March 2011
No 365

THE GENERATOR

Newsletter of THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC
Managers of the **"MARRINER RESERVE RAILWAY"**
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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

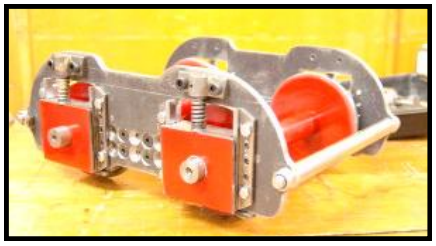
Place stamp here

This Months Featured Model

REPORT on the February Meeting.

Not a large turn-out of members but with the tragic events in Christchurch earlier in the week, probably quite understandable. The members were told that **Brian Avery** and partner Phillipa who had transferred to Christchurch before last Christmas were safe, but some ornaments, a bookshelf and the TV were not.

John Tweedie showed us the bogie for his driving trolley. He suffers from stiff joints in his legs (he is not alone with this complaint) and is making the trolley to suit his requirements. He said that he has also completed the sensitive drill built from the set of castings purchased from Graeme Hall. He said that the drill was too heavy for him to bring along.

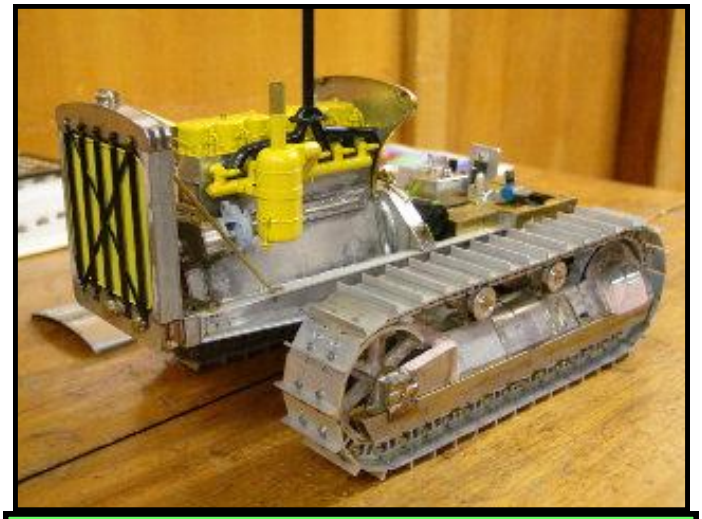


Warwick Leslie showed us the cab for an overtype steam truck, and an electric train set. The locomotive was a 2 -8 -0 Baldwin Narrow Gauge tender engine.

Chris Morton had a motorcycle speedometer drive that he had been asked to repair. He said how he intended to machine it and received some suggestions from the members on alternative methods.

Richard Lockett was asked to make some nuts for a vintage motorcycle. They were 7/16" and appeared to be 18 TPI. which is a BSF thread. However closer examination proved the thread pitch to be 19 TPI which doesn't link up to anything. This was not uncommon in older vehicles as the manufacturer knew that the owner would be forced to buy the spare parts from him. Richard is going to have to make the nuts on his lathe.

Bruce Geange brought along the Caterpillar D8 2U that is now well on the way to completion. What can you say about this model, it is absolutely superb and a credit to Bruce's determination to build a really accurate model.



COMING EVENTS

PNMEC AGM - APRIL 28

Track running at Marriner Reserve Railway

April 3rd from 1pm to 3pm
April1 7th from 1pm to 3pm

Open Weekends

EBoPME "Hot Pot and Night Run"
July 23 & 24

Havelock North Live Steamers.
Easter Weekend

The closing date for the next issue of The Generator is Friday 15th April

March Club Night

7:30pm, Thursday 24 March 2011
Hearing Association Rooms
Church Street, Palmerston North

The committee had a place for us to visit this month but it fell through at the last minute. **Plan B** is for you to bring along and tell us what you consider to be your most reliable hand tool.

