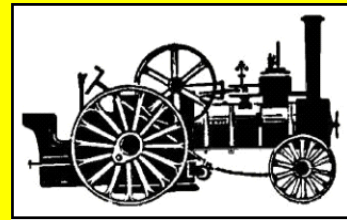
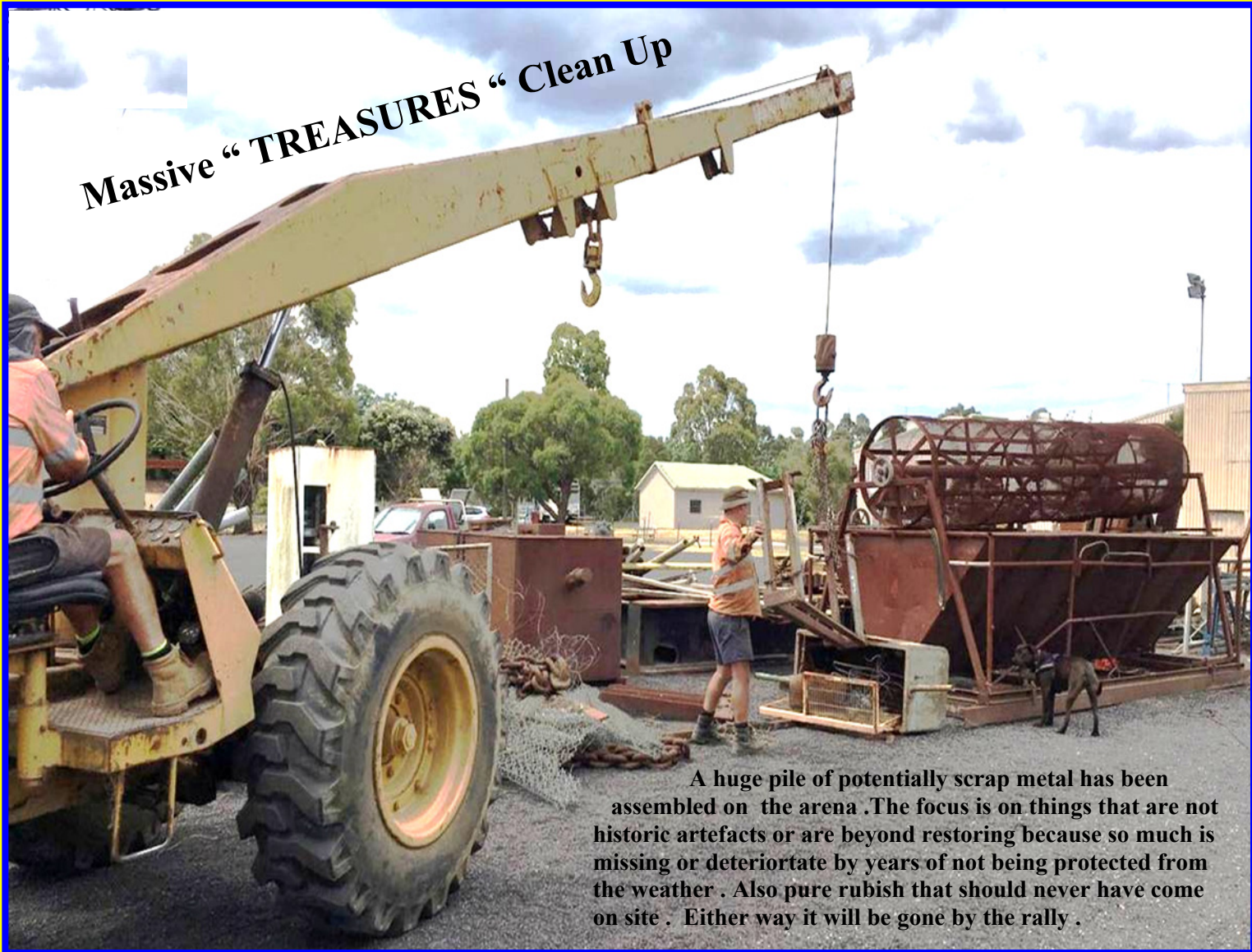


