January 2012
No 374

THE GENERATOR

Newsletter of THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC
Managers of the **"MARRINER RESERVE RAILWAY"**
Please address all correspondence to **:- 22b Haydon St, Palmerston North.**

PRESIDENT	SECRETARY	TREASURER	EDITOR
Richard Lockett	Stuart Anderson	Murray Bold	Doug Chambers
(06) 323-0948	(06) 357-7794	(06) 326-9665	(06) 354-9379
pnmec_president@trains.net.nz	pnmec_secretary@trains.net.nz	pnmec_treasurer@trains.net.nz	pnmec_editor@trains.net.nz

PNMEC Home Page www.pnmec.org.nz
Email:- pnmec@trains.net.nz

TRACK RUNNING

This is held on the FIRST and THIRD Sunday of each month, from 1 pm to 4 pm Summer and 1 pm to 3 pm during the Winter. All club members are welcome to attend and help out with loco coaling, watering and passenger marshalling - none of the tasks being at all

Visiting club members are always welcome at the track, at the monthly meeting, or if just visiting and wishing to make contact with members, please phone one of the above office bearers.

Sender:- PNMEC
22b Haydon St,
Palmerston North

Place stamp here

This Months Featured Model

Report on the November Annual Dinner

Thirty-one members gathered at the RSA to enjoy a very nice meal and companionship of good friends.
A time to reflect on the disasters (earthquakes, slips in the Manawatu Gorge) and the triumphs (Rugby World Cup) of 2011.
A time to remember members no longer with us and to take note of new members joining in with the Model Engineering Hobby.

THE NEW YEAR

The Editor

At this time of year we often make 'New Year Resolutions', model engineers vow to get more time in the workshop and make some serious progress with the current project. For various reasons the extra time doesn't always happen so one must continue to plod on doing what you can. The ever rising costs of living and materials used in our hobby often mean that projects have to be put aside for a while until sufficient funds are built up to allow the project to proceed.
Perhaps it is timely to consider model engineers in Christchurch since the earthquake. Some have had their models damaged, but this is of minor concern to those who have had their homes severely damaged. The Christchurch model engineers had no damage at their track site and were able to have a special run for children of Christchurch after the earthquake.
Be grateful for the time you have in your workshop, don't try to rush the job or take short cuts. In the case of a model steam locomotive, you are looking at a build time spread over several years, so there is no point in cutting corners. You don't want to finish your engine and then wish you had spent more time on some of the work and achieving a better miniature.
All the Best for the New Year and I hope your project continues to move forward.

January Club Night

PRESIDENTS BBQ
5:00pm, Thursday 26 January 2012
1502 Napier Road, Ashhurst

January Meeting

This is the Presidents Bar-be-que and will be held at Murray and Janice Bold's home in Ashhurst on January 26th from about 5.00 pm.
Directions to the venue.
Follow Napier Road towards the Manawatu River bridge. On the right is a 'No Exit' road. Take this road. It is 100 meters before the entrance to the Ashhurst Domain on the left. If you pass this point you have gone too far.
At the end of the No Exit Road (Napier Road) is No 1502. You are there. If there is room you can park on the gravel or outside the gate.

Go to www.pnmec.org.nz/PNMECBBQ2012.pdf for an Invitation and Map to find the place.

COMING EVENTS

Track running at Marriner Reserve Railway

January	19th	from 1pm to 3pm
February	3rd	from 1pm to 4pm
February	17th	from 1pm to 4pm

Open Weekends

Hawke's Bay Model Engineers 50th Anniversary on Waitangi Weekend
4 - 6 February 2012

Raumati Open Weekend
18 - 19 February 2012

Locomotion 2012 Palmerston North
3 - 4 March 2012

The closing date for the next issue of The Generator is Friday 10th February

Building a 'O' gauge T.T.T. Co Mallet locomotive

A model of this engine was thought of in the late 1960's when passing through Putaruru and noticed the engine sitting beside the tracks. The engine was checked out and a few photos were taken. Later on a scale drawing came my way. About four years back I became interested in it again and two ETS 'O' gauge motor units with wheels and coupling rods were ordered and the drawings were enlarged to 'O' scale. A large number of photos of the locomotive at Glenbrook were taken.

