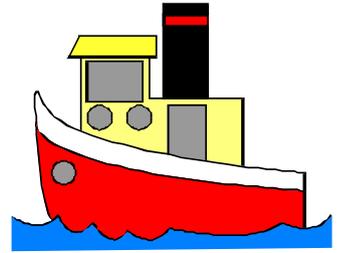




Wheels and Floats



Newsletter April 2016

TAURANGA MODEL MARINE AND ENGINEERING CLUB INC.

The Secretary
PO Box 15589
Tauranga 3112
Palmerville Station Phone 578 7293

Miniature Railway Memorial Park
Open to Public, weather permitting
Sundays in Summer: 10am to 4pm approximately
Website: www.tmmecc.org.nz

MEETINGS

General Members Meeting every first Tuesday 7pm.
Committee Meeting every second Thursday at 7pm.
Maintenance Tuesday mornings from 9am.
Engineering discussions Tuesday evenings 7.30pm.

COMMITTEE

President:	Peter Jones	543 2528
Secretary:	Bruce Harvey	548 0804
Co-Treasurers:	Owen Bennett	544 9807
	Clive Goodley	572 2959
Committee:	Warren Belk, Shane Marshall, John Stent, Bruce McKerras, Peter Lindsay, John Nicol, Russell Prout, Mike Webber	
Boiler Committee:	Peter Jones, Paul Newton, Bruce McKerras, John Heald	
Safety Committee:	Warren Karlsson, Bruce Harvey, John Nicol, Malcolm George	
EDITOR:	Roy Robinson	549 4346
	royrob@wave.co.nz	

CONVENERS

Workshop:	Malcolm George, John Nicol
Track :	Bruce Harvey, John Stent, Russell Prout
Marine:	Warren Belk
Librarian:	John Nicol
Rolling Stock:	Clive Goodley, Mike Webber
Website:	Murray de Lues
Driver Training:	Clive Goodley, Mike Webber
Club Captain:	Bruce McKerras

OPERATORS 2016

3 April	Geoff Barnes
10 April	Committee
17 April	Bryan Fitzpatrick
24 April	Clive Goodley
1 May	Bruce Harvey
8 May	Peter Jones
15 May	Warren Karlsson
22 May	Bryan Kincaid
29 May	Peter Lindsay

Stuff from HQ

NOTICE OF ANNUAL GENERAL MEETING

21st MAY 2016

Members are advised that the Tauranga Model Marine and Engineering Club Inc. 2016 Annual General Meeting will be held at Palmerville Station on Saturday the 21st of May 2016 following the Special General Meeting which commences at 2.00pm

AGENDA

Members present

Apologies

Minutes of the 2015 AGM

Matters Arising

Presidents Report

Treasurers Report

Safety Committee's Report

Election of Officers-President

-Vice President

-Secretary

-Treasurer

-Club Captain

-Committee

Appointment of Auditor

Appointment of Librarian

Appointment of Boiler Inspectors

Set Subscriptions

General Business

Bruce Harvey

Secretary

Tauranga Model Marine and Engineering Club Inc



**NOTICE OF SPECIAL GENERAL MEETING OF THE
TAURANGA MODEL MARINE & ENGINEERING CLUB INC
CALLED BY THE CLUB'S EXECUTIVE COMMITTEE TO BE HELD AT THE CLUBROOMS AT
2.00 O'CLOCK ON SATURDAY, 21 MAY 2016 AND TO BE FOLLOWED IMMEDIATELY THEREAFTER
BY THE CLUB'S ANNUAL GENERAL MEETING**

PREAMBLE: The Club's Executive Committee, upon reviewing the Club's Rules have resolved to put a Notice of Motion that an additional office bearing position of Club Captain be created and up to three (3) additional Committee Members be appointed.

NOTICE OF MOTION:

The Notice of Motion reads as follows:

Clauses 9.1 and 9.2 of the Club's Rules be deleted and the following clauses be substituted therefore:

"9.1 The Management for the Club will be vested in an Executive Committee consisting of:

- A. President
- B. Vice President
- C. Secretary
- D. Treasurer
- E. Immediate Past President
- F. Club Captain
- G. Four Members elected by the Financial Members

9.2 In the event of the President being re-elected to office the position of Immediate Past President lapses and five (5) Members will be elected instead of four (4)."

Clause 11.2 be amended to provide that a quorum for the Executive Committee will be six (6) members.

Clause 13.8 be inserted as follows:

"The Club Captain shall be responsible for organising social events and driver training days as and when appropriate."

