diesel-electric unit is about two to two and a half times that of a corresponding steam engine, but it is unfair to compare costs on a unit basis because of the greater availability of the diesel and consequent higher possible mileage per annum per unit.

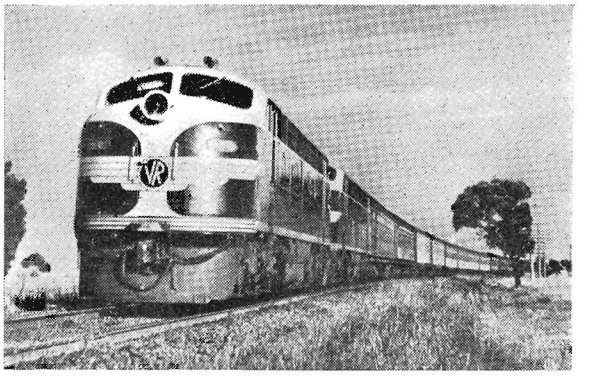
BEST FOR SHUNTING WORK

In shunting yards, where work is available for most of the 24 hours each day, the diesel is undoubtedly the best unit to use. Our 350 h.p. diesel-electric units enter service during Sunday evening and remain in traffic until the following Saturday evening. Actually, if the shunting yards operated on a seven-day-a-week basis, it would be possible for these locomotives to remain in traffic service for two weeks before returning to the locomotive depot for servicing and re-fuelling.

A comparable steam shunting locomotive operating under average conditions remains in traffic service for 16 hours before returning to the depot for servicing.

The greater availability of the diesel is only of value if the traffic is available to make use of this asset. To quote

Diesel-electric shunter



Diesel main-liners hauling "*The Overland*"

an example of using a diesel to advantage : a locomotive hauls the 4.15 p.m. Albury express from Melbourne to Albury, returning with a goods train. On return to Melbourne it does a round trip to Bendigo on goods running, after which it returns to the depot for fuelling and re-servicing before running the 9.15 p.m. Mildura goods train.

We now have in traffic, 26 main-line, 1500 h.p. diesel-electric locomotives, each averaging 2,630 miles weekly, or 136,700 per annum. The first of our diesel-electric locomotives, B60 (*Harold W. Clapp*) entered traffic on July 14, 1952, and after two years of service had completed 330,000 miles of running, or an average of 165,000 miles per annum.

The average mileage obtained with a comparable steam locomotive is about 30,000 miles per annum. In two instances, with intensive co-ordination, this figure rose to over 90,000 miles in one year, but it could not be maintained the following year because of tyre turning, *et cetera*. This underlines the fact that the greater initial purchase price of a diesel unit, compared with steam, should not be considered on a unit basis. Our own experiences show it would require four to five steam locomotives to give the same result as that achieved with one diesel unit.

DIESEL-ELECTRIC'S ADVANTAGES

Other advantages of the diesel-electric in comparison with steam are ; (*a*) the dynamic brake, with which the diesel-electric locomotive is equipped, reduces substantially brake block replacement (the average car and waggon brake block costs 18/–) ; and (*b*), the diesel engine gives a much better performance at starting or at low speed than the corresponding steam engine.

A striking example of this difference in characteristics is provided by the R class steam locomotive and our main-line diesel-electric locomotive. The R weighs 182 tons ; the diesel 112. The two locomotives develop approximately identical horse power, but the diesel hauls 700 tons up a 1 in 50 grade, whereas the R hauls only 400 tons, and that at lower speed. This illustrates one reason why the diesel is so superior for shunting.

When double-heading steam engines, it is necessary to have a crew on each engine, where, with the diesel-electrics, one crew on the leading unit can control both.

Compared with the steam engine, the maintenance costs of both the diesel-electric and electric locomotives are considerably lower.

Here are some examples :

X class : 43d. per mile.

Diesel-electric locomotive : 9d. per mile. Actually, this figure is more than double the maintenance charge to date, but the highest locomotive mileage so far has been 350,000, and no major overhaul has been involved. Not even piston rings have been removed. The 9d. allows for anticipated costs involving major overhauls.

Electric locomotive : 9d. per mile. This again is based on very low mileage performance, but, until more experience has been gained, it is a safe figure to work on

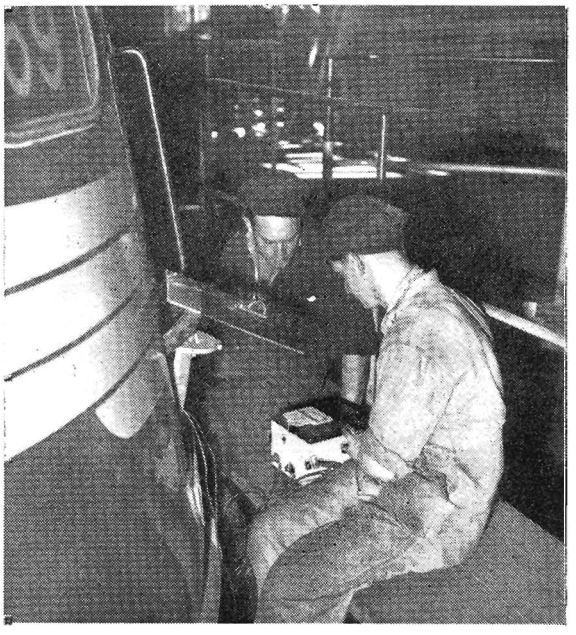
MAINTENANCE ROUTINE

Routine maintenance inspections of diesel-electrics are carried out every 7,500 miles. These result in the locomotive being out of revenue-earning service for about eight hours, during which time carbon brushes are renewed as required, electric circuits checked, diesel engine cylinder walls and pistons inspected through air inlet ports, and the fuel and lubricating oil filters renewed. The first major examination on these units is carried out after 360,000 miles of traffic service, when, for the first time, the cylinder heads, cylinder linings, pistons and piston rods are removed for inspection and checking for wear.

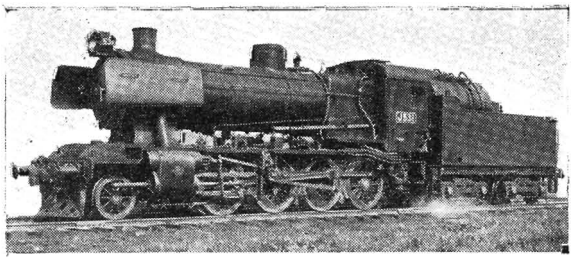
It is expected that all the original components will be available for fitting back into the engine for another cycle of 360,000 miles of service.

The main generator will be overhauled after the locomotive has run one million miles, and at this mileage the engine crankshaft main bearings will also be replaced.

It will be noted that the maintenance costs of both the diesel-electric and electric locomotives are identical. Because one form of motive power has a diesel engine (which, of course, must be maintained) this may be difficult to reconcile. The explanation is that, although one type of locomotive is fitted with a small portable power station, the cost of maintaining



Diesel main-liner maintenance



J class oil burning locomotive

this engine is offset by the costs of maintenance of the additional electrical equipment required in the electric locomotive.

FUEL COSTS

With the existing costs of fuel, £8.3.0 per ton for coal and £19.11.6 per ton for diesel fuel oil, fuel costs are much less for the diesel than for steam. For example, the fuel for a heavy passenger train to Albury from Melbourne would cost £52, hauled by steam, and £16 by diesel.

It is, therefore, seen that if traffic density is high enough to make use of the high availability of the diesel, then it is more economical than steam.

The purchase price of a diesel-electric locomotive is higher than a corresponding electric locomotive, but the diesel unit has the advantage of not requiring fixed overhead structures, traction bonding, sub-stations, *et cetera*.

If the traffic density on a line were such that the cost of providing the necessary diesels compared with that of providing the electric locomotives, overhead, and so on, then the type of motive power to be provided would depend on the price of diesel fuel and electric power.

