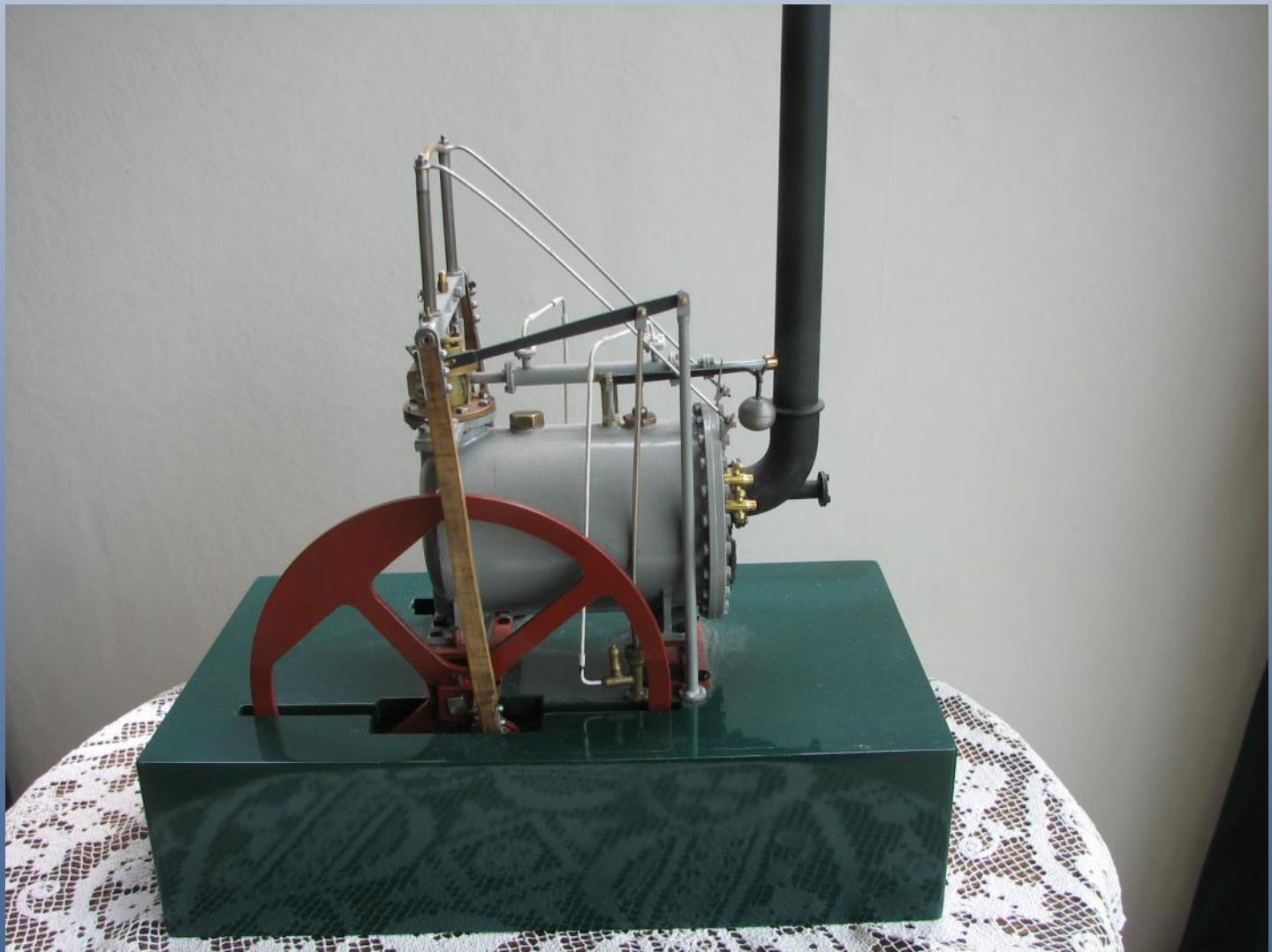


Wheels & Floats

October 2020



Tauranga Model Marine and Engineering Club Inc.

TAURANGA MODEL MARINE AND ENGINEERING CLUB INC.

The Secretary

PO Box 15589

Tauranga 3112

Palmerville Station Phone 578 7293

Miniature Railway Memorial Park

Open to Public, weather permitting

Sundays : 10am to 3pm approximately

MEETINGS

General Members Meeting every first Tuesday
7pm.

Committee Meeting every second Thursday at
7pm.

Maintenance Tuesday mornings from 9am.

Engineering discussions Tuesday evenings
7.30pm.

COMMITTEE

President: Jason Flannery 5721165

Vice President: Bruce McKerras 5770134

Club Captain Max Donnelly 5716778

Secretary: TBA

Treasurer: Joanne Knights

Committee: Ash Thomas, Russell Prout,
Warren Belk, Bruce Harvey
Brian Fitzpatrick, Owen Bennett

Boiler Committee: Peter Jones, Bruce McKerras,
John Heald.

Safety Committee: Chris Pattison, Peter Jones,
Warren Karlsson, Jason Flannery.

Editor: Roy Robinson 07 5491182
royrobkk@gmail.com

CONVENERS

Workshop: John Nicol, Brian Marriner.

Track: Bruce Harvey, John Stent.

Librarian: Chris Pattison

Rolling Stock: Bruce Harvey

Website: Max Donnelly

MEANZ rep John Heald

OPERATORS 2020

18 October B Harvey

25 October P Jones

1 November W Karlsson

7 November B McKerras

8 November R Prout

15 November M de Lues

22 November B Fitzpatrick

29 November J Flannery

6 December B Harvey

13 December P Jones

20 December W Karlsson

27 December B McKerras

Cover photo : Peter Lawn's Trevithick's Dredger Engine (See article inside)

Presidents Report September 2020

Once again we find ourselves starting to get to that time of year when the “to do” list seems to always be full, so I will try and keep the report short this month as there are a number of items to mention.

Firstly, for those of you who have not heard, Peter Jones had the misfortune of being struck by a car on Omanawa Road. He sustained several broken ribs but fortunately (how there can ever be such a thing as fortunate in accidents is debatable?) he is now at home and on the road to recovery. I am sure I speak for the whole club in wishing him a speedy recovery.

A great effort by the club members saw our ADR audit done, passed, and then sent to MEANZ/Worksafe for renewal. Thanks to Warren Karlsson and Bruce Harvey for the hours they put in running through all the admin, working bees as required thus making sure all was as needed for the Auditor.

Our container has arrived, as part of our agreement with the TCC it will need to be clad quickly, we don't want to give them any reasons to tell us to take it away. Please can you help with working bees to get the roof and side timber frames on. As soon as these items are delivered an email notice will be put out so please keep a look out for them.

We are currently in negotiations with Metalcraft roofing about having the coloursteel added, this is planned to involve a competition for a painted mural on the side facing the park. Early days on this one, for now it is just an idea and we plan to get meetings underway as soon as possible.

Russell Prout is already tackling the loco trolleys for our new container, so even if not clad we should hopefully still be able to start storing locos by the open weekend. Thanks for that Russell.