THIS MONTH'S FEATURED MODEL

By Chris Rogers

In the 1930s companies who had rail track into their factories and mines (most large ones had in those days) started to mark their trucks and wagons by painting them in significant colours with bold advertising lettering.
There were thousands of these wagons

and some people considered them very attractive as they gave the only colour in an otherwise drab railway.
I wanted to simulate some of these wagons in 16mm to the foot scale.

Because they were run in the garden no brake gear was added and they were built as simply as possible.
The set of six took two weeks to build. They are mostly made of wood with metal running gear. They proved to be very popular and may now be seen running on John Reinecke's track in Auckland. There is hours of reading on the 'web' under 'British Railways Private Wagons'.

LETTER from ENGLAND

By Stan Compton.

No doubt you will all be aware of the hard winter we are having so you can be grateful for your milder climate. Snow may look pretty on a Christmas card but when I read of 20,000 tons dumped on Heathrow, one of London's airports, making a mockery of our modern air transport system.
Yesterday was Boxing Day, it was 8 degrees below zero and my wife said "Aren't you going out to your workshop?" It was warm in the house but it is no good sitting all day so I went out and switched the electric heaters on in my insulated workshop, taking three hours to get up to 10 degrees.!!! This is weather that demands real manual work to get warm. How I miss the little 'hot dog' stove I had in New Zealand.
My electric clock is now complete, I wish it would run properly, the design is an old one comprising a balance wheel of 5 inches in diameter that runs on a hardened spindle carried on five ball bearings an each side giving self-alignment. A balance spring gives the return to the rotational thrust from a magnetic pulse from a timed electro-magnet. The principle is so simple. The balance wheel is a large version of the one in a wind up watch, it revolves each way for 270 degrees, or should do!!! A cam on the spindle operates a drive rod to a ratchet that rotates the clock movement mounted inside the 6 inch dial, simple.!!
While I look for more information I have

started another electric clock of a type I saw running at an exhibition, maybe I shall regret this later. Now I have to cut a 5/16" x 26 TPI worm to drive a 1.8" diameter worm wheel with 150 teeth, so now I am drilling a steel strip with 150 holes of equal spacing, just as the early clockmakers did. This is wrapped around a disc of chipboard forming a method of dividing when mounted on the lathe spindle. The simple drilling jig has two holes of suitable spacing, one hole has a short dowel inserted. This method is useful for spacing rivets also on those locomotives with all those pretty pimples that are difficult to paint with a spray gun.

I have not known a cold winter like this for years, I found one of my water-butts, (a plastic one) lying on its side in the garden, the water had frozen and expanded pushing the bottom out into a radius. You may have read that the people in Northern Ireland are having trouble with burst pipes now that the thaw has arrived, I made sure that all our pipes are lagged.

The Hereford Club track will have problems on the station where the water supply cannot be drained for the winter, an application of compressed air to a fitting supplied will clear the standing water, I hope someone remembered to do this.

It is nice to see photographs of regular maintenance on the track at Marriner Reserve, now one of the best sites in the country, you can be proud of it, an asset to Palmerston North.

I remember the early days laying track there,I used to get a trailer load of builders mix to spread the concrete on. The reinforcing steel was 'left-overs' scrounged from big building sites. The welding rods came from similar sources, so old that they were hard to weld with, but we had so little money then.

Peter Hatton used his spirit level to screed off the concrete before it set!! "You will wear it out Peter" and his reply was "It is alright, I always use it this way".

I read about a man driving an old Austin 7, who gave a lift to a soldier on leave. It got dark and the lights failed. The car kept going as it had magneto ignition. They kept going until he could find a pub car-park with some lights on so that he could see if he could sort out the car's lights. The soldier got out of the car and took a shilling out of his pocket and gave it to the owner of the car. The owner said, "What is that for?" and the soldier replied "Well, when our lights go out at home my mother puts another shilling in the meter!" He had no idea that a car can generate its own electricity.

The following is also a true story.