ELECTRIC LOCOMOTIVES

One way to make Victoria independent of outside fuel supplies is to electrify its main lines. Generally electrification, starting from scratch, could be three phase, single phase with alternating current motors, single phase on the overhead with rectifiers on each locomotive, then direct current motors, 3,000 volts d.c. or 1,500 volts d.c. We have not to worry about which we will have ; 1,500 volts d.c. is here for our suburban system and is quite suitable for extension to the lines likely to be electrified. For very dense traffic it is probably the best type. The others have something in their favour for long distances of sparse traffic, because the higher the voltage the lower is the cost of the overhead ; but the higher is the cost of the individual locomotives.

Electric locomotives have three of the advantages of a diesel-electric locomotive. They develop their power at low speed and are, therefore, particularly good on heavy grades. Dynamic braking is also possible, and where very long grades are encountered, they can take advantage of regenerative braking, where the power generated by the motors controlling the down grade movement is put back into the overhead system. Victoria's terrain does not justify this complication. The locomotives can be used in multiple, with a single crew.

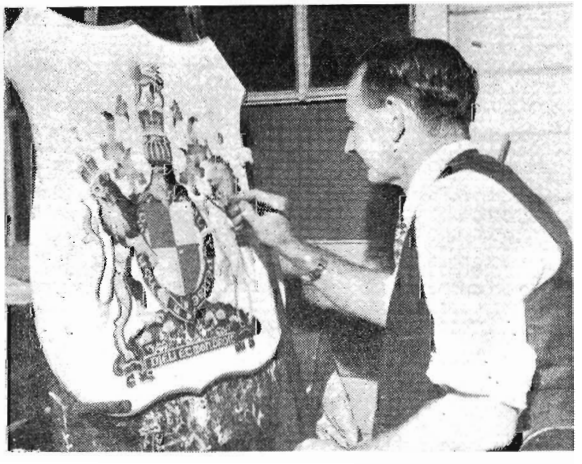
The drawback to electric traction, of course, is the very high initial cost of the overhead and the sub-stations, not to mention the power station. This limits the field of operation of the power units, which are immobile away from these facilities. Generally speaking, one can assume that power can be bought and the cost of power for a service estimated from the unit power cost without going into the question of providing a power house.

n any economic investigation in Victoria on the best type of motive power to use, the problem is very different from that of a railway starting *de novo*. Actually, we have coal stages, *et cetera*, and, what is more important, water supplies in existence. Consequently, the capital outlay involved to perpetuate steam is substantially less than if we were just beginning.

Left to Right : **Signwriters A. Russell, G. Murphy and K. Nelson painting destination indicator boards.**

SIGNWRITERS

DIRECTION and other signs have great value and importance in railroading. They cover a wide range of essential and useful information to train travellers and to all those whose business brings them to a railway station.



Leading Hand Signwriter W. Strong working on a coat-of-arms panel for one of the royal train's state cars.

IF, through bad display, imperfect spacing, or any other defect, the sign fails to convey its message clearly, it is a bad one. Most signs, particularly those giving train information, are read by people in a hurry. Therefore, they must be clear and legible, and leave no room for doubt.

It is not generally realized that it is much more difficult to paint simple block-type, contemporary, lettering—the most effective for railway purposes—than to use the brush on old-fashioned, ornamental lettering with elaborate flourishes and curves. The latter looks pretty, but does not stand out as boldly as plain and dignified lettering : it is less easy to read.

The Signwriter's Division of the Way and Works Branch at Spencer-st. comprises five signwriters and two painters. They work under the supervision of Foreman Painter W. McGown and Leading Hand William Strong who, as an apprentice, learned his trade in the Department. Apprentice painters are given six months training in signwriting and only the best are retained for this class of work.

The railway signwriter turns out everything from a bold, commanding sign for the Electrical Engineering Branch's danger boards—" Beware of Overhead Wires "—to the

minute lettering on an electrical switch panel. Their wide range of work covers illuminated station indicators and railway maps, gold lettering on windows, destination indicator boards, renewal of clock dials, signs to advertise the wares of the Refreshment Services Branch, " no parking " road signs and a host of other jobs.

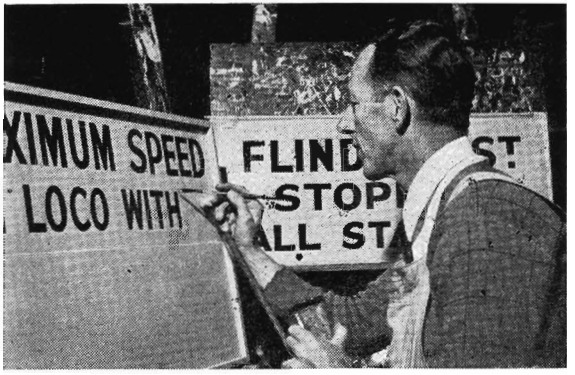
Busiest times of the year for the railway signwriters are the Easter and Christmas holidays, and the Royal Agricultural Show. Many barrier boards showing the destination and stopping places of trains have to be painted, some at very short notice. When extra trains are scheduled to cope with the big demand for rail travel, signwriters may be called upon to supply barrier train information notices within an hour or so. The work may involve the painting of up to 100 letters on each notice.

Double-sided boards giving train running information for busy holiday traffic periods average from 300 to 400 letters, and sometimes extend to even 600. The signwriters, of course, are given ample notice to prepare these.

The Spencer-st. signwriters were particularly busy during the recent railway centenary celebrations painting various signs for the rolling stock exhibition at No. 6 platform. They also coloured the coat-of-arms for Nos. 4 and 5 State cars of the Royal train, and for *B60– Harold W. Clapp* — and the locomotive that preceded it when Queen Elizabeth and the Duke of Edinburgh made their train tour of Victoria.

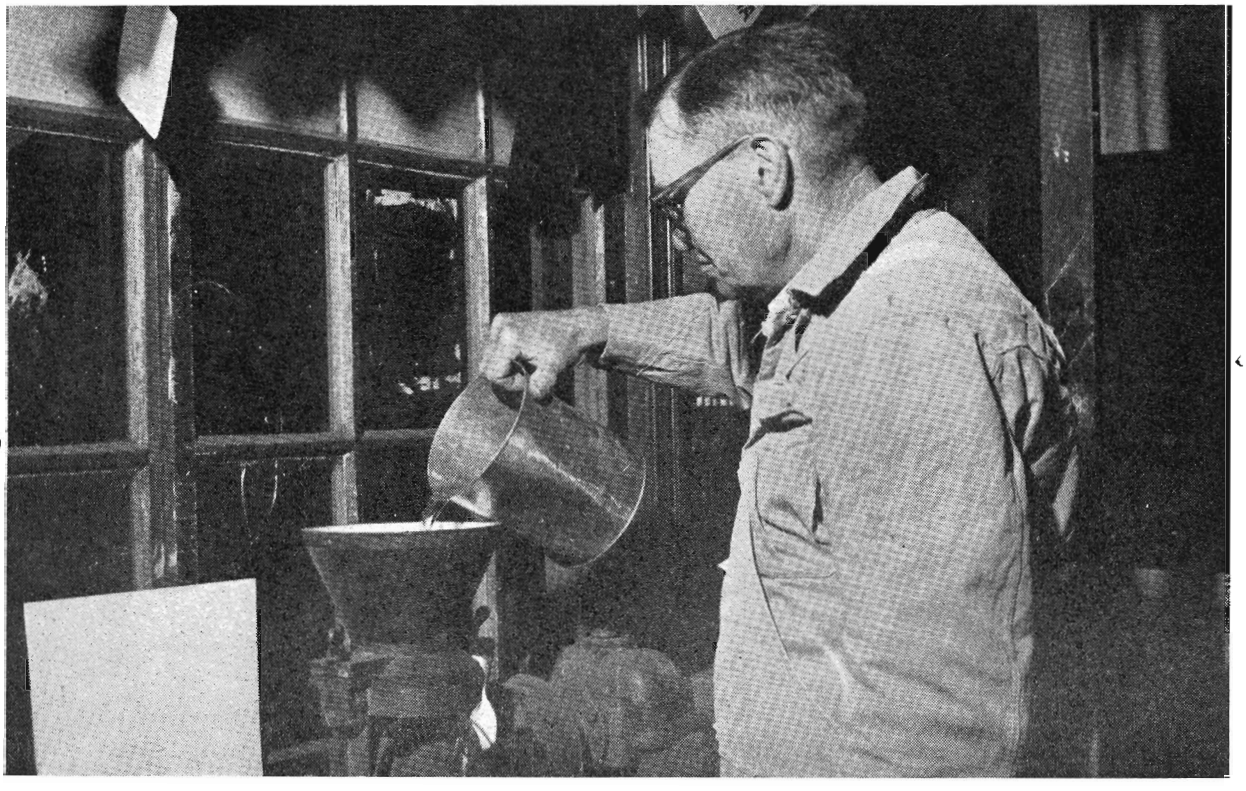
The signwriters also played their part in the Gippsland line duplication and electrification scheme. They were responsible for the $\frac{3}{16}$ in. to $\frac{5}{8}$ in. lettering for about 300 sub-station switch panels.