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The Halloween night run is coming up, it conveniently falls on the 31st this year. If you did not get to attend last year's, then I recommend you try this one out. The public loved it and the array of costumes was impressive. The run is from 6 to 9pm. Again, thanks to Roy and Barbra dinner will be served at 5pm so please come along and enjoy some "club time" before the run starts.

There are props to put out so several of us will be there from 3pm to start setting up. If you can help then please do so, it always seems to take longer than expected, although last year taught us a few tricks.

As the place will be open from 3pm some members have asked about a bit of a playdate before. If there are enough interested and you have the required numbers to open safely, then please do so. I suggest you all co-ordinate this amongst yourselves to make sure of numbers in advance.

Next will be the open weekend on the 7th and 8th of November. This looks set to have an impressive display of goodies; many members have expressed an interest in bringing items down. This is our main opportunity to show the public Model Engineering, if you can attend then please make the effort.

We have displays to set up, the table needs attending during the day, even if you are not interested in running trains, please come and support the TMMEC team.

Saturday's arrangements for food are as follows:

- 1 : Morning tea, please can members assist by bringing a plate, scones for example.
- 2 : Lunch will be Subway organized by the club. Dinner at around 5pm will be a BBQ put on by the club, thanks once again to Roy and Barbra. Chicken drumsticks, sausages, salads etc and of course some desserts.
- 3 : Sunday will be the usual arrangement of taking care of the leftovers, pizza if we need extra.

I know Saturday is a big day but please also help if you can on the Sunday, the numbers can be a bit thin when we do 2 days, but we will still be running for the public and need some volunteers.

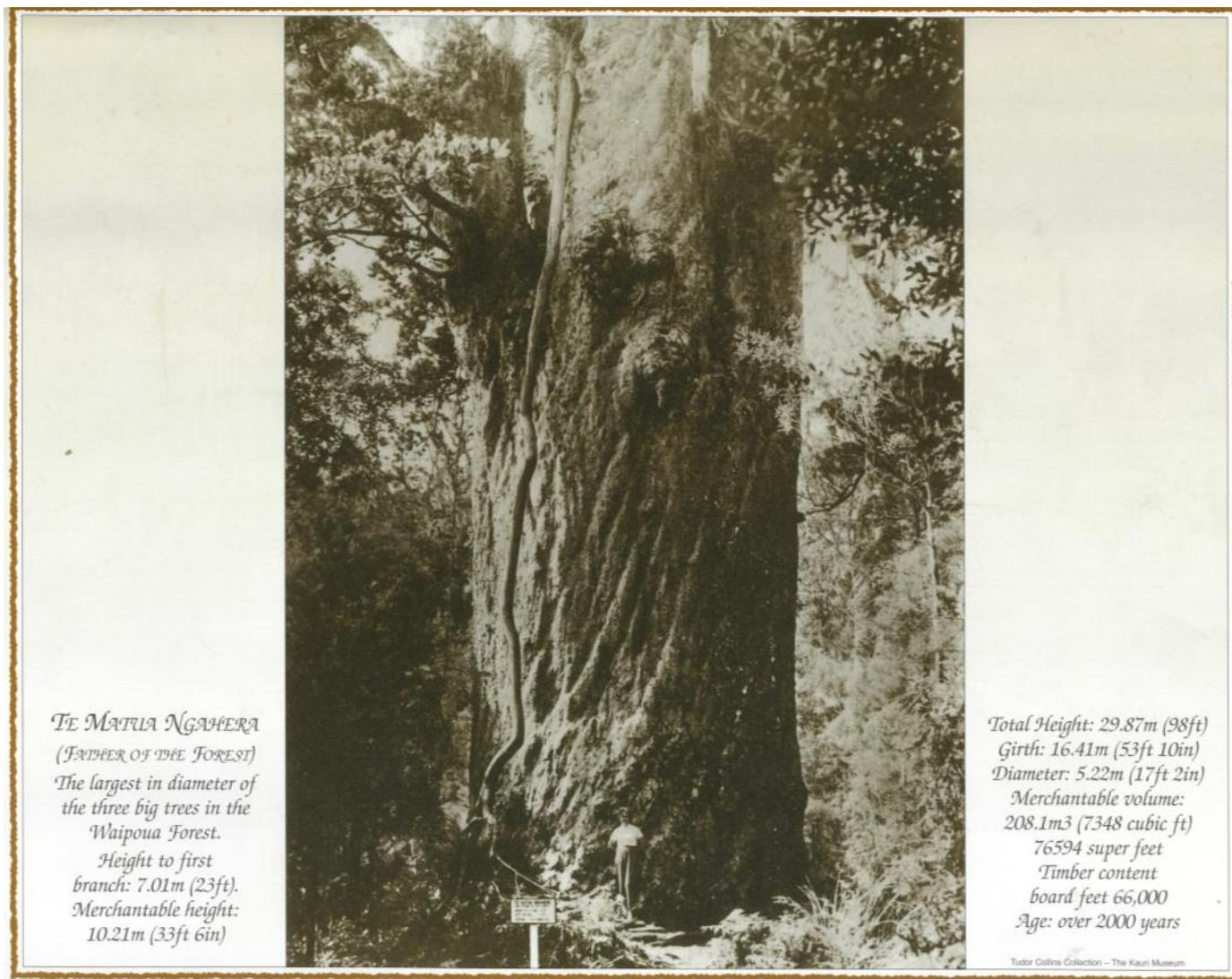
Something that has also been raised is future planning for the club. Where will we be in 2, 5 or 10 years? Please have a think about this, what you would like to see and any suggestions on how the club may achieve it.

As an example, there is already talk of if we should stop for a lunch break on Sundays like Hamilton do. Sitting down as a club and having a chance to socialize as a club, which is what we are here for in the first place. This topic is still early days so we will see what the future holds.

At the last Committee meeting dates for running over Christmas and New Year were discussed. With the running days of the 27/12 and 3/1 being very close to Boxing Day and New Years, a lot

There is no point opening hoping there will be enough to run, it is far simpler and better for the public to just advertise we are not going to be open. So last running date will be the 20/12/20, to re-open on the 10/1/21

Thanks TMMEC for your ongoing support.



