Issue 670 Nov 2026

A Wisp of

STEAM SUPREME

Extracts from the Melbourne Steam Traction Engine Club's Newsletter

Flathead FORD Festival



Tony Wilde demonstrating his Flathead Ford Burble





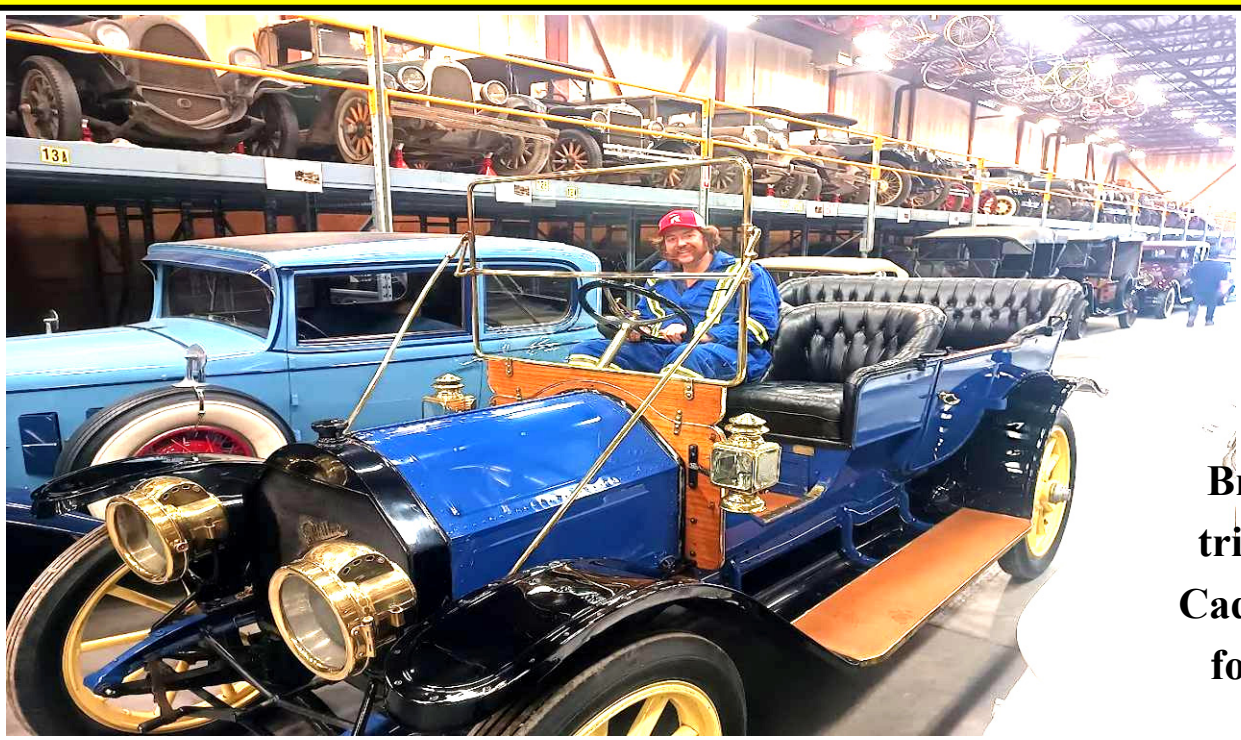


Make It Exhibition
Engraving clock plates

Brenton's Canadian Adventure
Working for the Reynolds Museum

Historic CRB Road Sweeper Donation

BRENTON'S CANADIAN MUSEUM EXPERIANCE



Brenton tries a Cadillac 30 for size

Hello All, *Some of you may have noticed I haven't been around much at the club for the last couple of months. Earlier this year, I applied for a seasonal job at a museum in Canada!*

I flew out of Melbourne back in May, and started work at the Reynolds Alberta Museum in their restoration workshop



I have been working on all sorts of vehicles and equipment. Some quite unique stuff, and quite a lot of stuff that I haven't even seen before. It has been quite an experience being able to work here.

Here is the workshop when I first arrived, as you can see there is a variety of vehicles in there.



One of the unique pieces of the collection is this 1917 Bucyrus Class 24 dragline Which is the worlds oldest dragline, and the last of its kind being a skid and roller mounted unit



Here is a small section of the warehouse, which is set up into quadrants. Automotive, Aircraft, Industrial, and Agriculture sections

A view of the Automotive section .