A Hereford Club member had in his younger days bought an old Rolls Royce car. It would not run properly and used large amounts of petrol. In desperation he contacted Rolls Royce Service department, who duly sent a man to sort out the problem. He worked all day on the car and stopped only for a cup of tea. At the end of the day the engine was running properly and the mechanic left to drive home. A month went by and no invoice of charges came by post. The car's owner was getting worried, having little money in those days. In desperation he telephoned the service department and was told twice "There is nothing wrong with your car!" No bill ever arrived. I recall reading about the design of their carburettors; these were very complex being vacuum assisted and requiring expert attention. Had someone been messing about with the engine? For it to take a whole day for an expert to sort out, it must have been in a mess.

I remember a lecturer from Massey University who had a small farm.

His Ferguson tractor would not run properly and he was told to contact a local lad for help. Before letting the boy see the tractor the lecturer asked the lad about his training. “I just fix things” said the boy. The lecturer was a bit unsure but he told the boy to have a go at the tractor. Ten minutes later the lad told him that the distributor cap was cracked. The owner could not believe how quickly the lad had found the problem when the agent’s mechanic had not been able to sort the problem.
I told the lecturer that, “The boy was a ‘natural’, good mechanics are born, not made.” Unfortunately if a man works with his hands he can rarely find promotion, only up to a supervisory level with a pay structure to suit.

A Morgan Car

By Dave Brownlow.

I was very interested to read about Morgan (Moggie) three wheelers in Stan Compton’s Letter from England. I bought my first ‘Moggie’ in 1962 when I was 18. Having seen two mates seriously injured in motor bike accidents, one leaving hospital considerably shorter, a ‘Moggie’ was considered a safer option than a motor bike.
The Super Sports model, my first purchase, had a 1000cc Matchless V twin up front. This was originally air cooled but had been converted to water cooling. The suspension was very hard and the radiator on several occasions gave me a hot foot wash.!! Not good when in traffic and as a result I usually drove in gumboots.

Due to a shunt by the previous owner, the decompressor had been damaged and removed. To deal with the beast on starting I put in a second ignition switch near the engine. This allowed rotation to compression hopefully without kicking back. Unfortunately the engine had a mind of its own when being started hot. On one occasion it fractured my right wrist so I cranked left handed and that ended with a sprained left wrist.
Ignition was by contact breaker and a double-ended coil firing each plug together, one being on the power stroke and the other being on the exhaust stroke. This arrangement together with a hand operated advance and retard allowed for some spectacular back-firing.
Carburettor freezing during winter was dangerous when in ‘full flight’ so I mounted the inverted triangular Morgan Club Badge on flared aluminium plate clipped to the inlet manifold. It deflected the cold air and looked the part.
One photo shows a motor cycle oil tank located low on the engine. This was done to eliminate oil line fractures from the top tank and oil on my feet. Any trip long or short was an adventure and overalls and a well-equipped tool box were essentials.
One amusing incident was encountering floods. Cars were getting through all right so we ventured in. My passenger could stand up so only his feet got wet. I got very wet as ones legs were nearly horizontal when seated. We got through but the engine was only firing on one cylinder. The suppressor on one of the high tension leads had failed. I removed the spark plug from the affected cylinder

and we plodded on. Approaching some road works on a climb, a road worker jumped in front and walked ahead with a red flag much to the amusement of the locals.
V twin Morgans were fast and could out accelerate some sports cars, but braking was a different matter. The footbrake applied the rear-wheel brake and a hand-operated lever braked the front wheels and when all brakes were required it left just one hand for the steering wheel and to operate the hand throttle.
The steering was sensitive requiring only 180 degrees on the steering wheel to go from lock to lock.
I fitted pedal operated hydraulic brakes from a Morris Series E to the front wheels and the hand lever operated the rear wheel brakes. I did make an arrangement for three wheeled hydraulic brakes, but never fitted it.
The throttle was moved to a more convenient pedal.

