A Brief History of The Shenley Valley Railway

The first railway in this area was a wooden-rail tramway of 4 ft. 7in. gauge. This was opened in 1822. Primitive wagons and vans, drawn by horses were used to convey passengers and freight. This line ran from Twiddledale to Shenley.

In 1829 the present company bought the line and by 1831 the wooden rails were replaced with 30 lb iron rails. New rolling stock was built and 2 0-2-2 locos were ordered from Robert Stephenson. These arrived in 1832; they were No. 1, The Rocket and No. 2 "The Mercury". In 1870 the U.D. Drinkwater dairy was opened, and its owner obtained control of the line. As the rails were wearing out they were replaced with 60 lb. bullhead steel rail. In 1872 two 4-4-0 locos were delivered from the Western and Atlantic Railroad. They were No. 3, "The General" and No. 2 "The Planet." At this time No. 2 was sold.

In 1880 the line was extended to Waverly Road. By 1920 No. A was out of service, so an 0-6-0 Tank Loco was obtained from the Midland Rly. This was No. 5. Another 0-6-0 was obtained from the Oristano Tramway, Italy. It is No. 6 and is at present being rebuilt. A diesel, No. 5007 is also on the loco roster, but will be sold. An 0-6-0 and a B.R. Class 3MT 2-6-2 are visitors to the line. A G.W.R 2-6-2 will probably be obtained, and an S.R 4-4-0 is on order.

The temporary track to Shenley from Twiddledale will be replaced in September. Two old time American coaches are being built. Three four wheel free lance coaches are to be rebuilt.

Official Livery:- Locos--varies No. 1, Yellow; No. 3, Black No. 5, Blue; No. 6, Black. Coaches—Red, now replaced by green. Freight —— Stock—Grey.

SHENLEY VALLEY RAILWAY QUARTERLY REVIEW

SPRING 1960. Nº 2 PRICE 5 PENCE

NEW DEVELOPEMENTS ON THE S.V.R.

OVER THE LAST FEW WEEKS THREE NEW LOCOMOTIVES HAVE GONE INTO SERVICE. THEY ARE:-

1. NO.6 AN 0-6-0 TANK LOCO WITH OUTSIDE WALSCHEART'S VALVE GEAR. THIS LOCO IS AN EX ITALIAN STATE RAILWAYS 835 CLASS AND IS IN BLACK LIVERY AT PRESENT. IT WAS ASSEMBLED BY THE TUNSTALL & FIGHFIELD DISTRICT RAILWAY COY. IT HAS "PECO" COUPLINGS AND IS USED ON THE MILK/NEWSPAPER TRAIN.

NO.7 AN 0-6-0 SADDLE TANK LOCO. THIS LOCO WAS BUILT ON FRAMES OBTAINED FROM THE T.&.F.D.R. IT WAS REBUILT IN THE SHENLEY WORKSHOPS OF THE S.V.R. IT IS FITTED WITH "PECO" COUPLINGS AND IS USED FOR TAKING TRAINS FROM TUNSTALL OVER THE S.V.R. METALS. IT IS, THEREFORE, STABLED AT WAVERLY ROAD. THIS LOCO IS COMPARITIVELY SLOW & IT ALWAYS SWAYS VIOLENTLY, BUT TAKING EVERYTHING INTO CONSIDERATION IT HAS PROVED SUCCESSFUL. IT IS PAINTED MAROON.

NO.8 A DIESEL ELECTRIC LOCO OF 0-6-0 WHEEL ARRANGEMENT. THIS LOCO IS POWERED BY A "TRI-ANG" CLOCKWORK MECHANISM. IT REGULARLY WORKS THE MORNING MIXED TRAIN BETWEEN TWIDDLEDALE AND SHENLEY. IT IS PAINTED GREEN.

OTHER DEVELOPMENTS ON THE S. V. R.

TWELVE YARDS OF "TRIANG" NICKEL SILVER TRACK ARE ON ORDER AND SHOULD ARRIVE EARLY THIS SEASON. THIS WILL MEAN THE END OF THE TRI-ANG TRACK ON THE MAIN LINE, IT IS HOPED TO HAVE ALL THE "TRIANG" TRACKWORK FINISHED BY CHRISTMAS.
WHEN THE MAINLINE BETWEEN SHENLEY AND TWIDDLEDALE IS COMPLETED THE MILK TRAIN WILL TERMINATE AT SHENLEY, AND THE SHENLEY-TWIDDLEDALE MIXED TRAIN WILL BE ABOLISHED.

VICTORIAN RAILWAYS NEWS

THE V CLASS DIESEL HYDRAULIC LOCO.

A SMALL FOUR WHEELED DIESEL HYDRAULIC LOCO OF 40 HORSE POWER, CLASS V NUMBER 56, HAS BEEN BUILT FOR PUSHING OR PULLING S" SUBURBAN ELECTRIC TRAINS THROUGH THE WASHING MACHINE AT ONE MILE PER HOUR. IT IS STABLED AT FLINDERS STREET.

SCRAPPING PROGRAMME

BY THE END OF THE CURRENT FINANCIAL YEAR THE FOLLOWING LOCO CLASSES WILL BE EXTINCT:-
D1, D2, D4, E.X, AND Y.

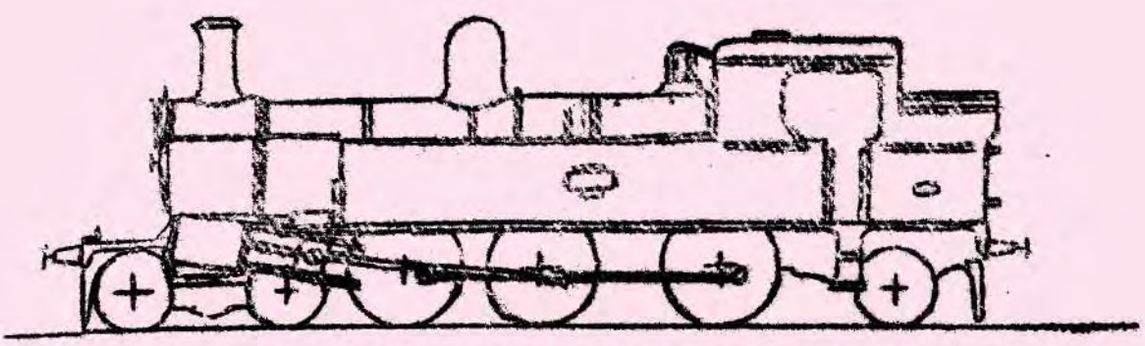
VICTORIAN RAILWAYS DDE/D4 CLASS LOCOMOTIVES

UNTIL 1908 MOST SUBURBAN TRAINS WERE HAULED BY 'E' CLASS 2-4-2 TANK LOCOS AND 'ME' CLASS 4-4-2 TANK LOCOS WHICH HAD BEEN CONVERTED FROM 'M' CLASS 4-4-0 TANK LOCOS. IN 1908 THE FIRST DDE CLASS 4-6-2 TANK LOCO WAS BUILT. FIFTY-SEVEN MORE LOCOS OF THE SAME CLASS FOLLOWED, THE LAST BEING BUILT IN 1913. THEY WERE PAINTED RED WITH DARKER PANELS OF RED, AND WHITE LINING.
THESE LOCOS WERE BUILT AS TANK VERSIONS OF THE DD CLASS 4-6-0 LOCOS, NOS. 710 AND 712 BEING CONVERTED TO DD'S IN 1923.
THEY WERE MAINLY USED ON THE BOX HILL LINE, BUT WERE ALSO SEEN ON DANDENONG, FRANKSTON AND WILLIAMSTOWN LINES. THEY TOOK 28 MINUTES ON THE CANTERBURY-MELBOURNE RUN, ELECTRIC TRAINS TAKING 19 MINUTES.

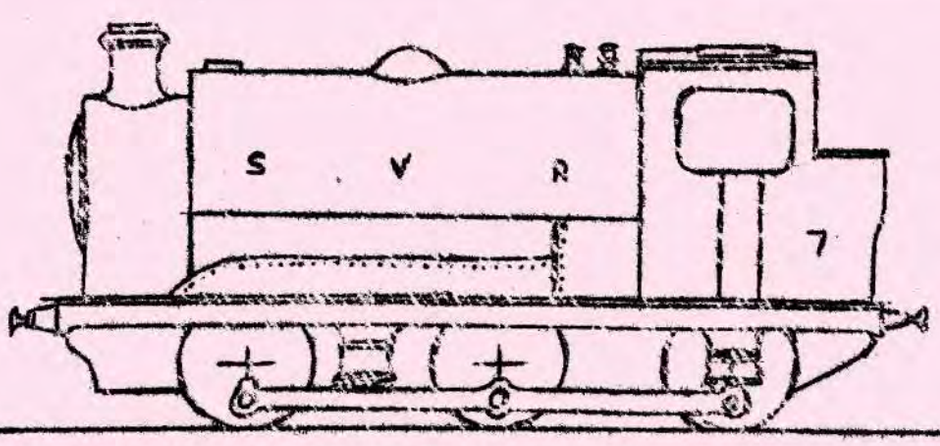
V.R. DDE CLASS LOCO. (CONTINUED)

THE MAXIMUM PERMISSABLE SPEED WAS 50 M.P.P. FUNNEL FIRST AND 40 M.P.H. BUNKER FIRST. THE FIRST DDE'S TO BE SCRAPPED WERE NINE OF THE CLASS IN 1924. NO. 255 WAS SOLD TO THE S.E.C. IN 1926. THESE LOCOS WERE RECLASSIFIED 14 CLASS SHUNTING ENGINES IN THE '20'S. BY THIS TIME THEY WERE PAINTED BLACK. THEY WERE, IN THERE LATER YEARS, USED ON SUCH LINES AS MORNINGTON, WAUBRA AND BUNINYONG FOR PASSENGER SERVICES.

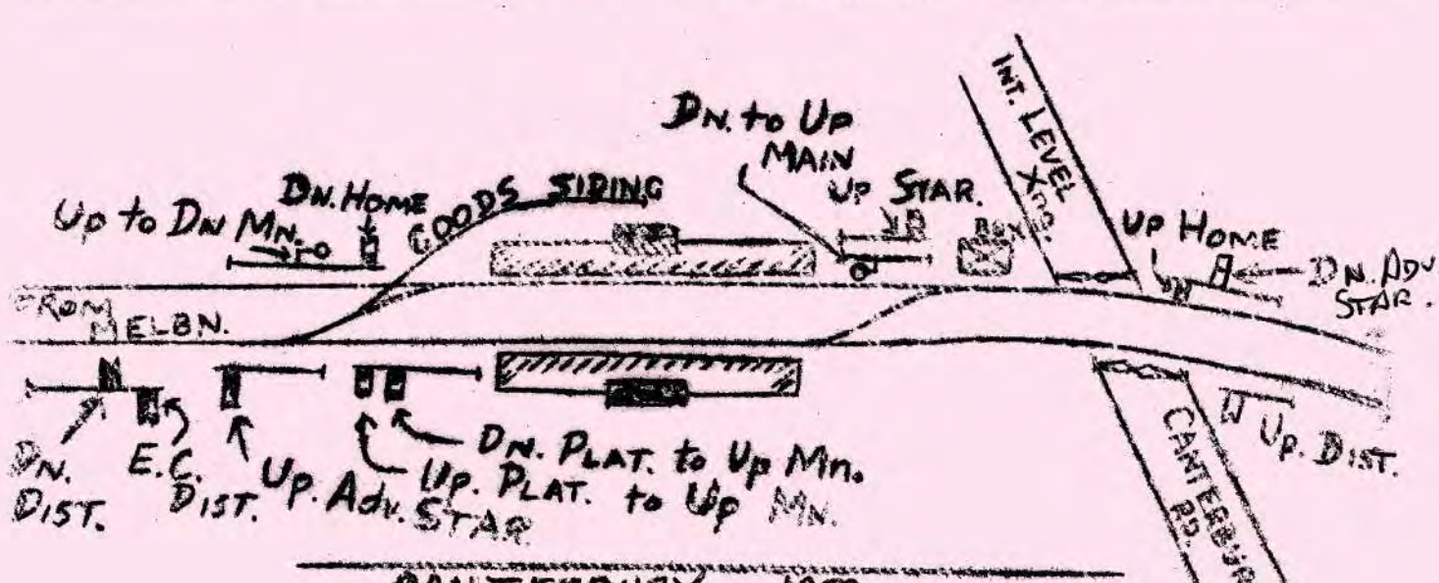
IN 1948 THERE WERE 26 OF THESE LOCOS IN SERVICE, AT PRESENT THERE ARE 3, HOWEVER THERE IS ONLY ONE IN SERVICE. BY THE END OF THE CURRENT FINANCIAL YEAR THESE EXCEEDINGLY HANDSOME ENGINES WILL BE EXTINCT.



VICTORIAN RAILWAYS DDE CLASS LOCOMOTIVE.

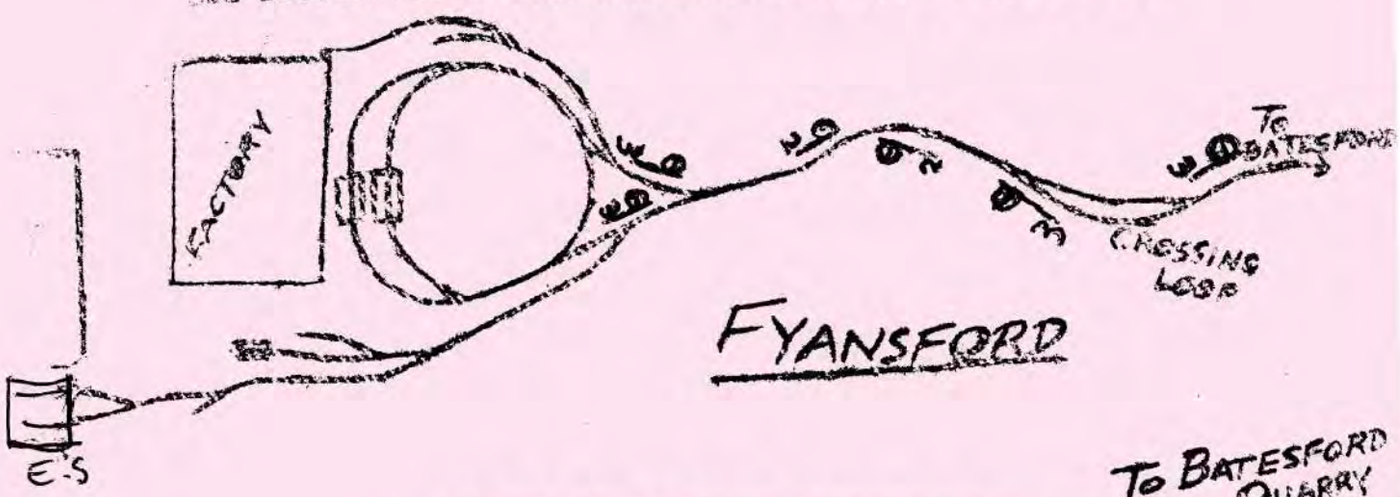


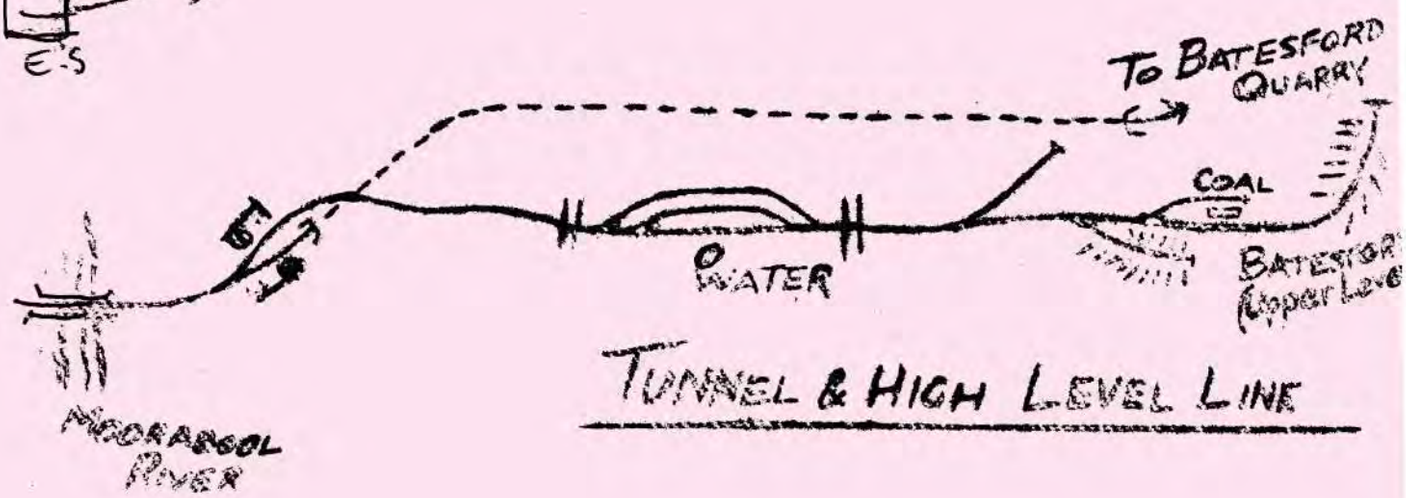
S.V.R No. 7. 0-6-0 SADDLE TANK LOCO.



CANTERBURY, 1980.

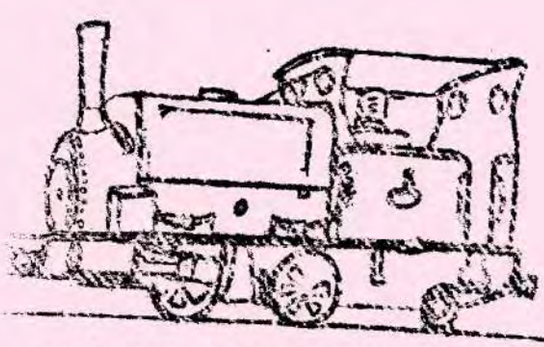
THE AUSTRALIAN CEMENT COMPANY'S RAILWAY AT FYANSFORD





BATESFORD QUARRY

THESE TRACK DIAGRAMS ARE OF THE LINE AT PRESENT AND ARE NOT TO SCALE. THEY WERE KINDLY SUPPLIED BY R. MURRAY.



HUDSWELL CLARKE SADDLE TANK LOCO USED ON THE FYANSFORD-BATESFORD 3'6" GAUGE LINE. THIS LOCO, NO. 8, WAS BUILT IN 1906.

DRAWING TRACED FROM A PHOTOGRAPH OF THE LOCO IN STORE AT FYANSFORD. THE PHOTOGRAPH WAS KINDLY SUPPLIED BY GARDNER.

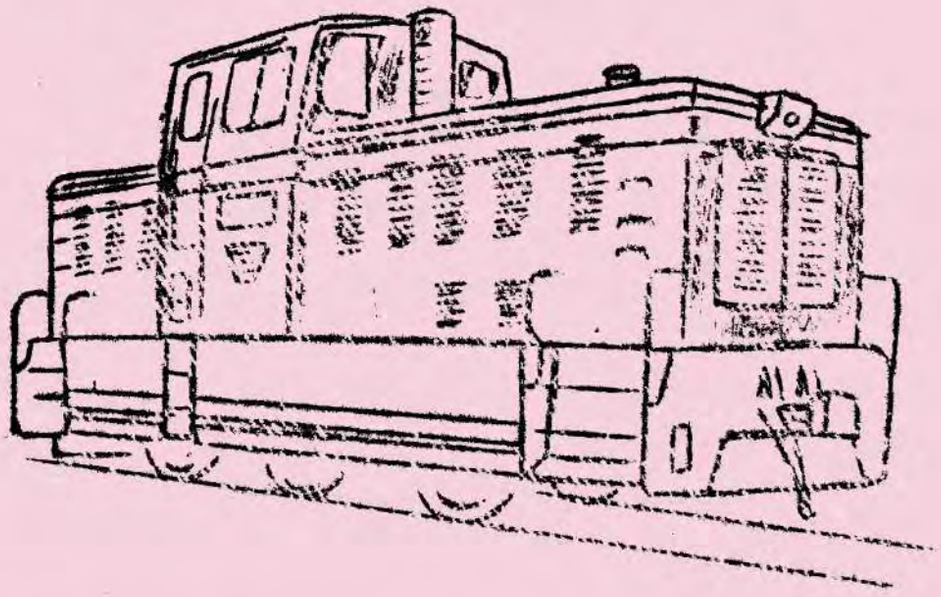
NEXT EDITION OF S.V.R.Q.R. WILL BE AVAILABLE ON DECEMBER 1ST. IT WILL INCLUDE RESULTS OF LOAD TRIALS OF ALL T.&.F.D.R AND S.V.R LOCOS, NOTES ON A.V.R. LOCO. AND CONTINUATION OF THE FYANSFORD ARTICLE.

COPIES OF "THE OUTER CIRCLE RAILWAY" ARE STILL AVAILABLE AT FOURPENCE EACH. THIS INCLUDES TRACK DIAGRAMS AND BRIEF HISTORICAL NOTES.

V.R. W class

CLASS:- W	TYPE:- 0-6-0 DIESEL HYDRAULIC
NUMBER BEING BUILT:- 25	NUMBER IN PRESENT SERVICE:- 25
DATE LAST OF CLASS BUILT:- DECEMBER 1959	DATE LAST OF CLASS BUILT:-
DATE 1ST OF CLASS SCRAPPED:-	DATE LAST OF CLASS SCRAPPED:-
ORIGINAL NUMBERS:- 241-265	PRESENT NUMBERS:- 241-265
BUILDERS:- ROBERTSON LTD. N.S.W.	
DIMENSIONS:-	
WHEEL DIAM.	48½ INS.
WHEELBASE	6'3"x6'3"-12'6"
LENGTH OVERALL	30'1"
MAXIMUM HEIGHT	14'
WIDTH OVERALL	9'7"
MAXIMUM AXLE LOAD WEIGHT(FULLY LOADED)	48TONS
ENGINE:-	MERCEDES BENZ 12 CYLINDER, 4 CYCLE NATURALLY ASPIRATED DIESEL, MODEL MB820 RATED AT 660 H.P.
TRANSMISSION:-	KRUPP HYDRAULIC MODEL 2W2B-46
COOLING:-	BEHR AUTOMATIC HYDROSTATIC SYSTEM
CAPACITIES:-	
FUEL OIL:	720 GALLONS
LUBRICATING OIL:	23 GALLONS
TRANSMISSION OIL:	46 GALLONS
COOLING WATER:	92 Gallons
MAXIMUM PERMISSABLE SPEED:-	40 M.P.H.

REMARKS:- THESE LOCOS WILL BE USED FOR SHUNTING AT MELBOURNE AND COUNTRY CENTRES, THEY WILL ALSO BE USED ON SUBURBAN GOODS AND ON COUNTRY BRANCHES AT PRESENT OPERATED BY STEAM.
THEY ARE IN BLUE AND "GOLD" LIVERY.



SHENLEY VALLEY RAILWAY QUARTERLY REVIEW

SUMMER 1960/61 NO.3 PRICE 7 PENCE

NEW DEVELOPEMENTS ON THE S.V.R.

NEW LOCOMOTIVES IN SERVICE:-

NO.9 AN 4-6-2 tender LOCO. THIS LOCO WAS PUT INTO SERVICE IN AN EMERGENCY PERIOD. IT IS PAINTED CHOCOLATE BROWN WITH COPPER PIPING. OWING TO ITS GREAT BULK IT IS UNSUITED TO OUR LINE AND IS AT PRESENT SELDOM USED. IT IS INTENDED TO CONVERT IT INTO A STANDARD "TRI-ANG" 4-6-4tank LOCO.

NO.31,757 A SOUTHERN RAILWAYS "L1" CLASS 4-4-0 TENDER LOCO BY "TRI-ANG". THIS LOCO IS AN EXCELLENT MODEL AND RUNS WELL. ALTHOUGH IT IS A 4-4-0 IT HOLDS THE TRACK WELL AND PULLS A REASONABLE TRAIN, UP TO TEN TRIANG BOGIE COACHES UP THE YOUPOTTYPOTPOT BANK. HOWEVER IT IS QUIET UNCONTROLLABLE AT LOW SPEEDS, AND THIS HAS CAUSED THE O.M.E. TO SERIOUSLY CONSIDER OBTAINING A H.&M. "MOTOR" CONTROLLER WITH PULSE POWER.

LOCOS OUT OF SERVICE:-

NO.6 THIS IS A "KITMASTER" ITALIAN TANKER MOTORISED WITH A "PERFECTA" KIT. IN THIS LOCO THE GEAR WHEEL WAS PLACED DIRECTLY ON TO THE PLASTIC AXLE. UNFORTUNATELY THE PLASTIC USED IS TO SOFT TO STAND THE STRESSES IMPOSED ON IT. THIS CAUSED THE AXLE TO BREAK. THE LOCO WILL BE LAID UP INDEFINITELY. SIMILAR TROUBLE HAS BEEN EXPERIENCED ON A T.&.H.D.R. 0-4-0 LOCO.

LOCO NO. 8 HAS NOT BEEN OPERATING LATELY AS IT IS ONLY ALLOWED TO OPERATE BETWEEN SHENLEY AND TWIDDLEDALE. THIS REGULATION WAS MADE AFTER A REGRETTABLE INCIDENT OCCURRED AT THE FOOT OF THE YOUPOTTYPOTPON BANK WHILE THE LOCO WAS HAULING AN UP MIXED. THIS LOCO IS CLOCKWORK.

OTHER LOCO NEWS:-

NO.5 HAS AN EARLY "TRI-ANG" BODY MADE OF A SOFT PLASTIC AND THIS HAS BADLY WARPED, A NEW BODY WILL HAVE TO BE OBTAINED.

NO.7 HAS ONE WHEEL OUT OF SQUARE AND "LIMPS" BADLY. AS SOON AS POSSIBLE THIS LOCO WILL BE TAKEN OUT OF SERVICE FOR THE NECESSARY REPAIR.

A "TRIX" 0-6-2 TANK LOCO IS ON ORDER AND SHOULD ARRIVE SOON, IT WILL BE USED ON MAIN LINE HEAVY DUTY WORK.

OTHER S.V.R. NEWS

THE MAIN LINE BETWEEN SHENLEY AND TWIDDLEDALE IS NOW LAID IN "WRENN" TRACK, ANOTHER TWELVE YARDS OF "WRENN" TRACK IS ON ORDER. THIS WILL BE USED IN SHENLEY YARD WHICH AT PRESENT IS IN A VERY UNWORKABLE CONDITION. TWIDDLEDALE IS AT PRESENT FITTED WITH A LOOP SIDING.

THE S.V.R. HAS ANNOUNCED ITS INTENTION OF OBTAINING 18 GOODS WAGONS BY "TRIX", "TRI-ANG", AND "HORNBY". THESE WILL CONSIST OF MAINLY OF OPEN WAGONS INCLUDING ABOUT NINE BOGIE VEHICLES BY "TRI-ANG" HOWEVER ALL FOUR WHEEL VEHICLES WILL BE NON "TRI-ANG" AT PRESENT ABOUT 16 GOODS VEHICLES ARE ARE IN USE ON THE S.V.R.

RESULTS OF LOCOMOTIVE LOAD TRIALS ARE SHOWN OVER PAGE

LOAD TRIALS ON THE T.&.H.D.R. CANNIBAL CREEK SDG.
BANK.
DATE 3RD. SEPTEMBER 1960. DRIVER:- L.STAMFORD.
DIRECTION:- UP.

ENGINE	LOAD	
T.&.H.D.R. "TRI-ANG" 0-6-0 TENDER LOCO	FORTY-SIX AXLES	46
T.&.F.D.R. "TRI-ANG" PRINCESSE 4-6-2 tender loco	FIFTY-EIGHT AXLES	58
T.&.H.D.R. TRI-ANG" 2-6-2TANK LOCO	SEVENTY AXLES	70
T.&.F.D.R. HORNBY DUBLO 0-6-0TANK	FIFTY AXLES	50
T.&.H.D.R. MOTORISED KITMASTER 0-4-0 SADDLE TANK	BROKEN DRIVING AXLE	X
T.&.H.D.R. HORNBY DUBLO 6-6-2tank	TWENTY AXLES	20
S.V.R. TRI-ANG Bo-Bo DIESEL NO.3007	FORTY TWO AXLES	42
S.V.R. TRI-ANG 0-6-0TANK NO.5	FIFTY TWO AXLES	52
S.V.R.NO.6 MOTORISED KITMASTER 0-6-0 ITALIAN TANKER	BROKEN DRIVING AXLE	X
S.V.R. TRI-ANG 0-6-0 SADDLE TANK NO.7	FIFTY AXLES	50
S.V.R. TRI-ANG C DIESEL (CLOCKWORK) NO.7	TWENTY TWO AXLES	22

ALL THE ABOVE TESTS WERE CARRIED OUT WITH GOODS VEHICLES MAKING UP THE TRAIN. THE LOAD RESULTS ARE TAKEN BY THE NUMBER OF AXLES IN EACH TRAIN, INCLUDING ONE BRAKEVAN. THE TRAIN CONSISTED OF FOUR &EIGHT WHEEL VEHICLES. ADDITIONS TO THIS LIST WILL BE MADE AS THEY COME TO HAND.

THE AUSTRALIAN CEMENT COMPANY'S RAILWAY AT FYANSFORD

(CONTINUED FROM SPRING EDITION)

THIS LINE WAS BUILT IN 1924 BY AUSTRALIAN CEMENT LTD. TO REPLACE AN AERIAL ROPEWAY CONNECTING THEIR QUARRY AT BALLENGORD WITH THE LARGE CEMENT WORKS AT FYANSFORD. THE LINE WAS BUILT TO 3'6" GAUGE WITH MAXIMUM GRADIENTS OF 1 IN 36 AND SHARPEST CURVES OF 4 CHAINS (RADIUS.

THE LINE IS VERY WELL BUILT AND PROPERLY BALLASTED THROUGHOUT IN THE THIRTIES A NEW LINE WAS BUILT THROUGH A 437 FEET TUNNEL TO A NEW QUARRY. THIS TUNNEL, WHICH IS THE LONGEST IN VICTORIA, IS ON A 1 IN 37 GRADE, AGAINST LOADED TRAINS. THE HIGH LEVEL LINE WAS RETAINED FOR REMOVING OVERBURDEN. THE LENGTH OF THE MAIN LINE IS APPROXIMATELY 3½ MILES.

LEVEL CROSSINGS ARE PROTECTED WITH CATTLE PITS AND SIGNALS ARE MODERN 2&3 ASPECT COLOR LIGHT. THE QUARRY HAS POWERFUL PUMPS FITTED TO PREVENT FLOODING. BEFORE THESE WERE FITTED IT ONCE BECAME FULL TO THE BRIM WITH WATER. IT IS 300' DEEP AND ITS FLOOR IS 120' BELOW SEA LEVEL.

ROLLINGSTOCK:-

IN 1924 FOUR FUDSWELL CLARKE 0-4-2 SADDLE TANK LOCOS WERE OBTAINED FROM THE NOW DEFUNCT WALLAROO AND MOONTA MINING AND SMELTING COY. OF SOUTH AUSTRALIA. THEY WERE BUILT BETWEEN 1903 and 1906 AND RETAINED THEIR ORIGINAL NUMBERS:-6,7,8,9. NOS. 6&8 ARE BLACK, AND 7&9 WERE RED UNTIL BEING PUT IN STORE.

IN 1926 TWO VULCAN 0-6-0 SADDLE TANK LOCOS WERE OBTAINED FROM COMMONWEALTH PENDERSON NAVAL BASE WESTERN AUSTRALIA. THEY WERE BUILT IN 1916 AND ARE OF TYPICAL AMERICAN APPEARANCE. THEY WERE PAINTED BLACK AND NUMBERED 4&5.

IN 1936 & 1938 locos NOS. 1&2 WERE OBTAINED FROM BEYER-PEACOCK, ENGLAND. THEY ARE 2-6-0+0-6-2 BEYER GARRAT LOCOS. NO. 1 IS PAINTED RED WITH BLACK TRIMMINGS. NO. 2 IS PAINTED BLACK.

IN 1947 AN AUSTRALIAN STANDARD GARRATT LOCO WAS OBTAINED THIS WAS NUMBERED 3. PAINTED BLACK AND IS AT PRESENT IN STORE. IT HAS THE 4-8-2+2-8-4 wheel arrangement

IN 1947 two 0-4-0 TANK LOCOS BY PERRY ENGINEERING COY. WERE OBTAINED FROM THE S.E.C. THEY WERE BUILT IN 1926 AND ARE NOW IN STORE.

IN 1956 A DIESEL ELECTRIC LOCO OF THE Bo-Bo WHEEL ARRANGEMENT WAS OBTAINED FROM CLYDE-G.M. IT IS SIMILAR TO A V.R. "T" CLASS BUT IS ON 3'6" GAUGE BOGIES. IT IS ALSO PAINTED SIMILAR TO A "T" AND IS NUMBERED D1 AND NAMED "WESLEY B. McCANN."

VEHICLES FOR MINERAL IN USE AT PRESENT CONSIST OF 4 AND 6 WHEEL STEEL WAGONS WITH WESTINGHOUSE BRAKES. THERE ARE ABOUT FORTY OF THESE VEHICLES IN USE MOST BEING PAINTED BLUE. THE SIX WHEELERS HAVE A 17 TON CAPACITY.

THE EARLIER VEHICLES WERE FAIRLY PRIMITIVE WOODEN SIDE TIP TIPPING FOUR WHEELERS WITH 19" DIAMETER WHEELS AND LENGTH OF 133".

THERE ARE VARIOUS OTHER VEHICLES THE MOST NUMEROUS GROUP BEING ABOUT FIVE FOUR WHEEL STEEL FLAT WAGONS. TWO OF THESE VEHICLES HAVE A WOODEN FRAMEWORK ON THEM WITH A TARPAULIN COVERING. THEY ARE FITTED WITH WOODEN SEATS AND STEPS AND ARE USED AS PASSENGER VEHICLES. THE REMAINING STEEL FLATS ARE USED FOR SUCH PURPOSES AS TRANSPORT OF COAL (IN SACKS) FOR LOCO PURPOSES.

THE SOLE GENUINE PASSENGER VEHICLE IS A BOGIE COACH OF UNUSUAL DESIGN. THE BODY IS MADE OF A PARDBOARD MATERIAL. IT IS PAINTED BLUE WITH RED DOORS IN DIAGONALLY OPPOSITE CORNERS OF THE ENDS. IT IS FITTED WITH GLASS WINDOWS AND WOODEN LONGITUDINAL SEATS.

LEADING DIMENSIONS:-

WHEEL DIAM. 15"
BOGIE WHEELBASE: 4'6".
WIDTH: 8'1"
BOGIE CENTRE: 22'4"
LENGTH: 30'8"

THE WANSFORD ARTICLE WILL BE CONTINUED IN THE AUTUMN EDITION OF THE REVIEW.

MELBOURNE'S HORSE TRAMWAYS

BY R. FELLOWS.

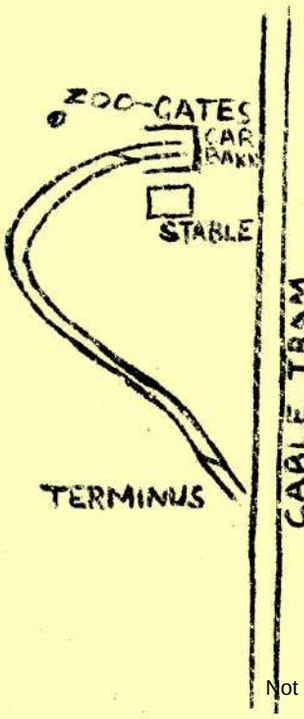
HORSE TRAMWAYS WERE THE FIRST IN MELBOURNE, FIVE SYSTEMS OF WHICH ARE KNOWN TO HAVE EXISTED BY 1878. A LONG TRAMWAY RAN FROM SANDRINGHAM TO BEAUMARIS AND CHELTENHAM VIA BLACK ROCK. ONE RAN FROM ELSTERNWICK INLAND TO CAULFIELD, AND ONE RAN AT COBURG BETWEEN MORELAND ROAD AND BELL STREET.

TWO HORSE TRAMWAYS WERE OPENED AS EXTENSIONS TO THE CABLE TRAMWAY NETWORK OF THE MELBOURNE TRAMWAY AND OMNIBUS CO. ONE WAS OPENED AS AN EXTENSION TO THE RICHMOND CABLE LINE FROM THE EAST SIDE OF HAWTHORN BRIDGE VIA BURWOOD ROAD, POWER STREET AND RIVERSDALE ROAD TO AUBURN ROAD. THE CARBARN IS NOW A GARAGE SOMEWHAT TO THE WEST OF AUBURN ROAD. SERVICES COMMENCED ON . . 27TH JANUARY 1890 . . AND CLOSED ON 31ST JANUARY, 1916, A FEW MONTHS PREPARITY TO THE OPENING OF THE HAWTHORN TRAMWAYS TRUST'S FIRST LINE BETWEEN THE CITY AND HAWTHORN (DEPOT).

THE OTHER LINE RAN FROM A POINT ABOUT HALF WAY ALONG THE BRUNSWICK CABLE LINE VIA WHAT IS NOW THE WESTERN FOOTPATH OF THE AVENUE FROM GATEHOUSE STREET AROUND MACARTHUR ROAD INTO ELLIOT AVENUE, TERMINATING AT THE ZOO GATES, WHERE THE CARBARN WAS SITUATED. THE LINE WAS ALL IN DOUBLE TRACK, EXTENDING FOR PERHAPS HALF A MILE. A FACING CROSSOVER WAS INSTALLED OUTSIDE THE CARBARN, AND A TRAILING CROSSOVER EXISTED AT THE GATEHOUSE STREET END. THE POINTS WERE OPERATED WITH A POINT BAR SIMILAR TO THE TYPE USED TODAY.

THE ROLLING STOCK TOTALLED FOUR CARS: TWO SALOONS AND TWO TOASTRACKS WITH TWO HORSES TO EACH CAR. NO REGULAR TIMETABLE WAS OPERATED AND CARS WERE RUN AS TRAFFIC DEMANDED. ONE CAR WAS AVAILABLE FOR RUNNING ON WEEKDAYS, TWO ON SATURDAYS, AND ALL FOUR ON SUNDAYS. THE HOURS OF RUNNING WERE THE HOURS THAT THE ZOO WAS OPEN AND THE THROUGH FARE FROM THE CITY WAS 2D.

THE SERVICE CEASED DRAMATICALLY ON GUY EVE, MONDAY, NOVEMBER 6TH., 1923, WHEN, DURING THE EVENING VANDALS SET THE CARBARN ALIGHT, DESTROYING ALL CARS. THE FIRE SPREAD TO THE STABLES AND THE HORSES WERE HASTILY REMOVED AND SET FREE. THE POLICE STRIKES OF 1923 ARE BLAMED FOR THIS INCIDENT (AMONG OTHERS) AND IF THE AREA HAD BEEN SUFFICIENTLY POLICED THE FIRE WOULD NEVER HAVE BEEN STARTED AND THE TRAMWAY WOULD (PERHAPS) STILL BE A TOURIST ATTRACTION OF MELBOURNE AS UNIQUE AS THE CABLE TRAMS OF SAN FRANCISCO.



V.R. NEWS

TWENTY FIVE ADDITIONAL "N" CLASS DIESEL-HYDRAULIC LOCOS ARE ON ORDER FOR USE ON COUNTRY BRANCHES AT PRESENT OPERATED BY STEAM.

THE PASSING OF THE "X" CLASS.

OF ALL V.R. STEAM LOCOS THE ONE . . . FARDEST FIT BY THE ADVENT OF THE LESS ATTRACTIVE MOTIVE POWER WOULD APPEAR TO BE THE "X" 2-8-2 HEAVY FREIGHT LOCO. THIS GROUP OF 29 LOCOS WERE BUILT BETWEEN 1939 and 1946 and WERE A DEVELOPMENT OF THE "C" 2-8-0 LOCOS. IN NOVEMBER 1960 THE LAST TWO OF THE CLASS PASSED INTO NEWPORT FOR "BOILER INSPECTION" AND WERE PROMPTLY BROKEN UP. THUS IT WILL BE SEEN THAT THIS USEFUL CLASS OF LOCOS HAD A VERY SHORT LIFE. THEIR JOB COULD BE DONE MORE EFFICIENTLY BY DIESELS BUT WITH . . . LESS ATTRACTIVE SPARK.

THE SHENLEY VALLEY RAILWAY QUARTERLY REVIEW

Published by the VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

AUTUMN 1961 NO.4 PRICE 4 PENCE (FREE TO MEMBERS)

NEW DEVELOPMENTS ON THE S.V.R.

LOCOMOTIVES:-

NO. 5007. This was a standard Tri-ang Bo-Bo diesel switcher, it was sold in December for £3.

NO.10. This is an Australian Tri-ang model of a Sydney suburban electric motor coach. It is not a very good model but with the pantograph removed it resembles closely a typical diesel rail motor of the 1930's and it is in this condition that it appears on the S.V.R. After a few runs it developed a fault in the armature and has been in pieces since. As yet it has not been painted in S.V.R. colors.

NO. 6664 THIS is a Trix 0-6-2tank loco, a model of a Great Western Railway loco. It has certain unusual features including a large three pole motor built to fine limits and requiring a long running in period, a metal body and keeper-plate assembly. It appears to have startling power but has not yet been given a load trial. It is painted in British Railways green livery. Its performance, so far, has been satisfactory.

Several new goods vehicles have been added to the S.V.R. stock, including a flat topped bogie waggon and a second 50 ton bogie waggon.

THE EFFECT OF THE WEATHER ON THE S.V.R.

During the hot period last January the "Shenley Mail" was derailed on the Youpottypotpon bank. It was found that the rails had expanded several millimetres out of place. All other trains were cancelled on that day and the track was immediately relaid.

DUring a recent wet period both the S.V.R. and the T.&.H.D.R. WERE seriously flooded at the following places:- TWIDDLEDALE, WAVERLY ROAD and NORWOOD. Locos No.5, 8, and 9 were slightly damaged together with several T.H.D.R. LOCOS. Points became temporarily innoperative and track was seriously out of gauge. After about a week the track returned to normal and train services resumed.

A Hammant and Morgan "Safety Minor" power unit with Vari-wave rectification control is on order.

In Tri-ang's 1961 programme 1890 style clerestory coaches are included. They probably will not be obtaiable for some considerable time, but when available four will be obtained for the Shenley Mail.

SHENLEY STATION YARDS:-

The Shenley station yards are now laid in Wrenn track however they are not yet complete. Another twelve yards of Wrenn will soon be put on order. The carriage siding is still tobe built and the turntable -engine shed road is also still to be built.

THE AUSTRALIAN CEMENT COMPANY'S RAILWAY, FYANSFORD.
(Continued from Summer Edition).

TRAIN WORKING:-

N.B. Referring to the diagram in the Spring edition

Originally only one balloon loop existed at Fyansford, the triangular connection forming a complete circle was added later, probably in the '30s. The second balloon loop was added quite recently. ~~AK~~ Originally, in the quarry, the track divided there being a seperate terminuss on each side.

When the Vulcans and the Hudswell Clarkes were the only locos in use the situation was as follows:-

The Hudswell Clarkes were used in the quarry and at the works for shunting wagons and removing overburden.

The Vulcans were used ~~in~~ on the main line. Between the river crossing/loop and the quarry they had to be double headed both ways. In this way they could haul SIX wagons.

THE time for the round trip was one hour.

THE BEYER GARRATS:-

These were capable of hauling six wagons alone. As no double heading was now needed the time for the round trip became thirty minutes.

THE AUSTRALIAN STANDARD GARRAT:-

This was able to haul NINE wagons, the time for the round remained as before.

TRAIN WORKING TODAY:-

THE diesel hauls trains of FIFTEEN wagons, taking twenty-three minutes for the round trip.

Either Garrat No.1 or 2 shunts at the works, Vulcan No.4 or 5 shunts in the quarry, and Hudswell Clarke No.6 potters about the works and runs the morning and afternoon passenger trains to the high level terminus.

In the quarry limestone is loaded into road motor trucks by mechanical shovels. The road vehicles then load the railway wagons at a loading platform.

The railway operations are at present as follows:-

a Vulcan shunts trains at the loading platform, the diesel then hauls the train from the quarry, through the tunnel over the main line to the balloon loops at the works. Here it decouples and attaches to a string of empties. While it is coupling onto the empties a garrat couples on to the loaded trucks and hauls them to the unloading bins. As soon as this clears the main line the diesel sets out for the quarry with the empties and the garrat places another rake of empties to await the diesel's return.

The V.R.'s Fyansford line was built in 1918 to assist in the building of the cement works, it is an extension of a North Geelong siding. It is on a completely different level to the 5'6"gauge line.

~~THE GRADIENT~~

IT is reported that the line will be closing in a few years, it will be replaced by a conveyor belt.

A photographic supplement will be available in the Winter issue and will be available to all those desiring a copy at an extra charge of about 4/9. It will consist of about four pages each containing two photographs and details of these photos.

This supplement will wind up the Fyansford article.

Orders should be made, accompanied by 4/9, to me not later than June 2nd.

F. Stamford

FYANSFORD RAILWAY

LOCOMOTIVES:-

NUMBERS X 6,7,8, and 9.
BUILDERS Russell Clarke,(England).
WHEEL ARRANGEMENT:- 0-4-2 Saddle Tank.
DATE BUILT:- No.6:1902,Nos.7,8 and 9: 1906.
DATE AQUIRED:1924,from Wallaroo and Moonta Mining and Smelting Co. of South Australia.
BUILDERS NUMBERS:- No.6:646,No.7:X 774,No.8:777,No.9:791
DRIVING WHEEL DIAMETER:- 27"
CYLINDERS:- ~~XXXXXXXXXXXX~~
No.6: TWO 10"xX 14"
No.7,8,&9: TWO 11"x15"
BOILER PRESSURE:- 160 P.S.I.
WEIGHT 14tons.
NOTES:No.6,&8 were painted black,No.7,&9 were painted red. No. 6 is still in service, the others are in "store."

NUMBERS: 4, and 5.
BUILDERS: Vulcan Iron Works(U.S.A.)
WHEEL ARRANGEMENT: 0-6-0 Saddle Tank.
DATE BUILT:-1916.
DATE PURCHASED:-1926,from the Commonwealth Henderson Naval Base,W.A.
BUILDERS NUMBERS:-No.4:2539, No.5:2540.
DRIVING WHEEL DIAMETER:-30" N.B.The centre drivers are flangeless.
CYLINDERS:- TWO 13"x18"
BOILER PRESSURE:-140 P.S.I.
TRACTIVE EFFORT:- 11,850 lbs.
WEIGHT:-30tons
COAL:-1400 lbs.
WATER:- 1100 gallons.
NOTES:- Both are painted black.One shunts in the quarry while the other is serviced and kept as a stand by.

(To be continued)

CORRECENDUM: To the horse tram article by R.Fellows S.V.R.Q.R. No.3 line 32 should read November 5th. not 6th.
(SIGNED) R.FELLOWS.

EDITORS NOTE:- Articles on topics of railway interest are welcomed by the editor. Next ~~month's~~ edition will include "A General Introduction to the Timber Tramways of Victoria," another article on horse trams and a continuation of the Fyansford article.
Non members requiring a copy of future Reviews would be well advised to order their copies in advance as only a small ~~x~~ number are being published. I wish to express my thanks ~~xxx~~ to Alex Stewart for helping me out with the typing.

In the near future I hope to issue a series of detailed maps showing the Victorian timber tramways at there best, as these maps will cost 1/- or 1/6 each I would like to know whether members think these should be included in the magazine or sold as an optional supplement. Altogether there will probably be about ten maps showing all lines known to have existed.
Any readers having old maps showing tramways should let me know so that these maps are as complete as possible.

THE SHENLEY VALLEY RAILWAY QUARTERLY REVIEW

Published by the VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

WINTER 1961 Vol.X II. No.5. PRICE 9 PENCE (FREE TO MEMBERS)

NEW DEVELOPMENTS ON THE S.V.R.

LOCOMOTIVES:-

No.10. The faulty armature has now been replaced, but trouble has been experienced with the driving wheel bushes, the rail motor is back in store.

No.6664. This is the "Trix" 0-6-2, its performance is now improving which prompts me to believe that it is beginning to get run in.

No.7. The 0-6-0 saddle tank loco, it has been on loan to the T.&.H.D.R. for the past few months.

The new Fairmant & Morgan "Safety Minor" power unit has arrived and is proving very successful. A cab contol switching arrangement has been installed whereby any controller can be connected to any or several of the track sections.

---

2 "Airfix" cattle vagon kits are on order together with 4 "Airfix" mineral vagon kits.

Plans are being made to run special tourist excursion trains over the forthcoming summer period.

Three 1890 style "Great Western" coaches have been obtained for the "Shenley Mail" and another one is on order. They are made by Triang and are excellent models. To work this train loco No.9 has been rebuilt as a 4-6-4 tank loco in maroon livery with white lining and lettering. The conversion was carried out in the Shenley workshops and the rebuilt loco has proved successful in every way.

A new timetable has been introduced to cover both the S.V.R. and the T.&.D.R. It is used in conjunction with a clock adjusted to run at ten times normal speed. It represents a typical day's working on the two lines. Copies are available at 1/- each.

VICTORIAN RAILWAYS NOTES

10 T class diesel electric locos are on order, some for use on the standard gauge line, 8 S class diesel electric locos are on order, all standard gauge. The standard gauge line will be entirely diesel operated.

The Wayook line, closed 1958, is now being dismantled. Arrangements are being made between another society and the V.R. for the preservation of the following locos:- T, E, X, X27 A2, C, 2D? class locos. (All steam, of course). You can help by donating paint grease, cleaning materials etc., or working on the locos during weekends. (It is interesting to note that the British Railways have about 50 steam locos preserved and another 35, still in service, will be preserved when the time comes for their withdrawal from service. Many of these locos will be kept in working condition so that they may be used on special occasions).

The Victorian Railways Commissioners have sent a letter announcing the impending closure of the Colac-Beaprior 3'6" gauge line to the Colac Shire Council. The Council has requested that the line be kept open until the new road is finished.

HORSE TRAMWAYS OF MELBOURNE — by R.FELLOWS.

(See Summer Q.R.)

As the cost of cable tramways was considerable, and lines could not be opened unless the population were fairly dense, the need was felt for feeder services of some type to pioneer transport, and thus settlement, in areas beyond the reach of the cable system.

The cable tramway authority, the Melbourne Tramway and Omnibus Co., satisfied this need to a certain extent by the provision of five horse bus and three horse tram routes for feeder services.

The horse trams seem to have been numbered in with the cable trailers, and consisted of a number of four-window single-truck saloons, and two open eight-bench toastracks. Two horses were used to each tram. The toastracks were used on the zoo line which was opened on 1st.October, 1887, and was the first horse tram feeder service.

The second line ran between Victoria Bridge and the Kew cemetry, and opened in December, 1887.

The last line, running between Hawthorn Bridge and Auburn Rd., Hawthorn, opened on 27th January, 1890.

In addition to these M.T.&.O.Co. lines, four other, private lines were operated. One ran from Elsternwick railway station to Glen Huntley railway station via Glenhuntley Rd., with a branch line running from Glenhuntley Rd., via Kooyong Rd., Bambra Rd., and Balaclava Rd. to Normanby Rd.. Another ran from Fairfield Park (now Fairfield) railway station, from the corner of Kingrove Street and Station Street via Station Street to Darebin Road, Darebin. This line was opened to encourage the sale of land in that area.

Another line, running from Moreland Rd. via Sydney Road to Bell Street was opened on 1st October, 1887, the same day as the Zoo line opened. This line, was opened by the great-grandfather of our estimable friend, Mr. Ewins, and closed in 1916 to make way for the new electric lines of the Melbourne, Brunswick, and Coburg Tramways Trust.

The last private line was operated from Sandringham to Black Rock, Beaumaris, and Cheltenham, and closed prior to the V.R. electric street railway between Sandringham and Black Rock in 1918.

Meanwhile, the M.T.&.O.Co. lines were succumbing to the wake of progress. The first to close was the Kew line, which closed prior to the opening of an electric line by the Prahran and Malvern Tramways Trust ~~line~~ between Victoria Bridge and Kew Post Office on 24th February, 1915.

The Hawthorn line lasted less than a year longer, closing on 31st January, 1916, and the last line, to the zoo, closed on 5th November, 1923, thus ending an era in the street transport of Melbourne.

"Balloon Stacks and Sugar Cane"

The New Zealand Railway and Locomotive Society will be publishing the above book later this year. It deals with the 2'6" gauge sugar tramways of Fiji. The book will be 6"x9", with 100 pages including photographs, maps, drawings of locos, rolling stock and track layouts. The pre-publication price is £1(N.Z.) Orders should be directed to the Secretary, N.Z.R.&.L.S., P.O.Box 5174, Wellington, C1, N.Z.

The same society has also published six booklets of N.Z. railway interest. Further details will appear in the next Q.R.

TIMBER TRAMWAYS IN VICTORIA

by F.STAMFORD.

PART I GENERAL INTRODUCTION.

In dealing with this subject we must first of all understand the correct meaning of the word "tramway," as, to most people this word immediately brings to mind electric street railways, however this is only half the story.

The earliest known railways consisted of wooden planks, or trammels as they were then known, laid upon wooden sleepers. These lines are known to have existed in the 16th century, and may have been used earlier. They were known as trammel ways, later abbreviated to tramway. Most railways built up to 1825 were known as tramways no matter no matter what form of locomotion or construction was used. Some early railways incorporated such terms in their registered names, the "Carmarthenshire Railway or Tramroad Company" and the "Oystermouth Railway or Tramroad Company" being examples.

In 1825 the "the Stockton and Darlington Railway" was opened, (not the first public railway, but the first public railway to be operated by steam), and this appears to be where the two terms gained slightly different meanings.

As all railways and tramways are laid with rails of some sort, broadly speaking the term railway covers all forms of vehicle guided by rail. The term tramway is now generally used for a light railway with no safe working system, and electric street railways come under this term together with many other varieties of railways. However do not take it that a railway of light construction and with primitive safe working systems is a tramway, and similarly that a heavy railway with safe working is a railway, - it is impossible to draw a sharp line between the two words.

The railways built for the conveyance of timber all fall into tramway group. Some had wooden rails, 20lb. (per yard) rails, 30lb. rails 40lb. rails, 60lb. rails, or even a spattering of 110lb. rails; or mixtures of several of these, however, no matter what type of materials were used - the result was always light and rough.

The construction of the better tramways was almost as good as the worst V.R. lines, however such excellently built tramways were very rare, the Powelltown, and the Forestry Commissions line at Erica being examples.

On the best lines grades were usually as steep as 1 in 25, with curves of 2½ chains radius, and ballast was provided, for instance the Powelltown line was ballasted with river gravel.

It is on the lighter lines that one finis conditions that are almost unbelievable to those accustomed to the heavier railways. Grades as steep as 1 in 12 and even steeper were found, curves of 1 chain radius were found and practically no earth works were carried out before the track was laid. On wooden rail lines the curves consisted of a procession of dog's-hind-legs because the wooden rails could not be bent to follow such sharp curves, while on all the rougher lines gauge variations of 3 or more inches were common. Points were usually made on the stub pattern.

The standard tramway gauge in Victoria was 3' but other gauges were also used including:- 2'; 2'6"; 3'6"; 4'8½" & 5'3".

It is, however, the method of running these tramways and the type of locos and rolling stock used that makes them worthy of great interest.

Locomotives fall into various types:-

1. Steam. Many of these tramways tried steam locomotives of conventional types, but owing to light construction track they were often unsuccessful. Apart from conventional ones; Shays, and Climaxes were used on the Powelltown and Erica (Forestry Commission) tramways with success, on tramways of lighter construction they would have failed.

However, as the cost of locomotives on these lines was to be kept to a minimum "bitsers" often resulted, being built in company's own "shops," out of various secondhand parts. Sometimes they conformed roughly to accepted designs, but many times they were freaks. Most of these locos, not surprisingly, were unsuccessful. The 0-6-6-0 loco used on Russell's tramway at Cembrook falls into the home-made group, it was based on a Heisler, and was successful although it was a little to heavy for the rails.

2. Internal Combustion Tractors. These were light tramway "locos" being powered by a tractor engine, they had four or six driving wheels of tramway pattern (q.v. post) and a very small power output. Double and triple heading was often resorted to with these machines. They were well suited to the roughest of tramways being more reliable and economical than the horse. Typical tractors were the Hattrasse, T.A.C.L., and the Malcolm Moore Tractor.

3. Diesel Locos (as opposed to tractors). These were a luxury item, the only tramway I know of to have them was the Alexandra-Rubicon Tramway; because the local council would not allow them to use steam locos because of the fire danger. These diesels have the doubtful honour of being the first diesels to be built in Australia.

4. Horse Traction. Horses were used on many of the lighter lines, usually in teams of six or eight. Probably by 1935 horse traction would not be found.

5. Other Systems. Such as gravity, cable haulage etc.

ROLLING STOCK:-

The most common vehicle used was a simple wooden short wheelbase "bogie." On the Powelltown line these had 18" wheels with 6" treads and deep flanges-the normal tramway wheel. These vehicles had swivelling bolsters on which the logs were placed, they were coupled by a simple link and pin arrangement and were unsprung. On the Alexandra-Rubicon tramway they were steel framed vehicles with springs, they also had more normal wheels.

These tramways first appeared at about the turn of the century. They were found in the following areas (this list is by no means complete) Travalla-Waterloo, 8miles, 5'3", 1 loco. Wal-wal--Warracook, 10miles, 3'6". Barwon-Sawmill, 8miles, 3'6", 1 loco, 1 tractor. Forest-Sawmill, 2miles, 3'6", 2locos. Forest-Barrangan, 3miles, 3'6", 3locos. Wye River-Jetty, 1mile, ?, ?. Pile Stg., 3miles, 3', 2tractors. Cobden-Stb. Purrumbete, 8miles, 3', ?plus. Elphinstone-?, ?, ?, 1 loco. Tanjong-Harper's Mill, 10miles, 3'6", 1 loco. Alexandra-Rubicon, 15miles, 2', 3 locos. Toobermon-Cherington, 22miles, 5'3", 3 locos. CaveHill-Mt. Evelyn, 4miles, 4'8½", 1 loco. Myers Ck. Rd.-Dimimill, 3', 3 locos, 2 tractors.

Yarra Junction-Powelltown-Aia River, 21½miles, 3', 6 locos.

Brittania Stg.-Seasoning Works, 3miles(?), 3', 1 loco.

La la-Big Pat's CK.-New Federal Mill, 17½miles, 3', 5 locos, 2 tractors.

King Lake-Central Mill, 3', 1 tractor. Wilmany-Mill, 3'

Cembrook-Russell's Mill, 12 miles, 3', 3 locos. Lardner-Mill, ?.

Crossover-Mill, 3'6", 1 loco. Crossover-Cunn's Mill, 10miles, 3'6", 2Locos.

Noojee-Goodwood Mill, 14miles, 3'6", 5locos. Collin's Stg.-Mills, 6miles, 2'6", 4 locos. Port Albert-Mullimiding Forest Mills, 25miles, 3'6"(?), 2 locos.

THE AUSTRALIAN CEMENT COMPANY'S RAILWAYS, PYANSFORD.
(Continued from Autumn edition)

LOCOMOTIVES:-

NUMBERS: 1 and 2.
BUILDERS: Beyer Peacock & Co. (England).
WHEEL ARRANGEMENT: 2-6-0-0-6-2 Tank.
DATE BUILT: No. 1: 1936; No. 2: 1938.
DATE PURCHASED: Ditto.
BUILDERS NUMBERS: No. 1: 6974; No. 2:
DRIVING WHEEL DIAMETER: 3'7½"N.B. The centre drivers have thin flanges
CYLINDERS: FOUR 15½"x27".
BOILER PRESSURE: 180 P.S.I.
WEIGHT: 71 tons.
TRACTIVE EFFORT: 24,300 lbs.
COAL: 2½ tons.
WATER: 2,000 gallons.
NOTES: No. 1 is painted red with black trimmings, No. 2 is painted black. No. 1 has recently had its boiler condemned and is unlikely to run again. No. 2 shunts at the works.

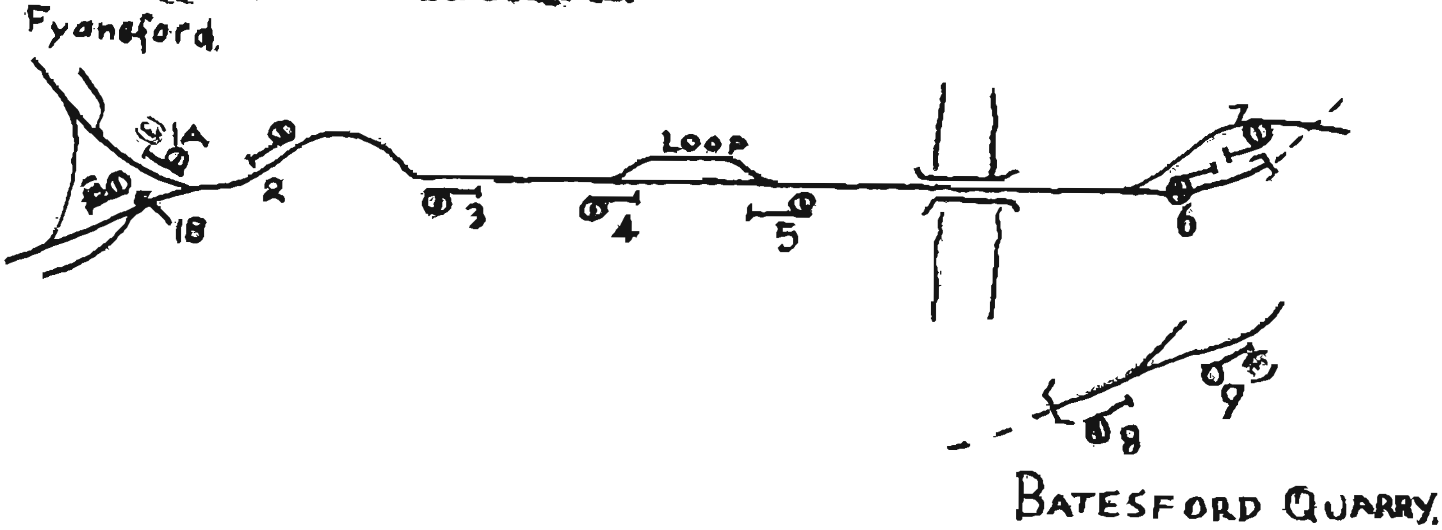
NUMBERS: 3
WHEEL ARRANGEMENT: 4-8-2-2-8-4 Tank.
DATE BUILT:
DATE PURCHASED: 1945.
DRIVING WHEEL DIAMETER: 4'
CYLINDERS: FOUR 14½"x24".
BOILER PRESSURE: 200P.S.I.
WEIGHT: 119 tons.
TRACTIVE EFFORT: 34,200 lbs.
COAL: 6 tons.
WATER: 4,200 gallons.
NOTES: Not in service, however, it is now undergoing repairs so that it can be used while the diesel is undergoing overhaul. It is an Australian Standard Garrat-never a very successful design, and, although it is a very terrible thing to say about a steam engine, in my oppinion it is extremely ugly.

NUMBERS: 10, and 11.
BUILDERS: Perry Engineering, (South Australia).
WHEEL ARRANGEMENT: 0-4-0 Tank.
DATE BUILT: 1926.
DATE PURCHASED: 1947, from S.E.C., who purchased it from the Bingle Washing Co., who purchased it from the Victorian Public Works Dept.
DRIVING WHEEL DIAMETER: 30"
CYLINDERS: Two
BOILER PRESSURE: 160 P.S.I.
TRACTIVE EFFORT: 6,000 lbs.
WEIGHT: 14 tons.
NOTES: Not in service.

NUMBER: D1.
BUIDERS: Clyde C.W. (New South Wales).
WHEEL ARRANGEMENT: Bo-bo.
DATE BUILT: 1956.
DATE PURCHASED: 1956.
TRACTIVE EFFORT: 37,000 lbs. (875 H.P)
NOTES: Is similar to a V.R. "T" class, and is painted in V.R. livery. It is named WESLEY B. McCANN.

REMARKS CONCERNING THE ABSOLUTE PERMISSIVE BLOCK SIGNALLING - AS USED ON THE FYANSFORD-BATESFORD RAILWAY. BY R. MURRAY.

Approximate track diagram:



The three mile long line between Fyansford and Batesford is now the only existing instillation of Absolute Permissive Block working in Victoria although it was once employed experimentally between Ferntree Gulley and Gembrook during 1926-27 resulting in the equipment of a modified version on the Geelong line. In this system intermediate automatic signals are placed along a single line in each direction so that, although opposing trains may not proceed into a single line section, one or more trains may follow another into the section using the automatic signals the same as on a double line: this was the system used on the Belgrave line.

There are two important differences between the type used on the Fyansford-line and in V.R. installations: with the former, the starting signals which allow trains to enter the single line section are normally at proceed whereas they are not on the V.R.; secondly there are no intermediate signals on the Fyansford line, a train presumably may be permitted to follow another into the section with a clear indication.

This line is divided into two sections, Fyansford-Loop, Loop-Quarry (there is no safe working on the high level). Certain signals (1a or 1b, 4 and 9) may show a yellow indicating that the next signal is at danger. None of the signals is controlled by levers but are worked by train movements: the starting signal is at clear for an unoccupied section or for a receding train but at stop when a train is approaching on the single line.

Signals 2 and 3 (I have numbers solely for the sake of convenience) are probably placed in advanced positions to facilitate shunting movements outside the points. Either signal 1a or 1b will clear according to the position of the points. Signal 6 situated between the converging lines applies from both across the bridge towards the loop. The purpose of signal 9 is not apparent as shunting is not permitted outside the points however I have observed that this signal shows red for approaching trains, yellow for a receding train (signal 8 being at stop both times; apparently one train cannot follow another into the tunnel on account of the grade) and green for a clear section.

The Absolute Permissive Block system (ie Absolute for opposing trains and permissive for following trains) avoids the delays caused by staff exchange, the authority to enter the single line being given by a signal indication, and is invaluable on an important line such as the Geelong line.

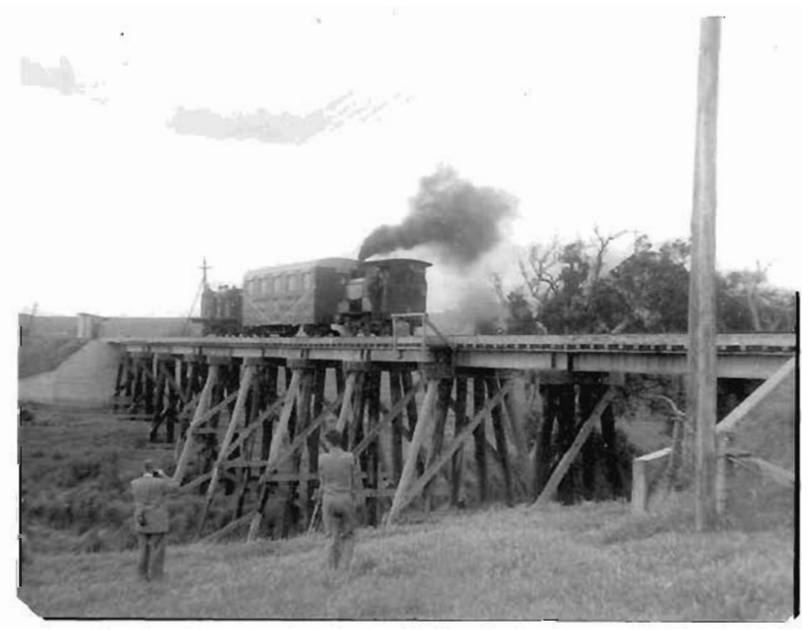
This concludes the Fyansford article, the editor would like to thank the following people for their assistance: R. Murray, G. Gardner, and A. Stewart.

PHOTOGRAPHIC SUPPLEMENT No. 1 PRICE 4s.9d.

THE AUSTRALIAN CEMENT COMPANY'S RAILWAY, FYANSFORD.

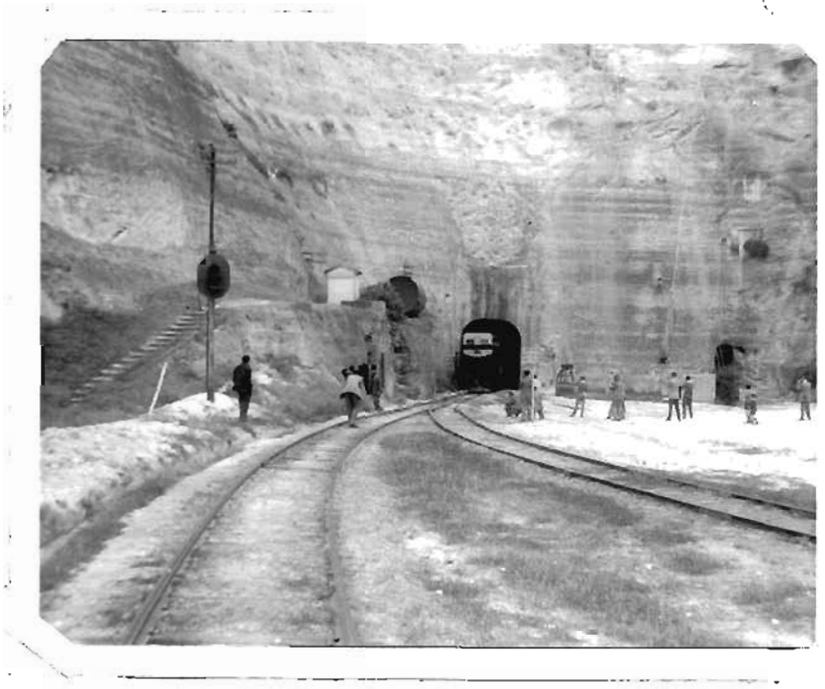
All photographs kindly supplied by R.Murray.

The Hudswell Clarke No.6 on a special railway enthusiasts train at the works.



The Hudswell Clarke on a special enthusiasts train. Cup Day 1960 The trestle-bridge crosses over the Moorabool River.

3. The Perry 0-4-0's in store at the cement works. The loco at the left is a Hudswell Clarke. September 1960.

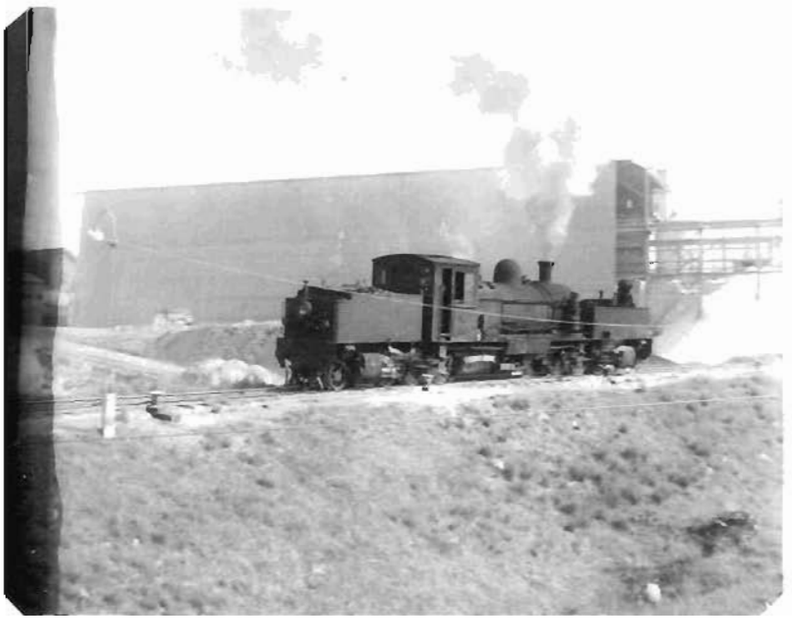


4. The diesel electric entering the ~~xxxxx~~ quarry. Cup day 1960

XM 5. The Diesel-electric on a train of 15 side tipping mineral wagons. It is just passing the River Crossing Loop. September 1960

6. The Russell Clarke on a special enthusiasts train, Cup day 1960. The distinctive passenger coach can clearly be seen, together with the more primitive 4 wheel passenger vehicles.

