



Newsletter of THE PALMERSTON NORTH MODEL ENGINEERING CLUB INC

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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 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
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Palmerston North

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This Months Featured Model



Bruce Geange's Black Five

JUNE MEETING.

Dr. Paul Morris gave us a most interesting talk on dental implants. I, like many others have mixed feelings about dentistry, but the expanding field of implants and the technology involved had all the members interested. Paul was able to answer the many questions from the members and I honestly can't remember any speaker getting such rapt attention. What can be achieved now in the way of accident repairs and wear and tear is remarkable and has tremendous benefits for those in need.

Also, (on the table) was a large copper boiler being built by Doug Chambers.

Murray Bold demonstrated his electric powered track sweeper for Gauge 1.

Bruce Geange set up and demonstrated a pair of ploughing engines and plough that he had built in Meccano. The engines are electric powered, and can move along under their own power.

The winch is also powered and this set up demonstrates the use of the balance plough.

Fred Kent showed us a picture of a small overshot water wheel he has made and parts of the World War 1 Fokker Triplane model he is making.

JULY MEETING

This will be held in the Hearing Association Rooms, Church Street, Palmerston North at 7.30pm (**SHARP**) on the 28 July 05.

It will be a '**Bits and Pieces**' evening, so bring along your current project and let us all see what is currently underway.

SUBSCRIPTIONS NOW DUE

Subscriptions remain at \$28 for members.

Juniors and Country members \$14.

You can send your sub to

The Treasurer PNMEC
C/o 22B Haydon Street,
Palmerston North

or hand it to Barry Parker at the next meeting.

COMING EVENTS

Mid Week Run at Marriner Reserve Railway

26th July between 10.00 am and 2 pm
Please contact Doug Chambers beforehand.

Track running at Marriner Reserve Railway

7th August 1 – 3 pm
21st August 1 - 3 pm

FOR SALE

Les Fordyce has decided to sell his 5" gauge New Zealand Railways Dsa shunter. It is electric powered, 24 volt with a ½ horsepower motor and complete with a bogie trolley and accessories. The asking price is \$2,250 , all offers considered.

Below -

The Dsa waiting short of Comptons Crossing.



The closing date for the next issue of The Generator is Friday 12 August

THE 'BLACK FIVES'

By Doug Chambers

In 1932 William Stanier left the GWR and joined the LMS as Chief Engineer. Under his supervision a design was prepared for a two-cylinder mixed traffic locomotive to replace the many older -6 -0's of the LMS. Although the pronounced taper of the boiler barrel was typically GWR, only the axleboxes were to follow GWR practice. The valve gear was Walschaert's and all the fittings were of proven LMS design.

The cylinders followed Lancashire and Yorkshire Railway practices. Over the next 18 years 842 locomotives of the 'Black Five' class were built by the following companies. The LMS works at Crewe built 231, The LMS Derby works built 54 and the LMS Horwich works built 130.

A Government scheme to provide work in depressed areas saw the Vulcan Foundry build 100 and Armstrong- Whitworth & Co built 327. The running numbers were from 4758 to 5499, with the numbers below 5000 being the latest built. One hundred more were built by British Railways and these were numbered from 44658 to 45499.

In service these engines were found to be very reliable. Their relatively light axle loading meant they could be used all over the Highland Division. Careful balancing and running tests were undertaken and resulted in 50% of the reciprocating weights being balanced. With 66% balanced tests showed that the driving wheels rose 2 1/4" from the rails at an equivalent speed of 104mph.

On many occasions a 'Royal Scot' 4 -6 -0 , 'Princess' or 'Duchess' 4 -6 -2 , failed while hauling the London to Glasgow 'Royal Scot'.

A 'Black Five' would be substituted for the failed engine and then would demonstrate their ability to maintain timings. The 'Black Fives' would have been incapable of hauling the train over the full distance as the shallow ash-pan would have seen the fire become choked.

