

The MICROMETER

AUCKLAND SOCIETY OF MODEL ENGINEERS INCORPORATED

PO Box 14570, Panmure, Auckland 1072, NEW ZEALAND

Club House: Peterson Reserve, off Peterson Road, Mt Wellington,
Auckland 1060

Number 654

March
2020

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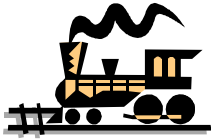
REGISTERED NEW ZEALAND PUBLICATION

Important Notice

DUE TO THE VERY DRY CONDITIONS AT PRESENT
THERE IS A TOTAL FIRE BAN IN PLACE AROUND AUCKLAND.
THE ASME COMMITTEE ADVISES THAT NO STEAM LOCOMOTIVES
ARE ALLOWED TO OPERATE AT OUR TRACK UNTIL WE HAVE HAD
SUFFICIENT RAIN AND IT IS SAFE TO ALLOW THE STEAM LOCOMOTIVES
TO RETURN TO NORMAL OPERATION.

The good news is we still have electric locomotives operating on Sundays from 1 pm – 4 pm.

Greville Wills
General Manager & Safety Convener



Train Roster

	<u>Date</u>	<u>Electric Driver</u>	<u>Electric Driver</u>	<u>Steam Driver</u>	<u>Train Controller</u>	<u>Station / Guard</u>	<u>Station / Guard</u>	
11:00am	1-Mar-20	M Hollis	D Housley	Voluntary	<u>P Dowdeswell</u>	R Crook*	M Luxton	
1:00pm	1-Mar-20	J Lankow	M Plant	Voluntary	<u>T Lawrence</u>	B Matchett*	D Vaughan	
	8-Mar-20	M Moore	R Reichardt	Voluntary	<u>S Meikle</u>	K Ryan*	M Vickers	
	15-Mar-20	A Shirley	P Woodford	Voluntary	<u>T Robinson</u>	R Shearer*	D Beecher	
	22-Mar-20	I Ashley	G Beazley	Voluntary	<u>G Anderson</u>	R Souter*	R Stratton	
	29-Mar-20	M Granger	M Hollis	Voluntary	<u>D Russell</u>	P Tomkies*	A Stratton	
	5-Apr-20	D Housley	J Lankow	Voluntary	<u>G Wills</u>	D Wilson*	R Shearer	
	12-Apr-20	M Moore	R Reichardt	Voluntary	<u>B Aickin</u>	M Vickers*	S Wilson	
	19-Apr-20	A Shirley	P Woodford	Voluntary	<u>P Dowdeswell</u>	R Crook*	D Beecher	
	26-Apr-20	I Ashley	A Bailey	Voluntary	<u>T Lawrence</u>	M Luxton*	B Matchett	
Note: There is a double roster for the Panmure Basin Fun Day on the 1st March								
11:00am to 2:00pm and 1:00pm to 4:00pm.								
(This gives an over-lap of 1 hour so members can have a lunch break)								

Bold and Underlined Name = **Train Controller**, i.e. the person in overall control of all operations for the day

Bold with Asterisk* Name = **Stationmaster**, i.e. the person responsible for activities in the station area and for the day's takings.

Please Note:

If for some reason you are unable to attend on your rostered date, you are respectfully reminded that it is **your** responsibility to find a replacement member to fill the gap – please don't let the rest of the team for the day be left short-handed. **Note: the Train Controllers for both affected days must be informed of the swap in advance. It is the responsibility of the person who initiated the swap to do this.**

The details of the swap should be noted in the Run Book.

Also, please ensure the member you arrange a swap with is one who is rostered to undertake the same role to ensure we always have members with the appropriate training and experience on the day.

MARCH CALENDAR

Sunday March 1st - **Panmure Basin Fun Day**, from 11am. Assuming the weather is fine, there will be lots of passengers riding our railway, and volunteers will be required to assist with "crowd control" and other duties. Please come if you can. Lunch will be provided.