7. The Vulcan No.5 at the Batesford quarry. On Cup day 1960. One Vulcan normally shunts inthe quarry while the other is kept as a standby. However, at present while Hudswell Clarke No.6 is undergoing overhaul, both Vulcans are being used, one in the quarry, the other on the passenger train



8. The particularly good looking Beyer Garrat loco No.K 2 shunting at the cement works. Unfortunately its elder brother is unlikely to run again as its boiler has been condemned.

K Further photographic supplements will be prepared if demand warrants them. Subjects available include V.R. Narrow gauge pictures S.E.C. narrow gauge electric pictures, timber tramway pictures and other pictures of general light railway interest.

VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

QUARTERLY REVIEW

SPRING XX 1961 Vol.II.,No.6. PRICE 9 PENCE(Free to members)

THE VICTORIAN RAILWAYS "W" CLASS 4-6-0 LIGHT LINES LOCOS. BY F.STANFORD.

LEADING DIMENSIONS:-

CYLINDERS: 2,outside 16"x24".
WHEELS COUPLED:4'3"
" BOGIE: 2'2"
" TENDER:3'
WHEELBASE: Rigid:5'plus7',12'
" Engine and tender: 40'3½"
LENGTH OVERALL:48'11½"
MAXIMUM HEIGHT:13'2"
HEIGHT,BOILER CENTRE:6'2"
BOILER HEATING SURFACES:
Tubes: 920 sq.ft.
Firebox: 82sq.ft.
Total:1002 sq.ft.
Grate Area:15.1sq.ft.
WORKING PRESSURE:125 p.s.i.
TRACTIVE EFFORT: @ 85% boiler pressure; 12,980 lbs.
WATER CAPACITY: 1695 gals.
COAL CAPACITY:3 tons.
WEIGHT IN WORKING ORDER: 56Ton 1 cwt.
MAXIMUM AXLE LOAD: 8 ton. 17 cwt.

These interesting locos were typical of early Baldwin design,with characteristic American features including bar frames,diamond stack,and ornamental sand dome and steam dome. When the "W" class were rebuilt they lost many of these features. The tender was unusual in that it had a fixed leading axle and a trailing bogie,which greatly facilitated tender first running,this type of tender was also used on the Baldwin 2-4-0 loco on the Powelltown tramway.
These locos had an extremely light axle load and were therefore used on construction work,on such lines as Wonthaggi and Orbost.They were mainly used on light branch lines such as the Cuttrin and Noojee lines. Originally these locos were painted green with brass trimmings,but in their last days they were plain black.
Historical Details:

There were 12 "W" class locos built,all built by the Baldwin locomotive works,Philadelphia,U.S.A. between 1879 and 1883.However a Phoenix built "S"class was later reboilered with a "W"type boiler and was reclassed as "W no.197 and this brought the class total to 13.

The first "W" to be scrapped was no.155 in 1925,and the last was no.227 in 1926. No.227 was sold to the Mc Ivor Timber Co.,Tooberac,in March 1925;when this company's timber tramway was closed the loco was sold back to the V.R. and was scrapped in 1934.

The V.L.R.R.S. wishes to announce that it now has available copies of four old timber tramway photos taken on the Powelltown,Erica Forestry Commission ,and the Rubicon tramway. The price of these prints is 1/-each to non-members and 10d.each to members. Members are requested to try to get as many customers as possible for these photos so that the price of having the originals copied is regained.
The editor welcomes any articles of historical interest that are related to Victorian (and possibly Tasmanian)railways of light construction.
Members who joined at the formation of the society are reminded that there membership fees of 4/-(or 8/- if the Q.R. has to be posted) is due on the 1st.September and must be paid by the 1st.of December.
In order that this publication continues to flourish (!) it is requested that members should try to increase its circulation so that it may be duplicated economically.

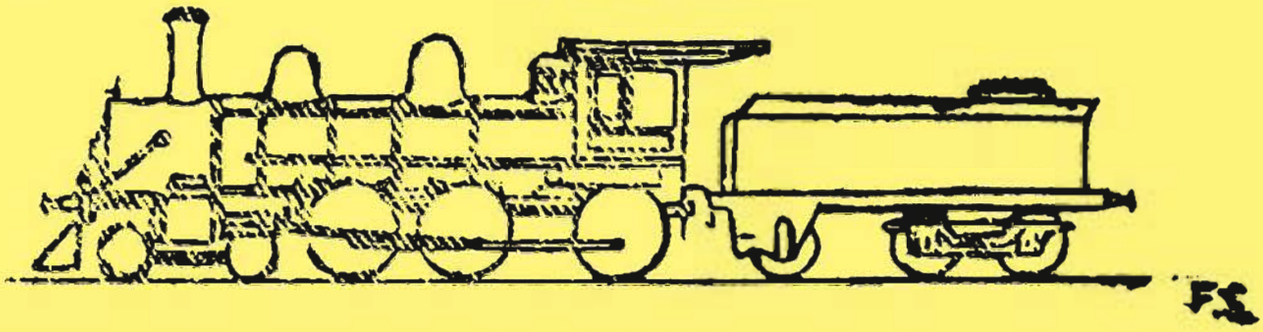
ADVERT. THE SHIRLEY VALLEY RAILWAY WISHES TO ADVISE THAT THE S.V.R.Q.R. is now published independantly of the V.L.R.R.S.and any body requiring copies should order them.

TENDERS are invited for the supply of approximately 12 small on/off switches, no tender necessarilly accepted.

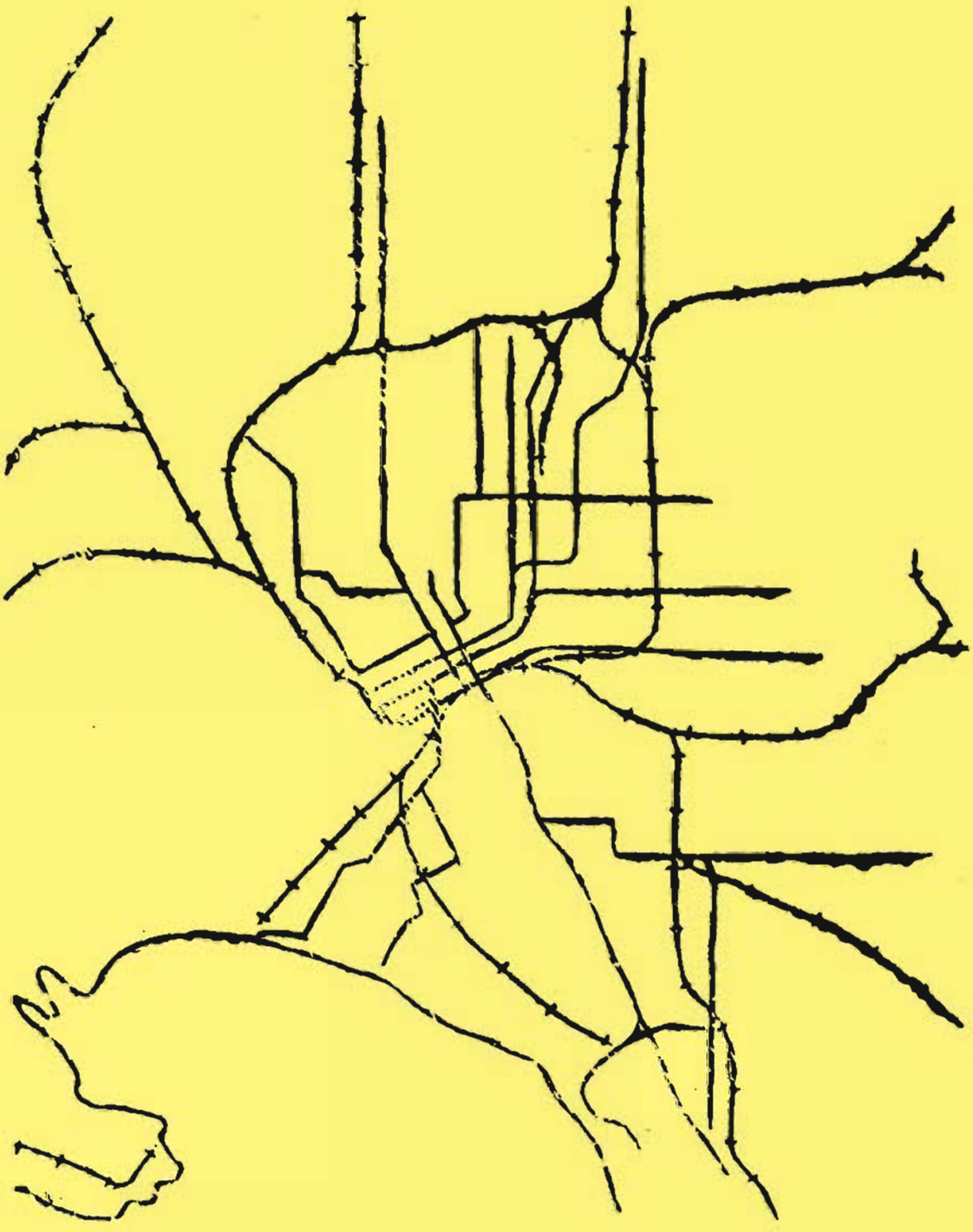
TENDERS are invited for the purchase of one tender (OO gauge-) and various other junk--no tender necessarily accepted.

F.STANFORD.

THE VICTORIAN RAILWAYS "W" CLASS LOCO, DIAGRAM.



F.S.



MELBOURNE'S SUBURBAN RAILWAYS AND TRAMWAYS, 1898

R.F.

MELBOURNE'S CABLE TRAMS

BY R. FELLOWS.

The principle of using a moving cable or rope to haul heavy loads as practised by the cable tram is by no means a recent invention,as is generally believed. In fact the Egyptians used complex arrangements of ropes to haul encurmous blocks of stone for their pyramids.

One of the earliest records of cables used on railway lines is that of the Canterbury& Whitstable Railway which opened in 1830,four miles of which was hauled,and two by gravity. The steepest gradient on this line was 1 in 28. The cable system of haulage was used only on a few portions of main line in Britain,and only one short suburban line had cable traction throughout,but as more powerful locos were built,the line was converted to steam traction.

Cable traction on tramways commenced on September 1873 with the opening of the Clay Street line in San Francisco.This was the invention of Andrew Hallidie who, it is said,resolved to develop a safer form of transport than the horse tramsthen in use after seeing a loaded tram tumble to the bottom of a steep San Francisco hill. Although cable traction was greatly favored in America,the first European line line to open was that up Highgate Hill,London,in 1884.

Cable tramways in Melbourne were to follow soon afterwards.Two acts of Parliament of 1883 authorised the Melbourne Tramway & Omnibus Co. to ahead with constructio The method of control for the tramways was to consist of two bodies,one,the Melbourne Tramways Trust, which was to construct the track and winding houses, and the M.T.&.O.Co., which was to build the depots and buy the rolling stock.

The first line opened on the 11th.November,1885, between Richmond and the corner of Spencer and Bourke Streets,followed soon afterwards by the opening of a line between Spencer Street and North Fitzroy on 2nd.October,1886.On 8th.May,1888,the Victorian Railways opened suburban railways to Collingwood and North Fitzroy. The two lines branched a short distance to the west of this cable line, and crossed it about about fifty yards apart.This necessitated the construction of complicated level crossings .

The early safeworking equipment is unknown,but signal lights were provided in 1920.

On 22nd.November 1886, a new line running from Spencer Street to Victoria Bridge via Collins Street was opened, later followed by the lines to Port and South Melbourne on 17th. June,1890. These lines terminated at Spring Street.Before the last of th Collins Street lines were opened ,two lines centred on Bourke Street were opened.The sectio between the winding house at the corner of Gertrude Street and Nicholson Street Clifton Hill were opened on 10th.August 1887,followed by the opening of a line from North Fitzroy Station, to Spencer Street on 22nd. August 1887. At the same time, the Clifton Hill line through routed to Spencer Street.

On October 1st 1887, the first Elizabeth Street lines were opened, from Flinders Street to Brunswick. This line was different from all the others in that bogie trailers were used .This line only had one slight curve of 400 ft. radius,all other curves being,in general,too sharp for these bogie trailers.During 1890,two other lines opened into Elizabeth Street. These were the Flemington Bridge line,which opened on on March 3rd.,followed by the West Melbourne route on April 11th. This latter was connected to the Flemington Bridge line by a junction in Abbotsford Street adjacent to the winding house.

The West Melbourne line was not widely used as it served mainly the commercial areas,but on fight nights the situation would change,when bogie trailers would be taken from the Brunswick line to carry enormous crowds to the West Melbourne Stadium,now pretentiously known as Festival Hall. It is said that 122 persons could be crammed aboard the trams on these nights.

On 21st. December,1887,the first line of a vast system centred on Swanston Street was opened. It ran from Lonsdale Street through Carlton to the Johnston Street bridge. This was followed by an extension to Milton Street,Elwood,called "Brighton Road",on 11th. October,1888,and this new line terminated at Queensberry Street. On 26th. October,1888,another extension was made,to Prahran,via Toorak and Chapel Streets,followed by a branch from the Collingwood line to North Fitzroy Carlton on 9th. February,1889, and a branch fromthe Prahran line to Irving Road Toorak, on 15th.February,1889.

During the late 1880's,the Clifton Hill Northcote,& Preston Tramway Co. was formed to construct and operate a cable tramway from the Clifton Hill cable terminus of the M.T.&.O.Co. to Dundas Street,Northcote;to aid suburban development in the area. Services began on the 2½mile line on 18th. February,1890. The line developed many faults and was closed for more than four years at various times between 1890 and 1901.In 1900 the Northcote City Council bought the line for £12,000 and set about restoring it to safe working order,reopening it in March 1901. For fifteen years it leased the line,but after 1915 the Council operated the line itself.

Meanwhile another extension was made to to the M.T.A.C.Co. lines. This was an isolated line from St.Kilda Beach to Chaple Street,Windsor,opened on 27th. October,1891. Passengers from the city to St. Kilda or Windsor had to change until 19th. December,1897 when connecting lines in the St.Kilda direction were laid to enable North Carlton trams to through run to St.Kilda. This however was not the only through routing,as,from 23rd. February 189[illegible] the Collingwood line had trams running to Prahran, leaving only the BrightonRd. and Toorak lines to terminate at Queensberry Street.
(To be continued).

ADDENDUM TO THE TIMBER TRAMWAY ARTICLE IN THE WINTER 1961 Q.R.

List of Timber Tramways (again this is by no means complete).
Noojee - Loch Valley, 3'6"
Cembrook - In addition to Russells steel tramway there were approximately 65 miles of wooden railed,horse operated tramways to 3' and 3'6" gauges.
Branch Lines off Powelltown tramway,all presumably 3'gauge wooden railed,horse operated and closed by 1942.-
Slaty Creek - Lloyd's Mill - Baseldens etc. 6½ miles.
Blacksands to mills 6 miles.
Three Bridges - Old School Corner 3 miles.
Gilderoy - Merleys 4½ miles.
A siding half way between Gilderoy & Powelltown - Feigline 4 miles.
Powelltown - Reids 3 miles.
11½ miles(from Yarra Junction) - Fitzpatricks 3 miles.
Wayook West - Walkers,Sharps 7 miles.
The milages given can only be taken as approximate.
Brittania Sdg.-Seasoning Works 6 miles(not 3 as was stated in the Winter number).
Millgrove - Mills 5 - 6 miles.
Isolated tramways north of Warburton 9 miles.
Yellingbo southwards 7 miles.
Woori Yallock - Mt.Toolo-be-Wong 5 miles.
Again the above milages are approximate.
Tramways connecting with the V.R.'s Walhalla line.-
Moondarra - Baw Baw Range 5 miles.
Collins Siding - Mills 17 miles (not including a fantastic network of wooden branch lines).
Erica - Beard's Mills ?
Knott's Sdg.(then known as Long Tunnel Mining Co.'s Sdg) - ? ?miles(1910-191[illegible]
Knott's Sdg. - mill,worked into 1930's(?)
O'Shea and Bennet's Sdg.(100 miles,17 chains from Melbourne) to :-
1. Northward between East Tyer's Junction and Thomson rivers.
2. South East branch of Rintoul's Creek.
Tramways connecting with the V.R.'s [illegible] Crowes line:-
Beech Forrest - Chapmalah 5-6 miles,3',wooden.
Ferguson - to somewhere west of Ferguson.
Pile Sdg. - Marshbank's Mill - Camp Creek ? 3',wooden.
Kincaid Sdg. - to somewhere north of Kincaid Sdg.
Dylangata - westward.
Pettet's Sdg. - North branch of Chapple Creek.
Stalker - ?
Lavers Mill - westward.
Crowes - southerly into Johnsons Valley.

Also a tramway in the vicinity of Dean towards Barkstead (possibly used for firewood) possibly 3'6" gauge, and apparently with two steam locos.
Additions to the above list are welcome.

WANTED:- Details,photographs etc connected with the Powelltown tramway and its numerous branch lines for an article that is about to appear in the Q.R. Wanted especially are track diagrams,photos which give clues to the track layouts,photos taken at intermediate "stations", a photograph or drawing or details of the two Kerr Stuart locos,details of brake gear used on vehicles,and any details which may assist in making accurate scale drawings of rolling stock and locos.
Apply to F. Stamford,9 Mc.Gregor Street,Canterbury,E.7.

VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

QUARTERLY REVIEW

SUMMER 1961/62 Vol. II. No. 5.7 PRICE 1/6 (FREE TO MEMBERS)

VICTORIAN RAILWAY NOTES

The rail motor service between Wodonga and Tallangatta ceased running as from 30th. September, 1961.
The Heathcote rail motor is to cease running, and the Wahgunyah mixed is to become the Wahgunyah goods.
The Weeaproinah line is to close in June. NA 14 and G41 are both in store at Colac leaving only G42 to operate the line.

SOCIETY NOTES

REPORT OF THE SOCIETY'S EXPEDITION TO YALLOURN TO SEE AND INVESTIGATE THE RUNNING OF THE S.E.C.'S 90 CM. ELECTRIC LINES.

By G. Gardner. 2nd. September, 1961.

The party left Melbourne on the "Gippslander" for Moe and travelled by bus to Yallourn: six people participated. Before lunch we were conducted over the power-house and in the afternoon were guided over the railways in the open cut. Throughout the day the S.E.C. were as helpfull as they could possibly be and provided transport around the plant including a trip in the cab of a loco. The findings of the expedition, together with other information on the lines shall be published later in the V.L.R.R.Q.R.

CABLE TRAMS OF MELBOURNE . (Continued)

R. FELLOWS.

Between the1891 and the time of the expiry of the M.T.&O.Co's lease on 31st June, 1916,no further extensions were made to the cable network, although the Victorian Railways, a private company, and two municipal Trusts had commenced electric tramway operation from various dates from 1906 onwards. A report of 1911 of the ROYAL COMMISSION OF THE RAILWAY AND TRAMWAY SYSTEMS observed that settlement was extending along the suburban railway lines, causing congesting. It was reccommended that a comprehensive system of electric tramways be established, especially in the eastern suburbs The Commission reccommended that the Camberwell and Caulfield railways be electrified, that control of all tramways should be vested in a Municipal Tramways Trust, and that the cable tramways should be converted to electric operation and extended as required. It is interesting to note that it was reccommended that the conduit system of current collection should not be adopted.

The Commission's plans began to materialise on ~~1st. November 1915~~ 1st July, 1916, when the Melbourne T.&.O.Co. was taken over by an interim Melbourne Tramways Trust. This latter too was taken over by the Melbourne and Metropolitan Tramways Board on 1st November 1919, which took over the municipal Trusts in 1921, and the private company, the North Melbourne Electric Tramway and Lighting Company, in 1922.

Under the Act of Parliament authorising the M.&M.T.B., the Board was required to prepare a comprehensive report for the future street

transport of Melbourne. After investigating the possibilities of battery and petrol-electric trams, trollybuses, and motorbuses, it was decided that the cable tramways should be closed, and converted mainly to electric tramways. As this would take some years, a number of improvements were made to the cable system to enable it to operate more efficiently until the time of closure. The speed of the ropes was speeded up, a number of auxiliary engines were installed at ~~intermediate~~ various winding houses for the increased peak hour loading, and additional crossovers were installed at intermediate pointes.

On 10th February, 1924, a new cable line came into operation along Lonsdale Street to enable North Melbourne cable trams to run through to St.Kilda. On the same day, the Queensberry Street cable line was closed beyond Lonsdale Street so that Coburg electric trams could come nearer the City. This small line, 10 chains long, was the first step of an operation of vast magnitude. With capable planning, the use of temporary track on the road surface, and a small fleet of buses, the whole operation was carried out with very little inconvenience to the travelling public.

The last step forward in the development of the cable system was when the formerly isolated Northcote cable system was connected to the main system, and through services commenced on 8th March, 1925. After this date, the result of years of planning began to materialise when the cross-suburban line from Windsor to St.Kilda Beach closed on 29th August, 1925, to reopen on 27th December of the same year to electric trams. From 26th December, 1925, the North Melbourne cable service was re-routed to its former city terminus at the corner of Elizabeth and Flinders Streets, and on 28th December, 1925, the North Carlton and Collingwood lines were extended from Swanston Street to Elizabeth Street in Lonsdale Street along the trackage built in 1924. Electric trams began running from the Southern end of Prince's Bridge on permanent tracks in Sturt, Hannah, and Park Streets, and on temporary tracks in St.Kilda Road as far as St.Kilda Junction on the 27th December to connect with the newly electrified St.Kilda Beach to Windsor line. The Swanston Street to Brighton Road (Milton Street) CABLE line was closed on 28th December, 1925, and the Toorak and Prahran lines were cut back to the corner of Domain and St.Kilda Roads.

The Swanston Street work was rapidly completed, and was opened to electric trams on 24th January, 1926. St.Kilda Road north of Domain Road was reopened on 28th March, 1926, and the remainder of St.Kilda Road was reopened on 9th May, 1926, enabling the temporary track to be abandoned. AFTER THESE WORKS HAD BEEN COMPLETED, the Commercial Road and High Street electric lines were connected to the new St.Kilda Road line, on 16th May, 1926. The final section, south of St.Kilda Junction to the former cable terminus at Milton Street with an extension to Glenhuntly Road, Elsternwick, was reopened on 29th August, 1926, so that the whole massive and complicated conversion had taken place in precisely an interval of one year.

The Board then turned its attention to the isolated Toorak and Prahan lines. The Prahran line from Toorak Road was closed in 28th August, 1926, and electric trams commenced operation on 1st October between Windsor Railway Station and Batman Avenue via the electric lines in Swan Street formerly controlled by the Hawthorn Tramways Trust and new lines in Chapel Street north of Toorak Road. The remainder of the line with an extension to Brighton Road opened on 19th December. The Toorak cable line closed on 1st October, 1926, and was reopened, electrified, to Orrong Road, about half a mile short of the former cable terminus, on 17th April, 1927, and was extended past the cable terminus to Glenferrie Road to connect with the electric line there on 8th May, 1927.

With the construction of a new electric tramway to West Coburg, the Flemington Bridge cable tramway was cut back to the top of Abbotsford Street, North Melbourne. This enabled Essendon and West Coburg electric trams to reach the City along new track built in Flemington Road, Peel Street, and William Street, to Collins Street. This new line was opened on 19th July, 1925. Because of the closure of the cable section, the cable depot near Flemington Bridge was closed and a new one was built in Howard Street, North Melbourne.

After the Swanston Street lines had been converted, the Richmond line was closed from Spencer Street terminus to Swanston Street on 15th May, 1927, and reopened to electric trams on 14th July. The rest of the line closed on 29th June, and reopened on 4th December, 1927.

The two lines centred on Collins Street were the next to be converted. The Victoria Bridge line (to Brunswick Street) closed on 16th July, 1929, to reopen to Brunswick Street on 14th September, 1929 and to the City on 7th December, 1929. The isolated North Fitzroy cable line from Brunswick Street was closed on 13th July, 1930, and reopened on 26th October, 1930. The South Melbourne and Port Melbourne cable lines (which were cut back to the top of Market Street when the Collins Street cable line closed), lasted nearly eight more years, until both closed on 13th March, 1937. The Port line was replaced by buses the next day, and the Beach line received electric trams via Spencer Street Bridge instead of Queen's Bridge on 25th July, 1937.

The next conversions were centred on the Elizabeth Street lines. Both the West and North Melbourne cable lines closed on 20th July, 1935, the former being replaced by buses the next day, and the latter by electric trams on 29th September, 1935. The Brunswick line, which used bogie trailers, was closed and electrified piecemeal. The section in Elizabeth Street closed on 29th September, 1935, and the remainder of that closed on 12th January, 19 . The line was electrified as follows Elizabeth Street, from Flinders Street to Victoria Street, on 17th November, 1935; Elizabeth Street, from Victoria Street to Flemington Road on 29th December, 1935; Royal Parade, between 12th January and 23rd February, 1936; and Sydney Road to the former cable tram terminus on 26th April, 1936. This electrification gave an alternative route to the City for Essendon and Coburg trams.

The two former Swanston Street lines, cut back to Lonsdale Street in 1924, lasted for a considerable time. The North Carlton line closed on ~~16th April, 1939~~, 1st August, 1936, and the Collingwood line closed on 15th April, 1939, both being replaced by buses the day after the closure

At this stage, only the two Bourke Street lines remained to be electrified to complete the recommendations of the Commission's 1911 report and the Board's 1923 plans. However the apparent success of diesel bus operation in some overseas cities influenced the Board to replace the cable trams by buses instead of electric trams. These required double and single deck buses were ready by April 1940, and the road under the Clifton Hill railway bridge had been lowered several feet to allow free passage of the double deck vehicles, leaving the cable tracks at their former level.

However, owing to the unexpected shortage of fuel because of war-time conditions, the conversion was postponed, allowing the 81 grip and trailer sets to continue running on borrowed time. THE CABLES were at the end of their dependable life by October, 1940, and the possibility of a break was imminent.

To avoid last tram incidents as on other routes, the secret decision was reached to close the lines on 26th October, 1940. The last cable tram in Australia left the Spencer Street terminus for Northcote at 9 p.m. So ended cable tramways in Australia.

Articles, notes etc., about Victorian light railways are welcomed by the editor.

WANTED: TRACK LAYOUTS OF POWELLTOWN TRAMWAY STATIONS & SIDINGS ALSO DETAILS OF THE SHAY LOCOS AS USED ON THE POWELLTOWN tramway. Details, photos, drawings etc. of articulated locos used on VICTORIAN TIMBER TRAMWAYS are also welcome.

Apply to F. STAMFORD.
9 McGREGOR ST.,
CANTERBURY, E.7.

TIMBER TRAMWAYS IN VICTORIA

(By F. Stamford)

PART II - DETAILED DESCRIPTION OF INDIVIDUAL LINES

The Powelltown Tramway

Of all Victorian timber tramways, the Victorian Hardwood & Sawmilling Company's Powelltown Tramway was perhaps the most popular and well known of them all. Located reasonably near Melbourne, and being situated in an area popular with tourists, it received more attention than most other Victorian timber tramways. It possessed many interesting features, including a variety of interesting rolling stock, while its loco stud was well balanced between English and American built locos. The Powelltown Tramway was the only Victorian timber tramway to run a regular passenger service, and it was also notable in possessing Victoria's only Shay locos. The Yarra Junction-Powelltown section could be compared, not unfavourably, with a Victorian Railways narrow gauge branch line, while in contrast to this, the section beyond Splitter's Camp and the many branch lines were quite primitive in construction and operation.

Description of Line

It is believed that the line was opened circa 1902, but as the first loco would have been either "Little Yarra", built in 1912, or 1st No. 3, which was apparently purchased from the Warburton Shire Tramway which had not been opened until 1910, this would appear doubtful. Alternatively, perhaps the line was operated by horses until the purchase of the first loco.

The line was built in State Forest country, and may be divided into three sections - the "Main Line" which was the section between Yarra Junction and Powelltown, the "Mountain Section" between Powelltown and Splitter's Camp, and finally, the inclines and connected branches beyond.

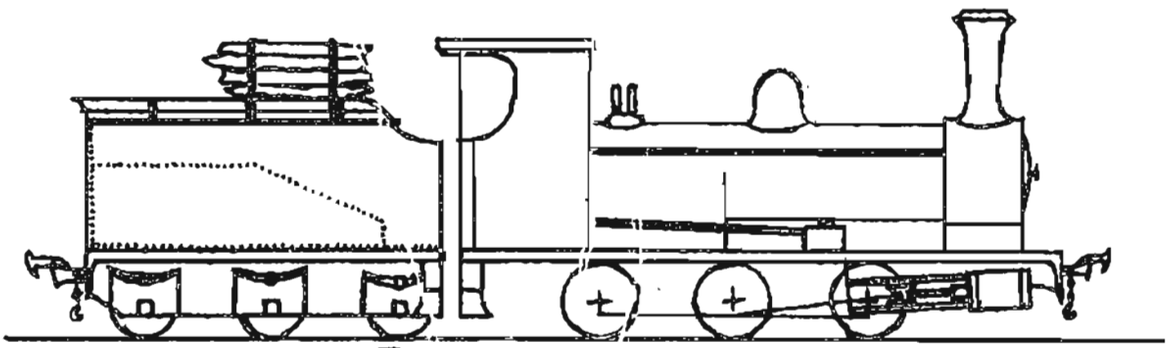
At Yarra Junction, the terminal facilities for the line were to be found on the up side of the V.R. yard. They consisted of two loop sidings and an ingenious steam operated overhead crane for transhipping heavy consignments. The line then followed the main Warburton railway for about a quarter of a mile, then turned South crossing over the main Warburton Road and joining the Powelltown Road. It has been said that the line then ran up the centre of this road, but on recent investigation, unmistakable signs of the roadbed were found at the side of the road. After folliwing the road for about half a mile, it left the road and ran in a South-Easterly direction for about two miles. Two and a half miles from Yarra Junction the station/siding known as Barrier was to be found. The line then turned North-Easterly, passing over a low, curved, timber viaduct. It then returned to the South-Easterly direction, the main Powelltown road coming into sight again. Three and three quarter miles from Yarra Junction the station/siding known as No. 1 Siding was found. A very low, straight, timber viaduct was then crossed, and after a short distance, Slaty Creek was crossed by a reasonably large trestle bridge.

(To be continued)

Editor's Note

Members of the Society will find enclosed with this edition the Q.R. a photograph showing a Shay loco on a curved, timber trestle bridge on the Powelltown line. These photographs were [illegible] free of charge by the Forest Commission. The article dealing [illegible] the Tyers [illegible] duplicated, and also given free of

Locomotives of the Powelltown Tramway.

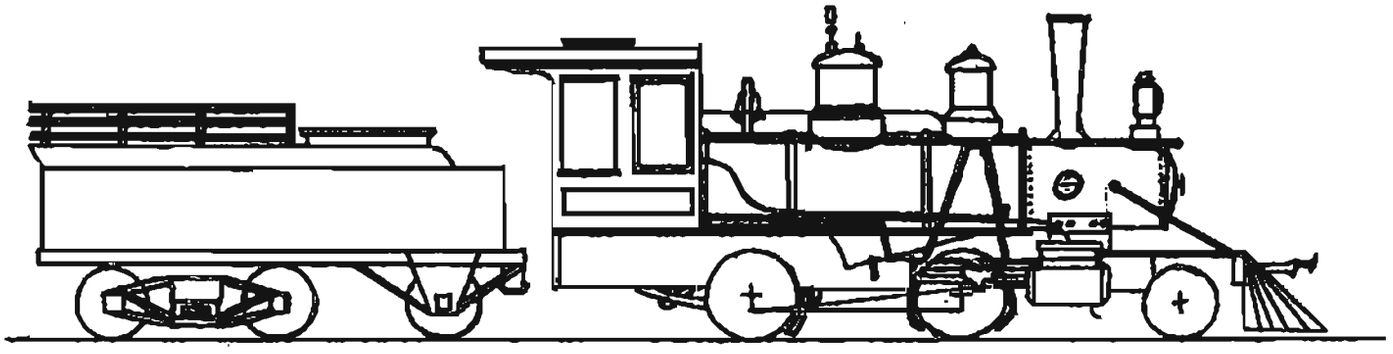


Powellite, Bagnall 0-6-0 tender loco

Details

Builders	W.G. Bagnall Ltd.
Date Built	1914.
Builder's Number	1955.
Cylinders	10" x 18"
Coupled Wheel Diam.	2'6"
Engine Wheelbase	9'-
Boiler Heating Surface	432 sq. ft.
Grate Area	9 sq. ft
Working Pressure	160 P.S.I.
Tractive Effort at 85% Boiler Pressure	7600 lbs.
Tender Capacity Wood	150 cubic feet.
" " Water	800 galons.
Total Weight	27 Tons.
Livery	Originally Green with White lining, Black in 1937.
Notes	In later years this loco carried its name in the form of polished Brass plates on the tender sides. The loco was maintained in excellent condition; it was assembled at the V.R. Newport shops, and was overhauled there at various times, ending up with a cut-down V.R. funnel. It was fitted with a basket-type wire mesh spark arrestor during summer. It alternated with "Little Yarra" on the Yarra Junction-Powelltown mixed trains. This loco was sold to Cameron & Sutherland Ltd., for the British Phosphate Commission for Nauru.

Locomotives of the Powelltown Tramway.

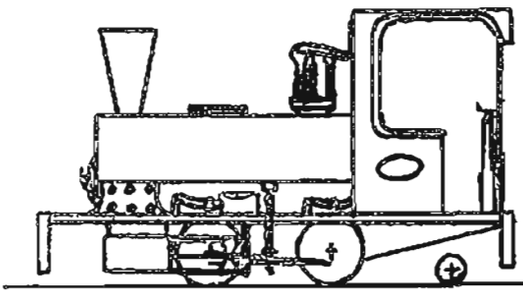


"Little Yarra," – 2-4-0 Tender loco.
Details.

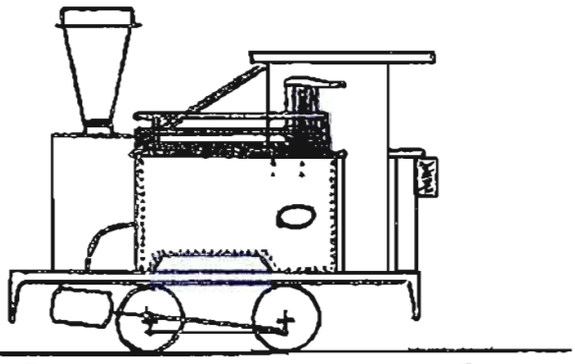
Builders	Baldwin Locomotive Works, U.S.A.
Date Built	1912
Builder's Number	37,718
Cylinders	10" x 16"
Leading Wheel Diam.	2'4"
Coupled " "	3'1"
Engine Wheelbase	14'4"
Rigid Wheelbase	7'–
Boiler Heating Surface	357 sq. ft.
Grate Area	8·5 sq. ft.
Working Pressure	160 p.s.i.
Tractive Effort at 85% working pressure	7,300 lbs.
Tender Capacity, wood	120 cubic feet.
" " , water	800 gallons.
Total Weight	20 tons.
Livery	Originally Red with white lining, in 1937 Dark Green.
Notes	Originally this loco possessed certain typically American features including bell, cowcatcher, kerosene headlamp etc, but these were later removed. A battery headlamp was fitted on the cab roof in later years, and the front window of the cab sides was covered over. A painted name was originally carried on the tender sides. In Summer this loco was fitted with a wire-mesh "basket type" spark arrester. This loco alternated with "Powellite" on the Yarra Junction – Powelltown Section, and, in later years, ran tender-first towards Powelltown. The tender was fitted with a rigid axle and trailing bogie, which facilitated tender first running. Outside slide D valves are driven by rocker arms from the inside Stephenson valve gear mounted on the leading driving axle. The dome carried a safety valve and a shrill whistle. The roomy cab was provided with padded seats, and the "pull-out" throttle and "Johson-bar" reverse was arranged on the right hand side. A steam brake operated on the driving-wheels,

continued on page 9

Locomotives of the Powelltown Tramway.



First No.3 "Coffee Pot"



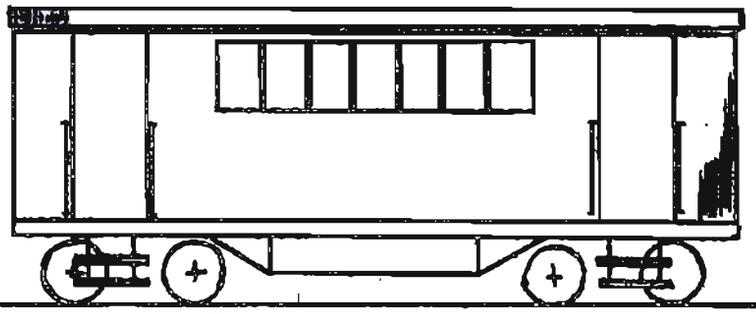
Second No.3 "Coffee Pot"

Details

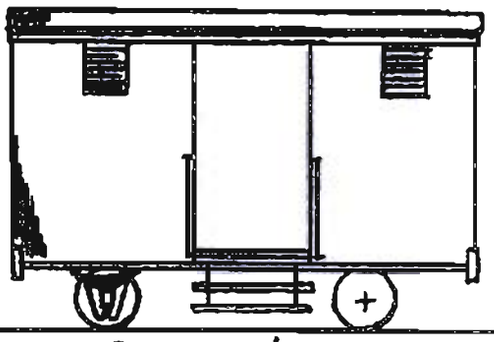
	First No.3 "Coffee Pot"	Second No.3 "Coffee Pot"
Builders	Kerr Stewart	Kerr Stewart
Date Built	1901	1902
Builder's Number	539	643
Cylinders	5"×12"	7"×12"
Coupled Wheel Diam.	2'	2'
Trailing Wheel Diam.	9"	—
Total Wheelbase	8ft. equally divided	4'5"
Rigid Wheelbase	4 ft.	4'5"
Boiler Heating-Surface		
Grate Area		
Boiler Length		9'6"
Boiler Diam.		2'6"
Boiler Tubes		49 tubes of 2" diam.
Working Pressure	130 p.s.i.	140 p.s.i.
Tractive Effort	1300 lbs.	2300 lbs.
Water Capacity		
Wood Capacity		
Total Weight	4 tons	8 tons.
Livery		Originally unlined green.
Notes	Apparently this loco was purchased from Herman's tramway, Warburton. Possibly the tramway's first loco, although the number does not suggest this. Apparently this loco was abandoned at Ada No.2 mill, but it may have been sold around 1915, to Cuming Smith & Company for use on their Brittania Creek line. Its original owners are unknown. It was fitted with Joy's valve gear.	This loco was purchased from the Tasmanian Gold Mining Co. in April 1916. It was in use until the line was closed in 1945. It was purchased by Dickson Primer of South Melbourne and was then sold to M.Dalley & Co. From about 1928 to 1938 this loco was out of use, but it was overhauled for use on the Ada Mill No.1 branch.

"LITTLE YARRA," NOTES continued.
and a hand brake on the tender. Little Yarra" was kept in rather bad condition in later years. It was sold to CAMERON & SUTHERLAND LTD. for the BRITISH PHOSPHATE COMMISSION, for use in Nauru.

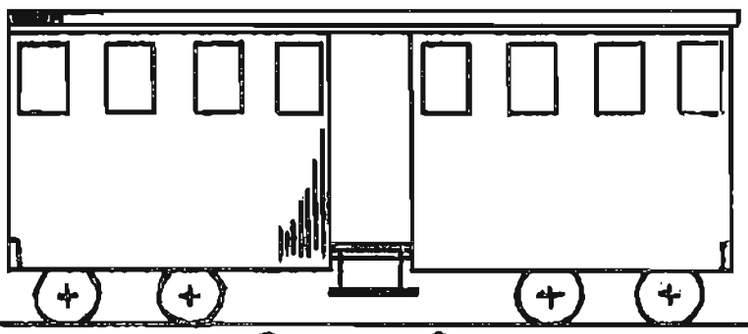
POWELLTOWN TRAMWAY ROLLING STOCK.



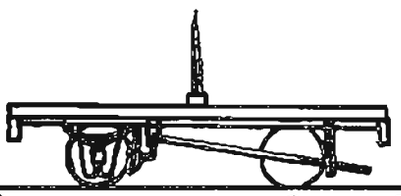
PASSENGER COACH



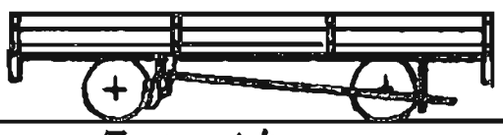
CLOSED VAN



PASSENGER COACH.



3 TON WAGON, WITH SWIVEL BOLSTER



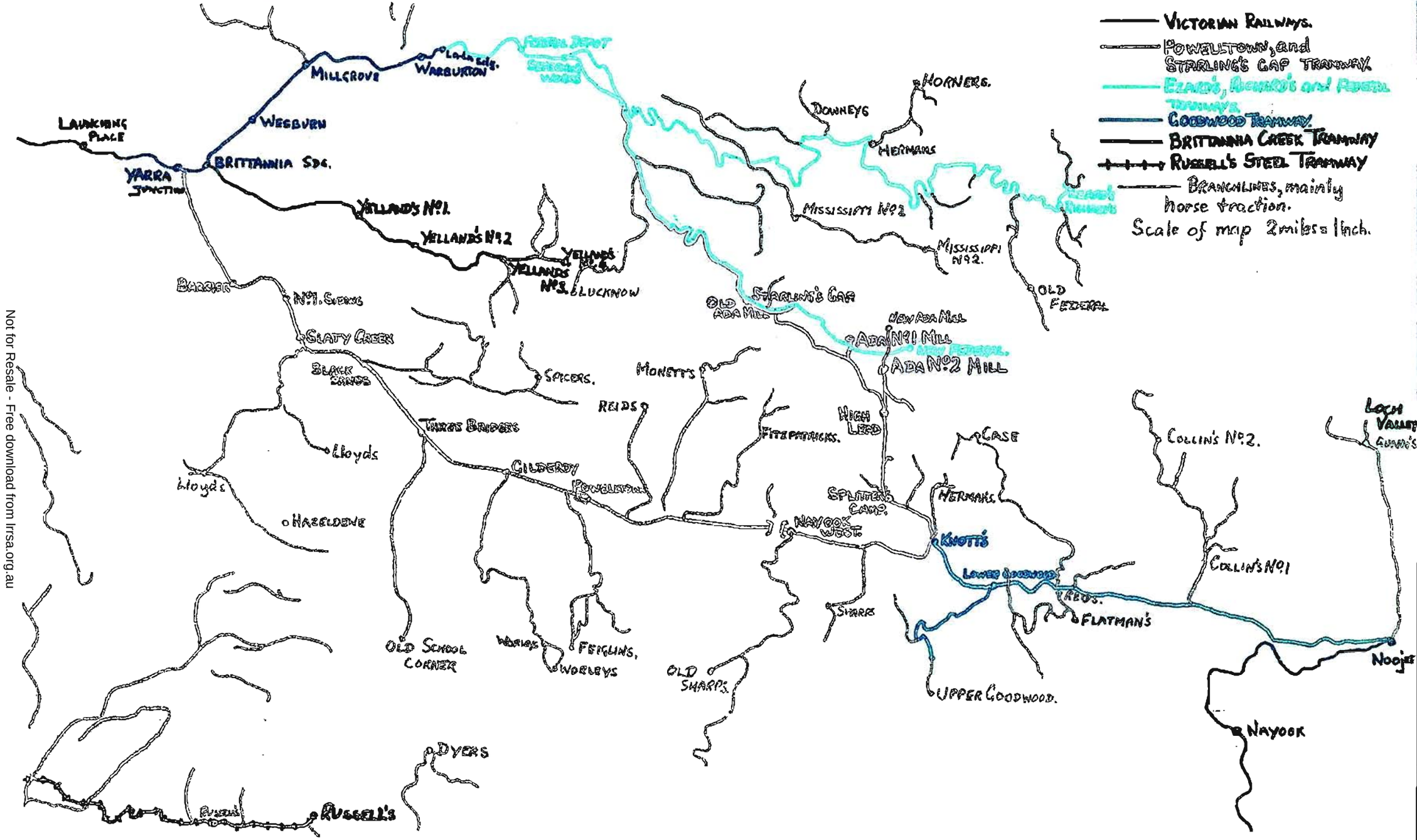
5 TON WAGON

TIMBER BOGIE.

DIMENSIONS OF ROLLING STOCK.

	TIMBER BOGIE	PASSENGER COACHES	CLOSED VAN	LOW SIDED WAGON	MEDIUM SIDED WAGONS.
WHEEL DIAM	1'6"	2'	2'	2'	2'
WHEELBASE	2'3"	—	8'6"	6'6"	9'–
LENGTH		24'	15'6"	12'6"	16'–
WIDTH		6'	7'	6'	6'6"
CAPACITY	—	—	—	3 TONS	5 TONS.
TARE WEIGHT		4 TONS.		1 TON 6 CWT.	2 TONS
BOGIE WHEELBASE		4'–			
BOGIE CENTRES		16'–			

ALL diagrams to 4 mm. to the foot scale, but as only a few dimensions are known their accuracy cannot be insured. DRAWINGS OF THE SHAYS are to follow, probably in the AUTUMN edition.



TIMBER TRAMWAYS OF THE WARBURTON-NOOJEE AREA.

VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

QUARTERLY REVIEW

AUTUMN XX 1962 VOL. II. NO.8. PRICE 10 PENCE.

VICTORIAN RAILWAYS NOTES

On February 18th.the 5'3" gauge electrified Upper Ferntree Gulley -Belgrave line was opened.The first day of regular train service was Monday the 19th.of February.

Apparently the Beech Forest-Weeaproinah narrow gauge line is to be officially closed as from June 30th.Meanwhile a series of "last passenger trains"are being run in March.

SAFEWORKING USED ON THE STATE ELECTRICITY COMMISSION'S RAILWAY SYSTEM AT YALLOURN AND MORWELL BY R.MURRAY.

1.Double Lines

Since most of the equipment has been imported from Germany (which explains the unusual gauge of 90 cms.), right hand running is in force.All lines now use three position automatic color light signalling. Until recently(about 17th.August,1961) the "double line staff" system was in use.It is not certain how this system worked, but apparently the staff was applicablo to both lines;which meant thatt two trains travelling in opposite directions could not pass each other between ends of sections.

2.Single Lines.

Tabs:-These are metal hoops which give the authority to enter some sidings and dead-end single lines; they perform a function similar to that of the train staffs for the Williamstown Pier and Ashburton sections A small disc bearing a number corresponding to the line for which the tab applies is attached to the hoop.The signal at the junction and the one immediately in the rear of it have route indicators(the latter for the convenience of drivers of trains travelling in the reverse direction), the numbers on the signals corresponding to the numbers on the tags.

A signal cabin operates all home signals,indicators,and points around the Open Cut. The home signals at the junction only signifies that the points are set correctly as indicated by the route indicater. A stand is provided for delivering up tags in the outwards direction without stopping.

Staffs:-Most staff sections have now been replaced by automatic signalling but there still remain four sections on the main line betwwen Yallourn and Morwell. The principle is similar to the T.S.T. system,except that tickets are not issued. A train may proceed into a section after the driver has sighted the staff for that section;i.e.,a train may travel away but not towards the staff.

In case of the staff's being at the wrong end (and in fact any other failing of the signalling), telephono ordres may be exchanged.

A.P.B.:-Automatic track controlled color light signalling is in force on most single lines now. The sections which are not controlled from the signal cabin are probably worked in a manner similar to that of the Fyansford-Batesford railway.

3.Signals:-In general the indications are red,yellow and green.No marker lights are provided,all signals being absolute,and there are no over laps . All signals are track controlled. The route indicators consist of a number of signals one above the other,each displaying an illuminated number No targets are provided and the aspects are situated just below the sinal. Owing to the German design,some indications are rather strange-e.g., Yellow & Green ovwr Yellow & Red with Green & Yellow beside one another.

(Owing to difficulties in obtaining access to the relevant copy of the "Railway Enthusiasts Magazine" Geoff Gardner's article on the S.E.C.'s 90 cm. gauge lines was not available for this edition,but we hope to publish it in the near future.)

EDITORS NOTE:-Articles of interest concerning Victorian light railways are wanted for publication in the "Quarterly Review". Rough notes are also welcome - we will either put them in the Society's Library,or ,if they are ... will make them into a presentable article.

TIMBER TRAMWAYS IN VICTORIA
Part II, Detailed Description of Individual Lines.
3. THE BRITTANNIA CREEK TRAMWAY
By D.BARRY

During my first research into Victorian light railways I found mention of a tramway,from Brittannia Creek to a seasoning works.,in the August 1953 edition of "Wildlife and Outdoors". Some years later I found the following details in an old A.R.H.S. Bulletin - "Brittannia Creek Sig. - Seasoning Works, 3 miles of 3' gauge tramway and ownedbby Cuming Smith." After further research,in the course of which I came into contact with a man who had been Cuming Smith's Chief Engineer for thirty eight years,I found the following information.The statement about the Seasoning Works at Yarra Junction or Brittannia Creek tends to be misleading.

The tramway was built circa 1906 by Mr.Yelland to convey timber from his sawmills on Brittannia Creek to Brittannia Siding, a 5'3" loop situated on the up side of the V.R. Warburton line, a short distance from Yarra Junction, where the timber was transhipped. From this point the tram way crossed the Little Yarra River and followed the course of the Brittannia Creek for about three miles to the first of Yelland's mills,and this portion of the line was worked by a small side tank loco. The line then continued, as a cable haulage,up the rapidly steepening valley for another three miles to the head of the creek, serving three other mills on the way.(see map in Summer 1961/62 Q.R.). The line was of 3' gauge and steel rails of about 30 pounds per yard for the most part.

There was only one locomotive and the only details available are that it was a side tank of 2-4-0 wheel arrangement,it had outside cylinders of about 7" diameter by 10 or 12" stroke, and it had inside valve gear. The loco was apparently obtained from Forrest, in the Otway Ranges, where a sawmiller named Sanderson used it to transport his cut timber to the main railhead,(Wildlife and OUtdoors,August 1953,helps to prove this theory - " Equally little trace remains of the long tramways that ran from Forrest into the rugged timbered slopes of the Otway Ranges,where a loco whose name"Westward Ho" once huffed and puffed") Examination under a magnifying glass of a photo of this loco in my possession reveals on a side nameplate the name "Westward Ho". An old A.R.H.S. BULLETIN tends to contradict this theory with reference to the gauge as it states"Forest - Barramunga, three engines of which one was a tractor,3 miles of . 3'6" gauge and owned by Sanderson". (Apparently the information in the A.R.H.S. Bulletin was incorrect, - it would appear that Sanderson's tramway was 3' gauge.-Ed.).

The Brittannia Creek tramway was acquired by Cuming Smith & Company who established a wood distillation works near the foot of the haulage. The line handled all the products from the Distillation Works, consisting of acetate of lime,charcoal and various other chemicals and also the output of cut commercial timber from Yellands sawmills.All stores for the works were back loaded."Passenger trains"for picnics were run.

Water for cooling the retorts at the works was diverted from Brittannia Creek at Brittannia Falls and was passed through wooden tanks with baffles in them to remove sticks and debris before entering two galvanised iron pipes approximately 8" or 9" diameter. During the 1930's two small concrete reservoirs replaced the wooden ones and from them water supply for Brittannia township and Yarra Junction is obtained.

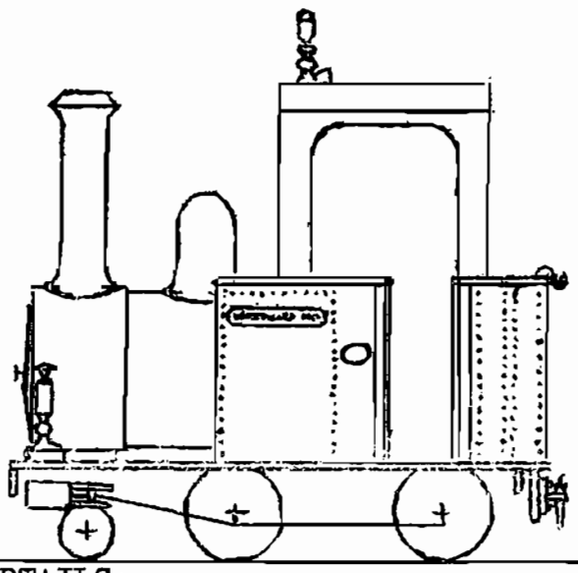
The factory and the works were known as "Jim Cuming's Hobby". He was a pioneer in the extraction of chemicals from eucalypt wood. The discharge from the works killed all fish in Brittannia Creek.After about twenty years service the works closed down in 1926 but the line was kept open by Yelland Brothers for a few years.Bad fires destroyed many trestle bridges and this caused the lines closure.

The works had a large dancehall which was used by their many employees,this was also destroyed by bushfires. The Girl Guides association now owns an area of land upon which Mr.Cuming's home stood.A great deal of chemical research on extraction of chemicals from the eucalypts was done at the works.

A mystery surrounds the fate of the loco after closure of the line but parts of the old engine were seen near the crossing of Tarango Avenue for some years. Since about 1935 the line has almost totally disappeared, although its roadbed can still be followed in places.

SEE OVER FOR LOCO DIAGRAM AND DETAILS. FURTHER INFORMATION IS [illegible]

BRITTANNIA CREEK TRAMWAY LOCOMOTIVE



This diagram is taken from a photo of the loco in Dave Barry's possession. As the boiler fittings are hidden in the photo those in the diagram are purely "artist's impressions". In the photo there is definitely no con. rod to back axle. There are two round spectacles in front of cab. The drawing was kindly made by D. Beaty.

DETAILS:-

BUILDERS : FOWLER (?)

DATE BUILT: .....

BUILDER'S NUMBER: .....

CYLINDERS: ABOUT 7"diam.by 10" or 12" stroke.

COUPLED WHEEL DIAM.:.....

RIGID WHEELBASE: .....

TOTAL WHEELBASE: .....

BOILER HEATING SURFACE: .....

GRATE AREA: .....

WORKING PRESSURE: .....

TRACTIVE EFFORT: .....

BUNKER CAPACITY: .....

TANK CAPACITY: .....

NOTES:

Apparently this loco came from Sanderson's tramway. To support this theory quite considerable evidence has been found. Photos of Sandersons Early loco show a similar machine to that in the photos of the Brittannia creek loco. Apparently a similar loco named 'The Parrot' was owned by Sanderson but it was found too weak for the work and was sold to work a sawmill at Crossover. It worked there for about a year, but after falling through a trestle bridge it was abandoned. 'The Parrot' was also a 2-4-0 tank loco and was built by Fowler. However if Sanderson's tramway was 3'6" gauge this theory must surely be incorrect. Any further evidence to help prove or disprove this theory will be welcomed by the editor and any further information will be published in later Q.R.'s. Any further details concerning the dimensions of the loco should also be sent to the editor.

Duplicated by "STEAM DUPLICATING"

TIMBER TRAMWAYS IN VICTORIA.

Part II, Detailed Description of Individual Lines,

1. THE POWELLTOWN TRAMWAY, (Contiued). By F. Stamford.

(N.B. Referring to the first part of this article; the line was definitely opened in 1912, at least as far as Powelltown. The line originally ran down the centre of the Warburton-Powelltown road for about half a mile, but was relaid at the side of the road about 1937. The 1st. No.3 "Coffee Pot" was broken up at Ada No.2 mill prior to 1940. Its boiler and saddle tank were seen there in that year.).

After crossing the Slaty Creek the line soon entered a cutting, passed a timber mill and crossed Hazeldene Road. Immediately after crossing this road Slaty Creek "station" was to be found. Here there was the usual loop siding, with a junction of some sort with Lloyd's tramway which ran in a generally southerly direction for a considerable distance, but by 1940 Lloyd's had been abandoned. After leaving Slaty Creek, which was 4½ miles from Yarra Junction, the line immediately crossed over a fairly long straight trestle bridge. The line continued in its generally south-easterly direction crossing over the Yarra Junction-Powelltown road, and then crossing over the Little Yarra Creek by another fairly large trestle bridge. The line then ran parallel to the Little Yarra River on its southern bank through very attractive timbered country. It was in this picturesque setting that the Black Sands station was found, at 5¾ miles from Yarra Junction. Black Sands was notable in having a hardwood waiting shelter for passengers, and also a loop siding and a junction with an extensive system of branch lines running in a general easterly direction.

The tramway continued along the southern bank of the Little Yarra River and became fenced. At 7½ miles from Yarra Junction the station of Three Bridges was situated. Here there was a loop siding and a junction with a branch line that ran in a general southerly direction for three miles terminating at "Old School Corner" where a timber mill was situated. Continuing along the main line three small timber bridges over small creeks were crossed and the main Powelltown road was crossed once again. The line then followed fairly closely the main road, crossing two more creeks before reaching Gilderoy, at 9¼ miles from Yarra Junction. At Gilderoy a hardwood waiting shelter was found together with a loop siding and a junction with a branch line running in a generally southerly direction for about four miles, terminating at Worley's Mill. The line then passed through heavily timbered country and about a quarter of a mile from Gilderoy another trestle bridge crossed a creek. Apparently at a point about 10 miles from Yarra Junction a timber mill was situated, and a junction made with a branch line terminating at Feiglin's Mill. About half a mile further on another creek was crossed and Powelltown was reached.

On entering Powelltown the line passed a timber drying shed on the right, followed by a small workshop where all railway and mill repairs were done, while on the left was a siding; at the end of which was a slightly raised section, set on piles, where a Shay was usually to be found. The main line then passed the hardwood passenger waiting shed, which was notable in having a painted nameboard, and the Company's offices, which I think, also served as the Post Office for some years. Opposite the station was the sawmill and between them was a run round road and a number of sidings serving the mill. There was also a fairly large electric traverser, for taking rolling stock around the mill and drying shed., which was probably the only brick building in Powelltown.

Before the Company had built their mill at Powelltown there was practically no settlement at all here, although Gilderoy was in existence before the coming of the tramway. Powelltown is a typical "timber town" although larger than most with a population of about 300. Most houses are small dillapidated unpainted timber dwellings spaced closely together. Powelltown has often been the centre of many disastrous bushfires, and the town is now surrounded by "Dugouts."

(To be continued)

WANTED:

Details of the situation of the sidings of the Powelltown tramway in the MOUNTAIN SECTION and also if possible track layouts.

If you can help please contact the editor before May 15.

WANTED URGENTLY: Articles, notes etc, dealing with Victorian light railways, suitable for publication. All articles or enquiries should be sent to the Editor, 9 McGregor Street, Canterbury, E.7.

SOCIETY NOTES

Next meeting:The next meeting of the Society will be held on Saturd 14 th. of April at 232 Mont Albert Road;and will begin at 2.30 P.M. Colo and black and white slides will be shown dealing with Narrow Gauge Railway lines of the Victorian Railways,with special emphasis on the Colac-Crowe line.

Library: A copy of the Scout Jambouree hike map of 1935,both Eastern and Western sheets have been loaned to the library,which is at present in charge of the Secretary,-G.Gardner,232 Mont Albert Road ,Surrey Hills.

Magazine Circulation: The membership of the Society has now reached 13,and the Quarterly Review also circulates among a number of non-members Every attempt is being made to increase the circulation among non-members while every attempt is also being made to increase our membership,which, however,is limited to people genuinely interested in light railway reser

Duplication of the Magazine;- The December edition of the Q.R. was mostly duplicated by Fordigraph,while this edition has been duplicated by Bill Russell and the Editor sincerely thanks both of these people for the work.Meanwhile the Editor has been busily carrying out further experiment on the Ellison Rotary Mimeograph in his possession,and the quality of its work is gradually improving,- I hope to have it making readable copies so

Magazine Format;- It has been suggested that the format of the magaz should be changed to 6½" X 8" with paper duplicated on both sides.The Edi of the Society would like members comments on this change,and correspond on this subject should be sent to the Secretary or the Editor.

THE TULLAH TRAM

The 2' gauge tramway which ran from Farrell Junction ,on the Emu Ba Railway,to Tullah,a small mining town on Tasmania's "Wild West" was recen closed. The 7½ mile long line was replaced by a road that the Hydro Electr ity Commission recently put through.The loco,a Fowler known as Wee George Wood will be preserved at Tullah. This line has recently had much publici in various magazines,and some excellent photos have been published.The li was typical of many small little known tramways which once served Tasmani

The Tyers Valley Tramway: The Forest's Commission reports that it inten to preserve the Climax loco,which operated on this line,at Erica.
In the same area an ex-Melbourne gasworks loco is in use at Walhalla on circular railway for amusement of children. The steel bridge on the Moe-Walhalla railway over the Thompson River is to be "Preserved".

BOOK REVIEW

"New Zealand's First Railway",published by the New Zealand Railway & Loco Society". 8/9 at the Technical Book Co.

The N.Z.R.&.L.S. have published anbexcellent little book con with New Zealand's first railway - the Dun Mountain Railway,which was opened in 1862 and closed a few years later. The author,Mr.A.N.Palmer has carried out considerable research into this line,which was practically unknown a few years ago. This publication should satisfy all light railwa enthusiast's for the Dun Mountain Railway abounded in sharp curves,and st grades. Many interesting photos are included while the text is clear and well presented.

"Along the Line", published by the Australian Traction Publications. 5/-

This is an Australian railway pictorial and can be recomended to all railway enthusiasts. The photos are of high quality and are well produced and cover a wide variety of Australian railways. Most of these photos are over ten years old and thus depict the Australian railway scen before the advent of large scale dieselisation.The only criticism that we have of this book is that the N.S.W.G.R. predominate,but perhaps this is understandable considering that the book was published for the celebratio of Junee's 75th year as a Municipality. Further books in this series are to be published from time to time.

VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

QUARTERLY REVIEW

WINTER 1962. VOL. III. No.9. PRICE 10 d.

VICTORIAN RAILWAYS NOTES.

With the introduction of the new time-tables for the Albury line on April 16th. the car-goods operating on the Springhurst- Wahgunyah line ceased running. Ordinary goods trains will continue to run on the line. The train was locally known as the "Stringybark Express" and the last trai was adorned with a placard reading - "We're through in '62". This was Victoria's last car-goods service.

The Upper Ferntree Gully - Gembrook 2'6" line:-The U.F.T.G.- Belgrav section of this line has been pulled up to allow the building of the broad gauge line, while the Lakeside- Gembrook has also been dismantled, leaving the Belgrave- Lakeside section for the Puffing Billy Preservation Society to concentrate on.At last it seems that their hard work will definitely insure that the train will continue to run. Already some rolling-stock has arrived at Belgrave and a Belgrave-Menzies Creek service is to begin in July,while the remainder of the line to Lakeside should be re-opened in Summer. No trains have run over this section forn nine years which helps t show just how difficult the task of re-openingwas. Apart from overgrown track and rotting sleepers,other difficulties which have been surmounted were the building of a new terminus at Belgrave and Lakeside, bypassing th landslide at the site of the water tank near Menzies Creek, repairing the high curved timber trestle bridge near Belgrave,and the re-installation of telephone line for the length of the line. Few such difficulties have been oncountered by the successful English or Welsh preservation societies.

But while we can look forward to the return of our old friend "Puffi Billy" another narrow gauge line,the Colac-Beech Forest-Crowes, is about t be closed. This was the longest of the four V.R. 2'6" lines and probably the longest narrow gauge line in Victoria.

Some attempts have been and are being made to save all or part of thi line,although it would seem a very difficult task. Among organizations that are in favor of saving it are the "Colac Herald",the R.A.C.V.,Corangamite Branch; and the National Trust. One of the proposed ideas is to build a rail motor to run a service for tourists. Perhaps the most promising news is that the Ditchley Park Hotel thatwas destroyed by fire last year is to be replced by a Hotel- Motel,which might supply passengers for a rail motor

In view of this narrow-gauge activity we have decided to include two brief articles dealing with these lines.

SOCIETY NOTES

Next meeting: The next meeting of the Society will be held on Saturday, June 9th, and will begin at 2.30 p.m. IT will be held at 9 Mc.Gregor Street, Canterbury.

Magazine Format: Apparently no members seem to care whether we retain the present format or change to the 8"x 6½" format suggested in the last Quarterly Review. In view of the lack of interest we have decided to retain the present format for some time. However we are now duplicating on both sides of the foolscap in order to keep costs down. In the near future we hope to publish a book in the 8" x 6½" format dealing with the Fyansford - Batesford railway. We are now collecting information for this booklet which we expect will have about 20 pages and will be about 1/9.a copy.

We are urgently in need of articles or notes suitabl for publication in the Q.R. These should be about some Victorian light rail way, and rough notes are acceptable. The editor will attempt to make such notes into a presentable article. c

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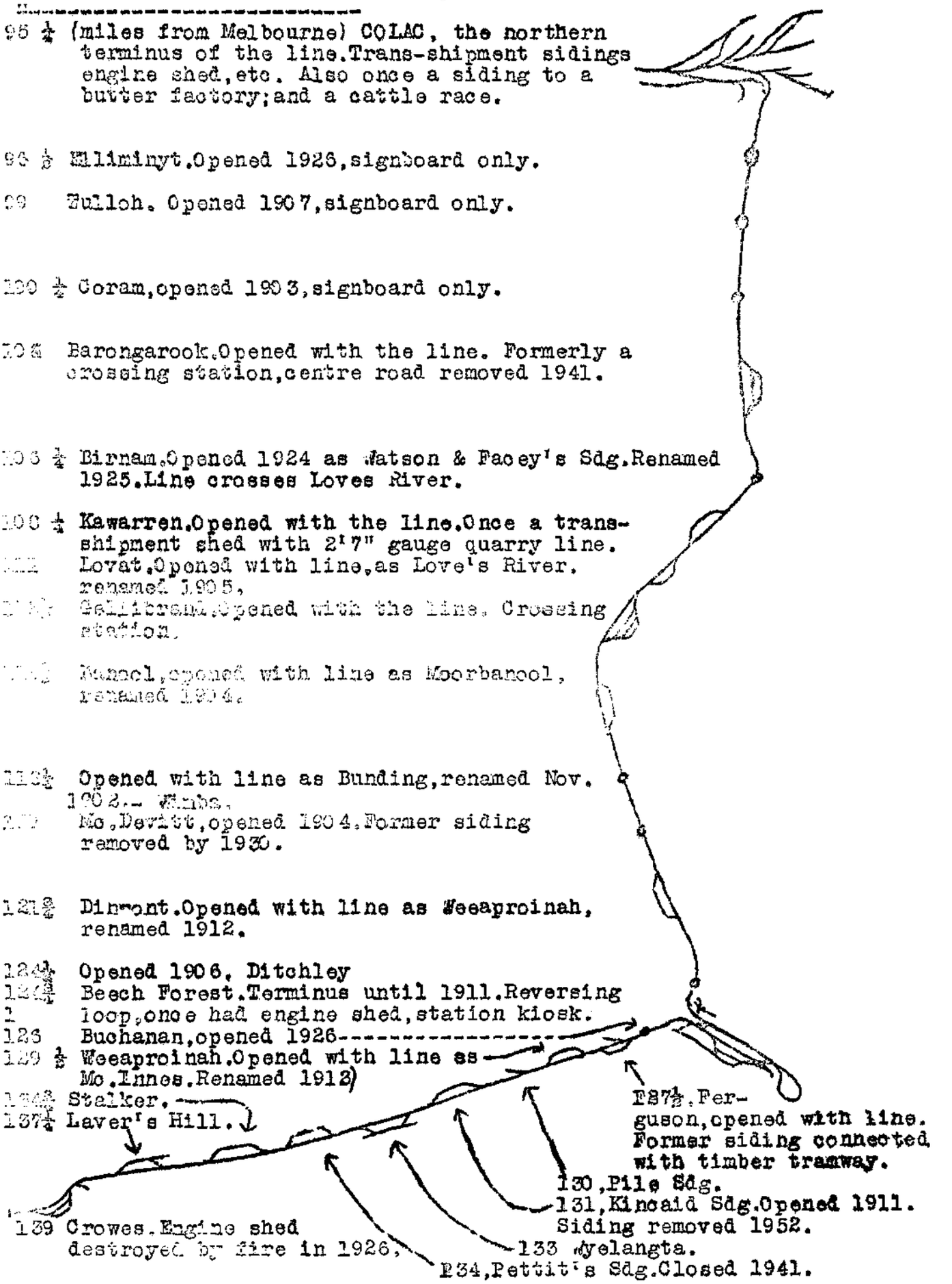
THE COLAC & CROWES RAILWAY By J. Miller.



Colac - Beech Forest, opened to goods and passengers,26 February,1902.
Beech Forest - Crowes, opened to goods and passengers,20 June,1911.
Colac- Crowes, closed to passengers 9th. December,1954.
Ferguson - Crowes, closed to goods 9th. December,1954.
Ferguson- Weeaproinah,re-opened to goods in truck loads only, 19 Jan. 19
Colac- Weeaproinah, to be closed to goods on June,30th.1962.

THE COLAC - CROWES RAILWAY

By J. Millar.

The line was originally surveyed for broad gauge, but the cost was too high and so four years later, in 1895, it was surveyed for narrow gauge. The gauge decided on was 2'6", and construction was authorised in December 1898, "subject to a maximum expenditure of £60,000." Construction began in June 1900 under the 'butty gang' system. The final cost of the line was £ 72,000.

Opening Ceremony...

The line was officially opened on Wednesday 26th. February, 1902. Members of both Houses of State Parliament travelled in a three car train to Beech Forest. By the time the train arrived at Beech Forest rain was falling in a deluge. The visitors alighted in ankle deep mud and made a dash for the marquee situated half a mile away.

After luncheon a large tree was specially felled for the occasion,- it came down across the road with such force that the officials were liberally splattered with mud! The party then returned to Colac where they were invited to a dinner by Chas. Forrest, a vigorous campaigner for the line.

Extension to Crowes....

In 1907 a survey was made of a proposed extension of the line to Wangerrip, some five miles beyond Laver's Hill. In view of the high cost of the last three miles of the line it was decided to make a terminus at a small area of land near Mr. Cornelius Crowes residence. Consruction began in 1909 and was finished in 1911. On the 20th. June that year the first train, carrying school children free, left Beech Forest for Crowesx and return.

The line was operated under the Staff and ticket system However between 17th. Jan. 1927 and 11th. Dec 1939, Train Section Orders were in force; staff and ticket was re-introduced on the later date.

Train Services...

