



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 4414

PRESIDENT

Robert Edwards
(06) 280-3057
pnmec-president@trains.net.nz

SECRETARY

Fin Mason
(06) 356-7849
pnmec-secretary@trains.net.nz

TREASURER

John Tweedie
(06) 358-0150
pnmec-treasurer@trains.net.nz

EDITOR

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

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No 405**

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

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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.

Sender:- PNMEC
22b Haydon St,
Palmerston North 4414

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This Months Featured Model



Report on the September Meeting.

The visit to the Rush family's car museum proved a most interesting night. There was a pleasant mix of ordinary saloon cars, Morris Minors, Ford 100E, Rover 16, Ford V8 two ton truck, a Bedford O series truck and a Seagrave Fire Engine. The fire engine had a Seagrave V12 engine with two spark plugs per cylinder.



The cars that really caught the eye were the open wheeler racing cars. There was a little Cooper 500 which was the first open wheeler Bruce McLaren drove. A Brabham BT 4 that Jack Brabham had driven in the Tasman Series. A McLaren M22 that was the last open wheeler car sold by McLarens to a private owner and is now driven by Tim Rush in the Formula 5000 revival races. There was the last Begg racing car built by Begg Engineering in New Zealand driven by David Oxton. A Lola 412 and the GM 3 sports car designed, built and raced by Graeme McCrae in the USA. There was a Morgan plus 4 that was raced at Ohakea by a Mr Freeman in



1953. That made me think as I was there!! There is also a room with a library that has memorabilia of race meetings and drivers and books about Chris Amon, Denny Hulme and Bruce McLaren.

October Club Night

7:30pm, Thursday 23 October 2014
Hearing Association Rooms
Church Street, Palmerston North

This will be a Bits and Pieces evening so bring along your current project, finished or unfinished and be prepared to tell us all about it.

There are some who haven't paid their Subscriptions

Subscriptions are now very over due and remain at the previous years amounts.

Full Membership	\$30
Country Membership	\$15
Junior Member	\$15

There is a joining fee of \$10 for new members or members that don't pay their subs by 30 October 2014

COMING EVENTS

Track running at Marriner Reserve Railway

October 19th from 1pm to 4pm
November 2nd from 1pm to 4pm
November 16th from 1pm to 4pm

Open Weekends

Tauranga Open Weekend 8th - 9th November
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 14th November

Club End of Year Dinner

Cosmopolitan Club

22 Linton Street
Palmerston North

Thursday 27 November 2014

Drinks 6pm Dinner 7pm

The cost is \$25 per person. (Pay as you arrive.)
They also have a licensed bar for you to purchase innervating liquids.

Bring the family and join us for a relaxing lead into the summer. We look forward to seeing you there.

We need to give the restaurant an idea of numbers.
Please let us know if you plan to attend and how many there will be in your party.

Dave, 027-457-6175, newstead@clear.net.nz
Murray 326-9665, engineer@inspire.net.nz
Cynthia, 354-7100, cynthia@trains.net.nz

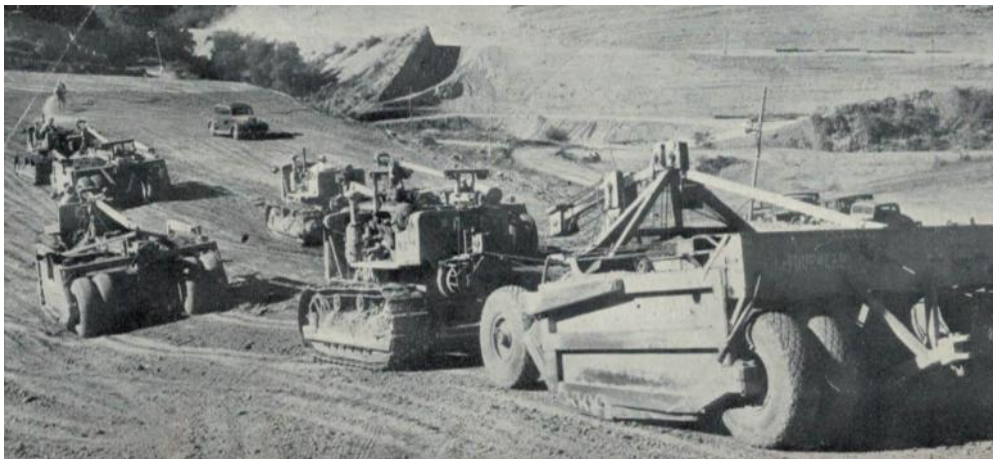
THIS MONTH'S FEATURED MODEL

Caterpillar D8 Tractor

By Bruce Geange

The model is based on a 1939 –1940 crawler tractor having the serial numbers starting with 1H and 95 drawbar horsepower. The tractor weight was 32,600 lbs. The starting method came from an independent 24 hp two cylinder petrol engine on the side of the main diesel engine that was hand-cranked to start.

