



## 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**

Richard Lockett  
(06) 323-0948  
pnmec\_president@trains.net.nz

**SECRETARY**

Stuart Anderson  
(06) 357-7794  
pnmec\_secretary@trains.net.nz

**TREASURER**

Murray Bold  
(06) 326-9665  
pnmec\_treasurer@trains.net.nz

**EDITOR**

Doug Chambers  
(06) 354-9379  
pnmec\_editor@trains.net.nz

**March 2012**

**No 376**

**T  
H  
E**

**G  
E  
N  
E  
R  
A  
T  
O  
R**

**PNMEC Home Page** [www.pnmeec.org.nz](http://www.pnmeec.org.nz)  
**Email:-** [pnmeec@trains.net.nz](mailto:pnmeec@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 February Meeting.

It appears that some members had been very busy over the holiday break, working on a widely varied range of projects.

**Laurie Gudsell** led off with a 'rig' made for his two Huskies. The Huskies pull the three-wheeled rig with Laurie either on board or 'scooting with one leg helping the dogs over uphill terrain. The 'rig' has three bicycle wheels and a lightweight frame, there not being enough snow around the Manawatu to allow the use of sleds when racing other teams.

**Murray Bold** showed us the GP 9 and one of the 10 boxcars he has traded.

**Richard Lockett** showed us the wheel patterns and one of the steel tyres he has made for the 7 ¼" gauge NZR 'U' class 4 -6 -0 tender engine he is building.

**Dave Newstead** showed us the modifications he has made to a lawn edge trimmer (disc wheel type) and explained why.

**Fred Kent** showed progress on the 'Flying Scotsman' explaining that other tasks had got in the way slowing progress.

**Ian Stephens** again surprised us, this time with a model of a Wade Saw. Seldom modelled, the Wade Saw's came out in the mid-twenties. A petrol engine drove a blade of a crosscut saw. This allowed a felled tree to be cut into lengths.

**Doug Chambers** displayed the 'Invicta' locomotive that he has been completing for Ian Foster.

A steam pump that has been completed and fitted to his Hunslet  
And the original petticoat pipe fitted to his 5" gauge locomotive 'Ashford'. A new and better one has been made and fitted and a series of trial runs will start after Locomotion Weekend.

**Bruce Geange** brought along the Caterpillar RD 8. Bruce has been busy making the fuel pump and injector pump thus completing the engine detail on the right hand side of the engine.

## March Club Night

7:30pm, Thursday 22 March 2012  
Hearing Association Rooms  
Church Street, Palmerston North  
Photos and talk from those that attended the "Steam Up North Convention"

## COMING EVENTS

### Track running at Marriner Reserve Railway

April 1<sup>st</sup> from 1pm to 3pm  
April 15<sup>th</sup> from 1pm to 3pm

### Open Weekends

Havelock North 20<sup>th</sup> Birthday  
celebrations Easter 6<sup>th</sup> – 9<sup>th</sup>

Thames Model Engineers  
May 19<sup>th</sup>-20<sup>th</sup>

**April Meeting.** This Meeting will be our **Annual General Meeting.** It will be held on the 26<sup>th</sup> April at 7.30pm in the Hearing Association Rooms, Church Street, Palmerston North.

During the evening members will be asked to vote for the **'Clubman of the Year'** so you should be giving some thought as to who you think would be a suitable recipient.

The closing date for the next issue of The Generator is Friday 13th April

## **THIS MONTH'S FEATURED MODEL**

By Stan Corlett

The picture on the front cover shows a replica of the Ford Quadricycle built to a scale of 12" to the foot.

The Ford Quadricycle was the first vehicle developed by Henry Ford.

On June 4, 1896 in a tiny workshop Henry Ford put the finishing touches on his pure ethanol-powered motor car.

After more than two years of experimentation, Ford, at the age of 32, had completed his first experimental automobile. He dubbed his creation the "Quadricycle", so named because it ran on four bicycle tyres.

The success of the little vehicle led to the founding of the Henry Ford Company in 1903.

The two cylinder engine could produce 4 horsepower and the transmission had only two gears.

Ford test drove it on June 4, 1896, and after various test drives he achieved a top speed of 20mph (32km/h).

I built the replica following very closely to the original Quadricycle.