Paint for all this railway signwriting is bought in powder form, mixed with varnish and run through a small paint mill to get the desired colours. Brushes, or signwriting pencils, cost from 4/– to 65/– and the stock lasts for about 18 months before replenishment is necessary.



Signwriter V. Dorhmann painting a locomotive maximum speed sign.

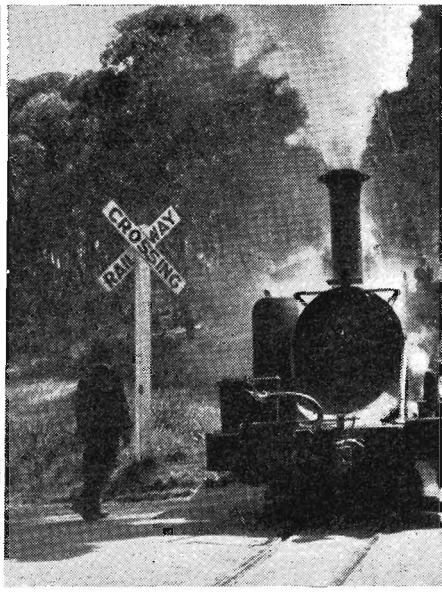
A wide range of destination indicator boards is produced by the signwriters.



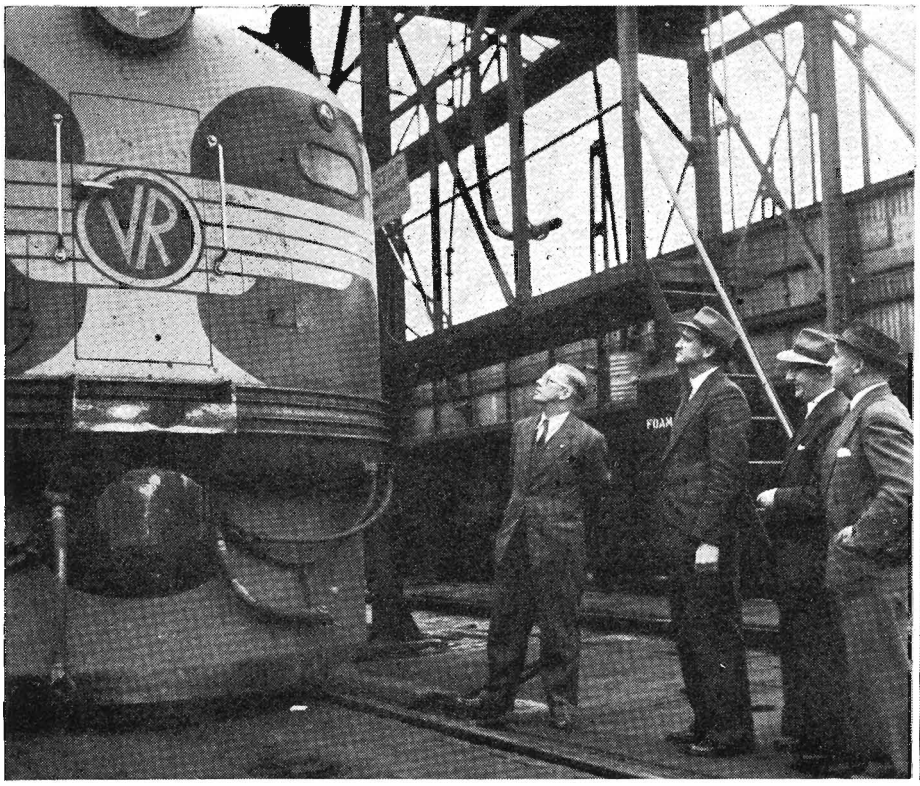
Painter S. Smith operating the paint mill. The paint is bought in powder form.

AROUND THE SYSTEM

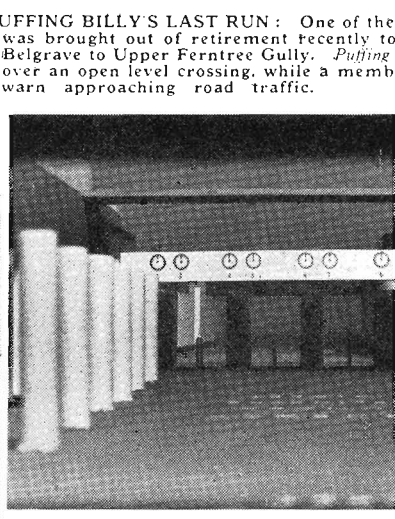
HOLIDAY FEVER : Crowds flocked to the Tourist Bureau in Collins-st. when booking began for interstate Christmas travel. The doors were opened at 8 a.m. to avoid congestion outside. This year booking for interstate travel on December 23 and 24 opened a day earlier than in previous years.



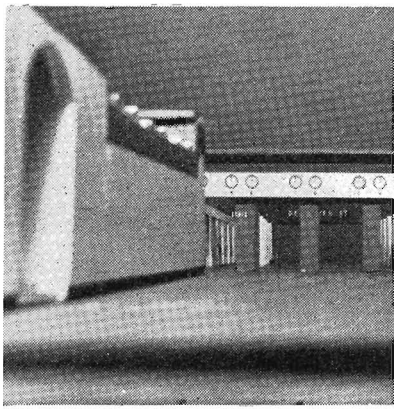
PUFFING BILLY'S LAST RUN : One of the was brought out of retirement recently to Belgrave to Upper Ferntree Gully. *Puffing* over an open level crossing, while a memb warn approaching road traffic.



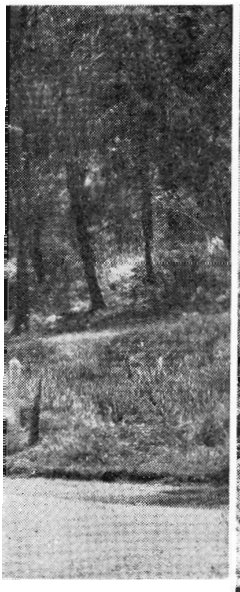
DIESEL INSPECTION : With members of the Australian Railway Historical Society, Mr. Nixon Porter, an engineer from Borneo, inspects a diesel-electric at the Diesel Shop.