In 1902 mixed trains left Beech Forest at 7 a.m on Mondays, Wednesdays, and Fridays, connecting at Colac with the Melbourne train. The return journey connected with the 6.30 a.m. train from Melbourne and arrived at Beech Forest at 5.16 p.m. With the extension to Crowes in 1911, a daily through mixed service was provided in each direction, in addition to a daily mixed service as far as Beech Forest. Foot warmers were provided and refreshments were available at Beech Forest.

By 1933 the service was reduced to thrice weekly to Beech Forest, twice weekly beyond. A postal motor service also operated. By 1940 the service was reduced to one round trip weekly. By this time the train was a car-goods in name only, any passengers were acommedated in the guards van; in 1954 it officially became a 'goods train' only. Days of running have varied considerably. At times pulp wood traffic between Beech Forest and Colac has been extemely heavy, special trains being run as required. Goods trains now operate between Beech Forest and Woeaproinah as required.

Rolling Stock....

Rolling stock constructed for the line included N A class 2-6-2 tank locos numbers 5A and 6A, 21 NQ open wagons, 2 N.U. louvred vans, 2 NB 2nd. class saloon cars with platform ends, and 2 NK passenger brake vans. NM cattle wagons followed and over the years the rolling stock on the line has changed considerably. In 1926 the line was provided with a "G" class Beyer Garratt 2-6-0-0-6-2 loco.

The rolling stock position on the line recently was as follows. Both "G" class Garratt locos are now at Colac, but G 41 is "in store" together with the sole NA at Colac, - 14 A. Of goods rolling s stock there are a few NU vans and many NQ wagons, no NM cattle wagons are st still in use. There are two NC guards vans together with a number of NPH excursion cars specially brought to Colac in 1959 to cater for some special passenger trips.

WANTED

Articles, notes etc., suitable for publication...

THE UPPER FERNTREE GULLY - GEMBROOK LINE. Notes By F.Stamford.

Stations...

22¾ miles, Upper Ferntree Gully, Terminus of line,originally fairly simple track layout with usual trans shipment facilities,and a single road engine shed. Altered in 1924,and track layout then remained the same until it was pulled up recently.

24¼ Upwey, opened 1902, loop siding.

25 Tecoma, opened 1927, no siding.

25¾ Belgrave, origimally named ~~Emerald~~ Monbulk,renamed 1904.Opened with line. Crossing loop,loop siding,goods shed.

27¼ Selby, opened 1904, no siding.

Tank's Sag, Site of water tank, known by this name for passenger bookings for a period. Landslides had a habit of occurring here,including the disastrous one in 1953 that caused the line closure.

~~Menzies~~

29¾ Menzies Creek, opened with the line,renamed "Aura"in 1904,and reverted to original name in 1947. Loop siding.

31 Clematis, opened 1902 as an un-named stopping place,later named Paradise Valley,then Paradise, and in 1921 it became Clematis. A very short loop siding was situated here,too short to cross trains.

32 Emerald,opened with line. Two loop sidings and goods shed. Later a siding serving a cattle race was added.

-- Nobelius Siding, goods only,served nursery of same name, Opened in 1915.

33¼ Nobelius, "tin shed" type passenger stopping place.Opened 1925

-- Lakeside, signboard only,opened 1942.

35 Wright,"tin shed" type passenger station,opened 1904.

36¾ Cockatoo, opened with line as Devon,renamed Cockatoo Creek in 1901,and shortened to Cockatoo in 1904. Loop siding and crossing loop. Goods shed.

38 Fielder, another tin shed.Opened 1929.

40¾ Gembrook, terminus of line.Two loop sidings,and two dead end sidings serving Russell's 3' gauge timber tramway,which once ran to a mill,about 12 miles away. Also water tank,ash pit, and engine shed,although the latter had disappeared well before 1953.

The line was opened on December 18th.1900,and officially closed in April 1954. However no trains ran after a landslide,referred to above, had blocked the line in August 1953. From December 1954 to February 1958 special passenger trains were run betwwen U.F.T.G. and Belgrave.

Train service...

Since about 1930 the normal timetable allowed for a Monday and Thursday return mixed train over the whole line.Passenger trains ran on Saturdays until about 1948. During public holidays a much more ambitious time table was introduced, with Belgrave, Aura, Emerald, Cockatoo all used as passing stations.

It was once proposed to run petrol-electric rail motors on the line,but unfortunately this idea was dropped, in favor of ..."road motors."

Since 1958 a new terminus has been built at Belgrave,and a run-round loop installed at Lakeside. The line will be run with three locos,- 6A,7A, and 12A. Passenger trains will be made up of NBH cars, which were built specially for this line to cater for excursion traffic

It is interesting to note that theP.B.P.S now has NK 1 and trailer, -the two vehicles which ran the postal service on the Whitfield line until that lines closure in October,1953.

T H E (narrow) G A U G E G O E S T H R U' I N '62

Belgrave - Menzies Creek - Lakeside.

Mc. Kenzie Creek Tramway
Horsham.

Notes & Diagram by D. Jowett.

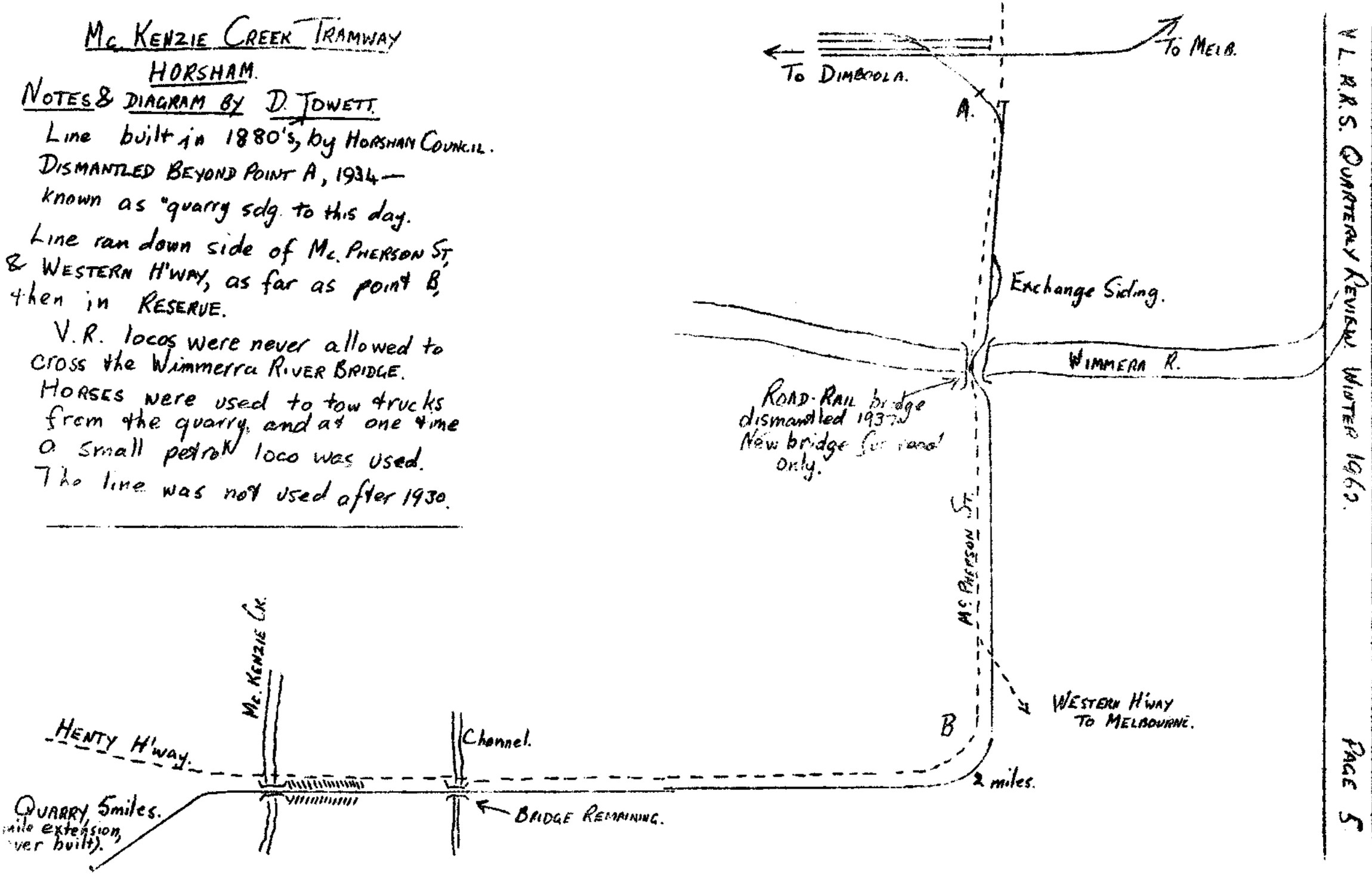
Line built in 1880's, by Horsham Council.
Dismantled beyond Point A, 1934 — known as "quarry sdg. to this day.

Line ran down side of Mc. Pherson St & Western H'way, as far as point B, then in Reserve.

V.R. locos were never allowed to cross the Wimmerra River Bridge.

Horses were used to tow trucks from the quarry, and at one time a small petrol loco was used.

The line was not used after 1930.

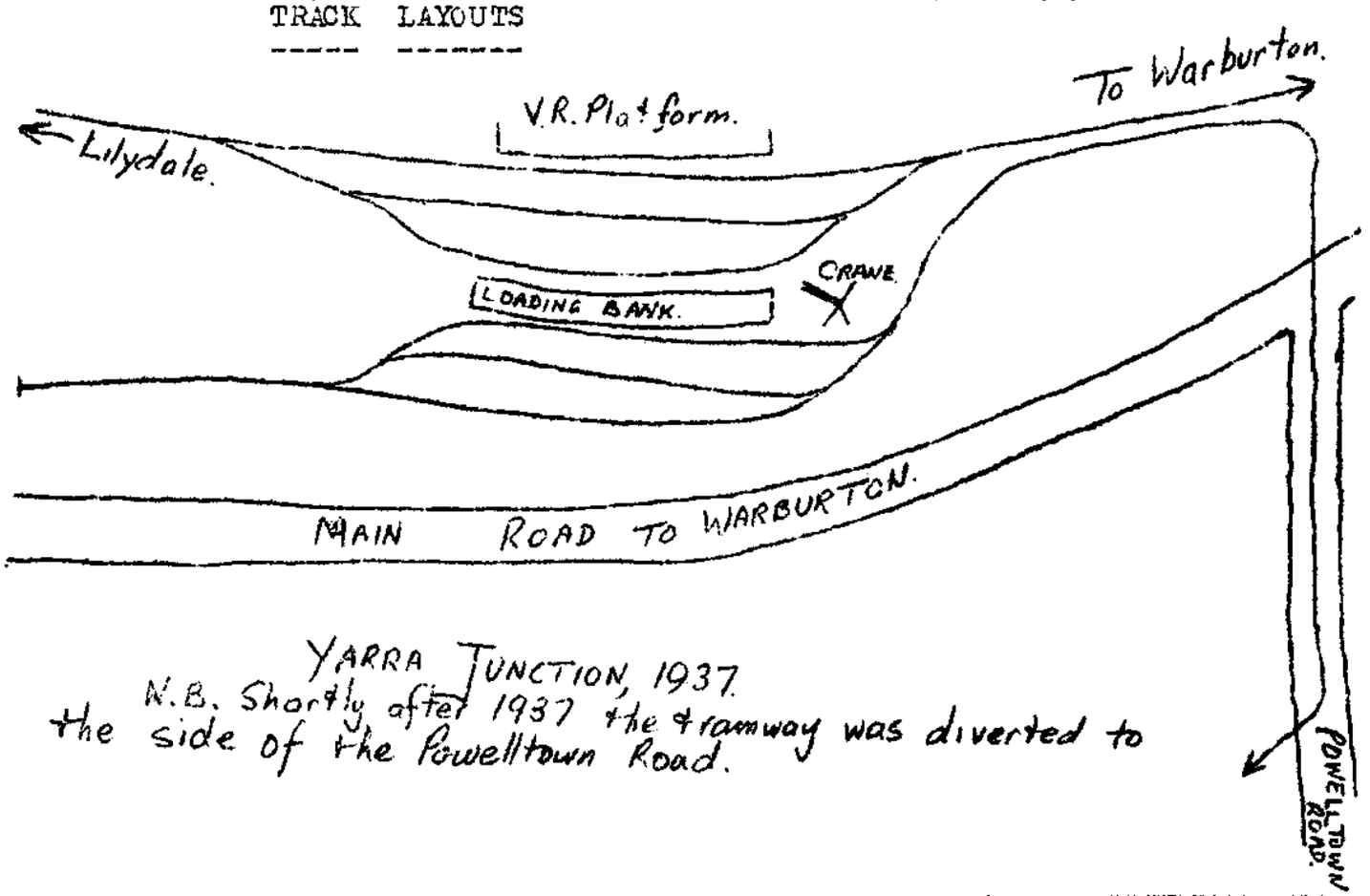


TIMBER TRAMWAYS IN VICTORIA

1. THE POWELLTOWN TRAMWAY, By F.Stamford.

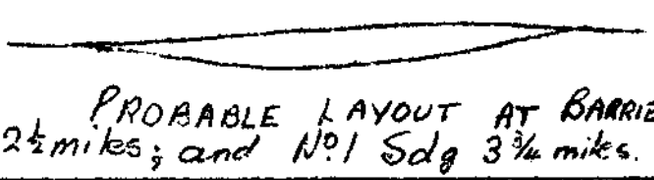
(Continued from Summer and Autumn editions)

TRACK LAYOUTS

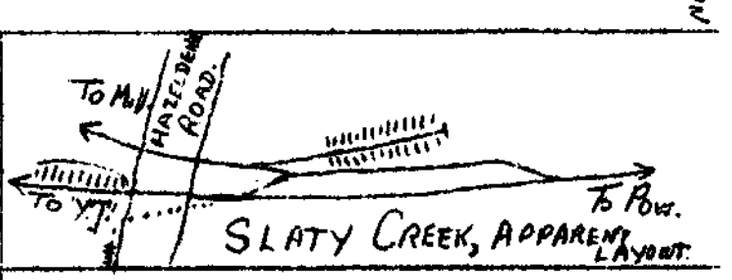


YARRA JUNCTION, 1937.

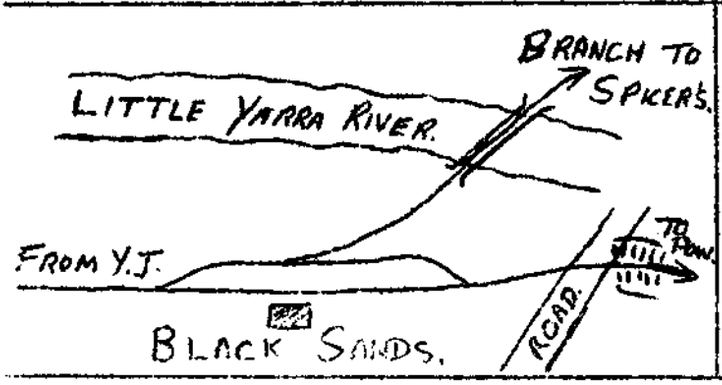
N.B. Shortly after 1937 the tramway was diverted to the side of the Powelltown Road.



PROBABLE LAYOUT AT BARRIER, 2½ miles; and No.1 Sdg 3¾ miles.



SLATY CREEK, APPARENT LAYOUT.



Further track layouts will be published in a later edition, together with a continuation of the description of the tramway. If any reader has any details of the track layouts I would be very interested to hear from him.

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

Dedicated to the study of the light railways and tramways which once served Victoria.

Secretary.. G.Gardner, 632 Mont Albert Road, Surrey Hills, E.10.
Treasurer.. R.Murray, 20 Essex Road, Surrey Hills, E.10.
Magazine Editor.. F.Stamford, 9 Mc.Gregor St., Canterbury, E.7.
Librarian.. G.Gardner.

Annual Subscription - 5/-, dating from December 1st.

A number of historical photos dealing with Victorian Timber Tramways are available, details on application. We hope to have a further series of photos available soon.

Wanted: list of quarry and mining tramways that have existed in Victoria.

VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

QUARTERLY REVIEW

SPRING 1962, Vol. III, No. 10 Price 1/-

NEWS ? NOTES , and COMMENTS

Victorian Railways: The last train on the Colac - Beech Forest line ran on June 30th, consisting of G.42, NC van, NU van, 5 NQ open wagons with tarpaulins and hardwood seats, another NU van, and another NC guards van. About 24 cars, station wagons and other vehicles followed the train. Various members of the local populace were at stations along the way, including what appeared to be the entire population of Tulloh, and Birnam.

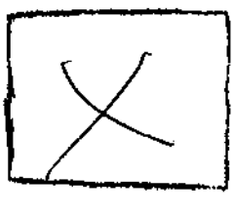
On Saturday July 28th. the Belgrave - Menzies Creek line was reopened amid much jubilation. This must be the most well kept railway in the state. The two locos, Nos.6A and 7A are kept clean and shiny with copper chymney cap and copper piping. What a pity the P.B.P.S. doesn't revert to the V.R.'S old livery of dark green with yellow lining? It is well worth a visit to Belgrave.

SOCIETY NOTES:- Mr. P.Charrett is carrying out research into the construction railways of the State Rivers & Water Supply Commission and would be grateful to hear from anyone who knows anything about the following lines: Hume Dam, Torumbarry Weir, Waranga Basin, Yarrawonga Weir, Silvan Dam, and Glenmaggie Dam. His address is: S.R.&.W.S.C., Eppalock Project, Private Bag, Axedale, Victoria.

The Society is at present working on two special projects, one being the booklet on the Fyansford railway, referred to last month, this will probably not be available until about next March. Does anyone have any dimensions of the rolling stock used on this line? Our other project is a list of Victorian light railways, and the locos that worked them. This list will include details of builders, wheel arrangement, tractive effort, driving wheel diameter, cylinder diameter, date built, date disposed of, from whom the loco was purchased and to whom it was sold. As this list will not be complete, supplements will be issued as further details come to hand. At present we require details of the locos used on the Silvan dam railway, and the Netherlands Harborworks Company, who built the Appleton Dock.

We still require plenty of articles for publication, although the response to our plea for articles which was made in the last issue was very good. It is also desirable that everybody engaged in research into light railways of Victoria should join the Society. We do not try to force our members to write articles for us, and our subscription is only 5/- !

ANNUAL SUBSCRIPTION DUE .....



if a cross appears in the square opposite your annual subscription to the Society is due on 1st. December. if two crosses appear your subscription is overdue, and no further Quarterly Reviews will be sent until it is paid. Our subscription is still 5/-. 4/- due

This should be paid by cheque, postal note or cash to R.Murray, 20 Essex Road, Surrey Hills, E.10., or to F.Stamford 9 Mc.Gregor Street, Canterbury, E.7.

In the next issue we will be including a list of members. Any member who does not wish to have his address published should contact the editor before November 15th.

Mr. G.E.Johnston reports that in the 1920's the remains of a timber tramway were seen along the Olinda Ck. at Mt. Evylin, just above the football ground, and thru' the area now occupied by the National Fitness Camp. Does anyone have any details of this line?

THE WEEAPROINAH GOODS; 6 June 1962. By P.Barry.

On arrival at Colac station at about 5.40 a.m.,we heard the faint but unmistakeable sounds of a compressor at work.Many clanks and rumblings were then heard coming from the narrow gauge yard, interspersed with several crows on the whistle. The ticket buyimg over,the four passengers moved across to locate the N.C. van, and found 5 N.C. at the end of a rake of empty N.Q.'s,which stretched away into the darkness,only broken by the light from the headlamp of G.42,now at the head of this rake. At 6.13 a.m. we heard the clash of auto-couplers,the van then jerked into motinn,the gaurd swung aboard,and No.3 goods had departed from Colac.

At a steady 10 to 15 m.p.h. the train rolled southwards,and on the 3 chain curve at 98¾ miles we gained some idea of the length of the train, the engine being almost of the curve before the van entered it. In the darkness we almost missed Elliminyt,Tulloh and Coram,now only dillapidated nameboards. We averaged 15 m.p.h. as the train rolled down the two miles from Coram towards Boundary Creek,clattered through Barongarook,and then th the pace became slower as the 1 in 43 rise towards the 103 mile post was surmeaunted. A rapid descent towards the Water Tanks followed, interspersed by a sedate 5 m.p.h. around the 2½ and 3 chain reverse curves at 104¼ miles. As we passed through Kawarren it was slowly becoming light and here a three chain was traversed at a speed somewhat in excess of 10 m.p.h. At close on 20 m.p.h, we headed for Gellibrand,arriving there in the full dawn at 7.29, after a 76 minute run from Colac.

The guard woke up and busied himself with the van goods,while the passengers supervised the taking of water,and inspected the fifteen vehicle 83 ton train. No wagons were in the sidings here,and none were detached, After breakfast we left Gellibrand for a 55 minute suruggle with the 1 in 30 grades between here and Dinmont. About 5 minutes out from Gellibrand the guard removed our tickets,made out the indemnities,and once more retired to his office and the warmth of his coal fired stove. The passe... however,had both doors open,and the temperature slowly dropped towards 40 degrees as we climbed deeper into the Otways.

As we snaked our way around the two and three chain curves,the wagon wheel flanges shrieking in protest,our 120 yard long train was several times travelling three ways at once. The clear exhaust beat echoed off the valley sides in the still cold air,as the Garratt,at a steady 7 m.p.h. tackled these steep grades without even once slipping. The smoke dispersed slowly,and even when the train was less than a mile below Dinmont,it could still be seen hanging over the road below Wimba,some 400feet below.

Ten minutes sufficed to take water and detach 2 N.Q.s at Dinmont, where there were also two N.Q.s loaded with potatoes. Soon after leaving here,we ran into cloud,but climbed above it by the time we reached Ditchley We ran along the double line under clear signals,over the scissors cross-over and came to a stand in Beech Forrest yard at 9.38 a.m.

After 25 minutes it was decided that the van would not be used for the run beyond here,and that ~~xxxxxx~~ passengers could not travel on the engine,so two of them changed to road transport. On the 65 minute round trip to Weeaproinah,a potato laden N.Q. was collected from both here and Ferguson,this 32 ton load being only a small foretaste of what was yet to follow. We helped lower the height of bags of potatoes in ~~xxxxxx~~ one N.Q. and while doing so our truck was attached to the train. So we rode around the Beech Forest loop on top of a load of potatoes. Several pulpwood filled N.Q.s were also added to the train,to make a total of 12 vehicles, 165 tons for the UP journey.

To provide additional braking power for this quite heavy train,the handbrakes on each vehicle were screwed down,and we left Beech Forest at 1.3 p.m. A few minutes later we had our last glimpse of Beech Forest from a train - the burnt out hotel,a few shops and houses,and the tennis court ... behind the row of pines. We were at Dinmont in 20 minutes,and nine minutes were spent attaching three N.Q.s of potatoes,to bring the load to 15 vehicle... 213 tons. These vehicles' brakes were also screwed down. Slowly but safely we descended the Otways,down through Mt.Devitt and Wimba,and as we passed Banool the sun broke through for the first time that day. Fifty minutes after leaving Dinmont,we left the writhing curves behind and clattered down the final hill, past the home signal,then paused for ten minutes while the engine took water at Gellibrand.

WEEAPROINAH GOODS, Continued...

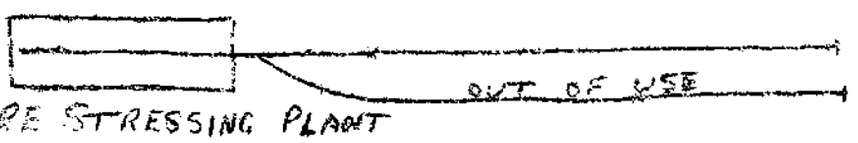
Although the brakes were not released here, being required for the descent from Coram, G.42 took only 31 minutes to run from Gellibrand to the Water Tanks. A further 10 minutes were spent here taking water, and then G.42 set out on the last 10 miles of her 68½ mile journey. The next 2½ miles to the Barongarook summit are no flatter than 1 in 52, and more than half the distance is 1 in 38. G. 42 took 10 minutes to lift the 215 ton train over the first 1½ miles, and the next 1¾ miles took a further sixteen minutes. The speed dropped almost to a stand several times, and remained little above walking pace as G.42 struggled up the grade. Momentum was quickly gained on the run through Barongarook, and the 2 mile run through to Coram, most of which is steeper than 1 in 40, only took seven minutes. At nearer 15 m.p.h. we descended the grade through Tulloh to Elimingyt, and a further 5 minutes saw the train safely in Colac at 4.10 p.m.

The shunter quikkly disposed of the train and by 4.45 p.m. G.42 was idle at the coal stage, there to remain for most of the next seven days.

STATE RIVERS AND WATER SUPPLY COMMISSION RAILWAYS? By P.Shannon.

TATURA

Tatura, 110 miles from Melbourne on the Toolamba -Echuca line has a State Rivers & Waters Supply Commission Constuction Depot situated at the north of the town. Pre stressed concrete beams are manufactured at this depot. These beams are stacked in piles outside the plant. A 2' railway is used to carry these from the plant th the crane outside. The track is about 5 chains long. Motive power is a Ruston-Hornsby diesel made in Lincoln, England. Wheel arrangement .....
Mark 3VSHL
Engine No. 298890
Full load 1200 r.p.m.
No load maximum 1270 r.p.m.
Rolling stock are six four wheel bogies coupled by link and pin.

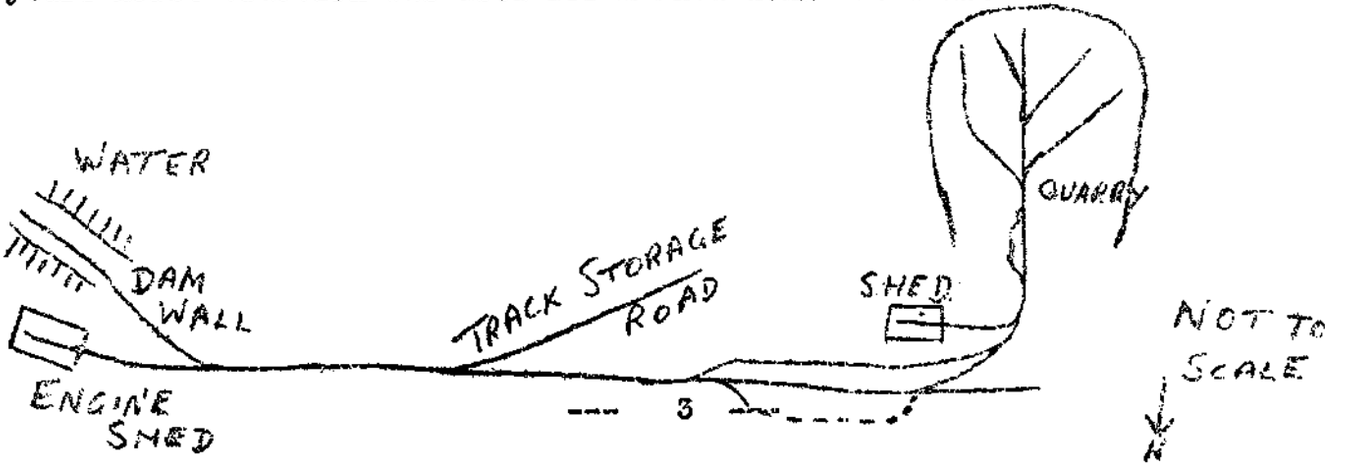


WARANGA BASIN JUNE 1962

At Waranga reservoir situated about 15 miles south west of Tatura a 2' gauge railway is used to maintain the wall. The railway runs the entire length of the wall and it is abouv a mile from the wall to the quarry. The line is single the entire length of the wall, approx. 3 miles.

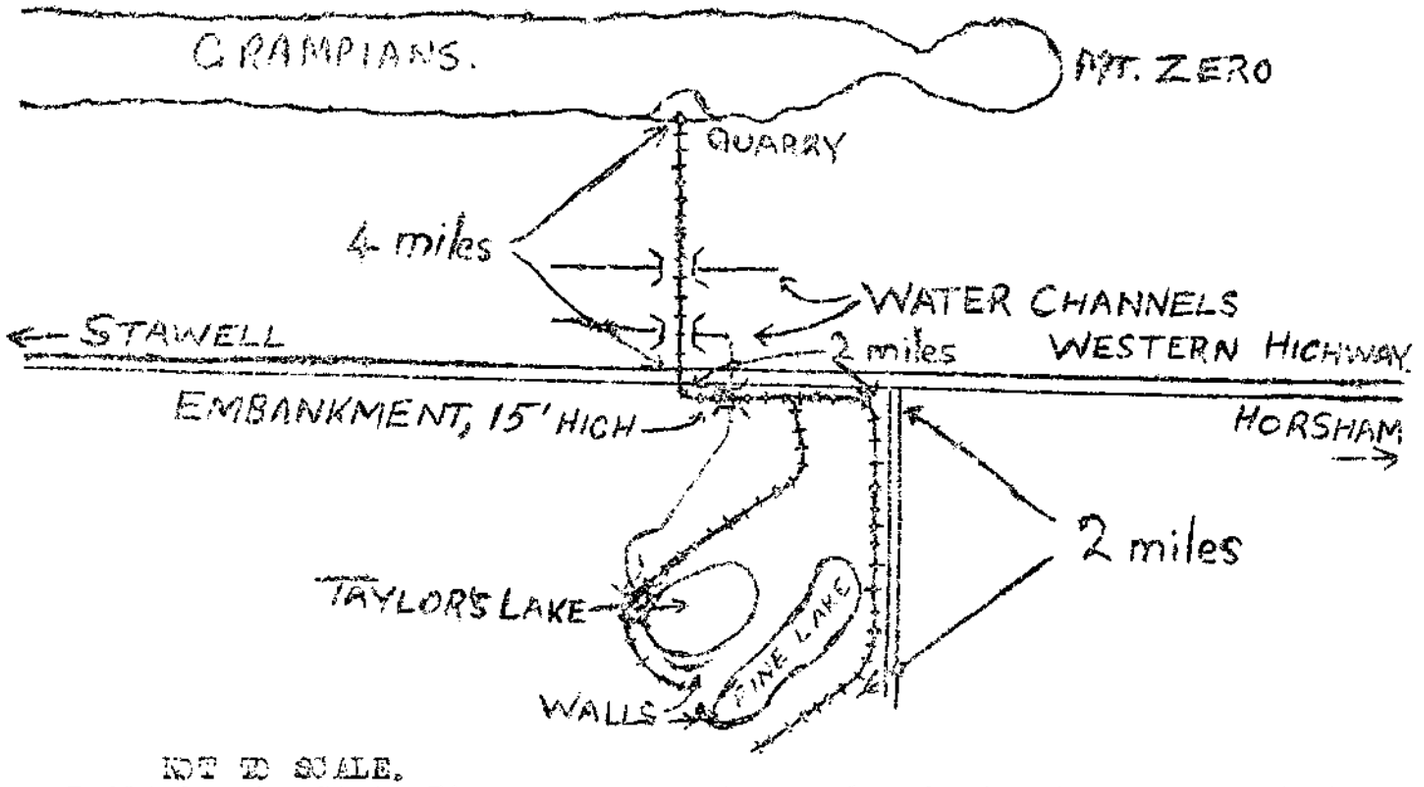
Rolling stock on the line (at 13/6/62) consisted of a small diesel loco which was reputed to take an hour to warm up, 20 side tipping trucks, 9 flat trucks and a "carriage". The carriage has a galvanised roof on a platform which is so highly strung that the slightest bump might throw you off. The line is very little used and the section from the loops to the quarry is not used at all.

This line was used in the construction of the dam. The original motive power was either steam or horse, possibly the latter. In more resent years horse traction was used for maintaining the wall. I



MT. ZERO TRAMWAY, STATE RIVERS & WATER SUPPLY COMMISSION.

By D. Jowett



NOT TO SCALE.

Built by the State Rivers & Water Supply Commission to carry rock from Mt. Zero quarry, about 8 miles from Taylors Lake dam in 1914, and Pine Lake dam built in 1919. It is 2' gauge, horse drawn and every 2 miles crossing loops where the horse teams changed over were built. After dams were completed the rails remained, although some were stolen during the last war. It was dismantled after the war and now only the earthworks remain. Bridges alongside Western Highway over channels were dismantled in 1960, although high earthen embankments follow the highway for a mile or so. Mt. Zero is the extreme Western end of the Grampians, about 20miles from Horsham. Two horses pulled a rake of nine trucks.

VICTORIAN MANGANESE MINING & IRON & STEEL COMPANY'S PROPOSED RAILWAY.

Details supplied by
D. Jowett.

On the 20th. of October 1911 an Act of Parliament was passed allowing construction of this railway was passed. The chief details of this line are as follows:

The line was to be of 3'6" gauge running from Lakes Entrance to the Company's mineral leases in the parishes of Nowa Nowa and Buchan, a distance of 38 miles. The railway was allowed to run along the side of any roads in the district subject to the consent of ~~any~~ the local council concerned. The Victorian Railways were to be permitted to use the railway for the carriage of goods, livestock, or passengers. Any other company or person was to be permitted to use the railway for conveyance of goods or livestock. The company was required to carry any passengers, and any goods for other persons or the Government.

The railway was to pass through the township of Nowa Nowa, and pass under or over the Bairnsdale- Orbost line.

---oooOOOooo---

BELGRAVE HORSE TRAM

Notes by P. Carrett.

~~ABSTRACT~~

A horse tramway left the Upper Ferntree Gully - Gembrook railway at the present site of the gangers shed at Little Belgrave. The tram went up into Sherbrooke Forest and went parallel to the main road after crossing the creek. The right of way beside the road and at the station can still be seen

-X-X-X-X-X-X-X-X-X-X-

TIMBER TRAMWAYS IN VICTORIA

THE POWELLTOWN TRAMWAY

By F.Stamford.

The Mountain Section.

Leaving Powelltown the line takes on a different character,for it traversed much more rugged country in this section. The track deteriorated gradually as it penetrated further into the bush. The line was gradually extended into the bush as further supplies of timber were exploited. This sectionX abounded in sharp curves and 1 in 30 grades. T

On leaving Powelltown the tramway contiued to follow the Little Yarra river valley for three miles to a steam haulage. On this section the line crossed three high curved timber trestle bridges, the highest of which was 105 from water level to decking (?),and a number of wooden railed horse operated tramways left the main line. At the foot of the steam haulage the line was at an elevation of 800' above sea level,the haulage taking the line over the watershed of the Latrobe river and being 1050' above sea level at its summitt. About 1926 this haulage was replaced by the Gap (or Bump) tunnel,which was about 1000 feet long and timber lined. This tunnel was made by ex-miners,mainly by hand,and took some months to build. At the Eastern portal of the tunnel the mill and settlement of Nayook West was situated. This settlement had a population of about two hundred,and government mills were situated here,but the settlement was burnt out in 1937,and abandoned.

For the next three miles the line followed the Latrobe river valley, crossing this river eight times on low bridges,and one and a half miles further on there was a long crossing loop,two dead end sidings facing opposite directions,and a junction with a horse worked wooden railed line running south to Armstead's mill. Between Nayook West and this loop there was a siding and three loading stages for salvaged timber. About a mile further on at a place called The Logs the line turned northward up the valley of the Big Creek to Knott's Mill served by the Goodwood tramway from Noojee. The tramway continued north for a short distance turned west for about a mile to terminate at Splitter's Camp. Over at least part of this last section the Goodwood tramway also once ran,but it is not known whether it was removed before the Powelltown line was built. The Powelltown line reached Splitter's Camp by 1930,and the total distance from Yarra Junction was 19 miles. Although most of the line was built of 40 lb.steel rails,towards the end of the Mountain section the track was mostly secondhand rail,including cable tram rail laid flange outwards.

Splitter's Camp ~~xxxxx~~ although the end of the Shay worked section, was not the end of the line. From here ran the spectacular High Lead incline, together with a motor winch operated line. V.L.R.R.S.photo No. T.018 shows the north end of Splitter's Camp very clearly.

The Inclines and Branch Lines.

This area is rather complicated and unfortunately the reports of various people always differ in details,while maps also differ from each other,thus making it a little difficult to give an accurate description of the area,however I will do my best to describe the main details.

At Splitter's Camp a line operated by motor winch ran in a north-westerly direction up the Big Creek valley for something less than a mile. Also leaving Splitter's Camp was the incline running up the High Lead, this haulage was about one mile long and carried the line up about 1300' to a maximum elevation of 2300' above sea level. The line was worked as a balanced funicular with three rails,the centre one being common to both up and down lines. Half way up the lines spread out to four rails to form a crossing loop. Leaving Splitter's Camp the incline went up a relatively shallow grade and round a curve to turn northerly.Then followed a short level section,then a steep incline followed by a level section at the half-way mark where the crossing loop was situated.This was followed by an extremely steep grade,a third level section then a comparitively shallow incline to the summitt of the High Lead where there were four short sidings and the steam winding engines,together with a mass of cables,slung on blocks attached to any handy tree trunks. The rope was coupled at the top to the load through a system of sheaves then around the winding drum of the steam winch through another system of sheaves,then to the bottom of the Lead where it was coupled to ~~xxxxxx~~ the empty bogies.

The Powelltown Tramway, continued.

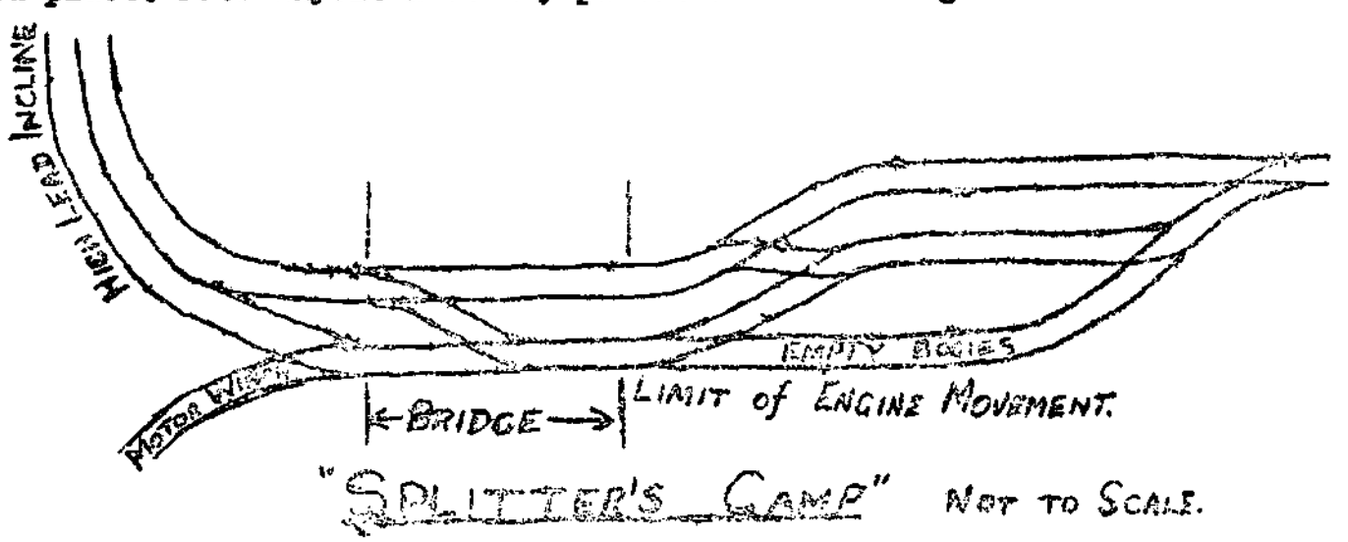
Loads were always taken in pairs on the High Lead incline, either two logs, two loads of sawn timber, or one log and one load of sawn timber. From High Lead summitt a second steam worked incline descended in a northerly direction into the Ada River valley. This line was operated with an endless rope, and only one load at a time was taken. The winch was situated at the summitt. From the summitt, descending this incline, there were three rails and a short distance from the top there was a wooden railed siding running into the bush for the collection of firewood for the winches at the summitt. A little further down, a branch left the ~~incline~~ incline, and for the remaining length this incline was single line. This branch was operated by a ~~Malcolm~~ Malcom Moore non-coupled six wheel tractor, was about a mile long and led to motor winches Nos. 2, 3, and, I think, 4, from which logs were brought.

Continuing down the incline, the Ada river is crossed on a trestle bridge built on a grade, and about half way a branch line leads to Ada No.1 mill. The incline then terminated at the site of Ada No.2 mill. The branch to Ada No.1 mill originally extended to the Old Ada mill, and was worked by the tramway's 0-4-0 tank loco "Coffee Pot" (2nd No.3), but by 1944 was being worked by another Malcolm Moore six wheel tractor.

At the Ada No.2 mill where this second incline ended, yet a third incline began, still running north, climbing the northern slopes of the Ada river valley. The Ada No.2 mill was burnt out in 1939, and it is here that that remains of let No.3 were found in 1940. The winch for the third incline was situated at its summit, and from this point a winding wooden railed tramway ran in a northerly direction for about a mile to the New Ada mill, situated on top of the ridge overlooking the valley of the little Ada river. ~~Cxxx~~

On this line and on the line to Ada mill No.1, there were ~~crossings~~ crossings with the Federal tramway from Warburton, in both cases the Federal tramway crossed the Powelltown by means of a hinged track arrangement.

Apparently most of the equipment for these inclines still remains as it was left in 1943, and even the rails have been left in place, probably because of the difficulty of removing them from such an isolated place. Does anyone have any photos or track diagrams of this area?



"SPLITTER'S CAMP" NOT TO SCALE.

To be continued

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Wanted articles, notes etc. suitable for publication.

VICTORIAN LIGHT RAILWAY

RESEARCH SOCIETY
QUARTERLY REVIEW

SUMMER 1962-63 VOL. III NO. 1 PRICE 6d.

NEWS, NOTES and COMMENTS:

Victorian Railways:

The centre (boiler) section of G.41 has been reported scrapped and rumour has it that the engine sections have met with the same fate. On a brighter note, though this has its sad points too - theP.B.P.S. has given up all hope of opening the Menzies Creek - Lakeside section this summer. This is because there is much more traffic than was originally expected and many more sleepers will have to be replaced to carry this traffic. Also the Gang-Shed at Belgrave was occupying too much space in the already crowded terminal and has had to be moved out to the first level-crossing.

The vehicles in use for the passenger service, a short time ago were:-

"Residing" at Belgrave;
3NC; 2NBC; 24NB; 6, 7, 8, 9, 10, 11, 13, NBH; NA 6A; NA 7A; also standing by 14NBH.

"Residing" at Menzies Creek;
2, 3, NBH.*

*These are probably used mainly for the transport of workers. NK1 and trailer at Belgrave and 45, 135 NQ & motor trollies etc at Menzies Creek are used for track-work.

Society Notes:

The members of the Society are

D.Barry	c/o Mrs. Crooks, 75 Broadway West, Yallourn, Vic.
P.Barry	c/o 22 Harts Pde., Hawthorn East, E.3, Vic.
J.Buckland	7 Burwah Ave., East Brighton, Vic.
P.Charrett	c/o S.R.&W.S.C., Eppaloch Project, Private Axedale, Vic.
R.Fellows	3 Corinda Road, Canterbury, E.7, Vic.
D.Fraser	24 Derby Road, Camberwell, E.6, Vic.
D.Jowett	66 Bailie Street, Horsham, Vic.
G.Gardner	232 Mont Albert Road, Surrey Hills, E.10, Vic.
R. Murray	20 Essex Road, Surrey Hills, E.10, Vic.
L.Poole	20 Oak Grove, East Malvern, S.E.5, Vic.
E.W.Russell	1 Dunoon Ave., East Brighton, S.6,Vic.
F.Stamford	9 Mc. Gregor Street, Canterbury, E.7,Vic.
R.Stamford	39 Croydon Road, Surrey Hills, E.10, Vic.
A.Stewart	1 Loch Street, Camberwell, E.6, Vic.

Meetings are held on the second Saterday in every second month. The next, and Annual meeting will be held at 8-00 p.m. on 9th. February at 9 Mc.Gregor St., Canterbury.

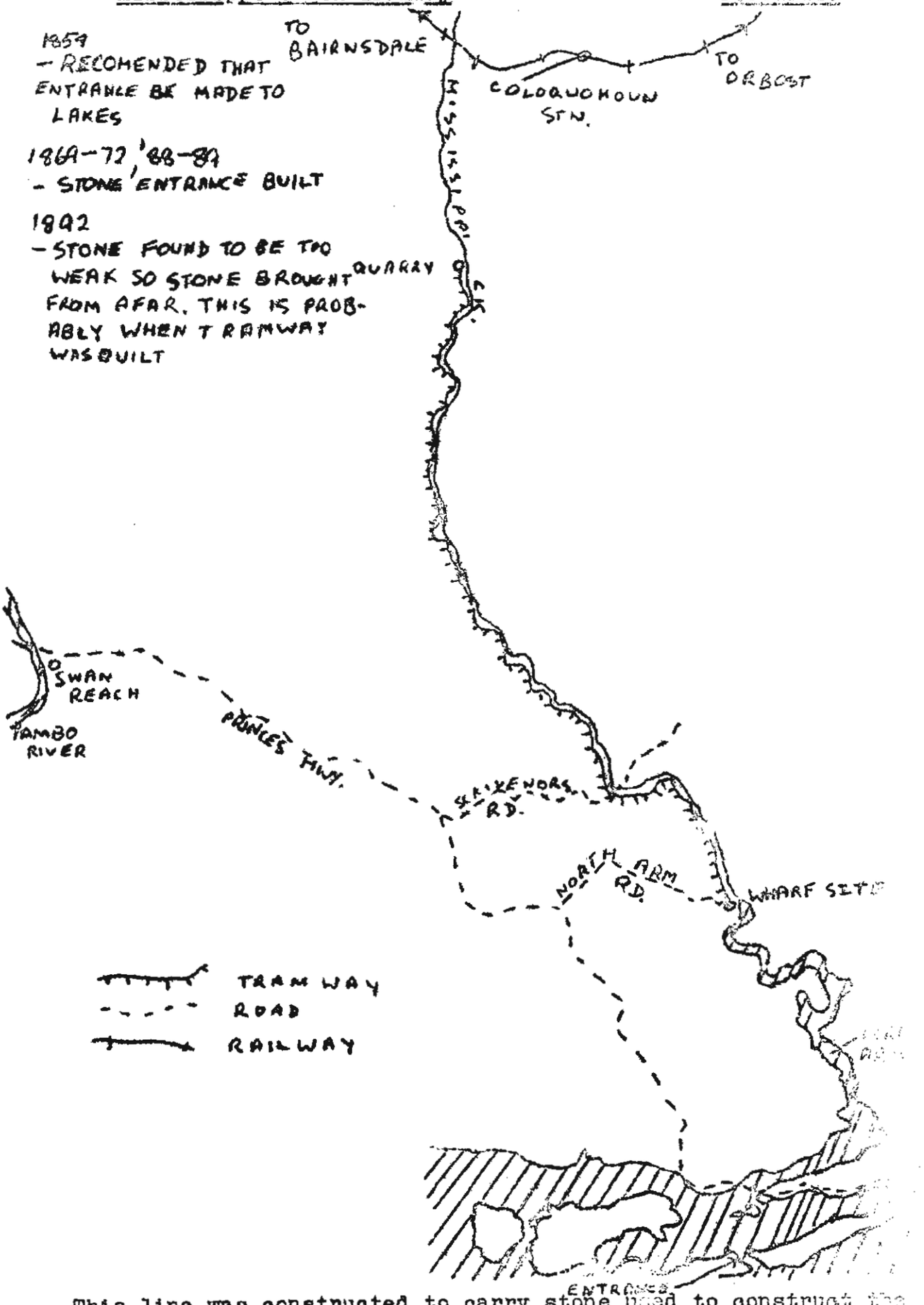
THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

Dedicated to the study of the light railways that once served Victoria.

-Remember your rough notes, maps, and snippets of information can usually be turned into a presentable article,so if you want to contribute to the magazine and perhaps do not have enough information to write an article send your notes to the magazine Editor, F.Stamford, and he may be able to find the information to complete it. Or you could write to him requesting information and he will endeavour to find it for you.

Mississippi Creek Tramway

D. JOWETT.



This line was constructed to carry stone used to construct the entrance to the Gippsland Lakes from a quarry to a warf on the North Arm from where it was transferred by barge to the entrance. It ran along the valley of the Mississippi Creek for about 7 miles and was probably of 3'6" gauge. Twenty yards or so of track still remain at the Warf Site together with an elaborate set of cast-iron sprung buffers. The engine was last seen at the Scrivenors Rd. crossing but has since disappeared.

(This article has been adapted from one titled "Timber Tramways", by Garnet Johnson, that appeared in the Melbourne Walker in 1948.)

FIVE WARBURTON AREA TRAMWAYS

- Big Pat's Creek Tramway

To assist the timber industry the Upper Yarra Shire arranged for a tramway to be built for some four miles above La-La yards, so that timber could be brought from various horse trams to the V&R. In 1910, Mr. Hermon constructed a 3' gauge steel tramway from La-La to a spot known as the "Points". This single line ran a distance of 4.29 miles . On leaving La-La it crossed to the right bank of the Yarra by means of a large timber bridge and followed up the stream for about 2 miles, passing a timber stacking site belonging to the Federal Timber Company. Crossing the Yarra once more, the line served the seasoning works of the Brimbonga Timber Company. (See map, page 9, Q.R., Summer 1961-62)(Ashed and an abandoned petrol motor remain at the Federal stack site, and the seasoning works still operate. -Ed.) The tramway then bore away from the Yarra to a short distance above the confluence with the Mississippi Creek - a spot known locally as the "Points". This was the meeting place of several tramways, from which all traffic was conveyed by this tramway. (Where the loop re-converges on your map, after the seasoning works, is the position of the "Points".) The Shire later leased the tramway to Mr. Hermon - trading as the Warburton Timber Co. - for 21 years, on the condition that all timber firms concerned were given running rights on the line. In 1931 the Shire sold the tramway to Mr. W. Richards. In 1934 the Yarra bridges were swept away, but after replacement the line continued to operate until about 1950-52. In later years the tramway was operated by tractors.

- Richard's Tramway:

In 1923, Mr. W. Richards constructed a 3' gauge steel tramway for 1½ miles from "The Points", up the slopes of the southern site of the Mississippi Creek, over the Divide, and down to his mill in the Starvation Creek valley. (Starvation Creek runs ,on your map, from just east of Richards, North-West, through Horner's and Straight off the map.) From 1936 the line was little used, and three years was damaged by forest fires. This led to its complete abandonment. In 1941 the steel rails were recovered to be used as tank traps.

Mr. Richards also constructed an independant loop line, 1¼ miles in length, from his Brimbonga Timber Co.'s seasoning works, alongside Big Pat's Creek, to his tramway at the "Points". After purchasing the Shire tramway in 1931 he abandoned this by-pass (the more northerly of the two lines of the loop).

-Warburton Timber Company:

This company under Mr. Hermon leased the Shire tramway for 21 years when it was constructedin 1910. Mr. Hermon purchased rail from the Sorrento tramway on its demolition in 1920.

Four locos all small tankers were used at various times to operate the line. They were:

A small Kerr STewart 0-4-2 sold to the Powelltown tramway to become their first No.3 (see Q.R. Summer '61-62 for details).

A Fowler 0-4-0 saddle tank, Builders No.5851, cylinders 8½"X14", stated to have gone to the Walsh Island Dockyard, N.S.W. in 1916.

Two Fowler 0-4-2s purchased new. They were No.13576 of 1918 and (the larger of the two) No.15989 of 1923 and both had large square side tanks and 2 small sand domes on the boiler. They went to the Copper refinery at Mt.Morgan around 1940, tractors being used after there disposal.

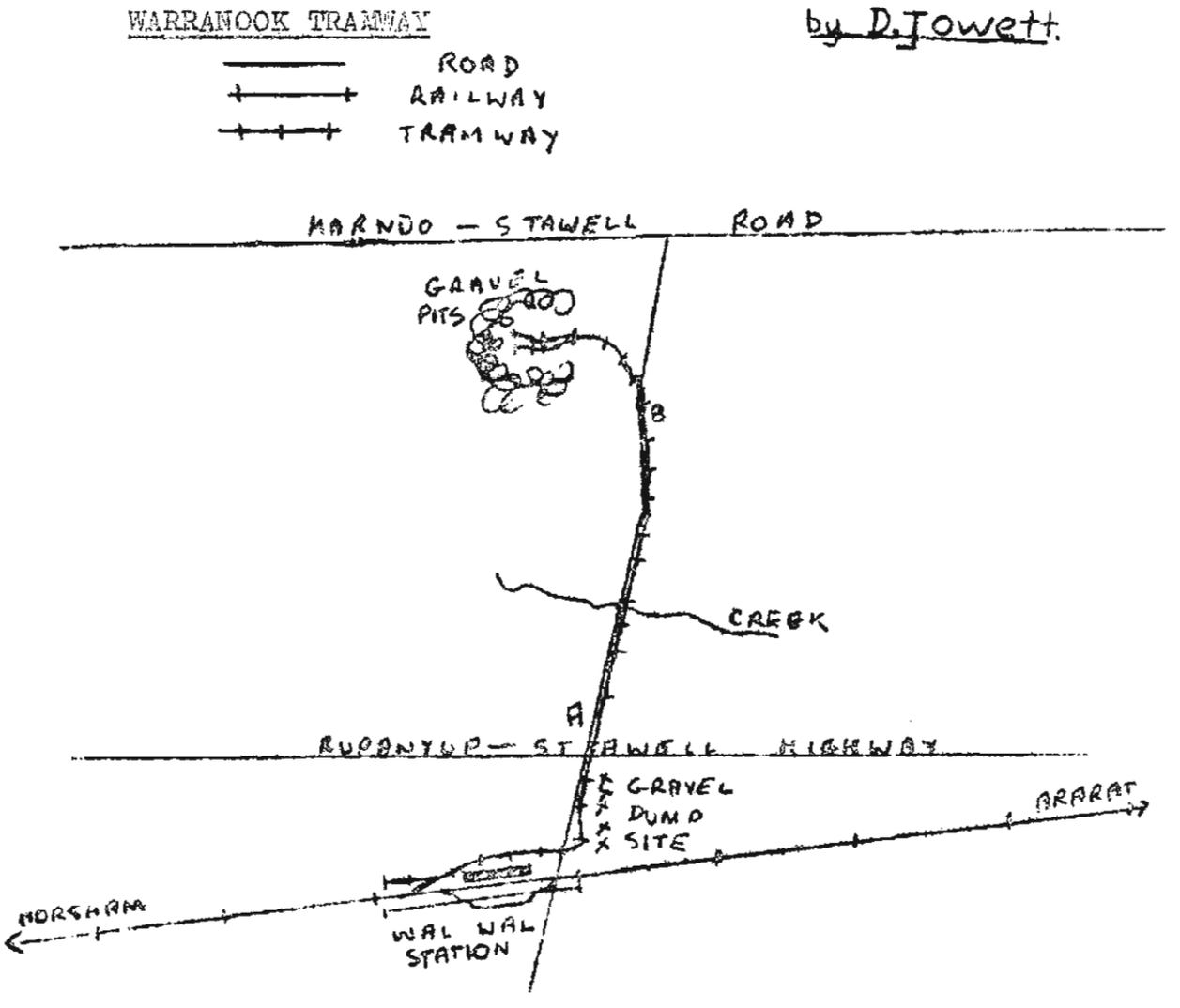
- Ezard's Tramway:

Ezard and Son owned a mill in the Starvation Creek valley, close to Richard's Mill, and after 1928 used a steam, geared loco to haul their timber bogies. This also hauled the bogies of the

Federal Timber Company Pty. Ltd. over Richards tramway to the "Point and La-La After 5 or 6 years, the Federal Company abandoned its mill on Starvation Creek, but Ezards continued to use this engine for another two years until forest fires forced them from there.
Ezards owned only a short, wooden-railed extension at the end of Richard's tramway. The engine used on this line was a rather unusual affair. Mr. J. Ezard purchased, in 1928, from Cameron Sutherland and Company of Melbourne, two small 2' gauge tank engine.
They had Originally come from the Goodwood Timber & Trading Company's tramway from Port Albert to the Mullundung Forests and were an 0-4-0 well tank and an 0-4-0 side tank.

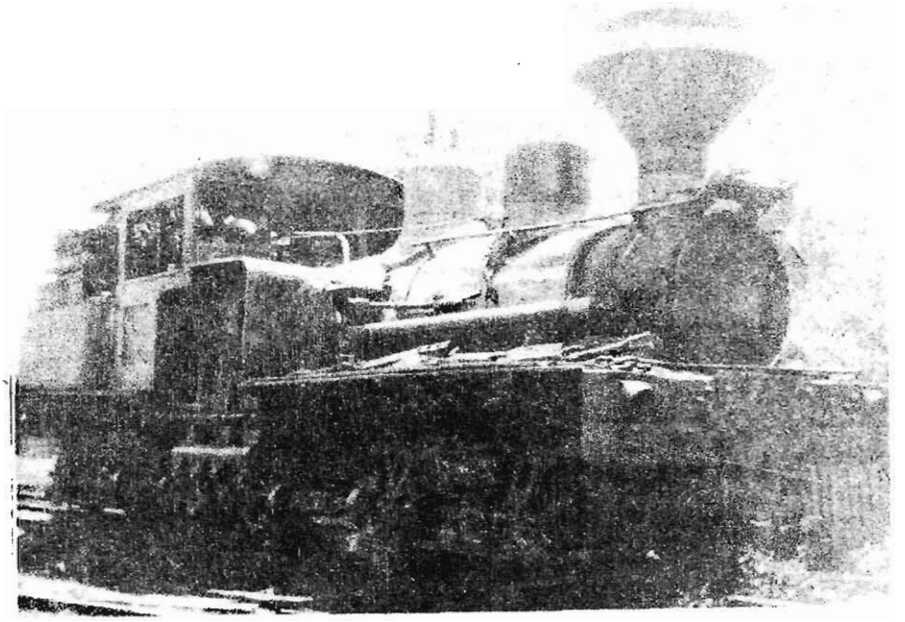
(Continued next issue)

WARRANOOK TRAMWAY by D.Jowett.



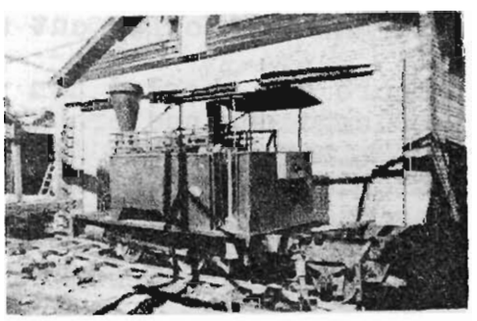
This four mile long, 5'3" gauge line was built about 1883 by Leslie and Ross, the contractors for the Stawell - Horsham line.
About sixty trucks of gravel a day were carried to ballast themain line. It was closed about 1887. As the line was built with an act of Parliament, it was included, in 1895, in the "Railway Valedation Act" to make its construction legal. It was reopened in 1904-05, to ballest the Hopetoun Railway; the private contractors using an old ex-V.R. engine. Several attempts to extend this line to Callawadda and Mitchell's Hill, near Donald, failed, and the line was dismantled about the First World War by a private firm for the metal.

Note on map:
The road between points A and B is built on the old road-bed of the line except where the bridges have been removed over the creek.

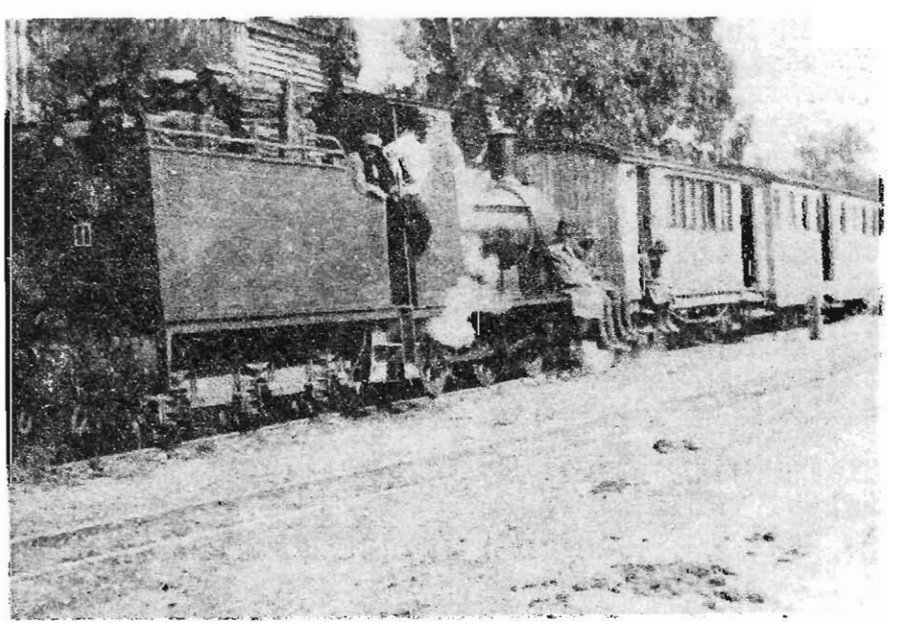


LEFT: ONE OF THE TWO SHAY LOCOS USED ON THE POWELLTOWN TRAMWAY, AT POWELLTOWN, 1933. (PHOTO L. STAMFORD)

BELOW: ONE OF THE FOWLER 0-4-2 TANKS ON HERMANS TRAMWAY NEAR WARBURTON. (POSSIBLY AT THE FEDERAL STACKING POINT. (PHOTO T. COX)



ABOVE: KERR STUART 2ND, NO.3 AT POWELLTOWN. (PHOTO LATE J.C.M.ROLLAND)



LEFT: POWELLITE ON MIXED TRAIN AT YARRA JUNCTION, NOTE TWO COACHES ON TRAIN. IN SOME PRINTS OF THIS PICTURE TWO PLATES ARE VISIBLE ON THE BACK OF THE TENDER, VIZ:-

[C] [1]

DOES ANYONE KNOW THEIR SIGNIFICANCE?
THIS PHOTO WAS TAKEN c.1920. (V.L.R.R.S. COLLECTION).

WANTED: ARTICLES, NOTES, PHOTOS, ETC., OF LIGHT RAILWAY INTEREST, SEND THEM TO THE EDITOR FOR PUBLICATION, OR FURTHER RESEARCH.

TIMBER TRAMWAYS IN VICTORIA

1. The Powelltown Tramway, continued.

By F. Stamford.

The locos and rolling stock:- The details of all the locos, except the Shays, were included in the Summer 1961/62 edition. An unofficial numbering scheme seems to have been in force by which Powellite was no.1, Little Yarra no.2, the Kerr Stuart 0-4-2ST was 1st. no.3, the Kerr Stewart 0-4-0T was 2nd. no.3, and the Shays were Nos.4 &5. The seems to be a lack of evidence to prove that this system existed, however, As Little Yarra was the first engine it would have been more sensible to call it No.1. It is also strange that both the Kerr Stuarts should have been given the same number, as they were both running at the same time before the Shays came.

The two Shays were identical, and had three vertical cylinders on the right hand side which drove a telescopic cardan shaft, which in turn drove the axles of both bogies through bevel gears arranged outside the axleboxes. They were built by the Lima Locomotive & Machine Coy., U.S.A., in 1912, and carried builders numbers 2575, and 2576. The driving wheels were about 2 feet in diameter. They carried large plates on the bunkers which bore the name Gibson Battle of Sydney as importing agents. They were painted green with brass fittings. Due to the Powelltown's rough track their bogies and flexible drive gave a little trouble, but otherwise they were very successful. No.2575 came from the Lloyd Copper Co. Ltd., Burraga, N.S.W. in 1920; and No.2576 came from the same place via G&J Hoskins, Lithgow, N.S.W.? in 1923. On the closure of the tramway in 1945 they were apparently both dismantled, the boiler of one going to a timber millat Yarragong, the boiler of the other going to a timber mill at Carpolac. The latter mill was closed recently and the boiler cut up, but fortunately the builder's plates were saved.

The tramway also possessed two Malcolm Moore six wheeled non coupled tractors with Fordson kerosene engines, probably of about 1935 vintage. These were mainly used on minor branches in the bush. When the tramway was closed one was abandoned in the bush, while the other one was retained for shunting around the mill at Powelltown, where it is still being used.

The locos burnt timber cut into four foot lengths and stacked at various points along thee line.

Rolling Stock: Drawings were given in the Summer 1961/62 edition. There were two passenger coaches, both built of hardwood at Powelltown. They were of more or less similar dimensions, one with a centre entrance, the other with entrances at each end. They had sliding doors, unglazed windows with wooden shutters, and wooden longitudinal seating for 20 passengers. A powerful handbrake was fitted in the brake section. Of these coaches the centre entrance one seems to have been used the least, and apparently disappeared around 1930, while the other one lasted until the passenger service was withdrawn in 1942. There was normally one coach on each mixed train, but occasionally both were used. About the time the centre entrance coach disappeared, a four wheel van was placed in service, this had open entrances in the centre (well almost in the centre!) and was used on most mixed trains, occasionally carrying passengers. This van was still at Powelltown in 1959 but has since gone. All these vehicles were painted dark red, with corragated iron roofs.

The goods vehicles fall into two catagories, the main-line ones and the timber bogies. The main line vehicles must have been the best goods vehicles used on any Victorian timber tramway. There were two types, the 5 ton medium sided ones, and the 3 ton low sided ones. They had sprung axle boxes and a hand brake operating on one wheel. There were a total of 85 of these vehicles, all built at Powelltown; and there seems to have been a preponderanse of the 3 tonners. Many of these were fitted with swivelling bolsters, so that a pair of wagons could be coupled for carrying long lengths of sawn timber.

Sometimes these vehicles were fitted with hardwood seats for carrying excursion traffic. All these vehicles were limited to use on the "mainline", but I suspect a few of the three tonners ventured on the mountain section occasionally. All of the mainline vehicles and "Powellite" and "Little Yarra" were fitted with Norwegian type chopper couplings, which were a combined centre buffer and drag-hook coupler. They also had safety chains fitted on each side of the buffer/coupling.

The vehicles used on the mountain section were of a much more primitive type, being a standard timber bogie used by practically all Victorian 3' gauge lines. They were four wheeled hardwood framed vehicles with no springing and very short wheelbase. They had primitive wooden brake blocks of bell shape, which operated on both wheels of one side. These brakes were operated by brakemen who had to run along the train while it was in motion to apply them. Each timber bogie was fitted with swivelling bolsters for carrying logs or sawn timber. They were coupled by primitive link and pin with wooden or steel bars. As these vehicles had to work over rough wooden railed branch lines where nobody cared about differences of three or four inches in the track gauge, or bothered about making the track level their wheels had six inch wide treads and deep flanges. Occasionally they were used on mixed trains on the main line, in which case they were always the last vehicles on the train in case they became derailed. Remains of these wagies can still be seen at various points along the entire length of the line. Many became derailed and they were often left where they landed, some can be seen in the Ada river.

There were also one or two special vehicles used at Powelltown, mainly for carrying sawdust from the mill to sawdust dumps.

TRAIN SERVICES:

Mainline:- According to Bradshaw's Guide to Victoria for July - December 1925 the service was as follows:-

"Trams leave Yarra Junction for Powelltown at 6.30 a.m. Mondays and Saturdays,
11.00 a.m. daily,
3.30 p.m. Saturdays,
4.00 p.m. Mondays and Saturdays excepted,
7.45 p.m. Mondays;
and return from Powelltown at:-
5.30 a.m. Mondays and Saturdays.
9.00 a.m. daily,
1.15 p.m. Saturdays,
1.45 p.m. Saturdays excepted."

From this it can be seeh that there were two trains daily, both mixed, with the service based on Powelltown. There was no regular service on Sundays, although there were occasional excursion trains of which I have no details. Unfortunately this is the only timetable I have a copy of. Journey time was 1 hour, giving an average speed of 10½ m.p.h. Printed paper tickets were issued by the guard who was at all times in charge of the train. Single tickets only were issued, and through booking over the V.R. was not possible. The single fare in 1937 was 1/1, and was proportionately less for intermediate stopping places. Wooden waiting sheds were constructed at Slaty Creek, Black Sands, Three Bridges, and Gilderoy, the ~~impera~~ permanent settlements along the line. Apparently the sheds at Slaty Creek and Three Bridges had fallen down by 1937. The mixed trains carried Company freight as well as timber, and public freight could also be carried, though in later years this was mostly sent by road. The intermediate stopping places (see Q.R.'s for Autumn and Winter) also carried little traffic in later years.

Like the Mountain section the Mainline was operated on the one engine in steam principal, the simplest form of safe working. The Mountain Section:- Like the main line normally there were two trains in each direction on this section. Before the tunnel was built (about 1926) and before the first Shay arrived the Kerr Stuart 0-4-0T operated the section from Powelltown to the Bump, the Kerr Stuart 0-4-2ST operating the section on the other side of the winch. After the Shays arrived and the tunnel had been built they ran the service between Powelltown and the terminus, which was Splitter's Camp by 1930. Presumably the two Kerr Stuarts were out of service for a while, until the construction of the High Lead winch and the isolated tramways connected to it, which once again gave employment to the Kerr Stuarts. Unfortunately I have no information about the Timetable for the mountain section, apart from the fact that the first train out of Powelltown left at 3.30a.m. ~~The Shays~~ A shay would take a train of about 20 empty bogies out of Powelltown loaded with stores for the fettler's camps along the line. Brakemen were dispersed along the train, about six in all, who had to apply and release brakes when necessary and lubricate the primitive bearings. Any passengers offering were accommodated on the timber bogies or on the outside of the loco, however women had the privilege of travelling in the cab. On the return journey logs of about 20 or 30 feet long were carried, together with sawn timber cut in the bush mills. These vehicles were pushed to the summitt near the tunnel, from where they ran into Powelltown by gravity, under the control of brakemen, the loco coming along afterwards at its leisure. Occasionally the load was to heavy and the loco stalled, while at other times reach bars between wagons broke through sudden jerks, derailments usually resulting. Coming into Powelltown the logs were diverted to the left into the mill, while sawn timber and case logs were diberted to the right for transport to Yarra Junction.

On one occasion a timber bogie coasted down a minor branch and then ran along the main line gradually building up speed, it ran right into Powelltown where it hit "Little Yarra" with such a thud that it put a whole in the tender.

The High Leads and Connected lines:- Starting from the terminus at the New Ada Mill the arrangement was as follows: A truck load of timber would leave the mill drawn by three horses, making its way down the winding tramway of wooden rails to a point about a mile from the mill. It would then be lowered down the first incline to the Ada No.2 mill (burnt out in 1940 . The load would then be coupled onto the endless rope to the summitt where the winches were situated. At the summitt ~~then~~ a pair of loads (two logs, one log and sawn timber, or two lots of sawn timber) were coupled onto the High Lead rope. On receiving the O.K. by telephone from the bottom (Splitter's Camp) the winding engine driver would feed steam to the cylinders, then as the rope began to pay out the two loads would descend the incline; while another pair of empty bogies would begin to ascend. As the grade steepened the driving force became a braking force to keep the speed down to a steady crawl. Halfway along the incline the descending loads would pass the ascending empties at the point where the three rails spread out to four, thus forming a crossing loop. On reaching the bottom the load would then be marshalled, by the shay loco.

The connecting lines were mainly internal combustion operated winches, however the line out to Ada No.1 mill was operated by the Kerr Stuart 0-4-0T, and in later years a Malcolm Moore tractor also worked this line. The other tractor worked a branch leading to winches 2,3, and probably 4. (See last Q.R.) The Kerr Stuart 0-4-2ST also worked out here somewhere, for it was scrapped at Ada No.2 mill before 1940.