Signed for and on behalf of the Club's Executive Committee

Peter Jones
Club President

TMMEC PRESIDENT'S POINTS

Greetings Members.

First a thank you to Roy Robinson for taking on the task as our new Newsletter Editor, this is his first edition. Thank you also to Clive for many years as our editor and I know he is keen to support Roy with further articles into the future. I have stated before and I will repeat myself by saying that our newsletter is the most important means of communicating between members and other clubs through out New Zealand and the World, whether by post or electronically. The editors job is to put order to the words supplied to him, however he needs you to provide the news.

The training day on Saturday the 9th went well I have been told, I was touring the Rotorua area so missed out. Congratulations to Don Hamilton and Peter Davies for passing the Electric Locomotive Drivers certification and to Mark Duncan for passing the Steam Locomotive Drivers Certification, well done. John Stent has been issued a fresh certificate for his LBSC Speedy, so more fresh action on the track.

Our next important event is the AGM which is to be held at Palmerville on Saturday the 21st of May. The format is a little different this year, the proceedings will start at 2.00pm with a special general meeting that will present amendments to our rules, including remits to be voted on during the AGM. You will find further details in this newsletter. I reported in the last newsletter that our rules handbook is being reviewed, and in line with this our committee has discussed rule changes that are needed to suit the way our club has evolved since the last rules review some 15 years ago.

The first rule change to be submitted is 9.1 Management section, purpose is to add a position of Club Captain to the list of club officers. The position of club captain was created about 18 months ago as a committee appointed position. It is the general opinion of our committee that this position should be part of the management team and the incumbent elected by our club members. The job description will involve organization of club social activities, training days and club members training and certification for various operating activities. The Club Captain will have the power to delegate duties to any members he may see as appropriate for the purposes of training or other activity. The second rule change is to increase the general committee to 4 from 3. As will be seen from the list, if the President of our club is re-elected then the general committee will be 5 elected members. In the past we have seconded members onto the general committee and have actually had a general committee of seven. There has never been a problem with the number but we have not been operating within our own rules. I have always been an advocate of getting those that

want to be involved having a chance, and it has worked well. What we can do is get those who want to be part of making things happen, be part of special projects sub committees, similar to our club safety committee. It's all about getting our members involved and taking ownership of our club. Please attend our special meeting and AGM. As specified under rule 9.4 all members of the Executive Committee will retire annually, but are eligible to be re-elected. Please get nominations to the secretary before Saturday the 21st .

It's the wind up of a very busy year, one we can look back with quite a lot of satisfaction. To name a few, installation of railway track marshalling area, completion of the steaming bay traverser, safety fencing installation around the track, completion of the service centre, Christmas parade, standardization of the ride car fleet and of course the 2016 MEANZ convention. Lots done and still lots to do. As a result of our ride car standardization some older cars and spare bogies have become redundant. If you have an interest in these please contact myself or Russell Prout.

Best Wishes

Peter Jones

Notes from the Editor

Hi All

Thanks for your support for this my first edition. Yea, sure to be mistakes but it will get better once I get more familiar with this program.

Thanks to all of yous who provided articles, couldn't get them all in so watch this space if yours is not in this month.

Just one request in fact a demand;

Files must be in a word format.

Pics must be in a jpeg format.

I do know how to turn the computer on but am not a expert so KISS theory prevails.

Next month there will be a section for Wanted : For Sale : Trade. If you have some bits you wish to get rid of or want please send me an email with the details.

Please read and enjoy,

Roy

Nomination for Life Membership:

Notice of Motion: That Ron Salisbury, member of TMMEC, be granted Life Membership of TMMEC for long term services to the Club.

Proposed by Owen Bennett, seconded by Bruce Harvey.

Change to the Rules of TMMEC:

Notice of Motion: That the allowable number of Life Memberships be changed to 7.

Proposed by Owen Bennett, seconded by Bruce Harvey.

FINANCIAL YEAR ENDS

The Club has just finished its first full financial year of trading since being GST registered from 1st April 2015. Owing to the high expenditure of recent expansion of track, north traverser, service centre, steaming bays, fences, etc. the Club has been able to claim back considerably more of the GST content of these purchases than paying GST on Income from ticket sales. Concession tickets are now \$20 for 12 rides, a saving of \$4. The change from a manual cashbook to MYOB Cashbook has made for much better reporting of the club's ongoing financial status. Detailed reports are presented to the committee meetings, generally by displaying through the TV monitor.