The engine is not built as a fine scale model as it runs on Hornby three rail tin plate track with a two foot radius. It is mainly constructed from tinplate with a lot of it coming from coffee tins. The motor units were joined together and then extended front and rear with brass frames and other parts as required. The front and rear bogies were added and aluminium wheels machined and fitted. Most of the engine weight is carried on the second set of drivers. Two boilers were built as the first one went into the scrap bin. Cylinders came next and connecting rods made and fitted. The cab was constructed from tinplate with the side walls below the windows lined with lead to offset the long overhang of the boiler. The roof clips onto the cab sides and has a working vent. Extra lead has been fitted in the firebox section of the boiler and more weight was added to the front motor unit.

The tender was built from tinplate with bearings machined and soldered in for the axles. More aluminium wheels were made and fitted. The rear tender coupling is of the Hornby type with a NZR coupling at the front. A hook and eye coupling fits between tender and engine. It was time now to run the basic engine on the track and with a few minor adjustments the model went very well. The engine was run in

this state for a considerable time and then bit by bit the detailing was added with the tender being completed first and then painted.

The rear light has been fitted to the tender. The boiler was next to be detailed followed by the high pressure valve gear and then the low pressure valve gear. This was mostly made in brass with pins machined to suit.

The locomotive was run again for some time before the engine was dismantled, cleaned and painted. After assembly badges were obtained from The Model Company and signage was produced by a local firm. The model is finished in gloss black as I like a gloss finish.

Bruce Geange

A FEW NOTES ON THE TAUPO-TOTARA TIMBER COMPANY MALLET

By Doug Chambers

The Taupo –Totara Timber Company ordered their Mallet from Alco in 1907 but due to financial constraints the locomotive didn't start work for them until 1913. From 1914 to 1944 it operated reliably on their 81 km track, but normally only on the northern section of the line, Heislers being used on the more difficult southern section.

The wheel arrangement was 2-4-4-2. On the Mallet system the rear drivers are fixed to the frame and the leading pony truck and drivers are on a separate frame which pivots relatively to the rear wheels allowing the engine to negotiate tight curves. The rear cylinders use steam direct from the boiler and is then used at a reduced pressure in the front cylinders which have larger diameter pistons so that a similar power is available at the wheels to that on the rear wheels. This required a flexible joint in the steam lines to the pivoting front cylinders and for many years this joint was the cause of much trouble with the design.

The engine and tender weighed 44 tons and

had an axle loading of only 6.5 tons.
For many years after being retired from service, the Mallet sat by the Putaruru Railway yards until it was taken north to Glenbrook where it was overhauled and put back into steam.
Gordon Trow of the Palmerston North Model Engineers, assisted in replacing boiler tubes and was for a time a fireman on the Mallet.
I remember him telling me that once you learned the right technique, it would steam very well, but get it wrong and you would suffer.