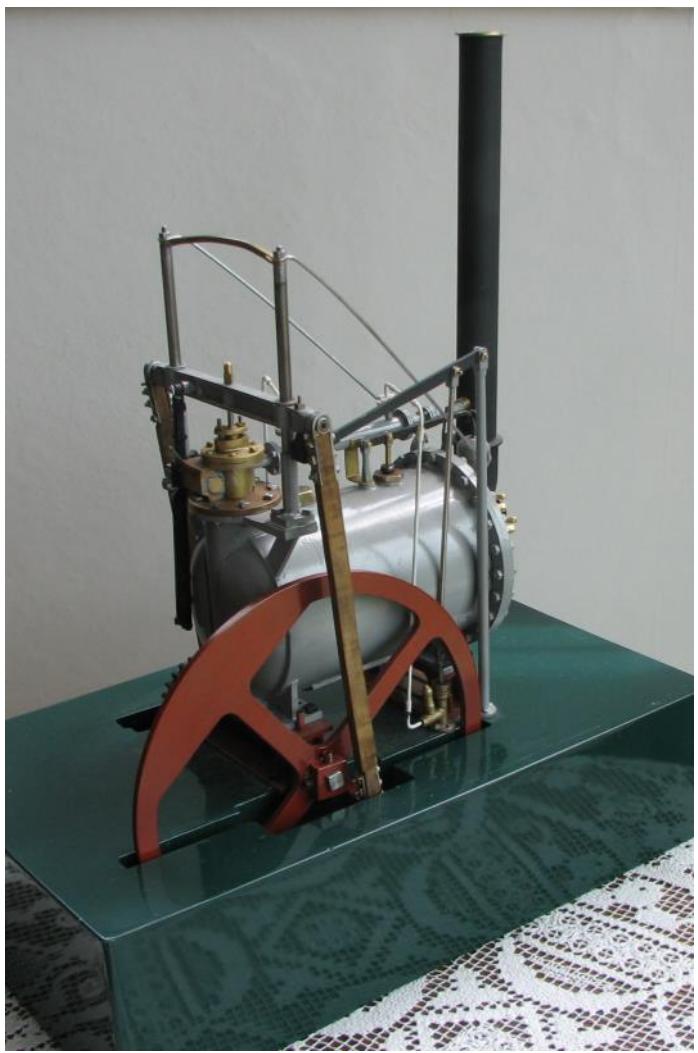
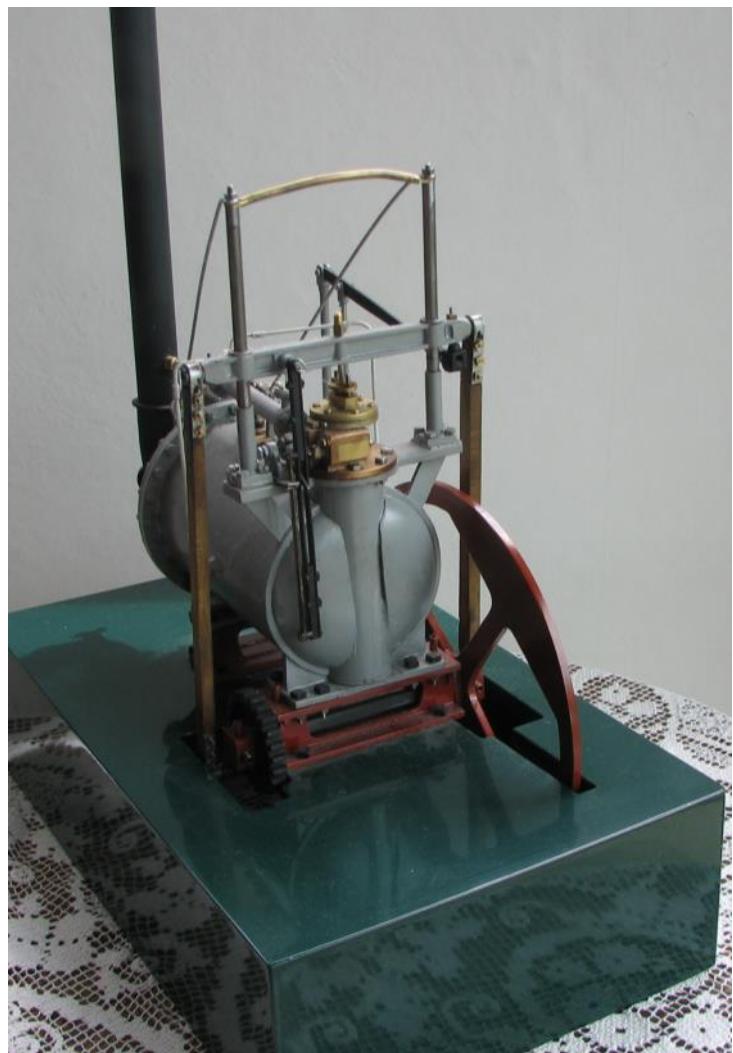
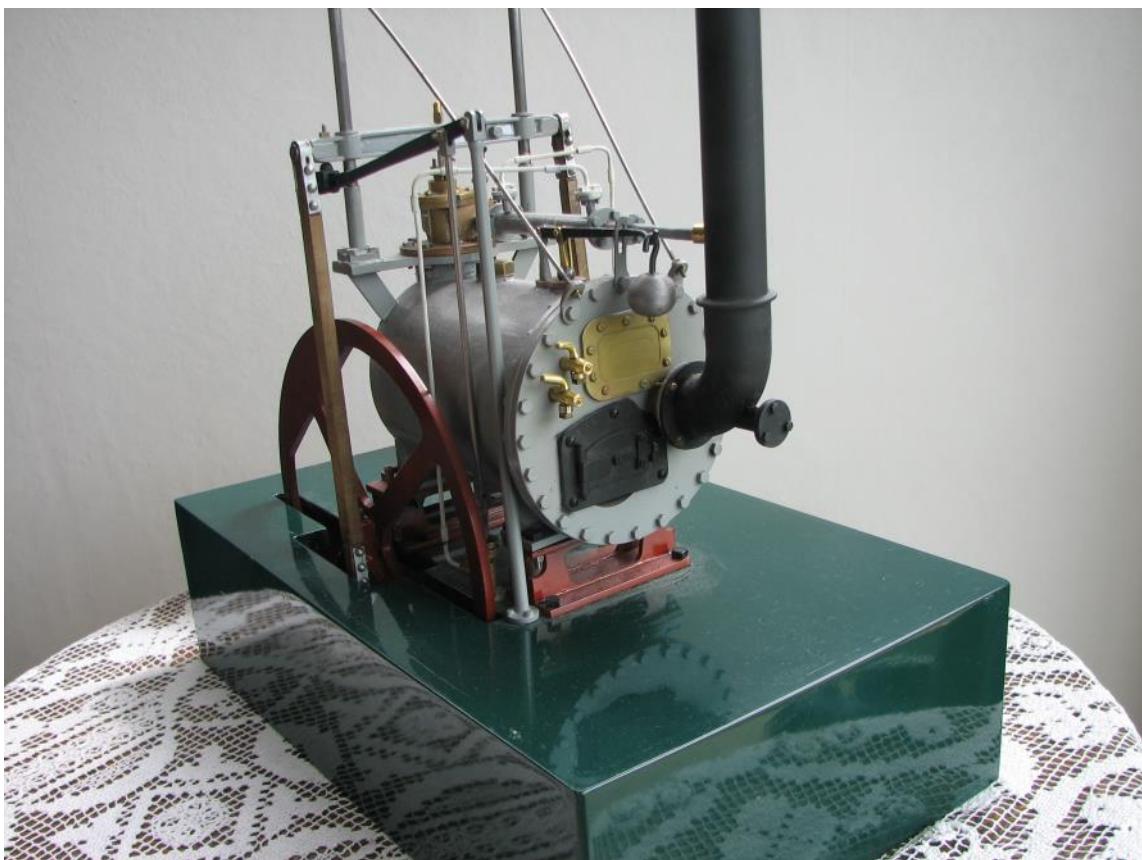
Jason

Some more pics from an old calendar I came across.