The Petty Cash reimbursement process of the past has also been changed. Those few members that spend smaller amounts on the Club's behalf for catering, workshop expendables, etc. are now reimbursed through the bank to their own individual bank accounts, which makes record keeping more transparent. There are reimbursement forms in the top drawer of the larger filing cabinet. Please accumulate any dockets, write one of the available code numbers on each docket, and staple to the reimbursement form, totalling at the bottom. Please give this to the Treasurer prior to the second Thursday committee meeting for tabling and passing for reimbursement. These individual purchases are entered into the appropriate expense codes in the Cashbook software.

All other club expenditure needs to be quoted or estimated and approved by committee. The supplier needs to address their invoice to TMMEC, not to an individual member, as there are GST ramifications to consider. Where a supplier needs to be paid before goods are uplifted, a pro-forma invoice tabled in committee can be paid to the supplier quickly.

Owen

HOW GOOD IS THE WELSH COAL?

The new Tamar 4" scale locomotive has been tried on both small Welch coal nuggets and large and small over the last year with very good results after much trial and error.

The boiler, as most readers will know is Duplex, fitted with two 27mm ID. dia. super heater tubes to accommodate coaxial super heaters reaching over the fire to within 4mm of the back of the firebox wall, plus nine 22mm ID.dia flu tubes, all duplex.

The grate area is 70 square inches having 20mm X 6mm bars with 5mm gaps in between.

Initial fire up times using only Welch coal and wood kindling was hard work and steam up times were longer than using any type of coal or char. May be around about 30% longer. Thus it was resolved to use a mixture of coal and small Welch nuts, which brought 100lb on the gauge within about 30 minutes at most. This was based on a 14 volt supply to the blower at the Tauranga track and 12 at the Whakatane track.

The ash pan sits below the boiler foundation ring by 5mm, no other air holes were put in, and thus air has all round access to the fire edges and central area of the grate.

The fire is then built up to the bottom level of the fire box door opening and kept there at all times. This works out to be about 45mm thick at the door end and 60mm at the front end.

Normal locomotive blower use was not much more than using coal or char, but the running side of the story then changed dramatically. The Tamar has been restricted basically to two people on one carriage thus the vacuum created in the smoke box is reduced due to less hard work. This led initially to the blower being used to cultivate the fire to a semi red looking condition most of the time.

Four new blast nozzles were made up drilled to between 7.6mm to 8mm with perfect flare ta-

per shape to the base of the petticoat pipe. I found the latter critical at later stages of testing. The difference between each one was most noticeable on the use of the blower while continuous running. I have now settled on a 7.6mm. This allows enough air to get pulled through the fire without the use of the blower while on the run on small and large throttle openings. The larger throttle openings were done with engine steam brakes partly on to simulate load.

One finding was that raking the fire seemed to break up the coal to the extent it fell into the ash pan dramatically filling it in minutes! New tactics have shown that keeping the fire thick and not raking have allowed the engine to do a full days running of about 4 hours without problems. It is good to see virtually no smoke and very little cinders being emitted. Also very little ash seems to appear in the smoke box allowing up to a 12 hour run before emptying.

Tests were also conducted to see how long the fire could be left without it totally dying. 40 minutes was easy to achieve even though the fire looked totally dead.

A test was also done on the Whakatane track to establish how long the engine could run on one firing. Admitted that there was only about a 250 Kg load but 65 minutes was recorded before pulling off the track and blowing down. Thus the BTU rating for Welch coal must be pretty good.

I emptied the ash pan at home to gauge the amount of clinker. Only a couple of small pieces about 30mm in diameter were found, this being the case on prior running days.

There is no doubt that the difference between using a narrow and wide fire box greatly changes how Welch coal produces the required heat. However I do believe that grate area, airflow and most certainly the blast pipe nozzle are the key to having a good steaming engine. It's getting the ratio right for individual locomotives which seems to be the key.

If you have 3 boilers with the same exterior dimensions, copper, carbon steel and Duplex; copper and Duplex will have about 20% more grate area than carbon steel due to the thickness of material used in construction.

I have tried a version of the 'Rosebud' grate which in theory gives about another 16% more available airflow. However the round air holes tend to get blocked up very easily. It would be interesting to hear more comments on various fuels as we go down this track as it looks unlikely, at this point in time, char will be in our hands in the near future.

Further trials are to be undertaken with the Tamar over the next few months with different fuels.