Tuesday March 3rd, 7.30pm - General Meeting, ASME clubrooms

Tuesday March 10th, 7.30pm - Workshop Night, ASME clubrooms

Tuesday March 17th, 7.30pm - Committee Meeting, ASME clubrooms

Saturday/Sunday March 28/29 - TSGR Open Weekend. See next page for details.

President's Report

February 2020

With the second month coming rapidly to an end it is a good chance to reflect on the start to the year and to look ahead. The General Meeting on 4th February was well attended and it was great to see all in good health, including David Black and Michael Cryns. We were treated to a very interesting and thought provoking talk by Jess Singh, a volunteer from House of Science, recipients of our 2019 \$1000.00 donation. She outlined the aims and setup of the organisation and demonstrated one of the kits they provide to schools, and discussed a few of the 30 or so they have available.

The returns from Sunday Running have been promising, with the guys being busy most of the time. The Panmure Basin Fun Day is coming up on the 1st March and we will have 2 crews rostered on as usual, but extra volunteers are always welcome. At this stage we have imposed a steamer ban due to the extremely dry conditions, but the committee will be keeping a close eye on the situation and if we can run steamers on the day we certainly will.

Thank you to those members who have promised to prepare items for the entertainment for the GM's, but we have plenty of opportunity for others who have done or come across items they wish to share - feel free to approach any of the committee for advice or comment.

I'll see you at the GM on 3rd March if not before, and good health and good modelling to you all,

Mike Moore.



TSGR OPEN WEEKEND 28/29 March 2020

Fellow enthusiasts:

Please be aware that the Thames Small Gauge Railway Society is having their annual OPEN WEEKEND over the period 28/29 March 2020.

We invite fellow enthusiasts and club members with an interest in small gauge railways to come along to the open weekend, with or without a locomotive.....

For those with locomotives wishing to run on our picturesque seaside railway, please enquire with Vice President (Operations), Ken Nation mariannenation@gmail.com for the detail.

Russell Skeet

Secretary

Thames Small Gauge Railway Society



Horologist Michael Cryns rose to the occasion when he was asked to fix the Civic Theatre clock.

Photo / Michael Craig

Now the time is right

The Civic Theatre clock in central Auckland has been telling the time for nearly a century, but in December local horologist Michael Cryns noticed it was right only twice a day.

He alerted the authorities – and was given the job of fixing it himself.

That's not too big a problem for Cryns, who has been the go-to man for big clocks since he fixed the Auckland Art Gallery chimes back in 1988.

Cryns trained as a mechanical engineer on power stations, but had to

give it up for health reasons. He switched to fixing clocks 35 years ago.

His big-clock resume includes the Auckland Town Hall, the Royal Sun Alliance and Whitcoulls clocks on Queen St and the town clock for Cambridge in the Waikato.

The Civic clock is an electric French-made Brillet, installed in 1928 when the theatre was built.

Auckland's salt air gradually ate into the aluminium hands which jammed up in December.

Cryns removed them two weeks ago and had them cleaned and

recoated before reattaching the 5kg pieces yesterday from a platform suspended above Queen St.

"I've installed oiling points on the inside of the clock, so it can be maintained every year," he told the *Herald*. "The scaffolding was the most expensive part of the job."

He's training another big-clock specialist, who will take over when he retires, because he admits to slowing down a bit.

"I get paid for this work," he said, "but I do put in a few free hours."

– Alex Robertson

This article appeared in The New Zealand Herald on January 30th 2020.

It shows ASME member and clock fixer Michael Cryns bearing the hands from the clock in Auckland's Civic Theatre, which he removed for repair after he noticed that the clock "was right only twice a day". It would seem like a minor task for Michael after the effort he put into the Art Gallery clock a few years ago.