That seems to complete the Powelltown tramway from the information I have at present, so from now on additions and corrections will be published (including track diagrams I hope). I woul like to thank the following people for assistance in various ways: J.Buckland, T.Cox, D.Jowett, R.Murray, L.Poole, L.W.Towan.

References: Railway Magazine 1916 (England), by Leit Cherry
Locomotive Magazine 1915 (England), by Leit Cherry
Railway Enthusiasts Magazine (Australia) 1939, by J.Buckland
A.R.H.S.Bulletin 1940, by J.Buckland.
A.R.H.S.Bulletin 1942, by J.Buckland.

In my description of the line in the Autumn edition I said the line crossed the Little Yarra river just before reaching Black Sands, this was quite wrong, the line only crossed an insignificant creek at this point.

Rolling stock experts may be interested to know of the drawings of South African and Rhodesian 3'6" and 2' gauge locos and rolling stock available from the Railway Society of Southern Africa, (C/o. Mr.A.H.Spit, 60 Ninth Avenue, Northmead, Benoni, South Africa). Included amongst these is a collection of well drawn diagrams of all ex 3'6" gauge locos of the S.A.R. and its constituents. This set totals about 220 diagrams to 1/8th inch to foot scale and is £3/15/- Australian. Also available from the R.S.S.A. is a list of the locos used by industrial organizations in Rhodesia, Nyasaland, Katanga, and Mozambique, at 2/6 Australian; and a similar list for South Africa at 16/6.

Members will find with this Q.R. a number of publications price lists which we hope you will circulate amongst your friends. The first four pages of this edition were typed and edited and drawn by Geoff Gardner, without whose help this edition would have been much smaller and later.

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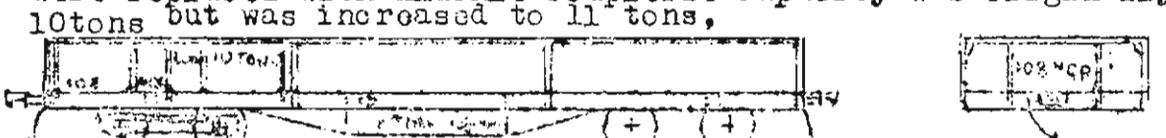
LIGHT RAILWAY ROLLING STOCK DRAWING
(a new regular feature!)

NQR open wagon of V.R. 2'6" gauge. (Later NQ class)

Built between 1898 and 1915 at Newport Workshops. Total number in class was 218, but 6 of these were converted to NBH passenger cars. The sides were divided into three similar drop sections. Width: 6'3¾"; Height from rail level 3'10".
Length 25'2". Bogie wheelbase 3'3". Bogie centres: 17'
Originally fitted with Norwegian chopper couplings, but these were replaced with knuckle couplers. Capacity was originally 10tons but was increased to 11 tons.



Scale of drawing 4mm. equals 1'. Next issue NBDBD Brake/2nd.

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

PRESIDENT/EDITOR: F.Stamford, 9 Mc.Gregor St., Canterbury, E.7.
SECRETARY/LIBRARIAN: G.Gardner, 232 Mont Albert Rd., Surrey Hills, E.10
TREASURER/VICE PRES.: R.Murray, 20 Essex Road, Surrey Hills, E.10.

The original copy of the Warburton tramways article was supplied by Peter Barry, as were the details of rolling stock in use on the Menzies Creek line.

Some members may have been surprised to receive their last Q.R. in a Kelvinator envelope, this was because we were given a couple of hundred of these. We have since made suitable labels to cover up the old advertising matter, and by using these envelopes we save a 1½d. for each Q.R. !

Due to circumstances beyond our control we will not be publishing the list of Victorian Private Railways' locos; this is no longer necessary. Instead we will be diverting all our energies to the Fyansford book. If anyone has a photo of the Vulcans double heading a mineral train on this line and would like to have it published we would be interested, - we think it would make a good frontispiece. More urgent however is a photo of one of the Forrys before they were put in store. In both cases a negative or a print will be satisfactory, but we would have to have it by January 15th. XX

Photos:- Our fifth series of photos will not be available until about February. Included amongst these will be photos of remains of tramways around Stawell and Horsham, supplied by Des Jowett. Also included will be photos of NQR wagons specially prepared to comply with our diagram for the use of modellers. Our photo service is at present rather slow,- we believe in giving a wide variety of photos at the lowest cost, but we must sacrifice speed in fulfilling orders for this.

The photostat copy of the Rubicon prospectus is necessarily expensive, so we have a put a copy of this in the Society's library and it may be borrowed by contacting the Librarian. The original prospectus was loaned to the Society for copying by Ian Barkla, whom we thank.

X Correction to page 20, second paragraph, the runaway bogie knocked a hole in the tender, not a whole!!!

If a cross appears in the square your sub. is overdue and should be sent to the Treasurer, or other office bearer. No further Q.R.'s will be sent until it is paid. Still a mere 8/-.

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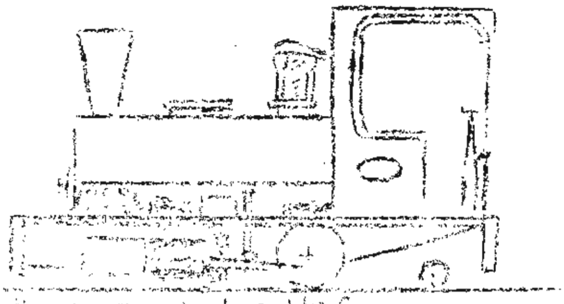
PLEASE DELIVER FLAT



POWELLTOWN, 1ST No 3.

FROM:- Victorian Light Railway Research Society,

9 Mc.Gregor Street,
CANTERBURY, E.7, Vic.

VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY,

QUARTERLY REVIEW

AUTUMN 1963, Vol. III, No. 12, Price 1/-.

NEWS, NOTES, & COMMENTS.

Victorian Railways: Notes on the dismantling of the Ben Nevis - Navarre line, by D.Jowett, :-

This line was purchased by the Stawell Shire,who used the rails on bridge construction. They converted about six miles to a roadway, mainly single lane. All mile posts,some whistle posts,and all stations remain, the platforms still intact. The platform at Joel is right beside the roadway and the road is formed on No.1 Road. It looks strange with the platform and handrails! It is the same at Landsborough,but here even the sheep race and buffers at the end of No.2 Road are right next to the road,which is formed on No.1 Road site.

All trestle bridges remain the same, but with warning notices of "Single Lane Bridge Ahead". From Tulkara to Navarre the Line is intact,rails and all, but the yard at Navarre has recently been lifted. The goods shed, platform, ash pits,etc., all remain. This is a rather unusual dismantling procedure, but as the Shire only wanted the rails,everything else has been left.

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Tasmanian Railways: All regular steam working has now ceased, but a number of steam locos are maintained for use in emergencies.

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Mount Lyell Mining & Railway Co.- It is expected that this Company's railway will be closing on June 30th. this year, giving way to road transport.

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Society Notes: Work on the Fyansford - Batesford booklet is proceeding fairly well,though the booklet will probably not be available until some time in April. We are gaining experience of the 6½"x8" format and I don't think it offers much more difficulty than the Foolscap (13"x8") format at present used on the magazine. With the next issue starting a new volume the opportunity once again arises of changing the magazine to this format. The main advantage of the present format is that it can easily be kept in foolscap folders. The smaller format would probably be of a more handy size fore most members,and we would be able to make better use of the special stencils of the type used for the photos in the last issue. This would also allow better presentation of the magazine with illustrated covers. The Council is in favor of this change. Also under consideration is the desirability of increasing the annual subscription to 7/6 or 10/- to allow for more illustrations to be included in the magazine. The council is also in favor of this change. Our circulation is increasing gradually and the number of articles being sent in is increasing,this is very gratifying; please keep it up! Many of our members have recently introduced their friends to our Society, this is also very gratifying.

We do not intend to change the format of the Magazine or the subscription rates until we have given members and subscribers an opportunity to give their oppinions. We are sending with this issue a questionaire which we hope all readers will fill in and return by May 1st.

STATE RIVERS & WATER SUPPLY COMMISSION RAILWAYS

Notes supplied by D.Barry.

The Red Cliffs Tramway:-

This ran for a distance of 3¼ miles from Red Cliffs V.R. siding to the S.R.&.W.S.C. Pumping Station constructed in 1924. It was of 2 foot gauge, single track, 20lb. to the yard steel rails. It transported coal and briquettes to the pumping station. Rolling stock consisted of side tipping wagons of 1 cubic yard capacity.

Motive power consisted of a Kerr Stuart steam loco, builder's number 742, unfortunately no other details are available. Also used were two Malcolm Moore tractors, the earlier one powered by a Fordson engine, the later one, used since 1950, powered with a Hercules diesel engine.

Following the construction of a new power station by the S.E.C. at Red Cliffs and the conversion of the irrigation pumping station to electric drive the line and rolling stock were sold to the Mildura Council, and the steam loco donated to the Red Cliffs Rotary Club as an historic memorial to be set up in the Red Cliffs Children's Playground.

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Torrumbarry:-

In 1920 the Commission advertised for the supply of one 2' gauge new or good secondhand light type steam or oil driven locomotive for use on the construction of the Torrumbarry Weir. Later that year it purchased from the Melbourne Harbour Trust Commissioners a Black Hawthorn & Co. secondhand locomotive at use on Williamstown Wharf for £475. Description of loco:-

Gauge:	2'
Builders:	Black, Hawthorn & Coy., Gateshead-on-Tyne.
Date Built:	
Builder's Number:	
Cylinders:	6½" diam., 12" stroke, with crossheads running in double planed guide bars.
Wheel Arrangement:	0-4-2 ST.
Driving wheels:	20½"diam.
Trailing wheels:	18" diam.
Rigid wheelbase:	3'2"
Total wheelbase:	7'3"
Boiler Details:	6' long, 2'9" diam., copper firebox 2'3"x2'3" 50 1¼" diam. brass tubes. Two injectors.
Boiler Pressure:	130 lbs. p.s.i.
Water capacity:	150 gallons.
Coal capacity:	3 cwt.
Weight:	approx. 7 tons empty.
Notes:	Fitted with outside cylinders and outside frames. Link motion reversing gear. Hand screww brake on four wheels, semi enclosed drivers cab, and framework for carrying wood fuel. This loco was later used at Yarrawonga Weir and was sold at auction in 1939.

-x-x-x-x-x-x-x-x-x-x-x-x-x-x-

Hume Reservoir: From 1922 to 1932 the Commission had in operation a number of light railways for conveyance of earth, stone, etc., during construction. The gauge was 3'.

Upon completion of the Reservoir embankment the rolling stock was sold at auction. See next page.

STATE RIVERS & WATER SUPPLY COMMISSION RAILWAYS

D.Barry

Extract from Sale Catalogue,
J.H.CURNOW & SON

HUME RESERVOIR DISPOSAL
September 1936.

Item 93 Locomotive (Perry) Type four wheel coupled, 3'6" gauge Cylinders 10 in. dia. x 15 in. stroke, fitted with Walscheart valve gear,and complete with steam brake, water tanks and fuel bunkers,etc. Tractive effort 6000 lbs., Boiler 160 lbs. w.p.
Item 94 ditto
Item 95 ditto
Item 96 ditto
Item 97 ditto
Item 98 ditto
Item 99 ditto
Item 100 Locomotive (Harman) Type four wheel coupled,3'6" gauge cylinders 10" dia. x 15" stroke,fitted with Walschaert valve gear,and complete with steam brake,water tanks, and fuel bunkers etc. Tractive effort 6000 lbs., Boiler 160 lbs. w.p.
Item 101 Locomotive (Baldwin), 10½" cylinder,16" stroke, Boiler overall 12 ft. 3 in. x 3 ft. dia., w.p. 120 lbs.
Item 102 Locomotive boiler (new), 7 ft. x 2'8", w.p. 180 lbs.
Item 103 Box loco parts
Item 104 " " "

---oooOOOooo---

Extract from sale catalogue:
J. H. CURNOW & SON
YARRAWONGA WEIR DISPOSAL, JUNE 1939

Item 410 Steam locomotive by Black Hawthorn, gauge 2'. In poor condition. (This is apparently the loco from Terrumbarry)
Item 411 Steam locomotive by Black Hawthorn, In good condition. Working Pressure 120 lbs.
Cylinders 7 in. dia. 10 in. stroke.
Complete with screw brake,water tanks,fuel bunkers and accessories.

-x-x-x-x-x-x-x-x-

Wimmerra Water Storages:

1/ 5 miles of 2 ft. gauge line from Grampians Range to Fyans lake to transport beaching stone. German wagons were used,hauled by horses.
2/ Mt.Zero to Taylors Lake (See Spring 1962 Q.R.,page 10) Nine miles of 2ft. gauge from Mt.Zero to Taylors Lake to transport beaching stone. Horse haulage,and also a rail tractor powered with a "T" Ford engine. Later 5 miles of this line was taken up and relaid to transport stone to beach Pine Lake embankment,and an additional 2½ miles making the line from Mt.Zero 11½ miles long.
Tonnages transported - Taylors Lake - 40,000 tons
Pine Lake - 60,000tons

Remember to send in articles and notes of light railway interest

The Powelltown Tramway

Additional information obtained from the articles on the line published in the Railway Magazine of 1916, and the Locomotive of 1915.

Firstly we will deal with the article in The Locomotive, December 1915 edition. The article was compiled from notes supplied by Mr.O.J. Cobani, who I presume worked for the Victorian Hardwood & Sawmilling Co. at the time.

At that time no less than seven companies were dependant on the Powelltoon tramway for conveyance of timber to the mainline. The Mountain Section of the line at this time was only 3½ miles long. The article says that the stopping places each possessed a shelter shed, a nameboard, a large goods siding, but no platform. A list of stations is given, as follows: Yarra Junction, Barrier 2¾ miles, Timber Siding 3½ miles, Slaty Creek 4½ miles, Black Sands 5¾ miles, Three Bridges 7½ miles, Gilderoy 9 miles, Ballast Siding 10½ miles, Powelltown 11 miles.
Some of the mileages given in this early article are different from those given in more recent articles, I think ~~xxxxxxxxx~~ the earlier ones are at fault. The above list of stations seems to confirm my suspicion that there was once a station between Gilderoy and Powelltown. When this "station", named Ballast Siding was closed I do not Know, probably around 1916, I suspect. Despite the fact that there was no signalling system the articles state that there was always more than one engine in steam at a time. The ruling grade of 1 in 30 and sharpest curve of 2½ chains radius occurred very frequently.

The speed limit was 20 miles an hour, but only 3 miles per hour through the town of Yarra Junction.

Further notes on the locos:

Three locos were in use at this time, "Little Yarra", "Powellite", and 1st No.3. Gresham's steam brake was fitted to the locos. According to the article Little Yarra was No.1, Powellite No.2, and the Kerr Stuart No.3 ; but it is not stated whether this numbering system was official or the writer's own invention.

Further notes and dimensions of Little Yarra:-

The boiler had 86 tubes 1¾" in diameter.

The wood capacity of the tender was 2½ tons.

It was fitted with a Michigan lubricator, a gauge glass and two test cocks.

The total weight was 28 tons, NOT 20 tons as I stated in my previous article concerning this engine.

According to the 1915 article it was painted black, unlined, but the 1916 article gives its color scheme as red with white lining.

Further notes and dimensions of Powellite,

The wheelbase was 9', equally divided.

Boiler centre from rail	6'
Boiler diam.	3'
Width	6'6"
Height	10'

Tender:- Wood capacity 3 tons
wheel diam. 2'
Wheelbase 6' equally divided.

Total wheelbase engine and tender 22'6"
Length overall " " " 31'6"

The centre driving wheels and centre wheels of tender were unflanged. This loco was fitted with a Detroit triple sight feed lubricator, hand sanding gear, two Gresham and Craven injectors. Stephenson link motion was used. One water glass and two test cocks were fitted. The heating surface was made up of firebox - 48 sq.ft. and tubes 384 sq.ft. It was painted green with white bands and lining.

Additional notes on 1st.No.3. Kerr Stuart 0-4-2ST
Rigid wheelbase .....4'
The boiler was"about as big as a coffee urn."
Quoting from the article in the Locomotive: "The names applied to this machine are varied and numerous,among them may be mentioned the 'Dreadnought','Squirt,'and 'Midget'. The others are mostly unprintable."

Additional notes on the rolling stock: The height of the passenger ~~xxxxxxxxxxxxxx~~ coaches was 10', and they were constructed of Mountain Ash. The 5 ton wagons were used to convey passengers on holidays,and were fitted with hardwood seats and canvas coverings for these occasions.

The train service at this time consisted of two mixed trains daily each way,with two extra each way on Mondays,and one extra each way on Saturdays.

-x-x-x-x-

Extracts from the article in the Railway Magazine.

"The section from Powelltown to Splitters Camp is used solely for the carriage of logs. It abounds in sharp curves,stiff banks,and in 4 miles ascends nearly 1,000 ft."

"Starting from Yarra Junction,the line climbs the valley of the Little Yaara to Powelltown,where the company owns a large saw mill. Indeed,there are saw mills near every station while numerous clearings are cultivated by settlers. The line passes through virgin forest nearly all the way, and naturally the scenery is magnificent. One has no conception of the wild grandeur of the Australian bush till one has seen it. The track is fenced off only here and there,and no provision,in the shape of ~~xxxxxxxxx~~ gates or cattle grids,is made to prevent animals straying on to the line where it crosses the tracks that do duty for roads. The ruling grade is 1 in 30 and occurs frequently, and the sharpest curve is 2½ chains."

"The line pays very well,as besides sawmilling,considerable quantities of agricultural produce are carried. Initial cost was low,as there are no extensive earthworks;there was nothing to pay for land,sleepers or ballast,and second hand rails were used. Repairs are few,as the rolling stock is all very light."

---oooOOOooo---

BOOK REVIEW:

The County Donegal Railways, by Edward M. Patterson. Available from David & Charles Ltd.,39 Strand,Dawlish,Devon,England. Price 31/- Sterling incl. postage.

This book deals with the history of the County Donegal Railways Joint Committee and its constituents. This railway was the largest 3' gauge line in Ireland,having a route mileage of 124 miles, five terminuses,and three junction stations. The author gives the early history of the constituents, and deals,in a most interesting way,with the problems the line met with in combatting the problems of Partition in Ireland followed by intensive road competition. To combat these problems a large fleet of most interesting railcars was built up these running the normal passenger services. In later years the Committee possessed seven locos, 4-6-4 tanks, and 2-6-4 tanks,both very handsome,especially in their smart crimson livery. These worked the goods trains and excursion trains.Despite the Committees attempts at cutting costs,due to the declining population of County Donegal traffic declined to such an extent that the system finally closed down on the 1st of Januaary 1960. Right to the end the C.D.R.J.C.was noted for its punctuality and friendly service. This book is one of the best narrow gauge histories so far published and can be recomended to all interested in overseas narrow gauge.

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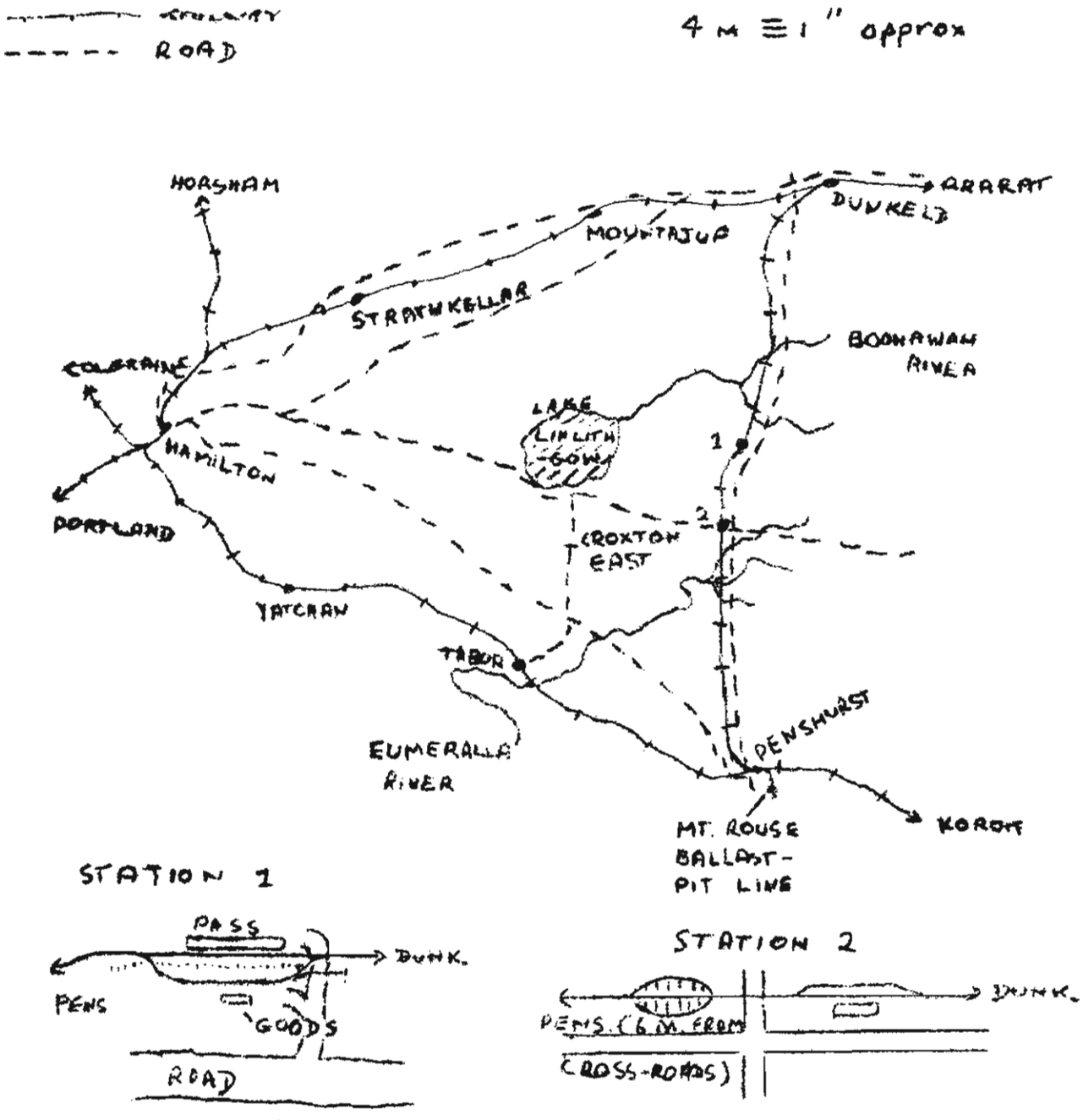
NOTES ON THE PENSHURST - DUNKELD LINE (VICTORIAN RAILWAYS)

By D.Jowett.



The embankments,cuttings,bridge piles,and two unknown station sites still remain quite intact. Platforms,minus facings,at the two stations still remain,also the goods platform at one of them. The line was 15.87 miles long, and was opened on 22-8-90,the same day as the Penshurst-Hamilton line. The service was a day return,connecting at Penshurst with the pass. ex Warrnambool,and with the Melbourne train at Dunkeld,and vice versa. In its last months the service was down to three days a week,until finally being closed on 24-3-91. The official dismantling date was 19-2-98. Only H class 4-4-0 locos were known to work the line,and ~~xxxxxx~~ turntables were located at Pehshurst and Dunkeld.. The cost of construction was £50,000.

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FIVE WARBURTON AREA TRAMWAYS, (Continued).

(Adapted from an article titled "Timber Tramways" by Garnet Johnson,which appeared in the "Melbourne Walker"1948;pp.69--71.

The 0-4-0 Well Tank had outside cylinders of 8½" x 12" and driving wheels of 20½" diam.,and was built by Orrenstein & Koppel (Germany). The 0-4-0 side tank had outside cylinders 8¼" x 12",and was built by Krauss (Germany). The Day Engineering Co. altered the framing,and Messrs.George and George of South Melbourne supplied the boiler. A geared engine somewhat similar to a Climax resulted. Dimensions as follows:

Wheel arrangement:	0-4-4-0
Steam pressure:	120 lbs.
Total weight:	18½ tons approx.
Cylinders:	Two, 10" x 12" With outside steam chests they were mounted horizontally outside below the frame,working a jack-shaft arranged transversely,which by means of bevel gearing drove cardan shafts geared to the inner axle on each of the four wheel bogies,the wheels being coupled in pairs with side rods. The "dee" slide valves were operated by outside Stephenson valve gear worked off the jack shaft. Conventional side tanks,cab and bunker were fitted, together with with a diamond stack. About 1938 this loco was transferred to Ezards other mill,at Erica.

THE FEDERAL TIMBER COMPANY'S TRAMWAYS:-

The old mill of the Federal Timber Company was situated at the head of Starvation Creek, and had a wooden 4 foot gauge tramway running down the valley to Richards tramway, where the timber was transhipped onto the 3 foot gauge and hauled by Mr.Ezards geared loco. Motive power on the 4foot gauge is unknown.

The Federal Co. erected a new mill on the Little Ada River and used the formation of the old Starling's Gap Tramway as far as the "Gap",extending it to the New Federal Mill, 11½ miles from "The Points" Track was wooden,reinforced with steel rails on the curves,some of which were ex-Melbourne cable-tramway rails. This line was worked by three six wheeled coupled tractors, one by Mc.Cormick Deering, and two by International.;these working through to La-La Siding. The timber bogies were fitted with primitive continuos brakes worked by ropes,and the tractors were placed behind the bogies on the long winding descent from the "Gap."

Leaving "The Points", the Federal Tramway followed Big Pat's Creek to the crossing of Smythe's Creek,where it commenced the long climb of 7½ miles up the Mortimer's Creek valley to the summit of Starling's Gap at 2,250 feet. From there it contours the slopes of the Ada River valley for about five miles, when it turns northwards up the Little Ada valley for a mile to the New Federal Mill. Two crossings were made with the Powelltown Tramway,on the Ada No.1 mill and the New Ada mill lines. In both cases the Federal line is on hinged rails. A 4 foot gauge steel haulage,built in 1939,descends from towards the end of the ridge. Another 3 foot line went back along the ridge towards the Ada River for about a mile, this being worked with a tractor.

With the closing down of the old mill in 1934,the old settlement of Starvation Creek ceased to exist. The name "Starvation Creek" was transferred to the settlement wich grew

up/...

up at the New Federal Mill, although three miles south and on a different waterway. This settlement was at an elevation of 2,000 feet, and possessed its own Post Office.

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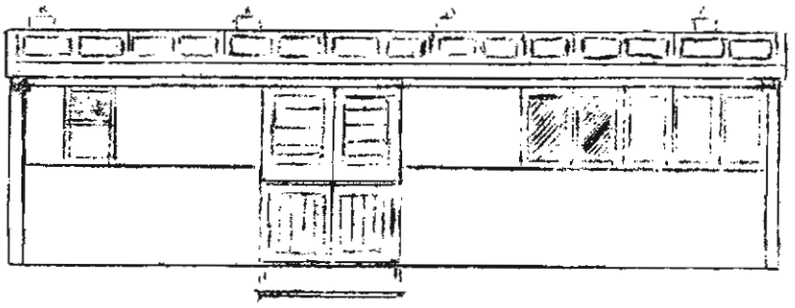
LIGHT RAILWAY ROLLING STOCK DRAWING

NBDBD Brake/2nd. coach of V.R. 2'6" gauge. (Later NBC class).



The chassis is the same as that used on the NOR open waggon, (see Summer Q.R.).
Details:
Built: 1898-1910
Numbers: 1-7.
Length: 25'2" over body.
Width: 6'3"
Capacity: 4 tons, 7 passengers. (Longitudinal seating).

There were five windows on one side, including two frosted windows in the gent's lavatory. On the the other side there were four windows.
On some of the cars the footboards extended the full length of the vehicle.

---oooOOOooo---

Remember to send in articles, notes, drawings, diagrams etc. suitable for publication.
If anybody has any details of the stations on the Dunkeld-Penshurst line please send them to the Editor.

SOCIETY NOTES

The next meeting will be held on Saturday, 20th. April; at 20 Essex Road, Surrey Hills; beginning at 2.30 p.m.

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

PRESIDENT/EDITOR: F. Stamford, 9 Mc.Gregor St., Canterbury, E.7.
SECRETARY/LIBRARIAN: G. Gardner, 232 Mont Albert Rd, Surrey Hills, E.10.
TREASURER/VICE PRES: R. Murray, 20 Essex Road, Surrey Hills, E.10.

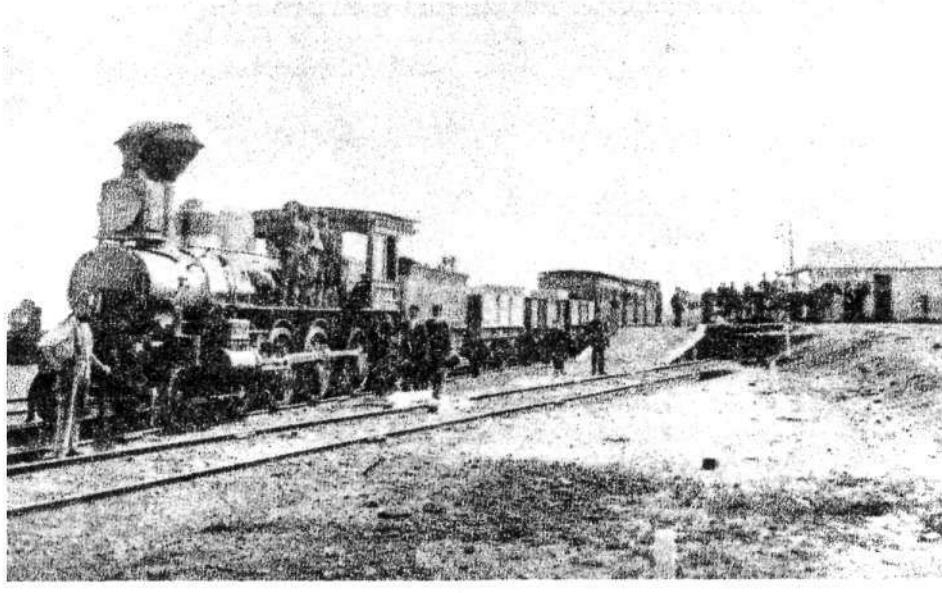
Articles, notes, drawings etc., are welcomed by the editor, and will be published in the Quarterly Review.

LIGHT RAILWAYS

PUBLISHED BY THE

VICTORIAN

LIGHT RAILWAY RESEARCH SOCIETY



WINTER 1963 No. 13

LIGHT RAILWAYS
(Quarterly Review)
---ooOoo---

No.13 - Winter 1963. Vol.IV.
Price...1/6d.

Front Cover Photo:- A.V.R "J" class 4-6-0 Baldwin loco at Boort, with a mixed train. This photo would probably have been taken around the turn of the century. This is a Victorian Railways Photo, reference number E.1114. Unfortunately it has lost much interesting detail in the reproduction.

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY
Dedicated to the study of the light railways which once served Tasmania and Victoria.

Anual Subscription, dating from December 1st. 1962 is 5/-.

Management Council

President: F.Stamford,
9 Mc.Gregor St., Canterbury, E.7.
Phone: 83-5873.

Secretary: G.Gardner,
232 Mont Albert Rd. Surrey Hills, E.10.
Phone: 83-3417.

Treasurer: R.Murray,
20 Essex Rd., Surrey Hills, E.10.
Phone: 83-7971.

Next Meeting

Saturday, August 10th. at 8.00 p.m.
Address: 9 Mc.Gregor Street, Canterbury, E.7.

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NEWS, NOTES, & COMMENTS.

Result of Questionnaire, and decisions made at Subsequent Council Meeting:-

Regarding the Annual Subscription, nobody felt that it should remain at 5/-, while about 4 people favored 7/6, and 7 favored 10/-. A firm decision on the Subscription has not yet been made but a announcement will be made in the Spring issue. Nobody wanted the old format retained so the change has now been made.

Very careful consideration was given to the matter of Magazine Content, and it was decided that articles on interstate light lines, overseas light lines and model matters should be limited to articles of exceptional interest or matters in some way connected with Victoria's light lines. Articles on Victorian Railways light lines will be welcomed, especially if they deal with lines now closed.

It was of little surprise that everyone who returned a form wanted Tasmanian light lines to be included in the lines studied by the V.L.R.R.S. Articles on any of these interesting lines will be especially welcomed by the Editor.

The majority of members favored meetings being held at 8 p.m.

It was also decided that membership of the Victorian Light Railway Research Society should be open to all. This was partly because we already have a number of subscribers to the magazine who pay exactly the same subscription as members, ~~and have exactly the same privileges~~ but do not have the same privileges. Another reason for this change in policy, and a very important one, was the point raised by Peter Barry, concerning small but often significant snippets of information which non-active members can occasionally give.

NEWS, NOTES & COMMENTS, Continued.

Mount Lyell Mining & Railway Company:

The The 3'6" gauge line from Strahan to Queenstown, Tasmania, operated by this Company is to close on June 30th. This line is especially interesting, as it is one of the two Abt rack lines which have operated in Australia. (The other one being the Mount Morgan line of the Queensland Railways, which was closed in 1954. The 2' gauge system operated by the M.L.M.&R.C around the Company's equipment at Mount Lyell will continue to be used.

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The Australian Cement Company, Fyansford:

Recently Geoff Gardner and Robin Fellows visited this line to obtain further information for the Society's booklet. They found Beyer Garratt No.1 and Australian Standard Garratt No.3 both under heavy repair, while No.4 Vulcan was having its boiler washed out. The other Vulcan was in the quarry, shunting. Also running were Beyer Garratt No.2, Diesel No.DS.1, and Hudswell Clarke No.6. Perry No.11 was in steam but not working. Perry No.10 is outside the new engine shed, and in fair condition. The other three Hudswell Clarkes, Nos.7,8, and 9, are lying on an overgrown unused siding, and are in a very poor state of repair.

::::::::::::::::::

Ammendments to the Membership list in issue No.11.
Delete J.Buckland, P.Charrett, E.M.Russell,
We welcome the following new members:
C.Einsiedal, 256 Rossiter Rd., Koo-wee-rup.
R.J.Graf, 18 Harrison Street, Ringwood.
M.Guiney, 10 Gollibrand St., Kew, E.4.
G.Johnston, 69 Yarrbat Av., Balwyn, E.8.
J.Wells, 4 Moralla Rd., Kooyong, S.E.4.
W.Wilson, 6 Dromana St., Glenroy.

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Wanted, articles, notes, drawings, photos, etc., suitable for publication. Send them to the Editor

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LIGHT RAILWAYS OF THE STATE ELECTRICITY COMMISSION

Notes supplied by D.Barry

Yallourn & Morwell:

Gauge: 90 cm. - 2'11-7/16"
Mileage (approx): Yallourn open cut .. 46 miles.
Morwell open cut .. 13 miles
Interconnecting railway, Morwell-Yallourn . 4 miles
Total: 63 miles

Rails: 94 lb. per yard, flat bottom.

The system is electrified at 1,100 volts D.C., overhead trolley wire with rail return.

Rolling stock:
Locomotives: 13 Bo-bo type weighing 60 tons each.
24 Bo-bo type weighing 16 tons each.
Wagons: Coal - Saddle back, side discharge-
80 each of 20 ton capacity.
90 each of 33 ton capacity.
Overburden - Side tipping, discharge:
87 each of 40 cubic yard capacity.
75 each of 32 cubic yard capacity.
All these are bogie vehicles.
Other rolling stock includes 3 Diesel shunting locos.
Trains consist of up to 13 vehicles, and are worked on the "push-pull" principal, the loco does not run around the train at terminii. Many of the 16 ton locos are coupled permenantly in pairs so that they can be run by one man. They are not fitted with Multiple unit control.
In 1 year Yallourn system carries approximately 3,000,000 cubic yards of overburden, and 11,000,000 tons of coal.
In one year the Morwell system carries approximately 1,000,000 cubic yards of overburden only.

Loading tracks under dredgers are moved as required by track-shifters. These machines are pushed along the track by means of a locomotive, and in passing over the tracks move them sideways up to 3 feet at a time.

TRAMWAYS:

Rubicon Haulage:

This is a 2' gauge single line from Rubicon powere station to Rubicon Forebay at pipehead.

Top Rail level: 2,700 feet.
Haulage height: 1,455 feet.
Haulage length: 4,280 feet.
Average grade: 1 in 3.
Maximum grade: 1 in 2.
Haulage details: The winch is operated by a 150 H.P. motor, the maximum strain on the rope is 30 tons. The rope is one inch in diameter, and 5,300 feet long. The winding drum is 7 feet in diameter.

Rubicon Racelines Tramway:

The haulage line at the pipehead connects with this tramway, which follows the racelines.
2' gauge, along raceline, Rubicon Forebay to Rubicon Dam.
Length: 28,500 feet.
Switching points at Rubicon Forebay and Royston Power Station.
Two battery-powered electric locos are used.
These units are in the nature of railcars, No.1 seats 12 people and has two five horse power motors. One of these is used for running forward the other for reverse running. The loco runs on 32 six volt batteries, and there are charging facilities at Rubicon Forebay and Royston power Station.
No.2 is an open scooter type vehicle and has one motor of 2½ h.p. It runs on 8 twelve volt batteries, and seats four.

Timber frame trestle bridges carry tram lines over gullies at Rubicon Forebay, Royston, and Beech and Lubra Creeks.

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The S.E.C. also operates electric street railways at Ballarat and Bendigo, and also operated the Geelong system which closed in 1956.

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Prior to the 90 cm. gauge electric lines being installed at Yallourn, there was a 3'6" gauge system operated by steam locos. There was also some 5'3" gauge operated by an ex V.R. DDE class loco.

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MELBOURNE & METROPOLITAN BOARD OF WORKS,
Construction Railways.

Yan Yean Tramroad: Used between 1853 and 1857 to convey pipes for the construction of the pipe track between Yan Yean and Melbourne. Rails and sleepers were of timber and the track gauge was 5'3". The line followed the route of the present pipeline, and pipe trolleys were operated by horses.

Main Outfall Sewer: Constructed by contract during 1892 ~~and~~ to 1894. A narrow gauge line was used to facilitate the construction of the sewer. No deatails of the locos used are known.

Silvan Dam: Constructed between 1927 and 1932. Gauge was 3'6", and six Perry locos were used. One line ran to a rock quarry about two miles south of the dam, and other lines ran to borrow pits near the dam.

Mount Little Joe and Upper Yarra Diversion Tunnel: Track gauge was 2' and Ruston Hornsby diesel mine locos, class DL20 with 16-20 horspower Ruston Mk.2VSHL, two cylinder diesel engines were used. All these locos have been sold.

Maroondah & O'Shannassy Dams: 2' gauge tramways were used.

"Little Yarra" and "Powellite's" Life on Nauru.

These two ex Poelltown Tramway locos were purchased by the British Phosphare Commission in 1945 for service in Nauru. One of them (probably "Little Yarra") saw vey little service as it did not prove particularly suitable, the other went out of service in 1957, when Clyde Diesel Locomotives took over the job. It is not known whether the locos have been scrapped.
Some further dimensions of these locos have been obtained:
Powellite: The boiler had 92 tubes each 1¾" diam. by 8' long. Firebox grate area was 54" x 24". Total width 6'8".
Little Yarra: Firebox grate area 48" x 24". The boiler had 100 tubes each 1¾" ~~long~~ diam. by 6'6" long. The tender wheels were of 22" diam. Total lenth of loco and tender was 35'6", and width was 7'3".

Also in use at Nauru until recently were two Orrenstein & Koppel locos of 165 horsepower, and three of somewhat lesser horsepower.
At Christmas Island a Shay geared loco was in use but was scrapped some years ago when the Commission altered the plant and the railway dismantled.

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Kilmany Park Steam Tramway By D. Jowett.

Opened on 16th. March 1910, this 5'3" line joined the main line at 118m.10ch., (up end of Kilmany). It was 2 miles 20 chains long. An 8 ch. loop siding was provided at the terminus, with a 13⅔ chain spur to sawmills. All classes of locos were allowed on this line but the maximum speed permitted was 10 m.p.h.

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Wanted; Articles, notes, etc., suitable for publication. Send them to the Editor.

HALL'S GAP TRAMWAY.

SEE PAGE 10.

D. JOWETT.

HALL'S GAP TRAMWAY By.D.Jowett.

At Hall's Gap a sign reads "Old Tramline Foot track to Venus' Bath." The only details I could get were from an old storekeeper there, who said the line ran up Stony Creek years ago. There is no trace of it and I would think it to be worked by horses.

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SALT TRAMWAYS, From D.Barry.

Cheetham Salt Limited have 2' gauge lines at both their Laverton and Geelong works. About six miles of tramway are in use at Geelong and five at Laverton., the lines being mainly used for the transport of crude salt from the crystallising pans to the treatment factory. This is done in rakes of usually about ten 3 ton wagons, the line being level with few curves. Locomotives are three cylinder Ruston diesel locos and one Dorman Simplex which was purchased at Jindivick on completion of the water channel there several years ago. Also used are five light locos made in Cheetham's workshops and powered by Ford Prefect engines. These are used for light haulage of men and materials and for haulage on portable lines laid for special purposes.

The permanent lines are laid with 30 lb. to the yard rail whilst 14 lb. rail is used on the portable lines/.

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W A N T E D

CONTRIBUTIONS FOR THIS MAGAZINE.

ARTICLES, NOTES, DRAWINGS, PHOTOS, ETC.

Dealing with Victorian and Tasmanian light lines
Send them to the Editor, 9 McGregor Street,
CANTERBURY, E.7.

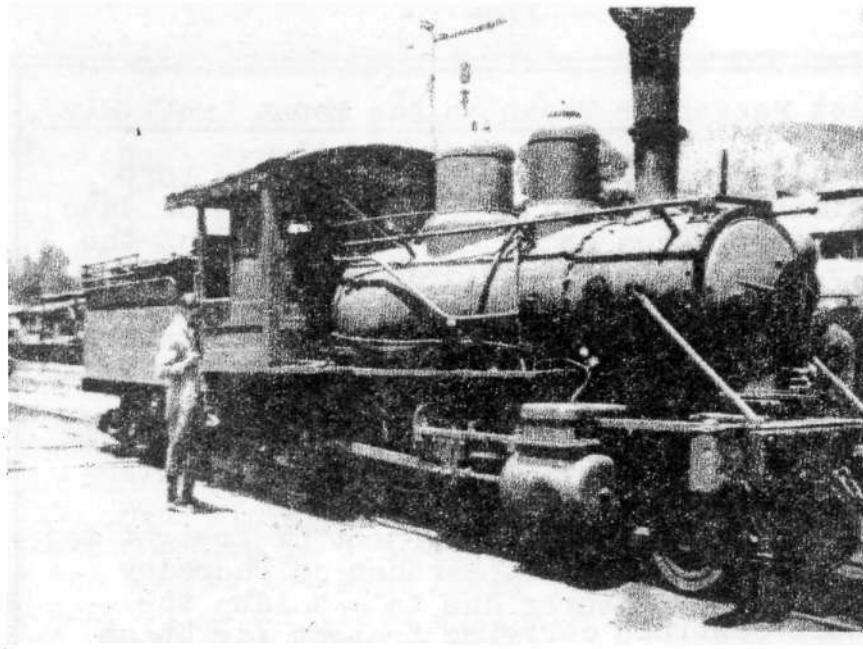
The Last Passenger Train on the Mount Lyell Rly..

The last passenger train on this line left Queenstown at about 10 a.m. on the 29th. of June carrying employees and former employees of the Company. The train was decorated for the occasion, and the Queenstown Silver Band played the Maori's Farewell as it departed. At Strahan the town band welcomed the train with Waltzing Matilda, while ships in port blew their sirens. As it left for the return journey the inter-state freighter Coonya flew signal flags wish-the train a good voyage.

Meanwhile the first consignment of freight to be carried by road left Strahan on Thursday the 27th. June. However due to a holdup the line will continue carrying freight for about another three weeks when it will be closed completely.

The 2' gauge lines used around Mount Lyell will remain in operation however.

The Company found the expense of maintaining the line, with its many bridges and operational difficulties, a burden; as it could use the road supplied by the Government at no cost to itself. With the very heavy traffic passing over the road maintenance costs will rise; so that the closure of the line will be to the detriment of Tasmania as a whole. Unfortunately proposals that the Government should subsidise the maintenance or operational costs of the line were not carried into fact. This is partly due to the fact that many Tasmanian politicians are road minded and feel all the railways should be closed. Fortunately their wish has not been fulfilled - so far.



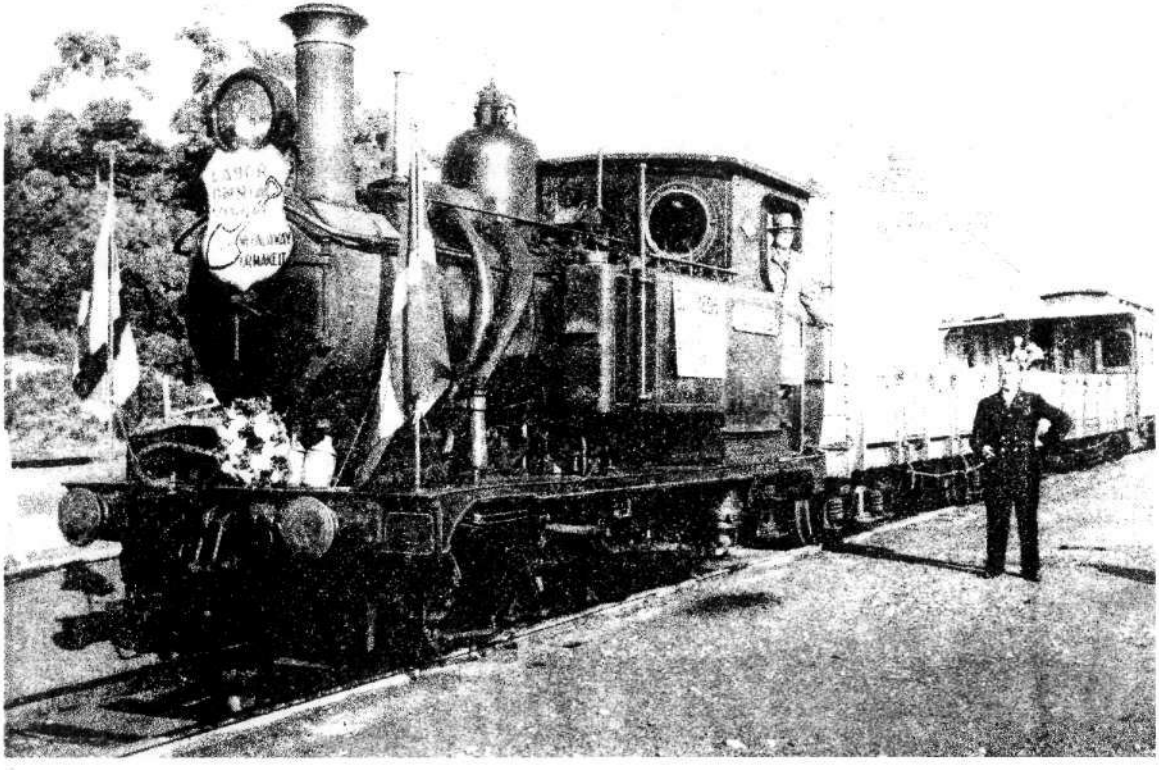
Above: "Little Yarra" at Powelltown, 1933.
Below: Trestle bridge a few miles beyond Powelltown.

LIGHT RAILWAYS

PUBLISHED BY THE

VICTORIAN

LIGHT RAILWAY RESEARCH SOCIETY



SPRING 1963. No. 14.

L I G H T R A I L W A Y S

(Quarterly Review).

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No.14.- Spring 1963. Vol.IV.
Price ... 2/-.

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Front Cover Photo:- The last passenger train on the Mount Lyell Railway about to depart from Queenstown for Regatta Point (Strahan), 30th.June 1963. The engine had been specially decorated for this sad occasion; the shield on the front of the loco. reads "Labor Omnia Vincit - We Find A Way or Make It," and is a replica of the plaque carried by the same engine on the first official train in 1896. Dismantling of sections of the line has begun, and the locos. are in store and are almost certain to be scrapped.
Photo Courtesy of "The Advocate" Burnie, Tas., Reference Number 42311.

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY
Dedicated to the study of the light railways which once served Tasmania and Victoria.
Annual Subscription, dating from December 1st. 1963 is 10/-.

Management Council

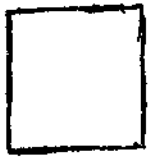
President: F.Stamford, 9 Mc.Gregor St., Canterbury; Phone:83-5873.
Secretary: C.Gardner, 232 Mont Albert Rd., Surrey Hills; Phone;- 83-3417.
Treasurer: R.Murray, 20 Essex Rd., Surrey Hills; Phone;-83-7971.

NEWS, NOTES & COMMENTS.

Victorian Railways: The Puffing Billy Preservation Society intends to open a narrow gauge museum at Menzies Creek. Sidings will be laid behind where the station building used to be, and it is hoped that the scissors crossover from Beech Forrest will be incorporated. Initial exhibits will be G.42, and the Climax loco from Erica. Apparently the S.E.C is to restore the Climax and move it to its new site.

The necessary Act of Parliament to allow dismantling of the Beech Forest/Weeaproinah line is at present in the process of being passed. All attempts at saving the line have failed.

Society Notes: Members should note that the Subscription for next year is 10/-.



If a cross appears in the square opposite your subscription will be due on the 1st. December. Amount due will be 10/-.
If two crosses appear in the square your subscription ran out with the last issue, and you should send 1/3 to cover the cost of this issue, plus 10/- for next year; total amount due will be 11/3.

Lower Subscription rates are available if you can arrange to pick up your Q.R. at meetings, thus saving postage costs.

NEXT MEETING:-

Will be held at 232 Mont Albert Road, at 8 p.m. on 14th. December.

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WANTED:-
Articles, notes, etc., suitable for publication. Send them to the editor.

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THE PROPOSED NOLMIE DISTRICT RAILWAY

This article is compiled from a report of the Parliamentary Standing Committee on Railways which was made in 1928.

Previous Reports:

1. In 1901 the Committee recomended the extension of the narrow-gauge Whitfield line to Mahaikah, a distance of 19 miles, at an estimated cost of £65,520, exclusive of land. A Bill authorizing constuction was rejected by the Legislative Council.

2. In 1905 this proposal was again considered but was rejected because it was felt the local settlers would find difficulty in paying the special railway tax.

3. In 1906 the Committee considered the construction of a railway up the valley of the Boggy Creek towards Mahaikah. However, it was felt that as this line would run parallel to the Whitfield line for most of its length it would not attract adequate traffic.

4. In 1908 the Committee investigated the possibility of extending the Whitfield line to Mahaikah. This line would serve the parishes of Toombullup, Cambatong, Ducran, Ducran East, Whitfield, Whitfield South, and Toombullup North. The annual loss on such a line was estimated to be £2,500; and only a Government sponsored Closer Settlement Scheme could reduce this loss.

5. In 1914 another investigation had been made. In 1912-13 a permanent survey had been made for a 2'6" line from Whitfield to Mahaikah, via Glenmore, and McDonald's Gap. The line was to be 20 miles long, with curves of 2 chains radius and 1 in 30 grades. The Committee did not recomend construction due to the unpromising financial outlook.

6.In 1923 the Committee again reported on the proposals for a line from Mansfield,Tatong,or Whitfield, but rejected them.

HISTORY OF THE TOLMIE DISTRICT.

7. In 1886 blocks on the Tolmie Tableland were thrown open for selection, and were eagerly applied for. The belief was held locally that a railway was to be built to the area.

8. The settlers struggled on, but owing to the long distance to the railway stations (Wangaratta 40 miles Benalla 38 miles,and Mansfield 16 miles) and the rough roads, most of the settlers lost heart, and abandoned their holdings. By 1928 there had been practically no resumption of the blocks, despite the extension of the railways to Tatong,and Whitfield, and the improvements in local roads. Without a railway grazing was compulsory,as there was no satisfactory methdd of transporting produce to market.

DESCRIPTION OF COUNTRY.

9. The Tolmie Tableland is situated in the Wombat Ranges, between 2,000 and 3,000 feet above sea level. Mahaikah is a township site about 2 miles east of Tolmie on the road to Whitfield. There is a good road from Tolmie to Mansfield, and a steeper,rougher road to Whitfield. There is a new road from Tatong, to Mahaikah.

10. Owing to the elevation of Tolmie, the climate is rather cold in winter for livestock, but with provision of cattle rugs and comfortable housing this should be no great detriment. The serious handicap is the absence of good and cheap transport.

11.The soil is of a volcanic nature,while further north sandy, clayey and limestone soils are met with. Between the various streams some of the broader timbered ridges have been cleared and cultivated. In the lighter land of sandstone formation, good crops of cereals have been obtained. The district at one time supported a population of about 700, but today, within a radius of 10 miles of Tolmie

township there would not be more than 300 people

The average annual rainfall is 42", and in winter there is frequently snow.

PRODUCTION & CLOSER SETTLEMENT PROSPECTS.

12. On the exceptionally fertile land around the Tolmie district average potato yield being about 6-10 tons to the acre, while oats yield 40-60 bushells to the acre. The district is suitable for potatoes, other root crops, rye, barley, oats tobacco, hops, and maize.

13. In the Tolmie district there have been 145 forfeitures and reforfeitures of allotments.

14. In 1922 two officers of the Closer Settlement Board reported that 1,390 acres of Crown Lands in the Tolmie area were suitable for cultivation. They considered 23 men could be settld onn this area. Most of the good land in the area was held by absentee owners. They reported " the main reason so many failed in this district was the difficulty in carting their produce over bad roads to the rail head....As there appears to be little chance of a railway being constructed into this district for some considerable time, a motor or steam tractor service should be installed to run between Mansfield and Tolmie township. If the freights charged were kept as low as possible it would be a great factor in the successful settlement of this district."

15. Land in the Parishes of Whitfield, Whitfield South, and Toombullup North is steep stoney country, quite unsuitable for settlement.

16. In the absence of closer railway facilities it is unlikely that a Closer Settlement scheme will be undertaken in the immediate future.

TIMBER & FOREST AREAS.

17. There are extensive forests in the Tolmie district. In the Toombullup Parish

Mr.McCashney's sawmill (employing approx. 30 men), is working near the head of Equinox Creek, the timber being conveyed by a private tramline 17 miles long to Tatong railway station. Near the present site there were only another 12 or 18 months cutting but another belt of timber of which he had knowledge would last him for about another 12 years.

18. Reports were made by the Forests Commission ~~xhxnk~~ in 1911, when it was estimated about 111,500,000 super feet would be obtained from 13,000 acres.

19. In 1924 it was estimated a total of 60,000,000 super feet could be obtained in the whole district.

20. The quality of the forests in the Whitfield-Tolmie area is only third rate, when compared with the best forests in Victoria.

VARIOUS CONNEXIONS SUGGESTED.

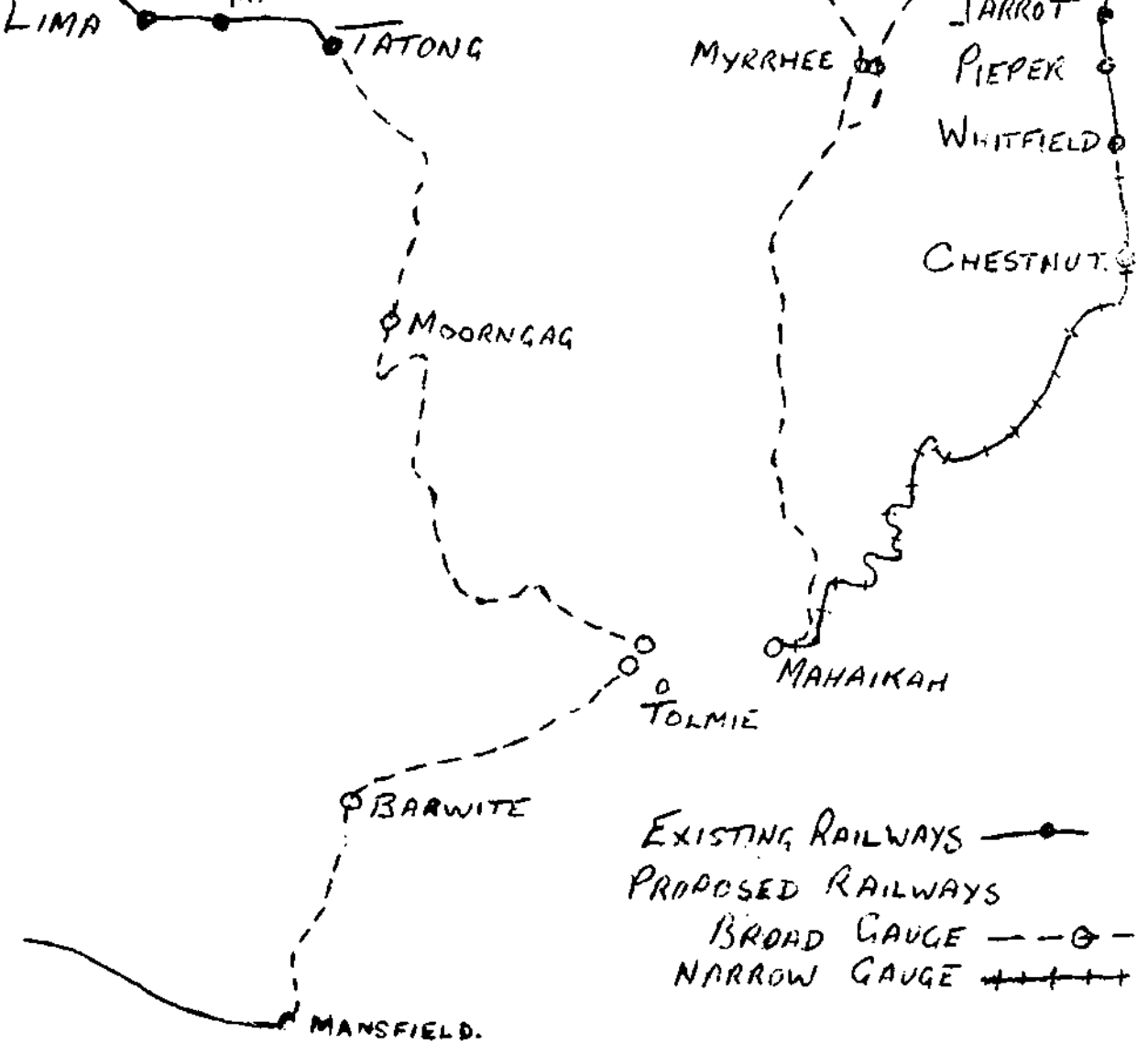
21. In the Tatong and Benalla areas a route from Tatong to Tolmie was favored, either direct via Holland' Creek, or first running north to Mollyullah and then along the Fifteen Mile Creek valley to Mahaikah and Tolmie. At Tolmie, Myrrhee, Moyhu, and Wangaratta the course generally favored was the conversion of the Whitfield line to 5'3" gauge, at least as far as Moyhu, and taking off near Moyhu and following the valleys of the Boggy Creek and Fifteen Mile Creek to Mahaikah and Tolmie.

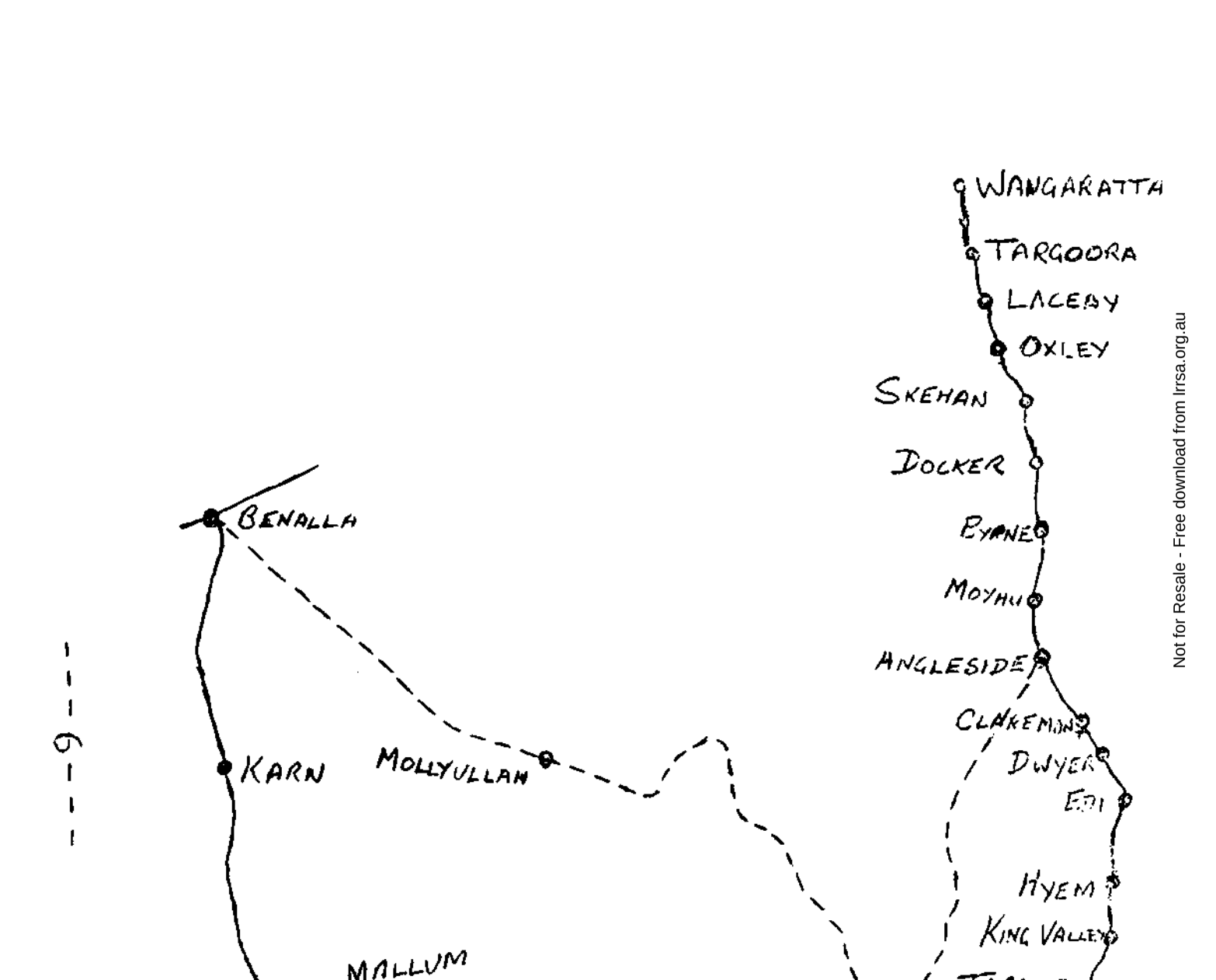
22. The route from Tolmie to Whitfield did not receive general support; nor did the route from Tolmie to Mansfield, it being considered that markets for most of the district's produce would be in towns north of Wangarratta and in the Riverina.

23. A number of people in the Tatong area favored a line connecting Mansfield with Lima, but this was really outside the scope of the present report.

LENGTH AND COST OF PROPOSED ROUTES.

24. The following estimates of cost were submitted by Mr.C.H.Perrin, Chief Engineer for Railway Construction:





ROUTE	GAUGE	LENGTH	RULING GRADE.	SHARPEST CURVE	Cost per MILE	TOTAL COST.
Mansfield-Tolmie	5'3"	14m20c.	1 in 30	5 ch.	£13,786	£196,400
Tatong-Tolmie	5'3"	20 00	30	8	19,715	394,300
Benalla-Mollyullah-Mahaikah	5'3"	42 40	30	8	7,491	310,900
Benalla-Mollyullah-FifteenMile Ck.	5'3"	33 60	30	8	6,358	214,600
Whitfield- Mahaikah	2'6"	20 00	30	2½	12,020	240,400
Moyhu-FifteenMile Ck	2'6"	19 24	40	3	5,400	108,000
Moyhu-FifteenMile Ck	5'3"	19 24	40	8	7,360	142,100
Moyhu-Mahaikah	5'3"	27 67	30	8	8,645	240,700
Conversion of Wangaratta-Moyhu line to 5'3",with third rail between Moyhu-Anglesido	..	17 45	60	12	2,900	51,000
Conversion of Wangaratta-Whitfield line to 5'3".	..	30 13	80	12	2,555	77,600

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SUMMARY OF MOYHU PROPOSALS.

Moyhu to Fifteen Mile Creek,& broad-gauging Wangaratta-Moyhu.£193,100
" " " " " " " " " -Whitfield.£219,700

Moyhu-Mahaika,& broad gauging Wangaratta-Moyhu £291,700
" " " " " " -Whitfield £318,300

25. The original 60 lb. iron rails would be retained on the straight sections of the Whitfield line after broad-gauging, but steel rails would be used on the curves, which would allow DD class locos to run upto 20 miles an hour. No estimate was obtained for the route from Tatong via Mollyulla and the Fifteen Mile creek valley to Mahaikah because of the devious and costly nature of the route.

ROADS.

26. During recent years there has been a gradual and steady improvement. The 16 miles from Mansfield to Tolmie is now metalled and in excellent order. A new metalled road from Tatong to Tolmie is being constructed. From Tolmie to Whitfield (25 miles) the road, of which only 4 miles has been metalled and six miles formed is steep and in places rough.

VIEWS OF THE COMMITTEE.

27. The Committee is of the oppinion that to build the line from Whitfield or Moyhu is undesirable, as this entails the added cost of broad gauging part of the Whitfield line. Alternatively the Tolmie line could be made narrow gauge, but the disastrous experience of the State with its four narrow gauge lines in the past ten years does not lend encouragement to that proposal.

28. Loss on narrow gauge lines.

Colac -Crowes, loss for ten years ending 30-6-27,		£108816
Ferntree-Gully - Gembrook,	" " " " "	£112681
Moe - Walhalla,	" " " " "	£ 66091
Wangarratta - Whitfield,	" " " " "	£ 34645

29. Geographically the Tolmie district is ~~xxxxxxxx~~ tributary to the Mansfield Railway Station, but the greatest demand for Tolmie produce is expected in the north.

30. A line via Tatong to Benalla appears, on the map, an apparently suitable route. However the cost for these 20 miles to Tatong is so great that it would

be cheaper by £83,400 to build 42½ miles of railway via Mollyullah to Benalla, thus paralelling to a considerable extent the Tatong line. This would not be a desirable route. There is not sufficient gathering ground for traffic for a line from Tolmie to Benalla via Mollyullah, while a very circuitous course involving heavy expenditure and interest charges without adequate revenue, would be followed by commencing the Mollyullah deviation at the Tatong terminus, as was propos by several witnesses. The Tatong line was constructed for a capital cost of only £50,940, or £2,830 per mile, and despite the low interest on this account, and that the line has extensive timber freight brought to it by a privately owned treaway, 17 miles in length, from the Toombullup sawmills, the losses during recent years have been as under,

Loss for year ended			30-6-1923 ..	..£1,626.
"	"	"	30-6-1924 ..	..£1,793.
"	"	"	30-6-1925 ..	..£2,392.
"	"	"	30-6-1926 ..	..£2,896.
"	"	"	30-6-1927 ..	..£3,317.

31. In the face of those figures, a steadily growing deficit on a line constructed so cheaply, it will be appreciated that with an extension at a cost per mile of £20,325 the prospects of such a line ever becoming payable are so remote that they at once may be dismissed from consideration.

32. The Committee cannot recommend the provision of a railway to the Tolmie area, in the light of the exceedingly high consruction cost and the limited cultivable area of the better class land.

RECOMMENDATION OF THE COMMITTEE

3. The Committee does not consider it expedient to construct a broad or narrow gauge line to the Tolmie area, but suggests the roads serving the district be improved.

THE PORT MELBOURNE GASWORKS TRAMWAY

By R.Murray.

On 7th. September 1962 Robin Fellows and I examined the remains of a short 2'6" gauge tramway running between an old jetty near Town Pier at Port Melbourne and a gasworks half a mile away. Two parallel lines, laid in concrete, ran the length of the tramway, there centres being 7'4" apart.

Although some of the trackage has either been removed or covered with bitumen, there can be no doubt about the route the tramway took north of Beach Road.

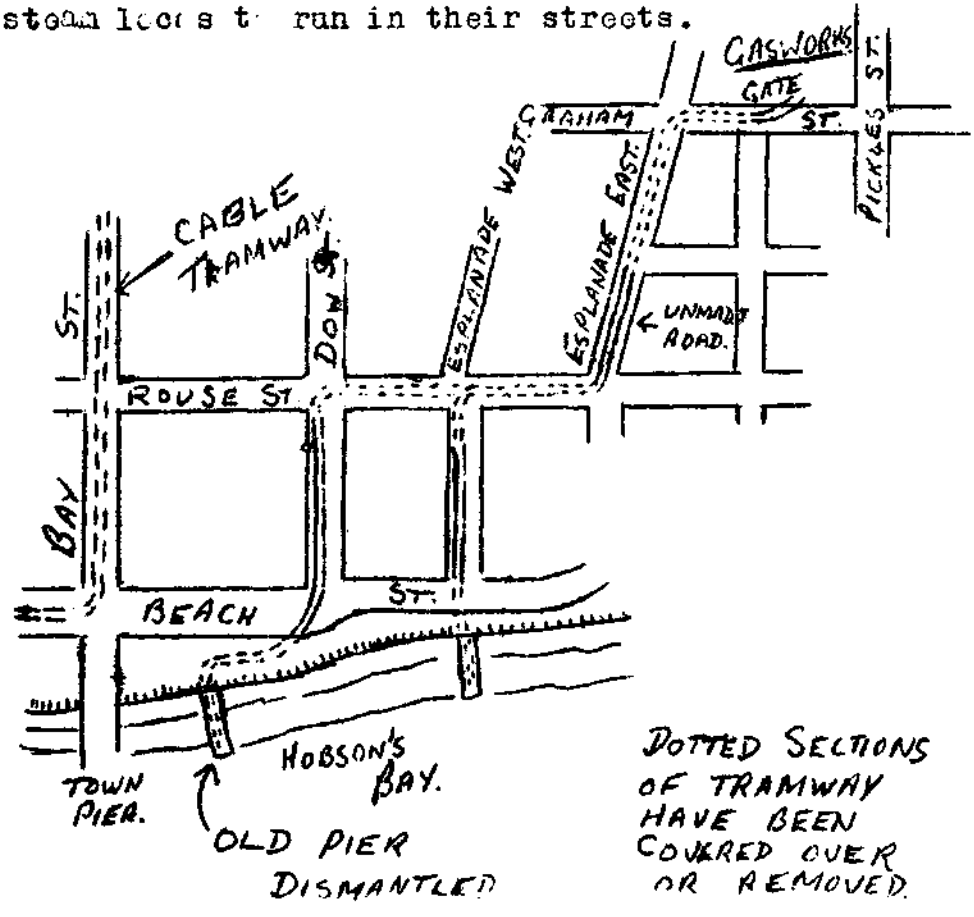
Since 1958 the section along Beach Road between Dow Street and the point where the line turned left onto a demolished jetty, a few hundred feet West, has been pulled up and the right-of-way on the south side of the road has been levelled off with gravel, leaving no trace of the site of the turn-off onto the jetty.

