



**May 2004  
No 290**

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

## **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**  
Bruce Geange  
(06) 357-0566

**SECRETARY**  
Murray Bold  
(06) 355-7000

**TRACK CONVENOR**  
Richard Lockett  
(06) 323-0948

**EDITOR**  
Doug Chambers  
(06) 354-9379

**PNMEC Home Page** [www.pnme.org.nz](http://www.pnme.org.nz)  
**Email:-** [pnme@clear.net.nz](mailto:pnme@clear.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 onerous.

Visiting club members too, 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,

Place  
stamp  
here

### **Coming Events**

**Coming Events:** May Monthly Meeting. This will be held at the Hearing Association Rooms, Church Street, Palmerston North on the 27<sup>th</sup> May at 7.30 pm. **SHARP.**

See further details on page 2.

**Mid Week Run at Marriner Reserve Railway :** 25<sup>th</sup> May , between 10.00 am and 2 pm.  
22<sup>nd</sup> June , between 10.00 am and 2 pm

Please contact Doug Chambers beforehand.

**Track running at Marriner Reserve Railway:** 6<sup>th</sup> June 1 – 3 pm  
20<sup>th</sup> June 1 – 3 pm

**Open Weekends :** Manakau Live Steamers 5<sup>th</sup> – 7<sup>th</sup> June  
Havelock Live Steamers 23<sup>rd</sup> – 25<sup>th</sup> October  
New Plymouth Model Engineers 23<sup>rd</sup> – 25<sup>th</sup> October  
Tauranga Model Engineers 12<sup>th</sup> – 14<sup>th</sup> November 25 Anniversary

The closing date for the next issue of The Generator is Friday 11<sup>th</sup> June

## REPORT of the APRIL (AGM) MEETING

The President's Report highlighted the efforts put in by members in ensuring the Club keeps progressing onwards. There is a band of workers who work steadily to ensure monthly meetings have interesting speakers, and Locomotion Events run smoothly.

The Treasurer's Report showed the Club's funds to be in good shape.

The following are the results of the Election of Officers.

<b>PRESIDENT</b>	Bruce Geange	<b>VICE-PRESIDENT</b>	Cynthia Cooper
<b>SECRETARY</b>	Murray Bold	<b>TREASURER</b>	Richard Lockett
<b>COMMITTEE</b>	Chris Morton, Barry Parker, Chris Rogers and Roger Corlett.		
<b>BOILER COMMITTEE</b>	Doug Chambers, Peter Hatton, Ken Neilsen, Chris Rogers, Richard Lockett Brian Wiffin.		
<b>EDITOR</b>	Doug Chambers	<b>LIBRARIAN</b>	Doug Chambers
<b>TRACK CONVENER</b>	Richard Lockett		

**THE COMPTON SHIELD** for the “**CLUBMAN of the YEAR**” was presented to Chris Rogers.

### **BITS and PIECES**

Fred Kent displayed one unit of his ‘twin – set’ railcar now with wiring in place.

Barry Parker had his “Rob Roy” now with the boiler and smokebox sitting in the frames.

Chris Rogers had the boiler for his 7 ¼” gauge ‘Adams Radial Tank’ in a nearly completed state.

### **MAY MONTHLY MEETING.**

Members are invited to bring along their favourite picture, photo or sketch, and be prepared to tell just why it is significant to you.

Members are also invited to bring along their current project to put on the table for ‘Bits and Pieces’. Richard Lockett will continue with his series of talks on ‘Workshop Practice’ if time permits.

### **FOR SALE**

A Myford Vertical Slide, average condition , Apply to Doug Chambers, Phone 06 354 9379.

### **APRIL MID -WEEK RUN**

Joining Ian McLellan’s ‘Juliet’ and Ken Neilsen’s ‘Maid of Kent’ was Jim Curtis’s ‘Santa Fe F 7 chassis. Jim had brought it over to check for any problems and to see if the gearing was about right. A few laps showed that everything was correct. Other members were invited to have a drive and all were impressed with the simplicity of the hydraulic drive. Jim will be able to continue with the bodywork knowing that the mechanicals are going to be ‘spot on’.

## A Weekend Away Up North

Over Anzac weekend the PNMEC was well represented at the Rotorua Open Weekend. Bruce and Alison, Ken and Joyce, Murray and Janice, and Cynthia attended with a D&NY Traction Engine, and Locomotives Lion and Mr Sandman.



**Ken and Joyce riding the rails with "LION"**

The trip up on Friday was in fine weather but coming home on Sunday afternoon was not so good. They were also visiting locos and drivers from Manakau, Havelock North, Hamilton and Tauranga.

The local airport has been extended so many of the tall trees have been removed from around the museum grounds. This lets the aircraft buzz the track at about 150 feet or less, or so it seems.

These gatherings are always a great social occasion as this photo shows.

Below is a very tidy Ajax with Mike Orange at the regulator.



**What it's all about. Telling lies to your mates.**



**Mike Orange from Manakau driving "Ajax"**

Our thanks go to the ladies and helpers for their hospitality and cups of coffee, tea and cordial, to keep the drivers fuelled.