Umpteen bicycles hanging from the roof

About 40 complete pre WW 2 cars, but, not necessarily running, on the right mezzanine .

On the left displays of components and powertrains;

Mobile vehicles on the ground floor .

Here is a small collection of some of the vehicles I have worked on

International Harvester Reliance (Last running one in the world





Ford Model T depot hack. Last of the series judging by the wire wheels

Buick Electra 225

Looks like just about enough space to turn around. Ed.



Caterpillar D7





Case 110 (110 hp traction engine)

Interesting to compare this North American Traction Engine to the English ones we are used too. Note the Overhung crank steam engine . The boiler would have a wet bottom to the fire box and much thinner plate than we are used to . The most obvious is the light weight wheels with their wide flat rims and round spokes . Rear mounted water tank and in this case a cabin , no doubt dictated by their freezing weather . Almost nothing in common with the English way of doing things but yet it seems to be a successful formula. Ed

Brenton continues

It has been a fun time and great opportunity to work here, I will be doing another article on their Harvest Festival. I will be back down at the club in November, look forward to seeing everyone and telling them stories from the museum here in Canada.

Brenton

Anyway thanks to Brenton for a very interesting article and we look forward to hearing more soon . Ed

Wolsely Engine Feedback

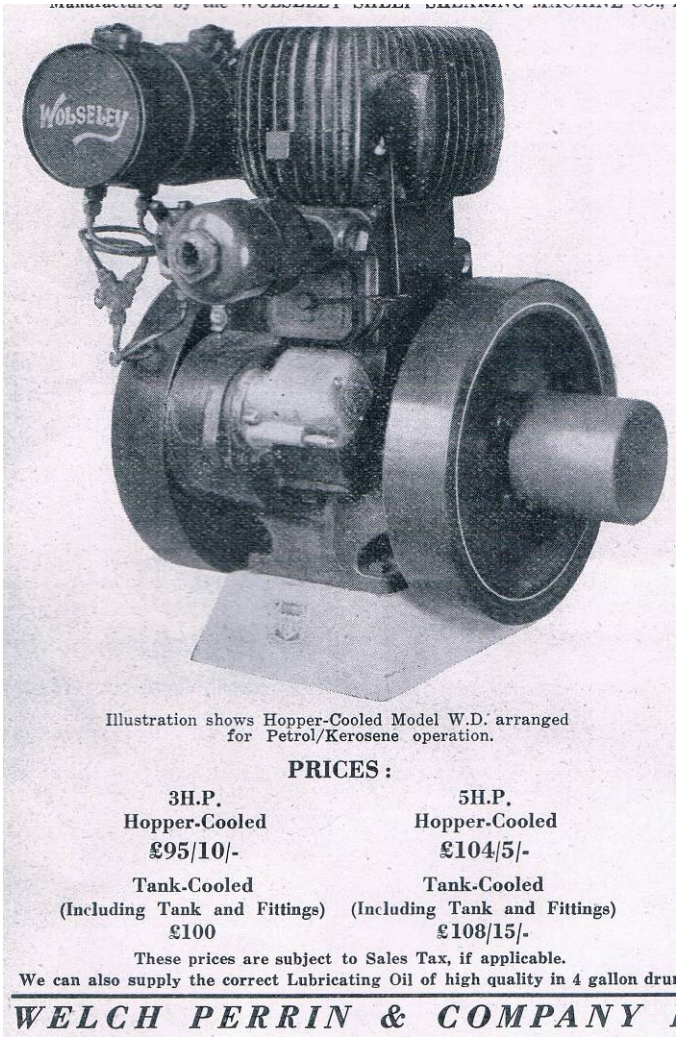
We have had good feedback from the September article on Wolseley stationary engines .

First we had the honour of a Yarra Valley member displaying his Wolseley engine at our Flathead Ford weekend . It was a 3 HP tank cooled kerosene version in very original condition belted up to a small power hacksaw that had it's work cut out slicing off a piece of heavy railway track . Close inspection of the engine shows it to be a tank cooled kerosene engine with the 2 compartment fuel tank and plumbing arrangement for starting on petrol and switching over to kero after a few minutes once the vaporizer gets up to operating temperature .