John Heald



South Western Model Engineers Cobden Australia



My kick start into Gauge 1

By Geoff Hallam

My first introduction to running engines on a 45 mm track was done by a very old friend Dick Edney who lived in Whangarei, a couple of hours north of Auckland. He had bought a Roundhouse engine and installed a simple aluminium railed running track in between the rails of his already established 5" gauge layout in the garden. My interest was purely 3.5" and 5" gauge construction at that stage. You have a heck of a lot to answer for DickJ, who sadly passed away back in 2000. He sowed a seed which has completely transformed my pastime, for the better I must add.

So, not long after this visit I ordered a Roundhouse Lady Anne and it has run faultlessly for the last 16 years or so. Not long after building my first track in Auckland, I heard of a deceased estate of Gauge 1 locomotives and track for sale on one of the local Islands in the Hauraki Gulf. We had never driven on the island, so we took the ferry over, just to have a look you understand. (Yeah right!)

We eventually found the home of Ken Birch where his daughter was living. She pointed over to a dilapidated old shed in the garden and said "it's all in there, go and have a look". Well, there were boxes and boxes and piles

of scratch built gauge 1 engines, coaches and wagons. It was like an Aladdin's cave that hadn't been touched for years. Everything was covered in dust and spiders webs and most had been

knocked around by I presume, grandchildren playing in the shed. There was a fair amount of repair work needed, mainly on the 18 electric powered locomotives of which some were even unfinished. I found bundles of scale drawings that he had obviously built from which tipped the scales in me making an offer. At least I had something to help me sort the engines and stock out.

I made a sensible offer which was duly accepted and then she said "the track goes as well at that price". The garden was covered in Tenmille track and points laid on cement board panels. Phew! There was a lot more work ahead than I had thought. I carefully started to pack boxes into the back of the XR6 station wagon, soon realising that there would be a second trip needed. When it was full to the roof we said "see you tomorrow" and set off for the ferry.

Island roads don't get the same care as the mainland and I began to realise that we were hitting the bumps a lot harder than usual. I hadn't given a thought to how much weight we had on board! When we approached the ferry ramps it suddenly dawned on me that this

**The Roundhouse
"Lady Anne"**



wasn't going to be easy with a much lower front spoiler and mud flaps to contend with. I diplomatically asked Sue and her mum to get out of the car (just to lighten the load a little bit) and gingerly approached the ferry. It was obvious that things were going to scrape, so I backed up and approached the boat at 45 degrees, which helped a little but things grounded and still made an awful noise. Other drivers waiting to get on were not impressed with how long it took me to negotiate the ferry ramp. The worst thing was I knew I had to do the same to get off and then there was also the next day as well.

I started the next day as early as I could, leaving Sue and her mum at home to give me extra carrying capacity. It took hours to lift the track in the baking hot sun which had also suffered badly over the years with our high UV levels causing the sleepers to become very brittle. Many sleepers broke off and it would be debatable if I could use the track again. By the end of the day the car was full to the roof again, passenger seats included!

The ferry trip was even more traumatic this time. One, I couldn't ask the passenger seats to unload this time! and two the tide was even lower than the day before!! I walked onto the ferry and explained the predicament I was in and found two big guys who were kind enough to provide some lift under each of the front wheel arches as I rolled onto the deck of the ferry. I was petrified they were going to get there hands trapped or I was going to roll over there feet. All went well though and it was much easier than I had thought. Mind you, I was in the driver's seat J and I didn't have to do the lifting!

It took several days to go through my new treasure trove. There was even a modern Unimat lathe in one of the boxes with heaps

of tooling, so I think I still got a bargain. Everything was moved into a new workshop -area I had built at the back of the house. There were 24 shelves for all the rolling stock and engines and a big workbench for me to start the repairs. And basically that's where they stood for the next few years. The freight wagons were the easiest to spruce up and they have given good service for a long time. The locomotives were an all together different task and were put in the "too difficult for now" basket.