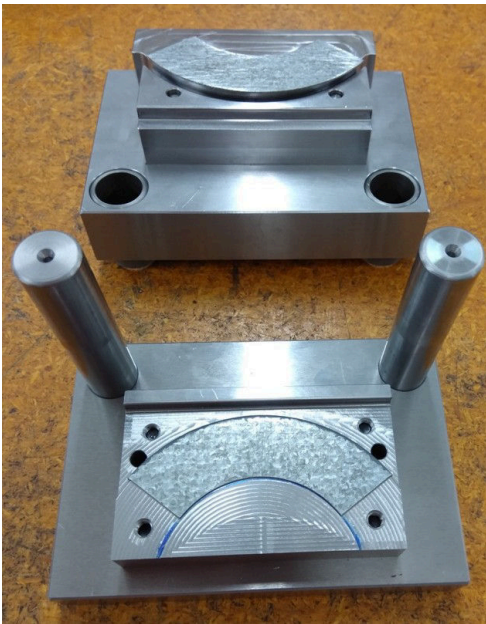
(I don't know what the time was when the photo was taken (probably not "ten past ten"), but I note that the intersection behind him seems mysteriously empty of both motor vehicles and pedestrians!)

Bits and Pieces, 4th February 2020

Presented by Greg Burrows, photos by Grant Anderson and Greville Wills,

with report by Grant Anderson

Mike Jack had a marvelous looking press tool he had made, simply to put a curve on the upper side of the light plates which will hold the lead weight to balance his BR Standard Class 3 loco wheels. Mike is making a number of kits for his overseas customers, so this tool was required to cut work in the longer term production. Made from a variety of materials (gauge plate, mild steel, 4140 and with cast iron bushes) and fitted with heavy springs (140kg) to hold the plate in place during pressing, this tool was a work of art in its own right. The fit of the two halves slid on the bushes with a very close tolerance.



He also had a sample wheel casting (sans tyre) so we could see where the plates will fit – one on each side. He has decided to secure the two plates by special rivet head screws made in male/female sections. Molten lead will finally be poured between the plates to balance the wheels.

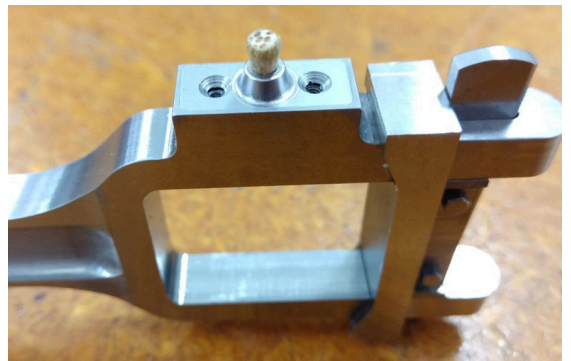


Mike also had some highly detailed rods (eccentric strap type) for a good UK customer – he had gone the extra mile to include proper oiling cavities, lids and even the cork plug!

(Pictures by Grant Anderson)



Also on show was a non-ferrous casting of a steam dome made from a low resolution 3D print mould as a trial. Mike explained this meant that each layer of print was at 30 micron (.03mm or 1.2 thou) as against hires which would be at 16 micron. The detail was highly satisfactory.

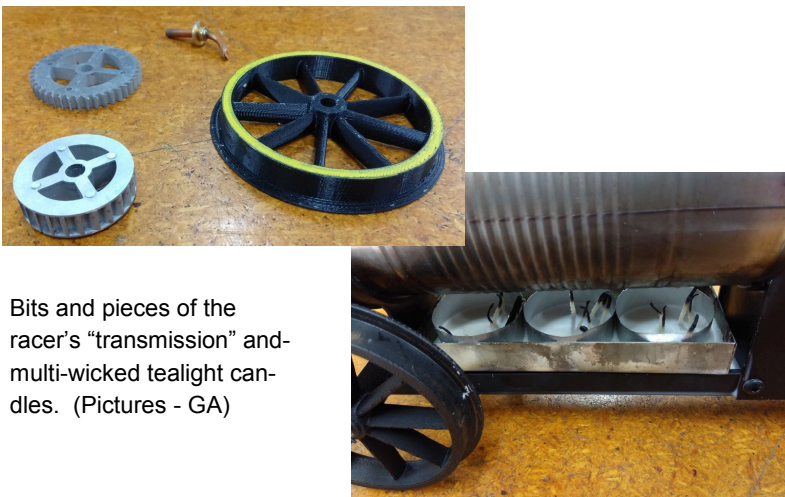




(Picture - GW)