The line runs north along Dow Street on the West side of that thoroughfare, easterly along Rouse Street, northerly along Esplanade East to Graham Street and easterly along the latter for a few hundred feet before disappearing into the gasworks.

There is also a length of line in Esplanade West on the south side of the street between Beach Street and Rouse Street. It cannot be ascertained whether this was the original line or a branch, or what it did on leaving the south end of Esplanade West. It may have been the original line to the demolished jetty via a different route but seems more likely to have gone straight onto the jetty on the other side of the road.

The four remaining sections of the tramway, which in some cases seem to be all that is holding the street together, show no evidence of any points and it seems quite possible that they were operated as two single lines. (this was also noted in 1958 when the section in Beach Street was in existence.) The most likely explanation for there munificence may be that each line was entirley independant of the other and the trams on each line did not shunt at termini.

Motive power on the tramway was horses, as the Port Melbourne Council would not allow steam locos to run in their streets.



NEW BOOKS:-

Speed Limit 20,-The Story of the Narrow Gauge Branch Lines of the Victorian Railways. By E. A.Downs. Published by The Australian Railway Historical Society, Vic.Div. Price:-£2., from all good bookshops.

This 130 page deals very clearly and explicitly with the 2'6" gauge lines of the V.R. including the Port Welshpool horse tramway, and lines proposed but not built as narrow gauge branches. Photos of most items of rolling stock are included, together with many photos of trains on the various lines themselves. Many of these photos have not been previously published. Also included are locality maps of the lines, and track diagrams of the stations. The book is printed on art-paper throughout. The only xxkkx omission seems to be drawings of the locos and rolling stock. This is probably one of the best Australian railway books so far published.

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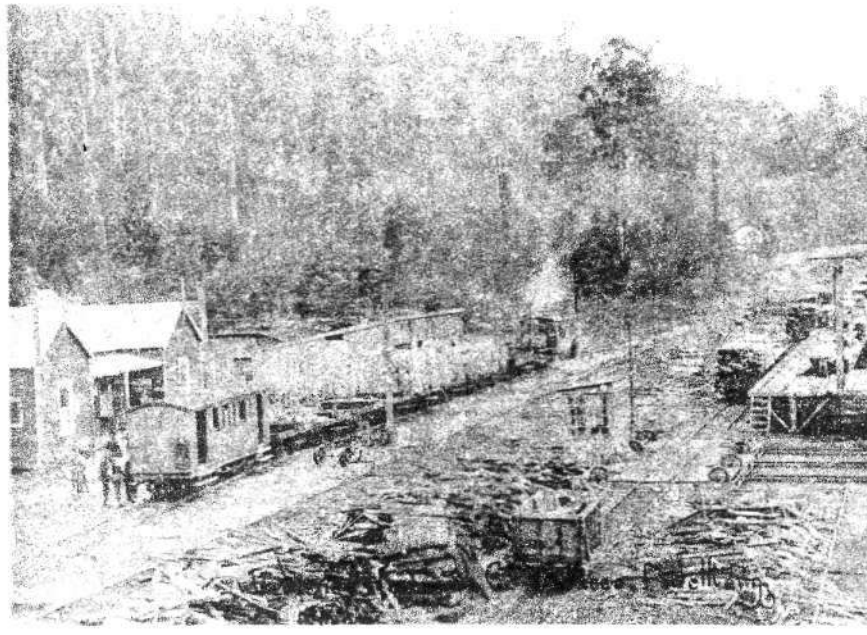
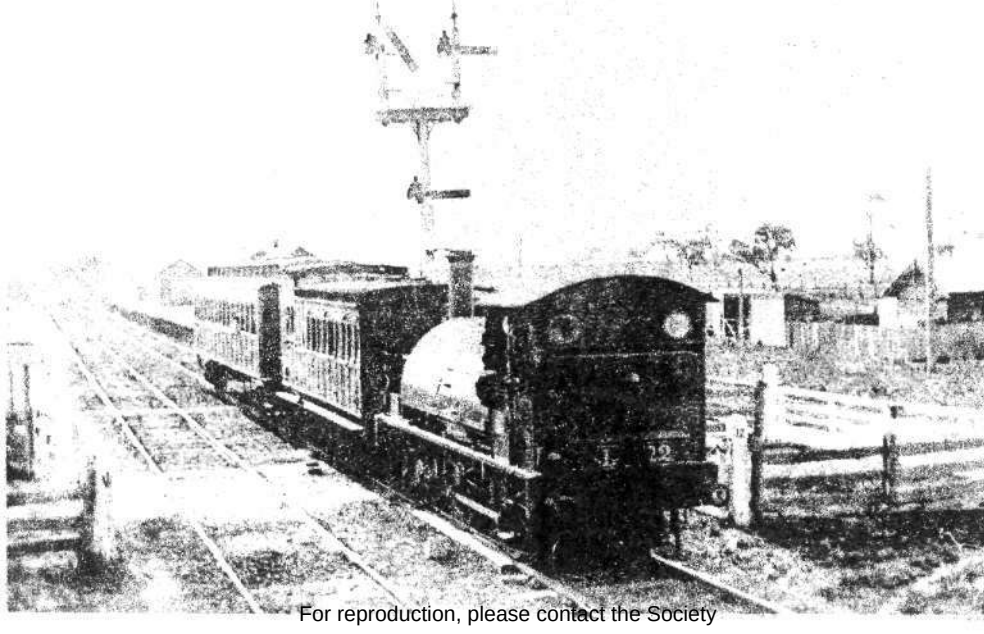
Railroading in Tasmania, 1930-1962, by T.C. Cooley, published by the Tasmanian Govt. Price 30/- from all good booksellers.

There is a large photo section in the back of this book, in which is reproduced about 200 excellent photos, many of which are very old. This book is well worth the price just for these photos. Unfortunately the 157 pages of text cannot be recommended. The text is full of in-accuracies, as well as type setting errors. The text is also very badly balanced, a large proportion of the book being taken up with details of accidents. There are two reliable chapters by Professor W.A. Townley, these deal with the Launceston and Western Railway Co., and the Tasmanian Main Line Railway Company. It does not seem to do justice to these two articles that they should be published in a book of this nature. Even the map at the beginning of the book is incomplete.

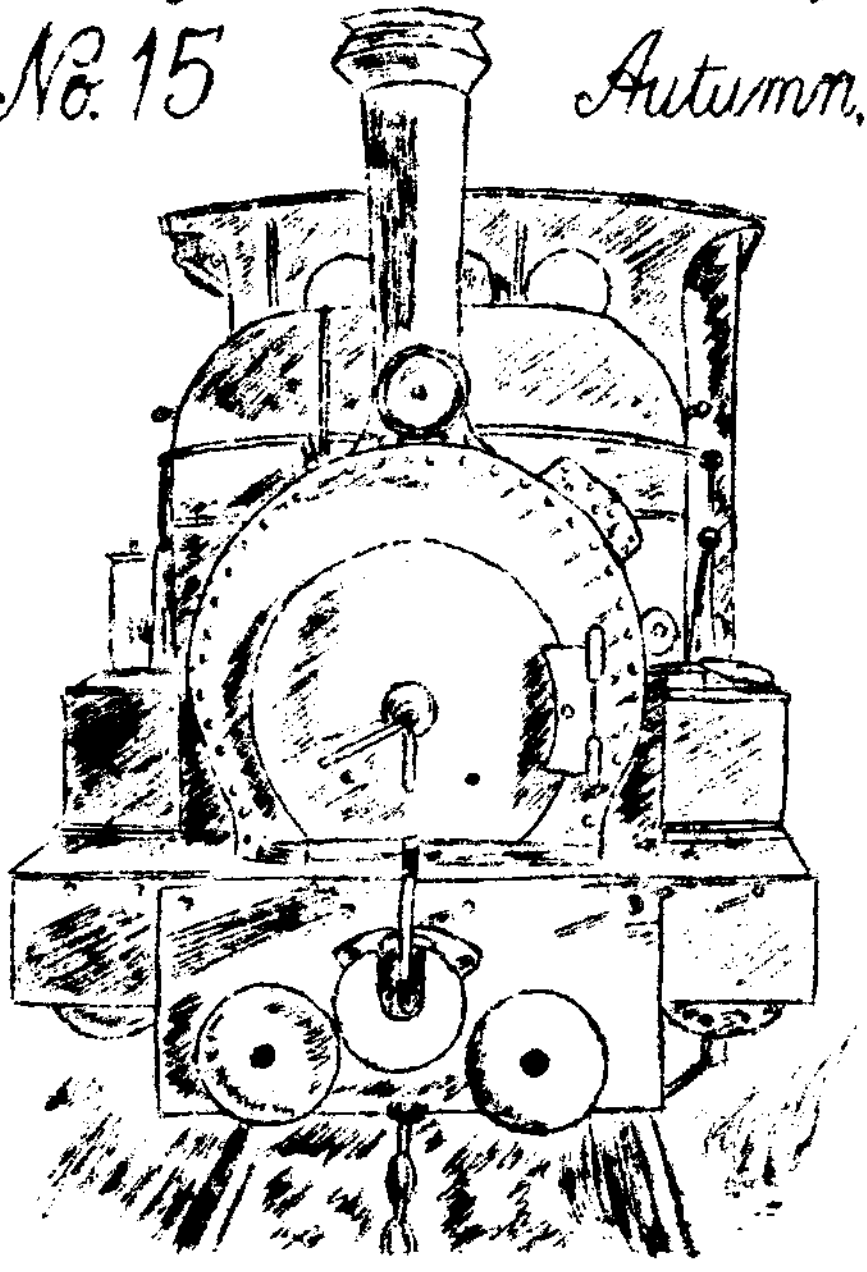


Above: Powelltown,1919,Little Yarra on train.
Below:Somerton,c.1900,"L"class on train. V.R. Photo.



Light Railways.

No. 15 Autumn, 1966.



LIGHT RAILWAYS

(Quarterly Review)

No.15. Autumn 1966. Vol.IV.

Price- 10 CENTS

Due to a lack of articles and a lack of time I regret that it has not been possible to publish a seperate Summer issue. However subscriptions will be extended by three months, so that members will still get four issues for their subscription. Meanwhile articles and notes suitable for publication will be gratefully received. ....Editor.

66

At a recent meeting the Council accepted with regret the resignation of our Treasurer, Ross Murray. His contribution to the Society, both as Treasurer and Council member has been considerable, and we are sorry that pressure of other commitments has caused him to make this decision.

66

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

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Annual Subscriptioh dating from December 1st.. 1963 to March 1st.1965 is 10/-.

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President: F.Stamford, 9 Mc.Gregor Street, Canterbury, Phone- 83.5873.

Secretary: R.Fellows, C/o. Ormond College, Parkeville.

Treasurer/Vice President: G.Gardner, 232 Essex Rd., Surrey Hills, Phone- 83-3417.

Editor:-F.Stamford, Librarian:-G.Gardner.

NEWS, NOTES & COMMENTS.

Mount Lyell Mining & Railway Co.,- One of the 3'6" gauge Abt rack locos is to be preserved by the A.R.H.S., in Victoria. The loco will probably be brought from Tasmania some time in May.

The M.L.M.R. coach obtained by the P.B.P.S. has been delivered to Belgrave, and is having its interior done up befor going into service. The coach is painted maroon below the waist, and cream above, and has been classed and numbered N.B.L. 1. The P.B.P.S. intends to obtain the remaining M.L.M.&.R. coaches, which total about four.

Gembrook line:- Geoff Gardner advises that the goods shed at Gembrook is still in existence, and is being used to store hay. Cockatoo station yard is being used as a gravel dump.

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THE STAWELL - GRAMPIANS TRAMWAY

D. Jowsi

According to the V.R. this line was opened on 26-6-1905, but from what I can make out it was taken over by them on that date. In 1887 there was a siding between Stawell and Deep Lead known as the Grampians Siding and this was probably the early connection to the tramway. One of the timber bridges has dates cut in the timbers, - 6/99, and 8/00. A fifteen mile long line with few engineering works should not take five or six years to build.

At the terminus the quarry is still worked by Standard Quarries Ltd., and they are situated in the old yard, where the only remaining track is situated, in the form of a set of points.

The P.M.G. purchased the right to dismantle the line, and used the rails as telegraph poles.

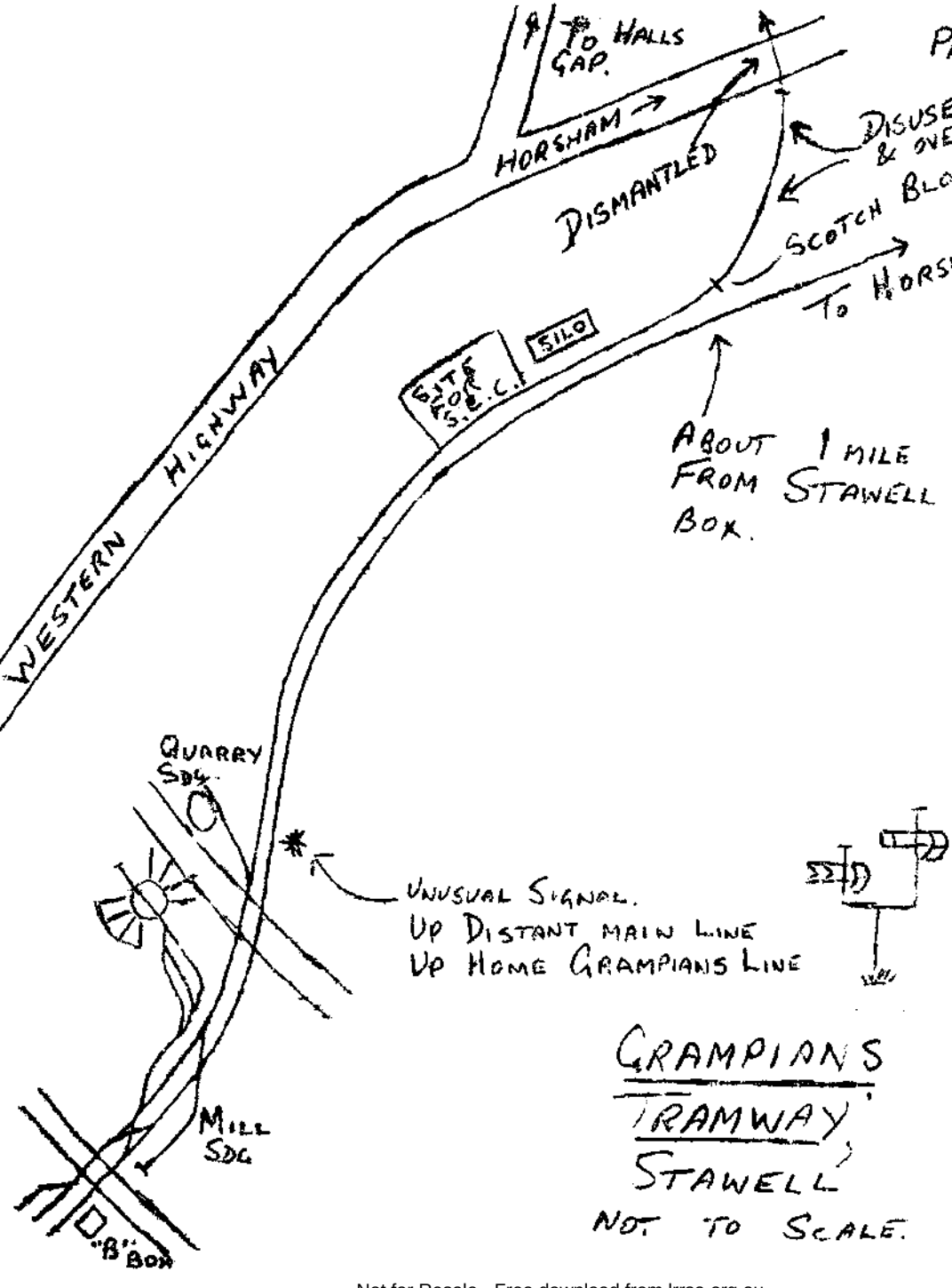
In the last mile or so before the terminus there is a stretch of 1 in 30 with two concrete and steel bridges. Only the concrete piers and abutments remain, the spans being about 20' each. These bridges were apparently built long after the line was opened but have no dates on them. Sleepers remain along the whole of the line, as well as several low timber trestle bridges.

About a mile of line between Stawell and Fyans Crock, is now a road and I could not find any trace of Fyans Creek station. The new Bolte Highway under construction between Horsham and Hall's Gap passes about ¼ mile from the terminus, which is at the feet of a very high rock wall, on the northern side of the Grampians.

The only photo I have ever seen of the line in operation shows a DD on a five car passenger special.

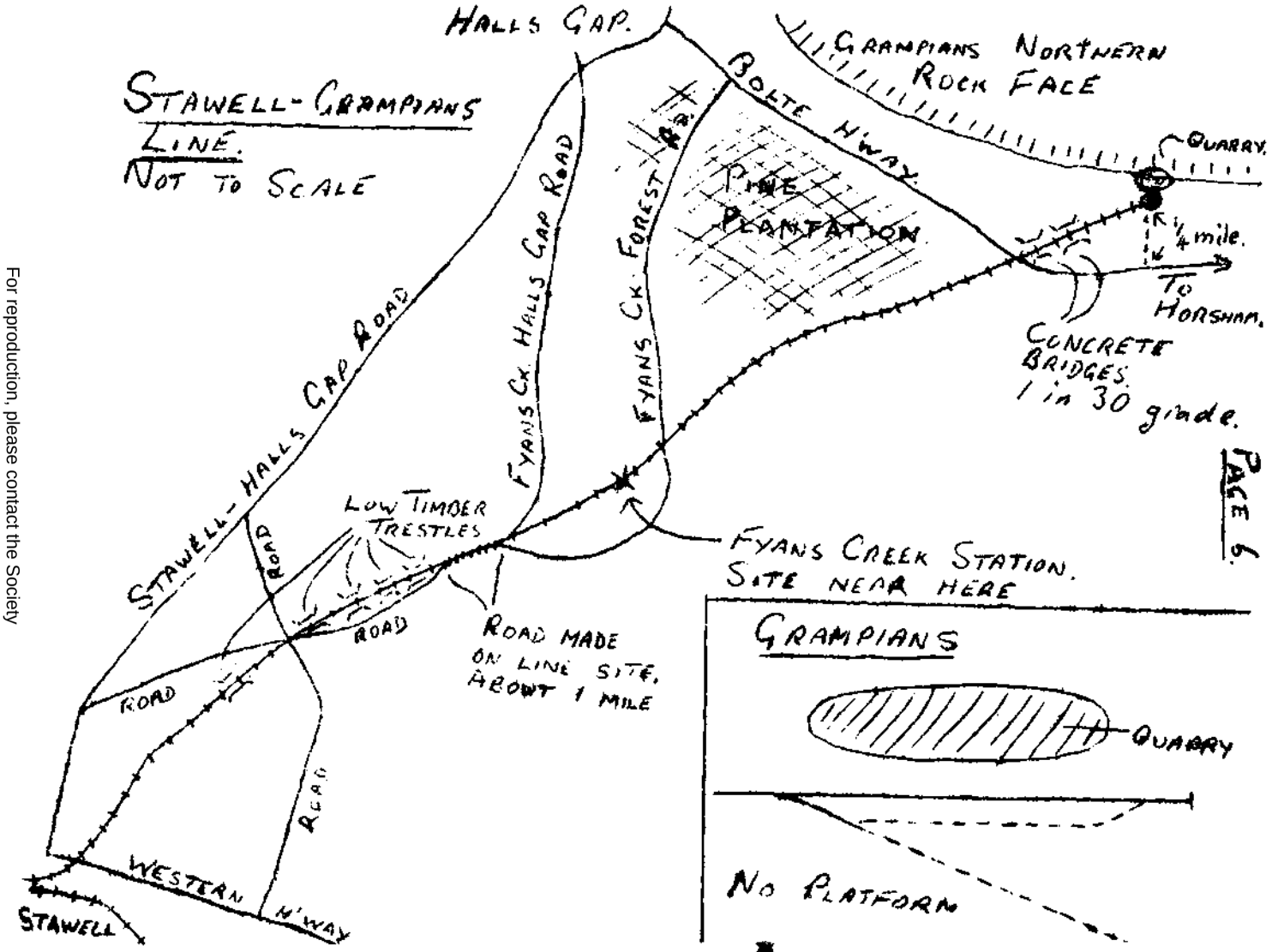
The line is still intact as far as the Western Highway crossing, about ½ mile past the wheat silo, where empty wagons were stored during 1956, the last known use of the old line. From Stawell to the silo the line is used during the wheat season, and to take poles to the S.E.C. site. The train staff for the Stawell-Grampians section is at Stawell "B" box. The up distant at Stawell has the up outer home from the Grampians line on the same post.. Trains are set back daily on the Grampians line from Stawell "B" for about ¼ mile out.

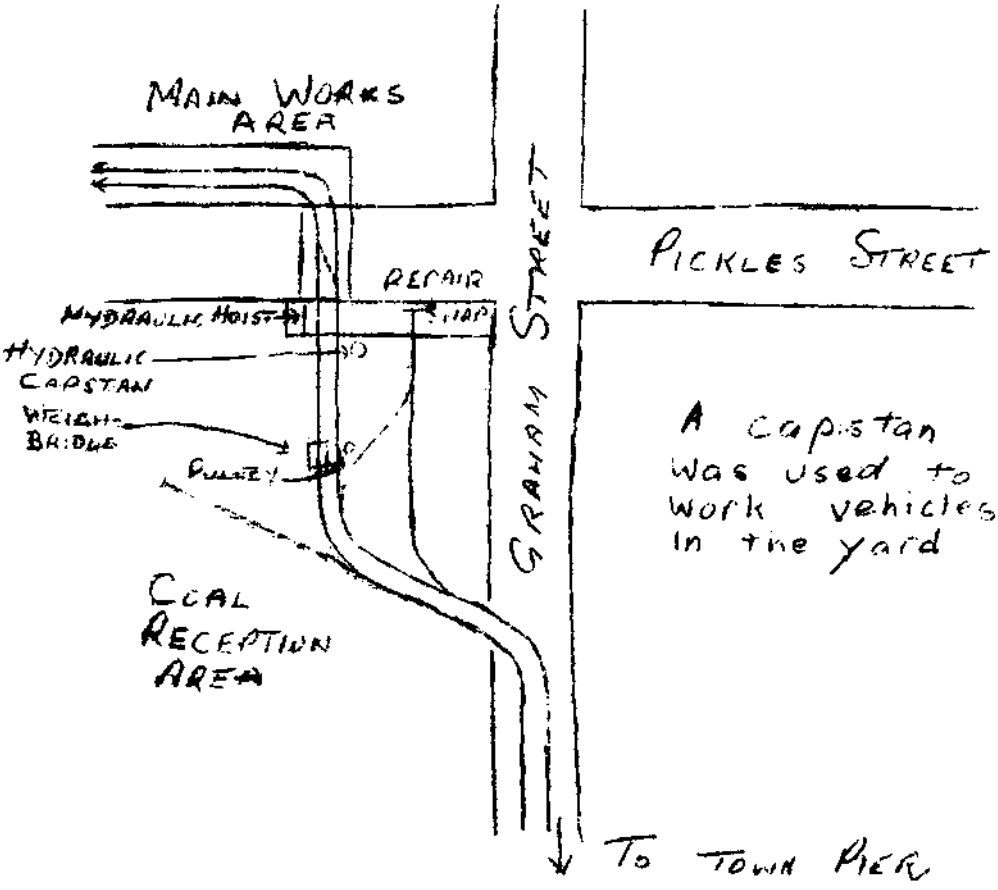
The line was officially closed on 29-3-1949, and had been dismantled by 1956.



GRAMPIANS TRAMWAY STAWELL

NOT TO SCALE.





SOUTH MELBOURNE GASWORKS
TRAMWAY TRACK LAYOUT IN THE COAL RECEPTION AREA.
NOT TO SCALE.
DIAGRAM BY W. L. WILSON
(SEE ARTICLE IN SPRING 1963 ISSUE).

South Melbourne Gaswor's Tramway. —J. Wilson.

With regard to R.Murray's article on the above tramway in the Spring 1963 issue I believe the following notes may be of interest.

The Melbourne Harbor Trust had adopted plans to widen Town Pier to a width of 100' on the 4th. September 1889. But the Metropolitan Gas Co. later asked that the pier be widened further to provide for the rails of the tramway.

The Trust on November 27th. of that year agreed to widen the pier a further 25' for a length of 908' 4". Two sets of rails were to be laid, flush with the decking, and connected with the Company's rails in Beach Street. Thos. Dalgish & Son completed the alterations in May 1891.

The tramway was also completed in that year, the original route was along Beach Street, north along Esplanade West, east along Rouse St., north along Esplanade East, east along Graham St., and into the works coal reception area.

In November 1924 permission was given to reroute the tramway north along Dow Street, and east along Rouse St., there connecting to the original tramway. This is the reason there is no sign of points at this spot.

On entering the works area the wagons were put on the weigh-bridge and then hoisted onto a high-level viaduct by hydraulic lift then across Pickles St., into the main works area, and to the various retort houses, still on the viaduct. A Fordson tractor worked the wagons on the viaduct. I have heard that one of the West Melbourne gasworks locos was tried on the viaduct but have not been able to verify this.

The tramway to the pier was closed around 1933.

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WANTED

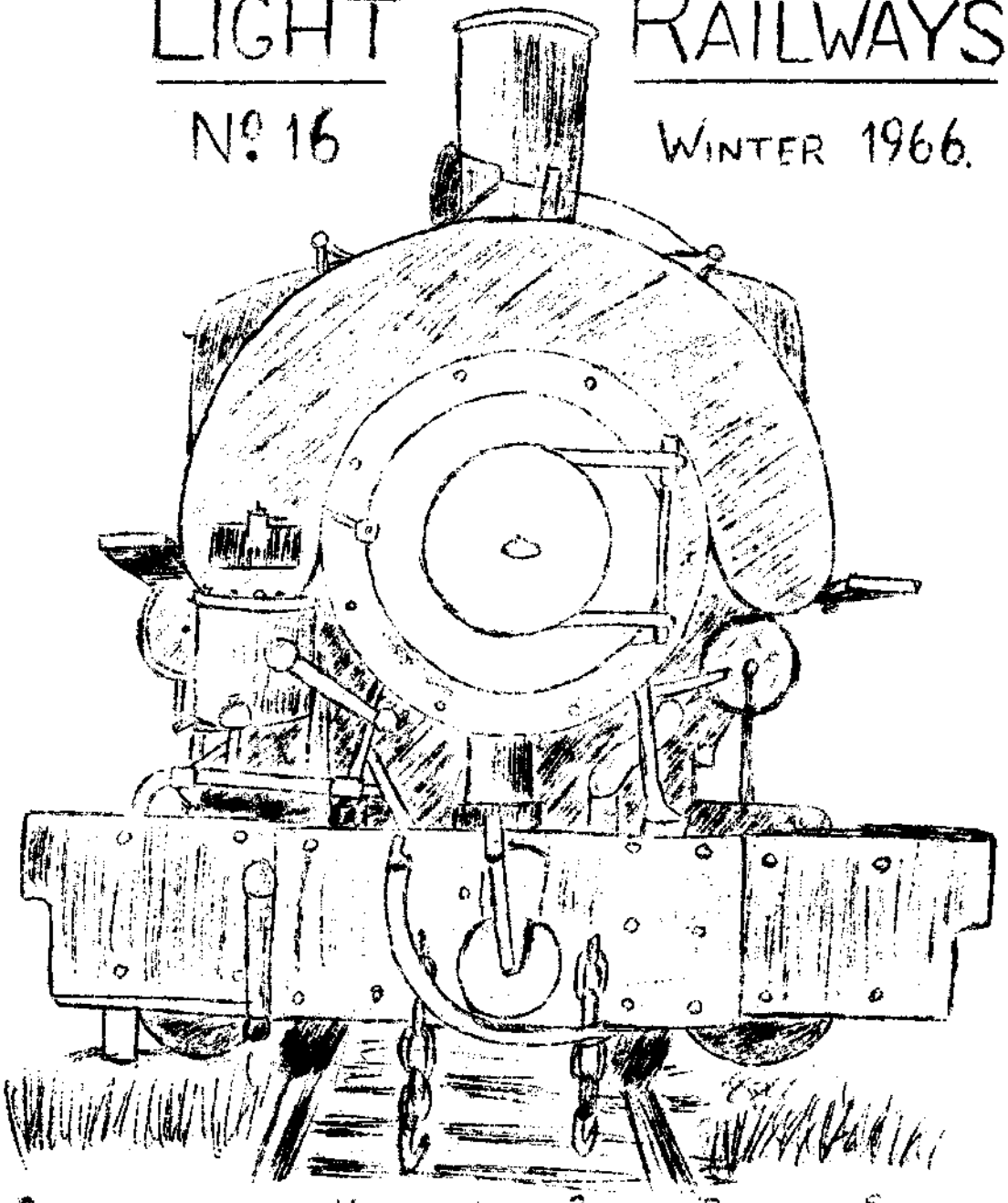
CONTRIBUTIONS FOR THIS MAGAZINE.

ARTICLES, NOTES, DRAWINGS, PHOTOS., ETC.,

Send them to the Editor, 9 Mc.Gregor St. Canterbury.

LIGHT RAILWAYS

No. 16 WINTER 1966.



PUBLISHED BY THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY.

LIGHT RAILWAYS
(Quarterly Review)

No.16. Winter 1966. Vol.IV.
Price- 20 cents.

Editor's Note:- I hope that this, and the two following issues should run into 40 pages, from the financial aspect this is possible, but we must have a good influx of articles, if a magazine of this size is to be maintained. There is a very wide and interesting field to cover, from horse operated timber railed tramways, to the 60 lb. per yard steel railed lines of the V.R. So, if you want the magazine on time, send some contribution in. Members should also try to obtain more members, as the more members we have, the more contributions we should get.

I am sorry that so much of this issue is devoted to W.A., but I had to fill out the magazine to a reasonable size someway. I think we should have some interesting articles in the Spring edition, however.

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY
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Annual Subscription: 75 cents

NEWS, NOTES & COMMENTS.

Emu Bay Railway Co.- This highly efficient organization took delivery of its fourth 10 class Bo-Bo diesel-hydraulic loco during May. As a result the four steam locos that remained in reserve were removed as quickly as possible. Australian Standard Garratt No.17 was cut up during June, and A.S.G. No.16 has since,or is now being cut up. Dubs No.6 is to be preserved at the School of Mines at Zeehan. Dubs No.8 may be privately preserved,otherwise it will be cut up.

Tasmanian Government Railways:-The T.G.R.'s 2' gauge 0-4-0-0-4-0 Beyer Garratt, K1, which was returned to Beyer-Peacock in 1947 for preservation in England, has recently been sold to the Festiniog Railway Co. who hope to restore it to running order and have it operating on their line in a few years time. While this is good news it is most regrettable that due to the restricted clearances in the tunnels on the Festiniog line, the funnel, dome, and cab of the engine will have to be cut down. This, I fear, will destroy much of the character of the engine. It is also interesting to note that the Welshpool & Llanfair Light Railway has recently purchased a 0-4-4-0 mallet tank engine from Bowaters Sittingbourne Railway. This engine was built in 1953 by Bagnall. This means that in a few years time it will be possible to see examples of mallet, garratt and fairlie locomotives on the Welsh narrow gauge lines. It seems a pity that the P.B.P.S. does not intend to follow this lead by restoring G.42 to operating condition. The P.B.P.S. does suffer from a lack of variety in motive power.

Powelltown Tramway:- Mark Plummer reports that one of the high curved timber trestle bridges beyond Powelltown has been blown up by the Army, as an exercise. This is a pity as these magnificent structures were one of the last really tangible remains of the tramway.

Mark Plummer also reports a rumour regarding one of the Powelltown Shay locos. One of these was sold to a timber mill near Omeo, and apparently was sent there almost complete, although without the bogies. Apparantly the timber mill recently finished using the Shay, and an enthusiast in Boronia is reported to have purchased it and had it transportded to Boronia. He then went to Powelltown and found various fittings amongst the rubbish there. Apparently the only major items which are missing are the bogies. Any confirmation or denial of this rumour would be welcome.

Victorian Railways:- Only three N class locos are now in service, and the last run by a member of this class is scheduled to take place on October 8th, on a fan trip.

Mount Lyell Mining & Railway Co.:- The Abt loco (No.3) donated to the A.R.H.S. Vic.Div., has now arrived in Melbourne, and is in store at West Melbourne. It will probably be transported to the narrow-gauge museum at Menzies Creek later this year.(see page 5).

Australian Cement Ltd., Fyansford,:- Mark Plummer advises that a Beyer-Garratt was being used in the quarry, as shunting engine, during May. The editor visited Fyansford on August 15th., to ascertain the current position. The conveyor belt went into operation on 3rd. May for the first time. For the following couple of months shunting locos at the quarry and cement works were maintained in steam, so that the train service could be restored at short notice on the numerous occasions that the conveyor belt broke down, or required adjustment. As recently as August 10th., 11th., and 12th., the railway was in full operation, the conveyor belt being out of action. On the day of my visit, the conveyor was in operation

and all locos, except No.6, the Hudswell-Clarke were in the shed, not in steam. No.6 works the workmen's train every day, whether the conveyor is working or not, and on this day I found it in the deep cutting on the river bridge side of the tunnel, with a permanent way train consisting of two steel flat wagons. They were replacing some sleepers, so obviously the line is likely to see a few more months of operation yet.

Beyer-Garratt loco No.1 still has No.2's centre (boiler) unit; while No.1's centre unit stands outside the engine shed with its boiler missing. Garratt No.2's engine units are in the shed. Australian Standard Garratt, No.3, was undergoing some maintenance and repair so that it could be steamed on September 10th., when the A.R.E. visits the line. This engine is now unique, and it is to be hoped something is done to ensure its preservation. Vulcans Nos.4 & 5 were both in the shed, not in steam; while Perry No.11 was also undergoing some maintenance.

The Mc.Kenzie & Holland automatic absolute permissive colour light block signalling is now out of use, some signals have covers over their lenses, others have had their heads removed, leaving only the mast standing, while in some cases only the concrete mast base remains. The points of the river crossing loop have been removed, as has most of the loop itself, and it is difficult to locate the position the loop occupied.

Puffing Billy Preservation Society:- The M.L.M. &.R. Co. Abt rack loco No.5 arrived at the museum at Menzies Creek on 13-8-66, and is reported to be in very good condition. Already at the museum is the Forestry Commission's Climax; a 2' gauge Hudswell-Clarke 0-4-2 ST. from Qld.,a Fowler traction engine, a steam roller,and four 3' gauge timber bogies.

WANDERINGS IN THE WILD WEST. by F.Stamford.

While on a trip around south west Western Australia in February this year I decided it might be worthwhile to head for Leonora, in search of the 20 inch gauge C-6-2T locomotive which was said to be preserved there. It was, I thought, worthwhile making a long trip through the wilderness to see an engine of such an unusually narrow-gauge.

The first stage of this trip requires going to Kalgoorlie (from Perth) on the overnight train, however I took a more indirect, slower route, which had the advantage that diesel-hauled trains were escaped from for a while. I left Perth on Tuesday night on the "Albany Progress", this train leaves Perth at 7-15 p.m. and travels in a south-easterly direction to Albany, on the South coast. It is typical of the overnight passenger trains run by the W.A.G.R., having modernized first and second class non-airconditioned sleeping cars; which are very well appointed inside, and very comfortable to travel in. The first class cars have hot and cold running water, and a shower compartment. Like the other overnight passenger trains of the W.A.G.R. this one has a buffet/lounge car, of exceedingly cunning design so that only one attendant is required to operate it, and also of extremely imaginative design as far as the interior decoration is concerned. These are the best designed refreshment vehicles of their type I have seen, and railways of the Eastern states may be able to learn a great deal from them.

These overnight passenger trains attract few passengers, but they do carry heavy parcels,

mail, and newspaper traffic, and there are usually a few refrigerator vans attached as well. Precisely at 7-15 p.m. the X class diesel-electric drew the train out of Perth, and this was the only time on this particular trip that the timetable was punctually adhered to. I think I should say something about the delightful little X class diesel, whose stench was now wafting through the train. These engines are of the 2'Do2' (4-8-4) wheel arrangement, and have an axle load of only 10·4 tons, being a true light lines engine. They are notable for their noise, which is completely out of all proportion to their size; their pungent odour; and their very smokey exhaust. They are the only diesels I know of that throw out cinders (unburnt hydrocarbons). Inumerable modifications were made to these locos before they could be regarded as reliable; and they did have an interesting propensity to burst into flames for no apparent reason, but they seem to have been cured of this, for much to my regret I did not witness this fascinating spectacle.

At 1-50 a.m. we arrived at Narrogin, 17 minutes late. This was where I left the train, which stops here for about 10 minutes to unload parcels. The Albany Progress then headed south, and I settled down for a chilly wait for the 3-30 a.m. goods to Merredin, the low temperature giving no indication of what was to follow later in the day. There are two cross country lines from Narrogin to Merredin, the direct line via Dickepin on which trains are timetabled to take 12 hours; and the indirect line via Kondinin, on which trains take about 15 hours. I travelled the short route, as it gave me a better chance of catching the Kalgoorlie train at Merredin.

This particular train is in the working time-

table as a goods, with the footnote that a ZA brakevan is to be attached. ZA brakevans have, passenger compartments, however in this case, as I expected, an ordinary van was attached. On several previous goods trains on which I travelled, ZA vans were not attached, although they were supposed to be.

However, I settled down amongst a pile of mail bags, and after a violent argument took place between the guard and a shunter, over whose fault it was that the train was overweight, we finally departed at 4-00 a.m. and I got a few hours sleep. The sun was up by the time we arrived at Wickepin, where we spent quite a bit of time shunting and I took the first pictures for the day. The loco was a PM class 4-6-2 in a rather grimy green livery, these are exceedingly handsome, well proportioned engines in the best English colonial export tradition.

The line on which we were travelling passes through the wheat belt. consequently it is fairly level and reasonably straight, while the scenery is no-where near as inspiring as that to be seen in the south-west. We had large consignments of superphosphate on board, and a few wagons were dropped off at almost every station,- this caused a great deal of time to be lost. At 11-30 a.m. we arrived at Corrigin, a reasonably large town, where I managed to get some lunch. After two hours of desultory shunting, everything went quiet for about an hour, then finally at 2-30 p.m. we proceeded on our way, by this time we were only about four hours late. The temperature had been gradually rising and by this time it was over the century, and remained so for the rest of the afternoon. This tended to make

the trip mildly tiring:

Further shunting took place at intermediate stations, all serving very small towns, and at 5-20 p.m. we arrived at Bruce Rock. the third large town we had been through. When I say large I mean the town possessed a few shops rather than just one general store. We spent an hour here, a little shunting being done, this was followed by the usual period of inactivity which seems to be inseperable from railway operation. At 6-20 p.m. we were on our way again, shunting being indulged in at Jura, then we continued into Merredin uneventfully, arriving there at 8-20 p.m.; only four hours and forty minutes late.

Merredin is quite a large town, and fortunately a café was open at this hour so I managed to get some dinner, then returned to the station for a two hour wait for the Kalgoorlie passenger train. During this time the inevitable W.A.G.R. road bus heaved into sight, this particular one having come from Perth. The W.A.G.R. uses buses extensively to complement and replace its train services, and the vehicles it uses are of a far superior design to those used by private operators in the Eastern states. Much as we, as railway enthusiasts, may regret passenger services being replaced by buses, a system of buses operated by the railways themselves does have much to commend it, and avoids the many abuses which are possible where buses are run by private operators. The W.A.G.R. co-ordinated system is extremely efficient, and provides a transport service which all the Eastern states should view with envy.

At 11.09 p.m. the Kalgoorlie train arrived,

the loco being an A class diesel-electric, of Co-Co wheel arrangement. These are Clyde G.M. products, similar in style to our T's but somewhat larger. I was soon in my berth and settled down for a good night's sleep. Next morning, after a hot shower, I had breakfast of braised steak and onions in the buffet car, the service being courteous and efficient, as I had come to expect in W.A.G.R. buffet cars. At 7-55 a.m. we drew into Kalgoorlie, forty minutes late. Time-keeping on these overnight passenger trains does not seem to be particularly good; in this respect they are like the "Overland", but the "Overland" does not have civilized refreshment facilities.

Whilst waiting for the 9-30 a.m. Leonora goods with car attached, I witnessed a great deal of activity when the "Westland" express came in from Perth, and disgorged its passengers into the waiting Commonwealth Railways train. Meanwhile at the back of the station two more of the inevitable buses were loading up, prior to departure for Coolgardie and Esperance in the south.

After all this activity Kalgoorlie soon returned to its normal tranquility, and I discovered that the 9-30 Leonora train was going to leave at 11-00 a.m. The opportunity was then taken to have a look at Kalgoorlie, an interesting little city which appears to have been stagnant, as far as growth or decline is concerned, for the past 30 years. The shops in this city are quite well kept, but their style of interior and exterior decoration appears to be that of the 1920's rather than that of the 1960's, and this

gives the city a character all its own.

Returning to the station at about 10-30 a.m. I found a couple of refrigerated vans, the Leonora coach, and the brake-van in the platform, with no sign of any officials or any activity. Quite a number of passengers were waiting around the train, mainly aborigines, but there were six whites travelling, including a W.A.G.R. official from Narrogin, who travels on the line once a month, for what purpose I am not quite sure.

The coach used on the train is quite an interesting piece. It is a typically English style compartment coach of about 1900, with so-called dog-box type compartments, and a toilet for each compartment. Externally its condition was excellent, having recently been repainted in green and cream livery, with all the iron handrails in black; and it was absolutely clean and shiny. It was a delight to behold, and, in the best narrow gauge tradition, horrible to ride in. The interior has not been modified in any way. A drinking glass is provided in each compartment, which can be filled from the water bags which hang from the handrails, outside most compartment windows.

By about 12 o'clock the train had been made up, and it turned out to be of considerable length, with one X class up front. At 12-15 p.m. we were finally on our way. This line passes through former gold mining country, most of the stations once served fairly prosperous towns, but now serve only sheep stations. Mullock heaps and old shafts can be seen for the whole 161 miles, and at some stations, such as at Kookynie, the ruins of shops and houses are still standing. Derelict mining

machinery can also be seen along the way. Scenery is uninspiring, there are plenty of small trees, and a good quantity of scrub and grass; but I saw the area at its best as there had recently been rain.

This was a particularly hot and tiring trip, without even the saving grace of a steam loco belting it out up front to brighten things up. The temperature was above the century most of the day, rising to 103 degrees; and the only place where refreshments can be obtained is at Menzies, approximate half way point, where we arrived at about 3-15 p.m. and departed again at about 4-00 p.m. Menzies is like an oasis in the desert. An elderly woman runs a refreshment room in the large, and somewhat time-worn stone station building. She had quite a good variety of drinks and sweets,and she also supplied sandwiches and tea,- not a bad service considering there is only one train a week! Of course the service was horribly slow, but this is no real disadvantage out in the bush, where there are few passengers and plenty of time.

We proceeded on our way from Menzies, and after doing a little shunting at Kookynie we departed from here minus the guard. That W.A.G.R. official from Narrogin,who I have already mentioned, came to the rescue by clambering along the footboards of the coach, leaping across to the brakevan, entering same and eventually applying the brake. We were then propelled back into Kookynie to collect the guard, and were soon on our way again with more time lost.

We spent about an hour, from about 7 o'clock, shunting at Malcolm. Malcolm was once a large gold mining town, but now there are absolutely no buildings remaining; the wagons dropped off here contain freight to be carried on to Laverton by road; the railway to that place having been closed about nine years ago. It seems the Leonora line will suffer the same fate within a year or two.

Just before 9-00 p.m. we passed through Gwalia, and this was a very sad sight. Gwalia has been a ghost town for about two years; and most of the houses and shops, together with all the mine buildings and much of the machinery could still be seen, silent, dark, and dead, in the moonlight. Two or three houses were still lived in, and had some lights on; but all the rest were empty. Gwalia was the starting point of the 50 mile long 20 inch gauge railway on which the engine I was looking for used to run, the purpose of the line being to bring in firewood for the gold-mine. Gwalia was also once the terminus of the Leonora-Gwalia street railway (tramway) which was operated by horse, steam, electric, and petrol vehicles, in that order; and which finally closed down in 1918; well after Leonora and Gwalia had passed the peak of their prosperity.

We arrived at Leonora at about 9-00 p.m., and on leaving the station I was confronted with lights in the distance, and about half a mile of black space in between. Fortunately a local came to my rescue and showed me where the road to the town was, and then showed me a suitable hotel to stay in. I hadn't had any dinner, but I was too tired to worry about this, and was soon in bed. The hotel proprietor's wife was amazed that I should come so far through the

to see the Gwalia engine, and had some unkind words to say about the train service. Leonora is certainly an inconvenient place to have a unique locomotive preserved, but it is certainly worth making the trip to see it,

Next morning I was up early, and before breakfast I discovered the loco I was looking for was just over the road from the pub. It also had a couple of wagons behind it, together with some 2' gauge wagons from the Leonora area. Before long I had taken about 30 photos of the loco., from every conceivable angle; so that I would have adequate information to make a model of the engine should I ever wish to do so. (Any reader who wants copies of any of these photos should contact me, and I will advise what I can supply).

The engine concerned turned out to be the "Midland", built at the W.A.G.R.'s Midland Workshops in 1934. It was in quite good condition, finished in green livery. I don't know what happened to its mate, an older and somewhat smaller Fowler 0-6-2T which was also in service up to 1964. I would have liked to have had a look around Gwalia, but didn't have the time; as the train left on the return journey at 9-30 a.m. (on Friday). The next public transport to Kalgoorlie after that would be the Monday plane, but you would have to be really keen to spend the weekend at this place.

An alternative method of returning to Perth, which unfortunately hadn't occurred to me until after I had done the trip, is to travel on the mail contractor's vehicle from Leonora north-westwards to Wiluna; and then travel on another mail contractor's vehicle westwards

to Meekatharra. The long suffering traveller then joins the Mullewa and Perth bound fast mixed, which leaves Meekatharra at 3-10 a.m. Saturday; and arrives in Perth, 600 miles away, at 7-05 a.m. Sunday. In this way two interesting and very outback railways can be covered; while the route of the former Meekatharra-Wiluna line is parallelled in one of the mail contractors' vehicles. Any reader silly enough to want to do this fascinating trip had better hurry, as the Leonora line is unlikely to last long; and no self respecting railway enthusiast would prefer a passenger/freighter bus with aircraft type seats; to a car goods, even if it does suffer from the indignity of diesel haulage.

As it was I made an almost direct return to Perth, stopping only for a quick 484 mile round trip to Esperance and back.

Corrigendum:-Due to deterioration in the stencil, the top two lines on page 4 of the last issue (No.15,Autumn 1966) were not very clear, they should have read as follows:-

"The P.M.G. purchased the right to dismantle the line, and used the rails as telegraph poles."

WANTED:- CONTRIBUTIONS FOR THIS MAGAZINE!!!

Articles,Notes,Drawings,Diagrams, Maps etc., of light railway interest, particularly of Victorian and Tasmanian interest.Send them to the Editor, 9 Mc.Gregor Street,Canterbury.Phone:83-5873.

ROLLING STOCK OF THE PYANSFORD-BATESFORD RAILWAY.

By F.Stamford.

This list was compiled on 15-8-66, and should be correct as at that date.

Limestone Wagons:- These fall into three groups, viz:- six wheeled with wooden suspension, (described as 6w;ws. in the list below); six wheeled wagons of all steel construction (6w;as.); and four wheeled wagons of all steel construction (4w;as). All three types have identical bodies.

Running No.	Type.	Running No.	Type.	Running No.	Type
1	6w;as	19	6w;as	37	6w;as
2	6w;as	20	6w;ws	38	6w;as
3	6w;as	21	6w;ws	39	6w;as
4	6w;ws	22	6w;as	40	6w;ws
5	6w;as	23	6w;as	41	6w;as
6	6w;as	24	6w;as	42	6w;as
7	6w;ws	25	6w;ws	43	6w;as
8	6w;ws	26	6w;ws	44	6w;as
9	6w;ws	27	6w;as	45	6w;as
10	6w;ws	28	6w;as	46	6w;as
11	6w;as	29	6w;as	47	6w;as
12	6w;as	30	6w;as	48	6w;as
13	6w;ws	31	6w;ws	49	6w;as
14	6w;as	32	6w;as	50	6w;as
15	6w;as	33	6w;as	51	6w;as
16	6w;as	34	6w;as	52	6w;as
17	6w;ws	35	6w;as	53	4w;as
18	6w;as	36	6w;as	54	4w;as

Running No.	Type	Running No.	Type
55	4w;as	60	4w;as
56	4w;as	61	4w;as
57	4w;as	62	4w;as
58	4w;as	63	6w;as
59	4w;as	64	6w;ws.

All these vehicles are said to have been built by Malcolm Moore; although not all of them bare M.M. plates. It appears that Nos. 1-27 originally all had wooden suspension, but some have been rebuilt since. Wagon No. 36 was not in service, but I found its chasis lying upside down on the centre unit of Garratt No.1, where its boiler should have been. Wagon No.21 is painted red, all the rest are blue.

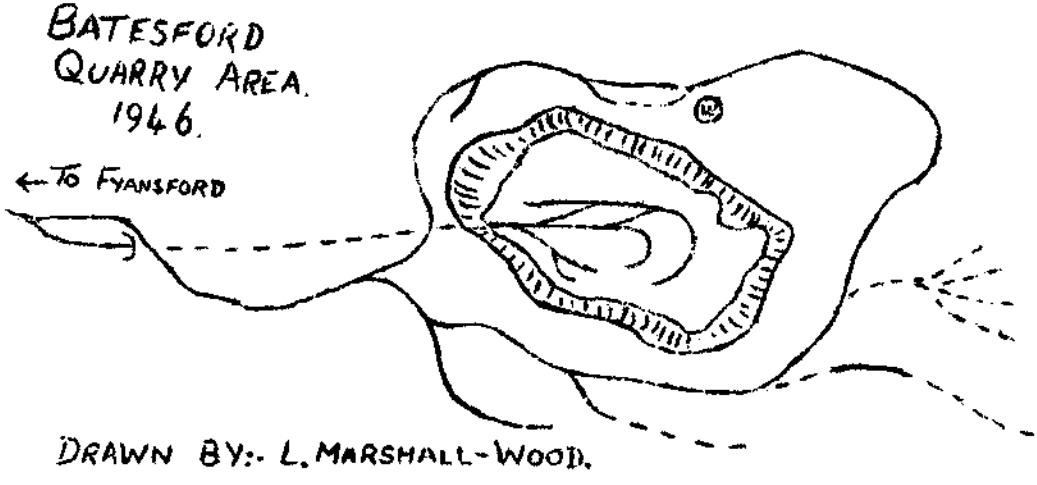
Overburden Wagons:-

No.3, 4w. wooden bodied, steel framed side tipping wagon.
No.4, 4w. wooden bodied, steel framed side tipping wagon.
No.9, 4w. wooden bodied,steel framed side tipping wagon.
Un-numbered, 4w.wooden bodied,steel framed open wagon.
Un-numbered, 4w.wooden bodied,steel framed open wagon.

These five vehicles are the last remnants of what was probably a once numerous group. The side tipping wagons are of quite substantial construction, and may have been the original limestone wagons.

Other Vehicles:-(all un-numbered)

Bogie passenger coach.
4w.steel flat wagon,with 2 vertical handrails at each end,and canopy,with seats inside.
4w.steel flat wagon,with 2 vertical handrails at each end,and canopy,with seats inside.
4w.steel flat wagon,with 2 vertical handrails at each end.
4w.steel flat wagon,with 2 vertical handrails at each end.
4w.steel flat wagon,with steel bar across each end.
4w.steel flat wagon,with steel bar across each end.
4w. weed killer wagon,
Bogie well wagon,all steel. This vehicle was apparently used for carrying road vehicles into the quarry.
Steam shovel, mounted on two 4wheel bogies. This was apparently used for overburden removal, and is very much an out-of-gauge vehicle as far as width and height is concerned. This shovel was self propelled.



THE WALHALLA MINING TRAMWAYS by Mark Plummer.

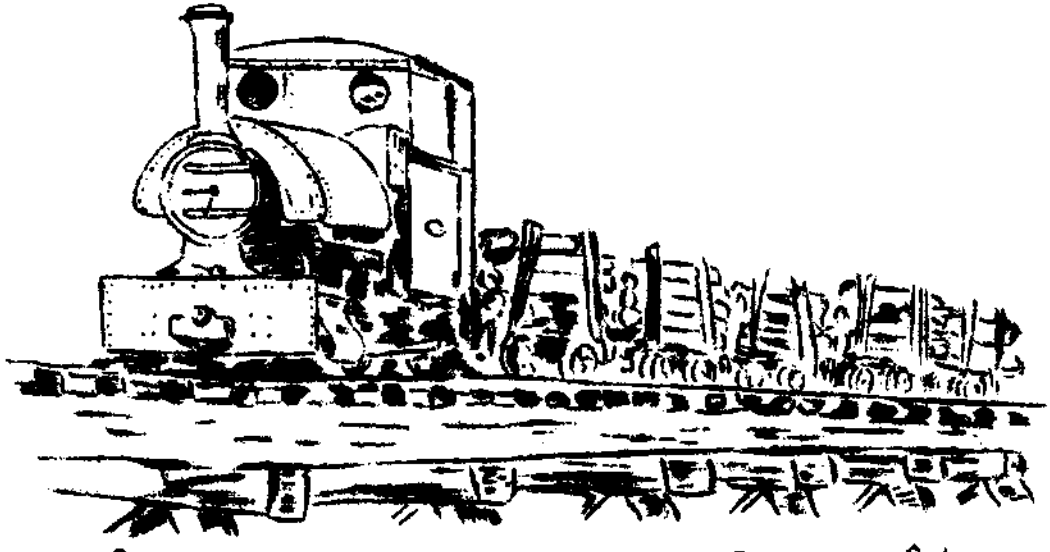
Alluvial gold was first panned at Walhalla (106 miles from Melbourne) in 1862, by Ned Stringer. His alluvial workings grew into the busy mining town of Walhalla in the late nineteenth century. At first timber for mining supports, fuel, and domestic use was drayed to the mines, but by 1866 when timber was already becoming scarce close to the township, three tramways were built. One of these extended a mile up the creek named after Ned Stringer.

These tramways were extended as the town grew, and at its peak there were 40 miles of tramway, of which the Long Tunnel Co. had built 27 miles, at an average cost of £5,200 a mile. So great was the demand for fuel and mining timbers that the mines, in 37 years denuded the Walhalla ranges of their dense forest cover. The construction and operation of the tramways became an industry/itself, mainly in Italian hands.

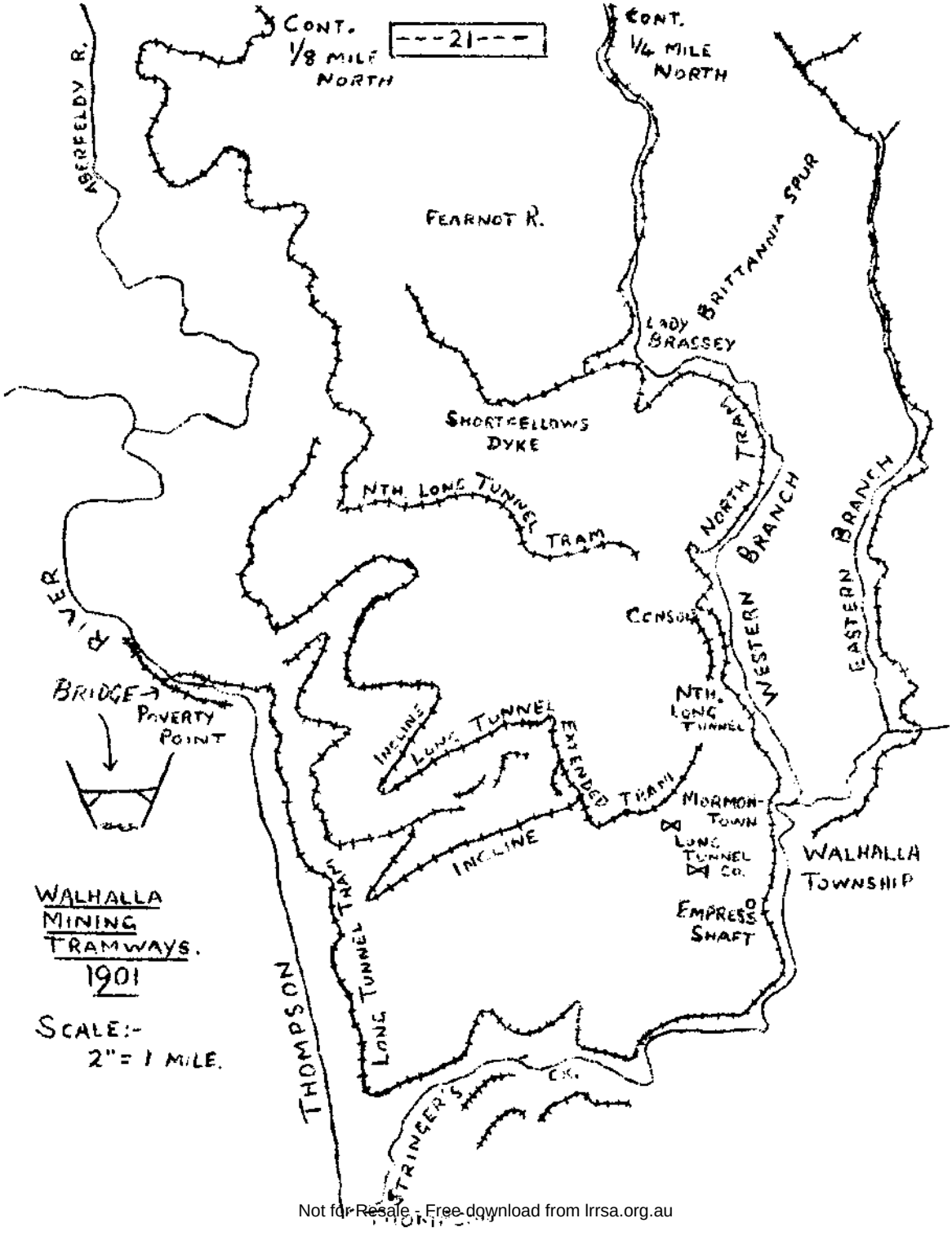
By this time (about 1901) the Long Tunnel Co. in desperation at the delay in construction of a railway from Moe to Walhalla, which was to bring them timber from the forests near to Moe, built its own bridge; a light steel structure of box girder construction. This bridge, near Poverty Point, was 158' long, and 8' wide, and was built to extend its southern tramway into the forest country on the Moondarra side. The bridge cost £1,496 but the extension of this one tramway already seven miles long, was the paramount consideration. In 1899 alone the Long Tunnel Co.'s insatiable boiler furnaces consumed

18,877 tons of firewood in supplying power to the mines and batteries, and in addition the Company brought in 683 tons of mine timbers, and 438 tons of sawn timbers. The Extended mine used 6,400 tons, and the North Long Tunnel 7,071 tons of fuel and timbers, the latter's being brought in by six miles of tramway. The tramways, mostly of two foot gauge, were laid with steel rails along narrow ledges on the side of the mountain. At least one locomotive, an 0-4-0 saddle tank, built by Bagnall, and an electric or battery-electric loco were used by the Long Tunnel Extended Co..

(to be continued).



BAGNALL 0-4-0ST. ON LONG TUNNEL EXTENDED Co's TRAMWAY. (DRAWN BY CHRIS. ANDREWS, FROM PHOTOGRAPHS).



MUNICIPAL TRAMWAY NEWS. By Bob Prentice.

S.E.C., Ballarat and Bendigo:- Increased fares will operate in Ballarat and Bendigo from September 1. The new fares will be:- Short inner-city sections 5c (previously 4c.), one section - 7c,(6c.), two sections - 10c,(8c) three sections - 13c (10c), four sections 15c (12c.). The new fares for children and pensioners will be 4c. for one section and city sections (no change), 5c for two sections (4c), 7c. for three or four sections (6c.).

S.E.C.,Bendigo :- Maximum Traction tram No.26 is at present undergoing an extensive overhaul. Exterior repainting has been almost completed, whilst the interior has been stripped of many coats of varnish and the surface of the seats has been prepared for revarnishing. A false ceiling, painted white, has been installed under the vented part of the tram's roof and the rest of the ceiling has been painted Winter Green.

Of the two Birney trams (Nos.28 & 30), recently damaged in accidents, 28 has been returned to service, whilst 30 is ready to receive its apron, which is receiving attention at this moment.

Readers interested in Municipal Electric Tramways may be interested in joining the Tramway Museum Society of Victoria Ltd. This Society was founded in 1963 as a non-profit organization, and incorporated under the Vic.Companies Act 1961. It was set up as an independant organization to specialize in the accuisition and preservation of tramway vehicles and ancillary equipment for museum purposes only.An operating Tramway Museum is the aim of the Society. Further particulars from The Manager,T.M.S.V.Ltd.,13 High Street, Prahran,Victoria.

FRASER'S (SYMES) ISLAND LIGHT TRAMWAY

By A. Howlett.

The island is situated on Lake King, near Lakes Entrance, and is accessible only by boat, the nearest jetty being Nyerimbelang Jetty on the north shore of the lake. The island, along with Flannagan and Rigby Islands, was originally owned by David Syme, founder of "the Age," for this reason the island is also known as Syme's Island. The Island has a large house with lookout tower.

The existing railway originates under the house, which was built on stilts, on the Western side. From there it runs on to a 1 in 7 grade for 100 yards, halfway down the grade there is a point, which mysteriously has no siding running from it. At the bottom of the grade is another point with a siding 20' long. From here the line curves and runs along level ground to the jetty. Gauge is 2', the track is very light, similar to that of a sugar tramway. Rolling stock on the line in 1963 consisted of two 4 wheel, steel quarry type tipping wagons, and a wooden trolley.

The dismantled line:- When Syme owned the three islands he entertained many guests at his houses on Fraser's and Flannagan Islands. He owned a large deep water yacht but the only place it could be docked was the jetty, so the railway was built to carry passengers and luggage to either house. Later the Flannagan Island area and bridge fell into ruins, and the track was dismantled and dumped near point B. At least three 4 wheel belt driven petrol trolleys were used to carry passengers.

(See map over page.)

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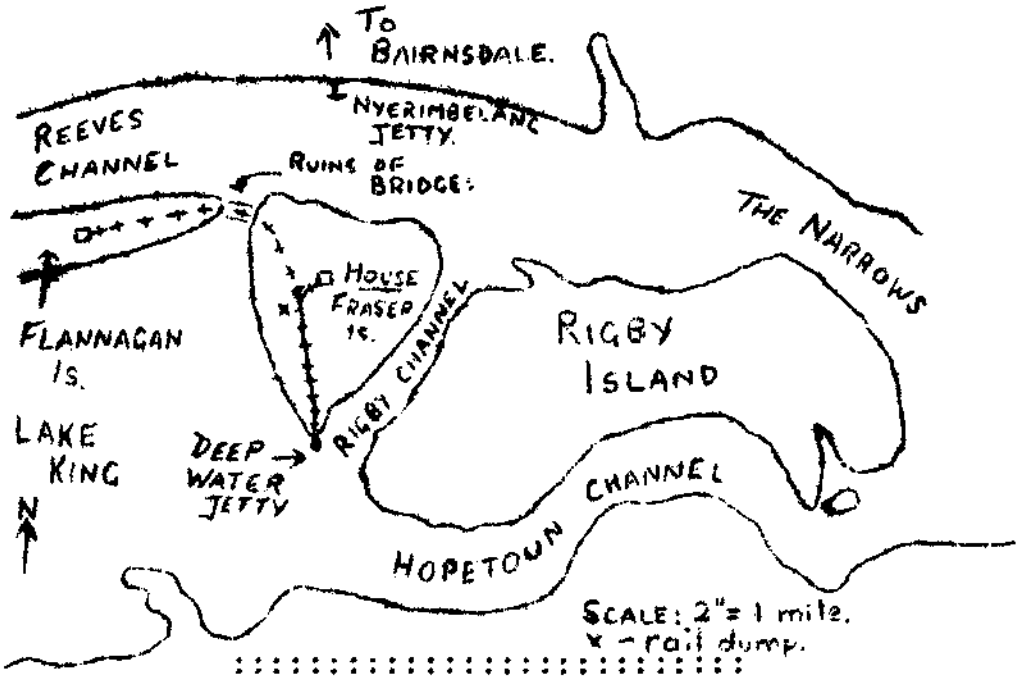

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COMING TRIPS:-

Sept.4th., Belgrave & Emerald (Steam Preservation Co-ordinating Committee)
Sept.10th., Fyansford., Assoc.Rly.Enthusiasts. (probably last chance to see Fyansford operational).
Sept.11th., Belgrave & Emerald (S.P.C.C.)
Sept.17/18., Yanac & Yaapeet. (A.R.H.S.)
Oct.2nd., Ballarat. (S.P.C.C.)
Oct.8th., Last run behind N class.(A.R.H.S.)
Oct.15/16., Deniliquin via Toolamba, return via Bendigo. (A.R.E.A.)
Oct.29th., Avoca-Ararat re-opening, (A.R.H.S.&.A.R.E.).
Aug.28th., L class tram tour. (T.M.S.V.)

For further details on these tours; ring the Editor, - 83-5873.

Oppinions expressed in articles are not necessarily those of the Society.

LIGHT RAILWAYS

No. 17.

SPRING, 1966.

PUBLISHED BY:-
THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY.

LIGHT RAILWAYS.

No.17. Spring 1966. Vol.V.
Price - 20 cents.

The front cover drawing is by C.Andrews.

Members should expect to receive the Summer issue about the 15th. of January. We would welcome more aticles, and news items from readers.

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

Dedicated to the study of the light railways which once served Victoria and Tasmania.

Annual subscription,dating from June 1st.1966 is 75 cents (7/6d.).

Council

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Secretary:- Mark Plummer,
18 Mc.Whae Ave.,Rippon Lea.(53-6794).

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232 Mont Albert Road,Surrey Hills.
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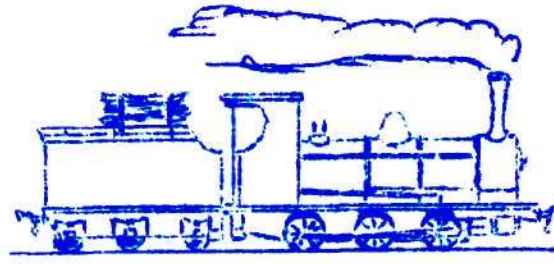
NEWS, NOTES & COMMENTS.



Puffing Billy Preservation Society:- There were two mistakes in our report on the Menzies Creek museum in the last issue. Here are the corrections - the timber bogies are of 2'6" gauge, and the traction engine is a "Foden." Other exhibits not mentioned in our last report are a portable steam engine, and a Mount Lyell four wheel brake van. The 2' gauge Hudswell-Clarke is from the Pleystowe sugar tramway, and was their No.4. (F.Stamford).

Emu Bay Railway Co.:-In a circular to shareholders Directors said they estimated the life of the Roseberry mine to be 18 years. For planning purposes they are accepting 15 years as the likely present life of the railway. ("The Age").

West Melbourne Gasworks Locomotives:-The West Melbourne gasworks had three locomotives on their 2'6" gauge line. Two were 0-4-0T's built by Decauville in 1886,(Builder's Nos.43 and 90), and one was an 0-4-0ST. built by Peckett & Sons (Builder's No.1711).The Decauvilles were named "John Benn" and "Carbon", the Peckett was named "Sir John Grice". Rumours had been circulating as to the where-abouts of these three engines. One had been seen at Valhalla in 1959 and two were supposedly at the Basin. Following these leads I found that the Peckett and one of the Decauvilles were now being prepared for use on a pleasure railway which has been built in an

outer Melbourne suburb. This railway already has ¾ mile of 60 lb./yard rails laid in an oval shape around an artificial lake of four acres. Being a continuous line it does not have any sidings, except for a loop that runs through an engine shed. The Peckett has an almost new boiler but most of the brass mountings have been stolen by vandals. The Decauville is in quite good condition, although at the moment it is on blocks while its wheels are being re-turned. Both locomotives are going to burn wood fuel and apart from nameplates both will look roughly the same as they did at West Melbourne. It is hoped to have the railway open to the public by Christmas, and we will keep readers advised of further developments. Also on the site are two Fowler traction engines, one Ruston-Hornsby traction engine, one Ransomes steam truck, and one portable steam engine.

The other Decauville is owned by a former V.R. engine driver, and he is completely rebuilding his engine. Its frames have been lengthened from 11' to 24' and are now similar to Baldwin frames. Its wheel arrangement is now 2-4-2ST. Its boiler has been moved back. Other dimensions are:- driving wheels- 22½";cylinders- 12" stroke, 7½" bore;grate area- 4 sq.ft.;boiler pressure- 160 lbs.p.s.i.;height- 9'3"; width 6'8"; tractive effort- 3,000 lbs.

When completed about February it will have the appearance of a loco out of the American Wild West, as it will also be fitted with an American style cowcatcher,bell and smokestack. This loco is also planned to be used on a pleasure railway. (M.Plummer).

Australian Cement Ltd.,(Fyansford):- On the high level line at the location where there were two passing loops, one inside the other, the inner loop has now been removed. The conveyor belt crosses the railway at this point;

and the legs of the conveyor belt are located where the loop used to be. The passenger coach is stabled on the outer loop during the day. Not included in the list of rolling stock in the last issue, was a motorized track inspection trolley. This was built by "Fairmont" of Minnesota, and is fitted with an 8 h.p. engine, and a roof. It was found to be too light and underpowered. We believe it has been sold to the P.B.P.S., for a nominal amount.

It is likely that the railway will be maintained in operating condition until December, what will happen then is anybody's guess. Meanwhile great farewell festivities took place on Sept. 10th. when the A.R.E. visited the line. About 370 people travelled down on the train, but there were also many motorcaders and locals paying their last respects to the line. All locomotives were in steam for the occasion, the diesel was also out of the shed but was dead. Three passenger trains were run, made up of limestone wagons with the passenger coach drawing up the rear. Each train ran to the tunnel mouth and was then propelled back to the works, while photo stops were held at the trestle bridge. The first train was hauled by Beyer-Garratt No.1 (with No.2's boiler unit); the second was hauled by the Australian Standard Garratt, the first time it has been used since 1964, and it is said that it pushed the track a couple of inches out of alignment in one place. After the A.S.G. had had its run the Beyer-Garratt ran light engine down to the tunnel mouth, then the third train went out, drawn by Vulcan No.4. Presumably on the latter's return trip the Beyer-Garratt acted as banking engine on the steep climb out of the tunnel cutting, but after assisting up the grade the garratt then followed the train at a respectable distance.

The Company had gone out of their way to make this a fitting farewell to Victoria's last steam operated private railway. It was a remarkably interesting and rewarding afternoon of industrial steam activity, the only jarring note was the sad thought in most people's minds that this would probably be the last time the Moorabool River valley would echo to the distinctive whistles of the Beyer-Garratt, the Vulcans, and the A.S.G. As far as I know the Perry and the Hudswell-Clarke didn't whistle at all, but just looked on, while the bigger engines indulged in one last final fling.