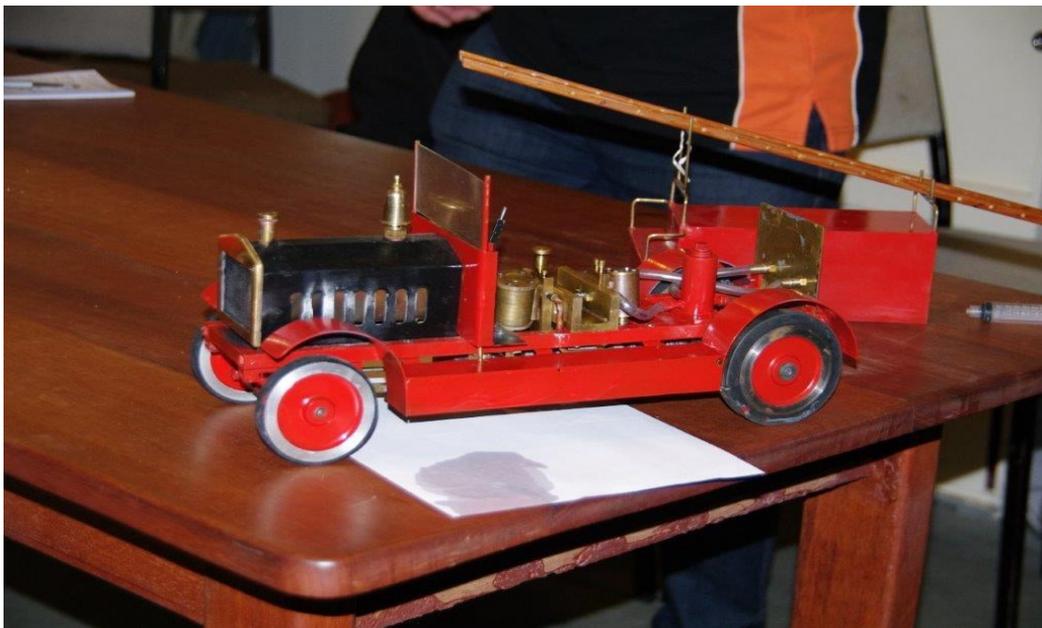
About six years ago I was looking on the internet and found that Walsall model industries did laser cut frames, pony truck and side rods for an LMS Royal Scot. As this was one of the unfinished locos, I decided to order the set of frames and wheels, which promptly arrived and have sadly sat on the shelf ever since!

As you approach more senior years it becomes clear that time doesn't slow down as you would have hoped, it actually passes quicker! I realised that if I didn't get some of these projects finished I might be too old to enjoy seeing them run. Even if I only rebuild three locos a year I will be nearly 70 before they are all done! Well that was how I got involved in Gauge 1 and the only thing that has regretted it is my bank balance .

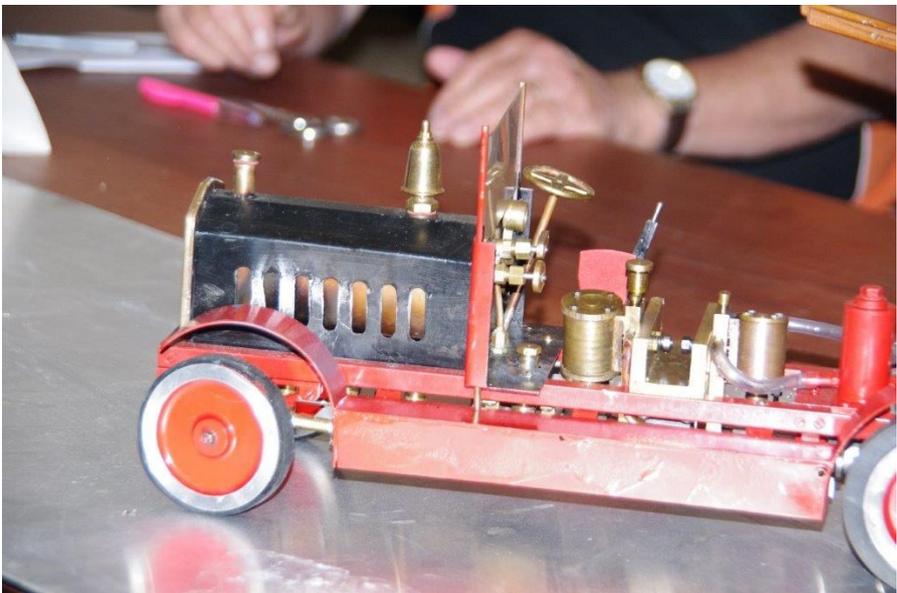
Geoff



One of the four shelf units showing some of the variety of Ken's work.



The Club's entry to the Les Moore Trophy made by Bob Stacey (article follows).



Live Steam off the Rails

Every two years, New Zealand Model Engineering Societies hold a Convention at which Committee members are elected to MEANZ (Model Engineering Association of New Zealand), the over-seeing body from Model Engineers, problems discussed and Rules set. Also, many Club arrive at a Venue and have a get-together on the Host track.