Next Daryll came up with a copy of some pages from his Welsh Perrin Company Limited Buying Guide for the Primary Producer that advertises this exact engine . Trading from 48 to 56 Queens Bridge street , Melbourne since the early 1900's they were major agents / importers of heavy machinery and implements for the agricultural industry including agents for Clayton and Shuttleworth portable engines . They were taken over and delisted in 1957.

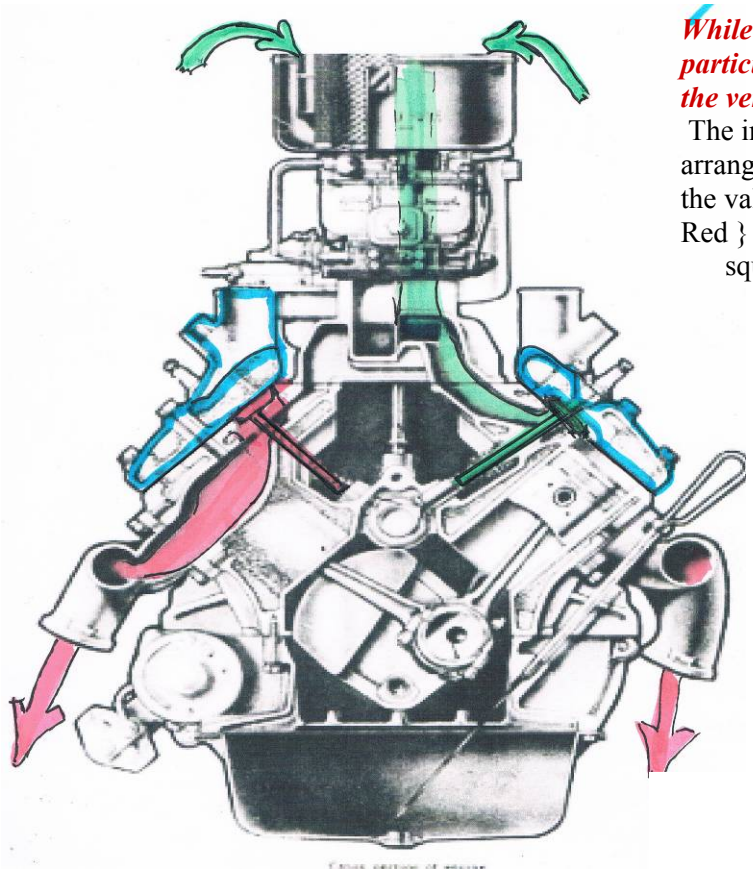
Daryll's pages gives much blurb about how wonderful Wolseley engine are which is enough to make you start wondering! The price listed for the Yarra Valley engine in 1954/5 is **£** 100 With an inflation factor of around 22 this makes the engine about $ 2,200 in today's money . This is about right for a similar quality engine of today . Acknowledgement Daryll Killingsworth





This Annual display of Classic Ford vehicles, put on by a group of Ford Enthusiast clubs ,has become something to look forward to in recent years. Of course having perfect weather and the magnificent surroundings of our National Steam Center is important but I think the secret is the diverse range of Ford vehicles that fall into the Flathead category ensures that there is something to appeal to everyone .

Here is an overview but first I must explain the Flathead nickname . It is type a type of old fashioned engine that has it's intake and exhaust valves located in the engine block beside the cylinder bores in contrast to modern engines that have them located , in the head , above the cylinders . The old design allows the top of the cylinders to be closed off by a simple flat plate containing the spark plugs ,in contrast to the Over Head Valve layout that adds considerable bulk and cost but is better for power , fuel consumption and emissions so has been the way of all but the very cheapest engines of today.



While not exclusive to Ford their Flathead V8 has become particularly iconic by having 2 banks of cylinders at 45 degrees to the vertical ,with all the valves in the center of the Vee .

The inlet passagers (highlighted in Green) , are a good arrangement since they feed straight down from the carburettor to the valves and cylinders. But in the case of the exhaust (coloured Red } to get out of the cylinders the hot gasses must squeeze their way between the cylinders to reach the exhaust manifolds on the out side of the vee. These long flattened passagers add significant restriction to flow which hurts power .

Adding insult to injury not only does this complication add cost to the casting but being in the water jacket adds a lot of extra heat to the cooling system requring an extra large and expensive radiator .