Trevithick's Dredger Engine

Peter Lawn



This diagram is probably of the dredger "Blazer", with a 6hp Trevithick engine powering the bucket chain and winch. The cylinder diameter was 14.5" and the stroke was 4'. Trevithick recorded

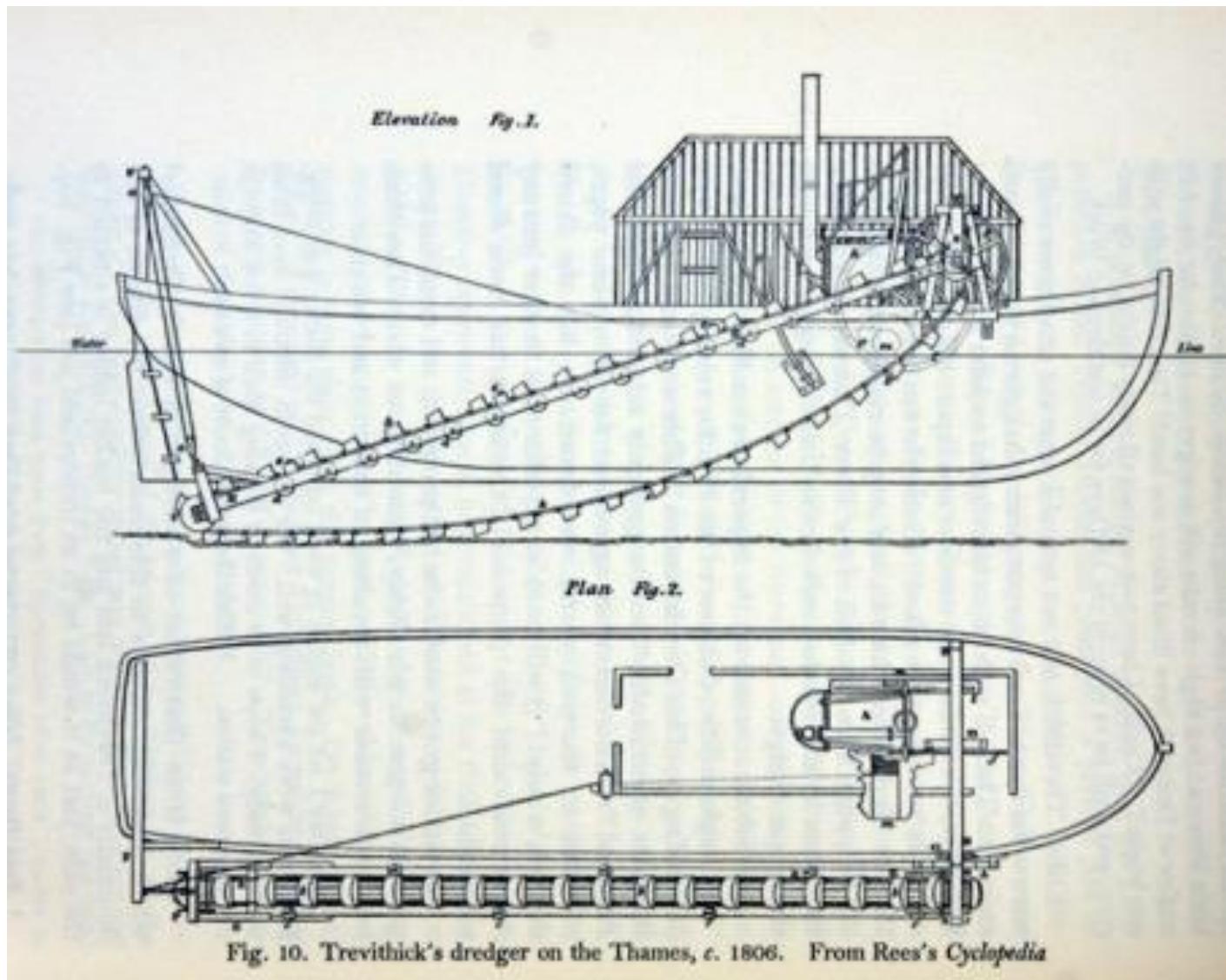
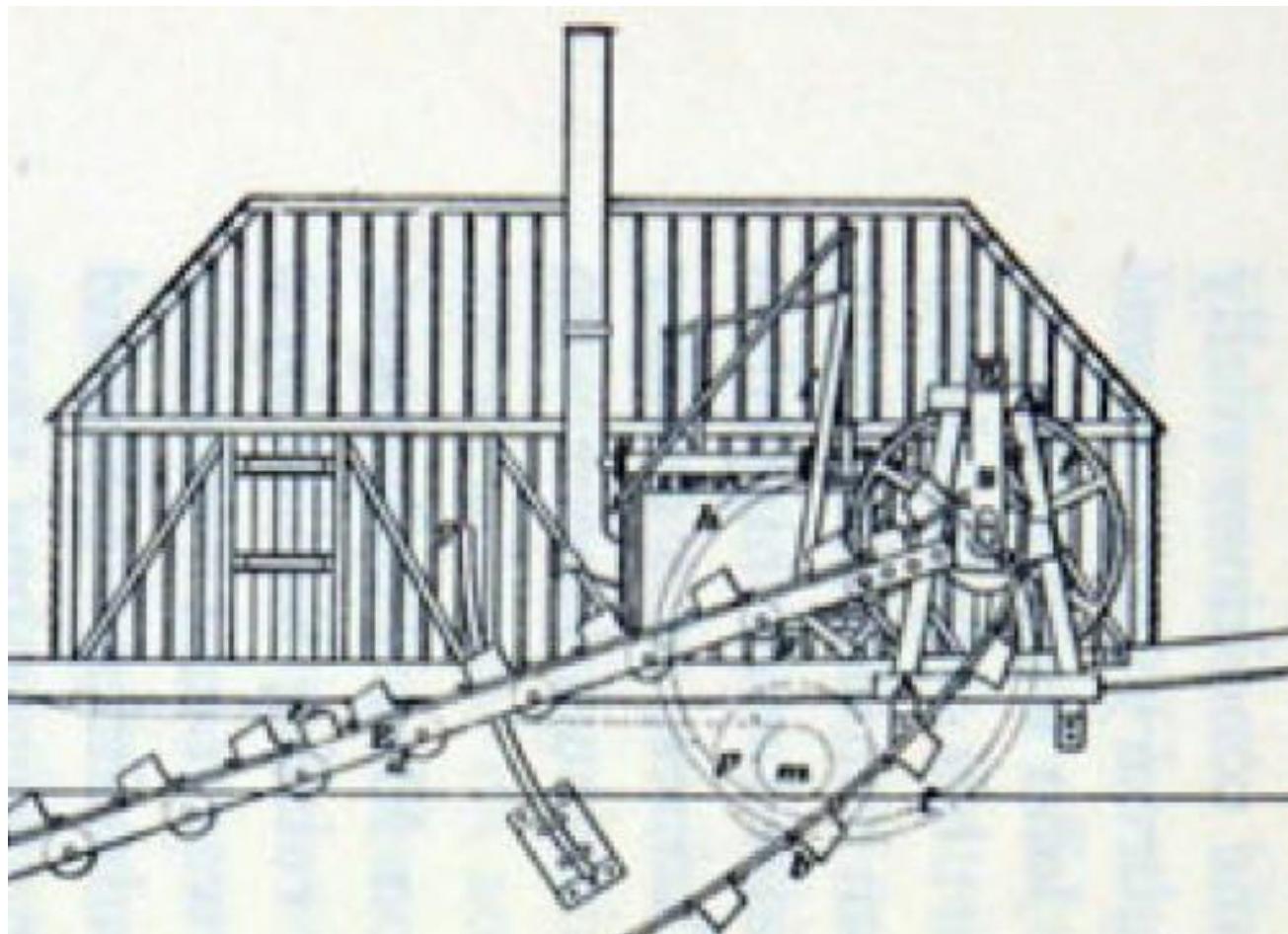


