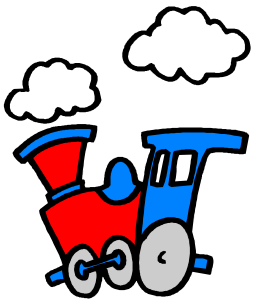
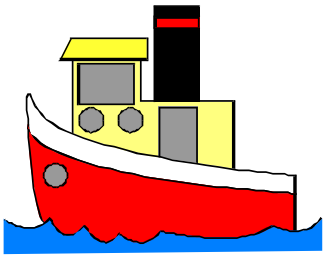


Wheels and Floats



Newsletter September 2017

TAURANGA MODEL MARINE AND ENGINEERING CLUB INC.

The Secretary
PO Box 15589
Tauranga 3112

Palmerville Station Phone 578 7293

Miniature Railway Memorial Park
Open to Public, weather permitting
Sundays in Summer: 10am to 4pm approximately
Winter. 10am to 3pm approximately
Website: www.tmmec.org.nz

MEETINGS
General Members Meeting every first Tuesday 7pm.
Committee Meeting every second Thursday at 7pm.
Maintenance Tuesday mornings from 9am.
Engineering discussions Tuesday evenings 7.30pm.

COMMITTEE

President:	Peter Jones	543 2528
Vice President:	Russell Prout	5482881
Club Captain	Bruce McKerras	5770134
Secretary:	Rachael Duncan	
Treasurer:	Owen Bennett	544 9807
Committee:	Warren Belk, Shane Marshall, John Stent, Jason Flannnery Bruce McKerras.	
Boiler Committee:	Peter Jones, Bruce McKerras, John Heald, Russell Prout.	
Safety Committee:	Warren Karlsson, Bruce Harvey, Peter Jones, Russell Prout, Mark Duncan	
Editor:	Roy Robinson 07 5491182 royrobkk@gmail.com	

CONVENERS

Workshop:	John Nicol
Track :	Bruce Harvey, John Stent, Russell Prout
Marine:	Warren Belk
Librarian:	John Nicol
Rolling Stock:	
Website:	Murray de Lues
Driver Training:	
Club Captain:	Bruce McKerras

OPERATORS 2017

3 September	B Harvey
10 September	P Jones
17 September	R Salsbury
24 September	B McKerras
1 October	N Bush
8 October	M de Lues
15 October	B Fitzpatrick
22 October	B Harvey
29 October	M Duncan
5 November	P Jones
11 November	W Karlsson

President's Report

Those that attended the last club night I am sure enjoyed the presentation by Jason Flannery who described his work assisting in the assembling of the "London Eye" and the well known London Icon, "The Gherkin" during his years in Britain as a "Rigger".
An insight into the various challengers of both projects was interesting and it does require a fair bit of confidence to be involved in those sorts of projects working at height to accept that as the best way to put food on the table.
The skills that faced the Planners , designers, manufactures, transporters, assemblers, health and safety experts, industrialists and the financers of the London Eye project who

health and safety experts, industrialists and the financers of the London Eye project who were perhaps the biggest risk takers of all, British Airways, who made it all happen and got it all back within a year, I understand now my confidence in commercial passenger flying.

When you take the ride on the EYE it is described as a "flight", Bev and I took it about 12 months after it had been commissioned about 8.00am on the same morning we arrived at Heathrow. What a great introduction to London, the first in the world , now there are quite a number throughout the world. Thank you Jason it was a great presentation and more importantly we learned a lot about your work experience.
Not to forget the other presentations on the night , Geoff Hallam presented his double fairly progressing really well , what fantastic ME skills he has. Owen displayed a wooden model steam engine of his own his design for his "Buggy". Lots of presentations on the night but I am not going to give a complete club night report, we had 23 members present, I believe we have a member who can provide an independent report our club nights for Roy to report in our news letter on a regular basis, don't be shy put your hand up. We had four members from Rotorua one from Tirau and two from Katikati, a combined return distance of 374Km in one evening to attend our meeting and all gave input, thank you for your support, it is always great to see you guys.