Letter from England

By Stan Compton

Every Time I go to one of our Model Exhibitions I am impressed by the variety of items on display, the remaining twenty per cent after all the locomotives on display. We seem to get a l ot of kit-set engines these days, but that fact will get more prevalent as time goes by. I regret missing the fine model of an 'Ascot-Pullin' 500cc OHV motor cycle built from scratch by H. Catchpole who always tackles unusual models. This machine, manufactured about 1932, had a pressed steel frame and forks, but never gained any popularity, a brave attempt.
I have only seen one and that is the one in the 'National Motorcycle Museum' near Birmingham.
On the competition stand was a fine model of a 'Clayton-Sentinal' steam bus, the original must have been uncomfortable to drive on a hot day. Passengers entered at the front alongside the vertical boiler leading to a central gangway. The seats on the model were upholstered to a very high standard. A visitor was trying to examine the 'undertype' engine with great difficulty, I know the feeling.
Next to the 'hot-air' engines stand was a clinker –built rowing boat, full size, the sort one hired out on a lake in a park, but this one had a hot-air engine, about 1.2 metres high driving a propeller. There was a propane cylinder in the stern near the rope-controlled rudder as on the original.
Do any of you recall reading about an unusual sailing vessel from the early thirties that had three cylindrical masts? A modest sized one did ply for trade for some years with little success. There was a model on a club stand that reminded me of the principle. I think it was the effect that as the wind blew against a cylindrical object a vacuum would form on the lee side creating the propulsion, was this called the Coander Effect?
Among all the locomotives on display I recall a 5" gauge 'South East and Chatham Railway' 2-4-0 tender engine called 'Asia'. This is what I should have built instead of the 'Caledonian' 2-4-0 which was difficult to steam due to lack of space above the correct water level.
There was a very nice model of 'Catch Me Who Can' on a club stand, so tiny among regular locomotive exhibits. If you remember this was a brave attempt in about 1810 to make money giving rides on a circular track in a London Park.
One display, put on by a bell-ringing association, was a bell-ringing machine built by John Carter 1854-1927. You may not be aware but Church Bell ringing is very complex with all the different 'Changes' creating different patterns of sound. The machine on display could reproduce various patterns of sound on a set of bells, powered originally by a treadle lathe, later converted to electricity. Details of the machine were published in 'Model Engineer' 5th March 1925.
It is interesting to note the builder was employed in the revolver section of 'Webley and Scott' the Birmingham gun makers.
About 1956 we were living in the village of Stradbroke in Suffolk opposite the church.
One evening the bells started ringing and went on for hours, then I discovered a visiting team of bell ringers were locked in the bell tower while their attempt on a bell contest took place.
Very nice to hear them from a distance but deafening close to.
Have I told you about the kit-set tug called 'Scwartz Zee', that I acquired part built as a project to complete while my new 'knee joint' recovered. The model at 36" long has been on my bench for months, complete except for 44 stanchions to support the rails. In the end I made my own, at 14mm long by 2mm wide with three holes .85mm diameter. I needed a jig and this I made out of gauge plate and completed the drilling on my 'Fobco Drill!!
The second electric clock with the notched- tooth to excite the battery powered coils, creating a pulse every eight beats of the pendulum, is at last going well. Once I made a new 'Count Wheel' I had better luck. It has taken as long to keep it going as it took to build it!!!
The descriptive book by John Wilding, published by Rite Time publishing.com, is very good. My equipment needed replacement to cut perfect notches.
Have you ever noticed when you are watching a Western film on TV how well-groomed the

horses are? Don't the directors making the film know that the horses sweat and the dust settles on it as you would expect? When I was a child my parents had been to see a Western film and arrived home with my mother complaining that dad had spoilt her night out. He, logically had pointed out that you could not float a stage-coach across a river with two tree-trunks lashed to it!!!!

Similarly when making films for TV, cars, trucks etc are hired to create the transport of the time of the film. These are usually restored vehicles with a paint finish of a very high standard of cleanliness. The roads of an 'Edwardian Era' as in 'Downton Abbey' were unsealed but we never see any dust on the early cars in the film. I was impressed with the episode depicting two of the daughters of the family took a pony and trap out one day, the pony supposedly went lame and we saw them do the correct thing and walked it home.

One day in the TV studio a young milliner, who made the hats worn by those girls, was being interviewed and she told us that when one of her hats was being worn in a scene, she ignored everything but **HER** hat!!