Greg Burrows had his entry into the **Les Moore Challenge**, held at the recent Hamilton MEANZ Convention in January, on show. Outwardly it was modeled to look like Dr Fate's racer out of a 1965 movie on the basis, Greg said, "that if it looks good, it must be good" and it incorporated similar stretching of the rules as the story line in the movie! For example, tea candles were the specified heat source, but Greg decided to rework the candles by organizing 5 wicks per candle rather than one – the object being a greater, albeit shorter period, heat source. Also, he used an external heat source to pre-warm components before lighting the tea candles (the point at which the timer started), as he found the turbine was a great heat sink.

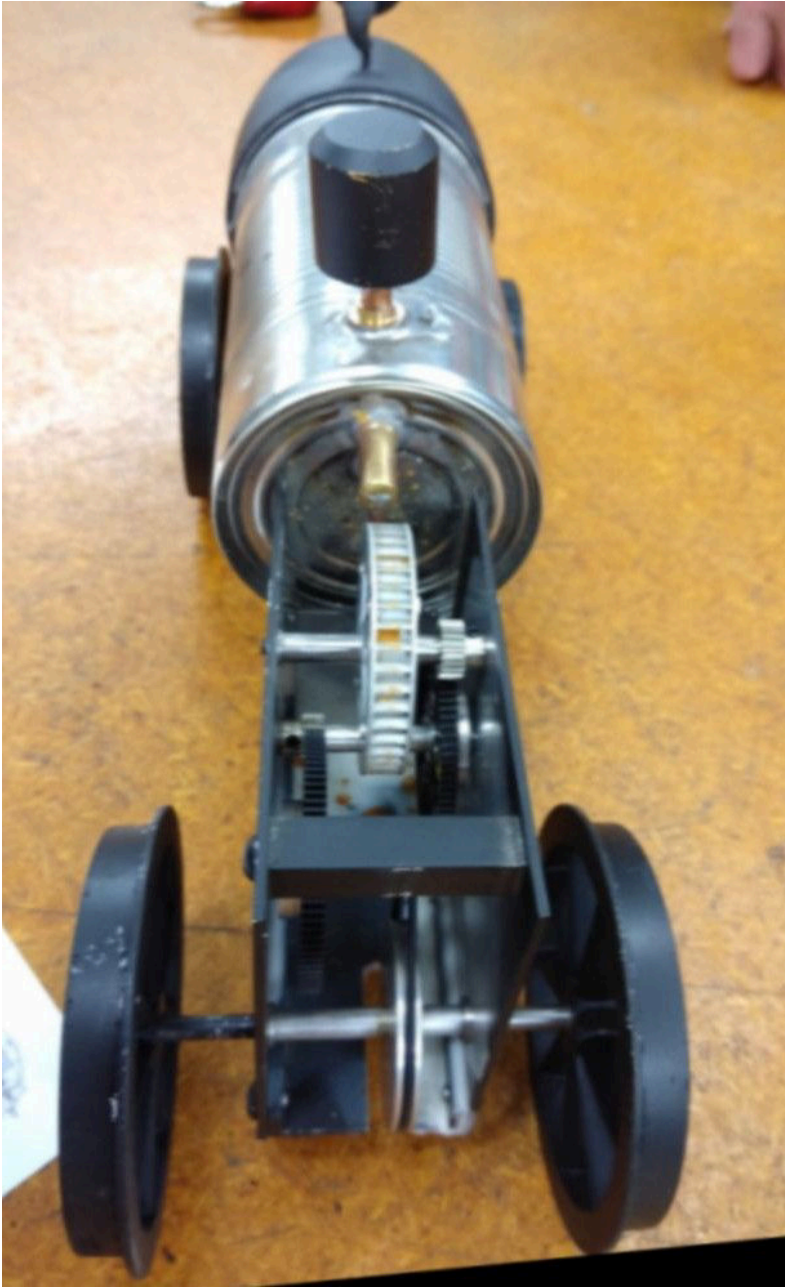
Nevertheless, the racer incorporated all the specified components – the boiler made from a chocolate drink tin with safety valve (lump of brass), a turbine which Greg fabricated, a gear set which he wire-cut the teeth and an O-ring pulley drive acquired from a local model store. The wheels to suit the 3.5" g track were made by 3D printing and lightly turned to ensure ease of running. Greg said that it was about a month of trial and error to get things working well enough to finally propel the entry about 2.5 metres along the track at Hamilton and win him 2nd place in the contest!