Chris Patton who recently joined our membership is interested in building a traction engine and would like to hear from those that are interested in doing the same. Chris has offered to be the speaker next club night about his career as an engineer in the field of loss adjustment throughout the world, I'm looking forward to hearing about his experiences.

The TECT community awards have come and gone and I had much pleasure in speaking on behalf of our club as the 2016 Regional Supreme Winners supported by our co-presenter Oliver Duncan, also Mark Duncan and Bev at the ASB Arena. This occasion highlites the local and Regional Volunteers who put their time into our communities. Unfortunately we were in the "also ran" category this year. Our category Sport and Leisure was awarded to Mt Maunganui and Papamoa Surf Clubs, the Supreme Winners this year was The Incubator, an art group, congratulations to them. Thank you to TECT and Tauranga City Council for identifying the work Volunteers do in our community. I high lighted in my presentation that the time skill and material gifted by volunteers, companies and organisations in our country will never be fully realised and unless time is taken to calculate a $ value we will never know, but we can guess billions of $'s, we just have to be so grateful helping is in our Kiwi DNA, and long may it last.

When you down the track next time you will notice that work has started on TCC's box hedge sign placed on the Southern side of the viaduct embankment. At this stage it is preparation and placing of mulch, planting will start later this year and I have been told it will take some time before MEMORIAL PARK words are clearly defined.

Finally, Bruce McKerras and Murray DeLues have been busy modifying ride car bolsters. Thanks for taking the iniative guys and thanks also to the track gang carrying out track maintenance in between the many wet days, well done.

Happy modelling

Peter Jones.

From the Editor

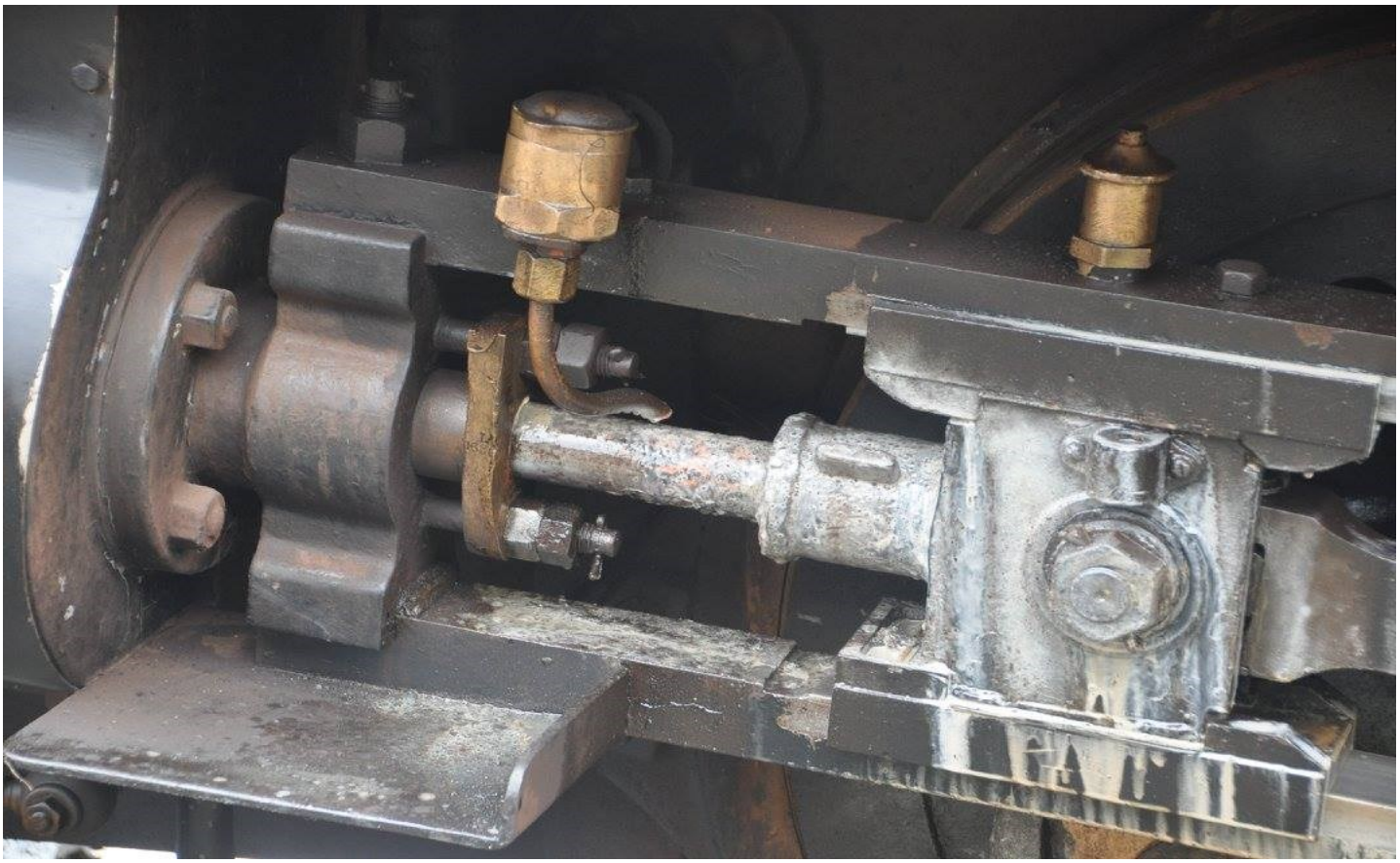
Yea…… still looking for more articles……. PLEASE