HUTT VALLEY MODEL ENGINEERS

Sometime ago the HVMES members had become aware that their raised track was nearing the end of its life. Close to the beach, the salt air had taken its toll on the steelwork and it was decided to rebuild using a similar method to the Maidstone Model Engineers. This involved making a special profile former to fit on the power unit of a Curbing and Channelling machine. A trial run using sand instead of concrete proved the design and after a delay due to wet weather, and the need for

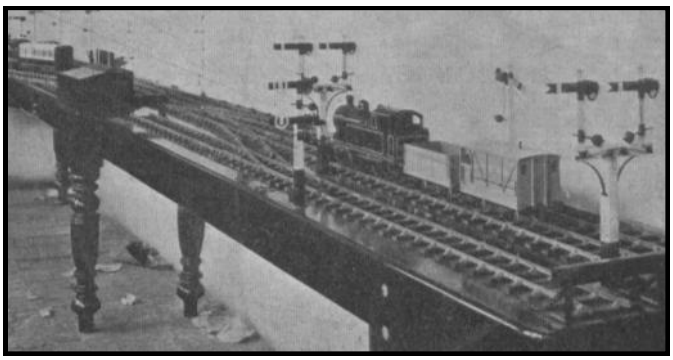
the site to dry out to enable concrete trucks to freely access the site, the concreting was finally completed on 24 November 2011.

The holiday season will see HVMES members busy laying track down and no doubt we will soon hear that it is business as usual again. The information and photos came from Ross Johnson who had found himself appointed Project Manager, but backed by very clever and able club members the task is now well on the way.

AN UNUSUAL MODEL TRAIN LAYOUT

By Doug Chambers

The following picture shows a model train layout with a difference. This one was made by Bassett-Lowke for the London and North-Western Railway. It was probably made in the early 1900s and was used to assist in the instruction of signalmen. Note the signals and the levers for operation of the points and signals. The levers would normally in full-size be housed in a signal cabin but for ease of operation on the model lay-out, the cabin has been dispensed with.



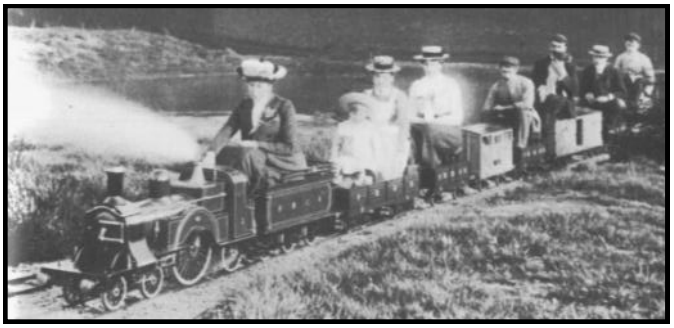
MINIATURE RAILWAYS

By Doug Chambers

We tend to think of Miniature Railways hauling passengers as having come in to being shortly before World War 2 but in fact they existed many years before then. One of the earliest photos I have come across is this one which

was taken at the Berlin Technical Exhibition of 1879. The gauge of the track is 600mm and the locomotive was built by Werner von Siemens.

Look at the dresses, suits and umbrellas.



The second photo is much later. It shows Captain J. A. Holder's 10 ¼" gauge 'Single' on the Pitmarston Moor Green Railway at the turn of the century. Note the hat and dress of the lady driver, one would hope that the engine didn't emit any sparks or cylinder oil to spoil such an elegant outfit. The lady passengers seated behind the engine all appear to be wearing white, a colour we have all learnt to avoid when driving steam locomotives, several of us have got off-side with our partners through a 'permanently stained shirt!!!!

New "G" gauge Railway in Ashhurst

Now that the weather has improved the track construction is underway on my new railway. The area available is about 5 times the size that I had in Palmerston North. Members will be able to see it at the Presidents BBQ.

Before Christmas it should be all ballasted and running properly.

The Last Running Day 2011

18 December 2011

Merry Christmas
and a Happy New Year
from the PNMEC Committee