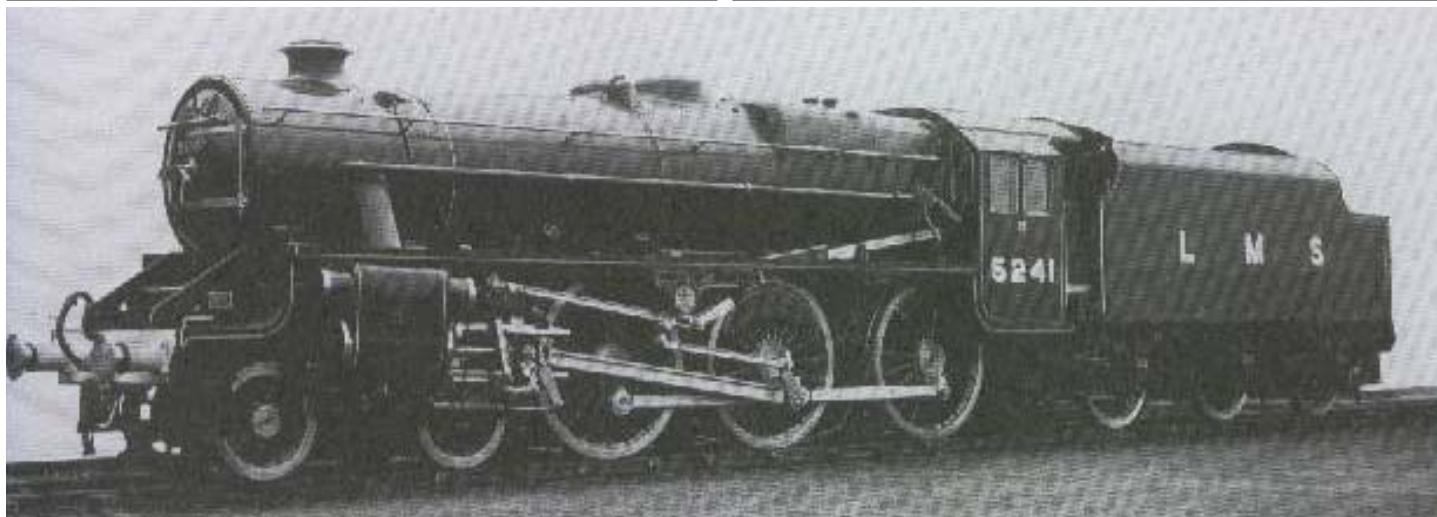
The much larger 'Duchess' and 'Princess' classes had deeper ash-pans and they also rode much better on their 4 -6 -2 wheel layout. It is said that 90mph on the footplate of a 'Duchess' at night with no headlight, was fairly exciting.

But the same speed on a 'Black Five' was a **TOTAL EXPERIENCE !!!!!**

However this was not the work they were designed for. Mixed traffic engines did everything, short haul express, light goods and heavy goods. So versatile were these engines that they were found to be capable of anything that they were required to do.

On various engines of the later built 'Black Fives' experiments were carried out. Roller bearings, double chimneys, rocking grates, Caprotti poppet valves, outside Stephenson valve gear , increased superheating and high manganese steel liners for the axlebox guides. The only alterations that were adopted by the whole class were the manganese steel liners in the axlebox guides and the increased superheat.

The 'Black Fives' based at Preston were the last steam locomotives to be used to haul timetabled express passenger trains for British Railways. As late as January 1967, just 20 months before the end of their careers, class No 44917 achieved the highest recorded speed for the class. This was 96mph (155kph) and was attained between Chester and Shrewsbury.



The Generator

HAWKES BAY M. E. OPEN WEEKEND

For the second year running I rode my Ducati up to Taradale to Anderson Park for their Mid-Winter Run.

Trundling around the Park were three full-sized traction engines. Closer inspection showed them to be a MacLaren 6nhp compound, a Fowler 4nhp compound tractor and a Brown and May 4nhp single cylinder tractor.

There were two 'Allchin' traction engines in 1 1/2" scale. Graham Learbourne and Richard Lockett had built them. Richard steamed his on both days, on the Saturday completing a circuit around the railway track.

There was a wide variety of 5" gauge locomotives running on the track. Too many for me to try and list without fear of omitting one and offending the owner.

The stationary steam plant with the two Weir pumps and two vertical stationary engines is an added attraction. The collection of stationary petrol, diesel and kerosene engines all added to the display.

Gleeson's 'S' Bedford truck, very nicely restored, and a few tractors, Fordson Major and Allis Chalmers were also worth close inspection.



Lister Diesel Generating Plant

The above photo is of a interesting mobile generating plant that was running most of the day.

The Palmerston North Model Engineers who attended over the weekend enjoyed themselves very much and thank the host Club for a great weekend, held in good weather and thanks very much to those involved with the catering.

Doug Chambers



Richard Lockett's 1 1/2" scale Allchin

Model of the Month BLACK FIVE Locomotive

When returning a model that I had repaired and painted for the late Ron Walker on Sunday the 10th May 1992 we chattered away for a while and then he asked me if I would like to have a Black Five. I was a bit taken back by this but he insisted that I have it. The loco had not been used for about 18 years and was lying on the garage floor under other bits and pieces. It was lifted out and placed in the car and bought home.

Over the next three weeks the boiler fittings and the cab were removed. The regulator was repaired and the steam brake valve was blocked off. New packing was fitted to the pump and a new drawbar between the engine and tender was made and fitted. The wheels on the engine and tender were never painted. After a good clean up of the frames, motion work and wheels, the wheels were painted and the motion work polished. A hydraulic test was done one weekend and the following weekend the engine passed a steam test.