The up side of all this was it allowed the use of simple flat heads to fill the niche for a cheap V8 for the mass market . So we can thank Henry for an affordable V8 as most other , at this time, were Overhead Valve and confined to the luxuary car market .

An Inline 6 cylinder Ford Flathead engine for pickup trucks that we did not get out here . →



All the other Ford automotive engines at that time were in line L4 and L6 cylinder engines with conventional inlet and exhausts making for a simple cost effective range for use in the ubiquitous T model car plus a larger version for the Detroit Fordson tractor . Following these was an updated engine for the A model car now with water pump and conventional distributer but still splash lubrication and cast iron pistons. This also included a similar larger version for tractors. The club has a number of theses engines on display but our visitors where mostly car people so did not seem interested in them .



T model with Brass Headlights and Radiator . By 1917 these had gone to tin due to WW1 priorities.

Dad used to say what time is it when T model Fords overtake ? "Tin past Tin"!

Also you could have any colour you wanted as long as it is black . The story was black was the cheapest paint . In reality it dried several hours quicker so more cars could be made in a day to help meet demand

The next generations of engines was significantly improved adopting pressure lubrication and aluminium pistons similar to those found in the flathead V8 . Four cylinder version appeared in the Ford Ferguson tractor and a 6 cylinder version for pickup trucks if you were not having a V8 but we did not get them out here , despite having similar power . I***n 1938 a down scaled down 1.17 litre version of the 4 cylinder flat head engine was introduced in the UK .*** *Diminutive English Ford Popular and Prefects.*





An overhead view of the various Hot Rod camps representing a range of styles and eras popular over the years At the moment it seems to be louvers!.



Lancia Ford Special .Built in the 1940's in a period of austerity following the war when racing cars were mostly home built from whatever parts were available . This uses a 1939 Ford V8 engine being a readily available source of reliable power .Often surplus military engines from Blitz or Bren gun carriers.

Another approach in the earlier days was to cobble something up from T model Ford parts . These being tough , light and could be found just about any where . An example is the Late Kevyn Brown's model T racer with it's pressure lubrication conversion , 2 speed rear axle , electric starter aluminium pistons and overhead valve cylinder head all built in the spirit of the day . Kevyn was a member of our club often turning up in his Model TT truck .

He was pivotal in getting cars of this era accepted for club rego as despite representing the standard of their day do not always meet modern requirements



The Kevyn Brown T Model sportser . Typical of it's day when doors and front wheel brakes were not considered essentials

Summing up there is no doubt the day was a great success. I think from the general public's point of view the great variety of vehicles on display and the willingness of the owners to enthuse about them was one of the secrets.

For the exhibitor the flathead Ford day was the perfect excuses to get their car out and exchange ideas with like minded people but there must be more to it than that as it seems to be exclusively a Ford thing . Chevrolet, since inception , has always had in line Overhead Valve Engines yet you hardly ever see a Hot Rod with one of their engines . It cannot just be the love of flatheads as all Chrysler engines of that era were in line flatheads with similar power to the V8 s while purring along nicely. These are also conspicuous by there absence .

Part of the Ford appeal must be down to Henry him self , an eccentric , larger than life character that the other manufactures did not have but there still must have been something else . All I can think of is that V8 Burble .

Harley Davidson certainly appreciated this as in later years they attempted to patented it but were opposed by other Vee twin motor bike manufactures such as Yamaha and Honda arguing that all 45 degree Vee engines with a single crankpin for each pair of cylinder naturally produce that firing rhythm which is obviously pleasing to the human ear for some subconscious reason . Maybe mimicking a heart beat .

And to think I got rid of the Holden V8 burble by making the engine breath properly but it paid off in the long run by extending the engines production run by another 12 years.

Warwick

V8 Burble

Tony Wilde brought along his 1937 flathead Ford set up on a test stand so he could rev it up at irregular intervals to the enjoyment of the crowd who always came galloping across when they heard the burble

That set me thinking what the attraction is and I put it down to that quintasensual (the most perfect example of it's class) V8 burble that everyone enjoys . My Bren gun carrier has the same effect with it's open exhaust and so it cannot be put down to its looks unlike some of the hot rods . Actually I am sure it is the poorly functioning inlet and exhaust ports of certain Vee engines whose unequal lengths and connections allow some cylinders to rob the inlet charge from other cylinders producing a rythmisnic variation in firing intensity .