A Wisp of STEAM SUPREME

Issue 660 January 2026



Extracts from the Melbourne Steam Traction Engine Club's Newsletter



Massive "TREASURES" "Clean Up"

A huge pile of potentially scrap metal has been assembled on the arena. The focus is on things that are not historic artefacts or are beyond restoring because so much is missing or deteriorate by years of not being protected from the weather. Also pure rubbish that should never have come on site. Either way it will be gone by the rally.

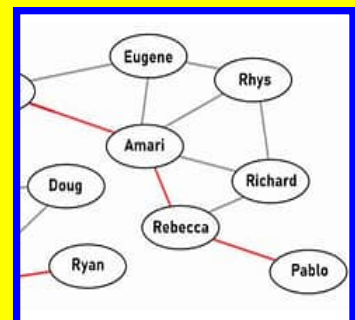


MSTEC Exhibits at Ambleside Heritage Festival

Fascinate the public



Steaming Tobacco
The right and wrong way



Networking
benefits everyone

Fern Tree Gully News
MSTEC's contribution to the community

S.T.E.A.M.

Our MSTEC National Steam Center did very well in the December 2025 issue of the Ferntree Gully News .

This is a free, volunteer produced, local community newspaper. It's aim is to strengthen the community by reporting the stories of people and groups in and around FTG.



Our first mention in the paper was of our immanent machinery display at the forthcoming Ambleside Heritage day .

← *The younger generation getting their introduction to steam at Ambleside thanks to MSTEC Aaron pic (see separate report).*

But what really caught member John Meade's eye was the full page article where Francois Malherbe, Associate Professor of Chemistry and Environmental Sciences at Swinburne University of Technology , takes a look our National Steam Center and Puffing Billy from a perspective of what these organizations bring to the FTG community in the greater sense .

In the "Empowering Education" section he devotes a full page to what he calls S.T.E.A.M. as in - Science – Technology – Engineering- Arts – Mathematics , where our contributions to the community is much greater than just those of a traditional museum . It is worth going in to a bit of detail about what he sees as our true contribution because we are a bit too close to see the big picture ourselves.

To this end here is a précis of what he sees us as all about . Ponder over it and think how we can turn it into an opportunity !

A Living Museum

He declares we are much more than the static displays of a traditional museum but have become an astonishing collection of over 800 working exhibits, which has made us a dynamic living showcase of industrial power and mechanical ingenuity. These aren't silent artefacts but take the visitor on a journey into the heart of the Industrial Revolution that once powered Australia's farms and early factories . For example the bark of a steam engines exhaust and clang of the blacksmith hammer greatly enhances the multi sensory experience you do not always get in other places.

The true highlight of "the Center" is its calendar of special events most notably the annual SteamFest were the grounds are transformed into a vibrant spectacle of the past . Visitors witness the precise artistry and complex science necessary to harness the power of steam that lead to the modern industrial world of transport and manufacturing we rely on today . (Now he has mentioned it these special events are now extending to many of our monthly RunDays when we host visiting organizations such as Model Engineers , Hand Tools, Car clubs , Earth Moving and Busses which really rake in our visitors Ed)

Future Innovators

Associate Professor Malherbe sees institutions like our Steam Center and Puffing Billy as a vital hub inspiring the next generation of thinkers , makers and creators by fostering the engagement of younger members of the community to become involved in these activities. (A good example is the relationship we have established with the HMAS Navy Training Base when small groups of recruits regularly come down for detailed explanation of some unique aspects of some of our machines.)



Ian Malcolm's starting demonstration of our example of the worlds first commercial Diesel engine has the latest group of Navy recruits transfixed . Len Brighton photo..