BUY and/or SELL.
Still looking for a fixed and a traveling steady for a Myford. <royrobkk@gmail.com>

There is a "Twilight Run" to be held at Whakatane on the 7 October. Starts 12.00 midday till later……

Regards Roy

Cross head assembly on the Bush Tramway Peckett



STEAM ENGINE for MINIATURE BUGGY 1.8m x 1.1m.

Having considered using industrial plastics as the core components, and finding that the stability with steam may make that concept impractical, I have decided to revert to the tried and tested use of cast iron. Suitable industrial plastics are available that could handle the heat and moisture but the very high cost of an untested concept did not appeal.

The concept is based on a 1903 Stanley Steamer which used a cast iron two cylinders and valve chest casting, with four steel frame rods attached through the casting lugs.

Not having access to a similar cast design, with no welding skills, and no plans, I have designed a totally fabricated modular unit based on a billet of 420mm x 90mm cast iron. This will provide the cylinders, pistons, end caps and steam chests. The frame will be mostly constructed from 12mm square BMS which will be inserted and screwed into the cylinders via the centre located milled slots in the cylinders, then working backwards through the crosshead slide bars, to the narrowed rear of the frame, to the crankshaft which runs in bearings contained in the bearing blocks, the cranks being located at the outer ends of the crankshaft. Flats will be milled on the crankshaft to facilitate the 90 degree quartering.