Obvious in this picture is the quirky exhaust with only 3 outlets for 4 cylinders passing from squeezing between cylinders

This became obvious to me after we redesigned the Holden V8's manifolds and cylinder heads to ensure all cylinders got equal amounts of air and fuel as part of the change to Electronic Fuel Injection.

The power , emissions and fuel consumption improved put the V8 burble disappeared ! Warwick

Orchard Sprayer

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Acquisition of this orchard irrigation engine and pump was reported in Steam Supreme issue 665 of June 2026 . Not a lot was known about it's small hp Tangye engine . Knowing MSTEC friend Carl Hopkins bought a somewhat similar one from the Nev Morris's clearing sale and was interested I asked him around . Carl took lots of measurement and wrote down any numbers he could find that will help identify the engine . On the face of it our speculation that the engine is no later than mid 1920's and has been converted in more recent times to magneto ignition and petrol carburettor seems to fit . Also our speculation that in later days it was set up on an old chassis with car wheels and Metters pressure pump is consistent with Carls observations.

If any more definite info comes to light he will certainly fill us in . In the mean time he would love to see ours running . So would we .! Warwick



Around the Club

CRB Road Sweeper

The latest arrival at our Museum is an ex CRB Road Sweeper which turns out to be quite a historic piece of machinery .



3/4 view of the Road Sweeper on it's arrival

Donated to us by the Caribbean Gardens it has been surplus to their requirement for quite a long time now as they are no longer open to the public. It 's background can be traced to the days between 1913 and 1983 when all the road design , maintenance and construction in Victoria was carried out by the State Government's Country Roads Board department. The CRB became a large entity allowing them to build up an organization with highly skilled staff and a large fleet of specialized road construction machinery . It did not last though as the John Cain Government began a systematic restructuring with administration being handled by the new Road Traffic Authority, which eventually morphed into Vic Roads . Road construction was soon privatized off and the extensive fleet of equipment disposed off to contractors or scrappies



The sweeper is one of these but interestingly we have quite a bit of their redundant equipment including various scarifiers, the "People Mover" , Industrial Fordson tractor Sooty , Wehr motor grader and the Fordson cable loader even the living van behind the Blacksmith shed . Their steam roller is in other hands being more collectable than realized.

Peter Morris did his time with the CRB and has a soft spot for all this machinery and has to be given the credit for saving much of this along with his Chamberlain tractor in shed 7 . Of course with the offer of the sweeper Peter wasted no time shooting around to the Gardens with his low loader.

← ***Closer look at the sweeper shows the rotating wire brush mounted amidships with drive by a series of chains , shafts and universal joint allowing it to be raised and angled similar to a grader blade .***



There is a platform at the back for the operator with controls that can be operated from either side →

← ***The drawbar , front wheels and turntable bear an uncanny resemblance to the people movers suggesting the design came from the same drawing office.***



We hope more info will come to light , it looks custom made with a welded up frame , light truck wheels and a rotary steel brush underneath driven from it's back wheels by a light tractor gearbox/final drive. Peter remembers it was often towed by road to the various jobs in country Victoria. The Makers plate declares MACRO ENGINNERING MELBOURNE Pty Ltd . Nothing in Melbourne come up on my internet and just a modern one from Italy





MAKE IT EXHIBITION

By any standard the Melbourne Society of Model and Experimental Engineers 2026 Exhibition , to celebrate the clubs 100th year since inauguration , was a great success. Adding to it's appeal was that it was not confined to just working models of miniature steam engines but broadened to include anything anyone may make as a hobby .

Here are a smattering of what was on display .