**Editor's Note.** Stan is in his late eighties which makes his achievement even more impressive.

### **Letter from England**

By Stan Compton

Can you visualise the problem experienced by the owner of the 6nhp DCC 'Burrell' traction engine "Buller", who was just about to enter the parade at a Rally when the rear axle broke in two? The engine had road springs fitted when built in 1903, even so fatigue had set in years later and it was found that just a half-inch of metal was taking the weight.

This is going to be a problem in future with old engines; just by good luck

someone in the restoration business had constructed an ambulance for just such an occasion. This utilised a heavy length of steel channel with a pair of solid rubber tyres on each end. After jacking up the bunker the device was clamped under the drawbar to take the weight. The rear wheels were then removed and the engine was then winched onto a low loader.

It is not uncommon for the rear axle to break, 'The Iron Maiden' that was in a feature film years ago had this happen, so did 'Royal Chester' the Allchin drawn in 1 1/2" scale by the late Bill Hughes for 'Model Engineer'. The saddest case happened 52 years ago when the Rev Stebbing was driving the 1914 Fowler KKS ploughing engine to a Rally in Suffolk, the axle broke, the police demanded it should be moved so a scrap man was called and the engine was cut-up in the road!!!

I heard of a tractor driver who got tired of having to get off his machine to open a farm gate, get on again, drive it through, get off again to close the gate as he left. He had a bright idea, make sure he lined the tractor up, engage bottom gear and leave it idling along while he opened the gate, closing it after the tractor passed through, being easy to jump on board and carry on. You can guess the rest, one day he could not get the gate open and had to watch as the driverless tractor smashed the gate. I can guess what the farmer said!!!

On a recent episode of 'Antiques Road Show' an item was presented that was a very basic toy locomotive based on something from the very early days of our Railway History. The expert claimed it could be the first example of such a toy, we could see a horizontal boiler, flared chimney, like 'Rocket' with four

wheels, mounted on a flat board. Everything was from turned wood, the owner acquired it in his youth, and it was obvious it was very old. It was about 9 inches long, just the right size for a small boy. The expert decided that someone had cut-up an item of furniture with turned legs, one piece became the boiler, and four slices became the wheels. It was difficult to put a price on but all credit to the imagination shown years ago.

I have just read a most moving book, bought for me by an old friend, 'The Long Walk' by Slavonir Rawitz, first published in 1956. The author led a group of prisoners to escape from a camp in Siberia to freedom in India. A four thousand mile trip, crossing first the Gobi Desert and then the mountains in Tibet. What impressed me was the hospitality offered by peasants in that region who gave food and shelter to a group of ill-clad starving men. In Britain today child poverty means that two girls have to share a bedroom!!!

One night on BBC TV we saw a clip of a helicopter disintegrating in the air near a building in Auckland NZ. Just a few seconds and not repeated. I do wonder if the pilot survived. ( I wrote to Stan and told him that the pilot was OK.) Similarly, we saw early footage of the results of the Christchurch earthquake, nothing since then, no one here is aware of the aftermath caused by 'liquefaction'. I feel for the hard working people who now find that their insurance is not going to cover them.

I have tackled a variety of repair jobs in my working life but a recent one must be the most unusual. One evening a neighbour appeared at my workshop door with a shallow saucepan with a lid

on. His wife had been making a 'kedgerree', heating the fish covered with milk. This boiled up sealing the lid on by a slight vacuum. She then did the worst thing possible by putting the pan under the cold tap!! Now we have a full vacuum and the convex lid had become concave, making it impossible to remove the lid. The maker had never thought of this possibility or a screwed knob on the lid could have been used to break the vacuum. A screwdriver released the lid and the meal was saved. I then beat the stainless steel lid back into its original shape using a very heavy lead and hide-faced hammer. My boxwood mallet would not touch it!!

### **TRACTION ENGINES with STEAM PUMPS.**

By Doug Chambers  
Mike Barnes and I have always said that when dealing with traction engines there are no hard and fast rules. There will always be one manufacturer who built one engine that is different to all the rest. But if anyone had said to me that some Burrell traction engines and a few Aveling and Porter engines were fitted ex works with a steam pump of American make I would have doubted their sanity. At the recent Manawatu Vintage Tractor display I was invited by Steve McClune to steer his Burrell 7nhp DDC in the Grand Parade. This particular Burrell named 'Dixie Flyer' was a three speed engine on springs and was one of the engines used on the Puketitri Run hauling wagons of sawn timber out to Napier.