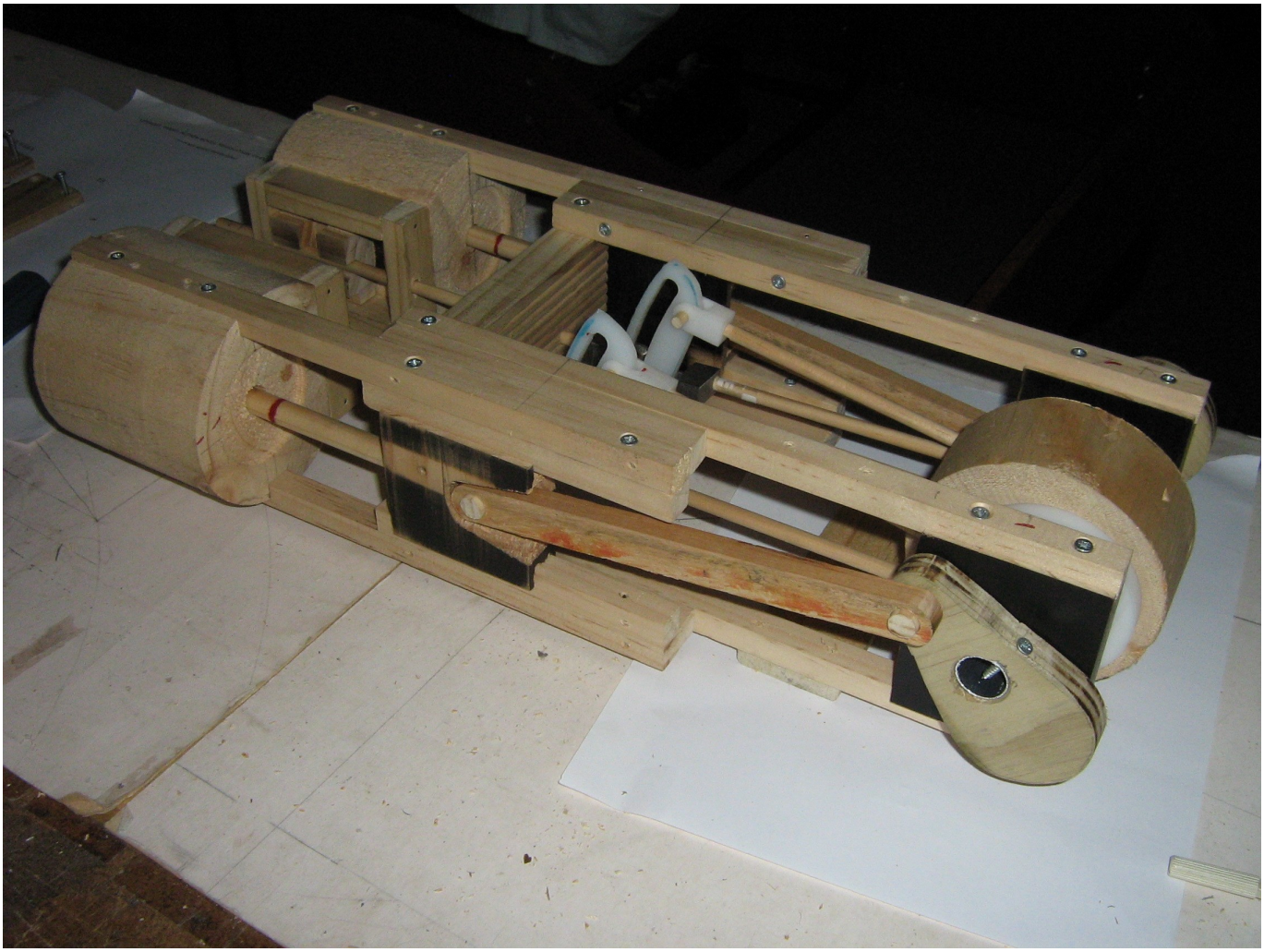
The Stephenson valve gear will be located in line with the side-mounted valve chests, the centre position on the crankshaft used for the 100mm x 30mm final drive toothed belt pulley, possibly 7.5mm tooth pitch to match the present mobility scooter engine and transaxle.