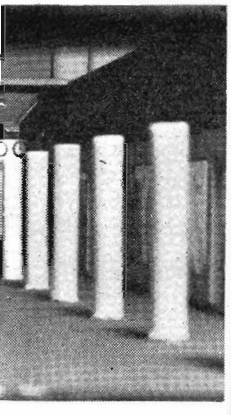
DEGRAVES-ST. SUBWAY : This mo when finished. A view from the D



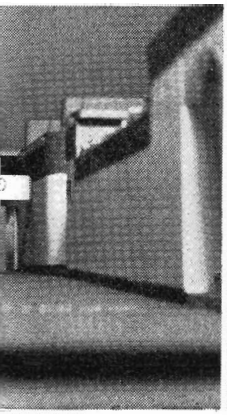
SUBWAY ENTRANCES : In foreground 3 platforms. The steps to No. 1 are



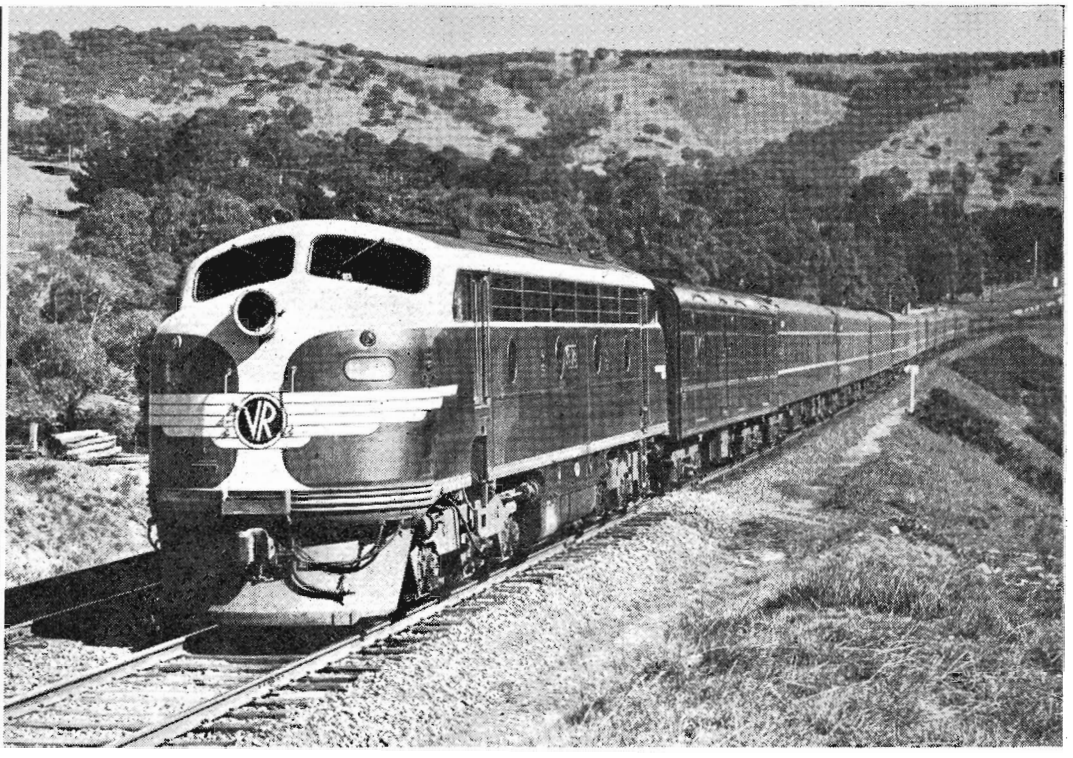
ow gauge locomotives
g empty trucks from
as here seen travelling
the crew stands by to
Photo : K. Lyell



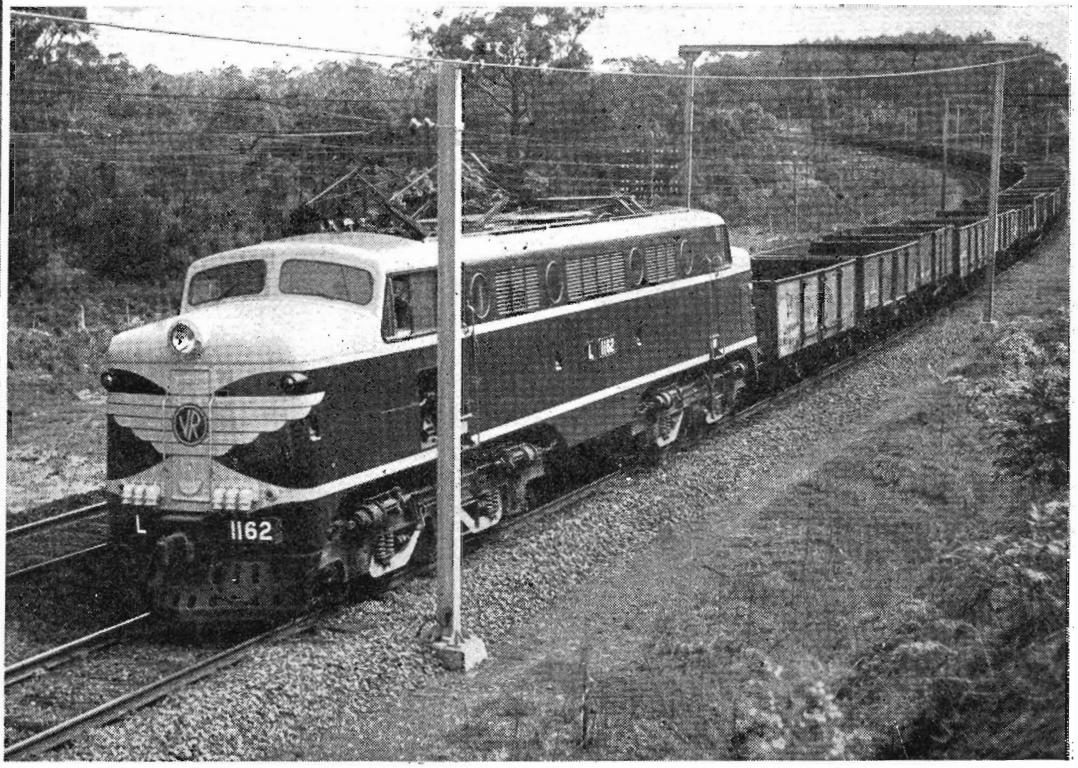
nows how it will look
es-st. end.



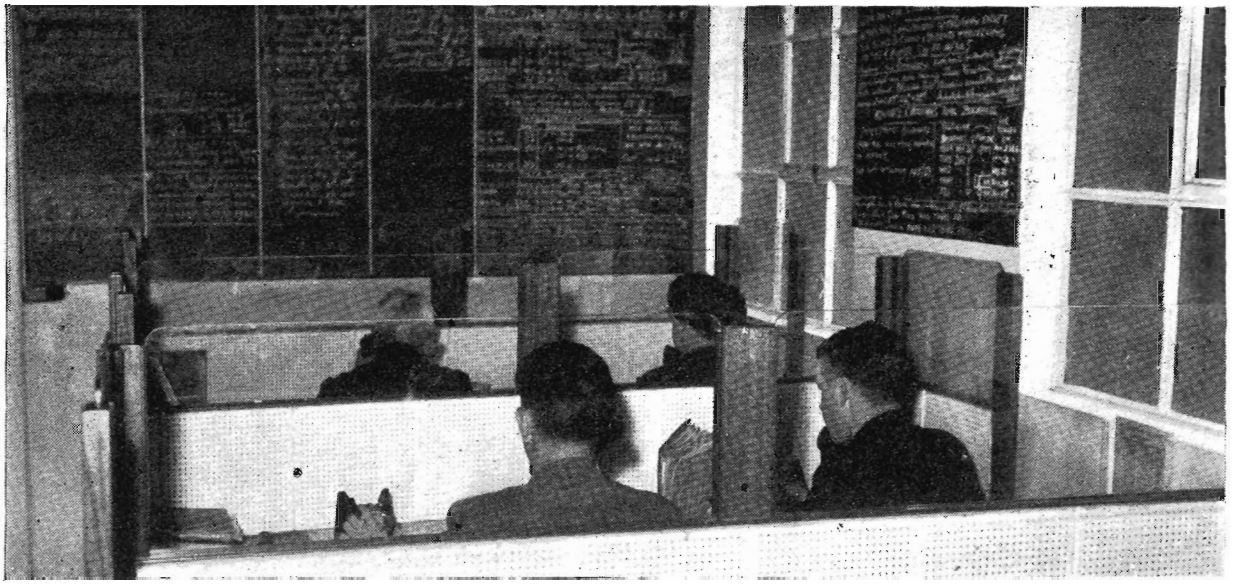
those to Nos. 2 and
the barrier gates.