Cont →

The Acronym STEAM , in Ferntree Gully , when you take the above into account then becomes :-

- S steam as in National Steam Center and Puffing Billy .
- T technology in restoring , and operating gigantic historic machines Willans Lyttelton Bigfoot & locomotives
- E engineering understanding the construction and thermodynamic cycles employed
- A art in the form of function and industrial design aesthetics .

The stylish design of our Hercus pillar drill can be traced back to Hercus a 100 year old South Australian company . →
This old style with its flowing curves is easy on the eyes and better equipped to withstand forces from varying directions as you get in nature particularly in trees.
I guess these flowing lines became too hard to draw as draughtsmen with there straight edges and squares started to dominate. Look for a comeback with CAD and 3-D printing !

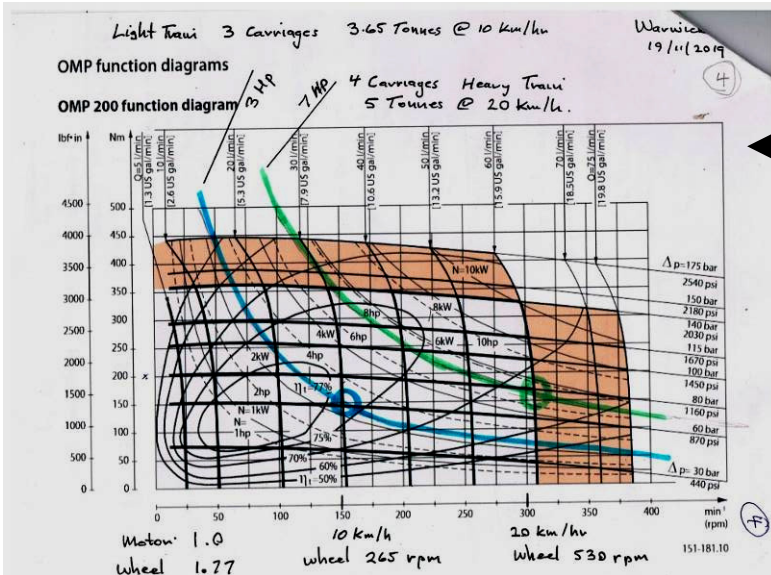


M mathematics , not everyone in our club realizes the extent it has been applied to projects around the club by our various qualified Engineers because it can get a bit too technical .

Examples include Willans and Sugar Mill engine foundations , boiler installation and even upgrades to provision of services to buildings around our grounds . , Another big one was drive train selection and optimization of our Diesel /Hydraulic loco REG .

This involved establishing the power required to over come rolling resistance , drag on curves , provide for acceleration and climb grades at various speeds and of course train mass.

← *Once these were calculated the size of engine , gear ratios , hydraulic components and traction to do the job was specified . (Similar to what was done at Holden's) . Anyone who has driven Reg will attest it is a very sweet loco to drive . Proof of the power of mathematics !*



Continued. Lets have some fun and put it to test first with **Industrialists** .Now if you have met me that makes :- You → Warwick → Grahame → Jack → Henry Ford which is only 4 Degrees of Separation and goodness knows who Henry knew but he was good friends with Thomas Edison and Harvey Firestone.! And so the chain grows further back .

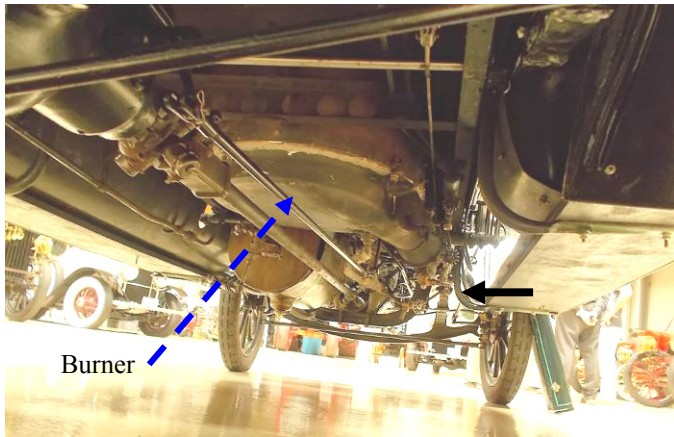
Another example that is fun to ponder is **Scoundrels**. You → Warwick → Model Engineer Noel → Noel's German Friend → Hitler which is 4 degrees back from you . Noels friend was in the Hitler youth and remembers Hitler shaking his hand after a sports victory . The mind boggles when you think of the 100's of dreadful characters Hitler was associated with !