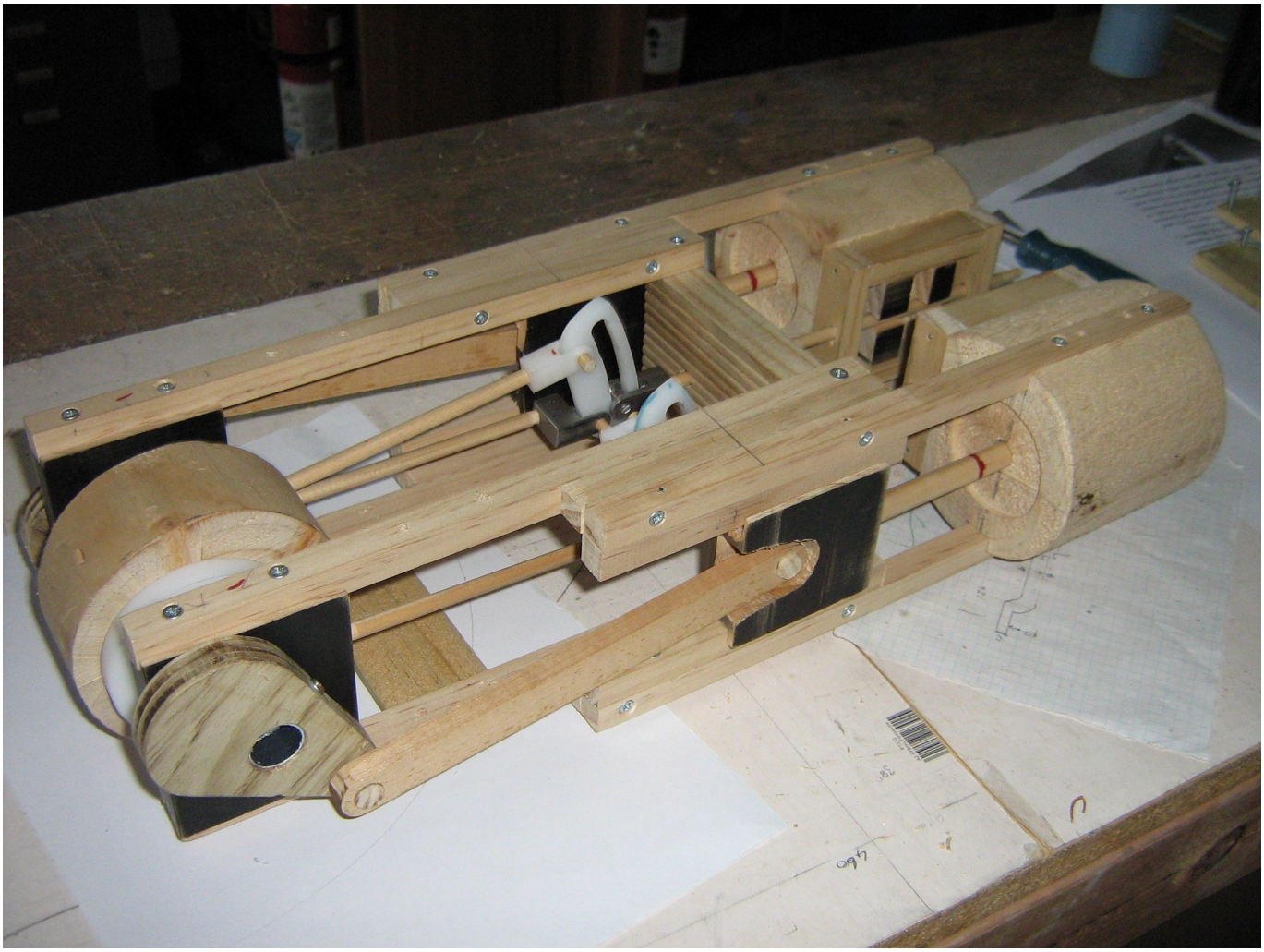
Industrial plastics will be used where appropriate, particularly for the eccentrics and other fittings not requiring physical strength or steam heat and moisture. The launch type expansion links and die blocks will be made in steel, with the radius rods matching the centre to centre crankshaft and expansion links radius, when decided.

The double acting cylinders will have a 50mm bore and 70mm stroke within the 90mm cylinders length. A blind end cap will screw onto the front of the cylinders, with a steam gland in the endcap at the rear of the cylinders. Steam chest covers will be 5mm steel, although Perspex may be used for trial purposes on air. Sufficient space is allowed between the cylinders for valve setting and adjustments. The very compact finished size of the engine will be approximately 230mm wide, 460mm long and 100mm deep, similar to the wooden prototype. The final drive to the buggy wheels will be a size suitable to run the buggy at 20-25 kph at logical engine rpm (possibly 200-300 rpm) to suit the 1.6m circumference of the wheels, so is yet to be decided.