**The Generator**

Burrells of this type normally had two injectors fitted. The speed the engines were driven at meant that the crankshaft driven water pumps tended to 'hammer' being operated too fast for the good of the pump. The pump was normally mounted in the left hand side of the foot plate about level with the crankshaft. But in place of the mechanical pump was a strange device and I was having trouble to decide its purpose. Steve saw my difficulty and told me it was a steam pump. It is fully enclosed and no moving parts can be seen. Once the steam is turned on, the only indication you have that it is going is the steady chuff –chuff –chuff of the exhaust down beside the axle in front of the tender tank.



Steve explained that 'Dixie Flyer' had one of these pumps but it had disappeared before he got the engine. He bought an old worn out one in England and he and his son John overhauled it and fitted it to 'Dixie Flyer'. The steam pump was made by Moores Steam Pumps, Michigan, USA. Burrell traction engines of the haulage class had the steam pump mounting holes pre-drilled during assembly so that a steam pump could be fitted if the customer desired or at a later date. Steve added a lubricator to the pump; from new there was no provision for lubrication of the steam cylinder. The pump performs very well and is particularly good when the engine is out

on the road.

But think about this, at a time when British Engineering pride was at its zenith, they were prepared to fit an American made steam pump to some Burrell and some Aveling Porter traction engines.

### **MEANZ Convention, Whangarei, January 2012 Part Two by John Tweedie**

The public turned out in large numbers on the Friday, which was hot and sunny. The lady with the large pump bottle of sunscreen was doing a great job. The number of locos on the track reached saturation level for quite a while and there was often a queue of locos waiting to return to the station to pick up passengers. I was quite glad not to be driving in such a crowd

Apart from loco watching, one of the highlights of the day was the Les Moore challenge, which was held after the public had left. There were six challengers and it was very pleasing to see that all had taken a different approach. A large group of spectators gathered to watch and there was a lot of friendly rivalry and discussion and I suspect some bets placed.

The Palmerston North entry was the last to run and by this stage I knew that, barring accidents, we had the trophy in the bag. (I had seen what our entry could do on our track.) My optimism was rewarded as our entry ran twice as far as any of the others, despite derailing and spinning its wheels for about a minute before being placed back on the track. Congratulations to Richard and his team for a great effort.

Saturday dawned overcast and rainy and there was very little activity on the track. Along with many others I took advantage of the displays put on by some of the other groups on the site.

The Vintage Machinery Club had several of their machines operating and an enthusiastic group of members were there to answer questions and provide information. The two large single cylinder diesel engines were started periodically and made an impressive sight (and sound). I also took advantage of the opportunity to visit the cars, motorcycles and machinery located at the Maungatapere Machinery Museum in the old dairy factory buildings.

### LOCOMOTION 2012.

By Doug Chambers

The Saturday morning saw light rain falling but with the weather forecast for the North Island being for gale force winds and heavy rain, we couldn't be very optimistic. After lunch the showers eased to intermittent drizzle and five engines were lit up and they ventured out onto the track. Although there were not very many passengers the drivers seemed to be enjoying themselves. However the Sunday came out fine and sunny, engines were steamed and a good turn out of passengers kept the drivers busy. There was time to catch up with old friends, meet newcomers to the model engineering hobby and answer the many questions from the interested public.



As always there has to be a special 'Thank You' to the ladies of the catering core, as we all know they perform a vital

service in keeping the 'inner man' satisfied.

We noted a new face among the station staff. Kelly Burn was conscripted into the job of loading passengers, 'clicking' tickets and ringing the bell letting the driver's know that they could depart with a new load of passengers. From the smile on her face I know she was enjoying herself.



I ran the PNME club's Santa Fe F 7 'diesel' first thing in the morning and then after more of the steamers came out onto the track to handle the growing queue of passengers, I parked the Santa Fe down a siding out of the way. However about five times during the afternoon we got requests from passengers who wanted to ride behind the Santa Fe, so out it came again for a few laps before returning to the siding. Then late in the afternoon the steamers start to come off to have fires dropped and be prepared for loading into vehicles for transport home. This is when the Santa Fe again takes over passenger hauling, running until the last latecomer gets their ride and the loco has the key turned off, fuel turned off and is put away.