As for High Places there is You → Warwick → My Father → Lady Blamey → General Macarthur → President Roosevelt (5 degrees) Dad met Lady Blamey in the war , she was the wife of General Blamey , Australia's Military leader serving under General Douglas Macarthur Supreme Commander of the Seventh fleet who of course reported to the President of the USA .

Dad (number 5) showing Lady Blamey's party around his Australian Red Cross's distribution center on Bougainville March 1945 pic Australia War Museum



Networking is used widely when looking for resources to get things done and is a form of association we may not have recognized . It is based on who knows someone who might know how or where it can be done and as such is a particularly strong tool for a club with their diverse range of contacts and great variety of skill sets needed .



A striking example was a few years ago when Phil Randall and myself were planning a trip to the USA and wanted to get a private viewing of TV celebrity Jay Leno's White steam car collection . Thanks to MSTEC member Adrian Anderson and his contacts , who were able to pull some strings. It only took 4 steps to pull the visit off ! Incredibly it only took 1 more step to get some vital burner parts from the only person in the world still making them , on the Isle of Man of all places How good is that ?

← Underside of Jay leno's White steam car showing burner and plumbing . Warwick pic

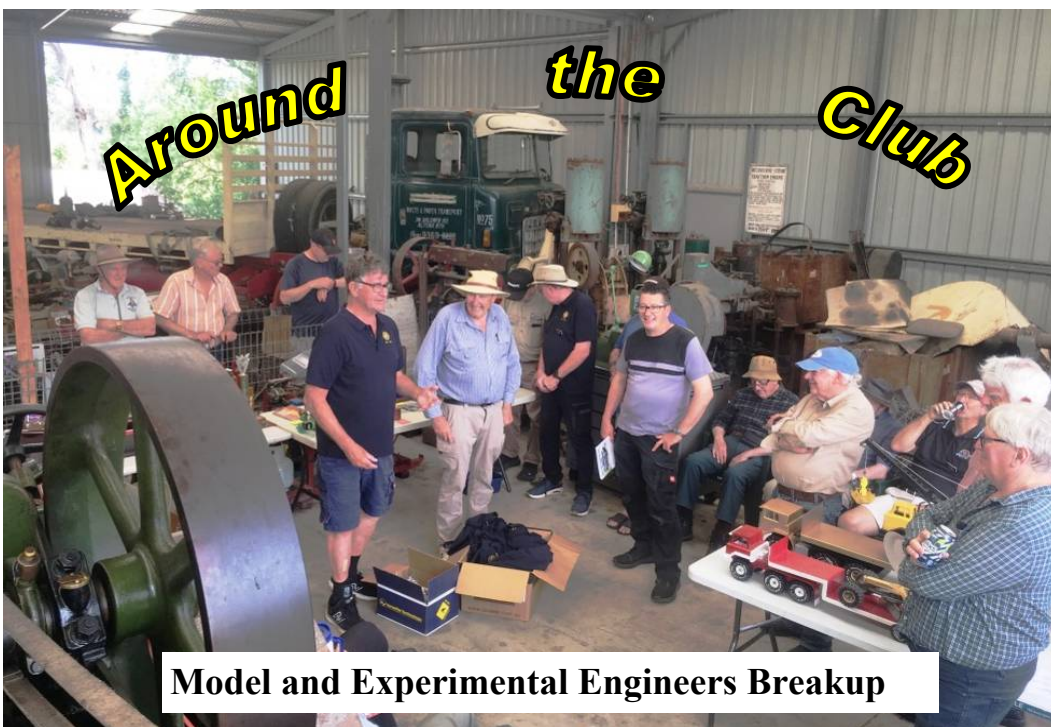
So If you are down at the club and not much is going on give the 6 Degrees of Association a try and see what you come up with . Just remember it works with bad people as well . Thanks to Terry Duggan