On the 7th June the engine was run on our track and did twelve laps with Ron looking on in amazement as the loco went up the grades with ease. After several runs the paint on the boiler and smoke box began to crack and peel off. The engine was dismantled and all paint removed, cleaned and repainted. The name 'GLASGOW HIGHLANDER' is now on the smoke box name boards.

Bruce Geange

MAURICE BROWNELL

I am sorry to have to tell the members that Maurice died on the 22. 6. 05

Maurice was one of those quiet members who was content to sit and listen. However when we found out about his life in road making and contracting, he was persuaded to give two fascinating talks. The first was on the use of explosives to break up rock to provide fill. And the second was on his experiences driving all sorts of bulldozers.

Maurice had bought the late Ron Walker's 5" gauge 'Jubilee' and the smiles on his face were great to see when he was running the engine at Marriner Reserve on the Tuesday Mid-Week runs.

Our thoughts are with his wife Rona and his family.



ANDREW BARSANTI

After a short illness Andrew passed away on 14. 7. 05 aged 93.

Up to the last few weeks Andrew could be found in his workshop making beautiful little trinket and jewellery boxes with carefully inlaid contrasting coloured wood.

A lifetime of working in wood and making all sorts of fine inlay work meant that Andrew was kept busy making and repairing things for his family and friends.

Quite a few members used to have their handsaws sharpened by him and on one occasion we persuaded Andrew to give a talk on sharpening handsaws.

A friendly, cheerful and polite man.

He will sadly missed by all his family and friends.



FACTS and FALLACIES

Your Editor and Mike Barnes often spend an hour or two over cups of coffee putting the world to rights and discussing the merits of steam locomotives and traction engines. In this age of mass production everything exactly the same. However in the period traction engines were being built, thousands of them by several large manufacturers, there was room for individuality. Although Fowlers, Burrells, Marshalls, Aveling and Porter etc., all had more or less standard designs, some owners required different features and the companies were only to happy to accommodate the wishes of the purchaser to complete the sale.

Over the last thirty years or more Mike and I have heard and seen written various statements concerning the builders of traction engines.

These statements usually follow the lines ; Fowlers never did ----- or Burrells always did -----.

During the passage of some years we have seen most of these statements disproved. Mike and I agree that when discussing traction engines there are no hard and fast rules one can apply as sooner or later an engine will be found that breaks the rule.

Mike and I have recalled these particular 'fallacies' for you.

Fowlers never made portable engines.!

Not quite correct. Fowler's salesmen would try to persuade the buyer to purchase a traction engine instead of a portable, pointing out that the traction engine was more versatile than the portable. However if the customers were determined to have a portable they would supply one. Fowler portables differed from other manufacturers in that their portable was a traction engine boiler with the cylinder block at the smokebox end and the crankshaft over the firebox. Portable type wheels were fitted and the extension of the hornplates to which the tender was bolted was removed.

About twenty-five years ago I found a Fowler portable half submerged in a tidal mangrove inlet near Wellsford, just north of Auckland.

When standing on the manstand facing forward, the slide valve is always on the left-hand side of the cylinder block on a single cylinder traction engine.!

Not correct. Aveling and Porter offered their single-cylinder traction engines with an option of having the slide valve on the left or right of the cylinder. I have a photo of one recovering a threshing mill that ran away and rolled over near Feilding after the drawbar pin came out of the Fowler traction engine towing it. No, the photo is not printed back to front !

Showman's engines were always painted red.!

Generally correct but in April of 1920 John Whyatt of Stoke -on-Trent took delivery of his new Fowler Showman's engine No 15116 . It was an R3 class, 7nhp, three speed compound. The final painting had not been finished and the Fowler left the works in a dark blue undercoat and an agreement that when the summer was over the Fowler would be returned to the works to have the topcoat of red paint applied.

At the end of the summer John Whyatt returned the engine to the works as promised, but he insisted that the engine have a topcoat of dark blue applied as the 'blue' Showman's engine had attracted a lot of favourable comment during the summer season.

Burrell engines don't have 'Chas. Burrell & Co, Thetford' cast into their rear wheel hubs.!

Not all Burrells have this cast into their wheel hubs and there seems no pattern in which ones do. Some of the older ones do, some don't. Some single cylinder engines do, some don't.

Burrell's only made three shaft engines.!

Most Burrell engines were three shaft. However the Company also produced some four shaft engines.

There are definitely more of these 'fallacies' that have come to our notice but at the moment these are the only ones Mike and I can remember.

Doug Chambers and Mike Barnes