Bits and pieces of the racer's "transmission" and multi-wicked tealight candles. (Pictures - GA)



The "works" exposed. (Picture - GW)



“Aerial” view of Greg’s racer with the lid off.
(Picture - GA)

Pete Woodford brought in a combination lock which he had found extremely easy to use. Rather than the usual small number tumblers that need to be carefully aligned (difficult in the dark!), this type simply had a 4-way setting button that could be used to unlock a combination of up to 16 moves. He had bought this some time ago at Bunnings but it was now surplus to his needs.

(Picture - GW)



Workshop Night 11th February 2020

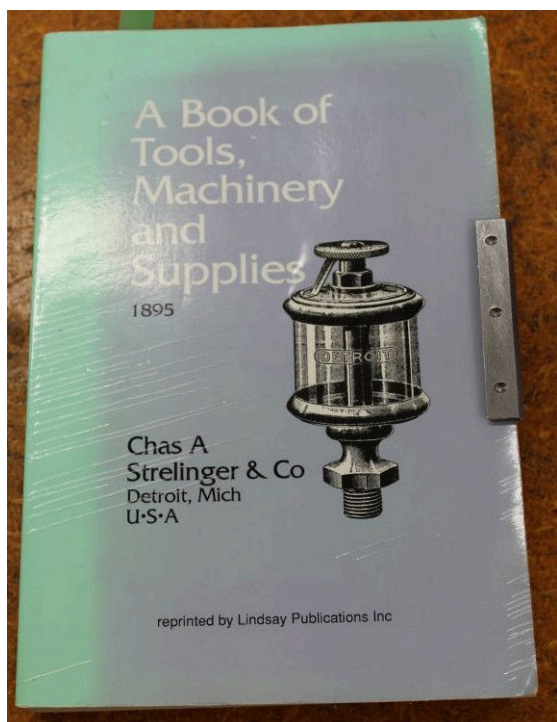
Report and photos by Greg Burrows

Well Happy New Year to everyone and all the best for another year of model engineering. We got off to a bit of a quiet start tonight. After everyone having a good break over Christmas we managed to have 8 people turn up for the first workshop night of the year. We started the night straight into it this time and left the cup of tea until later on. The bits and pieces got off to a good start with plenty to talk about and tales to tell of each piece on the table.