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For the last 40 years the Melbourne Model and Experimental Engineers have often held their Christmas break up at MSTEC's National Steam Center . This year it was set up over the other side of the grounds in shed 9 due to the unavailability of the usual shed 6 .

← Gerry Dean, in black shorts and Tee shirt , holding the floor as usual with demonstrations of his large scale working model of a WW2 German Tiger tank .

So impressed was Anthony Ick (blue base ball cap) , that he invited Gerry to bring it to the Vintage Military Vehicle Corp Xmas BBQ at John Belfields museum the next day . It certainly blew them away and shows just how our clubs interact for mutual benefit . Warwick pic → cont





Warwick brought along his 1/4 sized Atkinson steam wagon .

Robert Jones brought along his mid 1920's Rover car .

Although not a model every one was very interested in it and gave plenty of advice on the possibility of getting replacement cylinder heads cast using the latest 3 -D techniques .



At first some may think what are MSTEC member doing at an ME function ? Well take life member Reg Murton for example , who we were pleased to see could come . He has been associated with both clubs for at least 60 years including being one of MSTEC's longest serving Presidents while , at the same time, being able to put on his Model Engineers hat and take a major role in organizing a number of their Exhibitions during the 70 's & 80's. Also there was our current Committee member Robert Jones who was M.E. President for many years . Amongst those attending was Peter Jackman , Darryl Killingsworth and Warwick Bryce who actually joined ME before we got our Scoresby grounds. That said I recon there are about 20 who are current members of both clubs. It is great to reflect how we have a tradition of Networking and supporting each other to mutual benefit . Recent examples are the M.E. display at our rallies. They go out of their way to arrange to be here for the full 3 days as most exhibitors only do 2 . On the other hand we like to be able to take a couple of full sized engines to their shows when ever we can . A win win !

As for exhibitions I hear this is the Melbourne ME's 100 th year and a Special Exhibition is planned later on in the year . Lets see what we can do for them ?

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AMBLESIDE HERITAGE Festival

Some pictures s from the Club display at Ambleside Park Homestead in Ferntree gully 29th November.



The Britannia portable



The display was led by Andrew Fairweather and Andrew McCoy.