It is also interesting to note that this is the last 3'6" gauge line in Victoria, and with its closing the track gauge that was probably best suited to become the standard gauge in both Victoria and Australia, will be extinct in Victoria. Most of the 3'6" gauge lines that did exist in Victoria were of very primitive construction, the Fyansford line will always be remembered as the outstanding exception. (F.Stamford).

Forests Commission, (Erica):- The Forests' Commission's Erica sawmill has had the benefit of being served by some 2'6" gauge sidings around the mill area. Ex V.R. N.Q. wagons, in a somewhat appalling state of maintenance were in use. We now learn that a private contractor is to remove these sidings. So will be lost the last remnant of the 2'6" gauge in the Erica area.

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HELP! keep the magazine filled with interesting articles and news items by sending in your contribution soon. Let us have a Summer issue bigger than ever, the Editor will be glad to hear from you.

TRAMWAYS OF THE WONTHAGGI DISTRICT,

-Actual and Proposed.

By- W.L.Wilson.

Coal was discovered near Cape Patterson by Hume and Hovell in 1825-26 followed by Dr. Anderson of San-Remo finding the "Rock and Queen" veins in May 1836.

Approval was granted in the 1850's to the Cape Patterson Mining Co. to build a 7⅛-8 mile tramway between Cape Patterson and Anderson's Inlet where they proposed to build a jetty.

The first active coal mining in Victoria was commenced in 1859 when the Victorian Coal Co. sank a number of shafts and bores on their lease near Cape Patterson. About 2,000 tons were shipped to Melbourne by dragging the coal to the beach by bullock teams, where it was bagged and taken in whale boats to ships moored about one mile off shore.

The Company on 15-6-1860 applied to the Government for assistance to build a jetty, which was refused; but in 1862 the Government agreed to give the Company enough rails for two miles of tramway, plus £1,000 if the rails were laid; and certified by a railway engineer that the work had been performed. The land and rails were to remain the property of the Department of Land and Works.

The rails handed over were second-hand Barlow rails from Geelong valued at £955-15-1, plus the £1,000 which was handed over when the tramway was completed. If the 1¾ mile tramway was ever used the motive power would have been animal power, but Mr.N.Levi who controlled the Company stated at a Royal Commission in 1890, that the tramway was never used because the insurance companies refused

to insure the ships, after the moorings laid down by the Government in 1862 had been washed away in a storm. The mine had not been used since 1863-64. A Mr.Hobson investigated the matter for the Company and proposed a 400' jetty at Cape Patterson also a ¾ mile branch to Spring Bay Creek to carry freestone which he proposed to quarry there.

After the Company closed down operations numerous Committees and Commissions brought to light various proposals including a canal from Cape Patterson to Western Port Bay, and across the Mornington peninsula.

In 1864-65 Mr. E. Bage surveyed a route of 3'6" tramway to Western Port Bay. His estimates for the 17¾ miles were £80,000 for 30 lb. rails for horse traction and £122,882 for 56 lb. rails for loco traction. This proposal was revived in 1872 by Mr.F.M.Klouse who suggested a possible branch to Blue Mountain, near Woolamai.

The Government authorized a tramway from the Victorian Coal Company's mines to link up with the Western Port Coal Company's tramway at Kilcunda. The 11 mile line was to be completed in two years, but as far as is known nothing more was done on the proposal.

There was no more active mining in the district until November 1909 when the State Coal Mines commenced operations. Coal was taken by teams to Inverloch, and then by ship to Melbourne, until the railway from Nyora was opened in May 1910.

The State Mine sank eight shafts in the first year, to develop the area more rapidly, and in 1911-12 sank Nos. 9 and 10 shafts. To transport the coal from this mine a 70 chain 2' gauge cable

hauled tramway was constructed to No.5 screens. Portion of this tramway was on a timber viaduct and the endless rope was driven by a 150 H.P. induction motor. This motor could be started at various points along the line where start and stop buttons were installed. This tramway ceased operation when No.10 shaft closed in November 1927.

Work commenced in 1913 on driving the Mc.Bride tunnel which eventually extended to 4,627 feet by 1919. The gradient of this tunnel was 1 in 5½ and there was an endless-rope hauled tramwamway in the tunnel, and on the surface to No.5 screens, 18 chains from the mouth of the tunnel. The rope was driven by a 200 H.P. electric motor.

The V.R. extended the Wonthaggi line to Garden Blocks in 1916 to transport coal from the Eastern Area tunnel which commenced that year. This tunnel also had an endless-rope hauled tramway ultimately reaching 3,975 feet in 1919.

Sidings had also been provided behind the Wonthaggi station in 1919 to serve the station area mine, a 350 feet tunnel which ceased operations in May 1928.

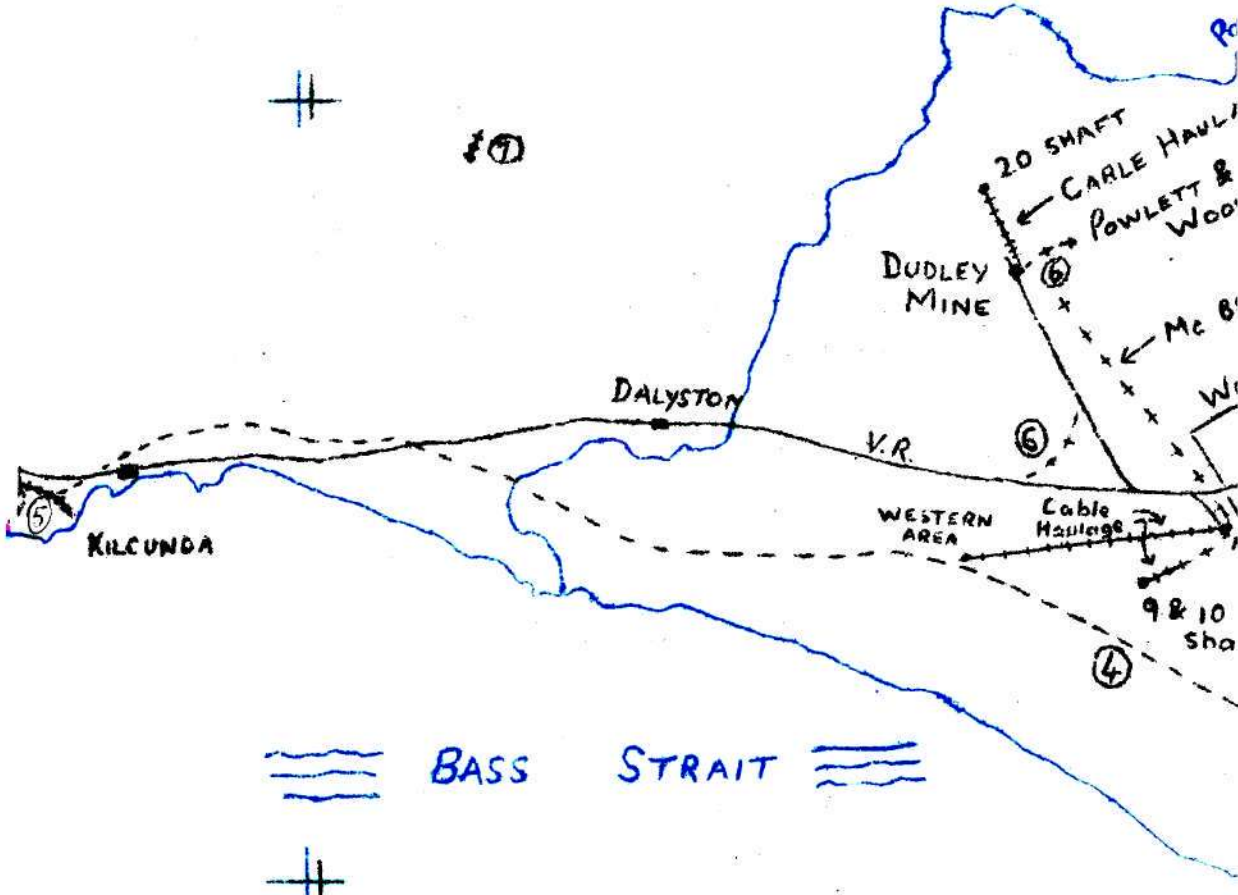
Dudley area mine (16 & 17 shafts) was opened in 1924 and sidings were constructed at the mine. Use was made of portion of a private spur constructed in 1911 to serve the Powlett & North Woolamai Company's mine nearby. This Company ceased operations about 1926. The junction with the main line was moved from the 84 mile post to the State Mine yard probably about this time.

Further development was necessary by 1930 and 19 & 20 shafts were sunk about 35 chains north of Dudley area, and an endless-rope hauled tramway was constructed to convey the coal to the Dudley area screens.This mine ceased operating in early 1962.

(Continued on page 12)

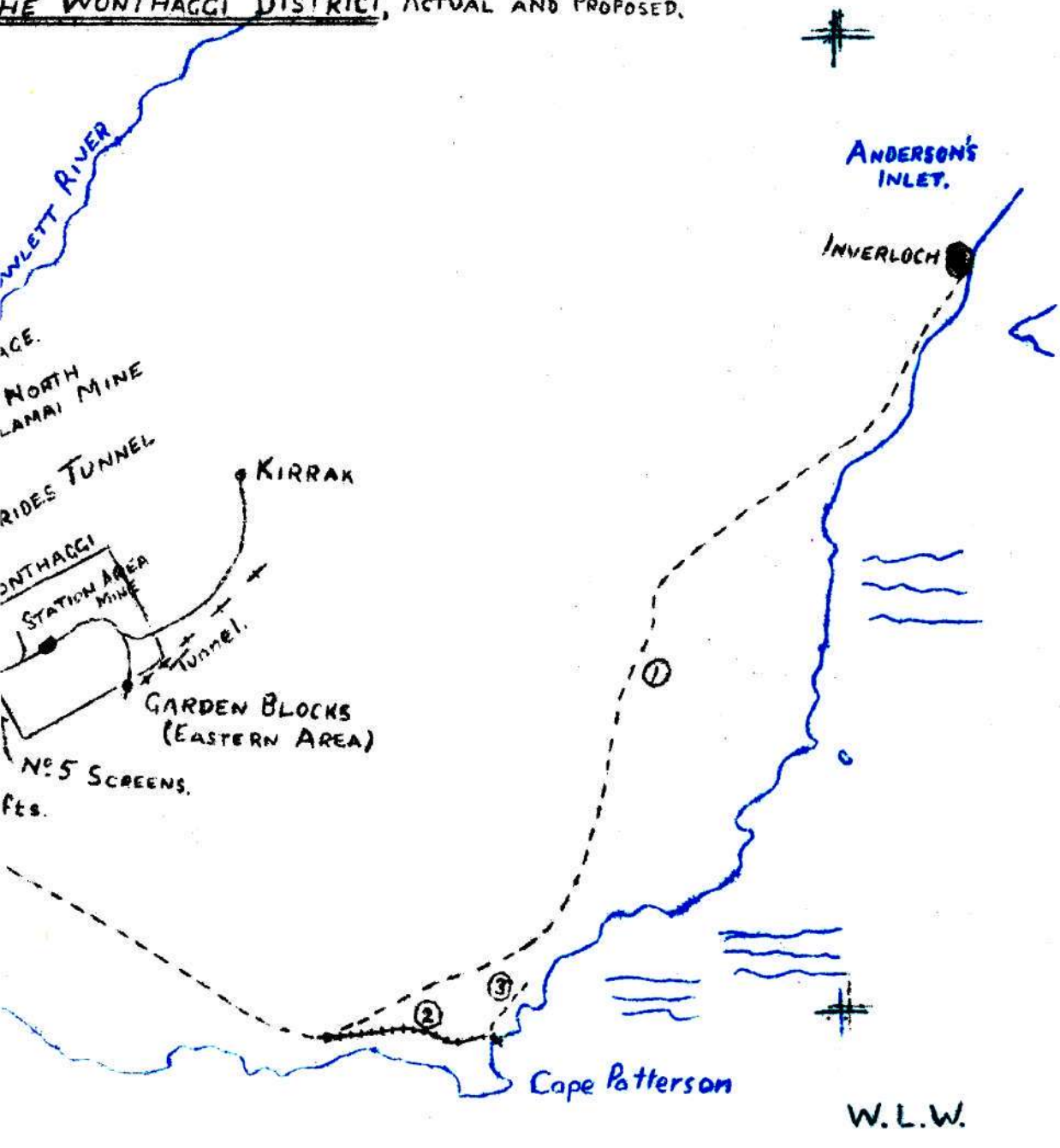
1. Proposed Cape Patterson Mining Co. line.
2. Victorian Coal Co. line.
3. Proposed Branch for Vic. Coal Co. line.
4. Proposed line, Cape Patterson to Kilcunda.
5. Western Port Coal Co. line.
6. Abandoned Sections of P.B.N.W.M.Co.
7. Steenhold's Hill Tramway.

TRAMWAYS OF T



(Scale – approx. 100 chains = 1 inch).

HE WONTHAGGI DISTRICT, ACTUAL AND PROPOSED.



With the closing of the Mc.Bride tunnel in December 1935, work commenced on the Western Area mine (21 & 22 shafts) and a cable hauled tramway about 1 mile 74 chains long was constructed to No.5 screens using the machinery from the abandoned tunnel. This is the only tramway still in use.

The only other railway development in the district was the Kirrak branch, built in 1939 to serve that mine then being opened up. Since that date there has been a gradual decline in the mines and the Eastern Area line has been dismantled beyond the junction with the Kirrak line, and the Dudley area branch has only recently been dismantled.

Main references consulted in preparing this article were:-

"The Colonial Mining Journal of Victoria and adjacent Colonies," 1858-61.
"The Report of Select Committee on the Cape patterson Coalfields,"1864-65.
"Report of Royal Commission on Victorian Coalfields 1890."
Annual Reports of the General Manager of the State Coalmines.

Editor's Note:- On the map in the centre pages I have added the Steenhold's Hill Tramway for the sake of completeness. This tramway is marked on the Wonthaggi Army Survey Map of 1926, but its purpose is not known.

ARE YOU A ....

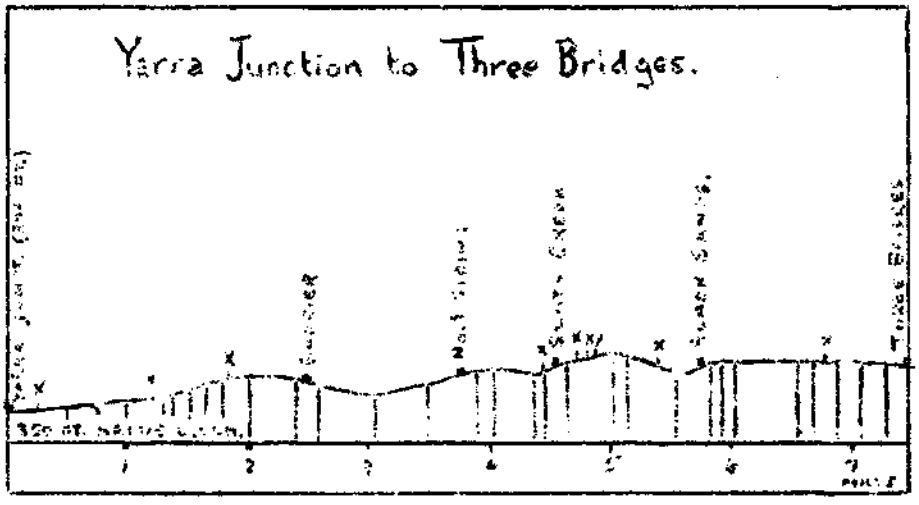
SIDRODROMARCHEOLOGIST ????

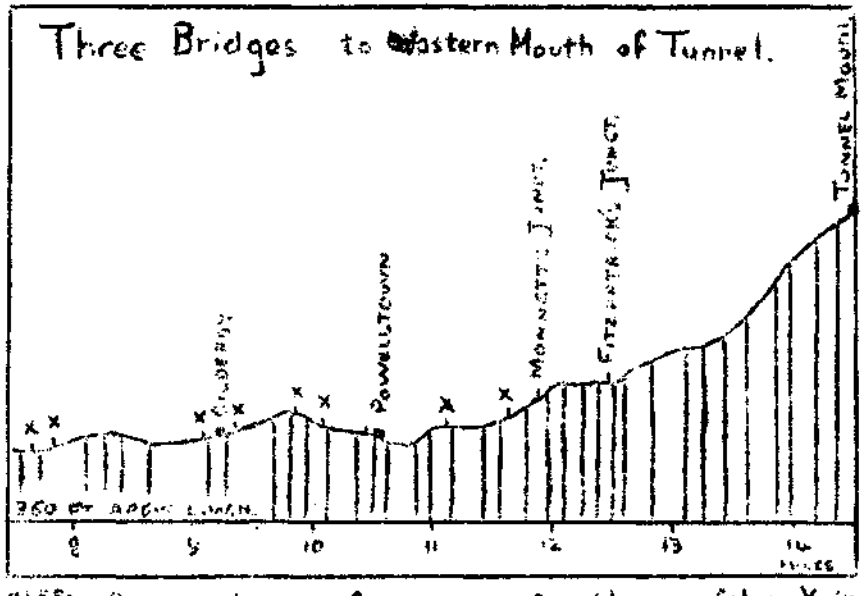
If so don't keep your latest findings a secret, send a report on them to the Editor, 9 Mc.Gregor Street, Canterbury E.7,for publication.

Powelltown Tramway.

Approximate Gradient Profile.

C. Andrews & M. Plummer.





Scales:- Horizontal 0 1 2 Miles

Vertical 0 200 400 600 Feet.

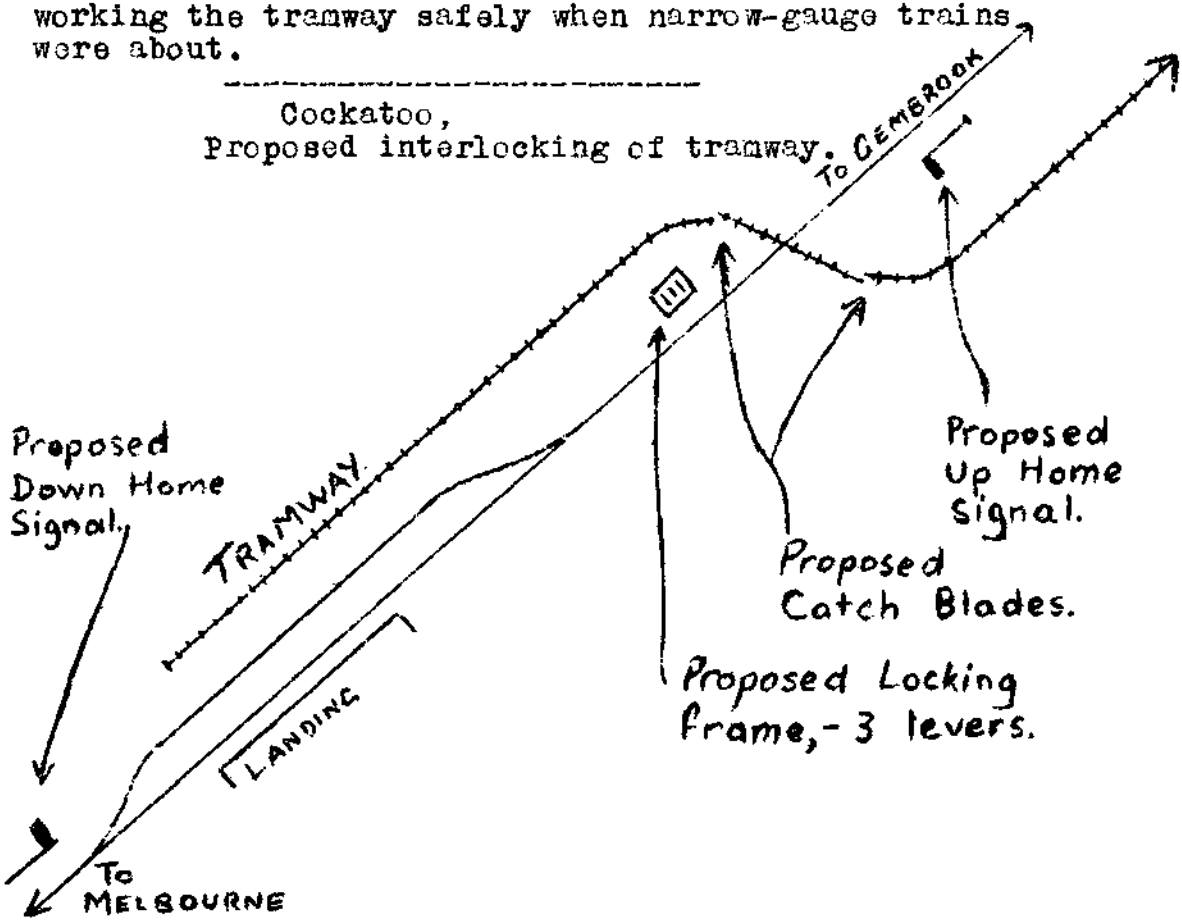
On the profiles X indicates location of level crossings over right-of-way as at present time.

THE COCKATOO HORSE TRAMWAY

By Mark Plummer.

The Cockatoo tramway was typical of the hundreds of wooden railed horse trams that operated in Victoria. In 1906 a Mr.J.Bell built the tramway from the present location of the No.3 road at Cockatoo railway station when Cockatoo had just a loop siding. The tramway went along Cockatoo Creek for about three miles, terminating near Patternoster Road. The diagram reproduced below was drawn on 21/11/1910 and shows proposed interlocking and signalling to be installed at Cockatoo within a year, for working the tramway safely when narrow-gauge trains were about.

Cockatoo,
Proposed interlocking of tramway.



THE WALHALLA MINING TRAMWAYS

By Mark Plummer.

(Continued from last issue).

(Editor's note:In the previous part of this article it was stated that the Long Tunnel Extended Co. had an electric or battery-electric loco.,- this in fact appears to be most unlikely. The inclusion of this erroneous information was entirely my fault, the author had nothing to do with it.)

The Bagnall locomotive's job on the Long Tunnel Extended Tram was to take the empties back to the bush. The full wagons were worked back by gravity with brake-men riding the wagons. At the township end of the tram there was a balanced incline down to the furnaces and boilers of the mine. The locomotive, of course, never worked the incline,although in the initial stages the loco may have been hauled up to the top via the incline.

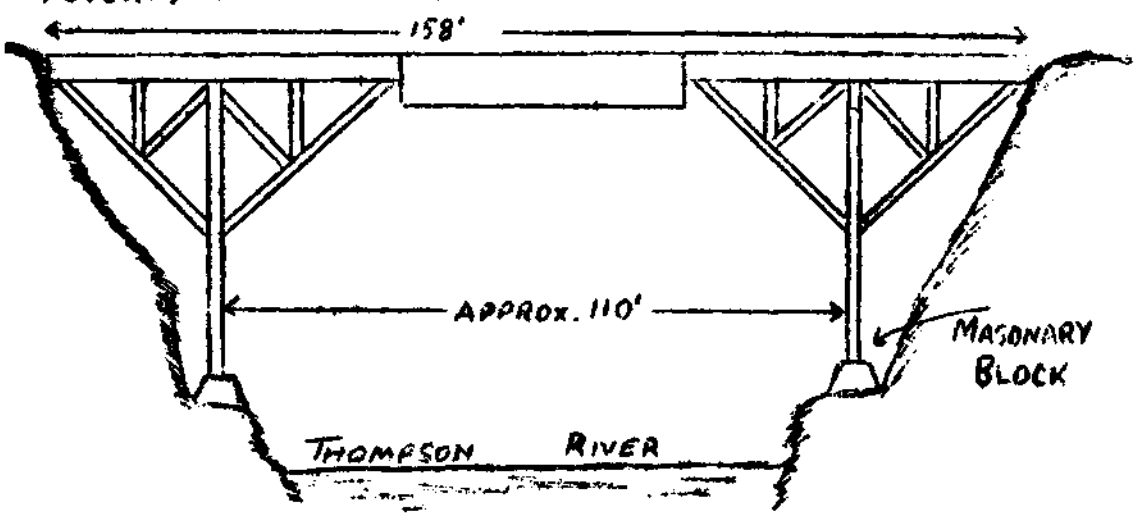
After the mine closed the locomotive was next seen working on the Hume Weir construction in the 1920's and is now supposedly "preserved" in the Murray Lands, South Australia.

The Poverty Point bridge mentioned in the last article is about 45' from water level to the top of the bridge. Some floods have risen to within 20' of the bridge, but have fortunately not risen higher, otherwise the bridge or the sleepers on top might have been washed away. The bridge was prefabricated in Melbourne and assembled on the spot. Mr. A. Lyell says that when he visited the bridge in the 1930's the construction numbers were still marked on the bridge. He also says that the downstream tram went three miles down the Thompson, not just one mile as my map shows. However my map is correct as at 1901. The bridge was an open-deck type, that is the sleepers were placed directly onto the steel girders.

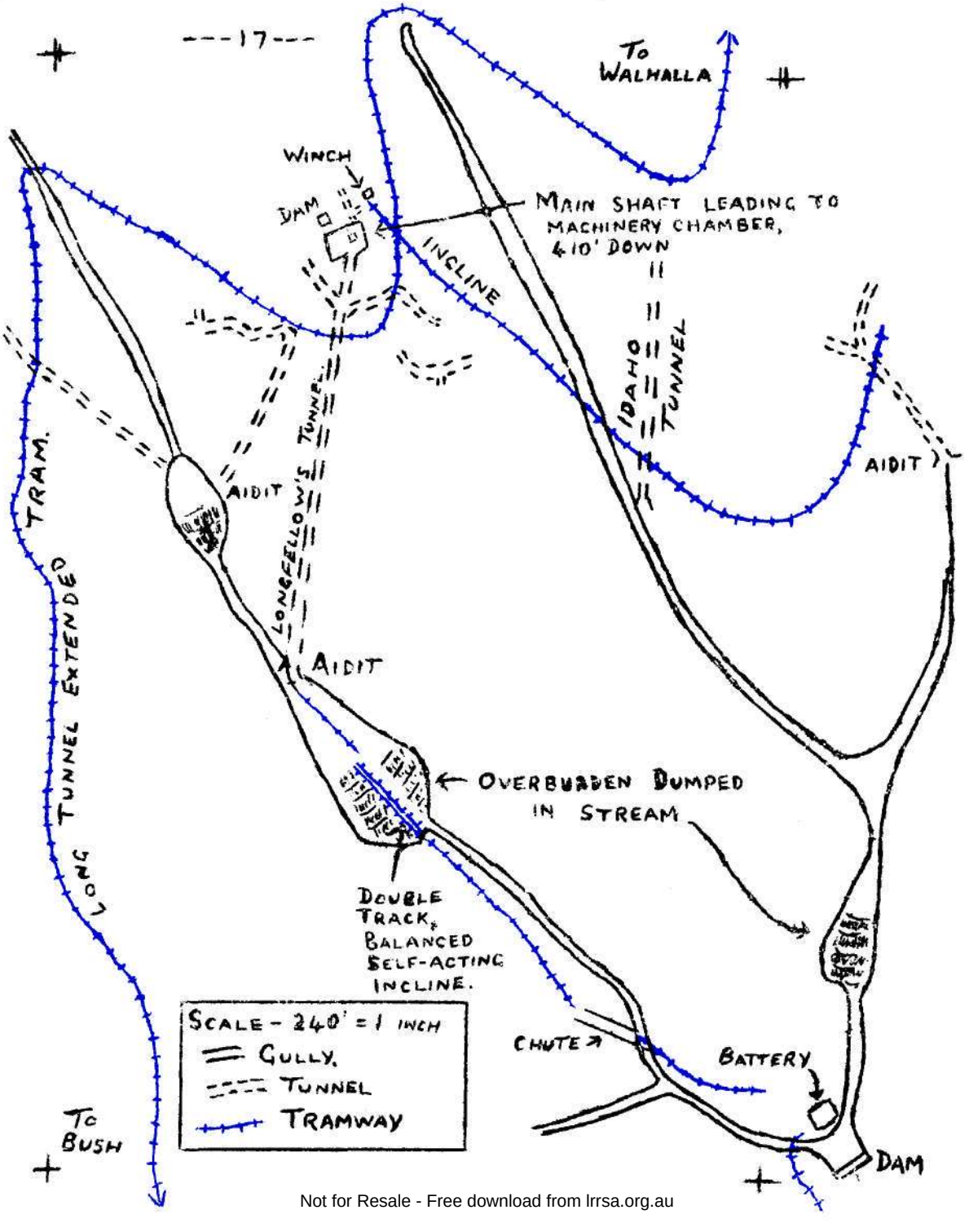
The diagram opposite is of Longfellows mine, and surrounding tramways, and is included to give an idea of how the tramways worked in with the mines. This area, although about three miles from Walhalla, is typical in its methods of most areas around Walhalla before the turn of the century.

The Long Tunnel tram was not connected with any of the mines shown, although it passed within 40' of Longfellow's main shaft. Longfellow's incline, which brought timber for shoring up the mine, to the head of the shaft; crossed the Long Tunnel's line at nearly right angles, and while I found where the incline crosses the Long Tunnel Extended tram, I could not work out the crossing arrangements. (If any members have any photos of the crossing I would very much like to see them). The incline would probably go under the Extended's line, as the cable would have been in the way of any level crossing. The Extended probably had a hinged track arrangement, like the crossing on the Powelltown incline.

POVERTY POINT BRIDGE.



(Continued on page 20).



TARWIN MEADOWS MILK TRAMWAY

REF:- WONTHAGGI ARMY SURVEY MAP, MAY 1930.

TARWIN MEADOWS MILK TRAMWAY.

(Details supplied by Mr.O.D. Mc.Micking, owner of the property, in a letter to Des. Jowett).

The tram line was built by G.M.Black in 1908 for use by the sharemen to bring the milk from the various dairies to a factory on the property. It also ran to the piggery where the waste from the factory was taken in tanks.

The line was approximately three miles in length, and each farm had a four wheel trolley that would carry 30 to 35 milk cans, and was pulled by a horse.

The line was in operation from 1908 until 1947, when road vehicles took over.
See map on page 18.

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ACCURACY !!!

When preparing articles for publication, certain points should be kept in mind. First and foremost is the need for accuracy,-when not absolutely sure of facts please make this clear in your article. The Society can only get a bad name if inaccurate statements of fact are made, and this is fatally easy to do - I know from my own experience!

It would also be appreciated if, where possible, details of the main references used in preparing articles were included; as this information may be of use to later researchers. Details of maps consulted would also be appreciated. And please remember to put in a "North" arrow on your maps if this is possible.

::

Walhalla Mining tramways, continued from page 16.

Most horizontal mines had 1'6" or 2' gauge track inside for the removal of overburden and ore. The line coming out of Longfellow's mine had a flexible end, and overburden wagons would have emptied over the end of the dump, but when gold-bearing ore was to be sent down to the batteries, the line would be connected up to a balanced self-acting incline, and sent down to the bottom where a wooden chute took it down to another tram, which delivered it to the batteries. To feed the batteries fuel-wise a tramway for timber came in from below, and a dam was thrown across the gully for water.

Today you can walk along the Extended tram easily, finding small cuttings, remains of sleepers, and sharp curves at the head of each gully. The incline is harder to find but can be located by the masses of cable near the shaft, which is still open, and is quite dangerous, as, while pushing through the undergrowth you might well come upon it very unexpectedly, as I did!

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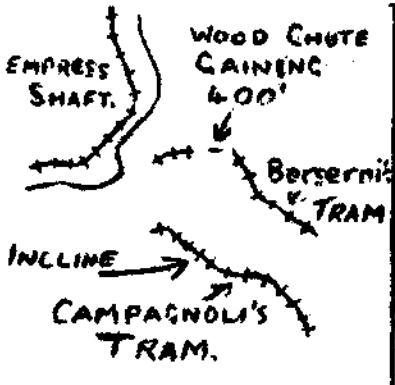
Two lines not marked in the bottom left hand corner of the map in the last issue were Borserni's and Campagnoli's tramways.

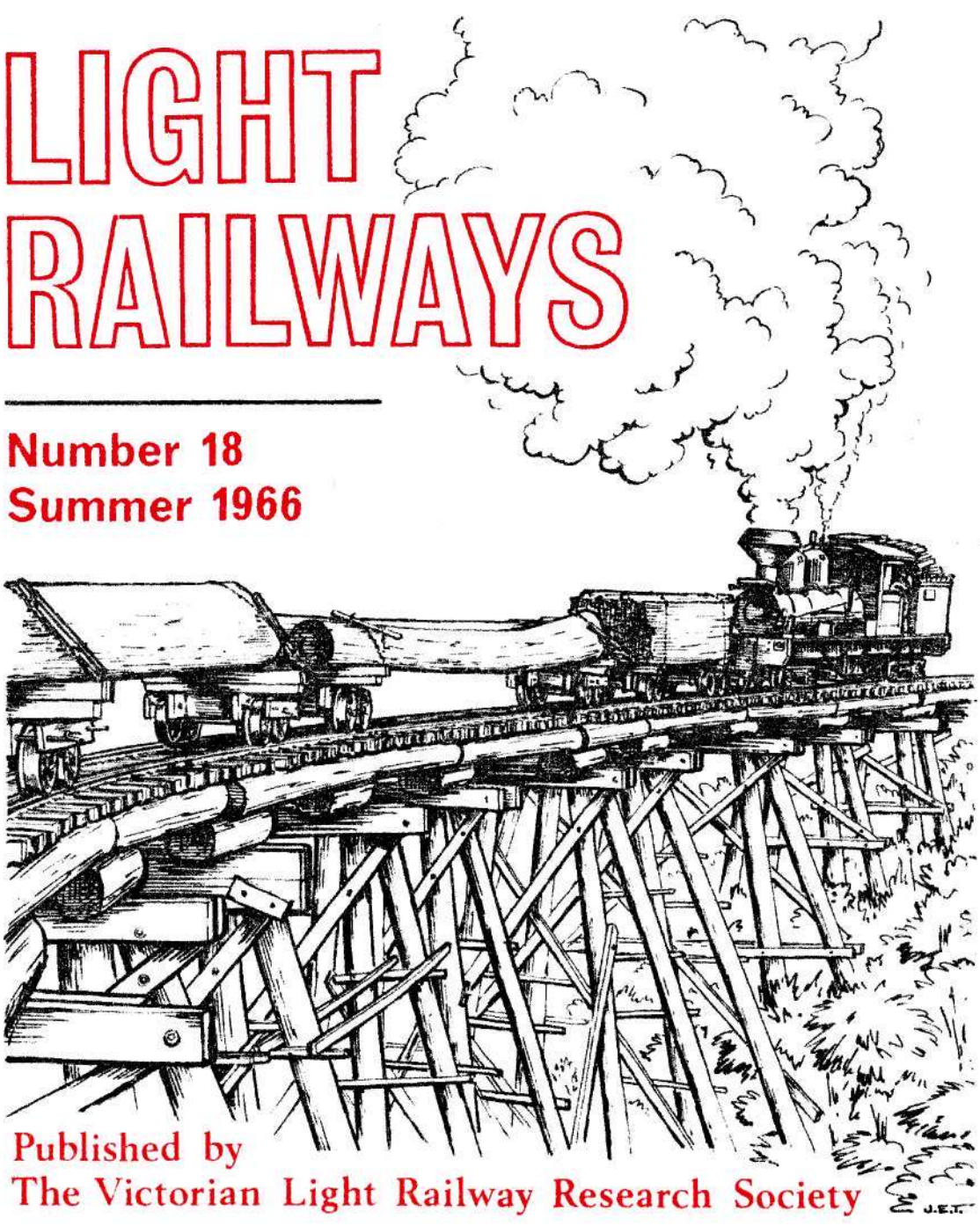


COMING TRIPS.

Nov.1st. Queenscliff (P.B.P.S.)
" 6th. Woodend (S.P.C.C.)
" 12th. Beaufort, and Lake Goldsmith traction-engine rally. (A.R.H.S.)
Nov.26th.Mansfield (A.R.E.)
Dec.3rd.Emerald Moonlighter (A.R.H.S.)
" 4th.Vintage train (S.P.C.C.)
Further details:- 83-5873.

LIGHT RAILWAYS

Number 18
Summer 1966



Published by
The Victorian Light Railway Research Society

LIGHT RAILWAYS

No.18. Summer 1966-67. Vol.V.
Price - 20 cents.

The front cover design, showing a Shay locomotive on the Powelltown tramway, is by John Thompson.

Members should expect to receive the Autumn issue about the 15th. of April. We would welcome more articles, and news items from readers.

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Vice President:-Geoff. Maynard,
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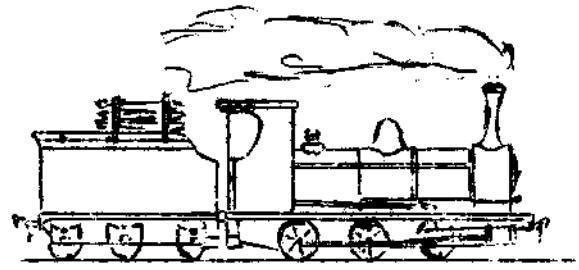
Back Numbers:- Limited numbers of issues Nos. 16 and 17 are available,from the Editor, at 20 cents each.

NEWS, NOTES & COMMENTS.



T A S M A N I A

Emu Bay Railway:- E.Z. Industries, who own the Roseberry mines which supply 92% of the E.B.R.'s traffic made a take-over bid for the E.B.R., worth $3-50 an ordinary share. E.B.R.'s ordinary 90 cent shares were selling on the Stock Exchange for 5 cents in 1959, but as a result of increased profitabiliy, had risen to $2-75 before the take-over bid was made. The Directors of the E.B.R. rejected the take-over bid, E.Z. then made the offer directly to E.B.R. shareholders, under the threat that if the offer was not accepted, E.Z. would terminate its freight contract with E.B.R. in September 1968. This would result in closure of the railway. E.Z.Industries studied eight alternative methods of transporting zinc concentrate from Roseberry, involving road, pipeline, or aerial ropeway transport, to Burnie, Risdon, or Strahan, and they claim that seven of these methods were cheaper than the present system. If this is true the E.B.R.'s future looks bleak.

("The Age").

V I C T O R I A

Australian Cement Ltd.,(Fyansford):-Due to failure of an electric motor in the conveyor belt system normal railway service operated on October 10th. and 11th. Locos Nos. 1,([illegible] No. 2's boiler unit) 4, and D.1 operated the service. The Beyer Garratt blew a boiler tube which has since been replaced.

At present locos.Nos.1,3,4,& 5 are being filled with an anti-corrosion compound, and are unlikely to be used again for months, if at all. The Hudswell-Clarke is scheduled to make its last run on the 22nd,Dec., and then will also be put in store.

(M. Bowmer.)

Puffing Billy Preservation Soc.:-The "Fairmont" track motor purchased from A.C.L.,Fyansford, has been dismantled and is being regauged. The original two stroke engine is being replaced with a Volkswagen 1500 cc. engine and a Prometheus 2 speed gear box.

(Narrow Gauge).

State Electricity Commission, Ballarat,:- Single truck tram No.21 was on trestles during the middle of September. The brake gear was being reconditioned whilst the truck was being rewheeled. Maximum Traction tram No.41 was in the rear of the depot for an exterior and interior repaint. At the same time, a general overhaul was being carried out, including a re-panel of the sides.

Accident repairs to drop-end side panel on single truck tram No.18 were being attended to. Accident repairs to single truck No.13 will be commenced in a few weeks time.

(Bob Prentice,29-9-1966)

Melbourne & Metropolitan Tramways Board;- The relay in mass concrete in Glenferrie Road is progressing satisfactorily. The "NACO -wheeled cars stationed at North Fitzroy are being replaced with trams fitted with the M.&.M.T.B. resilient wheels. The object in view is to fit these trams with "Ferado" brake shoes. This will be done progressivley in the next few weeks, so that all trams except one, 980, will be using this type of shoe. Two cars per day ex-North Fitzroy are to be serviced and and washed at South Melbourne Depot.

(Bob Prentice,29-9-1966)

Victorian Railways:-During November there were only about eight K class locos still in service. The Heathcote branch has been granted a further six month reprieve, until 1-7-1967.

(A.R.H.S.Vic.Div.Divisional Diary)

Cheetham Salt Ltd;Cheetham,(near Geelong)Track relaying with 30 lb. rails from Western Australia, is at present taking place on this extensive 2' gauge system. We hope to have an article on this railway in the next issue.

(M.Plummer.)

Victorian Railways, Wangaratta-Whitfield line:-From a recent visit to this area the following information was obtained. Apart from the well-known relics such as rails across back streets in Wangaratta, odd mileposts, cattle-pit fences, and van bodies in use as storage sheds, the station nameboards are the basis of my "news".
Having inspected the line some years ago I noticed today that some of the name-boards had disappeared, and the reason for this became evident at Moyhu. While having a look at the two NU vans and the NH van in the Shire depot, I noticed the "Oxley" nameboard leaning on a wall inside a shed. A closer look found it to be brand new! At this point a chap came to see what I was doing and he turned out to be the Shire Foreman. He showed me a heap of all the old station nameboards, minus their cast letters, but quite legible; and a neat stack of brand new boards of varying sizes, painted black ready to have the letters screwed on.
He explained that the Oxley Shire Engineers Dept. was erecting new nameboards along the railway formation at the request of a local historical society. (The North- Eastern Historical Society).
Nameboards already erected new are at Docker, Byrne, Claremont, Jarrott and Pieper. As some of the cast letters had been broken I advised him to get in touch with V.R. Spotswood Reclamation Dept. where I believe they are available, and he was pleased to hear this as they hope to re-install the names of all stations.

The Shire Foreman mentioned that he was very familiar with the railway in its day, and that it is a good idea to restore the nameboards, as there is little other evidence that there was ever a railway there.

There should be more of this sort of thing!

(John Thompson, 10-1-67).

SHAY LOCOMOTIVES IN AUSTRALIA By-F.Stamford.

General Introduction:- The "Shay" locomotive was invented by Ephraim Shay and was patented in the U.S.A. in 1881. It was designed to negotiate rough track and sharp curves at low speeds, and consequently gained great favour on private logging and mining railways. The cylinders were placed vertically about half-way along the right hand side of the locomotive, with the boiler placed left of the centre line of the locomotive to balance the cylinders, thus giving Shay locos an odd appearance, particularly when viewed from the front. The locomotives were mounted on two four-wheel bogies, all wheels of which were driven through bevel gears and cardan shafts from the cylinders. Four "classes" of Shay locomotive were manufactured, by the Lima Locomotive Works, Lima, Ohio, U.S.A., who held the patent; the "A" class being a small two cylinder, double truck type generally weighing less than 25 tons; the "B" class was a somewhat larger two truck three cylinder type; the "C" was a three truck,three cylinder type,the additional truck supporting an auxillary water tank; and the "D" was a four truck three cylinder type, the additional two trucks supporting a large auxilliary water tank. No examples of the "D" class were exported to Australia. There was much variety in size and style of locos built within each class.

Tasmania:- The first three Shay locomotives to come to Australia were purchased by the North Mount Lyell Mining Co. for use on their railway at Linda, near Queenstown. Known details of these are as follows:-

Builder's No.697 of 1902, Road No.5,
Weight:- 15 tons, Wheel diam.:- 2'3"
Gauge:- 3'6", Cylinders:- (2), 9"x 8"
This small A class Shay was sold to Lahey Bros., Canungra, Qld., probably in 1906.

Builder's No.698 of 1902, Road No.4,
Weight:- 25 tons, Wheel diam.:- 2'3"
Gauge:- 3'6", Cylinders:- (3), 8"x 12"

This "B" class Shay was sold to the Huon Timber Co., Geeveston, Tas., in 1907. The H.T.C. was a subsidiary of Millars Timber & Trading Co., its tramway extended from a jetty and large sawmill,on the shores of Hospital Bay, on the western side of the Huon Estuary through the town of Geeveston and onto the foothills of the Hartz Mountains. The line was about 20 miles long, including 2 branches, and the track was well laid and well graded. This tramway was opened in 1901, and closed in 1922, and there is no record of the subsequent fate of this Shay, but it was probably scrapped.

Builder's No. 704 of 1902. Road No.6.
Weight:-40 tons. Wheel diam. 2'9"
Gauge: 3'6" Cylinders (3), 11"x 12"

This "B" class Shay was sold to Bunning Bros. of Western Australia, in 1907, and for its subsequent history see under W.A.

A fourth Shay locomotive operated in Tasmania, this was builder's No.2029 of 1908, this operated on the 3'6" gauge Hopetoun tramway at Port Esperance, Tas. In 1914, after closure of this tramway, this Shay, and another engine from the same tramway,(an 0-4-0ST allegedly by Black Hawthorn) went to the Huon Timber Co. at Geeveston; where they joined the Shay from the North Mount Lyell (B.No.698)and a Barclay 0-4-0 ST. These four locos formed the motive power of the H.T.C.'s Geeveston tramway.
When the Geeveston line closed in 1922,Millar's Timber & Trading Co took the Barclay and Shay 2029 to Western Australia. Subsequent history of the Shay is not known. As previously mentioned, Shay 698 was probably scrapped at this time, while the other 0-4-0ST (Black Hawthorn ?) went to Jaeger's tramway in the Far North-West.
I have included the above information on these Tasmanian tramways in the hope that it may create more interest in Tasmania's very rich and interesting railway history.

New South Wales:- Seven Shay locomotives are known to have worked in New South Wales. The Wolgan Valley railway, which ran from Newnes Junction, near Lithgow, to Newnes; had four"C" class Shays, these being the only three truck Shays to be used in Australia.

Builder's No.1778 of 1906, Road No.1
" " 1994 of 1907, Road No.2
" " 2100 of 1909, Road No.3
" " 2270 of 1910, Road No.4

Road No.1 carried the name "Constance" and was scrapped before 1932, its boiler being used at the Shale Oil Works at Newnes. Road Nos. 2,3, and 4 were out of service in 1933, and remained derelict until being cut up in 1956.
Dimensions of these engines were as follows:-

	No.1	Nos.2 & 3	No.4
Cylinders (3)	12"x 15"	12"x 15"	14½"x 15"
Boiler Pressure (lbs.p.s.i.)	200	200	200
Weight (tons)	65	79	90
Total Wheel-base	40'3"		
Rigid Wheel-base	4'4"		
Wheel diam.:-	3'	3'	3'
Tractive Effort (lbs.)		29,800	40,400

The British Australian Timber Co. had a Shay locomotive in use at Coff's Harbour, which it apparently purchased new. Known details are as follows:-
Builder's No.2135 of 1909;
Weight;- 27 tons. Wheel diam. 2'2"
Gauge:- 3'6" Cylinders:-(2), 8"x 12"

Nothing is known of the disposal of this locomotive, The weight of 27 tons appears rather heavy for an "A" class (2 cylinder) Shay locomotive.

The other two New South Wales Shay locomotives were originally owned by the Lloyd Copper Co., of Burraga, N.S.W. They were identical "B" class Shays, details of which are as follows:-
Builder's Nos. 2575 and 2576 of 1912.
Weight:- 31 tons. Wheel diam.:-2'5"
Gauge: -3' Cylinders:- (3) ,8"x 12"

No.2575 was sold to the Victorian Hardwood & Sawmilling Co. in 1920 for the Powelltown tramway.
No.2576 was sold to G.C. Hoskins of Lithgow, about 1920, and possibly operated on their line out from Ben Bullen, on the Mudgee line. It was noted partially dismantled at Hoskins Lithgow works in 1924, and in 1926 was sold to the Victorian Hardwood & Sawmilling Co. for use on the Powelltown tramway.

Victoria:- The only two Shays to work in Victoria were the two owned by the Victorian Hardwood & Sawmilling Co., which were used on the Powelltown tramway, - gauge 3'.

Builder's No. 2575 of 1912, purchased second hand from the Lloyd Copper Co.,N.S.W., in 1920, and sold to Cameron & Sutherland about 1946, who in turn sold the boiler to a timber mill at Carpolac, western Victoria. This boiler was cut up in 1962.
Builder's No. 2576 of 1912, purchased second hand from G.&.C.Haskins, Lithgow,N.S.W., in 1926. Sold to Cameron & Sutherland about 1946, who in turn sold the boiler and frame, with cylinders, to a timber mill at Omeo. These remains are said to be now located at Dorset Road. Croydon.

Western Australia:- Three Shay locomotives are known to have worked in Western Australia. A "B" class Shay was bought new by J.M.Ferguson Ltd., Sawmillers of Donnybrook, W.A.. It was later owned by the Swan Sawmill Co. Timber Corporation, Greenbushes; later coming into the hands of Millar's Timber & Trading Co. who took over the Greenbushes mill. It was scrapped in 1939. Known details are as follows:-
Builder's No.1968 of 1907. Gauge 3'6". Weight 20 tons.

Bunning Bros.(sawmillers) purchased one of the ex North Mount Lyell Copper Co. Shays in 1907. Bunning Bros. used it at Lions Mill, near Mt. Helena; then at Argyle. It was scrapped in 1950. This locomotive was builder's No. 704 of 1902, North Mount Lyell's road No.6, - for other details see under "Tasmania."

Millar's Timber & Trading Co. brought Shay builder's No.2029,of 1908,from Tasmania in 1922, on the closure of the Huon Timber Co's line at Geeveston. Nothing is known of this locos subsequent activities in Western Australia, or of its ultimate fate.

Queensland:- Queensland had the honour of being Australia's leading Shay state, a total of eight Shay locos are known to have worked there.

The Maroochy Shire Council had two Shay locomotives, for use on their Nambour-Mapleton tramway. The known details of these locomotives are as follows:-

Builder's Nos. 2091 and 2800,of 1908 and 1914 respectively.
Weight: 14 tons. Wheel diam.:-1'10"on 2091
Gauge:- 2' " " 1'10½"on 2000
Boiler Pressure:-160 lbs.p.s.i.
Cylinders:-(2),6"x 10"
Bogie wheelbase:- 4'
Length;- 22'8" over frames.
Width:- 6' over running boards.

No.2091 was named"Dulong", No.2800 was named "Mapleton". Dulong was originally purchased by the Moreton Central Mill Co.(Nambour) in 1908 and was sold to the Maroochy Shire Council in 1914. Both engines came into the hands of the Moreton Central Mill Co. in 1944. Subsequently parts of Mapleton were used to rebuild Dulong, which remained in service until about 1958, being the last operating Shay locomotive in Australia. This engine is now preserved at the Moreton Central Mill, Nambour; being painted green, and bearing the name "Shay."

The Maroochy Shire Council also owned a B class Shay for use on its Buderim Mountain

Tramway, which ran from Palmwoods to Buderim Mountain, Known details are as follows:-
Builder's No. 2823 of 1915.
Weight:- 27 tons. Wheel diam.:- 1'11"
Gauge:- 2'6" Cylinders:-(3), 8"x 10".

This locomotive was purchased new by the Shire Council.

D.Munro's "Perseverance" logging tramway at Hampton, Qld. had two small A class 2'6" gauge Shay locos.
Builder's No. 906 of 1904 Wheel diam.:-2'2½"
Weight:- 15 tons. Cylinders:-(2), 7"x 12"
Gauge:- 2'6"

Builder's No. 2097 of 1908 Wheel diam.:-2'2"
Weight:- 22 tons. Cylinders:-(2), 7"x 12"
Gauge:- 2'6"

The Canungra & Pine Creek logging tramway, owned by Lahey Bros., had three Shays, of which the following details are known:-

Builder's No.697 of 1902, purchased second hand from the Mount Lyell Mining & Railway Co. of Tasmania, this was ex North Mount Lyell Copper Co, Road No.5; an A class Shay. For further details see under Tasmania. It is quite likely that this locomotive was used elsewhere in Queensland for a few years before coming into the hands of Lahey Bros.

Builder's No.2371 of 1910
Weight:-27 tons Wheel diam.:-2'5½"
Gauge:- 3'6" Cylinders:-(3),8"x 9"

Builder's No. 2478 of 1911
Weight:- 14 tons Wheel diam.:-1'10½"
Gauge:- 3'6" Cylinders:-(2), 6"x 10"

The latter two locomotives were purchased new. All three of Lahey's Shays were subsequently scrapped.

In conclusion I would like to thank H. Dunker, L.Poole, and J.Stokes for supplying some of the information used in this article.

TRAMWAYS OF THE FORREST-BARWON DOWNS AREA.

By- M. Plummer

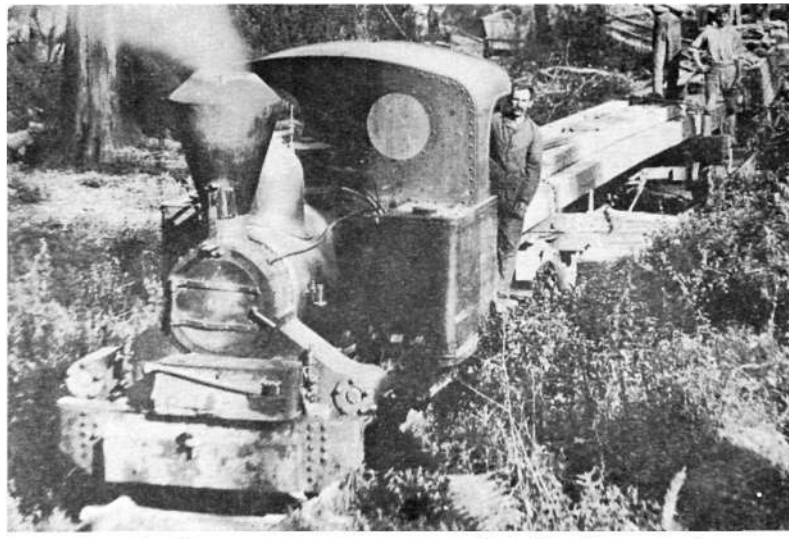
W.R.Henry's Tramway, 3'6" Gauge.

J.Henry started operating his tramway in 1895,four years after the V.R. line reached Forrest, and worked it with horses until 1909, when locomotive No.7 arrived. This was an 0-4-0 Well Tank (cylinders about 6" x 8", 1'2" wheels), with a very interesting history. Comparing a photo of No.7 with a drawing of an O-4-OWT design used on A.Guiness's brewery line in Dublin, and Beyer-Peacock's O-4-OST design used on the Horwich works line of the Lancashire & Yorkshire Railway, one cannot help noticing the general designs are almost the same.

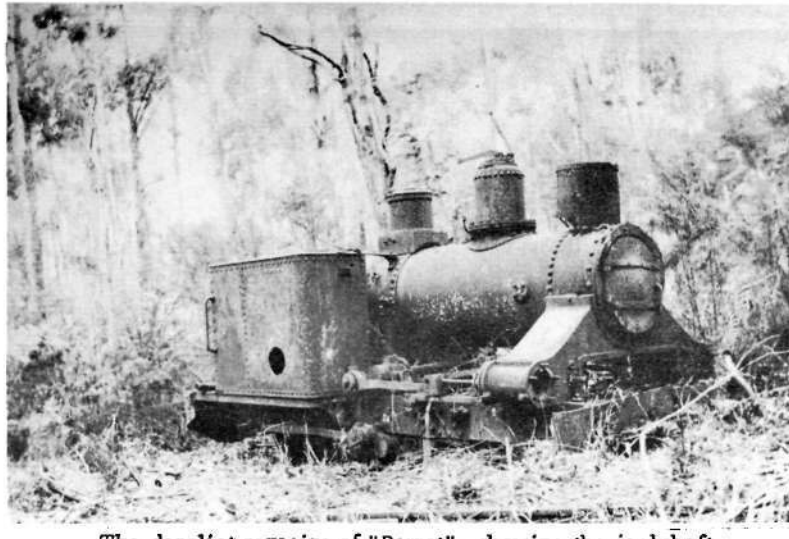
It is known that in 1888 Captain Hancock, of the Wallaroo & Moonta Mining & Smelting Co.(South Australia), interviewed Mr. Aspinall, the then Chief Mechanical Engineer of the L.&.Y.R., and considered the Horwich works design suitable for the 3'6" gauge line at Wallaroo. As Beyer-Peacock could not supply a locomotive immediately, Captain Hancock brought back blue-prints, and it is believed the locomotive was built in South Australia. The locomotive became No.7 of the Wallaroo & Moonta Mining & Smelting Co., and after spending about 20 years at the Wallaroo Smelters, was sold to Mr. Henry for use at Forrest.

The next locomotive was bought new, being an O-4-OST built by Hunslet, Builder's No. 1100 of 1911. This locomotive had inside cylinders, which is unusual on sub-standard gauge locomotives. It arrived at Forrest in 1912 and was used on the No.1 Mill line until being transferred to the Roadknight Creek line. It is interesting to note that this engine had a hinged funnel owing to restricted clearances in the tunnels. These two locomotives were abandoned at Forrest, where they were still to be seen in August 1946.

The mainline from Forrest railway station crossed a seven span trestle bridge over Nearl's Gully and followed the West Barwon River for about 1½ miles, thence followed the Noonday Creek for about seven miles, passing the Noonday Creek Mill (est.1898) and through a tunnel 1,362' long. This tunnel was built in 1900 by ex Ballarat miners, at a cost of £1,300, and took the line into the head of the West Barwon River. The tramway then crossed the river to the Barwon Mill. There were 57 bridges and timber culverts on the line.



Fowler locomotive "Parrot", with indirect jackshaft drive, on Sanderson's tramway, Forrest. About 1903.
Photo:- M. Plummer Collection



The derelict remains of "Parrot", showing the jackshaft drive, at Crossover (Noojee line), about 1940.
Photo:- R. Pearson.

A horse team on Sanderson's tramway, showing two interesting trestle bridges. About 1903.
Photo:- M. Plummer Collection.

O-4-O WT., ex Wallaroo & Moonta No. 7, on Henry's tramway, somewhere south of Forrest.

The No.1 Mill was the largest in the area, and was the hub of the line. Established in 1900 and powered by a Tangie steam engine, it is said to have had an output of 16,000 super feet of timber a day. Incorporated in the track layout at No.1 Mill was an unusual three way stub point with interlaced track. (See drawing,page).

Over 250 people lived at No.1 Mill, and they had a store, a school, and a post-office. In later years the mail was carried by a four wheeled motor trolley powered by a "Flyer Precision" 600cc. "Big Turn" motor. This vehicle was also used as an ambulance and personal transport for Mr. Henry. On special occasions, such as the Forrest sports, the employees, with their wives and children, would travel on top of loads of sawn timber, behind the Hunslet.

No.1 Mill was also the junction of the two main lines. From here a steel railed line followed the West Barwon River in an easterly direction, passing through a short straight tunnel, 230' long. The other line was winch operated, climbing 820' after leaving the mill, then dropping 780 feet, thus crossing the Barwon - Kennett Divide. It then continued as a horse operated line, gradually dropping for about two miles to the No.1 Mount Sabine Mill on the Kennett River,which was established in 1908, and was powered by a Robley portable steam engine. The next mill on this line was the No.2 Mount Sabine Mill built in 1925. This was powered by a Buffalo Pitts traction engine, complete except for its front wheels. There were a number of short branches off this line, to mill and winch sites. This line was closed in 1935.

The first steam winch on Henry's line (and also the first in the Otways) came into operation in 1919. This supplanted bullock and horse teams which had previously struggled to move logs over steep grades.

From 1935 to 1948 an isolated line operated from Mount Sabine, on the Skene's Creek - Forrest Road, out into the Carrisbrook Creek - Mettle Creek Divide, for a distance of about seven miles. This served about three mills and the timber was transferred by gantry to road vehicles, which delivered the timber to Forrest railway station.

Three "Trail" tractors with Fordson engines were used on this section. In principle these consisted of a Fordson tractor engine and gearbox mounted on undriven wheels, the power take-off being attached to a propellor shaft driving a crown-wheel in the first log bogie. The drive was then transferred by spur gears to both axles, the whole unit being permanently coupled. In practice different types of these tractors were used, but they were all designed so that the

weight of the first log, which was heavier than the tractor, was over the driving wheels, thus gaining better traction. This arrangement was invented by a Mr. Trail, a New Zealander, who later came to Forrest. To the best of our knowledge this type of tractor was not used on any Victorian timber tramways outside the Forrest-Barwon Downs area.

Henry also operated a short line which went for about two miles to the west of Forrest railway station, into Roadknight Creek where it served two mills. This was the last line on which the Hunslet operated, and while working on this line it was refitted and was in quite good condition when abandoned. Neither No.7, nor the tractors operated on this line.

Mr. Henry, when being interviewed, said he would still have his lines operating with steam locomotives if it was not for the Forestry Commission wanting to put all mills in the towns, and abolish steam locomotives due to the fire hazard. The only changes he would make would be to have incline winches operated by diesel engines, as winches had to be on the top of ranges where there is a shortage of water for boilers. Mr. Henry recently had to change his mill at Forrest township to electric operation, as he could not find a steam engineer. Mr.Henry also has a modern, partly steam operated mill at Geelong; with a traverser feeding parallel lines to stacks and drying kilns. The yard at Geelong has about one-third of a mile of 30lb. per yard rails, which came from Forrest, having been retrieved by the Trail tractors in 1948. The remainder of the rails at Forrest went to the P.M.G. as telegraph poles.

Sanderson's Tramway,3'6" gauge,(and possibly 5'3" ?).

This was started in 1897 by the Barwon River Sawmilling Co.. Sanderson operated horsedrawn trams until the purchase of the two 2-4-0T's by Fowler, named"Parrot" and "Westward Ho". These two locos were sold around 1905 being too weak for the work. Parrot, which had indirect jack-shaft drive, was sold to a tramway at Crossover, on the Noojee line, and was later abandoned at Crossover.

The fate of Westward Ho is a much greater mystery. This locomotive had conventional drive, and from the rather poor photographs available, appears to be almost identical in appearance to an engine of the same name which operated on the 3' gauge Brittania Creek tramway, which is said to have opened circa 1906. It is therefore possible that Sanderson sold the locomotive to Yelland who owned the Brittannia Creek tramway, and that it was

converted to 3' gauge at this time. There is, however, considerable doubt on this point, as gauge conversion of the loco would have been difficult.

Another locomotive to be acquired was an 0-6-OST., named "Tom Cue." This engine was built by Hudswell Clarke, Builder's No.378 of 1891. Tom Cue was one of four engines originally imported by Edward Keane, contractor for the Midland Railway Co. of Western Australia. It was later acquired by Baxter & Sadler and used on the construction of the Mullewa - Cue line. In 1899 it went to Tasmania and was used for construction works on the North Mount Lyell Railway. It was overhauled in 1900 and the boiler was sent to Melbourne, for repairs. As the line was completed in November 1900 the locomotive was not needed in Tasmania, and went to Forrest. This locomotive was abandoned in 1929 when Fordson powered Trail tractors took over.

An 0-4-OST by Baldwin ran intermittently on the line, and was sold, in August 1915, to the Tasmanian Public Works Department, through Cameron & Sutherland of Melbourne. The Tasmanian P.W.D. used this locomotive on the Marrawah tramway, where it was apparently named "Spidor."

Another locomotive used on the line was a vertical boilered engine built by Clayton of the U.S.A. This locomotive was wrecked, and Sanderson, and his son Marshall, were killed, when a fire-damaged trestle bridge collapsed under it. Grant, Sanderson's brother-in-law, took over the line in 1907 immediately after Sanderson's death.

Mr. Sanderson named his sons "Baldwin", after the Baldwin 0-4-OST; "Marshall," after a portable steam engine; "Clayton" after the vertical boilered engine; and his daughter "Forrestina," after the Forrest rail head.

Sanderson purchased from the V.R. "L" class No.32, a 2-4-OST by Slaughter Grunning, Builder's No.410 of 1860, in October 1904. There is photographic evidence that this was used on a railway at Forrest, but the purpose of this line is not known. The remains of this engine were still at Barramunga in the 1940's. The two engine units of the V.R.'s Rowan cars were also purchased at this time, for use as logging winches.

Sanderson's line went along the top of a ridge on a continuous ascending grade of about 1 in 30, for about five miles from Forrest to Barramunga, then swung west, towards Upper Gellibrand. The line terminated at a winch site, from which a one mile long rope-hauled incline went across the Barramunga Creek to a mill.

Grant also had his own 3'6" gauge line which branched from Henry's line near the junction of the Monday Creek and the West Barwon River, then followed the West Barwon River for

six miles, serving two mills, and ending in two miles of wooden railed track. Grant pulled out of this area in 1923 due to flood damage to the tramway and mills.

Robin's Tramway, Gauge unknown.

The Parliamentary Report on the extension of the V.R.'s 5'3" gauge line from Forrest to Barramunga states that in 1904 Mr.E.Robins was sending about 60 tons of sawn timber a week over a wooden railed timber tramway from his mill to the station. It cost Mr.Robins about £100 - £150 a mile to extend his line. Nothing further is known of this line.

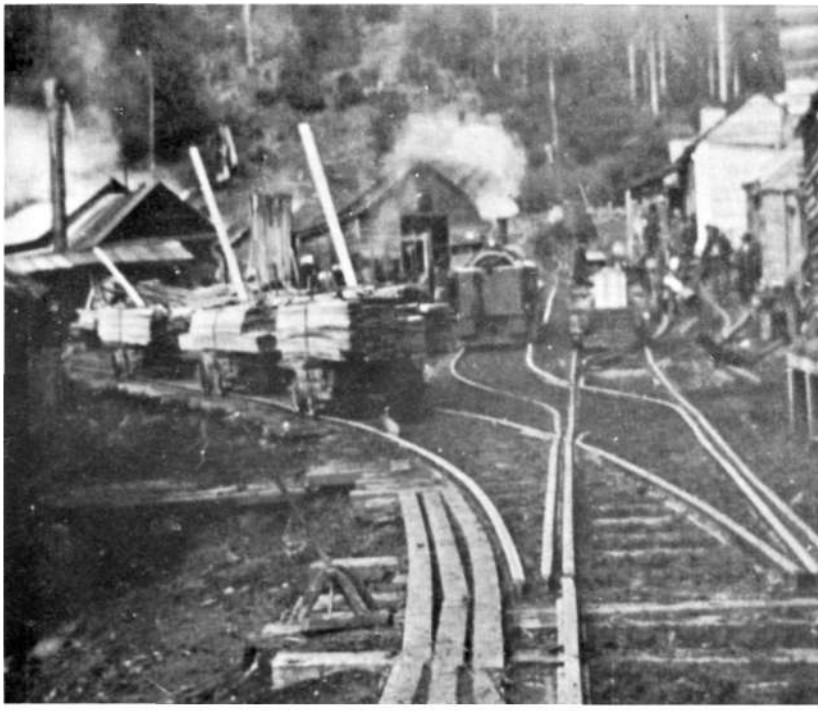
Hayden's Tramway, Barwon Downs; 3'6" gauge.

Mr. Hayden operated a fairly extensive system of tramways. The Eastern line went up the left branch of Callahan's Creek for about eight miles, and served three mills. The western line went from the Barwon railway station for about three miles, to one mile below the junction of Mackie Creek and Seymour Creek, before branching. The eastern branch ran up the Mackie Creek for about five miles and terminated at a mill. The western branch went up Newcomes Spur, between Seymour and King Creek for about five miles to a mill, thence onto the divide where it branched. One branch went south to Curtis Clearing, and dropped via an incline into the western head of the Cumberland River. The other branch dropped slowly into the head of the Cumberland River, thence by a series of inclines into the river bed and west along it for about three miles.

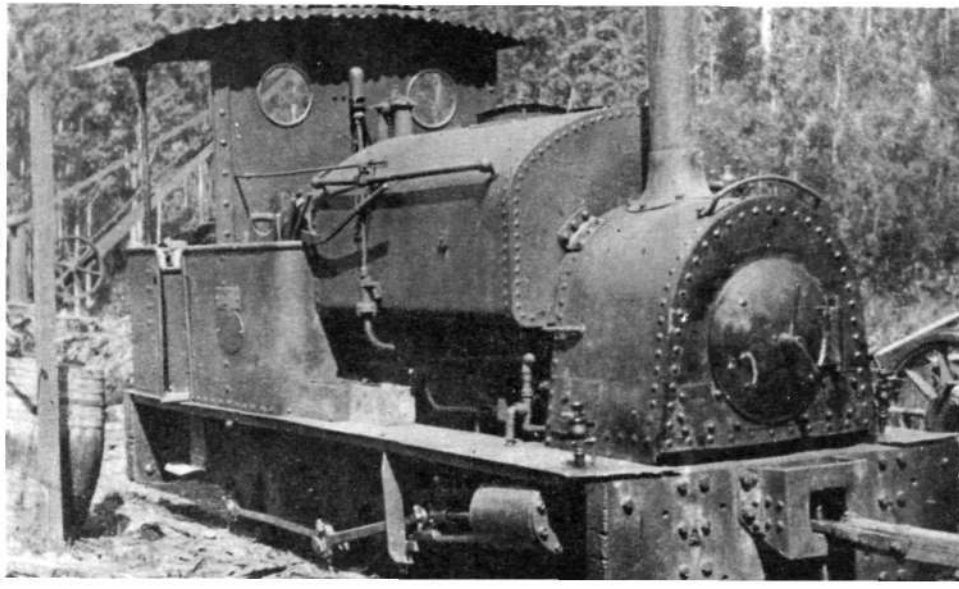
It is of note that the first movement of logs by tractor to a tramway was done here in 1938, using one of the first Caterpillar tractors.

Hayden's tramways were originally horse operated, later a steam locomotive was used. From about 1930 Fordson powered Trail tractors, and a conventional four wheeled tractor were in use. It is possible that the locomotive still remains in the bush, as Hayden removed portion of the main line before the locomotive could be removed. This locomotive is also thought to be the one referred to in a news item of 1936 regarding a locomotive falling off a trestle bridge at Barwon Downs. Nothing else is known of this locomotive. If the locomotives named "Westward Ho" at Brittannia Ck. and Forrest were different engines, it is perhaps possible that Hayden's engine was the "Westward Ho" that previously worked on Sanderson's tramway. However no evidence has yet been found to support this theory.

"Trail" tractor, with Fordson kerosene engine, on Henry's Mt. Sabine - Carisbrook Ck. line. About 1940.
Photo:- W. Henry.



No. 1 Mill on Henry's tramway, circa 1920, showing three-way point and Hunslet loco.
Photo:- W. Henry.



O-6-O ST. "Tom Cue", at Forrest. Photo:- L. Gordon

"Trail" tractor on Hayden's tramway, circa 1937.
Photo:- W. Henry.

The Forrest -Barwon Downs Tramways Today.

Today the tramways of Forrest are no more. The sole survivor in the area, and indeed in Victoria, of a running timber tramway is from Hayden's Mill to the site of Barwon station, a distance of about half a mile.

At the mill, whenever a load of timber is required to be moved, a horse sets off with two or three of the remaining nine timber wagons, passes the remains of the small traverser which once served the drying sheds, passes the storage siding; and sets off on a down grade, on old and corroded track, out of the mill precincts and onto the "mainline".

At the terminus there is one siding, then the line veers off to round a bend onto the loading gantry, which is about three feet off the ground. The track on this is well laid cable-tram track with a log as a buffer-stop. The old V.R. 6 ton crane is in use for loading the timber onto road vehicles.

Of the rest there is very little. The West Barwon Dam covers most of Grant's earlier tramway. The western-most tramway to Barramunga, which followed the ridge can still be traced in parts. At the site of his mill is a Ronaldson & Tippet single-cylinder steam engine still on sleds.