THE NEW *SPIRIT* : Since the S class locomotives were withdrawn from service, *Spirit of Progress* has been hauled by diesel main-liners. The train is here seen passing through Kilmore East on the up trip.



NEW MOTIVE POWER : An electric locomotive on the Longwarry-Drouin section of the Gippsland line on its way to Yallourn with empty trucks for a big load of brown coal.



Part of the telephone room. The cubicles and ceiling are lined with sound absorbing material. A service is provided from 8 a.m. to 10 p.m. daily, Sundays from 8.45 a.m. to 10 p.m. The normal staff is 10.

A MILLION CALLS A YEAR

HOW do I get to Tumbi Umbi? Are there any power points in Barwon Heads camping park? How long does it take a funeral to go from Ascot Vale to Fawkner?

TELEPHONE inquiries, such as these, at the Victorian Government Tourist Bureau, indicate the wide range of questions asked. In fact, it seems to be a Melbourne habit to ring the Bureau for information on almost anything. And since the Bureau is clearly expected to be omniscient, it always does its best to help. (Incidentally, and to save map searching, it may be mentioned that Tumbi Umbi is about 70 miles from Sydney, towards Newcastle.) About half the inquiries are answered by a special staff in the telephone room; the remainder go to the various sections of the Bureau. The calls answered by the telephone room are electrically counted; last year they totalled 630,857.

This month, with the approach of Christmas, the Bureau 'phones will ring with increasing frequency until they reach, in the telephone room, a peak of over 4,000 calls on Christmas Eve. That will not be the year's busiest day, however. The highest annual peak is always reached on the eve of Good Friday, when the calls top the 5,000 mark.

Undue delay to callers is prevented by the automatic inquiry equipment, which is installed in the telephone room, and which automatically queues in calls in the order in which they are received. Each is then answered in its turn. An ingenious indicator enables a constant check to be kept on the number of calls awaiting attention. This indicator has three vertical columns of illuminated spaces. Waiting inquiries show up in the outside columns, and those actually being answered in the centre column. A replica of this indicator, in the manager's office, gives him the same information.

To cope with the continuous stream of inquiries, a small library of reference books is kept. Among them are timetables from other systems, year books, post office and municipal guides, directories, and over 50 maps. The staff also pick up odd items of information, such as the date and place of flower shows, and so on, and jot them down in the office records, with the certainty that someone, sooner or later, will ask about them.

Although many questions are only remotely connected with tourism (it was recently asked where a certain picture was showing) the Bureau staff answer, as far as possible, every question. They, indeed, pride themselves on being the best Quiz Kids in Melbourne.

Mr. G. Cracknell enters train information on the blackboard. A direct line to Train Control enables the information to be kept up-to-the-minute. On the left is the indicator that shows waiting calls and those being answered.

A2 572 hauling the *Sydney Express*

A VETERAN PASSES

After nearly half a century of service, in which it amassed nearly 1,173,000 miles, A2 825 has reached the end of its economic life and now awaits scrapping at Ballarat North Workshops.

PLACED in service on December 2, 1907, it was the first of the fleet of the famous A2's and the first express passenger locomotive to be entirely designed by the Department's engineers and built at Newport Workshops. The Chief Mechanical Engineer responsible for the design was the late Mr. A. E. Smith, who, later, also supervised the design of the S class engine.

No.'s 816–939 (Stephenson valve gear) were built at Newport Workshops between 1907 and 1915. No.'s 940–999 were built at Newport, Ballarat and Bendigo workshops in 1915–22. The latter were converted to oil-burners in 1945–46 when coal was difficult to obtain.

A2 572 was greatly admired when it took the road, with its wheels and body painted red, and with dark blue cleading bands and white lines on the engine and tender. Later, the bodywork colour was changed from red to maroon, and the dark blue cleading bands to brown. As an economy after the 1914 war, black, without lining, was adopted as standard for the Department's fleet of steam locomotives, and, with the establishment of the engine pool, the practice of assigning a locomotive to a particular crew was discontinued. Although the pre-pool system had induced crews to take a personal interest in the appearance of their locomotives and keep them highly polished, it was obviously impracticable under modern conditions to keep it going.

The first A2 was originally classified No. 572, but became A1 805 in 1925. This class letter was introduced for saturated steam locomotives. Later, A1 805 became A2 825, when, in 1946, it was converted to a superheated locomotive, with a marine type superheater. It was not the first, however : that distinction goes to DD 882, later D3 668, which was built with a Schmidt superheater in 1914.

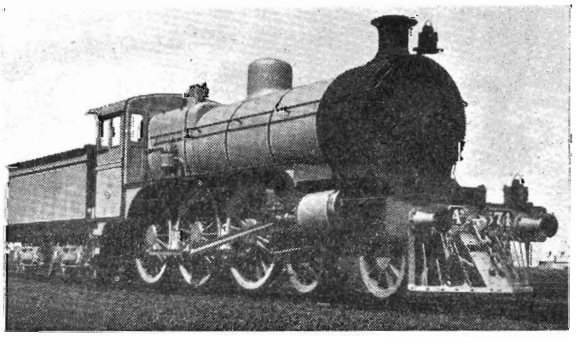
The advantages of superheating steam are an increased volume of steam per pound of water evaporated, reduced steam consumption, due to its greater expansive force, and a reduction of cylinder condensation. These factors result in an overall saving of about 30 per cent. of water and 25 per cent. of fuel.

So important were these economies, that all the earlier A2 locomotives were ultimately converted to superheaters.

During its long life on the track, A2 825 had many surgical engineering treatments to give it a new lease of life and enable it to build up such an impressive mileage.

It had at least nine changes of boilers, frame inserts when cracks occurred, replacements of drag box, fitting of auto-couplers, a re-designed smoke box, smoke deflectors and an electric headlight.

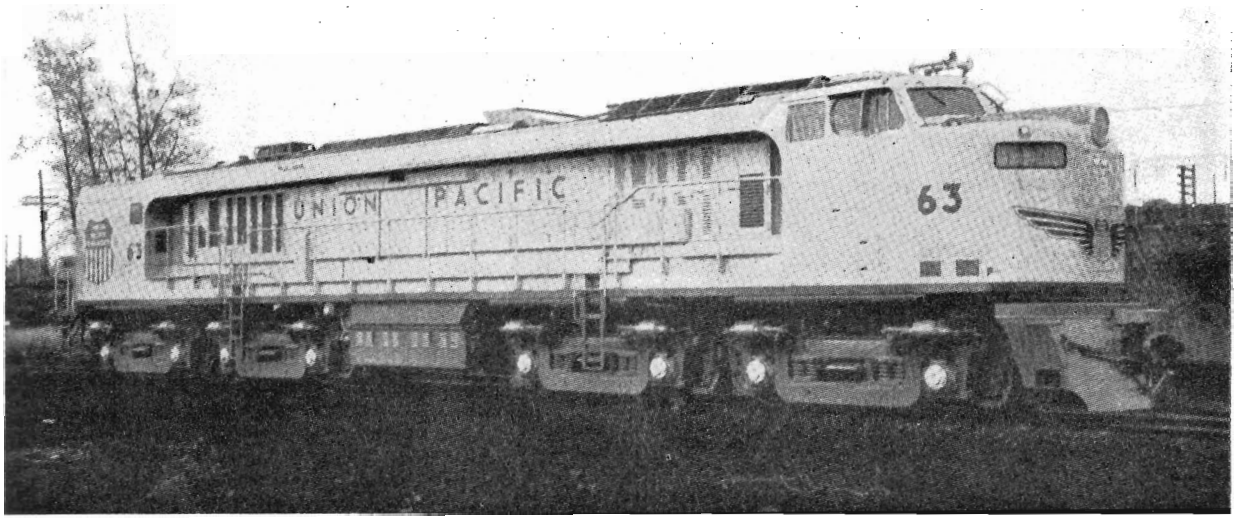
A2 825 goes to the locomotive scrap heap loaded with honours.