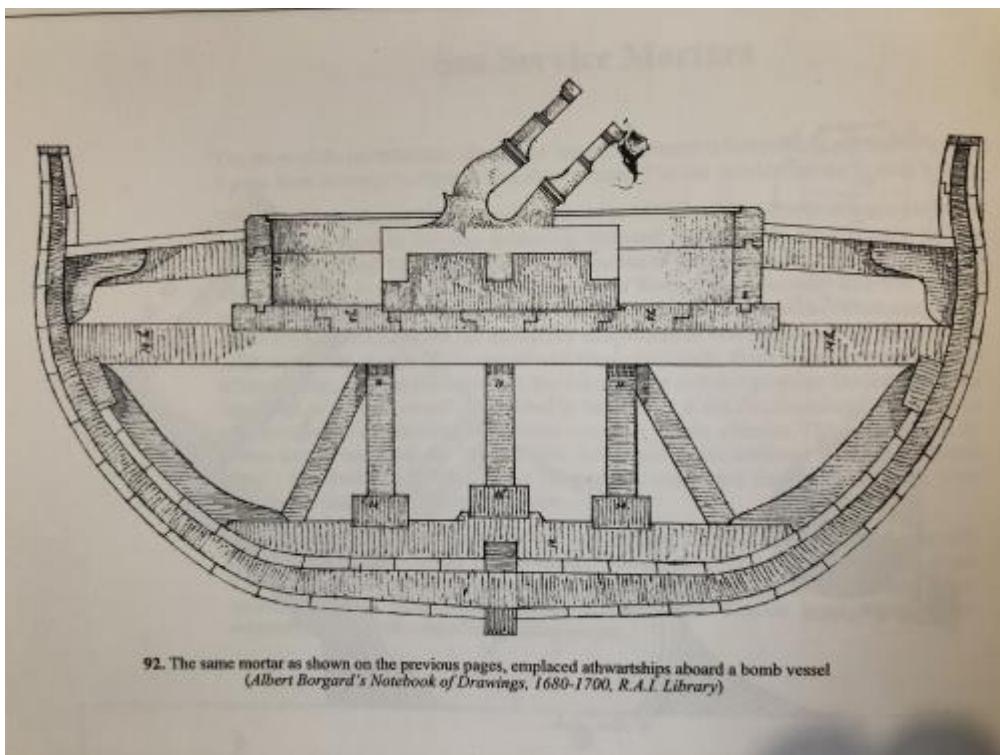
Fig. 10. Trevithick's dredger on the Thames, c. 1806. From Rees's Cyclopaedia

that his dredger would lift 100 tons of mud per hour. Rock and gravel 180 tons per 6-8 hour tide. It must have been impressive enough for him to obtain a contract to lift 500,000 tons per year from the bottom of the Thames at 6 pence per ton. Other dredgers had Trevithick engines of up to 20hp. (ref. "The Life of Richard Trevithick" by Francis Trevithick 1872) three of these dredgers were recorded by Trevithick as being 80, 120 tons and 300 tons.



Magnified view of the engine house on the dredger. Note the relative sizes of the flywheel and the bucket chain driving gear.

And this is the diagram of a cross section of a bomb-vessel from a century before Trevithick. It is mounting a 13" bore mortar. Note the massive supporting beams. You can see why Trevithick chose this type of vessel to mount his steam engine and dredging machinery.



92. The same mortar as shown on the previous pages, emplaced athwartships aboard a bomb vessel
(Albert Borgard's Notebook of Drawings, 1680-1700, R.A.I. Library)

The Elbow Engine

From another Cave in Katikati

After building Richard Trevithick's Dredger Engine I was looking for a new project. Reading a Australian Model Engineering magazine in the Club Library I spotted an article on The Elbow Engine. After coping the relevant pages I started to machine two cylinders 2" dia x 3" long. A fair amount of detail was provided about drilling the holes. It was recommended to use the vertical mill rather than the drill press. I found a length of hydraulic ram shaft (thanks Russell) and cut two pieces and put them into the Kent Fire for the night to anneal them. I spent some time shimming my mill to ensure that it was exactly vertical. The centre holes were drilled and reamed in the lathe. The three other holes were all done on the mill.

After building the three 90° con rods and support frame I tried assembly. Not successful!!!!!! I decided to check all the holes with a 1/2" bar through them on V blocks with the DTI. The centre

holes were OK but the others had wandered, some up to 0.020".

OK, start again, so two more pieces into the Kent Fire for two nights, just in case there were some odd hard spots. I had been caught once before on another job. I then bored the centre hole in the lathe and decided to do the other three in the lathe as well. A heavy block of steel with a centre pivot was mounted on the face plate. With much counter balancing plus locating pegs I drilled and reamed the other three holes. Back to the V blocks to check the pieces with the DTI to find all was OK. On assembly the engine would now rotate.