A Machining and Assembly Manual will follow.

Owen.





Tamar Update

Two full sized Tamar locomotives have arrived in UK from the Cameroons, a West Coast Country of Africa. Statfold Narrow Gauge Railway are to restore one and the other is to be sold on. Both engines worked on the Bota Palm Oil mill and Banana Plantations up to the mid 1980's. Both had been kept under cover since being decommissioned and appear complete with little corrosion.

When Kerr Stuart went into liquidation in 1930, Hunslet locomotive company bought the assets. Thus Kerr Stuart designed engines continued to be built. The two Tamar's were built in 1952, probably about the last that Hunslet built. However I do know of one built in 2005 for a Welch narrow gauge railway.

Both these engines have Hackworth valve gear, the club engine using Marshall for easier maintenance.

Although the pictures show the engines without the cabs, these are in good condition and will be refitted, as per the rest of the engine parts and both engines look reasonable for restoration projects. The engines were known for having good tractive effort, reaching 2,620Kgs on a level track, probably more with water side the tanks full.

John Heald

Father's Day 2017

One of the good things about being Editor of the Club mag is that Presi Pete generously sends me mags he receives from other Clubs. A recent one he sent was from the Pukemiro Bush Tramway and its contents was so interesting that I had to put a visit on my "urgent to do" list whilst the steam locos were still running (winter running only because of fire danger).

I roped up "the team" and all arrived at the Pukemiro Station on the first Sunday of September which is their normal Run Day for the month. After a cup of coffee from the thermos (no Robert Harris here) we wandered down to the Station to get our tickets. The line runs approx West and East from the Station a total of 10km I guess. The West section is a respectable 1 – 50 grade up hill and they were using the 2 Drewry Locos, one front and back, to haul the 2 restored carriages to that end of the line. It was then a drift back to the Station where the diesels were removed and a Peckett steam loco was placed in front of the carriages. We trundled to the end of that line and then back to the Station.

It was time to check out the yard and buildings and what a collection there is. One thing that caught my eye was a hand crane built if I remember correctly in 1897 and with a max lift of 5 tons. With no stabilisers I had to wonder if that capacity was only fore and aft, it would have been very exciting with 5 ton on the hook east west!!!!!!!! The most noticeable thing at this place is that Safety & Health had not been here. That's not to say there weren't signs or that the place was a dangerous mess. Every part of the complex is accessible including the wood and engineering workshops and there is nobody looking after the public. Tool boxes were unlocked, one could clamber through carriages and locos under repair, a real breath of fresh air and long may it continue.