The meeting was closed down at around 9-30pm



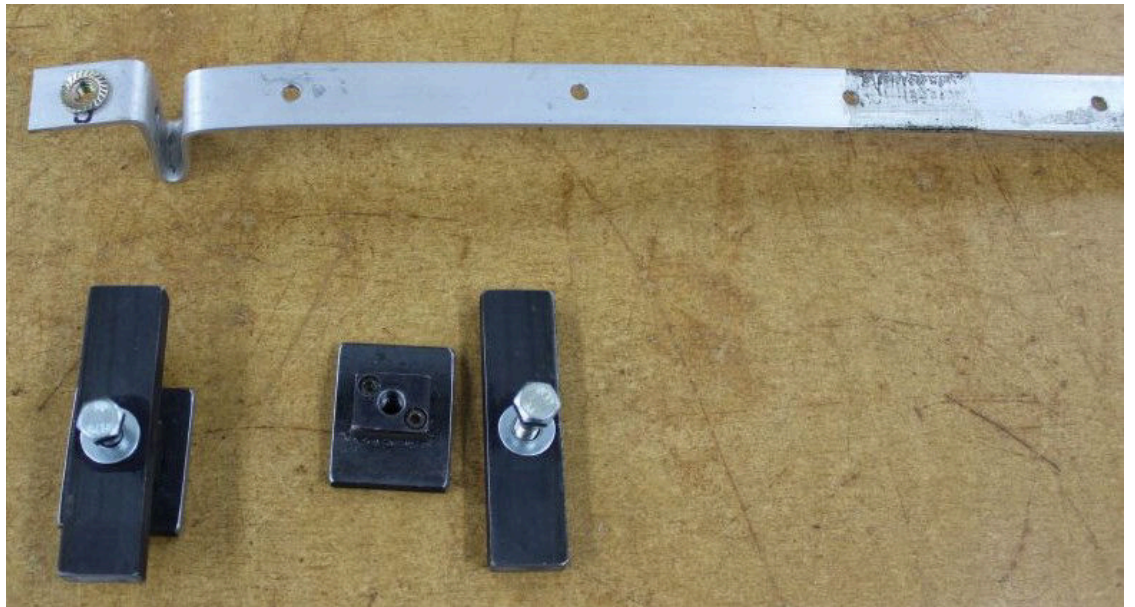
Peter Woodford brought in a very nice hand press he is making. Some time ago a friend gave him a rack and pinion, so he put it in the back of the workshop and thought it would be useful one day. After having a clear up last year it reappeared and he thought: I know what I can do with that. So after some careful design and collecting of other materials it has now taken shape. If you have a look at the photo below you will see the every clever idea he has come up with for a moveable stop with fine adjustment built into it. By just loosening off the grub screw on the left you can reposition the stop anywhere you need it.



Visitor Bill Parker brought in this lovely old Tools, Machinery and Supplies book that was reprinted in the 1980's. The quality of the lithographs inside are just so wonderful when you think about all the work that went into producing each photo. Also the variety of tools and machinery that was around over 140 years ago is very interesting.



Also from Bill Parker, this item is for his 4" Foster scale Traction engine he is building. The castings comprise the non-return valve of the water feed system from the injector to the boiler.



Murray Hollis has been up to his usual tricks of finding tricky places to try and get nuts and bolts into without having to pull the offending cabinet/ machine or other piece of equipment to bits. So he has made up another Murray-special tool to hold on to these nuts that fit into a hexagonal hole he has filed into the end of the bar; this way he can feed it into position and attach the required bolt from the side he can reach. The black pieces of bar are parts of a couple of holding down clamps for his cut-off saw. He found that trying to hold onto short and irregular shapes was proving a little bit difficult, so with these hold down clamps he can cut anything now. Murray has also made up a handyman's box of the most used nuts /bolts/ washers etc.



Dave Russell was out for a walk one night and just happened to walk past a post that had this water pump sitting on top of it, and after a long period of time no one turned up to claim it so he thought "I can make use of it" and home it came.... So the job now is to clean it up and put it to good use. This will probably not be pumping water as the rubber diaphragm and some of the other plastic parts are pretty well past their use-by date. (Some noises were being made about a feed motor for the mill.)