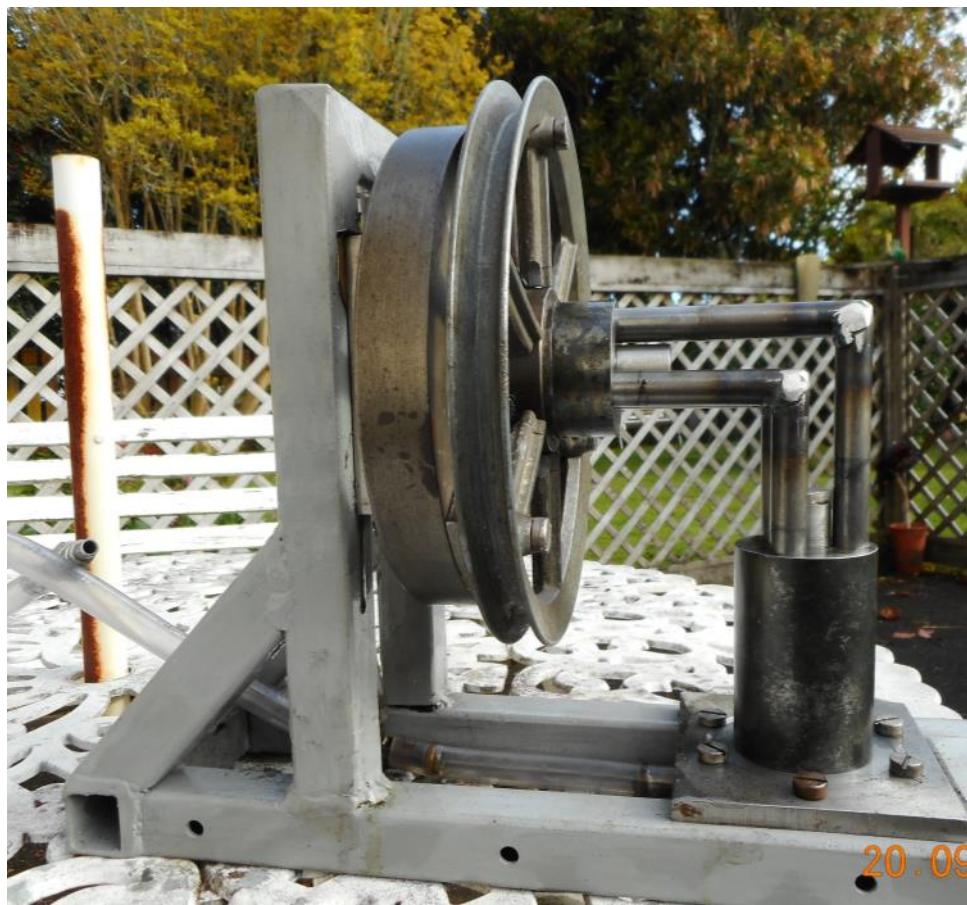
The article recommended fitting a large pulley to the horizontal cylinder and belt drive it with a drill to run the engine in. I decided to also add a heavy cast iron flywheel.

I added 1/4" lines but with air leaks and small pipes it was "no go". Upping to pipe size to 3/8" and chasing some of the air leaks proved successful.

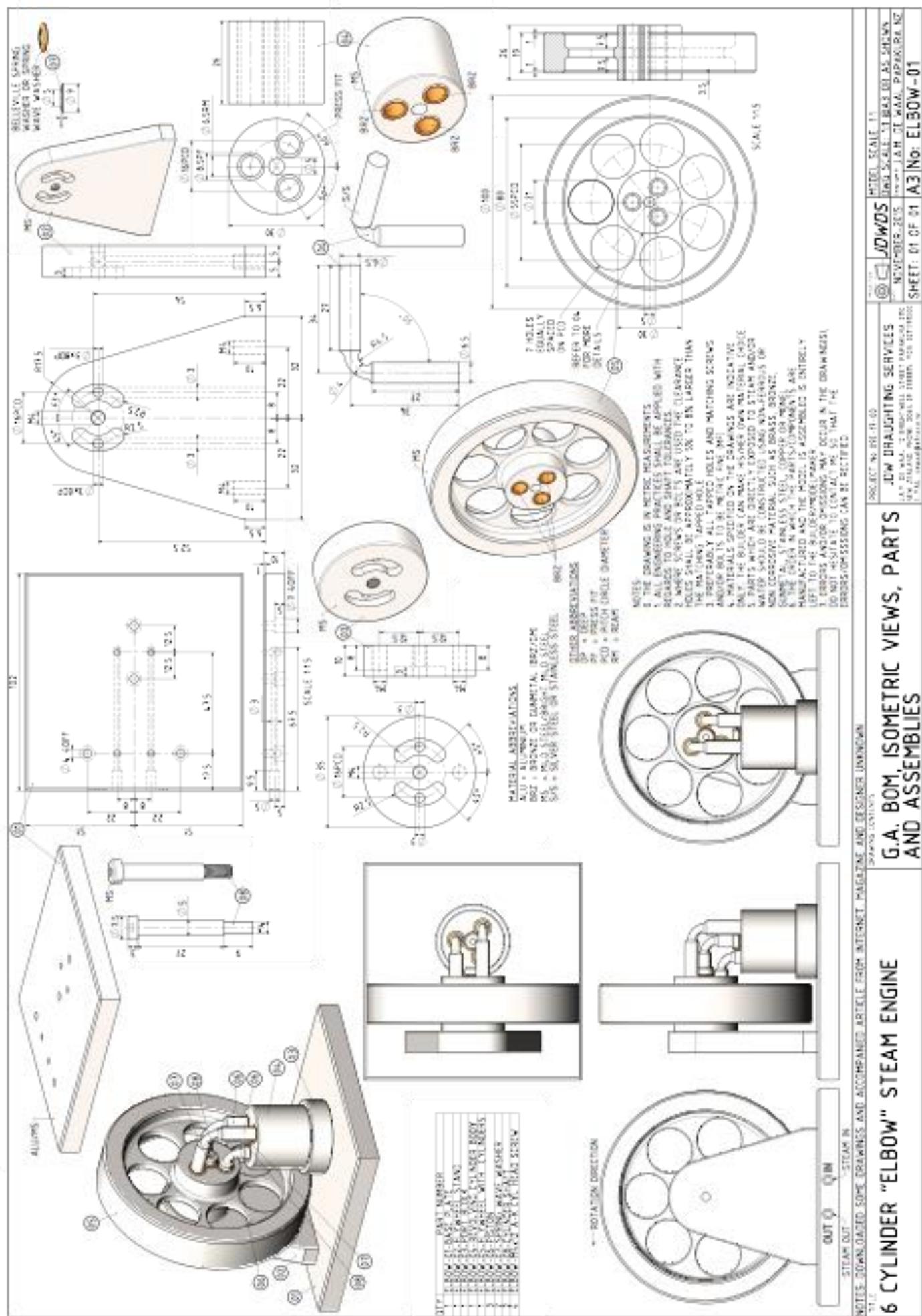
Yes it does run but it very heavy on air consumption and needs a full tank of air to get it running. It slowly dies as consumption is greater than the compressor can provide. The article even said



that the author had had the some problems.



Peter Lawn



G.A. BOM, ISOMETRIC VIEWS, PARTS
AND ASSEMBLIES

DIRECTIONS FOR TRAINING AND AUTHORITY ARTICLE FROM INTERNET PARTIES AND OTHER UNIONS

四

Kapiti Miniature Railway Visit

On the weekend of 26-27 September KMR celebrated their 40th anniversary and members of TMMEC took the opportunity to join in on the celebrations.

The trip began on Thursday and thanks to Bruce Harvey his holiday home in Taupo was made available to break up the trip. Bruce travelled via Rotorua where he picked up the the Cli-Shay



Alias the 'Gadget'. Joanne, Imogen and Ben travelled with me and Bruce McKerras, Max Donnelly and John Heald with Bruce Harvey. Bruce's home in Taupo looks directly across the lake to Mt Ruapehu, what a view to wake up to.

A short walk up the road and we enjoyed a meal at Bruce's local before hitting the hay. An early start on Friday saw us in Kapiti just after lunch. The weather was looking a bit dodgy to

say the least and we were half expecting KMR to cancel or postpone the event.