EDITOR'S NOTE: Bruce spent over 1000 hours on this project and the resulting model shows outstanding workmanship and detail. Bruce used Caterpillar brochures and photos of existing D8's to prepare his own plans. He closely studied D8's in the local area and took lots of photos of them. The 1000 hours reflects the actual construction time and I would expect that an equal amount of time was spent in planning



before each component was tackled.

The patience Bruce has shown in building up the tracks so that they look exactly the same as the full size is a credit to him. I remember him showing me the first radiator he made and I couldn't fault it. It was however destined for the scrap bin as he felt it was not good enough. Bruce fortunately took photos and wrote about the construction of the D8 so starting in this issue of The Generator are the pages from his own records.

The RD8 and the D8 were the first really big crawler tractors and in the mid 1930's. They provided for the first time a way of moving large volumes of earth for road-making and construction of dams. At first they were fitted with a bulldozer blade, cable operated. Then Caterpillar and Le Tourneau came together. Caterpillar building the tractors and Le Tourneau building the towed self loading carryalls. Bruce has made the two power operated winches (PCU Power Controlled Units) for his model which indicates that it was to be used to haul a carryall as pictured below, although a cable operated blade could be fitted and operated by one of the PCU's.

LETTER from ENGLAND

By Stan Compton

We have been watching a repeat of a program about three Narrow Gauge Railways in India. The famous Darjeeling Railway has changed to diesel traction but we did see some of the old original 0-4-0 steam locomotives in action. Like the other two railways tourists are the main source of income at very cheap rates set years ago. The 'Kalka to Shimla' Railway, also diesel powered, was interesting but we saw a lot about the people involved with all three railways, however not much about the locomotive side of the operation. What was interesting was to see the original 'Tablet system' of signalling as

installed over 100 years ago. Balls were used inscribed with the next Station, to be handed over in a special frame. The second programme was about the 'Nilgiri Hills Rack' Railway. This one I travelled on when I was serving in the Royal Navy during World War 2. After a year on a base near Cochin

in Southern India we were given leave up in the Hills, 6000 feet up above the clouds with sunny days and cool nights. The original Swiss built locomotives are still in service on the steep sections and money has been allocated to build four new engines in India.

Recently I met a visitor to the Hereford track site. He was new to model engineering and he had bought a 'Polly' kitset which is the way new members get started now. He had a problem that worried him, how to file the die blocks for the expansion links, never having used a file in his life. Now this is what happens these days and is why we older men need to accept that we have to help new members. But when we are not around, who do they go to for help? He had no one in his new group to advise him how to form the block of metal supplied. He will find he has a reel of PTFE thread tape to wrap around the threads when installing steam valves etc; the only way to get a tight fit is to use copper washers although I have used brass ones with a pipe sealant to obtain a tight fit when I ran out of copper washers.

Once I went to open the blow-down valve on the gauge glass of a 3 ½" gauge locomotive during a steam test. "Don't move that. You will break the gauge glass" I was warned. The lower gauge glass mounting was loose in the boiler bush. I told the owner I would pass it provided he fixed the problem as soon as he got home. Guess what!! A year later this engine was again under test by another of our boiler inspectors who went to blow down the gauge glass and was told by the owner. "Don't touch that. Stan said it was all right". Now you know why I wish to retire from the position of boiler inspector.

I mentioned some time ago about what a pleasure it was to ride an overhead camshaft 'Velocette' of only 350cc. A pre-war design and race-bred. I had forgotten about a man I knew at work who told me he was going to act as mechanic to his friend who had entered the clubman's TT on the Isle of Man about 1948. I would love to have taken on the job. I had enquired if his friend had any experience racing motorcycles. He had none but he did win his class on that 350cc 'Velocette'. One of our club members told me about a man who took his BSA 650cc 'Golden Flash' to the Island in the fifties and after the races had finished he rode the BSA around the circuit using every bit of power he had. His average lap speed was only

37mph at a time when 90mph was usual. Now I gather 125mph is the outright record. No wonder riders get killed on such a demanding circuit.

Those of you who have been watching the Commonwealth Games on TV will have noticed the massive crane, all on its own, on the River Clyde at Glasgow. One commentator said it was a relic from the days of the shipyards but that was not correct. It is the largest crane in Scotland built to load locomotives made in Springburn, Glasgow, onto ships for export.

