September
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No 404

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 difficult. We may even offer you a cuppa.

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.

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This Months Featured Model

Report on the August Meeting.

Richard Lockett started off the evening showing us the bogie side plates and stretcher for the NZR 'U' class locomotive he is building.
Doug Chambers brought along the American 4-4-0 boiler that is finished and ready for testing.
Graeme Hall showed us the 'Snow' engine now nearly complete. He is working on the distributor having made the spark plugs for it. The engine is like a tandem steam engine but each cylinder is double acting with complicated valve gear at each end of the two cylinders.
Murray Bold showed us the compost shredder he uses for crushing food scraps for composting. The whole machine, less the bolts and square aluminium drive shafts, was made on his 3D printer, taking some 80 hours to produce all the components.
Fin Mason has been busy making the cylinder liners for his Merlin V12 engine. The liners are of 'Flo-cast' iron and the cylinder block and cylinder head that were cast in aluminium were of top quality.
Ian McLellan is busy making the boiler for a 3 ½" gauge 'Virginia'. To date the outer shell is complete, the firebox wrapper formed and the firebox endplates flanged.
Neil Burn has been given a sign by a grand-daughter that warns.

Caution
This sign has sharp edges
Do not touch the edges

Bruce Geange has made a very nice fire engine out of Meccano that he has fitted up with steering and an electric motor which gives forward and reverse.
Chris Morton had a magnetic base that had been damaged. He explained the dismantling and repair operation.

September Club Night

This will be held on the 25th September. A visit to the The Rush Collection - 51 Mahua Road, Feilding has been arranged. This is a collection of historic open wheeler motor racing cars and memorabilia plus other vehicles of road and commercial interests, working brass items & over 2500 Dinky, Matchbox, Corgi & other model toys.
$10 per person entry fee includes a cuppa and a short talk about the collection. We are to gather at 7:30pm at the site. Mahua Road is to the right off SH 54 northeast from Feilding, very shortly after crossing the Kiwitea Stream on the outskirts of Feilding heading towards Kimbolton.

COMING EVENTS

Track running at Marriner Reserve Railway

October 5th from 1pm to 4pm
October 19th from 1pm to 4pm

Open Weekends

Hamilton Model Engineers
Child Cancer Charity Weekend
4th -5th October

Labour Weekend at Keirunga Park Railway 24th – 27th October

New Plymouth
25th – 27th October

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

THIS MONTH'S FEATURED MODEL

By Bruce Geange

While at a Model railway Exhibition a few years ago and looking around the trade stands I came across a $^{3}/_{16}$ scale Dubs A kit. It looked interesting from etched brass and I asked the question if it would be produced in O gauge. Very quickly a hand went under the table and out came an O gauge kit but not as complete as the smaller one. I looked at it and went away and thought about it. The next day I went back and purchased the kit. The kit sat at home for six months before I purchased some wheel casting centres and machined these and a set of tyres which were fitted. The etched kit that comes as a flat pack was assembled over time with much shaping and folding of the parts. The parts that were not in the kit were manufactured (funnel, smoke box door, lights, cab fittings and lots more). A 12 volt DC motor has been fitted and connects to a worm drive on one axle. Centre rail pickups were made and fitted. The loco was run on the test rollers and seemed good. The engine was given an Apple Green paint job with detail parts being hand painted. The model looks good with a small rake of wagons behind.

LETTER from ENGLAND

By Stan Compton

One of the Hereford members Nigel, who is a real worker; he tows the trailer with the raised portable track and the 'Sweet Pea' on board to various functions.
On checking the locomotive he found that the new stainless steel grate had burnt out. The anthracite coal we use burns with no flame but is very hot. The ash needs to be cleared regularly.
I had removed the piece of angle steel below the grate leaving a clear exit some years ago. Nigel had heard of a new type of grate called a 'Rosebud' so he typed 'Rosebud Grate' into Google and he discovered this is a mine in the USA that developed a grate made from sheet steel having a lot of tapered holes in it. Nigel took a piece of 4mm stainless steel sheet and drilled lots of 3mm holes in it and tapered them from the underneath.
So far this grate has only been tried on a relatively short run but it will be trialled soon on a longer run. The principle is that the fire is lifted off the grate. We have heard from the owner of a 'Romulus' who made his grate out of 3/16" plate and it was also successful.