100 year old Douglas motorbike. Some of you might have heard about it . Not a model but due to worn and missing parts much of it has had to be remade Graham Hobbs photo

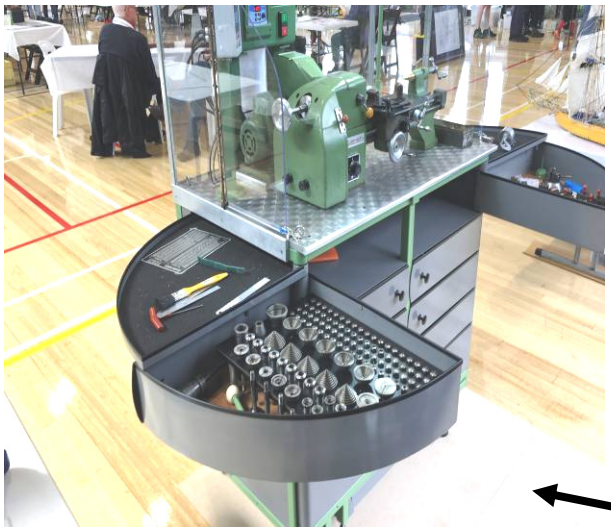


Waverly spinners and weavers where back again by popular demand



A young family enjoying the demonstration of a model beam engine running on compressed air .





Not sure what you would call it but the detail , skill and imagination involved in making this model has to be admired

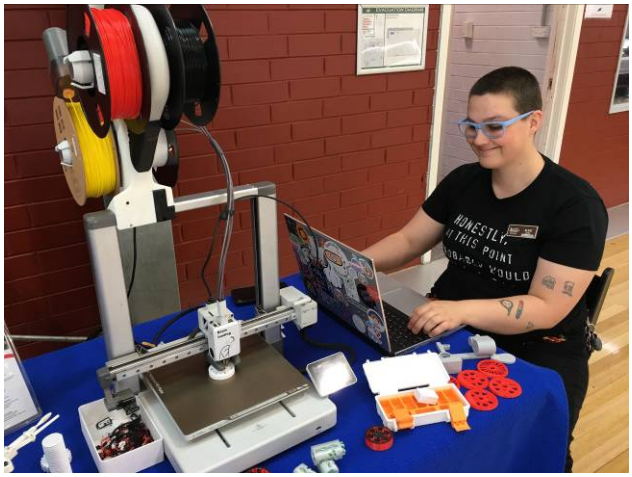
Workshop equipment was also featured. ***In this case this superb tool cabinet with twin rows of swinging draws was made by Gary Sneesby for his factory***



Guest of Honour for the 2 days was Neil Wyatt Editor of the prestigious English Model Engineer & Workshop magazine .

Here he is fascinated by Warwicks 1/10 scale model of the worlds first commercial ice making machine invented in Geelong , now 170 years ago. Built from pictures in Roy Lang's book it was demonstrated a number of times making tiny pieces of real ice .

Manning the Geelong clubs refrigeration display over the 2 days of the exhibition was Graham Hobbs , Stuart Tankard and Stephen Lacombe , a display not seen before in Melbourne .



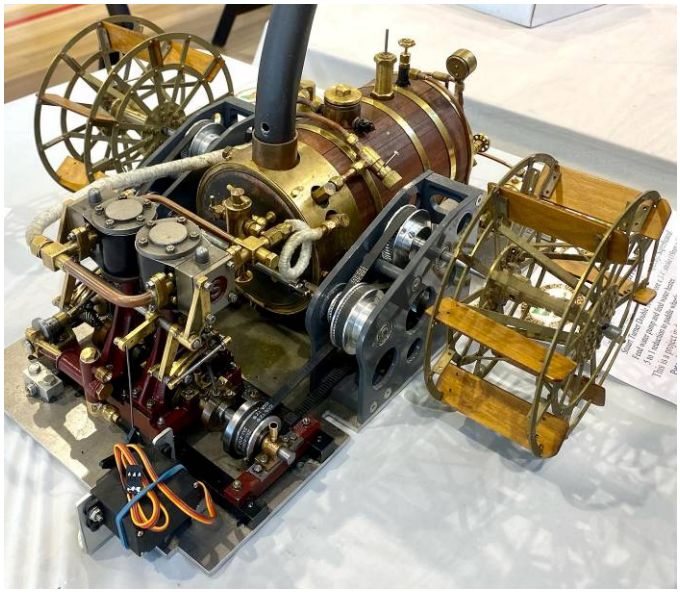
MSTEC member Alice Jacka brought along her 3-D printer .

It fascinated visitors with her working set of epicyclic herring bone gears that once made cannot be disassembled yet rotate perfectly without binding .



Superb 5 inch gauge model of a British A 4 steam loco .had everyone enthusing being identical to the legendary Mallard that officially recorded 126 MPH for 3 seconds going down a slight hill.