We have a club member at Hereford who will tackle any project. Wally served his time in a shipyard in Tyneside on the North-East Coast. He built two 7¼" gauge petrol engine locomotives, a Santa Fe replica and a GWR 'Parcels Van' based on the pre 1939 Railcar. Both locomotives are in use on running days. His latest project is to write construction articles about his version of the 'English Wheel' for 'Engineering in Miniature'. This can be very demanding, it is easier to make something up than to write about it. Wally learnt how to restore and build antique furniture and he made a lovely job of the case for my regulator clock. His mentor was his uncle and I have seen photographs of quality furniture he built for wealthy customers. His wife, Wania located a 7½" gauge locomotive based on a 4-4-2 'Tilbury Tank' and bought it for him not realising that it will need modification to run on 7¼" gauge track.

In the Newsletters from other Clubs

Blastpipe Petone Peter Targett has taken over the GWR 0-4-2 tank 'Dart'. This loco built by Russ Freeman and later Dennis McConkey before being completed by Bill Phillips. Serious boiler issues led Peter to take over the project and the engine has been stripped and a rebuild has been started.

Maidstone Some of their members visited Alan Spinks private 7 ¼" track. They hope to host a kindergarten party on the first of November.

Whangarei Model Engineers Weather not helping operations on their track running days. One of the Wednesday workers is getting a bit tired of painting picket fence palings. Heavy rain has been washing away some of the ballast in some locations.

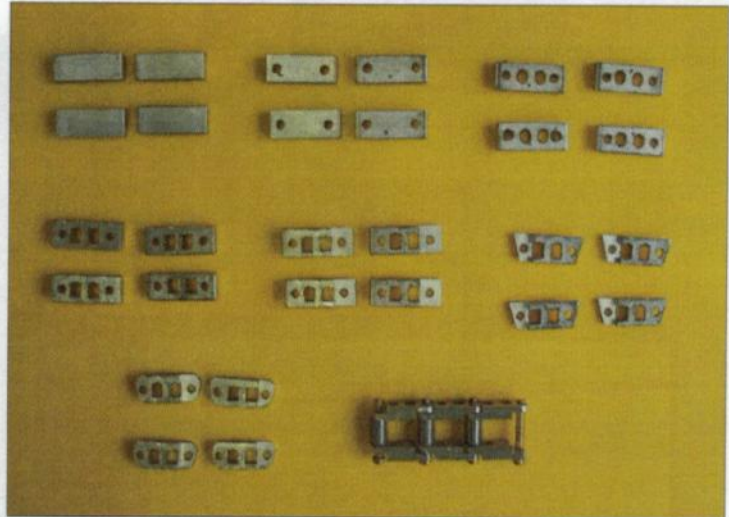
Otago Miniature Road and Rail Society Photos taken at the 2014 Festival Week Exhibition show a wide variety of models.

The model with a scale of 1 inch = 1 foot.

It was decided to build the tracks first as this seemed to be the hardest part of the model to build. I asked people how they would go about this job and the main thoughts were cutting the parts from solid material. These were aluminium rectangle bar and a T section extrusion. There was six processes to each chain link and each chain section has a left and right link. Jigs were made to allow each piece to finish up the required size. Spacers were machined from aluminium and the track pins and collars are from brass.

After assembling the chain, collars were soldered to the ends of the track pins. Holes were drilled and tapped in the chain links and the track shoes were secured with 8 BA bolts.

Photo shows the six processes to manufacture the chain links.



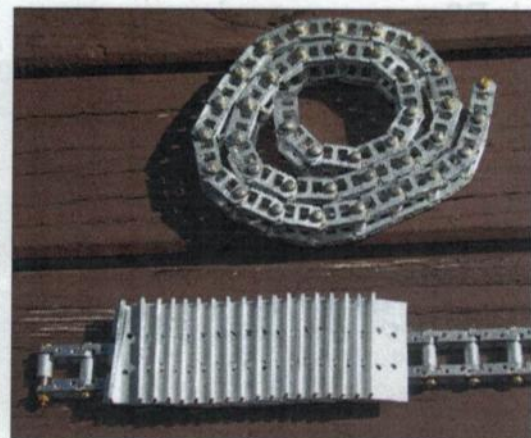
Pressing the rectangle slot in the chain link.