We arrived at Kapiti nice and early Saturday for the drivers briefing and were soon joined by Jason, Warren and their families. A very comprehensive safety briefing was followed by some play time on the track before the public were admitted. This allowed everyone to become familiar with the track, the signal system and station, along with some catch up time with the KMR team.

KMR carried out the formal proceedings at the station under a huge balcony with the Deputy Mayor officiating. This was followed by lunch, the cutting (and eating) of an amazing cake.

The cake resembled the newest acquisition, a very nice electric loco built in Dunedin



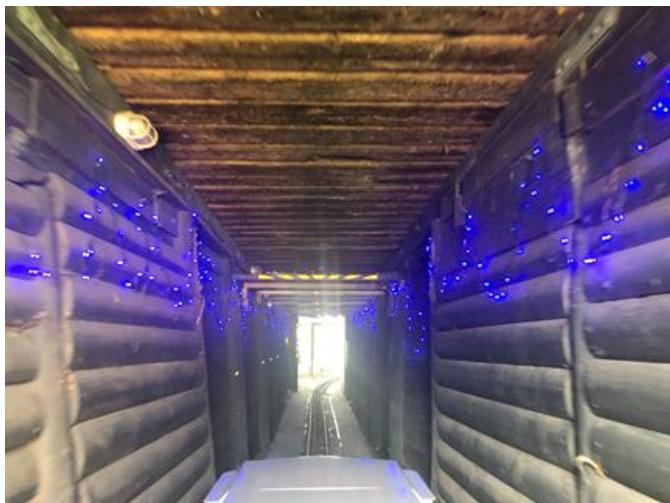


Above : The TMMEC team just before lunch. A huge thank you to all who attended, I am sure like me you were not disappointed.

Our members were on the track from the very start until well into the night pulling our fair share of the passengers.

As we steamed down and loaded the locos onto our trailers the weather closed in with very strong winds and considerable rainfall. Whilst our clothes and bodies were drenched our spirits remained high. Events on the Sunday were cancelled due to the high winds and rain.

TMMEC offer our congratulations to the KMR team for celebrating their 40th in an amazing setting, and making us all very welcome. The food was incredible, the hospitality even better. I for one look forward to visiting again.





Pics and article by Russell Prout



From the Cave at Katikati

Still only a few articles.....Please.....Please

WANTED

I'm looking for Issues 4635—4641 (inclusive) UK Model Engineer. If anyone can help I would appreciate it. Beg, borrow, steal but preferably not pay!!! Thanks, Editor

For Sale



Atlas Lathe WYSIWYG

Contact Jason Flannery

HBMES have upgraded our track by adding 7 1/4. Gauge, we have removed the 3 1/2. Gauge.
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the rail in
various lengths but mostly 6 metre lengths. We would consider
\$1500.00
or reasonable offer for the lot or part thereof from any one interested.



Norm McPhee

Disclaimer :

The views and opinions expressed in articles contained in this magazine are those of the author(s) and do not necessarily reflect the policy, position or opinion of the TMMEC or its officials.

In 1986 The Coal Mining Industries Welfare Council announced that they were printing the last issue of New Zealand Coal after 30 years of reporting. There are some interesting articles in that publication, this is one of them. My thanks must go to Gerard Morris who wrote the article whom I have been unable to contact to seek permission to reproduce it. Enjoy!! Ed.

A Century on — a fine old lady



Above: Full steam ahead — a parade in Greymouth where the engine gets the chance to clank through its paces.

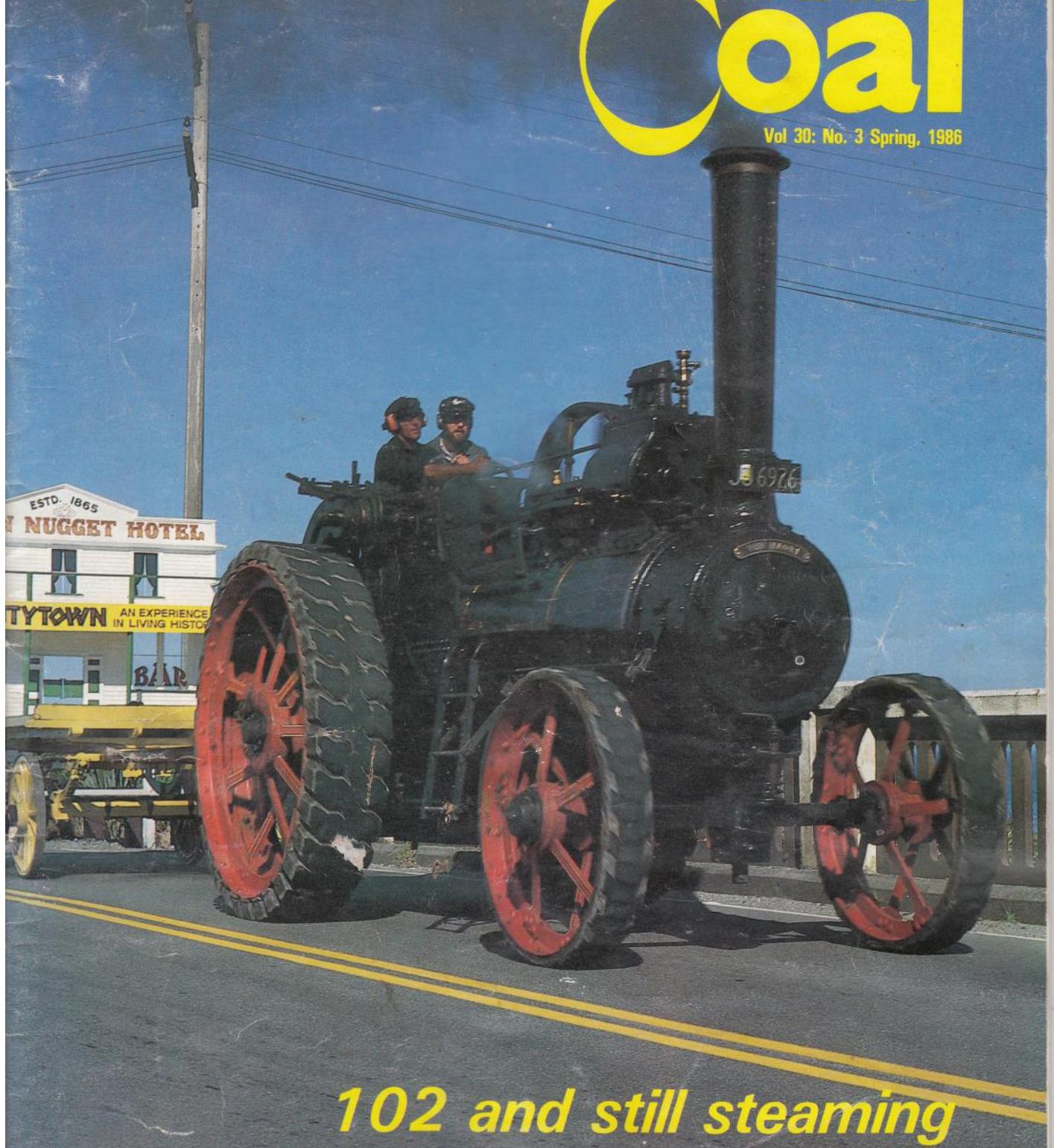
Below: An 1890s shot threshing wheat in Canterbury.