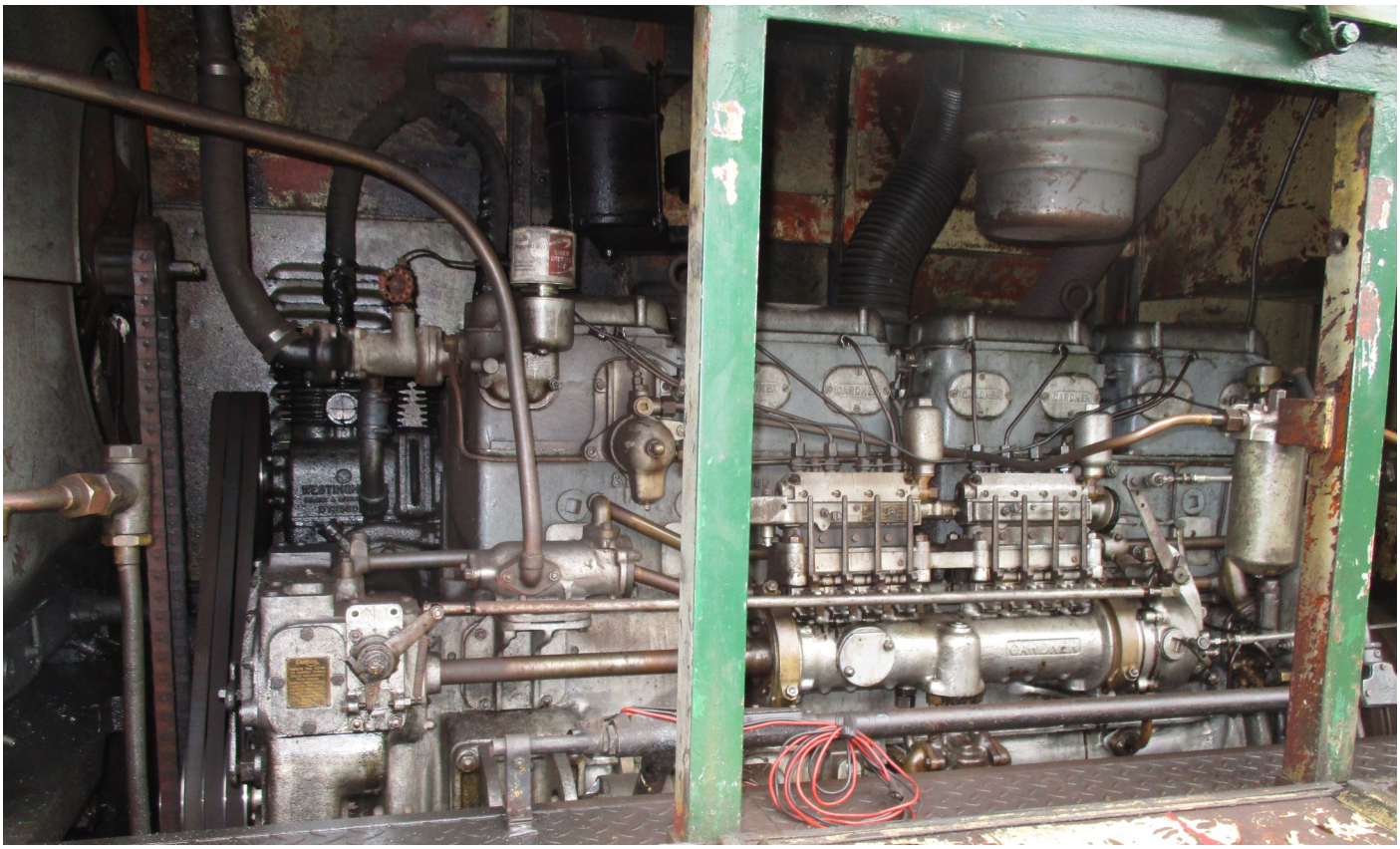
A couple of us got talking to the driver of one of the Drewrys. We asked if we could remove the engine covers to gaze at the 8LW Gardner power plant, for me, it's love at first sight!!!! One could have balanced a coin on this engine it ran that smooth. 150hp (that's Clydesdales not pony's) at 1500rpm but they only take them too 1200rpm. An invitation into the cab was instantly accepted and when it was time to reconnect to the carriages we were able to stay for the trip up the hill. One never felt that the 8LW was under load just a rise in engine temperature indicated it was working. The view of the track is completely different when one is in the engine cab. This track goes through coal country which never made great foundations and I suggest the Bush Tramway has a steady work load to maintain the line in a usable condition. Trees, slips, causeways are all taking a toll. I understood they have assistance from PEP workers on a regular basis which would be an important labour force.

One can only wish this group of volunteers well and hope that their group grows in numbers and reduces in age. If you haven't visited this Bush Tramway I would strongly recommend it. Tickets aren't too expensive and there is lots to look at for free!!!!

Roy

Above : The Drewry shunter and the Peckett loco at The Bush Tramway

Below : What a beautiful sight!!!!!! The 8LW Gardner in the Drewry loco.