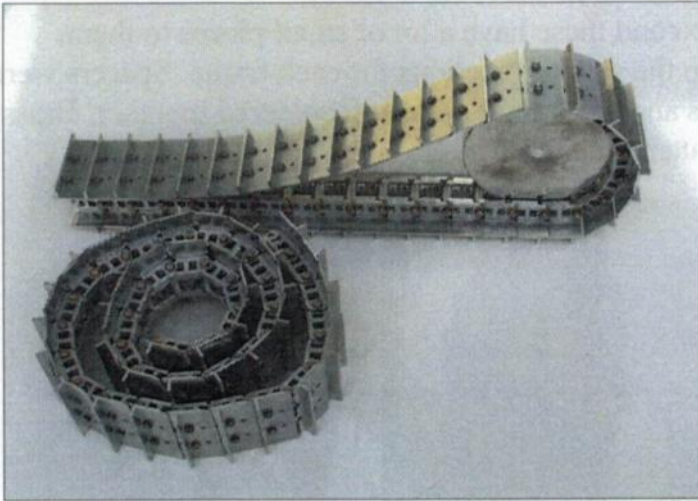
Milling the end sections on the chain link



Milling the angle section on the track shoes

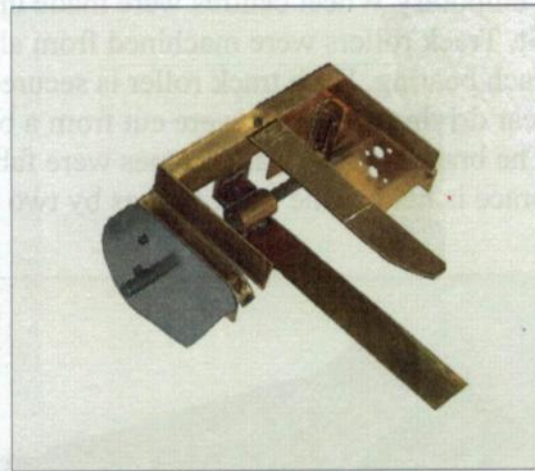


The chain and track shoes

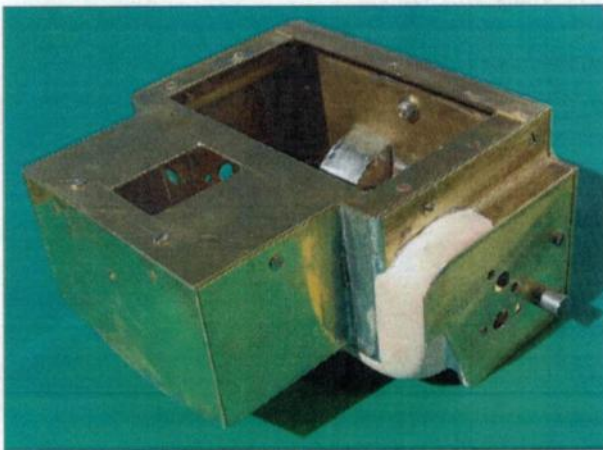


The completed tracks

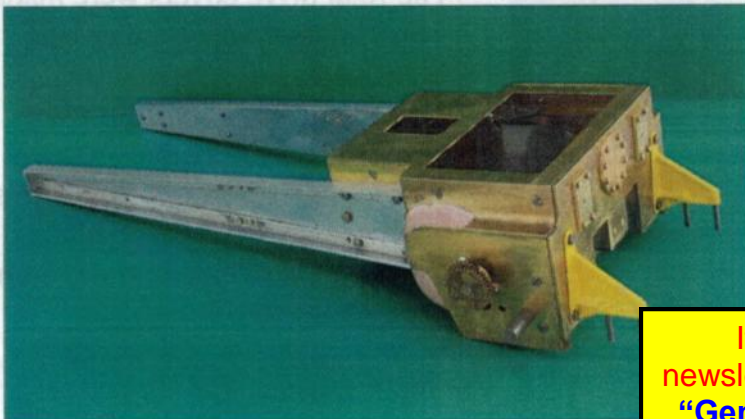
The next item to be constructed would be the rear end of the tractor. Brass angle pieces were machined square in the mill and brass sheet was riveted to the angle pieces to make up a square box type section. Other pieces were added to give the shape required. To stop the rivets coming loose the whole unit was soft soldered. The top can be removed from the unit. Builders bog was used for shaping in some areas.



Above - The rear unit during construction.
Left - The complete unit.



The chassis rails have been constructed from aluminium sheet and angle and the parts riveted together. Holes were drilled in the rails and then bolted and pinned to the rear end unit. Drawbar parts were made from brass and tinplate with a temporary fitting tried when completed.



The chassis rails bolted to the rear end section.

To be Continued

If you would like an email when this newsletter is published, send us an email with "Generator Please" in the subject line with your Name, Club and Email address to pnmec@trains.org.nz