The early A2's had dark blue cleading bands and white lines on engine and tender.

LINES FROM OTHER LINES

The Norfolk and Western's experimental coal-burning turbine-electric locomotive is rated at 4,500 h.p. and is designed for a maximum speed of 60 m.p.h. It has a maximum rated tractive force of 175,000 lb. and a continuous tractive force of 144,000 lb. at 9 m.p.h. There are four six-wheel trucks with each axle motorized.



A modified unit, one of three recently delivered, of the Union Pacific's fleet of gas-turbine-electric locomotives. These locomotives have a starting tractive force of 135,000 lb. There are four four-wheeled trucks with each axle motorized. These locomotives burn heavy oil.

Naming B.R. Locos

IN British Railways' programme for standard locomotives to be built during 1954 and 1955, five class 7 and ten class 6 locomotives have been allocated to the Scottish Region. The class 7 engines bear the names of the Firths of Clyde, Forth, and Tay and of the Dornach and Moray Firths. The class 6's are named after clans Colquhoun, Graham, MacDougall, MacLean, Douglas, Gordon, Hamilton, Kennedy, Lindsay and Scott.

France-Algeria Containers

THE French National Railways have put into service 1,000 freight containers built specially for working across the Mediterranean between metropolitan France and Algeria. These containers have a capacity of 247 cubic feet, and can accommodate a maximum load of 5 *tonnes*. For ocean traffic, the containers have to conform to certain standards, and must be able to fit snugly one on top of the other and each be strong enough to support the weight of two others fully loaded on top of them. As the principal traffic on this route is fresh vegetables and fruit, the containers have to be particularly well ventilated.

European Rail Freights

AN agreement is reported between the six member nations of the European Coal and Steel Pool on a standard taper in freight rates in relation to distance. The effect will be to enable through freight rates to be quoted on a more or less uniform system, even though the journey may cross several boundaries between member nations. In the past, freight crossing a frontier became, in effect, a new haul, with a new taper. The agreement will apply to coal, steel, iron ore, and scrap, but has still to be ratified by the governments concerned.

Electrification In U.S.S.R.

THE official organ of the Russian Railwaymen's Union reports that this year marks the 25th anniversary of the first railway electrification in the U.S.S.R. Plans for further electrification, it is stated, include part of the Trans-Siberian as far east as Irkutsk, other lines connecting Russia in Europe with industrial regions east of the Urals, the Moscow-Leningrad main line, and suburban lines in industrial areas.

U.S.A. Locos For Korea

THE president of the Chesapeake and Ohio Railroad has told President Syngman Rhee of Korea that his company is presenting 12 more steam locomotives to the Korean National Railways. These are 0 – 8 – 0 shunting engines, built in 1930. Previously, six shunting and three 2 – 8 – 0 freight locomotives were presented.

AMONG OURSELVES . . .

Newport's Golden Age

IN February next year, Mr. W. P. Hambridge, officer-in-charge of the Car Section of the Rolling Stock Drawing Office, will be celebrating his 50th year in the Victorian Railways. He was 14 when he joined the Department in 1905 and went to Newport Workshops to learn his trade as a car and waggon builder. There was a big car construction programme in progress at the time ; 71 ft. cars were being built for the *Sydney Express*, for the joint stock of the Victorian and South Australian Railways, and for general use on the V.R. system. Cedar was used for the internal partitions and finish of these cars. They were the most up-to-date of their kind in Australia. They were followed by similarly designed W class 58 ft. cars, mounted on four-wheeled bogies. For these, Queensland maple was used in the partitions and finish.

Mails On Wheels

ABOUT 1910, Mr. Hambridge saw the C.E. express type passenger and mail sorter vans built at the 'shops. The motor car industry was then in its infancy, and the railways carried mails to all parts of the State. The sorter van was fitted with racks and tables, mail bag frames and pigeon holes for letters. It also had an exterior slot for posting letters at stations en route.

THE EMPLOYMENT OFFICER AT RAILWAYS ADMINISTRATIVE OFFICES, SPENCER ST., MELBOURNE, HAS ALL DETAILS ABOUT OPPORTUNITIES FOR CLERKS, TRAINEE ENGINEMEN, SHUNTERS, PORTERS, METAL TRADESMEN ETC., IN THE RAILWAY SERVICE.

The Department's latest recruiting poster is designed to stimulate the interest of young men in a railway career. The poster, which is on display at stations, is the work of railway artist Clive Trewin.

Mr. Hambridge

There was great activity at the 'shops, says Mr. Hambridge, when work was begun on the first batch of Tait sliding door cars, and swing door types were lengthened to make them suitable for the suburban system. The car and waggon builders even worked through the Christmas holidays to finish the first Tait cars for service on the due date.

Before he left Newport for Head Office to become an acting draughtsman, Mr. Hambridge saw *Loddon*, *Torrens*, *Glenelg*, *Onkaparinga* and *Barwon* sleeping cars built as joint stock for the *Adelaide Express*, *Yarra* and *Murray* parlour cars for the *Sydney Express*, and *Goulburn*, *Campaspe* and *Wimmera* dining cars. In this pre-1914 car construction programme, nothing excited more interest and admiration than No. 4 State Car, from the observation platform of which the Queen and the Duke of Edinburgh, this year, greeted Victorians.

Material Scroungers

IN the golden age of car construction at the 'shops, Mr. Hambridge says that Newport had its humourists and other quaint characters to enliven the day's work. No car shop gang, he points out, could work smoothly in those days without a smart lad labourer who made it his business to see that tradesmen did not go short of materials. Their methods, at times, were not quite according to Hoyle and sometimes bitter arguments ensued about the rightful ownership of certain materials required to finish a job. Old timers at the 'shops still talk about a dispute that developed between two lad labourers over some materials that had been spirited from one gang to another. The victor was Paddy O'Brien, a broad shouldered lad, who later became heavy-weight amateur boxing champion of Victoria and star Carlton footballer.

Driver With Drive

DRIVER ALLAN BLACHFORD, of Ararat, is the latest railwayman to be elected to the local council. He is pledged to get a better water supply for the district. Joining the service as an engine cleaner in 1924, he worked at North Melbourne, Stawell, Dimboola, Maryborough and Ballarat, before going to Ararat in 1939. He has been a driver since 1941, and at various times has acted as night foreman. Mr. Blachford has been engine working instructor at the Railways Institute since 1941 and is now president of the V.R.I. Ararat centre committee. An active member of the Australian Federated Union of Loco Enginemen, he has been twice chairman of the Ararat branch.

Mr. Blachford began a professional runner's career in 1922. He was coached by J. E. Curran and W. P. Twomey, both of whom were Stawell Gift winners, and had considerable success on the track. When he was overtaken by Father

Time and hung up his running spikes, he became a coach and administrator. His present team of four runners includes A. T. Bryant, a winner of many important distance races. Mr. Blachford is senior vice-president of the Ararat Highland Sports Society and timekeeper and Victorian Athletic League delegate. He was also responsible for forming the Ararat Institute Women's Athletic Club.

Mr. Blachford was also a footballer. He played for Stawell in the Wimmera League for 12 years. A first aider for 13 years, he is now Superintendent of Ararat No. 1 team. He also acts as timekeeper for the Ararat Boxing Club.