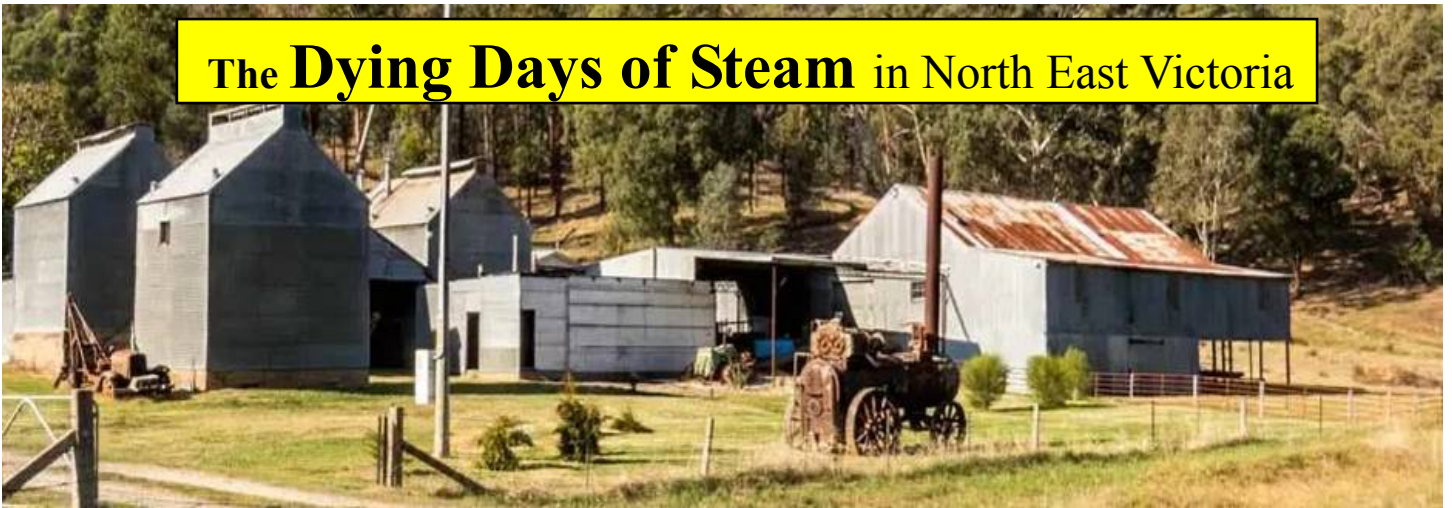


The recently donated Ray Barrow McDonald oil engine ran well .



The display included our KL Bulldog tractor, and ex Don Whalley International engine,

The Dying Days of Steam in North East Victoria



Portable Engine for steaming “the weed “ still outside tobacco kilns at Porepunkah. Note motion removed Internet picture.

I came across a very accurate description of one of the last agricultural uses of steam in North East Victoria . Although it appeared as fiction in a Christmas novel , having grown up in this area I can personally relate to these goings on as being far more than just imagination.

Although not a pleasant story I believe it is worth recounting as it graphically portrays the immense power of steam and the need to handle it properly . On the other hand it describes in considerable detail the final use many of these mobile steam engines were put to in the Ovens and King Valleys . This ensured their survival long after most ended up as scrap .

It was reported to the Coroner that a 28 year old immigrant was blown to pieces by an exploding 44 gallon drum being used to make steam for curing of tobacco at Buffalo River near Myrtleford . But first a bit of background on the process .

Steam is required to humidify the tobacco in the kiln to make it pliable enough for handling . The curing process requires the just picked green tobacco leaves to be tied in bunches with twine and hung over sticks about 25 mm square and 1 m long . (I used to sometimes help mum with this after school for pocket money) .

These sticks are then hung on racks in the kiln . These are square corrugated iron clad buildings about 2 stories high. in which hot air , from wood or oil burners is circulated through ducts on the floor for about 5 days to effect the curing process .

See opening photo a few still survive along the Myrtleford and Whitfield roads

The leaves are the now golden and powerfully aromatic but too dry and brittle to handle . *Cured leaves just removed from the kiln and still on the sticks* →

To avoid disintegration when unloading the kiln water is heated in a drum outside the kiln and the resulting steam distributed through a pipe into the kiln moistening the tobacco .

According to the story the drum with water in it was set up outside the kiln . A fire was then lit in the trench below it , more wood was placed on the fire then the worker returned to his house 60 or 70 yards away to get a cigarette . He hears a loud explosion and find 2 co workers badly burned and scolded. Rushing towards the scene the farm owner finds a mutilated corpse 37 paces away. On arrival of the Police the bottom of the drum , which has blown off is found 30 yards from the kiln. The rest of the drum is intact but buckled but 44 yard away in the opposite direction. 2 days later the 3/4 “ elbow and a short piece of pipe is found 150 yards from the kiln .



← *Internet picture of a drum that has suffered a similar fate .*

Standard test pressure is 250 kPa but it would be interesting to know the actual burst pressure, probaly much more ?