Not at record of maximum speed capability in many peoples eyes, as that is the average over a stipulated distance on the level in both directions . Never the less an amazing achievement !



Paddle Steamer power plant

Mostly assembled from commercially available parts so I expect it is to power a fully working radio controlled model .

Meccano is always popular



Railway Report

12" Gauge Railway – MSTEC S

19-Oct-2026

Steam loco No.43, Clive. The boiler was inspected by Gavin from CMIS. His summary of observations was:

He is really happy with the boiler condition.
On the crown sheet the metal is a good colour, there is no pitting and there is some scale, but not an issue.
The tubes are good.
The front corners of the firebox are good.

I am thankful for the diligent team who together light up, operate and shut down the boiler each Run Day ensuring it is stored dry. They then follow up with cleaning the tubes, firebox, grate and ashpan.



Andrew and Hamish with Clive all back together and in steam following the boiler inspection and all ready for the Oct RunDay .

Steam loco fuel There is a large holding of the saw mill off-cuts. These are being consumed gradually. More of the wrist diameter branches are needed. Peter Morris has been alerted and will look out for them around the grounds.

Rob Worland, Railway Manager

SS SS SS SS SS SS SS SS SS

Steam Shovel Report

Laurie Hall has been busy making new hinges for the boiler access door at the rear . More of the door can be salvaged than first though but new hinges had to be fabricated with the help of a jig to hold the pieces in position while welding

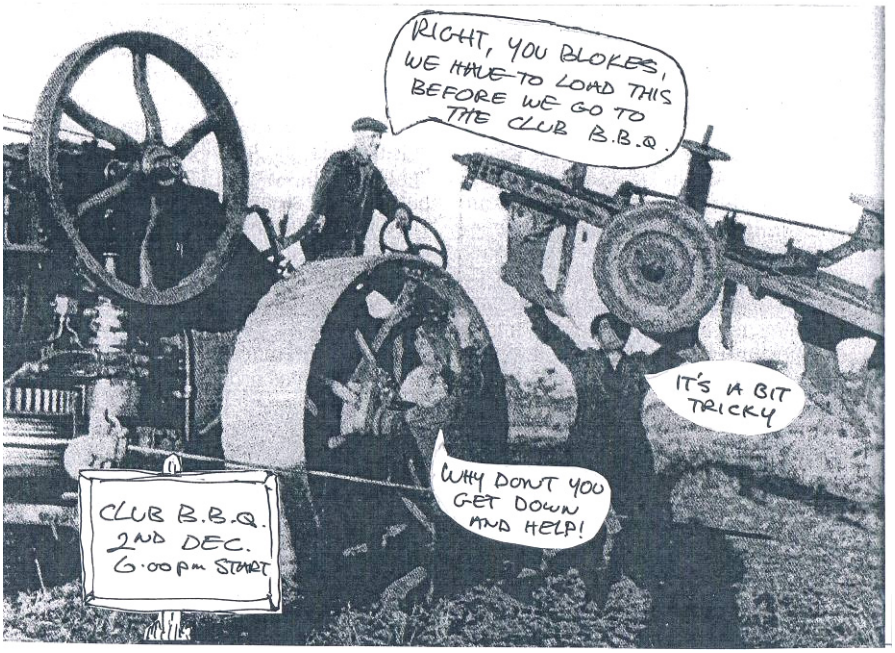




Andrew Greaves has been cleaning up and reseating the boiler valves and fitting , and in the meantime reorganizing the West corner of shed 7 with shelves and benches to have an area to work on and stores parts that are ready to go back on.

By the way if you have the need for repairs or maintenance around your house that is getting too much for you Club member Andrew could be just the person to call on 0408 763 163

Daryll has been at it again with one of his famous cartoons announcing the Steam Clubs Xmas BBQ on the 2 DEC before the Wednesday Social Meeting



COMING EVENTS

Social Meeting **Wednesday 4 November**
Monash Rail Challenge Report

Regular Events : -

MSTEC Social meetings, 8 pm Scoresby. First Wednesday of each month .
Museum open every **Thursday, Saturday** and **Sunday** . Miniature Train running every Sunday 11 am to 4 pm
Museum Machinery in action. Last Sunday of each month **Except end of year December.**