At Mt.Sabine all that remains are earthworks together with one rusted boiler. Henry's main line is very overgrown, but can be picked up in a few spots. However, despite a long search by the author and friend, no trace of the tunnels could be found.

The V.R.'s Birregurra - Forrest line is very easy to pick up, but soon all bridges are to be dismantled, thus helping to destroy the railway history of Forrest.

SIDRODROMARCHAEOLOGISTS!

Have you discovered the remains of a previously unknown tramway? Send a report to the Editor, so that Victoria's and Tasmania's railway history will be well documented.

Locomctives & Tractors used on the Tramways of the Forrest-Barwon Downs Area.

Wheel Arrang't. & Type.	Builder, Builder's No.& date.	Date in service	Cylinders, diam., & stroke.	D'wheel diam.	Remarks
W.R.HENRY'S TRAMWAY, 3'6" Gauge.					
0-4-0WT	Believed built in Sth.Aust. about 1889	1909	OC. About 6 x8"	1'2"	
0-4-0ST	Hunslet 1100 of 1911	1912	IC.		
"Trail" tractor 6 d.whls,	Donaldson Foundaries Melbourne. Fordson Engine.	?		?	Not very success-ful.
"Trail" tractor	? Fordson Engine	?		?	Ex Heyden, Barwon.
"Trail" tractor	? Fordson Engine	?		?	
Mail trolley 4 whls.	Flyer Precision 600cc. "Big Turn" Engine.	?		?	
SANDERSONS TRAMWAY, 5'3" Gauge					
2-4-0ST ex V.R. "L" class	Slaughter Grunning, 410 of 1860	1904	IC. 16x18"	5'	

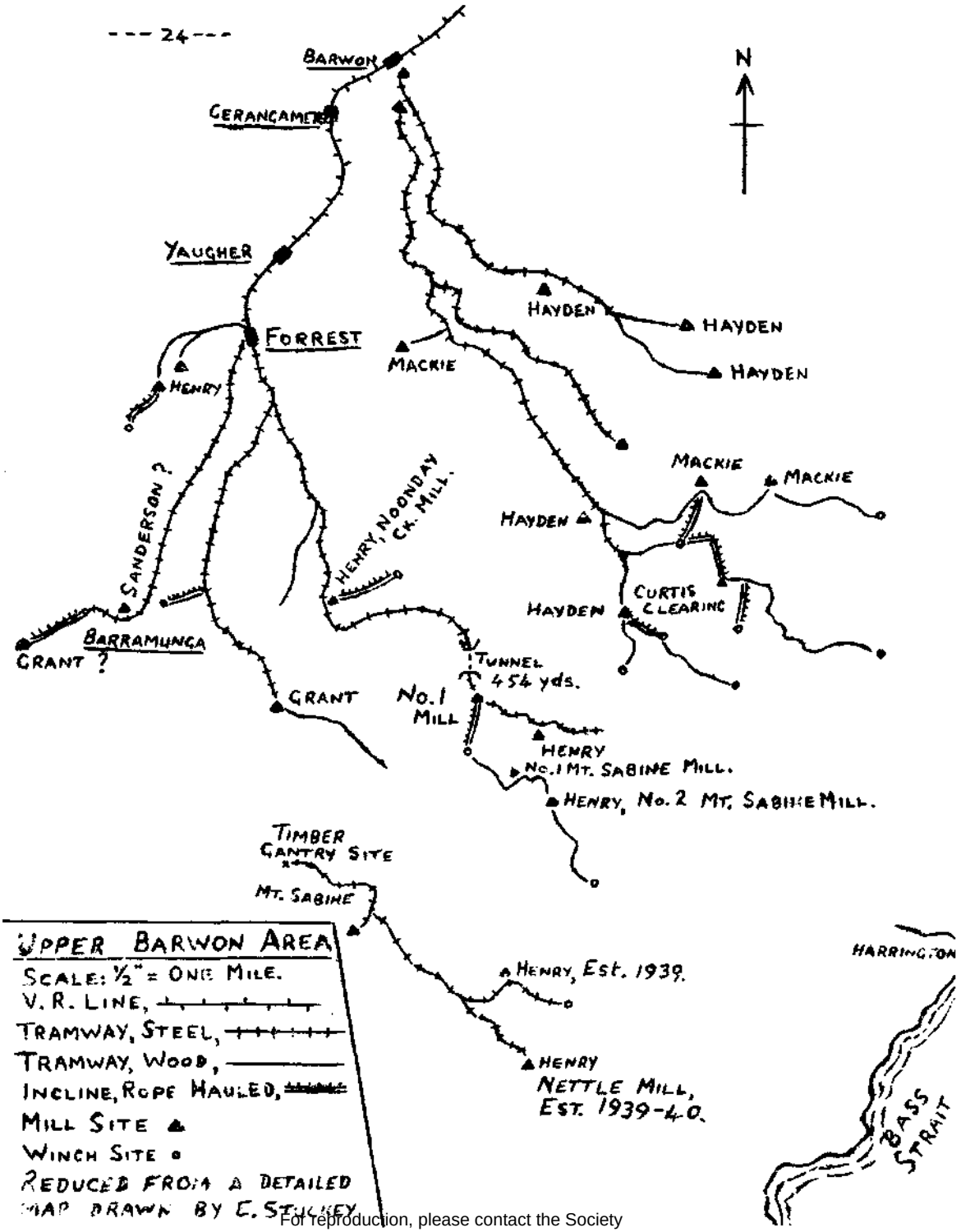
The two engine units of the V.R.s Rowan Cars were also purchased,and were used as logging winches. It seems possible these may have been used as locomotives in early years.

Wheel Arrang't & Type.	Builder, Builder's No.& date.	Date in service	Cylinders, diam., & stroke	D'whl. diam.	Remarks
SANDERSON'S TRAMWAY, 3'6" Gauge.					
2-4-0T	Fowler	?	?	?	Named "Parrot"
2-4-0T	Fowler ?	?	?	?	Named "Westward Ho" ?
0-6-0ST	Hudswell Clarke. 378 of 1891	About 1901 ?	OC. About 8 x16"	About 1'10"	Named "Tom Cue"
0-4-0ST	Baldwin	?	?	?	
0-4-0 Vertical boiler	Clayton	?	?	?	
Several Trail tractors were also used.					
HEYDEN'S TRAMWAY, 3'6" Gauge.					
Steam loco.	?	?	?	?	
4 whl. tractor	?	?	?	?	Conventional type.

Several "Trail" tractors were used, one of which was sold to W.R.Henry.

Details of the origin and disposal of these locotives can be found in the text of the article.
In the "Cylinders" column "OC" means-Outside Cylinders, and "IC." means inside cylinders.

Acknowledgements:-In the preparation of the Forrest article information was supplied by:- E.G.Stuckey, G.Maynard, L.Marshall-Wood, J.Matthews, L.Poole, and W.Henry; whom the Author thanks.
Information was obtained from the following newspapers:- Colac Herald,1897-1940;Winchelsea and Birregurra Times,1904-1909; Winchelsea Ensign - Mercury,1910-1922.



LETTERS:

Mr. A. Lyell writes:- Thank you for sending me the Spring issue. Its very heartening to know that there are still some people putting in some hard work in research instead of running a tourist agency.

As you rightly stress the need for accuracy, I have a few criticisms. I have, in addition, included any further information that I have.

TRAMWAYS OF THE WONTHAGGI DISTRICT:-

The following additions to Mr.Wilson's article are suggested:-

(i) In 1870 the Victorian Government offered a bonus of £5,000 for the delivery in Melbourne of 5,000 tons of Victorian black coal. As a result, the Western Port Coal Company built a 3'6" gauge wooden tramway from its mine at Kilcunda to Griffiths Point (San Remo). The Geological Survey Progress Reports (1876) mentions that the Company had eight horses, 20 wagons, and employed three drivers and eight men keeping the track in order, materials for track repairs costing £2 weekly.

In 1882 The Western Port Coal Co. offered to supply the Government with 50,000 tons in lots of not less than 500 tons at 10/- a ton at pit mouth. The offer was accepted, but after the Company had raised 2,000 tons the contract was cancelled on account of the difficulty of transport. The Company was obliged to spend the remaining capital on the construction of a steel tramway and loading gear at San Remo, at a cost of £30,000. The rails for the tramway were loaned to the Company by the Government.

The locomotive was ex Tasmanian Main Line Co. No.14 (1st) - a Nielson 0-4-2, Builder's No. 2369 of 1878. According to evidence at the 1890 Royal Commission on Coal the engine was "too heavy, and not the right build". Another witness said that the traffic did not exceed 25 tons per day. The loco was apparently disposed of after a short period and the line reverted to horse traction. By 1889 the line was in bad repair and was virtually impassable. The Company, however, did not survive that long, as it went into liquidation in 1884.

(ii) In 1888 Nathaniel Levi obtained the passage of a Private Bill - The Cape Patterson & Kilcunda Junction Railway Act. This is the authorization mentioned by Mr.Wilson, but it crops up again twice at two yearly intervals as the C.P.&.K.J. Railway Amendment Act - in each case merely to extend the time limit for construction. The estimated cost of

the line was £18-19,000. After the second Amendment Act no more was heard of the proposal.

(iii) The rails from the San Remo - Kilcunda line were sold by the Government in October 1897 to the Great Victoria Colliery Company to build a 5'3" gauge line from Queensferry jetty to the foot of the Bass ranges near the present Woolamai station, from which point a 50 chain self-acting incline connected with the Company's mine in a Gully on the northern slope of Steenholdt's Hill. The track was laid from the jetty for a distance of about five miles, but the Company went into liqidation in 1899, before completion of the line (or the production of any coal).

The Company had purchased Launceston & Western Railway No.1 - 4-4-0T built by Robert Stephenson (Builder's No.1914 of 1870). This lay derelict near the Grantville Road until after the completion of the Wonthaggi line, when it was hauled to the railway,and towed to Kelly & Lewis (then located, I believe, in Little Bourke Street) who reconditioned it, and despatched it to South Australia, to the contracting firm of Smith & Timms, who used it on the construction of the Angaston line. After the completion of the job it was purchased by the S.A.R., who numbered it "O" 204. It was scrapped in 1929.

(iv) The short tramway shown at Steenholdt's Hill connected a small coal mine with the road. This mine, which closed during 1966 has been operated in recent years by Nabilla Bros. of Kilcunda. I understand that they re-opened it about 12 years ago after it had been abandoned for some years. There are no traces of the tramway left.

THE WALHALLA MINING TRAMWAYS:-

I will start off by being critical of a couple of points in Mark's Walhalla article, and then try to add some further information.
First, may I suggest that overburden is not the correct term to use in relation to underground mines. It is only used in connection with open-cut mining, when its meaning is self evident. Also a single ended horizontal tunnel is an "adit" not an "aidit."
The Bagnall loco operated by the Long Tunnel Extended did not ever go to the Hume Weir Job. In 1917 it was working on the Glenelg Breakwater construction in South Australia, then being owned by Stone & Siddeley Ltd. It was purchased in 1921 by Forward Down & Co.Ltd., who resold it to the South Australian

Government in August 1922. Together with a Kerr Stuart 0-4-2 (Builder's No.742) ex the Silver Spray mine at Zeehan, it operated on a four mile seven chain tramway owned by the Irrigation Commission between the river landing at Cobdogla on the Murray, and Hume Bros. (later Hume Pipe Co.) pipe works at Loveday. From 1923 it lay in the yard of the Cobdogla pumping station until 1947 when it was offered for sale. It is now preserved at Barmerah. No.1 - the Kerr Stuart, was shipped by river steamer to Redcliffs (Vic) where it is now preserved after many years work hauling coal from the railway station to the pumping plant.

Incidentally, the Bagnall operated at Walhalla on the east side of the valley, the incline terminating approximately opposite the site of the State Battery, and as the boilers and main shaft of the Extended were located in a chamber 920' from the mouth of the adit all mining timbers and firewood had to be stored outside and taken in as required.

I feel that the description of the "Poverty Point" bridge as being open deck is misleading. After all, it was a horse tramway, and I have yet to see a horse that could pace it out over sleepers! When I first visited the bridge in December 1930 most of the decking was intact,and a photo taken on a later visit in (I think) Jan.1936 shows solid decking with a few gaps, none of which were wide enough to worry about crossing.

In conclusion I would like to suggest that the problem about how the incline crossed the tramway at Longfellow's is not very difficult - I doubt that both were in use at the one time. The map from which the sketch was taken is partly compiled from a variety of plans of the various parties and companies who worked the lease, some of the workings dating back to 1866. However that is only a theory, as it is a good many years since I visited Longfellow's

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Mr.L.Poole writes, regarding the Walhalla steam loco,:- W.G.Bagnall's No.1801 of 1906, 2' gauge. This was a small saddle tank of 0-4-0 wheel arrangement, supplied new by the builders to Messrs. Mussabin & Co.

It is not known to the writer what became of the engine after the closing of the Walhalla mine tunnels, but in the A.R.H.S."Bulletin" No.161 of March 1951 , there is mention of this engine

being in the possession of Messrs.Stone & Siddeley Ltd. in 1917, and of it being used on the construction of the Glenelg pier, South Australia, at this time.

In 1921 it went to the firm of Forwood,Down & Co., of Adelaide,(Metal Merchants ?) who sold it to the South Australian Govt. in August 1922, who sent it to Cobdogla, for use on the line to the Hume Pipe works on the River Murray. The pipe works closed in February 1923, and the loco was left standing until 1959 at the Cobdogla pumping station, although sold to a Mr.W.G.Woolmer,who was unable to move the engine.

In 1959 it was set up in a children's playground at Barmera and is still there.

LIST OF LOCOMOTIVES OF THE PRIVATE RAILWAYS OF VICTORIA.

Some years ago Jim Wells prepared for the A.R.H.S. a tentative list of the locomotives of the private railways of Victoria. The V.L.R.R.S. has now come to an agreement with the A.R.H.S. to prepare for publication an amended and expanded version of this list. When this is ready, possibly late this year, the list will be published in booklet form under the names of the two Societies. If you have any comments to make on how you think the list should be presented, or on the amount of information about each loco you think should be included, we would be glad to hear from you. If you have any information you think might be of use in this list, we would also be pleased to hear from you. We are particularly anxious to obtain information about tractors used on Victorian timber tramways, and we also wish to obtain the Builder's Nos. and dates of the Ruston-Hornsby diesel locos used by Cheetham Salt Ltd. Send any information or comments to M.Plummer,

18 Mc.Whae Ave.,
Rippon Lea,Vic.

A 73 YEAR-OLD LOCOMOTIVE RESIDES IN MELBOURNE.

By M.Plummer.

Many members may remember an 0-4-2T locomotive being displayed at the P.B.P.S. fund-raising fair in October 1960, but may not know anything about it. Although it never worked on a line in Victoria it has resided at the warehouse of Miller & Co. (Machinery) Pty.Ltd. 27 Queens Bridge Street, South Melbourne since the 1st. of May 1924. It was built by J.Fowler & Co. Leeds, England in 1893.

SPECIFICATIONS:-

Cylinders:-6"diam.9" stroke.
Driving wheel diam.:- 1'8"
Trailing wheel diam.:-1'2"
Wheel tread:- 2½"
Boiler:-5' long,2' diam..
40 brass tubes 1¾" diam..
Wrought iron platform at rear (footplate) 6' long 8'6" wide.
Weight:- 6⅝ tons.
Water tanks:4'6" long, 3' deep, 1' wide.
Firebox,outside measurements:-3'4" long, 2'6" wide. Inside measurements:-2'7" long,1'11"wide,3'3" high.
Boiler pressure:- 180 lbs.p.s.i.
Will haul 36⅝ tons on 1 in 100 grade,21½ tons on 1 in 50, and 10½ tons on 1 in 25.

This engine was unusual in that the cylinders drove a jack-shaft, which drove the driving wheels through vertical coupling rods. The engine was similar in this respect to "Parrot" on Sanderson's Forrest Barramunga line . It is not known from where the locomotive came, nor is the builder's number known.

Narrow-Gauge Mountains and Pacifics are working Less than 300 miles from Melbourne!

The Tasmanian Railways still has H class 4-8-2's and M class 4-6-2's in operation on its highly efficient system.Indeed H classes are still undergoing major overhauls. For latest news on the steam situation in Tasmania we can recommend Tasmanian Rail News, published monthly,annual subscription $1-50. Subs.should be sent to-Mr.A.T.Ryan, 91 Parker St., Devenport, Tasmania.

OUR NEXT RESEARCH PROJECT - The South Western Area.

(from the Secretary).

For the next three months we have decided to concentrate on the area south of the Winchelsea Terang Railway line, east of the Timboon line, and west of the old Wensleydale line. This area includes such lines as the Dean's Marsh to Benwerrin colliery line, reputed to have had an ex-V.R. locomotive, and the Apollo Bay timber tramway which is reputed to have owned steam locomotives 100 years ago. There were also tractor operated lines, like the Cobden to South Purrumbete line which operated in the 1920's, and Marchbank's Mill line from Pile Siding on the Beech Forrest-Crowes line. We know of many steel or wooden-railed horse drawn lines, perhaps some of these had locomotives or home-made tractors.

If you have any information, no matter how trifling, on any private lines in this practically untouched area, please send them to Mr. John Matthews, 24 Murchison Street, East St. Kilda, Vic.

John has volunteered to collate all information sent to him, and will write an article for publication in a later issue of "Light Railways." John is very able to write on this area as he has spent the last six years in making a historical film of the Colac-Crowes narrow-gauge line, and in gathering information he has been through local newspapers, interviewed local people, and has done much film work on the line and surrounding areas.

Please send in any information, even though you might not consider it important. It could be just the lead we need. If you would like to participate in hikes along the old lines, or help us to go through newspaper files also write to John.

Remember that the Forrest article was done by many members contributing information, much of it conflicting, but after being sorted out and checked we were able to publish fairly comprehensive articles on these lines.

The Society's First Film Night, Dec.2nd,1966.

Society business took about five minutes,to complete, and for the rest of the meeting films of light railway interest were shown. Lines covered were a varied selection, including Cairns-Kuranda,Darwin-Larrimah,Croydon-Normanton,Weeaproinah,Powelltown, Tyers Valley,Rubicon-Royston,remains of the Zeehan-North East Dundas tramway, a spectacular film of a cable-haulage line in western Tasmania, and others.

About 60 people attended, and all seemed to be well satisfied. Congratulations must go to J.Matthews P.Dodd,G.Maynard, and A.Hutchins for the excellent presentation,projector co-ordination, and the high standard of the films.

It is hoped that another film night will be held in March or April.

The Narrow Gauge Railway Society (England).

This Society is not very well known in Australia. It is interested in narrow-gauge railways throughout the world, A bi-monthly news sheet is published giving latest news on British narrow-gauge lines, public and industrial, together with news on overseas lines whether they be in Bulgaria or North Borneo, the U.S.A. or Victoria. In addition members receive a very well produced quarterly magazine,with many illustrations, and with very varied contents. Recent articles have been about the East Broad Top, (U.S.A.),South African sugar trams,early petrol-electric locomotives, railways of Formosa,Baldwin narrow gauge locomotives,Hudswell-Clarke locos, American narrow-gauge locomotives with oscillating cylinders, and many others. In addition many high quality scale drawings are published in the magazine. Considering the quality of the magazine,which is offset printed, and the interesting contents the subscription is most reasonable-£1-1-0 ($2-62 Aust.). Enquiries to-Mr.M.Swift,47 Birchington Ave., Birchcliffe,Huddersfield,England. Alternatively, further details can be obtained from the Editor of "Light Railways".

SPECIAL TRAIN NOTICE.

Feb.,Saturday 11th, Timboon. (A.R.E.).
" " 25th,Ballarat North, Redan, and Eureka. (A.R.H.S.)
March,Fri.10th/Mon.13th, Carpolac,Balmoral,Coleraine, Casterton,Portland,Warrnambool. (A.R.H.S.)
April,Sat.8th., Waubra (V.S.R.C.A.)
" " 15th, Stratford (A.R.E.)
" " 22nd, Destination to be determined, (A.R.H.S.)

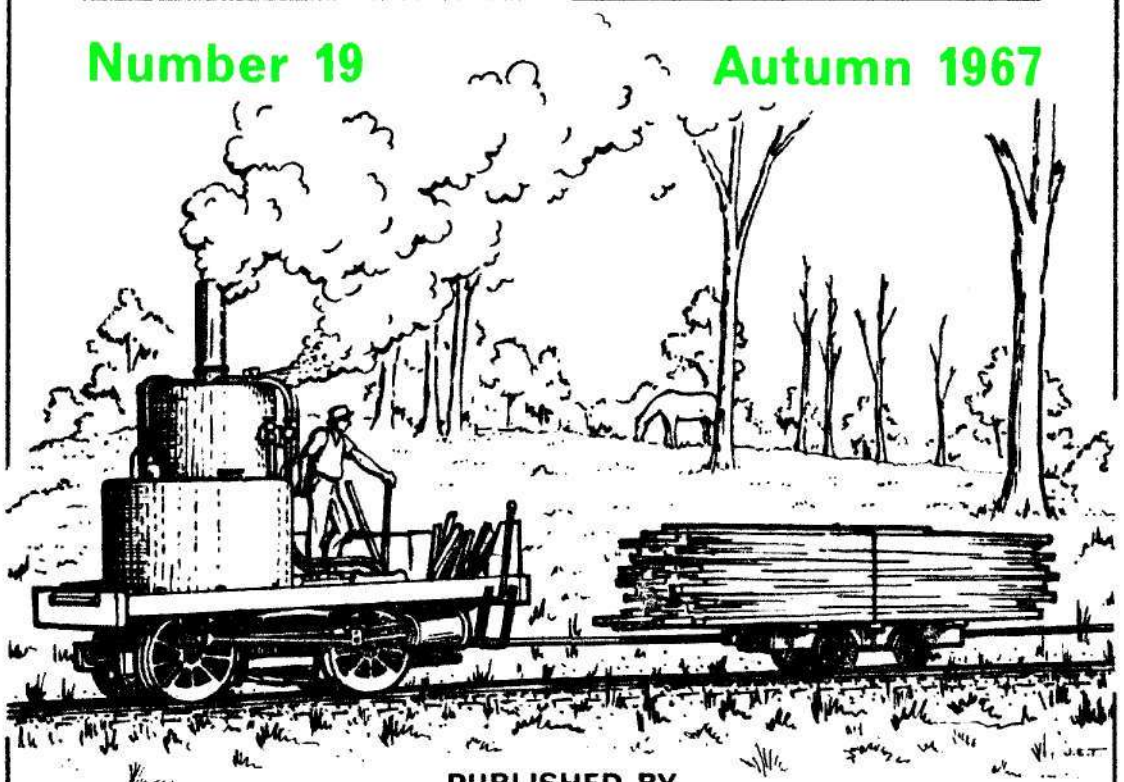
For further information concerning these trips ring the Editor, 83-5873.

While every effort is made to ensure the accuracy and completeness of articles published in "Light Railways", we cannot be sure that errors have not crept in. Additional information is being uncovered all the time, and this often proves that the history of tramways and locomotives was in fact quite different to that which was previously believed to be true.
If readers see any errors in articles, or are able to add additional information, we would be very much indebted if they would forward this information in writing, to the Editor. All corrections and additional information will be published in the magazine. Without <u>your</u> co-operation in doing this we will be unable to accurately record the history of Victoria's light railways.
The Editor would also be pleased to receive more articles, notes or news items for publication in the magazine.

Opinions expressed in articles or letters are not necessarily those of the Society.

LIGHT RAILWAYS

Number 19 Autumn 1967



PUBLISHED BY
The Victorian Light Railway Research Society

L I G H T R A I L W A Y S

No.19 Autumn 1967. Vol.V.
Price - 20 cents.

The front cover shows an ex- Victorian Railways Rowan car hauling sawn timber on Sanderson's Tramway, Forrest. Based on a recently found photograph and drawn by John Thompson.

Due to pressure of University studies our Treasurer, and foundation member, Geoff Gardner has found it necessary to resign from his office. His work for the Society has been considerable, particularly over the last six months when membership grow so spectacularly. Council has appointed John Prideaux to act as Treasurer until the next Annual Meeting.

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

Annual Subscription dating from June 1st. 1967 is $1-00.

Council.

President/Magazine Editor:-Frank Stamford,
9 Mc.Gregor St., Canterbury.(83-5873).
Vice President:- Geoff. Maynard,
"Nayook," Bungalook Rd., Bayswater.(72-9-2405).
Secretary:- Mark Plummer,
18 Mc.Whae Ave., Ripponlea. (53-6794).
Treasurer:- John Prideaux,
2 Emmaline St., Northcote. (48-4280).

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Back Numbers:- Copies of the last issue, Summer 1966-67 are available from the Editor, at 20 cents each, plus postage.

NEWS, NOTES & COMMENTS, Now on page 25. This change enables us to give more up-to-date information.

POWELLTOWN 1928.

By - Hugh Richards.

(From the Victorian Railways Magazine, Feb.1928).

Powelltown swelters under a blazing summer sun. The gums on the slopes of the surrounding ranges are masses of bright, dry green, streaked with the slim, straight whitenesses of the trunks. The big tin roof of the sawmill shimmers with reflected heat. Black smoke ascends sluggishly from the tall chimney stack. Dust - hot dust - lifts from your feet as you walk.

And eternally the drone of the sawmill rises and falls, monotonous and persistent as the heat.

Shunting trucks of timber from the sawmill platform, the squat little engine with the enormous stack whistles with the assurance of an A2. You disturb the swarm of flies enveloping you and study your watch. The young foreman beside you answers your thoughts.

"She'll be leaving inside half an hour," he says. "I suppose there'll be ten logs for her to bring in. About nine to ten miles out she goes. Climbs all the way there."

"Will it be any cooler?" You jerk a thumb towards the ranges, flick some of the flies irritably from your face and wave them on the foreman.

The foreman waves them back to you. "When you get in amongst the trees and over the creeks, it will. That is," he grins, "if you don't run into a bushfire."

You moisten your lips and survey the sprawling ranges anxiously. Not the slightest sign of fire, not even a solitary wisp of blue smoke anywhere. All the same, this heat....

"We make three trips for logs every day," continues the foreman casually.

"That gives us, say, 30 logs to slice and stack daily - 30,000 super feet of timber. Our tram line takes it to Yarra Junction, and from there it's railed to Melbourne."

The shade of the mill is not much cooler than the glare of the sun, but it looks cooler. Under the hot tin shelter, you watch the flashing, revolving saws slicing through the slabs of hardwood, and listen to the drone of their unchanging dirge.

All Mountain Ash.

"Hard wood and good wood," the foreman shouts. "Mountain ash we handle here. It's used for interior building structures, motor bodies and the like. When it is seasoned and polished, they call it Australian Oak. It makes fine furniture. We season about 10 to 15 per cent.

Machinery does most of the lifting and handling in the Powelltown sawmill. Lanky iron arms roll the logs into proper position under the big saws. Mechanical conveyors trundle the flitches under the smaller saws.and slide the scantlings to the stackers. Sawdust travels in thick masses along ascending runways to the furnaces. Underneath the false flooring huge machinery throbs and pounds.

At the roaring furnaces by the three boilers, a stoker juggles huge pieces of firewood. Even the merciless rays of the sun are prefereable to the overpowering burst of heat from the furnaces. The very air is on fire.

And, under the sun-drenched tin roof, the saws drone and drone....

But the log train is ready for its climb into the heart of the hills. The engine is drawn

up at the head of a long row of low,open trolleys - each merely a bare framework on four sturdy wheels. You perch yourself on the front of the leading trolley, shift your feet clear of the uncovered wheels and wave farewell to the foreman. Immediately in front of you is the stolid rear of the engine, topped by an immense stack of firewood.

The whistle shrieks. The train shakes itself into movement. The wheels beneath you bump forward. Couplings clank the whole length of the train. Grinding and jolting on the light, narrow-gauge rails, the train climbs and winds out of the yards, whistles as it laours across Powelltown's main street, and determinidely sets its snorting nose at the steep ranges.

Fainter and fainter sounds the omnipresent whining drone of the sawmill ..... Fainter and fainter .....

Rusty rail, wooden sleepers and rough tracks slither under the wheels of the engine and slide beneath your feet. Pungent smoke whisps around the blackened roof of the cab. It is a stiff climb and a hard pull for the little locomotive.

On either hand, the steep slopes of the ranges sweep to the blue, unclouded sky. Thousands of bare tree trunks stand like soldiers on parade. Foliage has not yet freshened all the ravages of the bushfires which, a year or so ago, ringed Powelltown in a circle of raging flames. But a young generation of green saplings is springing up.

Onward and Upward.

Twisting across a high trestle bridge, the train turns to the left. A hundred feet or so below in the valley lie ugly looking rocks. The line disappears between high narrow banks, which almost brush the sides of the swaying engine.

Onward and upward....Clanking of piston rods ....Grinding and bumping of wheels....

A bronzed giant in a flannel shirt, belted trousers and two days growth of whiskers backs off the engine and swings himself on to the front of the trolley beside you.

"Slow enough, isn't it?" he says. "We'll show you some speed coming back, though. You see, we leave these trolleys with the other engine at the top, and pick up the logs which are waiting for us on the trolleys we left there the other day. Follow me?"

"Now, its a run downhill all the way after we've topped the range coming back, so this engine just pushes the logs in front of it until we're on the slope and gives us a shove off. My cobber and I - there's only two of us travel on the logs - hang on to the moving trolleys and brake them as they gather speed. We get up to thirty miles an hour coming down. Coast right into the mill almost.

"Dangerous?" He laughs. "Safe as houses. They might get away from us of course. But then we'd just jump off. We <u>did</u> lose four heavy logs a week or so ago. They came round one turn hell-for-leather, beat the brakes, and we had to let 'em go. Sixty miles an hour or more they must have been travelling when they jumped the rails and crashed into the valley. Some row they made, too. Bad as France again.

<u>Through the Tunnel</u>.

"And here we are at the tunnel."

Cold air swirls out of a black, square opening in the mountainside, right ahead. Plunging into the gloom and coolness, the engine squeezes past the entrance to the tunnel, seeming to scrape the roof and sides. There is noise and tumult. Echoes are flung from rails to roof.

Light dims and grows dimmer. Behind, the square which engulfed the train has changed to an eye of blinding sunshine glaring into the blackness. Further and further into the bowels of the mountain.....

"Thousand feet long!" screams a voice in your ear. Faintly the invisible engine begins to take shape once more. Light struggles round it and filters through the smoke beating against the low roof of the tunnel. Then abruptly the engine has burst into the open and the heat again.

There is a dip and a slope outside the tunnel. With increased speed, the train rumbles around a curve and ventures over a gurgling creek which splashes between green ferns.

"Looks cooler here," says the timber man, "but we want a fall of rain to make things quite safe from bush fires. Anyhow, I'd rather have summer conditions than winter, Coming home hot and drenched with perspiration is a damn sight better than coming home cold to the bone and drenched with rain."

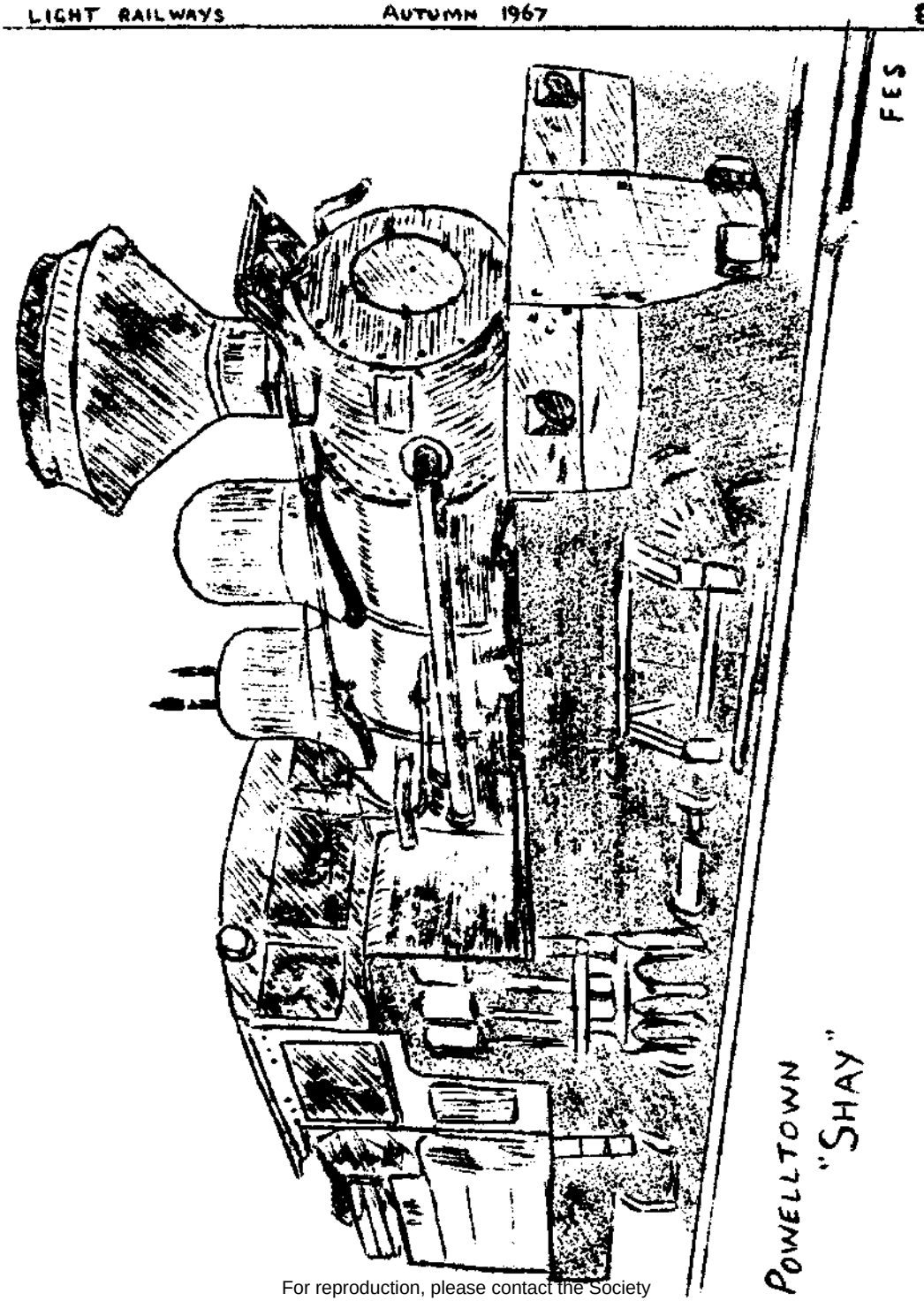
He shakes his head decisively and, with a sudden "We're here!" leaps to the ground to overhaul and pass the engine in half-a-dozen long easy strides.

In a cool, wooded glade, the train halts, hesitatingly, doubtfully. You jump down and stretch your legs in the shade of the silent, towering gums. The sound of an axe meeting hardwood somewhere to the left is the only sound that issues from the dense jungle.

There is a siding on the right of the log train, a siding loaded with ten huge logs on low trolleys and strung together heavily behind another locomotive.

The Return Journey.

Seven or eight timber-fellers materialize from the trees. Axes are dropped as the engine-driver



cheerfully flourishes a packet of letters and a bundle of newspapers.

"Got a good load for you today, Jim," says a bare-shouldered axeman, whose rippling muscles threaten to split the dark skin of his upper arms. "Ten snifters! Eh? No, no fires yet. Still they'll come if it doesn't rain. And of course it won't. One shower'd be enough, too. Just one."

He squints up at the hot sky and glaring sun, shrugs his shoulders resignedly and fills his pipe.

With a minimum of effort the empty trolleys are kicked behind the local engine, ready for tomorrow's trees. The Powelltown locomotive shoulders its way behind the ten patient logs. Two men pass slowly along the line of trolleys and their tremendous burdens, adjusting the wooden brake blocks, tugging, pushing and testing.

"Better sit on the end of this last log," your recent friend advises. "Make yourself comfortable, but hang on when we start in earnest. And mind the roll; there's three or four inches of play allowed for each log."

You seat yourself on the smooth rounded trunk, dangling you legs over one side. There is nothing which you can grasp for security except one of the links in the stout chain which shackles the log to the low trolley. And you can only jamb one finger through that. However .....

The two brakemen have clambered on to the leading logs. One of them waves his hand. The engine whistles and pushes forward. The heavy logs are thrust into motion.

Things are quite comfortable at first.

True, the log shakes and strains and trembles

and slips and groans and gives every promise of breaking at any moment from its chains. And certainly it has a disconcerting habit of slithering backward and forward as it negotiates curves at the rear of its nine brothers. But, with the reliable old engine puffing confidently behind you, and the speed of the swaying logs a mere fifteen miles an hour or so, there is no cause for alarm or even apprehension.

Why, there is one of the brakemen walking along the logs as they lumber through the thick scrub and thread their way ponderously between the trees, passing from one moving log to the next as casually as though he were walking down Collins Street.

Through the tunnel once more, however, and the engine uncouples and falls back to follow at its restricted speed limit.

"Hang on!" bawls the nearest brakeman.

You refrain from the obvious reply and sit more rigidly. Dipping, the logs pitch clumsily down the grade. Staggering, they rock with gathering speed around a curve. They plunge awkwardly down hill swayed by their weight and rolling under the chains. Perched on the end, with your legs braced firmly against the side of the huge, trembling log, one hand flattened firmly along the surface, and one finger of the other twisted through the imprisoning chain, you endure the jarring and shaking with an assumption of calmness.

Another curve jerks the length of each log in turn and sways your seat back three or four inches. It seems like three or four feet. The chain is forced back and jambs your finger. Painfully you readjust the crushed digit and slip it into the next link. Playfully the log straightens and, slithering back, nips your finger a second time.

One of those trestle bridges - much narrower

than when you climbed it an hour ago - trembles under the clamourous passage of the great logs. Your legs are swinging a hundred feet or more above some very solid-looking ground and rocks. Extremely solid looking. You lean back a trifle. And you recollect that if you had eyes in the back of your head they would witness the same inspiring spectacle, the same lofty drop and the same solid-looking rocks behind you. So you sit bolt upright.

Those trees are flashing past pretty quickly. Thirty miles an hour or thirty-five? That fellow said they had once gone as fast as sixty miles. That time, though, they had to jump off because the logs had got away from the brakes.

Mechanically you measure the distance between your helpless feet and the rough track whisking away beneath. Of course, it could be done. But suppose they shouted to you to jump off when they were in the middle of another trestle bridge?

Your disturbed reflections are rudely interrupted by a gust of wind which plucks suddenly at your hat. You effect a smart rescue, and blink off the blue clouds of thick smoke which rise from the tortured wooden brake blocks to envelop the log from end to end. Dimly, as in a fog, you glimpse one of the brakemen hauling desperately at a brake lever in front of him. You can't see the other man. No doubt he has fallen off.....

The influence of those sturdy brakes is being felt now, however. Speed slackens. The acrid smoke abates. Gingerly you shift your position. There is nothing soft about a fresh felled log.

Another trestle bridge rumbles sonorously. You avert your gaze and glance along the logs. No sense in looking down at the drop below. You are relieved to observe that the front brakeman has not fallen off. He's - yes, he has just taken his hat

off to scratch the back of his head.

Swinging to the right, the logs sweep through a cutting, curve round a sandy embankment, brush past overhanging bushes and stagger to a standstill within sight of the nearest houses of Powelltown. The brakemen walk leisurely back to where you are sitting. assessing bruises and nursing a black finger-nail.

"Good run, eh?" says one."We've got to wait now for the engine to catch up. There's a bit of a rise just here. Only a quarter of a mile or so to go and we'll be back at the mill."

"Why, listen."

Like the distant buzz of angry wasps, the eternal drone of the Powelltown sawmill floats towards us. And a red sun is sinking behind the tips of the tallest gum trees.

ENTERPISE SAWMILLS TRAMWAY By-E.G.Stuckey.

This tramway, which was about 3' gauge, ran from Cement Ck. mill around the side of Mt.Donna Buang to the Lead at Rocky Ck. It continued as a cable-haulage, on grades up to 1 in 3 to Warburton. The upper section of about three miles was steel railed and operated by a tractor. This unit was unusual in that it was mounted on two log bogies, probably chain driven.

For latest news of the Tasmanian Government Railways read Tasmanian Rail News, published six times a year Subscription $1-50. Send to- Mr.A.T.Ryan, 91 Parker Street, Devenport, Tasmania.

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TRAMWAYS OF THE FORREST - BARWON DOWNS AREA.

By-M.Plummer.

(The following additional information concerning Hayden's and Henry's tramways has been found since the publication of the article in the last issue. Additional information on Sanderson's tramway, regarding the use of ex V.R. Rowan cars and an "L" class locomotive is still being investigated, and it is hoped to give more details in the Winter issue.)

Hayden's Tramway, Barwon Downs; 3'6" gauge.

The Otways were thrown open to sawmillers in the 1890's and this saw the advent of the two sawmilling firms, Hayden Bros. and Anderson-Mackie & Co. The Haydens arrived in 1896 and for two years timber was taken to the station by bullock team from a mill near Mt.Cowley. When the timber was cut out, the mill was moved to a site six miles from Barwon Downs. From the mill a wooden railed horse drawn tram to the station was built. About 1905 Hayden's built a mill on Callahan's Creek and laid a steel railed line to Barwon.

On this line ran an 0-4-0ST Baldwin steam tram motor which was bought from the Electric Supply Company of Victoria - who used it on the Bendigo tramways - in about 1906. It was one of five Baldwins and three nearly identical Phoenix motors that ran at Bendigo. (Baldwin B/Nos.12,241-5 of 1891, Phoenix B/Nos. 315-7 of 1892).

Hayden's motor was converted from 4'8½" to 3'6" gauge by Browns of Geelong, an operation which was carried out on at least three of the Bendigo motors for use on other tramways.

About 1919 Hayden built yet another line, which was too steep for the loco, which was then sold for use in the Hume Reservoir construction.

The new line ran along Seymour Creek and Newcomes Spur, connecting with Mackie's horse trams and inclines. Hayden used horses for about 9-10 years, and then purchased two Trail tractors. These were later joined by a four wheeled tractor built by Day & Sons, which was not as successful as the Trails.

About 1936 the Day tractor fell through a bridge, the driver being killed. This tractor was later sold. One of the Trails was abandoned at Curtis Clearing and later scrapped. The other, a 32 h.p. model, was sold to Henry.

The line was closed about 1938, when a large flood came up Callahan's Creek and damaged the tramway, tearing out all the 44 bridges along the creek. Heaps of sleepers and stringers remained until being burnt in the fires of 1939.

Henry's Tramway, Forrest; 3'6" gauge.

There is not much to add, except that the Donaldson tractor was abandoned at the Nettle Creek Mill (southernmost mill), and is possibly still there.

Controversy is raging over Hayden's 0-4-0WT (Beyer Peacock ?) No.7, and readers will find further details of this loco in the "Letters" section of this issue.

To help those trying to put the lines on the Lands Department Maps, and/or find the tunnels, the following points may be useful:-

(1). Noonday and Monday Creeks are one and the same.

(2). The long tunnel can possibly be reached by going along a track marked "No.1 Road" off Kanalang Road.

(3). The short tunnel is two miles upstream from No.1 Mill site.

The Trail-Fordson Tractor

By - M.Plummer.

Mr. G. F. Sewell, of Footscray, began the building of Trail tractors about 1928, and built about twenty until 1932 when his plant was taken over by Lion Rolling Mills, which is now defunct. Mr, Sewell's grandson told me Trails were sold all over Australia, the last two going to Queensland.

Mr. N. E. Wadeson kindly forwarded to me an extract from the "Colac Herald" 31st.August 1928, describing the trial run of the Trail, from which the following summary is presented:-

"A very interesting and successful demonstration in what is practically a revolution in sawmill transport was given on the property of Messrs.Sanderson and Grant, sawmillers, on Wednesday last. A large number of sawmillers and sawmill representatives from the Otway and Beech Forest areas were present. [They included] ...Mr.J.Knox (manager), Mr.Brian (engineer of Weeaproinah mill, of Petitts' Geelong), Mr.J.Grant(...Barramunga), Mr.J.Haydon...,Mr.E.Henry...,Mr.J.Condon (Ferguson mill),...Mr.Rylan (Ford cars), Mr.G.F.Sewell (of Sewell Pty. Ltd.), Mr.Frank Trail, and engineer demonstrators."

"The party left Forrest at about 11 a.m. and arrived at its destination per Trail Fordson loco. [sic] about 1 p.m. The run, which was without incident, augured well for the test, which was held under conditions that proved its reliability and efficiency to the most exacting critic. The line leading from Barramunga to Grant and Sanderson's mill traverses many steep cuttings along the side of the range, persuing a serpentine course through several miles of dense timber, messmates and gums, passing beautiful fern gullies and the many varieties of scrub such as musk hazel, silver wattle and many forms of eucalyptus indigenous to the Otway forest."

"Rain fell about 2 p.m. and the iron rails became slippery and it was evident that the return to Forrest with the tractor with its load of 4000 ft. of timber and a very full complement of passengers would be a Herculean task. The tractor, however, drew this load with apparent ease. A demonstration was also given of shoving this load in front of the Trail Fordson, over a part of the line, which it also did without difficulty....All interested unanimously expressed their satisfaction at the result of the test. That this new form of transport marks a new era in the sawmilling industry is undoubted. That it is possible to convey nearly a 12 tons load over eight miles of rugged mountain country with a climb of one in sixteen, at the cost of a little over one tin of power kerosene seems incredible. This, however, was what, under bad conditions, the tractor accomplished."

"The Trail Fordson, which weighs about four tons, consists of a 24 h.p. motor on four wheels of 8 in. tread, and 2½ inch flanges. It has three forward and one reverse gear. The outstanding feature of the machine is an attachment of a connecting shaft from the motor by two universal joints to an attached bogie and being propelled by rotary movement. Oppinions were expressed that the tractor would be universally adopted by the millers, as its economy of haulage would enable millers to advance further into the forest for timber. Horse drawn trucks were costly and slow. The transport, apart from the cost of fodder, was always an expensive charge on the mills. Mr.Grant ... was satisfied it was an essential factor to the sawmilling industry. An exhibition was also given of using the gears instead of brakes on the home journey from Barramunga. This was also ... in every way satisfactory, fulfilling the claims made by the proprietors. Mr.Frank Trail of New Zealand, sawmiller, and inventor of the rail applied tractor and Mr.G.Sewell, manafacturer,of Footscray, are to be congratulated on the high efficiency,economy and reliability of the machine..."

While the writer was forgetting the advent of the road truck, Mr.Hayden was impressed enough to purchase two; and Sanderon & Grant used their example until 1939, when, according to the driver - Joe Wilson - it was sold to Henry's, who also purchased one from Hayden Bros. They were used on Henry's tramway until 1948.

The author wishes to thank the following people for their help in adding to our knowledge of the Forrest - Barwon Downs tramways - E.G.Stuckey, J.Turner, W.Hayden, J.Hayden, W.Henry, E.Henry, R.P.Sewell, N.Wadeson, R.Wilson, Mrs. J.Wilson.

PORT FAIRY LIGHTHOUSE TRAMWAY.

By- D.Ctercteko.

This tramway supplied a lighthouse - which was unapproachable by sea - at the mouth of the Moyne River; it was of a narrow gauge (about 2 ft.) and is now almost non-existant. Most of the track has been used to strengthen sea walls or causeways which block the South-west Passage and line the river. Some of the chains from the wagons, and rails were bought by Fletcher-Jones and used to decorate his Warrnambool factory gardens and his home.

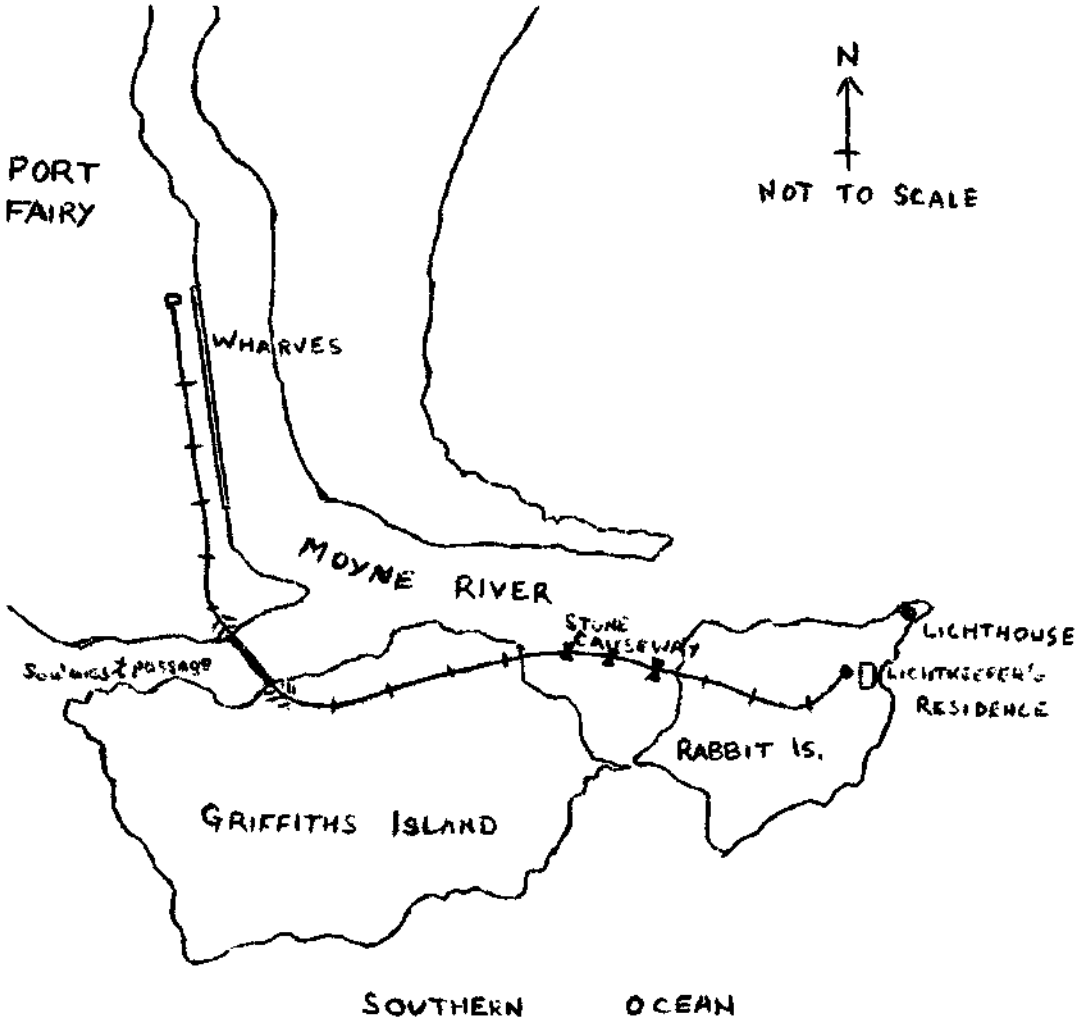
When I was last in Port Fairy (about Sept. 1964) I counted ten small flat wagons, some with steel chassis and some with wooden chassis. These were hand-pushed, and may have been horse-drawn in later years. This information was obtained from my grandfather who was resident in Port Fairy between 1910 and 1915.

From memory I have drawn the path I assume the track took, on the map over page.

I hope further research is possible for this tramway and can suggest the "Port Fairy Gazette" as a source of information.

(Map next page).

Port Fairy Lighthouse Tramway.



TANJIL BREN TRAMWAY

Notes by - E.G.Stuckey.

Gauge- 3'6"steel railed,owned by Forests Commission of Victoria,and operated by tractors.

Main line ran three miles up the Tanjil River to Parta's Mill. There was a sixty chain branch to Strawn's Mill. Closed by a washout in 1952.

Confirmation of above information would be appreciated.

BOOK REVIEW

"Railroads in the Woods" by John T. Labbe and Vernon Goe. Published by Howell & North 1961.
Price $10.00, Technical Book Shop, Swanston St., Melb.

That's a lot to pay for a book you say, but it works out at just over 2 cents each for the 440 photographs therein, and few of us can get them at that price nowadays.

From the end plates of the spectacular Baird's Ck. bridge, 1,130-ft. long and 235-ft. high, in the Cowlitz County near Longview, to the numerous photographs of each type of geared locomotives the prints are excellent.

Brief but adequate comments on the photographs are made and the book is divided into sections, covering all aspects of logging by rail in the U.S.A.

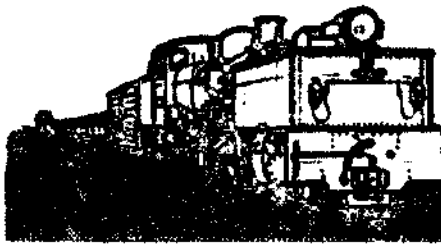
Such oddities as the Baldwin attempts at geared locomotives, the Gripwheel and incline haulages are covered.

As the book covers all the U.S.A. no attempt is made to expound any area or period. Rather a cover from the beginning to the present day systems is given.

This book can be recommended as an interesting and informative addition to your library.

E.G.Stuckey.

Don't let Puffing Billy Die
The continued existence of Victoria's only steam operated narrow-gauge railway still depends on volunteer support.
Puffing Billy needs you to help keep steam in the hills.



LETTERS

Messrs. A.A. &. I.A. Gunsser write-

Tramways of the Forrest Area, Henry's Tramway.

In reference to the photo of the 0-4-0WT on page 14 of the Summer issue, the driver of the locomotive, standing at the back, is Mr. Alex McLaws who is still alive and living in Geelong West. At present he is recovering from a broken leg. In his 80's he is still very alert and more than interested in your article. Especially the photo of Henry's No.1 mill with its excellent illustration of the three-way points. The Hunslet loco is waiting for the fourth truck to be loaded with timber.

Mr. McLaws said that your article was so complete that there was very little he could add, other than to say that, as the photo shows, there was no cab on the Hunslet and the funnel had to be lowered, and he had to sit in a crouched position going through the tunnel - there being only a few inches clearance of the safety-valve. As Forrest is in a high rainfall area, be would finish up wet through every rainy day. Most of Henry's locos were put together by Mr. McLaws, who also put the No.4 & 5 Vulcans and the four Hudswell-Clarke locos together, when they came to Australian Portland Cement, Fyansford, about 1925.

Mr. E.G.Stuckey writes:-
Hayden's Tramway, Barwon Downs- It is believed this tramway crossed the Cumberland River on a three deck trestle bridge. Each section supported the one above, across a narrow gorge in the head of the Cumberland River.

Mr. M. Swift,(Sec.,Narrow Gauge Rly.Soc.,U.K.)writes-

Very many thanks for sending on the copy of Light Railways and your kind comments about the N.G.R.S. Frankly I am staggered at the interesting material in your publication, and wonder why I have never heard of it before.

Tramways of the Forrest Area, Henry's loco. "No.7"

I was most interested in the various lines described, and particularly in the 0-4-0WT on Henry's tramway. As you probably know, Aspinall came to the L.&.Y. in 1886 from one of the Irish railways, and his first job was to establish the new loco works at Horwich. The first 18" gauge locos were DOT, ROBIN, and WREN, BP 2823-2825/1887. Tnese were 0-4-0 ST's, not well tanks, as was Henry' loco.

The loco which is exactly similar to Henry's is DOT (not the same loco as the Horwich DOT), an 18" gauge 0-4-0WT BP 2817/1887. This loco was taken from Beyer Peacock's works on 3rd.June 1961 for preservation at the Narrow Gauge Museum, Towyn, on the Tallylyn Railway. It is reputed by the Birmingham Loco. Club to have been built for the New South Wales Government, but never delivered. At any rate it was apparently used on the works tramway at Beyer-Peacock's Gorton Foundry until about 1930, when it was shipped off to Disley, near Stockport, and kept in the garden of a house there occupied by one of the directors of Beyer Peacock. About 1950 it was returned to Gorton and remained there until moved to Towyn.

If the information that it was ordered for N.S.W. is authentic, there would seem to be a possibility that the Henry loco was actually built by BP - probably the loco was built and the order was cancelled. The dimensions of the BP DOT are cyls. 5" x 6", drivers 1'4½", wheel base 2'9", length over buffer beams 7'4½", and height over stack 7'4⅝".

Mr. L. G. Poole writes:-

TRAMWAYS OF THE FORREST AREA, Locomotive "No.7" of Henry's tramway - 0-4-0WT, -

In recent correspondence with railway friends in England, the following appears to be the position- Beyer Peacock No.2817 was built by them to 1'8" gauge, an 0-4-0ST for use in their Gorton Foundry, and it did not leave England. The number on Henry's engine, i.e. No.7, was never used on the Wallaroo-Moonta mine lines. Henry's engine was of 2'9" gauge when working in Moonta, and my good friend Mr. L. Kingsborough, lately retired from being the S.A.R. chief draftsman of the Ways and Works department, in his last letter, mentioned that this engine (which was known as "The Pig" while in S.A.) was seen by an old man in that office when Mr. Kingsborough started work prior to 1914. This old man told Mr.Kingsborough that he had seen the engine left lying out in the open behind a shed, and carrying B.P. plates, with no builders number nor date.

It is known that a Mr.Smedley came to S.A. with Mr.Hancock about 1889, and the former could have had a set of B.P. blueprints of an engine with him, but there is no evidence that an engine was built at Wallaroo/Moonta at any time.

Now we come to the key statement from England. It appears that in 1879, BP built an 0-4-0WT engine for 2'9" gauge, which was the gauge of the Wallaroo/ Moonta narrow-gauge lines. It appears it was built for "stock" and not for an order when built, or for an order and not taken delivery of. It carried no Builder's Number, and there is not room for it in the official works records of builder's numbers, and it appears to be that this engine is "The Pig". Why No.7 was given to it,and when, is not known to me, but as stated before, it did not carry this number at Wallaroo/Moonta, being simply known by its nick-name.

Mr. E. W. Woodland writes:-

Shay Locomotives in Australia.

May I say how much I enjoyed your article on "Shay Locomotives in Australia" in "Light Railways."

I would very much like to offer the following information concerning "Shays" in Western Australia. Records show that two only were in W.A. (see A.R.H.S. Bulletin No.325 of 1964).

You are quite correct in saying that a Barclay 0-4-0 ST came from Geeveston, Tasmania, to Western Australia, but "Shay" No.2029 of 1908 did not come here. This Shay was supplied new by Gibson Battle & Co. of Sydney, N.S.W. to the Tasmanian Hardwood Co. It was later owned by the Huon Timber Co. of Geeveston, which was taken over by Millar's Timber & Trading Co.. It was then sent to the Phillipines where Millar's T.&.T.Co. had an interest in timber milling. A 2-4-0 T & T was sent from W.A. to the Phillipines in 1917 by Millars to their mills there.

In many talks with the late Mr. S. Moss, engineer at Millar's Yarloop workshops, we often discussed the "Shay" and he never at any time mentioned two of them.

When the Barclay 0-4-0 ST (named "Huon" when in W.A.) was brought over here, some rolling stock was also brought over at the same time, and I have seen axle-boxes with T.M.R. on them.

ARE YOU A ..... SIDRODROMARCHEOLOGIST ????

If so, don't keep your latest findings a secret, send a report of them to the Editor, 9 Mc.Gregor Street, Canterbury, E.7.

Mr. L. I. Goff writes:-

Shay Locomotives in Australia.

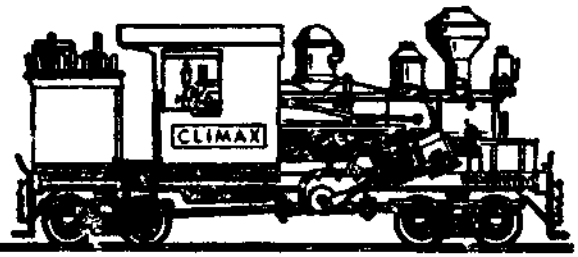
I recently read of your organization in the P.B.P.S. magazine, so I paid my 75 cents and was delighted with the result - Light Railways describes railroading at its best! I'm sorry I didn't get the message earlier.

Re the article on the "Shays" - no mention is made of locos in the Cloncurry area of Queensland. The Queensland Mining Journal of 1912 states the Hampden-Cloncurry Ltd. Mining Co. had "a 14 ton Shay" at Kuridala, and the Mt. Elliot Smelters had a 3'6" gauge two truck Shay.

Unfortunately just the bald statement with no details!

(Editor's Note- It is quite possible one of these locos was Builder's No.697, ex North Mount Lyell. This loco was sold by Mt.Lyell in 1906, and later came Canungra & Pine Creek tramway in Qld.)

NEWS, NOTES & COMMENTS



V I C T O R I A .

Cheetham Salt Ltd., Laverton:- The peak season on this 2-ft. gauge system is just over, with the maximum number of locomotives (about five or six) having been in use. At present there is a large stock pile of salt which is slowly being moved by one Ruston-Hornsby locomotive on a short section of track to the crushers. (M. Plummer).

Powelltown Tramway:- The remains of the boiler of Shay loco, B/No.2575 were recently seen at Carpolac, on the occasion of the A.R.H.S.'s visit to that town. The firebox and smokebox are still intact, but the boiler has been cut open, and all the copper tubes removed.

Recently about fifteen members visited the Old Ada No.2 Mill site, and found two stationery boilers still in position, - no doubt one, at least, of these was used to haul timber bogies up the incline. Also seen here was the distinctively shaped saddle-tank of the Powelltown tramway's 0-4-2ST loco (Kerr Stuart or Andrew Barclay). Although the top of this was badly rusted it was basically in very sound condition, and we consider it worthy of preservation. No other identifiable parts of this engine were found on this occasion.

There is still a large quantity of steel cable, used on the inclines, lying around, and a quite long section of wooden railed tramway,

still intact, though rotten and badly distorted by the trees growing through it. Another interesting discovery were some strap rails - i.e. wooden rails which have been strengthened with a strel strip along the top.

Most of the trestle bridges appear to have collapsed or been pushed over, and much of the old right-of-way is badly overgrown, so that it will probably become very difficult to follow in a few years time unless some clearing is done.

(Frank Stamford).

Australian Cement Ltd., Fyansford:- Maintenance to track and wagons is still continuing, and each Monday the Diesel ventures out to the quarry to ensure that the track is still in satisfactory condition. The Company has no intention of scrapping any of the locomotives, though exact details of their disposal are not known. Loco No. 11, the Perry 0-4-0T, is still being used as steam cleaner. Preservation of the A.S.G. will be particularly difficult due to the cost of transporting it from the works.

(Albert Gunsser/Frank Stamford)

Miller & Co. (Machinery) Pty.Ltd.:- The 0-4-0T loco described in our last issue on page 29 took part in this year's Moomba procession, mounted on a float. On this occasion it was described as being a Queensland sugar tramway loco, although it has been in Victoria for 43 years, and there is no definite proof that it ever did work in Queensland.

(Frank Stamford)

South-Western Area Project:- Work is proceeding steadily on this research project, and the following people are acknowledged for their assistance: Ron Weaven, Jeff Thompson, Ted Stuckey, Wayne Chynoweth, Les Poole, Mark Plummer and his Forrest research team. I would be pleased to hear from anyone with information on this area.

(John Matthews).

RELICS OF A RAILWAY

By. J. Thompson.

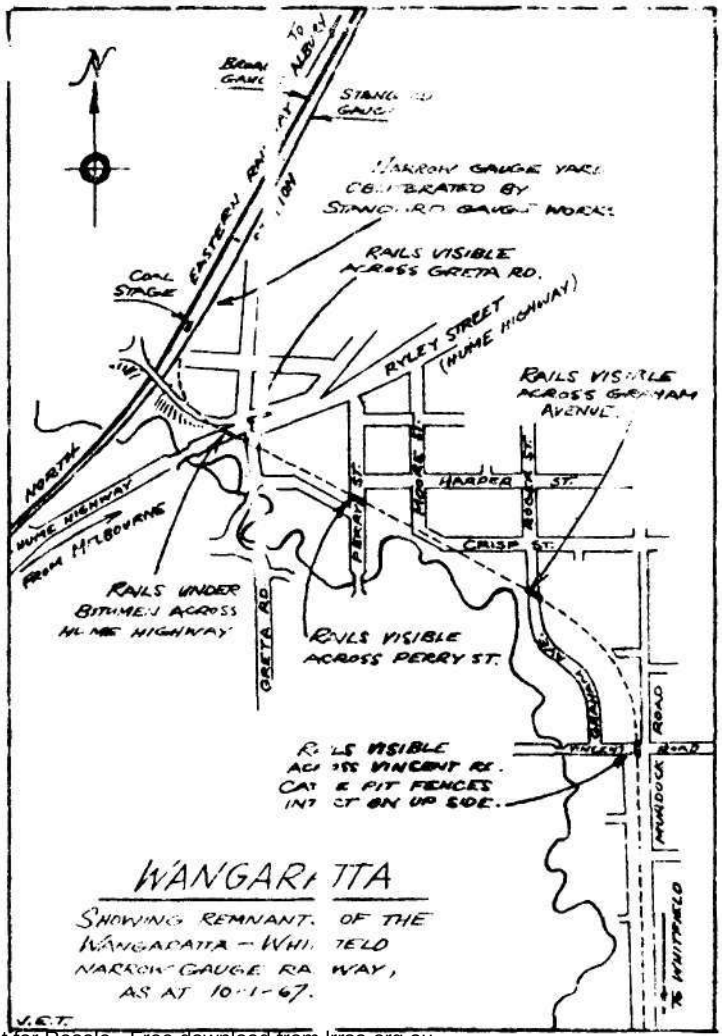
Although the Wangaratta - Whitfield narrow-gauge railway has been dismantled for nearly 14 years, many vestiges of its existence still remain. The following features were noted during a brief visit to the area on January 10th. this year.

In the Wangaratta yard, the standard gauge cutting has obliterated the entire 2'6" terminal, with the exception of a few sleepers and formation adjacent to the coal stage, which was still intact.

The accompanying map locates the visible remnants of the line through the town, in addition to the clearly defined trackbed and formation which is easily followed right through to Whitfield, mostly parallel with the main road.

Mileposts 152 and 173 were found in situ while 162 and 167 had been repainted and turned to face the road.

As reported in the Summer



issue, the Oxley Shire Engineer's Department has erected new station and stopping-place nameboards at Docker, Byrne, Claremont, Jarrott and Pieper, the latter two being in their original positions beside the trackbed, the others relocated beside the road.

At Moyhu, a number of NU van bodies were seen in varying condition. In use as storage sheds, two are located on private property and three at the Shire Depot. Also at the Depot is the body of NH 1, the sole van of its class, still in good condition. Another NU "shed" was found at Whitfield adjacent to the general store.

The Whitfield engine-shed remains in use as a garage/service station. All wooden smoke collectors are intact as are the rails and inspection pits, utilized for the servicing of motor vehicles. A short distance from the shed, the water tank has survived and was in fact still full and overflowing. A few sleepers could be seen in the station yard, together with the goods shed foundations.

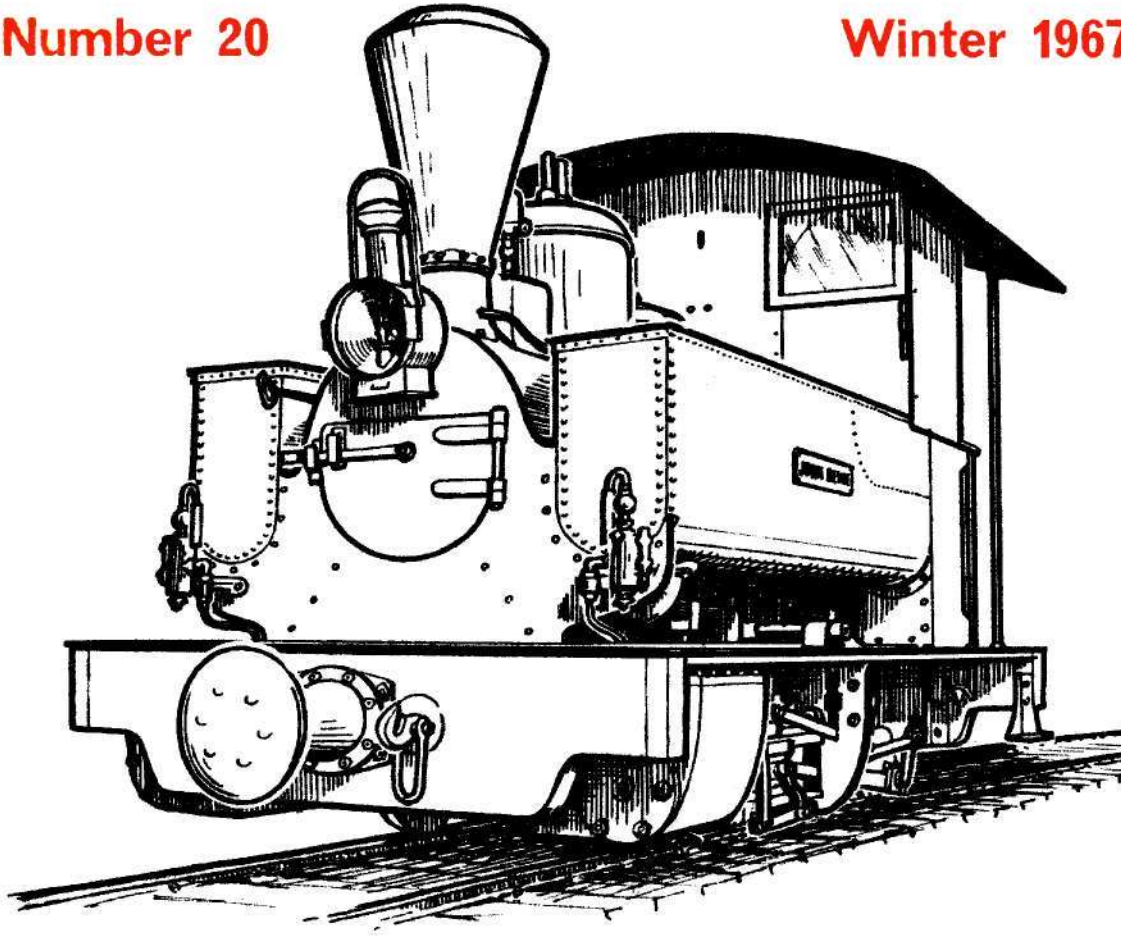
Many other small items were seen and no doubt other relics exist and could be found on a more thorough survey, particularly on the sections away from the main road.

While every effort is made to ensure the accuracy and completeness of articles published in "Light Railways", we cannot be sure that errors have not crept in. Additional information is being uncovered all the time, and this often indicates that the history of tramways and locomotives was in fact quite different to that which was previously believed to be true.
If readers see any errors in articles, or are able to add additional information, we would be very much indebted if they would forward this information to the Editor.

Oppinions expressed in articles or letters are not necessarily those of the Society or the Editor.

LIGHT RAILWAYS

Number 20 Winter 1967



Published by The Victorian Light Railway Research Society

LIGHT RAILWAYS

NO.20 WINTER 1967 VOL.V.

PRICE - 25¢.

Our front cover shows ex- West Melbourne Gasworks 2'6" gauge Decauville 0-4-0T loco, now in private ownership. (Builder's No.43 of 1886).
Drawn by - John Thompson.

A number of experiments have been tried with this issue in an attempt to improve presentation. Most of these seem to have been fairly successful, but I must apologise for the bad reproduction of the New Guinea map on page 20, on which I used a different type of stencil.