Mr. Blachford trained the champion pony, *Athene*, who ran 4½ furlongs in Australian record time. His best turf coup was with *Ramulator*, which won a race at Ballarat and paid the record tote dividend of £127.15.0 for 5/–.

Miss Dorothy Jean Simons, a tracer in the Rolling Stock Drawing Office, was married at Murchison recently to Mr. Alan McKenzie, electrical engineer, of Altona. The bride's father, the Rev. R. P. Simons officiated. Miss Simons worked on tracings of the R class locomotive design. Railway history was made when she was permitted to travel to Seymour on the footplate of the first R to go into service. Before she left the Department she was presented by the Rolling Stock Engineer, Mr. A. M. Hughes, on behalf of the Drawing Office staff, with a silver tea service.

Railway Toreador

ASSISTANT Stationmaster H. Ross, of Moonee Ponds, who goes about his job without any fuss, can always handle an emergency situation with quiet competence. Recently he demonstrated a toreador versatility by handling a runaway steer. The incident made newspaper headlines. Keenly interested in sport, he at one time organized social cricket between railway staff and newspaper offices. An enthusiastic supporter of Essendon football team, he delighted train travelling supporters of the Dons by decorating the station chimney with the club's red and black colours. Mr. Ross has been at Moonee Ponds since 1927.

Ballarat District Engineer's Transfer

TRACK men and outside staff generally in the Ballarat district will miss District Engineer Mr. D. D. Wade, who was transferred recently to the north-eastern district. He had been at Ballarat for six years. At a farewell party, the senior clerk, Mr. H. R. Orpen, presented Mr. Wade with a pipe and tobacco pouch, a pen and pencil, and an electric clock, for his wife.

Time-Table Harmonist

THE man who, since the war, has prepared time-tables for country special trains and those that have taken many thousands of migrants from Melbourne to Bonegilla, has retired because of ill health after more than 46 years' service. He is Roy Ogilvie, who had been on the staff of the Superintendent of Train Services, since 1944.

Roy joined, in 1907, as a lad porter and, after working as block recorder and acting booking clerk in the suburban area, he became successively an operating porter, an assistant stationmaster and, at the age of 22, stationmaster at Chillingollah. He was then the youngest S.M. in the service. From train control work at Ballarat and Ararat he was transferred to Central Control in 1929, which equipped him for time-table work on the staff of the Superintendent of Train Services in the last year of World War Two. With others he then drew up time-tables for war-time troop trains and during the demobilization period.

Versatile Pianist

OUTSIDE his railway work Roy was a well-known pianist. He started to play at the age of five, and, encouraged by his father who was a playing member and chairman of the Victorian Police Band for 20 years, Roy showed great promise. Later in life, he became probably the most sought after pianist in the railways. He could swing from Beethoven to hot jazz with astonishing ease. In 1919, in the open pianoforte championship at South-st. competitions, he finished a close second, against all comers. When he was stationmaster at Kingston, between 1916 and 1920, he organized and played in many concert parties and minstrel shows which netted hundreds of pounds for war funds. During the last war he played at the regular Sunday afternoon concerts for Allied servicemen at the Railways Institute.

A large and representative gathering farewelled him. The Superintendent of Train Services, Mr. F. D. Greene, presented him with a wallet of notes and a vase for his wife.

V.R. Military Band Memories

IN the special centenary issue of *News Letter* in September there appeared a photograph of the railway military band of 1906. Readers were asked to identify any of the bandsmen.

Mr. V. Sarsfield, of the Way and Works Branch, Shepparton, says that his late father, Mr. M. C. Sarsfield, is fourth from the left in the front row. Another to recognize a relative is Mr. R. Tanner, Turnery Extension, Newport Workshops. He says that his grandfather, Mr. I. Herring was the drummer. Mr. Tanner has a memento of the band in the shape of a gold tie pin, with a crown on top and the V.R. monogram beneath.

Mr. Sarsfield has sent *News Letter* a copy of the band's rules. All members were obliged to appear at public engagements in the band uniform, and wear a white shirt and collar, black bow-tie and black boots. The bandmaster had full control over members at practice and public engagements, and selected the music and the programme for public performances, subject to the approval of the committee. He also assigned to each bandsman his instrument. The duties of the drum major were "to muster members as required at public engagements and assist in maintaining discipline"

Thanks

TO the train crew of the Mildura express who made it possible for two women and myself to rejoin it at Dunolly after alighting there, instead of at our St. Arnaud destination.

—Mr. F. Richards, St. Arnaud District Hospital

To Mr. F. Battersby for upholding the railway tradition of cheerful service. Now retired, he drove the Cohuna line diesel rail-car for many years. "We always felt quite happy when school children were travelling in a diesel rail-car driven by Mr. Battersby."

—Mr. C. R. G. Reid, Gunbower Estate Pty. Ltd., Gunbower

For the £38 donation from the Stores Branch Charity Fund (representing regular fortnightly pay contributions) to the Lord Major's Fund for Metropolitan Hospitals and Charities. "It is most heartening to have such support of your Charity Fund."

The Lord Mayor of Melbourne (Cr. F. Selleck)

Geelong Guard Retires

ONE of Geelong's best known passenger guards, Tom Hilton, retired recently after 43 years' service. Before he went to Geelong he was at Donald and Maryborough and, while in the country, took an active interest in plumpton coursing and football. At farewell gatherings he was presented with a fireside chair, a gold watch and a travelling rug.

Balaclava Loses A Friend

THE stationmaster's office at Balaclava was gaily decorated in the S.M.'s favourite football colours, St. Kilda, on the day Mr. W. H. Curtis retired from the Department recently after 47 years' service. He joined as a lad porter at Box Hill and, after a year at Nhill as signal porter, returned to the suburban area as a signalman at Sandringham and Balaclava. His first stationmaster's appointment was at Creighton in 1926, and he was located at Tatyoon, Macorna, Rosedale, Wedderburn, Tallangatta and Birchip before returning to Balaclava for a spell of 21 years. He was a most popular S.M. with suburban travellers. He was presented with a gold wristlet watch.

Apprentice Who Climbed High

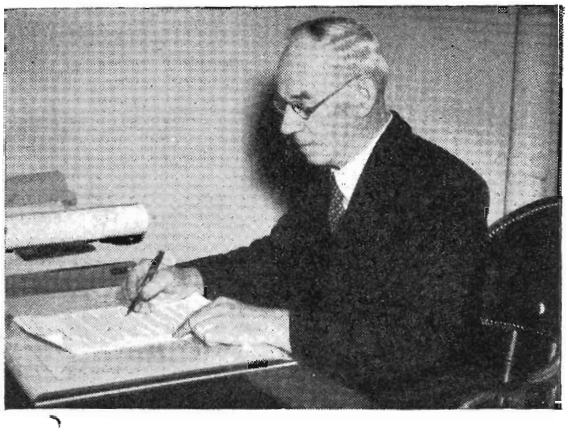
MR. A. E. PATTERSON, Engineer of Machinery and Water Supply, who retired recently, began as a supernumerary lad labourer at Newport Workshops. He transferred to the Way and Works Branch in 1913 after finishing his apprenticeship as a fitter and turner and obtaining the Magee Prize for engineering drawing and design at the Melbourne Technical School. He became a draftsman in the office of the Engineer of Machinery and Water Supply and, later, as a young engineer, he was stationed at Lithgow, N.S.W., as an inspector for rails then being rolled for the V.R. Subsequently, he spent a number of years on crane inspection, and on water supplies for locomotives.

Departmental water supply schemes, large and small, throughout the State were all well known to him, and many improvements were made under his direction. Hot water and heating installations have also been his speciality.

As a member of various committees, he has helped to introduce mechanical coal and ash handling equipment, chemical water treatment plants for locomotive supplies, oil storages at Newport and the overhead hoppers at North Melbourne Locomotive Depot for fuelling brown coal dust burning locomotives.