I met a man years ago who was part of a crash crew serving with the RAF in North Africa in World War 2. The crash crew had developed a method of extracting the crew of 'Mosquito' after a crash landing. The 'Mosquito' was a twin- engine aircraft built of wood. The crash- crew found that the quickest way to extract the pilot and navigator was to use a saw to cut the fuselage allowing access to the cockpit. The crash crew knew that they had to work quickly to get the men out before the 'Mosquito' caught fire. One day a young officer, new to the war-zone, went with the crash crew to a crashed 'Mosquito' on the aerodrome. The officer stopped them from sawing the fuselage and insisted that they use the unbolting technique as detailed in the hand-book. As they argued about this the plane burst into flames and I was told that the sight of the aircrew being burnt to death in front of their eyes stayed with the crash-crew member and he had a hatred of all officers after that episode.

A news item about a group 'Concern Universal' who develop items to help tribes-people in Africa to save fuel used in cooking. A simple clay pot like ones used by gardeners, but upside down with openings near the bottom to feed the wood-fire and I assume more holes around the top to let heat and smoke out.

Cheap to make and it sounds practical. Young men these days have more money to spend than I ever did. Parked outside our local supermarket was a new motor-cycle with “L” plates on it, a ‘Regal Raptor’ a make I have never heard of. A sprung frame, with a vertical twin engine of maybe 350cc. It looked very smart and I liked the low saddle height as being rather short of stature I always had difficulty mounting British bikes!!!

My friend Fred found his ‘Hunslet’ was short of steam. There was a pinhole in the super heater and once that was repaired all was well for a while. However another hole appeared and it was decided to remove it and run the engine saturated. The second ‘Hunslet’ I built was a saturated engine and it seemed to run as well as the first one which was superheated. I know all about the extra efficiency of super heaters but our needs are not too demanding.

The first man I met driving a small locomotive was Bren Campbell who died recently. He had a portable track that he would set up in the ‘Square’ in Palmerston North. He had a 2-4-0 locomotive of 7¼” gauge and two trolleys.

Editors Note:- This loco was featured in the July Issue of The Generator.

The tender had two tanks, one for water and the other for kerosene used to fire the steel boiler. He told me that coal firing would not raise enough steam for the engine to pull a load. He used to set the track up at his home on Christmas Day and give all the local children free rides. Bren had served his time at Niven and Co in Palmerston North and during World War II he was in the New Zealand Railway Operating Division in North Africa where he worked on British 2-8-0 freight locomotives. Back in civilian life he was a metalwork teacher and later he taught maths as well. He was a very talented man; he built his own lathe using 3” hexagonal bars to form the bed of the lathe. I recall him telling me about a pupil who was so keen to get his hands onto some metal that he would be waiting outside the classroom door early and that Bren could see the boy’s heart beating. This was the day he waited for; all the rest of the week was a waste of time. Bren was keen on any steam project and his steam powered ‘tractor’ followed by the steam powered ‘jeep’ were typical examples. The 2-4-0 locomotive, tender, trolleys and track got sold to a showman in Palmerston North. I heard later about him removing all the pipe-work and taking it to someone to explain how an injector works!!!!!

The clock in the photo is an ex railway clock. On the dial the letters L & NW appear indicating that the Railway concerned was the London & North Western Railway. This clock sold at auction for $1200. Stan photographed it at the local clock repairer’s workshop where it was having about $300 of work done to it.

A story for the ladies: Mistress to the maid "Yvonne, I wrote your name in the dust on the dining room table this morning". "Yes Madam, I know – and you spelt it wrong"!!

In the Newsletters from other Clubs

Blastpipe Petone The guest speaker at a recent meeting was Bernie Breslin a retired builder who has taken up making violins, mandolins and guitars in his retirement. The footbridge that provided access to our station area is no more and now drivers will have to take extra care to avoid people crossing the tracks.

Maidstone Members have been working on improvements to the northern end of the station where passengers are loaded. Also there is a tap stand at the northern end of the station so drivers can top up their engines while passengers are being loaded.

Whangarei Model Engineers The Wednesday Workers and Running Days have been hindered by wet weather. They have a sign on the platform seeking some older members of the public who might want to join up and help run the railway. There have been a few nibbles but as yet no takers.

Manakau Live Steamers Moves underway to revamp their kitchen and outside two bridges are to receive attention to keep them safe.
Diesel outline locomotive for sale.

Hawkes Bay Model Engineers. Track running and working bees are keeping members busy. A good article on the history of Ab 608 'Passchendaele'.

Havelock North Live Steamers Weather has upset their running days. A very good article on the Castledare Railway in Western Australia.