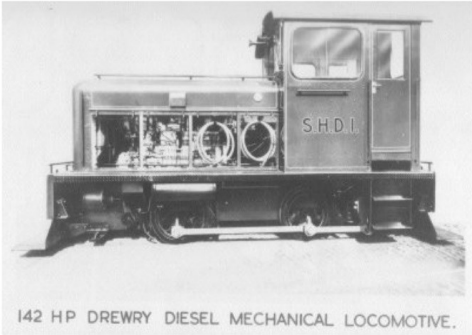


401/402 Locomotives Works Numbers 2623/4 Built 1957

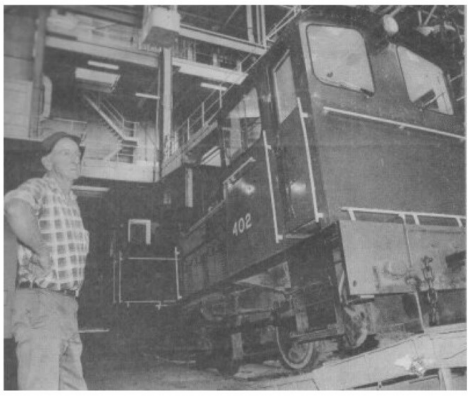

NORRIS, HENTY, & GARDNERS, LTD.

SPARE PARTS CATALOGUE FOR THE GARDNER COMPRESSION IGNITION OIL ENGINE TYPE L3

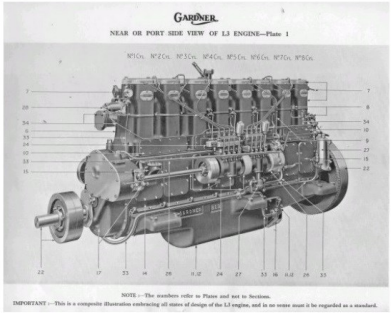
These locomotives were an identical pair made in England by the firm of Robert Stephenson & Hawthorn for the Drewry Car Company of London. Drewry made very little product themselves, but acted as a "consolidator". If you wanted a railway, they would get the track from one supplier, the locomotives from another, and the rolling stock from someone else & then supply it all as a "package".



These locomotives worked the sidings at the Meremere Power Station, a few kilometres north of Huntly from 1957 until 1997, whereupon they found their way to the BTC. These locomotives have the advantage of a light weight which is suitable for the BTC track (the rail of which is 55lb/yard and relatively light) along with having Gardner 8LW diesel engines - these extremely reliable, legendary engines were made over a 60 year period until the 1990's & potentially have an indefinite life.



Photos include a Drewry catalogue picture, 402 at Meremere, at the BTC and a catalogue picture of the Gardner engine



The hand crane Pukemiro Bush Tramway

Exam results:

Define the word “monotony”?
Monotony is being married to the same person all your life.

What does the word “benign” mean?
Benign is what you will be after you are eight.

Who did not welcome the return of the prodigal son?
The fatted calf.

Name four seasons?
Salt, pepper, mustard and vinegar.

What happens to your body as you age?
When you get old so do your bowels and you get intercontinental.

Name a major disease associated with cigarettes?
Premature death.

What is the Fibula?
A small lie.

What is the most common form of birth control?
Most people prevent contraception by wearing a condominium.

What is the alimentary canal?
The alimentary canal is located in Northern Indiana.

What is a seizure?
A Roman Emperor.

What is a terminal illness?
When you are sick at the airport.

What are steroids?
Things for keeping carpet on stairs.

What has to be established before giving a blood transfusion?
If the blood is negative or affirmative.

What is a vacuum?
A large empty space where the Pope lives.

What is a supersaturated solution?
A supersaturated solution is one that holds more than it can hold.

What is rhubarb?
It’s kind of celery gone bloodshot.

What is enema?
Someone who is not your friend.

What is a morbid state?
A stage in a takeover when a bigger offer is made..