My friend had a Morgan three-wheeler with a Ford 93a four cylinder side valve engine. It was more civilised and I later owned it for a while. My friend's father worked at Hucknall, the Rolls Royce test aerodrome so repairs done used aircraft technology.
The gearbox at the rear used straight cut gears and a worm and bronze wheel to drive the chain and sprocket.
Attachment of the bronze wheel was by 5 or 6 bolts which had a habit of elongating the holes. This was fixed by fitting cushion inserts and high tensile bolts.
All in all driving a Morgan honed ones skills, heel and toeing to double de-clutch during gear changes was the norm otherwise there was a great deal of grinding.
My (frog eye) Sprite was a dream to drive after the Morgan but I still found double de-clutching faster through the gears.

If the editor allows I will follow this article with some more amusing incidents.

Editor's Note. He does. You will.

FOR SALE

A new 71/4" gauge petrol-hydraulic shunter. It is an 0 -6 -0 powered by a new Honda four stroke OHV engine of 5.5hp driving an Eaton Hydrostatic Drive unit. 4 forward / 2 reverse with braking. The final drive is via chain and coupling rods. It is equipped with a front light and a air horn. It is small enough to fit in a Hatch or small station wagon for transport. 1050mm long, 460mm wide and 600mm high.
Great puller and work horse. Reliable.
Price $6,500
Contact Rex Toms, Rotorua.
Ph: 07 348 2931 or 027 234 5051

LOCOMOTION 2011

Richard Lockett

I lay in bed in the early hours of Saturday morning listening to the rain hitting the iron on my roof, hoping it would go away before morning, it did but not till about 11.30 am. Trouble was I had to repeat the exercise on the Sunday morning as well but it did stop raining earlier with only a couple of short showers to interrupt a day of light drizzle. The weather man Jim called it a stalled front which luckily for the Manawatu's reputation had the whole of the North Island covered in moisture laden cloud, so I think we got off quite lightly.

As Locomotive's from Tauranga and Cambridge were already in town by Friday night, they say, "the show must go on". So as soon as the rain turned to drizzle on Saturday morning fires were lit and the Marriner Reserve Railway was in operation. First onto the track was Grant Alexander with Narrow Gauge Baldwin No 24 followed by Ben Sewell with an electric 5 "TR which with steep grades and a slippery track, it drew far too many amps for the owners comfort. Alan Spinks had the Welsh narrow gauge loco Brynglas steamed up soon after to haul the hardy passengers who continued to show up both days despite the weather. Other Locomotives to run over the weekend were Lyall and Dianne Dawe's K36 No 500, Dave Brownlow's NZR S class single Fairlie, Dave Harris's 5" gauge NZR Y class, built by his father the late Ron Harris, Craig Moore's 5" gauge Sweet Pea built by his Father Les and MRR regular Kerr Stuart "Wren" class loco Robyn driven by Daniel and Jonathan Mason. Two traction engines were on site, Monty George's Fowler and Bruce Geange's Burrell but these were not steamed in case it rained and they became bogged down in the park.

Our own Graeme Hall gave the Offenhauser engine a brief run on Sunday afternoon to the delight of those present.

The only technical issues to arise from the weekend was that some moisture got into our turnout operating switches which we were at a lost to explain, it didn't stop them it was that they wouldn't stop.

It was noted that over the course of the event that some of our own members and visitors were content to sit inside the pavilion all day long and natter amongst themselves. You can't go wrong with talking, the good transfer of knowledge amongst kindred spirits or more likely the transfer of bullshit. Injectors were a topic I heard in passing, whose were good and whose not, BS or not, I will not comment upon.

Significant eye candy in the form of our ladies looking after the hospitality in the pavilion may also have contributed to the resident pavilion population with a special thanks to Janice B, Robyn, Donna, Joan, Janice H, Barbara.

John Tweedie had done a good job in organising our advertising feature in the Tribune this year and we must mention the companies who gave advertising support which allowed the feature to happen. See Roger Drayton at Coastal Machinery, for new and second hand engineering machinery. Murray Searle from Hydralink and Seal House for oil seals and hoses. Kevin Ramsey at Trade Tools for engineering machinery and tools. Lastly from me a thanks to all PNMEC members who gave assistance over the weekend to make our Locomotion weekend possible.












Photos from the lens of John Tweedie