Building my First Locomotive. 'Simplex' continued from August

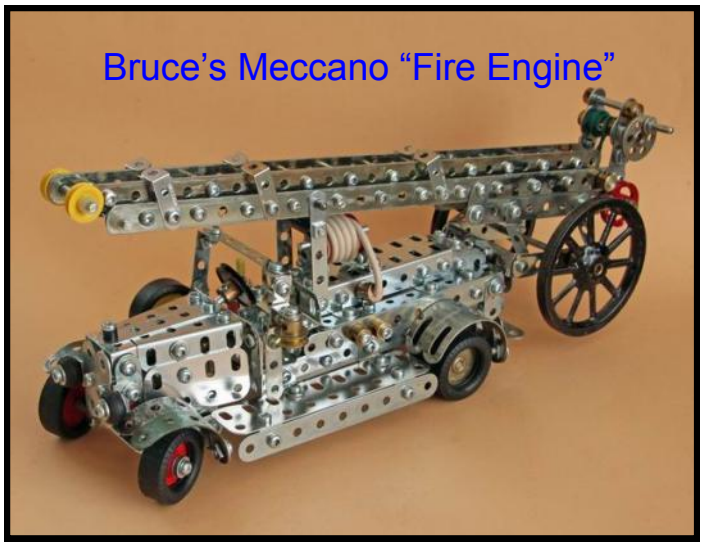
By Doug Chambers

Labour weekend came around and I spent Saturday and Sunday driving a tractor but on the Monday it rained heavily so Robyn and I with the 'Simplex' in the car boot, set off for New Plymouth. Fine and sunny in New Plymouth, Monty George met us and asked what engine I had brought up. I told him I had the 'Simplex' and he said "Oh we have had those here before". I explained that I had carried out some improvements and I felt it would go alright. I said that I would try it during lunch when there were no other engines on the track and if it was no good then I would put it back in the car.
Steam was raised and a trolley selected and I started hauling passengers.
The trolley had room for the driver and one adult and three small boys, a good load for a smaller engine considering the steep bank on their track. I found I was able to ascend the grade with the safety valves blowing and when I saw Monty, Gerry Gerrard and Owen Handley sitting watching I gave the whistle a blow as I went up the grade past where they were sitting. I ran the 'Simplex' from 12.30pm till 3.30pm when I came off and headed for the steaming bays to drop the fire and load up the car as we had a 3 hour trip home and then work the next day.
The fire was dropped and the boiler blown down and when I opened the smokebox door, Owen Handley was beside me having a good look at the changes I had made. Owen knew that I had made alterations to the draughting and he went away saying that perhaps he should do the same to his NZR 'F'. Monty came along and he bent down and peered up under the engine before asking, "Where is the electric motor and battery?" Not long after Gerry came along

and looked hard at the ‘Simplex’ before asking if I had had a good run? I said, “Yes Gerry, a very good run”.
Gerry then said, “I have never seen one of those go that well before”, and then he crushed my hand in a very firm handshake. A proud moment for me I will admit. I had altered my driving practice on their track. I found that on the downhill grade the best steaming result was to apply the brakes leaving the regulator alone so that the engine was ‘working hard’ going downhill as well as up. We returned home but I was already wondering how the ‘Simplex’ would perform on a nearly flat track.

The next track I took ‘Simplex’ to was Maidstone and their raised track had very gentle grades. Steam was raised and the young stationmaster coupled up a passenger car. Once again the load was to be the driver, an adult passenger and a small boy. The first load was two small boys and the engine did not steam well. Pressure dropped to below 60psi but the water remained well up the glass.
Back at the station I requested another passenger car from the stationmaster who pointed out that I had barely managed to get around with one. I said “Never mind, just get out another passenger car and then load me with the biggest passengers you can find”. I fired some more coal on and while topping up the water I heard the sound of steel grinding into steel. I looked around and saw an **enormous** lady settling herself on the rear passenger car and a man and boy were getting on the car behind me.
The noise I had heard were the wheels on the lady passenger’s car grinding into the rail. The stationmaster with a smirk said “Away you go driver” and off we went. I had only gone about 50 metres when the safety valves lifted and they stayed open even when the axle pump was used to top up the water in the boiler. The stationmaster never said a word when I returned into the station; the smirk had gone, replaced with a look of astonishment and I found that as long as I had a good load there was never a shortage of steam. I was now convinced that I was getting out of the ‘Simplex’ all that it was possible to get. However I strongly recommend that anyone considering building a ‘Simplex’ that they should use the ‘Super Simplex’ boiler and with the inverted Y exhaust and the venturi chimney and the result will be that you will finish up with a very free steaming engine easy to handle and capable of useful work.
Over the years I have fitted the altered exhaust and the venturi chimney to several existing engines resulting every time in a much improved performance. Locomotives that I have built from ‘scratch’ have had these improvements fitted during building and have all shown the benefits.
Ian McLellan has altered his 3 ½” ‘Maisie’ and his 3 ½” ‘Juliet’ and the performance of these two is astonishing.

Bruce’s Meccano “Fire Engine”



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