The Convention alternates between North and South Islands, and this year, 2016, the Tauranga Model Marine & Engineering Club decided to hold the Event at its track in Memorial Park. Also, during the event, a competition is held called "The Les Moore Trophy", in which the Host Club decided on a model to be built by the Clubs, between Conventions, and competed for during the Convention.

This year, the Tauranga Club decided the model would be a steam driven fire engine. As described by LBSC in a Model Engineer in December 1954. A folder was made up and copies of the drawings made and sent to all the Clubs, and work commenced. Initially, three members started building models, with one person having a half- completed model from a different Club.

My first step was to sort out the materials required, most of which came from the scrap "It might come in useful one day box". The side rails for the chassis were from an angle poise lamp, the cross members were key steel, the engine mounting frame built up from brass sheet silver soldered. Wheels were made up out of aluminium for the front wheels and mild steel for the rear, with tyres made from drive rings from a printer on the front and square section rubber glued to the rear. The bevel gears came from the "Useful" box, and did the job well, although bigger than the meccano gears suggested by LBSC. The boiler was built as per instructions, and proved to be a good steamer, with pressure being raised to 50psi in just over four minutes. The body work was from Imm brass sheet, sub-soldered together.

In the meantime, the other two Members who had started on models had fallen by the wayside, so I was on my own except for someone who made the ladder. The other Member who had the half-finished model had done some more work on it, and had reported that it was not a working model and would not pump any water, so testing of my version was essential.

When testing, I found that the cause of the failure to pump was that the ports on the oscillating double acting cylinder did not allow sufficient water into the cylinder on the suction stroke, so it was pumping more air than water. I then enlarged the ports as large as I dared, which allowed slightly more water to go through, but not much. As time was getting on, I then decided to get the painting done., as I would have something that looked like a fire engine, even if it was a poor performer, and that was when more problems occurred.

Stripping down was easy, painting was easy, the reassembly was difficult, as paint had entered some of the bearings, and made everything very tight, so it had to be stripped and cleaned several times before it would run properly, but still not pump. I then started working on a new pumping unit, but time had run out and the Convention was here, so it was taken to the hall, as was, where disappointingly there was only one other entry from all the Clubs in New Zealand. This was built as an escape appliance, with escape ladder, lining and a pump that worked, and so was a worthy winner.

Bob Stacey

Measure?

(Names in the following story are factious and any resemblance to real people is purely coincidental.)

Down at Noddyville Station, Station Master Peter J was wondering if the Stations flag pole would fit into the Engine Shed so it could be repaired and repainted. He summoned Platform Porters Shane M and Mike T into his office.

“I want you to find out how high the flagpole is so I can see if it will fit in the Engine Shed for repairs” said Peter J.

Off the Platform Porters went to study Peters J’s request. After 4 hours of deliberation Platform Porter Mike T (the brighter one) said to Shane M,

“Why don’t we undo one of the two mounting bolts and swing the pole down so we can measure it on the ground?”

“Good thinking,” said Shane M, but not having a clue what he was talking about.

They had the pole on the ground and were measuring it when Station Master Peter J turned up and asked,

“What are you doing?”

“Measuring the pole”, responded Platform Porter Mike T.

“I told you I wanted the height not the length”, said Station Master Peter J..!!??..

Wrong Decision

Two old boys taking afternoon tea at the Bowling Club were overheard.

One said, “Did you know Lions have sex seven times a day?”

The other replied, “Damn, and I’ve just joined Rotary.”

Remember February 1972?

The long job of hauling the Java Tunnelling machine over the Kaimai’s to the eastern end on the Kaimai Rail Tunnel has now been completed.

The machine which cost \$1,400,000 and was imported from the United States was used for a time on the western end but was limited by the hard rock encountered.

Then last September it was decided to move the 250 ton giant one piece at a time over the hills. This has now been done. When the project reopened after the Xmas vocation the machine had been reassembled at the eastern end of the tunnel. It will be used to cut through 2.5 miles of material expected to be softer than that encountered on the other side of the hills.

Ab Class Pacific 832 was moved to the Museum of Transport and Technology at Western Springs where it will be preserved.

The Kingston Flyer the steam hauled tourist train operating between Lumsden and Kingston in the South Island attracted more than 9000 passengers in its first 27 days of operation. Hauled by an Ab class 4-6-2 the Flyer started service on December 21st and runs all summer till April 3rd. The train consists of a “birdcage” or gallery car and a saloon car. The loco and rolling stock has been restored to the style of the 1920s. One of the busiest days was January 3rd when the 2 return trips attracted 696 paying passengers. The Flyer’s routs crosses the main routes leading to popular Southern Lakes resorts.