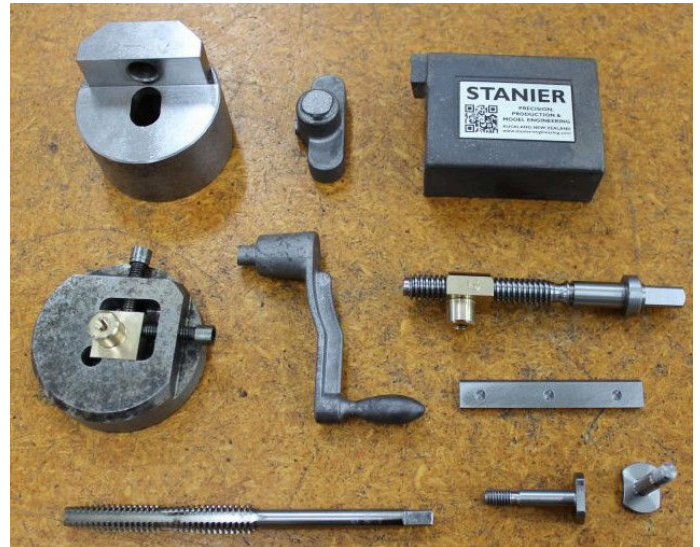
Martin Plant had with him his superheaters for his 5" g B1 locomotive. He is making a very nice job of this loco and had a couple of colour photos with him (sorry, the copies I have are only photos of his). He has painted the tender in a gloss paint and then put a final top coat of satin finish clear over it. The result is a nice matt finish to it.





Michael Jack has been busy again with work for his overseas customers. Tonight he has a 5" Britannia locomotive connecting rod that he has machined from black steel. A locking tab for an LMS Duchess and a pair of crossheads and a chimney all cast in white bronze.

Michael has also been very busy with a new batch of his small engineering vices. He has made a start on building new patterns and moulds to help with making waxes for the lost wax casting he gets done on these parts now. This has given him much improved castings and improved consistency in size and shape. He has also been making new sets of jigs to hold these castings when machining them.



Greg Burrows went to the 2020 Steam and Steel convention in Hamilton over Christmas and one of the suppliers that came over from Australia was a guy called Brett Setford. He has a little business that makes all sorts of small scale tools for model locomotives and you can find him on Facebook by looking up **Scale Tools and Railway Fittings**. So at the Convention dinner my wife was clever enough to win a very generous gift voucher from them to be used on any of the items he makes. So after some very tricky negotiations with my wife she offered to put them towards this beautiful tool set (below) that Brett makes. Brett makes all the dies and press tools to punch and fold these shovels out and then finishes them by hand with a nice wooden handle.

Also from Greg Burrows: this is a special that Brett made up just for this convention that you could buy (\$20) and he would donate a part of the sale to the bush "fireys" in Australia.



Well that is a quick round-up of the workshop night and as always it is good to see members interested in supporting this night. Remember if there are questions about engineering or other ideas on how to do something that you would like help with, just bring them to the night.

So remember this meeting takes place at 7-30 on the second Tuesday of the month and all are welcome to come along and join in. Cheers Greg B

FOR PRIVATE SALE (In Australia) :

“FLYING DUTCHMAN” ATLANTIC 4-4-2 STEAM LOCOMOTIVE No. 1935.

“Flying Dutchman” Atlantic 4-4-2 miniature steam locomotive, Road No “1935”. Gauged to 6” gauge (or thereabouts) has a copper boiler as far as we could see, was built during the 1930's, is about 1.5 metres long including 6 wheeled tender. It is fired on Propane Gas. There are 3 passenger carriages (each about 1 metre long) and a caboose. Included is about 30 metres of 6” gauge steel track. The asking price is \$6000.00. The boiler is not registered and has no current boiler certificate. All items appear in fair to good condition consistent with their age.

Enquiries : John Scida – Mobile Tel No. 0411-665-565.

(This ad posted on behalf of Brian M Coleman, PBMRI Vice President. <brianblocko1@bigpond.com>)