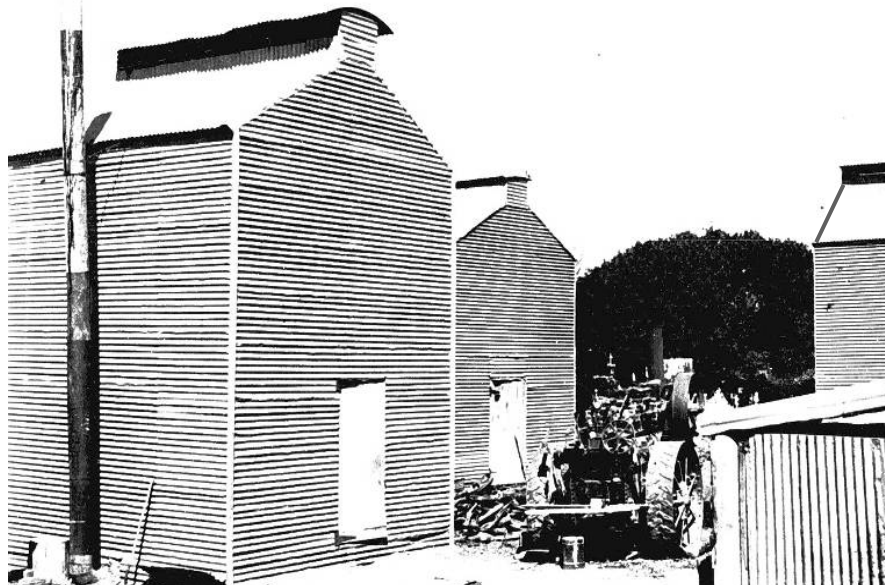
The body of the deceased , is decapitated with a portion of the head found 3 feet from it , right arm 10 feet and left leg about 30 feet . (This gruesome info has been included as a warning of the explosive power of steam Ed) .

The Boiler Inspector visits the site and sees a similar 44 gallon drum to the one that caused the explosion in position at another kiln . He says drums are not built to carry pressure and are highly dangerous when used as a pressure vessel .

The farm owner says the drum was not his piece of equipment but that of the share farmer and similar drums have been used for 20 years and he has never heard any such drums giving any trouble .

In real life I am sure the truth would have been covered up just as in this story ! Ed.

Actually in the story the farmer is telling lies as in reality there was numerous explosions in the districts . I grew up in the King Valley and one exploded on the tobacco farm across the road not more than 1 km from our house and blew the whole side and 1/2 the roof off the adjacent tobacco kiln , fortunately there were no injuries this time . Ed



This story is still relevant to day . First it serves to highlight the power of steam and particularly the danger of vessels not specifically designed to be used as boilers.

The second is , the crackdown on using 44 gallon drums created a great demand for retired portable steam engines for steaming tobacco and soil sterilization .

← *A traction engine nestling between the kilns near Gunbower on the Murray . The cleats on the wheels instead of strakes ,wide flywheel and rear steering platform suggest an American engine. Note the pile of fire wood Internet pic*



The ban on drums was surely responsible for many engines going to tobacco growers rather than the scrappy which saved them long enough to enter the preservation movement . One give away is that the motion and flywheel is often missing since it was no longer required.

Andrew Fairweather's Marshall portable recently arrived at MSTEC Steam Center from the Ovens Valley . Warwick pic

Acknowledgement The Immigrants by Moreno Giovannoni . In his novel the victim of the accident that occurred on 17 Feb 1954 was Lugi Battistig if someone wants to investigate.

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Steam Shovel

↓ Robert Jones folding and shearing the end wall sheets at his Bayswater factory helped by Adrian Anderson



Sheets are progressively going on . ↓

The overlap of the sheets are being arranged so the back wall can be slid out holus-bolus to put the boiler in later when it is ready .



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COMING EVENTS

Social Meeting
Wednesday 7 January

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.**