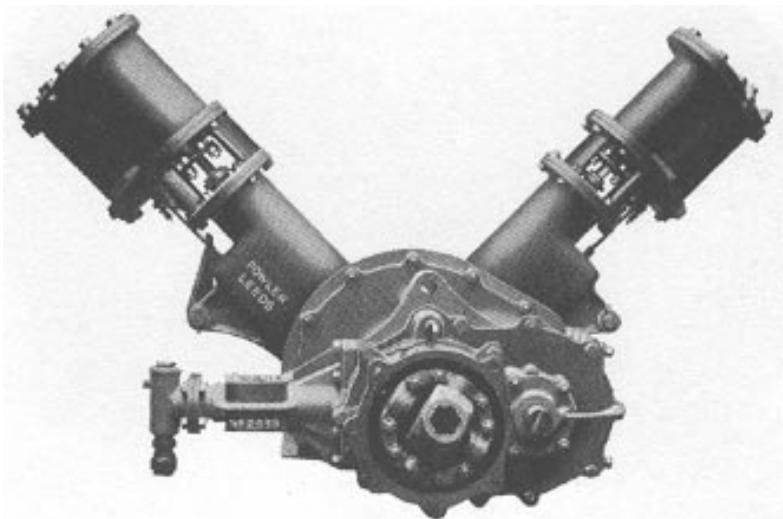
Cynthia C & Murray B

## FOWLER STEAM WAGONS

The following information comes from a book put together by the late W. J. Hughes from a collection of catalogues issued by the firm John Fowler and Co. (Leeds) Ltd , during the 1920s.

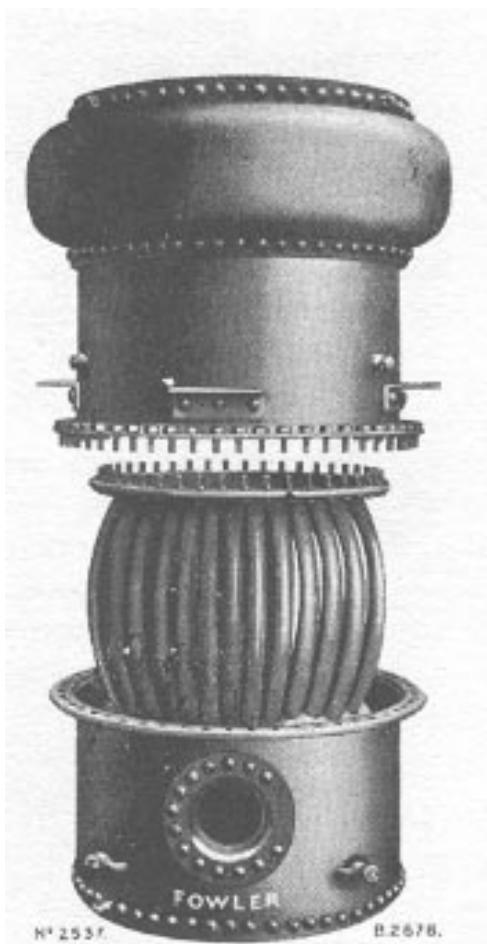
The Fowler steam wagon of this period differs from it's competitors in many ways.

The engine is of the 'V' twin cylinder layout similar to that used in the Heisler bush loco. However the engine is a compound with piston valves fed by steam having a high degree of superheat.

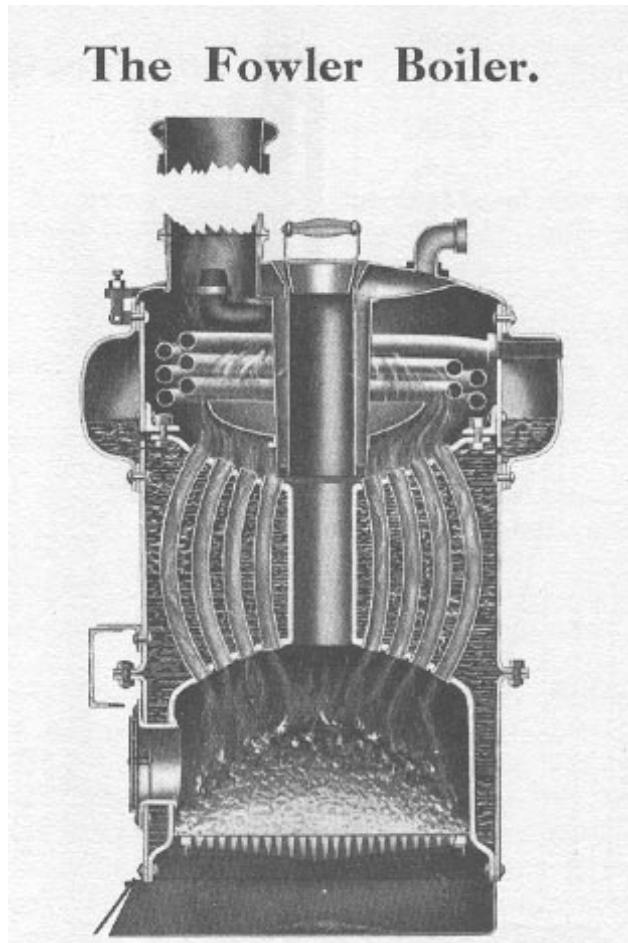


The crankcase and gearbox form a complete unit carried by the frame at three points. The single throw crankshaft and all the gearbox shafts for the three speed gearbox are carried on roller and ball bearings and are lubricated by the large oil bath. The cylinders are lubricated by a mechanical lubricator. A boiler feed pump is driven through reduction gearing from the main shaft.