Mechanization

AFTER his appointment as Engineer of Machinery and Water Supply, in 1949, Mr. Patterson was associated with the purchase of electrically operated turntables and cranes, mobile cranes, and the provision of mechanical earth moving and track maintenance equipment, machine tools and modern plant for the Way and Works Branch. His last job was the design of the prototype mechanical car washing plant in the Jolimont Yard. Quiet and unassuming, Mr. Patterson



Mr. Patterson

was recognized as a highly competent engineer, who knew how to pass his knowledge on to younger men.

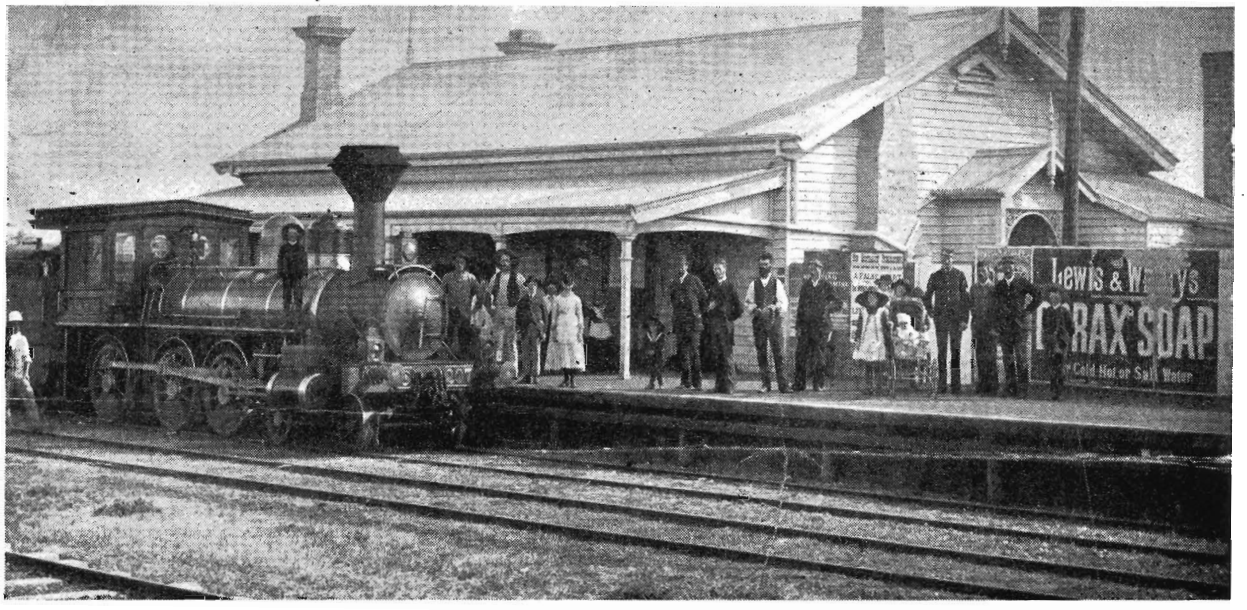
Before he left the Department, he was presented by the Chief Civil Engineer (Mr. A. P. Taylor) with a photographic projector for coloured slides. It was a gift from his many friends and associates in the various branches.

Coal Mine Driver

DRIVER Alf Withers was a fireman in the early days of Melbourne's steam train passenger service, but 33 of his 43 years' railway service were spent at the State Coal Mines, Wonthaggi, where during his career he drove coal and passenger trains. A popular driver, Alf's cheery personality will be missed from the footplate, now he has retired.

Depot Veterans Retire

STAFF at the Electric Running Depot, Jolimont, recently farewelled three railwaymen who are very well known on the suburban system, Drivers Fred Corrie and Jim Hartley and electric suburban guard George Wood. The former was at Stawell and Ararat before his transfer to Oakleigh and was a relief driver on *The Overland*. He was a member of Stawell's 1923 champion first-aid team. Jim Hartley is the last of three brothers to retire from the Department.



Donald station in 1893. The old S class locomotive in the photograph was one of 10 made in 1883 by the Phoenix Foundry Company, of Ballarat.

Bendigo, winners of the V.R.I. country golf week teams championship. *Left to right*: L. Townsend, J. de Araugo, H. Fletcher, G. Townsend, L. Barlow.

SPORTS

Record Entry For Country Golf Week

A record number of country golfers from all parts of the system took part in the recent country golf week at Rossdale course, Aspendale. Bendigo, with Mr. L. Townsend and his son, Graeme, in the team, won the championship cup for the third successive year. Before the end of the tournament, the country representatives met 20 metropolitan players in competitive events. The State open singles championship was won by R. McPherson, of Frankston, with a score of 125 for 27 holes, and the country open singles championship went to H. Fletcher, of Lalbert, with 127. G. Tolliday, of Dimboola, with 132, won the country minor championship, and F. Bellett (Maryborough), 151, (41), 110, was the winner of the 27 holes handicap. Other results were:—18 holes handicap: F. Bellett (Maryborough), 97, (27), 70. 9 holes Stableford: C. Chiswell (Benalla), 22 pts. 18 holes Stableford: F. Neilson (Warracknabeal), 41 pts. 9 holes bogie: E. Petty (Maryborough), 2 up. *18 holes bogie: G. Townsend (Bendigo)*, 1 down. Mr. Commissioner Meyer presented the trophies to the winners at a social evening at the V.R.I.

The "Ashes" Come Home

V.R.I. golfers are very proud that, at long last, they defeated the Postal Institute players and for 12 months, at least, the Edwards Shield and the "ashes" trophy will be on display at the Institute with many other trophies won by railway sportsmen. The postal golfers had won the trophies in five successive contests and seemed to have a mortgage on them. The "ashes" is a most unusual trophy. When the institutes first met and railwaymen sustained the first of what was to become a series of defeats, Tom Kelly of the V.R.I. team put a match to his score card. The "ashes" were placed in a miniature bowl and mounted on polished wood.

Cricket Carnival

THE form of railway cricketers is being watched very closely so that the best possible team can be selected to represent Victoria at the interstate cricket carnival in February, next year. The holders of the championship Mick Simmons cup are Queensland, who won the trophy in Brisbane in January this year. This month's fixtures are: December 7, Flinders-st. v Newport; Northern Lines v Loco. December 14–21, Yard v Loco., Flinders-st. v Northern Lines.

Skilled Fencer

ANOTHER new railwayman with an interesting history is Mr. E. (Andy) Szarkall, V.R.I. steward and secretary-instructor of the Institute's Fencing Club. A native of Szegev, in Hungary, Mr. Szarkall was early destined for the army. He entered a military academy and had his first fencing lesson when he was 12. At 16, he won a county fencing championship in the foil, and, as a young lieutenant, he took part in army championships. He also became a skilled horseman.

As a captain, when the last war broke out, he took part in some bitter battles against the Russians. He was wounded four times. One of his wounds shortened his left arm by two inches, but it has not affected his skill as a fencer. When the Russians invaded Hungary, Andy Szarkall escaped to the British Zone.

Several years later, he decided to make his home in Victoria. He joined the railways, and his first job was with a Way and Works gang at Nowa Nowa in Gippsland. It was with track gangs that he met a compatriot, C. Cercsenyi, a former Hungarian Air Force officer, also a fencing enthusiast. Back in Melbourne they suggested the formation of a fencing club to the general secretary of the V.R.I. (Mr. W. E. Elliott) who gave it wholehearted support.

Selector For Women's Tennis Team

RAILWAY sportsmen, will be gratified to know that the Claims Agent Mr. A. W. (Alec) Cobham, has been appointed a selector for the women's tennis team to go overseas early next year. Mr. Cobham represents N.S.W. on the Council of the Lawn Tennis Association of Australia, and is also a member of the Council of the Victorian Lawn Tennis Association. He has been associated with the sport for many years.

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