THE VICTORIAN LIGHT RAILWAY RESEARCH SOCIETY

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Back numbers- Copies of issues Nos. 18 and 19 are available from the Editor, at 20 cents each, plus postage.

Annual subscription dates from June 1st..

THE DEAN MARSH-BENWERRIN RAILWAY.

By - L.I. Richardson.

1. INTRODUCTION.

This 5'3" railway was built by the Great Western Colliery Company in 1902 to facilitate the transport of coal from the Benwerrin coal mine, which was located 5½ miles in a direct line south-east of Dean Marsh railway station. This mine had been worked on a very small scale from 1895, the coal being transported to Dean Marsh station by horse drawn drays. In winter the roads became quagmires and often it was impossible for the drays to get through.

After the construction of the railway to the mine, coal production increased, but the Company was apparently having financial difficulties which were not helped by two serious accidents on the line. The Company went into voluntary liquidation in December 1903, after which the Victorian Railways Commissioners immediately removed all rails, apparently for recouperation of outstanding debts.

The venture was an ill-considered one, for although the coal was a highly developed lignite of exceptionally good quality, the deposit was a very small one and the Company's method of mining was unsatisfactory. It appears that it would have been wise for the Great Western Colliery Co. to have determined the extent of coal to be won before indulging in the expenditure of a considerable sum of money on the construction of a broad gauge railway through fairly difficult country.

The mine was worked on a small scale from 1942 to 1949, approximately 25 tons per week being carted by road to Dean Marsh station.

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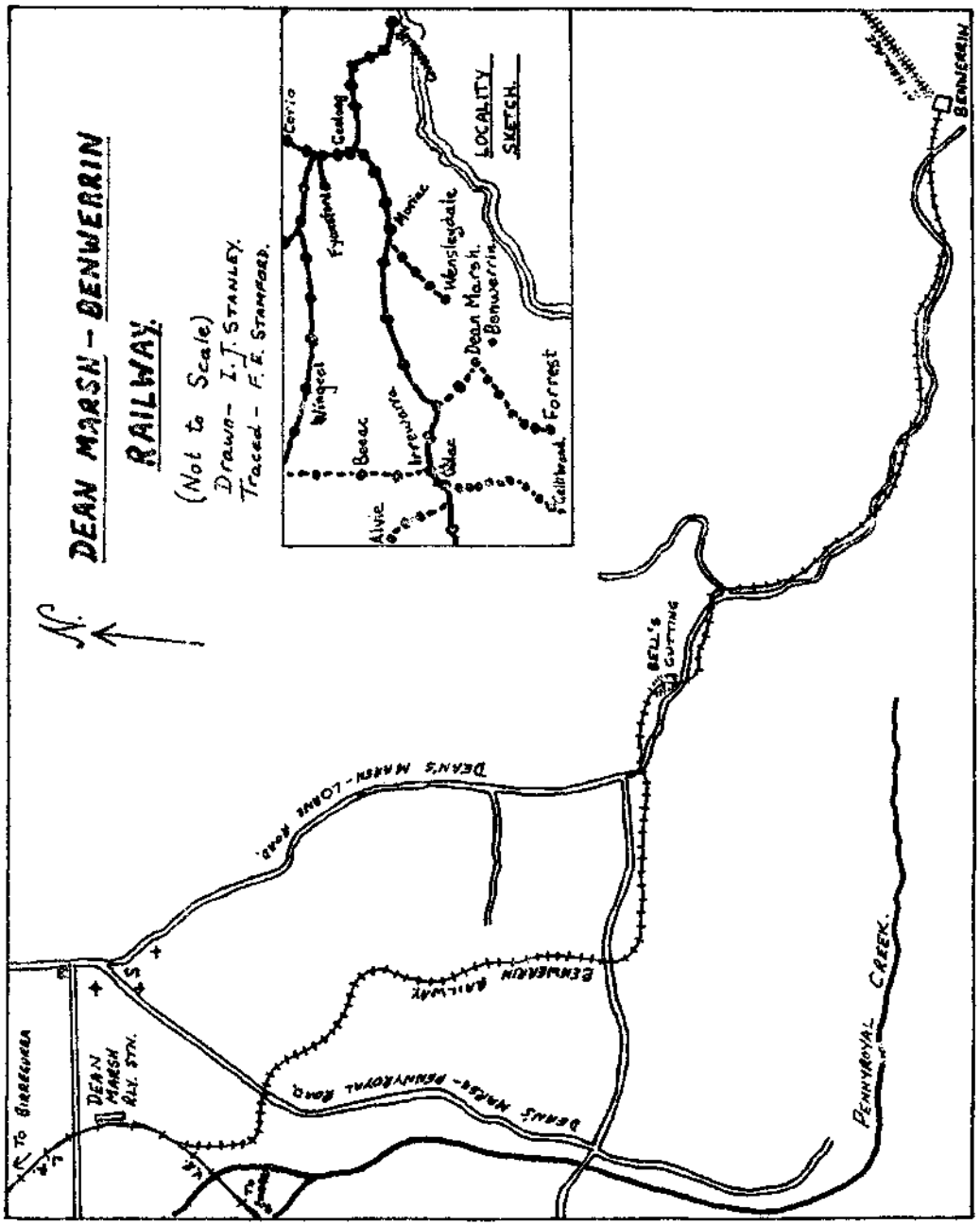
2. DESCRIPTION OF THE LINE.

Dean Marsh is situated on the former Birregurra - Forrest line 90¾ miles by rail from Melbourne. The Dean Marsh station and sidings were located in an extensive cutting on a 600 ft. radius curve. After leaving Dean Marsh station cutting the Forrest line crossed a creek on a trestle bridge, (still standing) and then entered another shallow cutting. The junction of the Benwerrin line with the Forrest line was at a point just at the down end of the trestle bridge, 40 chains from the Dean Marsh station.

The Benwerrin line then curved towards the south-east, through a cutting (since filled in), crossed a wide valley and curved around a spur at the foothills of the range, crossing the Deans Marsh-Pennyroyal road. From here the railway climbed steeply through timbered country until it crossed the Pennyroyal road in a shallow cutting on the top of the ridge. This cutting is still clearly visible on both sides of the gravel road. The railway formation parallels this road to the south, passing behind a farmhouse until it crosses the main Deans Marsh - Lorne bitumen road at the sharp bend in the road. The railway formation can then be seen paralleling the Lorne road on the immediate north side of the road, but gaining elevation at a faster rate than the road, until it crosses the head of a small valley on a high embankment.

Whereas the main road passes around the next spur of the range, the railway passes through a narrow deep cutting to rejoin the road at the other side of the spur. This cutting -called "Bell's cutting" - appears so narrow that it is hard to believe a 5'3" gauge line passed through it. It was here that numerous landslips occurred during the line's brief existence. From Bell's cutting the present Lorne road has been built on the railway formation, the route of the old road following the telephone wires. The only trace of the old railway



formation in this latter section is at some of the curves in the road, where the railway cuts the corner slightly.

There is no evidence of the railway formation from where it left the road to the coal loading bins at the terminus. At the present time, the Country Roads Board is regrading and widening the Dean Marsh - Lorne road further up the range, and it is possible in the near future when such work is done on the lower section of the road that the few remaining traces of this coal railway will be obliterated.

3. CONSTRUCTION OF THE LINE.

The Great Western Coal Mining Company was registered in 1897 and worked the mine on a small scale until 1901. This company was hampered by the high cost of transport of coal to Dean Marsh station. In September 1898 the Deans Marsh Tramway Company Ltd. was formed with the objectives of constructing a tramway from the Great Western Coal Mining Co's mine to the railway line at Deans Marsh, and taking over the Great Western Coal Mining Co. At this time the Great Western Coal Mining Co accepted an offer by the Tramway Company to construct the railway and to carry the coal mined at Benwerrin. However, on 30th. March 1899, the Deans Marsh Tramway Company, not seeing any probability of being able to carry out the objectives for which it was formed, went into voluntary liquidation.

The failure of the Dean's Marsh Tramway Co. tended to retard the progress of the Great Western Coal Mining Company; however, the latter company appeared to complete the survey for the railway and to pay some deposit on land for it.

In September 1901 the Great Western Colliery Company was formed and apparently took over from the Great Western Coal Mining Company. Upon formation, the Great Western Colliery Company commenced the construction of the eight miles of railway from the junction, 40 chains on the down side

of Dean Marsh station, to a point on the ridge, immediately above the mine. 60 lb. rail was used in the line's construction, on which approximately 40 men were employed. The Company paid £156 ($312) cash for the construction of the four chains 11-ft. inside the V.R. boundary and paid a deposit of £661 ($1322) on materials used outside the boundary. Although it undertook to pay five annual instalments of approximately £450 ($900) only £100($200) on account of the first instalment was paid.

The Company also commenced the construction of a 2' gauge incline tramway for the mine, which was situated in a valley, to the proposed railway terminus. This tramway was 1,600-ft. long, had a grade of 1 in 4 and was constructed of 12 lb. tramway rails. It was stated that the proposed facilities to be erected at the railway terminus included shunting yards, loco sheds, winding plant, coal bins, platform for handling coal, grizzlies, etc. Until facilities at the terminus had been completed, and the railway laid to it, it appears that coal was loaded at a temporary terminus six miles from the junction.

By the end of 1902, coal trains were being worked over this section, even though ballasting with sand had only been completed to the three mile peg, at Bell's Cutting. No maintenance war required on the ballasted section of the line, but on the unballasted section, maintenance was very expensive. The latter section included a narrow cutting, 46-ft. deep, in which frequent landslips occurred during wet weather. At one time 7,000 cubic yards of earth and rock came away, causing considerable delay to traffic before it was cleared.

By June 1903 the incline tramway winding plant was installed, and the railway was apparently being worked right to the terminus. The winding plant was installed from the "Corona" mine near Daylesford. Trouble was still being experienced on the unballasted portion of the line and in

Bell's cutting. It was realized that the landslips here could only be arrested by timbering the cutting with sawn hardwood guard rails.

The Company was apparently running short of capital as on 30th. March 1903 the mineworkers refused to work until arrears in wages were paid. Although work resumed on 12th. April 1904 the Company still needed more capital, which was refused by the majority of shareholders at a meeting in November, 1903. The Directors therefore chose to sell the Company's assets to Mr. M. Moore on behalf of a new company. However this new company failed to eventuate and the Great Western Colliery Co. went into liquidation on 24th. December 1903. The Railway Commissioners immediately removed all materials from the railway including some that had not been supplied by the Department, the sale of which realized £83 ($166) in excess of the sum owing!

4. OPERATION OF THE LINE.

The first locomotive used on the Benwerrin coal line is believed to have been the same locomotive as used by the contractor who built the Forrest line. This locomotive was one of the old "N" class (2-4-0WT) and lay abandoned at Murroon until purchased by the Great Western Colliery Company. It is possible that some wooden trucks which were also abandoned at Murroon may have been used for ballasting the Benwerrin line.

The method of watering the locomotive was to fill it from a dam situated near the junction. Mr. McKay, whose son now farms the land near the junction, had the contract for watering the locomotives. Horses were used to pull a tank of water on a sled from the dam to the nearest point on the line, and, it is said, the locomotive was then filled by Mr.McKay and an assistant using kerosene tins.

On 25th. April 1902, while the engine and three trucks were standing on a slope ready to move

up the hill, the train started moving down hill. Two of eight men sitting on the trucks jumped immediately while the train kept going, soon attaining an estimated speed of 50 m.p.h. One truck left the rails, broke its coupling and released the engine, which ran off with the driver (Mr. Morrison) and his son. The engine ploughed through soft ground before turning over. Miraculously the Morrisons escaped but six of the eight workmen were injured.

It appears that the Company's engine only carted the loaded coal trucks as far as the junction, there leaving them on the branch line to be picked up by the up train from Forrest. As the junction does not appear to have had a loop, it seems likely that the empty trucks were pulled up the range by the locomotive, but were pushed in front coming down the range. Each train on the Benwerrin line consisted of the engine and three or four trucks and ran a daily service each way.

The method by which the empty trucks were directed onto the branchline can be remembered by Mr. McKay. The V.R. engine would arrive from Dean Marsh pulling the empty coal trucks. Crossing the bridge just prior to the junction at speed, the wagons would be decoupled, the engine would accelerate down the Forrest line, and with someone on the points, these would be changed after the passage of the engine, so that the empty trucks ran onto the Benwerrin line.

In May 1903 another train got away coming down the hill. The engine was derailed and thrown off the line near the bottom of the range. It was two weeks before the locomotive and trucks were repaired. The lack of Westinghouse brakes on the locomotive was blamed for this accident.

At 4 p.m. on Friday 11th. September 1903, the Company's engine was stationary with a full train of laden coal trucks at the junction. The driver was examining one of the vehicles when the

boiler exploded scattering pieces of the engine over a radius of a quarter of a mile. The dome lay in a paddock for many years. The fireman was found on the top of the cutting, not having suffered serious injury. The engine was completely wrecked. Following this accident to the Company's locomotive, a replacement locomotive was purchased from the Victorian Railways. There is an item in V.R. records regarding the cost of running a loco from North Melbourne to Dean Marsh about this time.

5. LATER WORKING OF COAL AT BENJERRIN.

In 1908 a test bore was drilled by the Mines Department on the line of the old incline tramway. The lease of the mine area was taken up again from 1925 and held by various parties until 1930, during which time some test boring was done. The lease was taken up in 1941 by V.T. Ekberg, and further boring showed that three coal seams existed in the area. The only workable seam was the lower one, which has a thickness of approximately 6-ft., is limited to an area of about ten acres and contains about 75,000 tons of good coal. Due to the acute shortage of New South Wales black coal in Victoria in the 1940's, the mine was reopened. Although it was recommended in 1942 that the old incline tramway be replaced by a graded road, the tramway was actually rebuilt on the same location, but to 1'3" gauge.

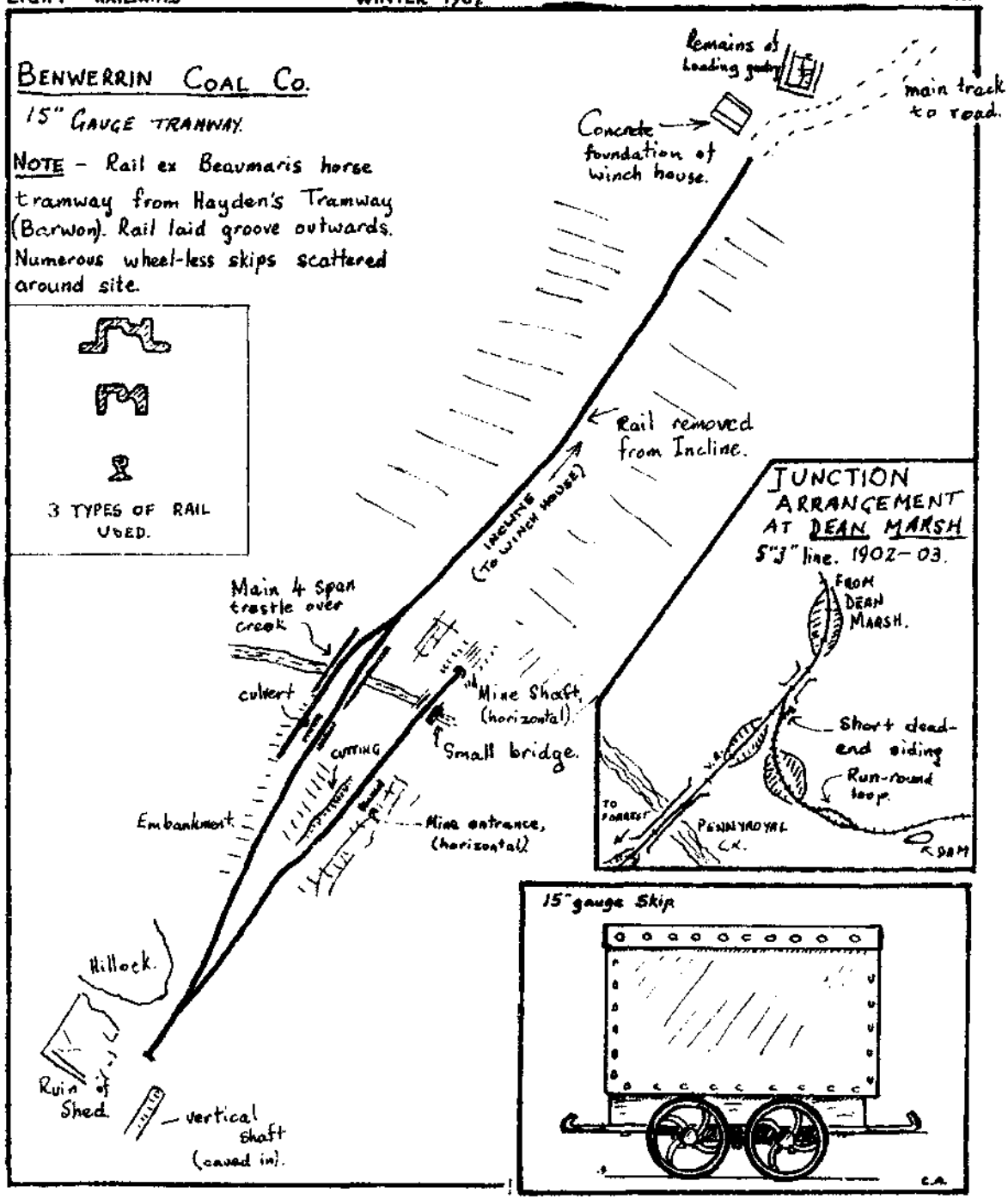
The tramway rails used apparently came from part of the disused Hayden's tramway at Barwon Downs. These rails were of an unusual type, best described as a "Barlow" rail with the addition of a flangeway for use in a street railway. The rails were very worn and had been turned so that the flangeway was on the outside. It is thought that these rails were originally from the Beaumaris horse tramway. Fixed to the sleepers between the rails were rollers for the cable, which was hauled by a small first motion steam mine winder converted to diesel drive. The map on page 11 shows the

BENWERRIN COAL CO.

15" GAUGE TRAMWAY.

NOTE – Rail ex Beaumaris horse tramway from Hayden's Tramway (Barwon). Rail laid groove outwards. Numerous wheel-less skips scattered around site.

3 TYPES OF RAIL USED.

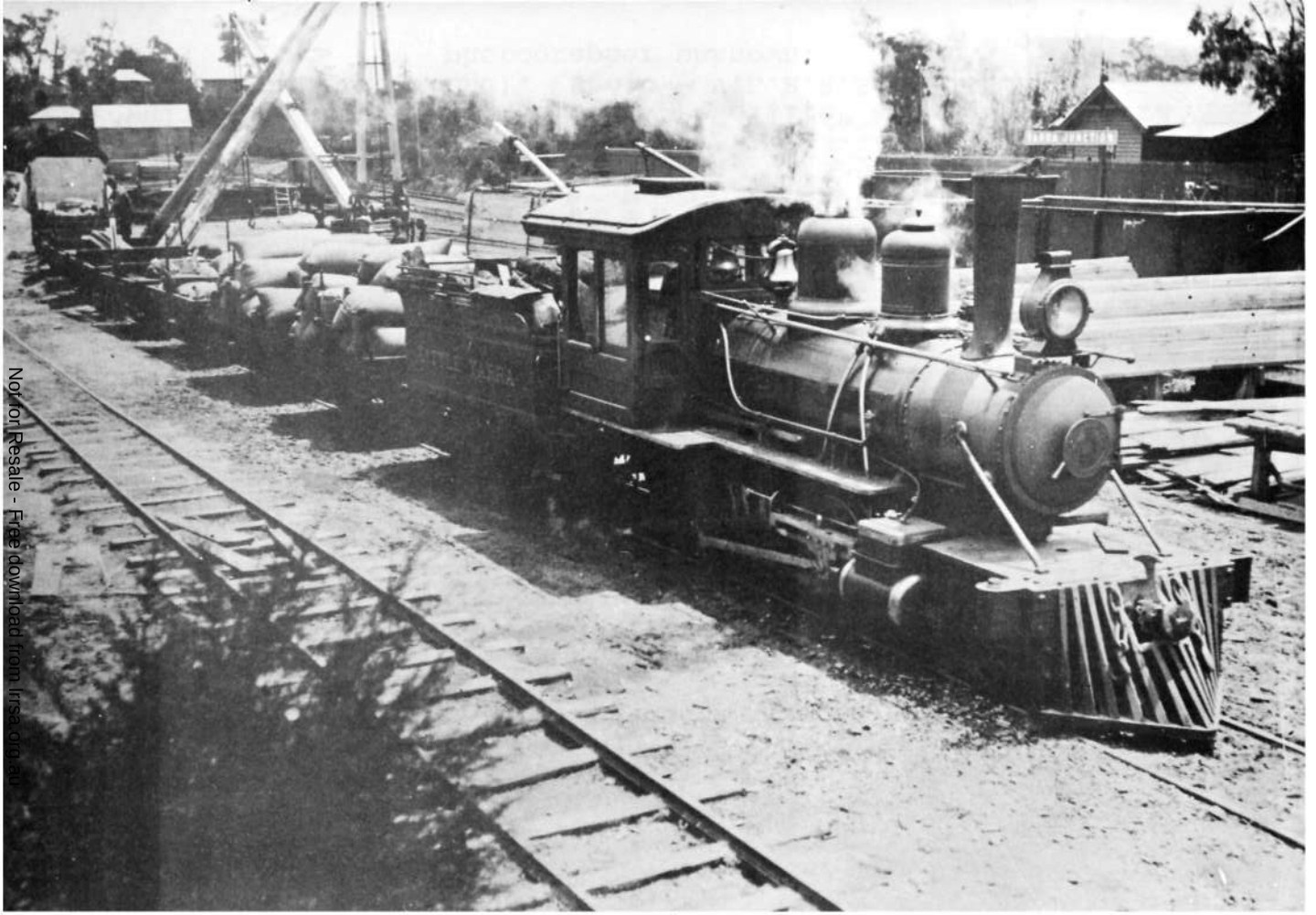


route to the mine. In the last few years the rails down the incline have been removed, but the tramway rails still exist over the trestle bridge and around the mine area, together with numerous derelict skips used on the tramway. The tramway transported the coal to the top of the ridge from whence it was taken by road to Dean Marsh station for loading onto the rail trucks. A special loading ramp for this purpose was constructed at Dean Marsh. The mine and incline tramway were closed in 1949.

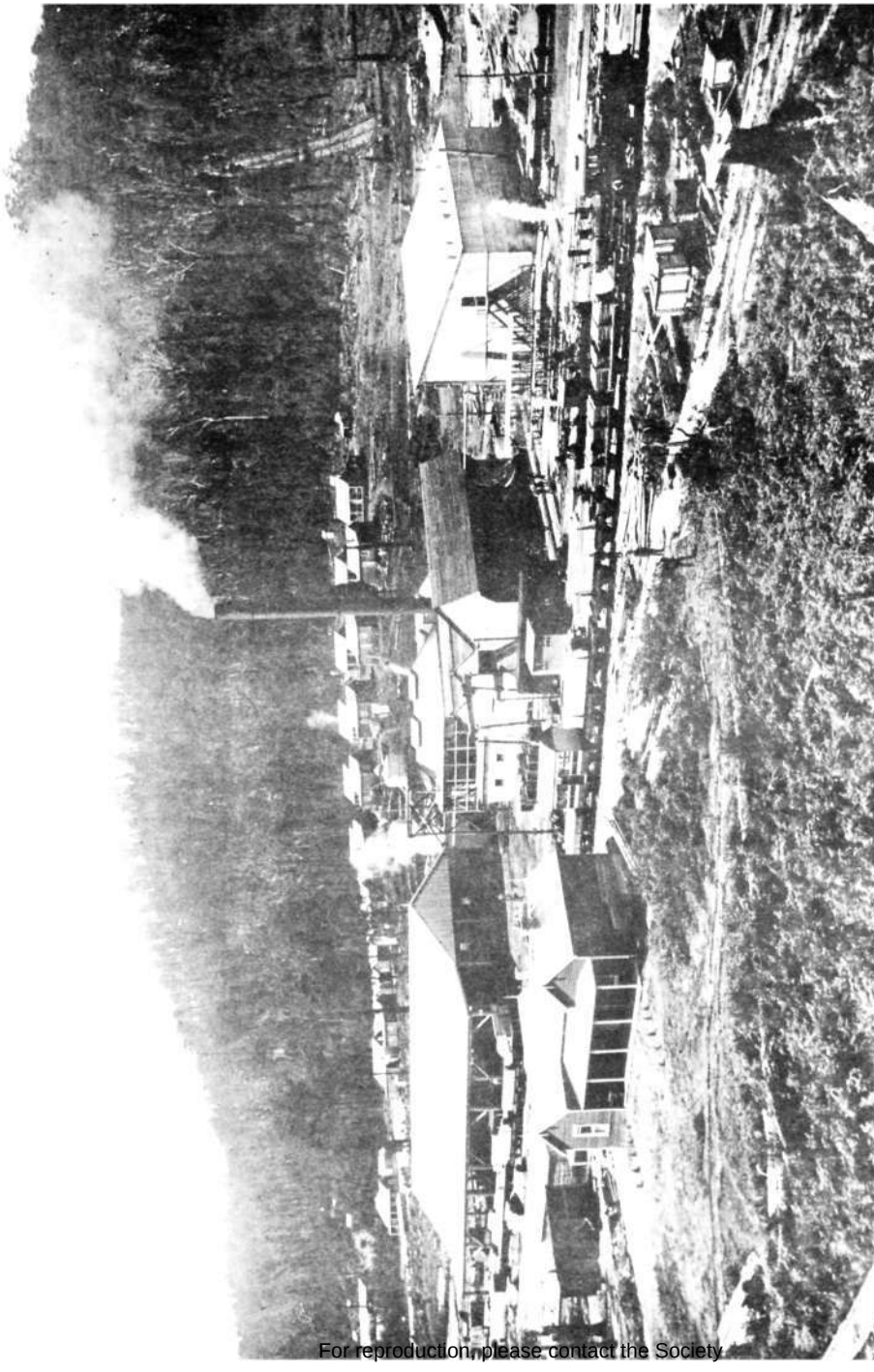
ACKNOWLEDGEMENTS

Preparation of this article was part of the South-Western Area project, and the author wishes to thank the following people without whose help the article could not have been written, as it was in every respect a combined effort. -
A. Lyell, who supplied Argus references, details and reports from mining journals and other information; M.Plummer and C.Andrews who searched through the Colac Herald and Company records in the Latrobe Library; I. Stanley for the map, and G. Thompson, Mr. McKay, E. Stuckey, J. Matthews, and the Tramway Museum Society of Victoria Ltd. for other information and assistance.

The following references were used:-
Colac Herald, 1899-1903.
Winchelsea and Birregurra Mercury 1904 and 1921.
Company reports of the three companies.
J.Kenny, "Benwerrin Coal Mine", (Mining and Geological Journal, March 1947.
E.J.Dunn, "Notes on Coal Bores in the Deans Marsh and Beech Forest Districts," 1914.
Mining and Geological Journal, September 1948.
The Argus, 1897 - 1904.



"Little Yarra", still in the glory of its original red lined livery, and complete with brass bell, basks in the sunshine at Yarra Junction before heading for Powelltown. Estimated date - 1915.



Powelltown, about 1915, showing "Powellite" and "Little Yarra" (Lower right foreground). Photo - V.L.R.R.S. ARCHIVES, photographer unknown.

GEMS FROM THE ARCHIVES.

Two very interesting photos of the Powelltown tramway have recently come into the Society's collection, and, believing they will be of interest to members, we have published them on pages 13 and 14. Both pictures were probably taken about 1915, just after the delivery of "Powellite"(Bagnall 0-6-0, B/N. 1965 of 1914) and only one or two years after the opening of the Powelltown mill. Of interest in both pictures is the passenger coach, - a converted four wheel 5-ton wagon. Apparently the bogie passenger coaches had not yet been delivered, the converted wagon being used as a temporary measure.

Of siginificance in the photo opposite is the wooden railed line in the lower left hand corner, the wooden railed line in front of "Little Yarra,"(Baldwin 2-4-0, B/N. 37718 of 1912), and the incline tramway in the right-hand background of the picture. This appears to have no connection with the Powelltown tramway, and may have predated it. It is known that a tramway was built from Yarra Junction to the Gilderoy/Powelltown area about 1907, but its precise route and terminus are not yet known. This tramway was made redundant when the steel railed Powelltown line was built about 1913-14.

DO YOU WANT MORE "GEMS FROM THE ARCHIVES"?

Then tell your friends about "Light Railways". The more subscribers we have the more photos we can publish. Enclosed with this issue is a copy of our new green membership application form. We hope you can pass it on to someone who may be interested in joining. And if you have any photographic "gems" you would like to see published, don't forget to tell the editor....

THE YAN YEAN TRAMROAD

(This article is based on an article which appeared in The Whittlesea Post, and is reproduced by kind permission of the Leader Publishing Co. Northcote. Considerable additional information from the 1866 Parliamentary Standing Committee Report has also been included.)

This 19 mile long 5-ft.3-in. gauge tramway was constructed in 1855 to carry pipes and materials for the water supply pipeline from Yan Yean Reservoir to Melbourne.

On leaving the reservoir the water was conveyed in a channel for seven miles. At a distance of 247 chains from the reservoir was a stone bridge which also served as a turnpike road and carried the tramway. An open aqueduct was used to South Morang from where pipes were used to the city. The bridge over the Merri, a tubular girder imported from England, cost £15,400.

Built primarily to overcome the hazards of execrable roads and to facilitate pipelaying, a 5'3" gauge tramroad, 19 miles long, was laid adjacent to the route of the proposed pipeline between Yan Yean and Melbourne. Starting at the Yan Yean end the first seven miles were built by the contractors for the corresponding section of the pipeline. Their price of £900 per mile was considered so favorable that the Water Supply Commissioners asked them to extend the tramway a further five miles at the same price. Another firm completed the work.

The tramroad comprised two mountain-ash rails, laid on sleepers made of the same timber, iron rails being used only for the first 75 chains at the city end of the line. This was by the Exhibition gardens in Nicholson Street. The 75 chains ended about the present North Fitzroy station. The tramway's right-of-way was 66-ft. wide.

The route then continued along Brunswick St. across the Merri Creek bridge, and followed the pipeline in St.Georges Road.

About 14 miles from Melbourne was the "Plough Cutting", which was the steepest gradient on the line, causing much difficulty for the horses.

The pipes, imported from England, were loaded onto trollies drawn by horses - three horses being required to haul one pipe.

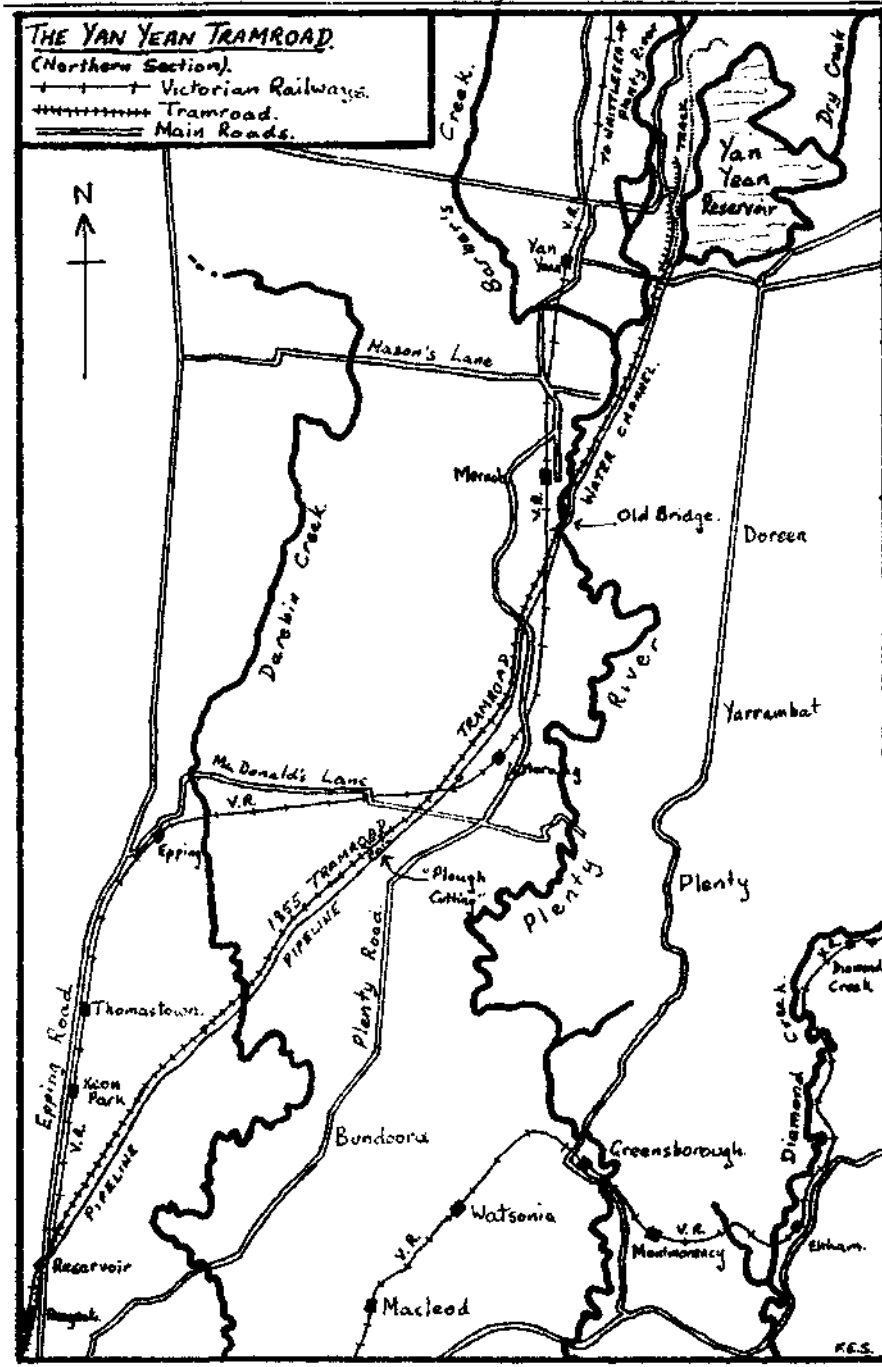
The tramway was unballasted, and no drainage facilities were built. As a result, horses were continually falling between the sleepers, one horse going up to its shoulders in slush. Latterly the pipes were brought up by the alternative metalled road, rather than by the tramway, as it had worn out before the pipe carrying contract was finished.

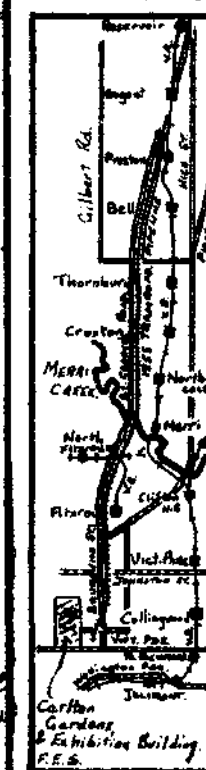
On completion of the pipe-line the tramway was not taken up, but was left to decay in the changeable climate, soon rotting to pieces. The tramroad again sprung into prominence a decade later when, in 1866, the Government appointed a Select Committee to ascertain what advantages would be conferred on the Whittlesea district if the tramroad was reopened.

Twenty years of intensive agriculture had seriously depleted the natural fertility of the district, which until then had been regarded as the granary of the city. In the 1860's the main worry was the lack of fertility of the land, and someone suggested reopening the tramroad so as to bring Melbourne's night-soil, in closed iron tanks, to Whittlesea, where it could be deodorized and used as a fertlizer.

The land needed manure, and the authorities were at their wit's end to find some convenient place for disposing the liquid waste of the city. The reopening of the tramroad provided a convenient solution to the problem, and accordingly the Select Committee was formed to go into the matter. The Committee's report to the Government was in favour of the reopening of the tramway.

Thomas Reilly, who laid seven miles of the line, told the Select Committee that had the tramway had proper drainage, and if red gum had been used for the rails and sleepers, instead of





Scale of both maps:-
½" = 1 mile.

The Yan Yean Tramroad, (Continued from page 17.)

instead of/
mountain ash, the tramway would have lasted for years.

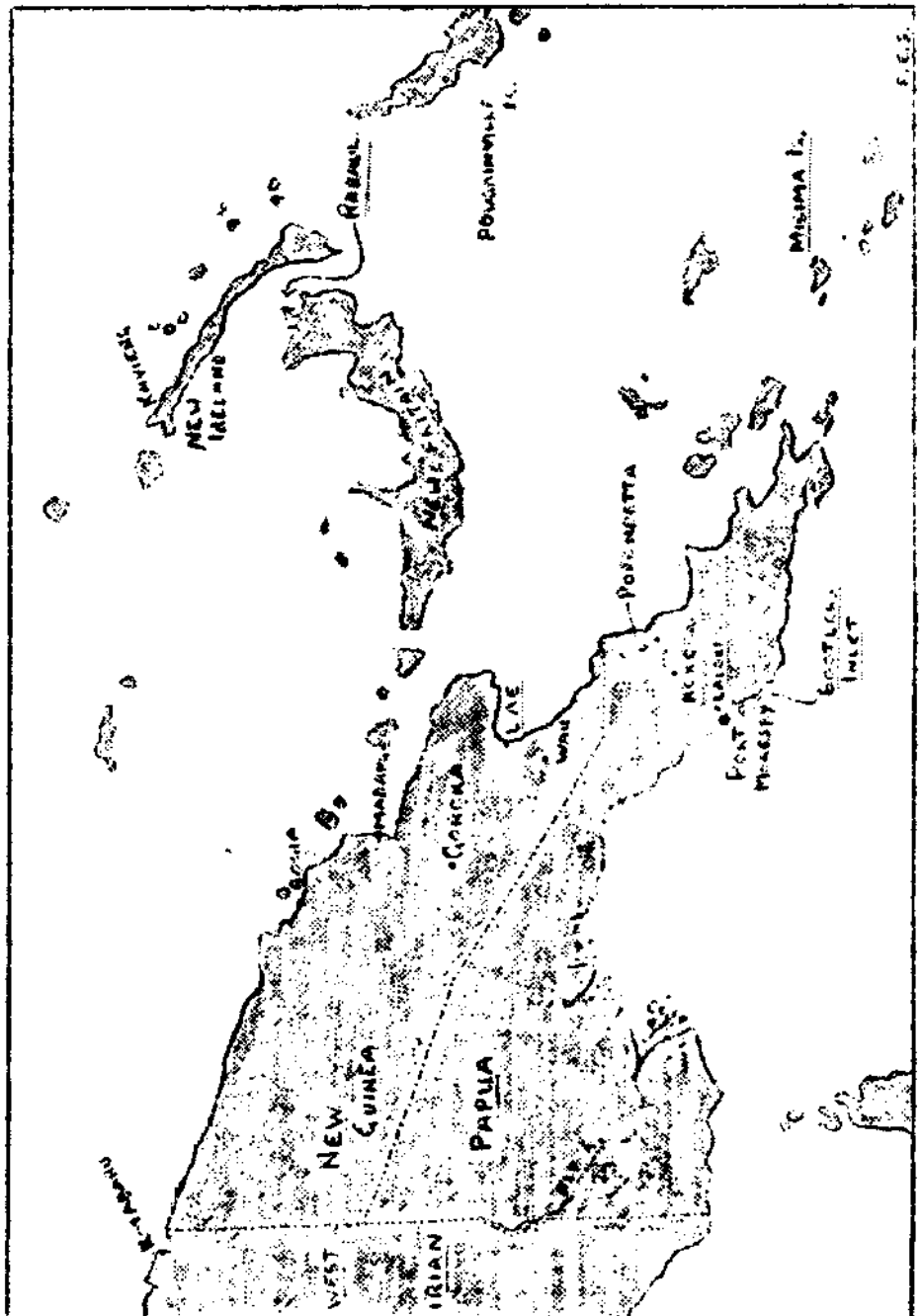
He advised the Select Committee that if the tramway was rebuilt as a horse tramway, the Plough Cutting gradient would need to be eased, though no other extensive earthworks would be required. However, a new bridge over the Merri Creek would be needed, as the old one was felt to be unsuitable for a permanent tramway.

Amongst the suggestions for the rebuilding of the tramroad were (1), a horse tramway using red gum rails; (2), a horse tramway using 6" x 6" red gum rails surfaced with iron plates; (3), a horse tramway laid with 30 lb. iron rails, at a cost of $2,300 per mile, or 45 lb. rails at a cost of $3,080 per mile; (4), a locomotive operated railway, using 60 lb. rails, at a cost of $5,400 per mile. In the latter case extensive earthworks would be required to ease the gradients.

The Select Committee was told that extensive timber cutting was taking place in the Plenty Ranges, and that if the tramroad was reconstructed the timber cutters would build their own wooden railed feeders to the main line.

One vital fact was overlooked. Portion of the Whittlesea district formed part of the Yan Yean catchment, and one shudders to think of the effect on the purity of Melbourne's water supply had the scheme been carried out.

It appears from the evidence that the primary objective of the deputation was to secure a railway to Whittlesea, and beyond to Seymour and the nort-east. However, the tramroad was never rebuilt, and an entirely new route was used when the Whittlesea railway was constructed over twenty years later, being opened in 1889. By this time the Seymour line had been completed, on a route which bypassed Yan Yean completely.



TERRITORY OF PAPUA AND NEW GUINEA, showing location of known railways:-
i.e. Bootless Inlet mining railway; Misima Island mining railway; Lae jetty tramway; and Rabaul (Japanese military railway). Scale of Map - 160 miles to 1 inch.

A RAILWAY IN PAPUA. By- Ray Pearson.

During the Second World War I was on service with the Army, and was Official Photographer for our Unit, but was never called on for actual photos.

I did take photos of trains going north to Townsville, and quite a lot of scenes in Papua. During lulls in the work we were doing, about six of us used to borrow a truck and go walkabout to various places on the maps we had. On showing some of the photos of Queensland trains to the natives, two said- "he one fella here out Bootless Bay."

As I had been near this bay a couple of times out came the old map, and being told by one of the more educated natives better directions, I set off to find the railway. Eventually I found the 3'6" gauge line and followed it to the large smelting works and loco pits, jetties for loading the ships with the copper and other ores that were brought out, etc.

The mine, owned by the Sapphire Mining Co., was at Sapphire, more or less on the road from Port Moresby to Sogeri, and was approximately located at the turnoff at the 18 mile post, just before reaching Rona Falls, and after passing Hellfire Pass.

The natives were employed as miners, and pushed the usual ore trollies out of the mine to a dump, where ore was shovelled into buckets on a ropeway which crossed the mountain range. It was then loaded into 3'6" gauge four wheel hopper wagons. These wagons were made by Kelly & Lewis, of Springvale, Victoria. There were also some old type wooden dump wagons, I believe called "aeroplane dump trucks", the same as were used at Yallourn in the early years to clear the overburden from the coal.

Regarding locos, apparently there were originally three, although I only saw two. One was a two cylinder A class Shay, builder's number and date unknown, which came from Hampden

Smelters, near Clonoury, in 1919. This was on a siding with a rake of hopper wagons. The other loco was an 0-6-0T, named "Polygon," built by Andrew Barclay, and formerly used by the Broken Hill Associated Smelters, Port Pirie, South Australia. The third loco is said to have been an English built 0-6-0T, no other details known.

The line is believed to have been built about 1916. The locomotives were hard to photograph on account of the overgrown jungle around them, as they had been idle for many years. I crawled all over and under both locos looking for numbers on crank rods, axles, frames etc., but could find nothing, only getting damn near bitten to death by wallopping great red bull ants.

(The Pacific Islands Yearbook, and Pacific Islands Monthly states that this line ran from Bootless Inlet to Jai Jai [3½ miles], from where an aerial ropeway, with a daily capacity of 200-250 tons, ran to a mine at Laloki. The railway continued three miles past Jai Jai over lighter rails to another mine at Dubana. Both ropeway and railway operated for five or six years, - from 1920/21 to 1925/26.)

MAGAZINE REVIEW.

"The Narrow Gauge", May 1967, published by the Narrow Gauge Railway Society,(U.K.),34 pages plus scale drawing insert.

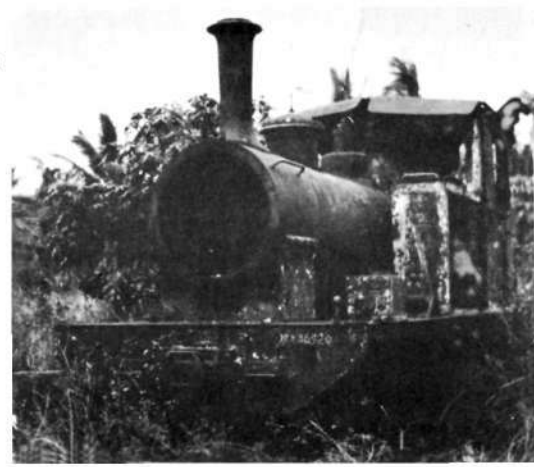
The latest issue of this well produced off-set printed publication includes articles on Guinness's 1'10" gauge line at their Dublin brewery, Beyer-Garratt locomotives on the 2-ft. gauge in South Africa, a review of Irish narrow gauge industrial railways, and 19 photographs. Excellent scale drawings of the South African NG.G.11 class 2-ft. gauge 2-6-0-0-6-2 Garratt, the Vale of Rheidol 2-6-2T, and one of the Guinness Brewery's locomotives are included. Highly recommended to all interested in overseas narrow gauge. Enquiries to-M.Swift,47 Birchington Ave., Birchencliff, Huddersfield, England.

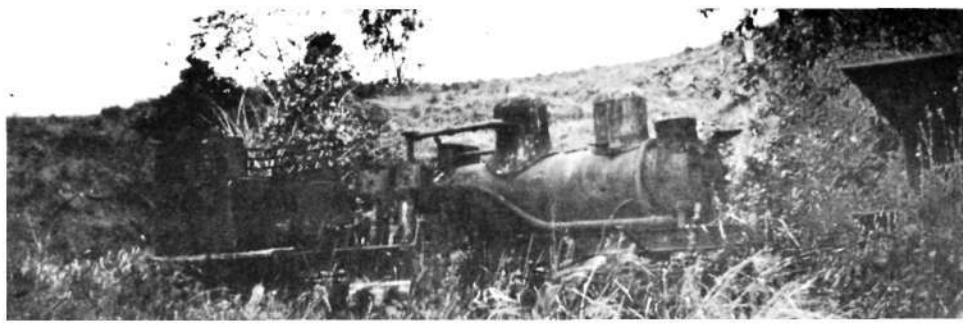
A RAILWAY IN PAPUA.

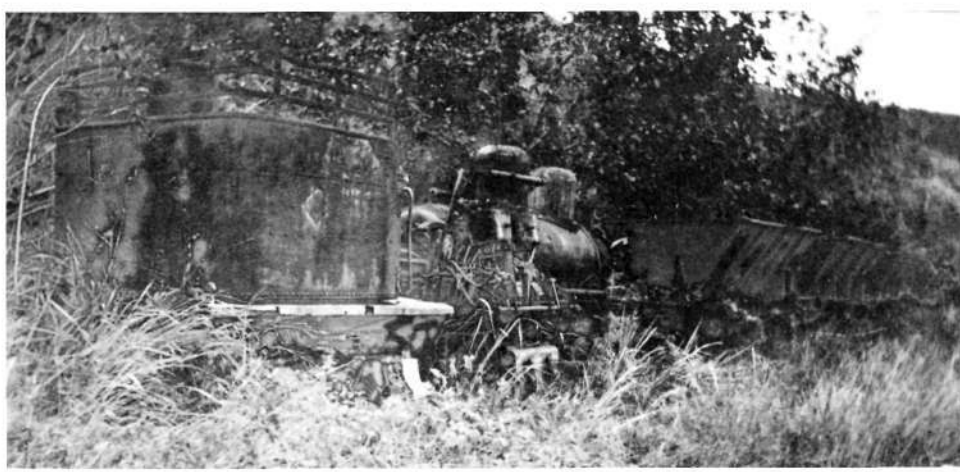
Right- Andrew Barclay 0-6-0T "Polygon", derelict at the smelters near Bootless Bay.

Below- Two views of the derelict "A" class Shay locomotive at the smelters. The locomotive was derelict from about 1926 until it was cut up about 10 years ago.

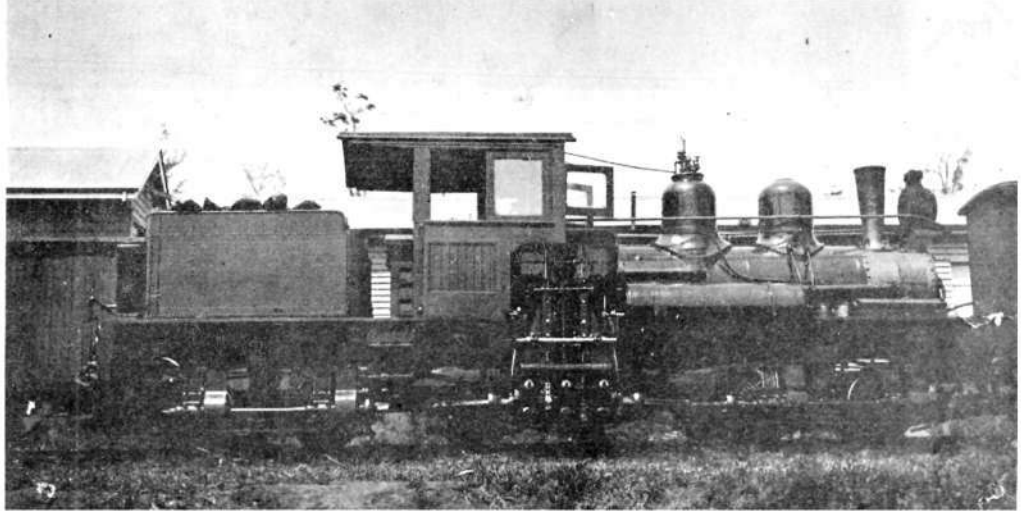
All photos taken in 1945 by R.Pearson.







Ex North Mount Lyell Shay locomotive No.5, (B/N.697).
on Lahey Bros. tramway, Canungra, Queensland, in 1919?
Photo - G. Bond Collection.



"A" class Shay loco, B/N.2823 of 1915, on the Palmwoods Buderim 2'6" gauge tramway, Queensland.
Photo - G. Bond Collection.

THE SOUTH MELBOURNE GASWORKS TRAMWAY.

By - L. I. Richardson, & W. L. Wilson.

This double track 2'6" gauge tramway ran from Town Pier, Port Melbourne, to the South Melbourne Gasworks, a distance of about half a mile. Horses were used, because the Council would not allow steam locomotives to be used in the streets. Coal wagons were put on the weighbridge in the holder yard, then lifted from ground level to the viaduct by means of a hydraulic lift. The coal wagons were originally horse drawn across the viaduct, spanning Pickle Street, However, after a horse had fallen from the viaduct into a coal bunker, a Fordson tractor was used to move the coal wagons over the viaduct, horses still being used in the Port Melbourne streets.

The tramway was completed in 1891, Town Pier having been widened to 125-ft. for a length of 908-ft. to accommodate the line. Two sets of rails were laid on the pier, flush with the decking. The original route was along Beach Street, north along Esplanade West, east along Rouse Street, north along Esplanade East, east along Graham Street, and into the Works Coal Reception Area (holder yard).

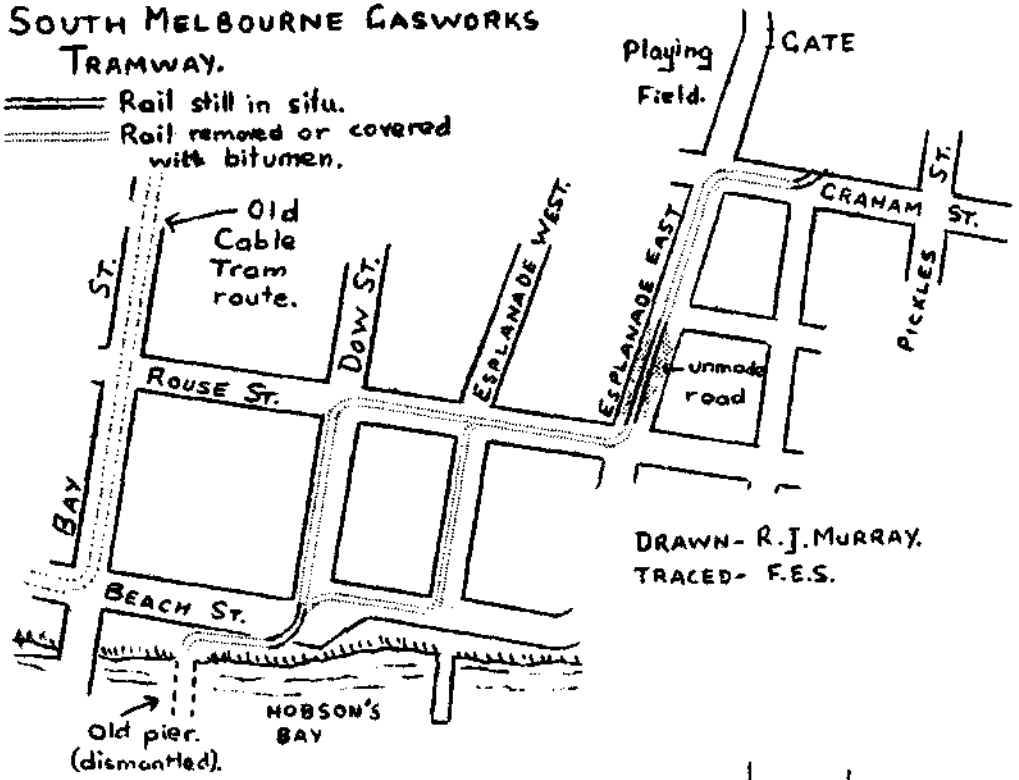
In November 1924 permission was given to reroute the tramway along Dow Street, and east along Rouse Street, there connecting to the original tramway. The rails in Esplanade West were not removed.

In 1931, during the depression, the South Melbourne Gasworks were closed, all gas needed being obtained from the West Melbourne works. At this time some of the workmen were transferred to West Melbourne, and some were put to work relaying the horse tramway lines in concrete. These relaid lines were never used, as when the works were reopened in 1934, the coal was taken from West Melbourne by road truck.

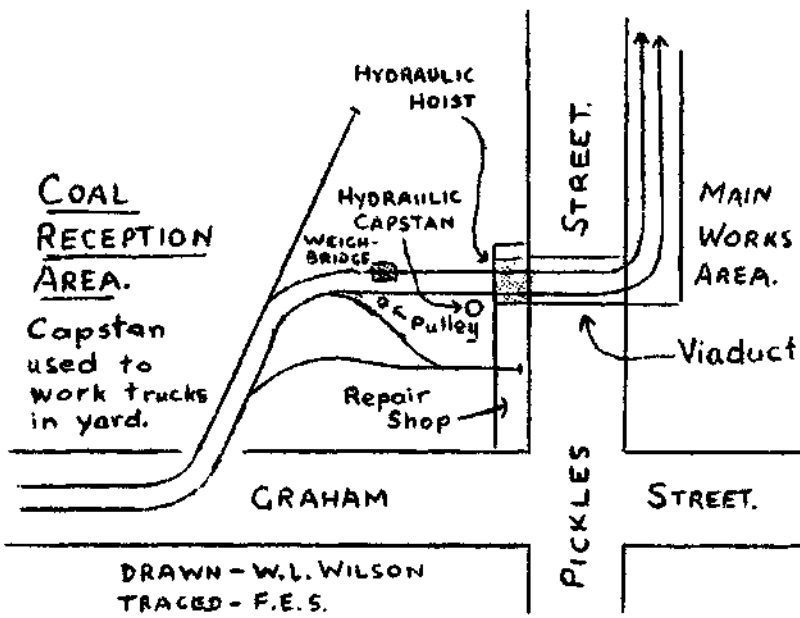
Over the past 20 years Port Melbourne Council has gradually removed the remains of the

SOUTH MELBOURNE GASWORKS TRAMWAY.

Rail still in situ.
Rail removed or covered with bitumen.



DRAWN - R.J. MURRAY.
TRACED - F.E.S.



DRAWN - W.L. WILSON
TRACED - F.E.S.

tramway during road resurfacing. Some time ago the viaduct carrying the tramway over Pickle Street was demolished, and in December last year the portion of the tramway's original route in Esplanade West was covered with bitumen. In January this year the lines in Dow Street were also covered over, and now the only lines remaining are those crossing Beach Street into Dow Street, those in the unmade section of Esplanade East, and those in the holder yard on the north side of Graham Street.

LETTERS

Mr. R. K. Warren writes:-

Tramways of the Forrest Area, Locomotive "No.7" of Henry's Tramway - 0-4-0T, -

It appears that the builder was Beyer Peacock. Mr. L. I. Kingsborough (who is the most painstakingly accurate and authoritative South Australian railway historian) tells me that a friend of his, Mr. Oswald Prior (who was brought up in the Wallaroo - Moonta area and worked for the Company until its untimely demise), worked on the loco at the time of its conversion from 2'8" to 3'6" gauge, and knows quite well that while at Moonta the loco bore Beyer-Peacock maker's plates, oblong in shape, on both sides. Although the oblong shape of the plates is unusual for Beyer Peacock plates, Mr. Prior has a singularly excellent memory in spite of his advancing years. Photographic evidence, also, shows the plates in position on the loco and although the

actual letters are too hazy to be readable, photos showing the plates are clear enough to discern that the plates have precisley the right number of letters, in the right positions, for a standard Beyer Peacock plate of that vintage, - i.e. -,

Beyer, Peacock & Co. Ltd.
Gorton Foundry
Manchester, England, 1887

If you are still unconvinced, that must be your decision, but this is enough for me.

Mr. B.T. MacDonald (Curator, Museum of Historic Engines, Goulburn, N.S.W.), writes: -

A copy of No. 18 issue of Light Railways was given to me today, which is the initial introduction I have to the existence of the Society. Having now read through it please allow me to congratulate you on the efforts of your supporters in the production of such a worthwhile publication. It is indeed heartening to me, personally, to make the acquaintance of a body who is not only aware, but recognizes that their are railways that are or were run by bodies other than the Government. It is possibly even more significant you are based in Victoria and are interested in Victorian light railways, which really is a field that has not been well cultivated in the past. The task now will be much more difficult, for time has taken to the grave men whose memory would have helped the scant written word.

Shay Locomotives in Australia

I was particularly interested in the articles on Shays in Australia, and perhaps you may be interested in some additional details with regard to some of them.

B/No. 698, following the closure of the Geeveston line, was allegedly sent to one of the Miller ventures in the Phillipine Islands -

Phillipines Insula Lumber Co.?

B/No. 2029 did not go Western Australia, but was sold to the Kauri Timber Co. who used it on the Vanikoro Islands, in the Solomons. I have a photo of it there.

B/No. 1994 & 2100. The boilers of these were removed and used in the shale oil works at Glen Davis, and following the closure of this venture were sold to the N.S.W. Blue Metal Co. who used the boiler of 1994 in a steam shovel at Dunmore on the N.S.W. South Coast, and held 2100 as spare, however with the purchase of almost new electric draglines from the Joint Coal Board, the steam shovel was superseded and scrapped in 1965. I have the smoke box dress plate off it.

B/No. 2135 went from B.A.T. to a mill line some ten miles south of Coff's Harbour about 1916, and was allegedly broken up there in the late 1920's. The Lahey Bros. were very interested in purchasing it, but as it has not shown up yet this probably did not eventuate, - or did it?

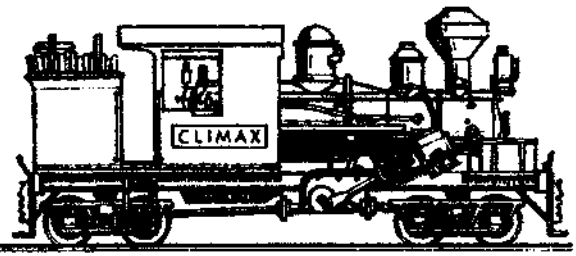
B/No. 2576 was bought by Hoskins for a venture which did not eventuate, and is a long story, but it is probable that the engine never worked for them.

Hopetoun Tramway, Port Esperance, Tasmania

Referring back to Tasmania, you make reference to an 0-4-0ST. on the Hopetoun line. Carl Jaeger told me that it was a Black Hawthorn but I am doubtful, because BH builder's plates were oval, whilst the one on this loco was a long rectangle, like the Manning Wardle plates of the 1860's and 70's. This loco has a lot of MW. features, but so did a couple of other builders of this period, particularly Hunslet, also Hudswell Clarke. At this stage my money says it was Manning Wardle.

(Comparing the above letter with E.W. Woodland's in the last issue, there seems to be doubt as to which Shay went to the Phillipines.- Ed.).

NEWS, NOTES & COMMENTS



V.L.R.R.S. Visit to the
STATE ELECTRICITY COMMISSION'S RUBICON - ROYSTON
2-ft. gauge tramway, 7th. May 1967.

28 members participated in this highly successful tour, in which we saw the two old diesel locomotives at the Alexandra timber mill, and the route of the old Rubicon - Royston tramway. Before our arrival at Rubicon power station,a stop was made at two old trestle bridges for photographic purposes. Here, due to a slight mistake on the S.E.C.'s part, there was some delay before the "First division" ascended the ½ mile long steep haulage, up what is probably Victoria' steepest railway gradient - 1 in 3, steepening in places to 1 in 2. At the top of the grade the passengers quickly changed trams, continuing along the almost level, but very curvy, raceline tramway in a luxurious (!) battery-electric bogie railcar. Meanwhile the haulage vehicle descended the incline to bring up the second group of passengers. Although the track is not maintained to mainline standards, some maintenance does take place, and it was noticed that concrete sleepers were being used for replacement of old timber ones.

Several photo-stops were held, and a demonstration run was made of the Fordson rail tractor hauling a large bridge pile, which was carried on two ex-Rubicon tramway timber bogies. All passengers were also given the opportunity of travelling on the four-wheeled battery-electric trolley, which was also an interesting experience.

We also saw the Rubicon power station, for many of us this was the first time we had seen

a hydro-electric station. The scrupulously clean, well kept appearance of this was very impressive, and reflects great credit on the local S.E.C. employees.

Following the success of this tour, we are now considering the possibility of running some trips to other non-V.R. lines.

(F. Stamford).

WANGARATTA CITY COUNCIL- A Government Gazette late last year carried a public notice to the effect that this Council intended to lay a tramway along the boundary of Gibson St., and across Kerr St. This is an extension of a 5'3" gauge industrial siding.

AUSTRALIAN CEMENT LTD., Fyansford, - An inspection of the works on 9/7/67 showed that all wagons had been transferred to the quarry, and all engines were in the shed. The last steam train ran on 22nd. December, when the Hudswell-Clarke brought in the last workmen's train. Maintenance of locomotives and the track ceased on 31st. May; up to which time the diesel loco had been used each Monday, to inspect the track.

Although the Company has not officially decided as to the disposal of locomotives, it is known that at least 12 people or organizations have indicated their interest in acquiring the locomotives. It seems that all locomotives will be preserved in some way. (The Perry, (No.10), will probably be retained as a steam cleaner.- Ed)

(M.Plummer).

EZARD'S TRAMWAY, ERICA, - The tall, and extremely spindly trestle bridge over the South Cascade Creek, on Ezard's tramway from Erica to Bell's Camp, was dismantled in June by the Forestry Commission, as it was considered unsafe. This may have been the highest privately owned trestle bridge in Victoria.

(M.Plummer/G.Maynard).

HENRY'S TRAMWAY, FORREST, The last rail trolley used on Henry's tramway was salvaged recently by member Reg Wilson, of Gerangamete, who now has it on his property. It was a Lea Francis, with small disc driving-wheels at the back, and a non-powered bogie at the front. (2'A wheel arrangement,- or 4-2-0 in steam parlance).

(M.Plummer).

PUFFING BILLY PRESERVATION SOCIETY, - Recently the P.B.P.S. obtained the 5'3" gauge wagon turntable, which resided for about eighty years under the Motor Registration Branch office at the Exhibition Buildings in Melbourne. This turntable formed part of an exhibit at an exhibition held in the 1880's. It is now at Emerald, and will be displayed as a static exhibit.

(M.Plummer).

NEWS WANTED ! Kept "Nows, Notes & Comments" filled by sending in suitable news items.

STATE ELECTRICITY COMMISSION, Yallourn, - Two new Bo-Bo electric locomotives, (road Nos. 124 and 125), arrived in Melbourne on June 18th. They were built by the Hitachi Co. in Japan, and were transported to Victoria Dock, Melbourne, by ship. Here they were transferred by the ship's 200 ton derrick onto railway wagons for transfer to Yallourn, the bodies and bogies being carried seperately.

The new 2'11-7/16" gauge locos each weigh 62 tons, and are of 1,000-h.p. This makes interesting comparison with the V.R.'s 5'3" gauge "T" class diesel-electric locos, which are only 875-h.p. and weigh 68 tons. The new locos are therefore the most powerful narrow-gauge locos in Victoria, and probably the most powerful sub-3'6" gauge locos in Australia. They show the potentialities of narrow-gauge when combined with direct electric-traction.

The new engines can be worked in multiple-unit with the 16 locos of 800-h.p. which form part of the present motive-power of the S.E.C.'s extensive rail network at Yallourn/Morwell. They will be used for hauling longer coal-trains on the interconnecting railway between Yallourn and Morwell open-cuts. All other electric locos obtained since the second world war were built by Siemens Schuckert Werke, of Western Germany.

(A.R.H.S. Div.Diary/S.E.C.News/M.Plummer/F.Stamford)

V.L.R.R.S. MODELLER'S SERVICE.

Scale Drawing of Powelltown Shay Locomotive.

After month's of painstaking spare-time work member Chris. Andrews has produced a highly detailed ¼" to 1-ft. scale drawing of the Shay locos used on the Powelltown tramway. Elevations of both sides are shown, together with front and rear elevations. This drawing can be recommended to modellers, while railway enthusiasts generally should find it of great interest.

Copies are available from the Editor,- Price - 35 c. incl. postage. Very highly recommended to steam fans.

ERICA SAWMILL

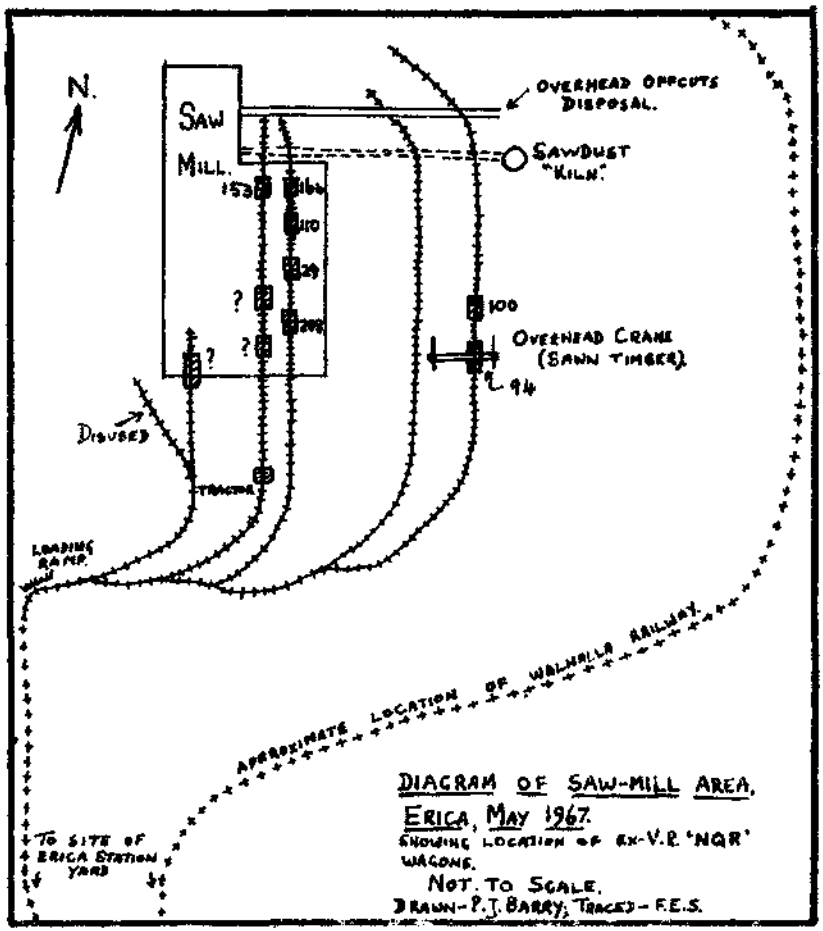
A visit early in May to the Erica area found the following.

The former Forests Commission sawmill at Erica still operates. The mill sidings appear intact as far north as the overhead mill-end disposal unit, although the most westerly track is disused. Opposite the loading ramp on the former lead to the railway station yard, is a dump where all types of rubbish from the mill is burnt. Motive power is provided by a 2'6" gauge Malcolm Moore T.A.C.L. tractor, No.19568 of 1924.

Coupling is by fixed link on the tractor and pin through the movable jaw of the knuckle couplers on the ten ex-V.R. N.Q.R. wagons. These wagons all have their drop sides removed, while several also have their ends removed. All except NQR 208 show evidence of great overloading - distorted frames. Tracing the numbers beneath the black residue from the sawn timber, particularly on the "endless" NQR's is difficult. However the following could be identified - 29, 94, 100, 110, 153, 164, and 208. Those underlined, together with 169, were noted in A.R.H.S. Bulletin Supplement for October 1959 as being at the mill, the other five being indecipherable. The three NQR's unidentified by this writer may well be identifiable when outside the mill - when seen they were well in shadow in the mill.

Point levers vary from V.R. WSA levers to home made 180 degree throw varieties, while one has the following cast on it:-

Ransomes & Rapier's Patent
1866
Switchbox
Ransomes & Rapier
Patentees
&
Makers. London.
Pattern
B



WALHALLA RAILWAY & TYERS VALLEY TRAMWAY.

The down end water tank at Erica remains, Moondarra station site is passed through by an access road between the old and new Erica-Moe roads.

At Tyers Junction, the bridges over the Tyers River are still in place, as is at least one bridge between here and Collins Siding.

(Peter Barry).

V.L.R.R.S. PHOTO SALES SECTION.

Orders for the first series of photos have been coming in rather slowly, and we regret that this has resulted in a delay in filling some orders.

Further orders for the first series of photos will continue to be accepted up to August 21st., - if any members did not receive our list of these photos they should contact the editor to obtain a copy. We hope to have details of a second series of photos shortly.

Tasmanian Private Railways.

Member Ken Flood is attempting the very difficult task of compiling a list of all private railways and tramways in Tasmania. Any members who feel they may be able to help are strongly urged to contact him at the address below. For too long Tasmania's private railways have been ignored by Australian railway enthusiasts, and at this late stage the task of recording their extremely complex and interesting history will not be easy. If you can help write to - Mr. K. Flood, 16 Warwick Place, Kings Meadows, LAUNCESTON, Tas, 7250.

While every effort is made to ensure the accuracy and completeness of articles published in "Light Railways", we cannot be sure that errors have not crept in. Additional information is being uncovered all the time, and this often contradicts previous information. If you see any errors, or can add additional information, please contact the Editor, and so help us to record the full history of Victoria's and Tasmania's light railways.

Oppinions expressed in articles or letters are not necessarily those of the Society or the Editor.