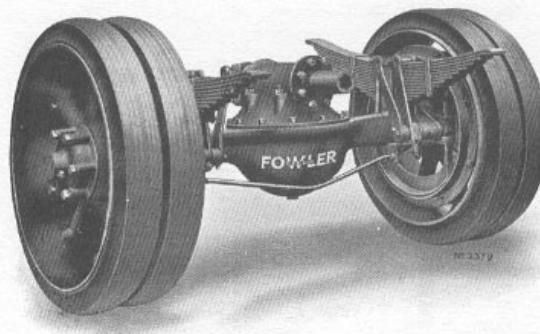
The boiler has no stays at all and the curved boiler tubes, being free to expand with the boiler are less likely to leak. The absence of stays and the very free circulation means the boiler is ideal for quick raising of steam. The boiler can be dismantled for an annual inspection by removing the bolts at the two joints.



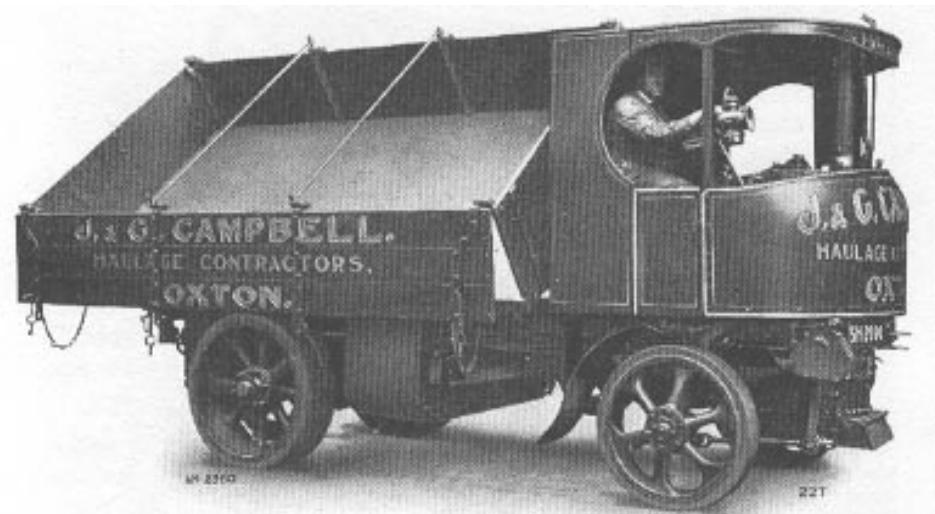
**The Fowler Boiler.**



The rear axle has a fully enclosed gear case containing a patent worm drive which eliminates any backlash, thus ensuring stopping and starting without the jerking that promotes wear on drive line parts.



The short wheelbase, 11 feet for the standard wagon and 9 foot 6 inches for the tipping wagon make for very good manoeuvrability.



Fowler wagon specifications. Boiler pressure. 225 psi , Grate area 3.8 square feet , Heating surface 88 sq ft ,Cylinders bore 4  $\frac{3}{4}$ " and 7  $\frac{1}{2}$ " stroke 8".

The capabilities of a Fowler wagon was displayed during a test in Pietermaritzburg, Natal. A wagon with a load of 6  $\frac{1}{2}$  tons was driven up Town Hill. The hill is two miles long with a gradient of 1 : 10 rising to 1 : 7 in parts. The ascent was made without stopping and the boiler pressure only dropped 5 psi.

A further test was held in England. In this case a load of ten tons of coal was taken 100 miles from the pit head in Coventry to London in 7  $\frac{1}{2}$  hours. Remember this wagon only had solid rubber tyres and the road was not familiar to the driver. The run took place in winter and was to see if road transport could compete with rail. It was found that the Fowler wagon made a saving of 40% to 50% against rail.

The Fowler wagons with tipping gear have hydraulic rams that may be fitted up for end, side or three way tipping. The oil pump is driven from the engine and the tipping arrangement is operated from the drivers seat.

Among the claims by Fowler's of the superiority of their wagon compared to petrol powered trucks is the fact that although the purchase price of the steam wagon is less than the petrol competitor, the steam vehicle is expected to have a longer working life. Some 30% longer, a fact borne out by the Inland Revenue who allow a 20% depreciation on a petrol truck, but only 15% on the steam wagon.

# “Model Mee 2004”

A message to all from the organizing committee.

Thanks to all the exhibitors and assistants for their help in setting up on Friday and cleaning up after the exhibition on Sunday.



A collage of photos from “Model Mee 2004”