ISSN 0028-8004

NEW ZEALAND Coal

Vol 30: No. 3 Spring, 1986



102 and still steaming



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Old timer all steamed up again and raring to go

Greymouth steam buffs, Ian Tibbles and Peter Kerr have fired up a 102-year-old traction engine that had previously been consigned to a watery grave in the Grey Valley.

"The Maori" was built in England in 1884 and shipped to New Zealand where she first worked on the Canterbury wheatfields. She moved to the Coast around 1900, purchased for sawmilling work by Lockingtons of Reefton.

After a distinguished career in Reefton industry, she was retired in 1939, and later pushed into the Snowy River as an erosion bather. That's where Ian Tibbles found her in 1968.

"It was my auntie, who lives at Ikamatua, who first told me about the engine", says Ian. "I found out that a farmer, Mr Lemmon, owned her, and he told me people from Canterbury held the option. He suggested I find out whether the Canterbury people were still interested and if they weren't she was mine for \$200, which I thought was quite a bit of money at the time — 1973."

Ian Tibbles arranged for a local contractor, Tony Pupich with his D4 to pull the old engine out of the river.

"We had trouble trying to find a place to hook the rope on because the front wheels were adrift", says Ian.

"We tied the rope around the boiler and started the winch. Tony Pupich asked 'what happens if the boiler breaks?', and I said 'it's all right, we'll just pay you and go home and leave her there if she's rotten'. Fortunately, she came out in one piece and we pulled her out to the road, just like a trailer behind the dozer. We then fished out the front wheels and put those under her."

Their problems were only beginning. They had to find a place to park and work on the rusting hulk. Peter Kerr suggested his place but it wasn't as simple as it sounds, as Ian recalls.

"We managed to get the engine on the back of a transporter and carted her to Greymouth", says Ian.

"We arrived outside Peter's place at about 4 o'clock in the afternoon. She was like a magnet for schoolkids. They were everywhere."

"We parked her under a cherry tree in front of Peter's house — a great heap of rust and garbage in the middle of suburbia. Next morning a traffic officer knocked on Peter's door, and advised us to move because she was not registered, and if anybody ran into her somebody had to pay. So we hired a front end loader and pushed her up into the backyard."

This was where the fun started.

Peter and Ian slowly dismantled the engine, took the wheels off and all the top gear, including the crankshaft. A boiler inspector had a look at her and a local foundry assessed the restoration possibilities which left the partnership "pretty dubious" as Ian says.

At this time Ian called in his Canterbury contacts for advice. A

Right: Ian Tibbles with 'The Maori'.

By
Gerard Morris

Rangiora traction engine enthusiast, Frank Heron, invited them to take her over to his workshop in North Canterbury.

They carted the engine and associated bits and pieces, across to Rangiora on the back of a truck and trailer. Ian takes up the story:

"We found a replacement boiler in a former market garden glasshouse near Christchurch. Together with Peter Kerr and his wife Ann, we made 25 consecutive trips at weekends to work on the engine in the early stages. You could say we got to know the road after a while. We got her running, but we still had quite a bit of work to do to paint it, lag the boiler and to fit rubber tyres.

"In terms of hours it took us about 5000 hours' restoration time, and something like \$3000 worth of materials. We finally got her on the road and kept her at Rangiora, occasionally doing long trips with the local traction engine club, sometimes from Rangiora to Pleasant Point, covering 40 miles a day."

The engine has two speeds, slow and very slow, and weighs eleven and a half tonnes, with eight and a half tonnes on the back axle. Anywhere they go they need an overweight permit and fortunately Peter Kerr as a "sideline" is resident engineer for the local Ministry of Works and responsible for issuing overweight permits.

Ian has been able to put together a potted history on the life of the machine. She was built by J. and H. McLaren in Leeds, in 1884, and first registered in New Zealand in January 1885 by a Mr McLaughlin in Kaiapoi. Apparently she was used for threshing wheat and hauling wheat to the railway.

In the mid 1890s she was sold to a Mr Jack Sharp at Prebbleton, where she was also used for threshing, and later, about 1900, was sold to the Lockington family at Reefton. She was used there for sawmilling until they sold her in 1908 to the Consolidated Goldfields Company in Reefton, which owned a number of large quartz mines in the area. They used her until 1922, when she was sold to the Lemmon family of Hukarere who, in turn, also used her for sawmilling and farm work. The Lemmons used her at times for stumping, pulling a single-furrow plough and for driving a pump in a goldmining operation.

Ian says the boiler lasted until about 1939 when the pressure was down to about 60 lbs per square inch, instead of the normal 120 lbs. She was then consigned to a watery grave in the Snowy River.

Peter and Ian have fitted her with rubber tyres which are cut from the tread of used motor scraper tyres, a process taking up to six hours. They then use block and tackle, front end



loader, hammers, fencing wire and anything else that will help to drag the tread on to the steel rims. It takes about 12 hours to put each tyre on, held in place by a couple of bolts. Ian says they have done a thousand miles on this set of treads and reckons they've got another thousand miles left in them yet.

"The Maori" is now often based at Shantytown where Ian works as engine driver on the tourist town's steam loco 'Kaitangata'. The traction engine arouses a lot of interest from visitors with its polished appearance belying her smoky diet of United Party and Roa coal. The engine is 17 feet long, and the back wheels are almost 6 feet high. The boiler is about 6 h.p. and the engine about 8 h.p., and uses a quarter of a ton of coal per 20 miles. The partnership have taken their engine to a number of significant events, including a visit at Easter to the Waiuta goldmining region where the engine once worked for Consolidated Goldfields.

"After you've done about six or seven hours' driving you really know you've been somewhere", says Ian.

"We've had a lot of satisfaction in taking her back to Reefton and taking photographs of her in front of some of the old buildings near where she worked."

He has strong affection for the engine, and says that he would never sell her. She is valued at around \$20,000.

"If you a steam person you become very attached, probably more so than to the wife", he laughs.

And there lies another story.

One of the side benefits of the partnership with Frank Heron was that he also had a daughter who was very interested in old steam engines.

"She had to be, living in a traction engine household", says Ian.

Barbara Heron closely followed the restoration of "The Maori" as she also had a half share in another traction engine. Barbara and Ian were married in 1983, and Ian says that now he has a very understanding wife. Barbara doesn't regard herself as a steam widow, and respects Ian's priorities which she reckons are "Shantytown first, traction engine second and Barbara third".

Ian Tibbles has always been interested in steam engines, and started work with the Railways in Greymouth in 1962. He worked on all the West Coast lines and lasted two years on the diesels. He left the Railways in 1972 and has worked periodically at Shantytown since. He is fortunate to be able to combine a job which includes his hobby. And what is

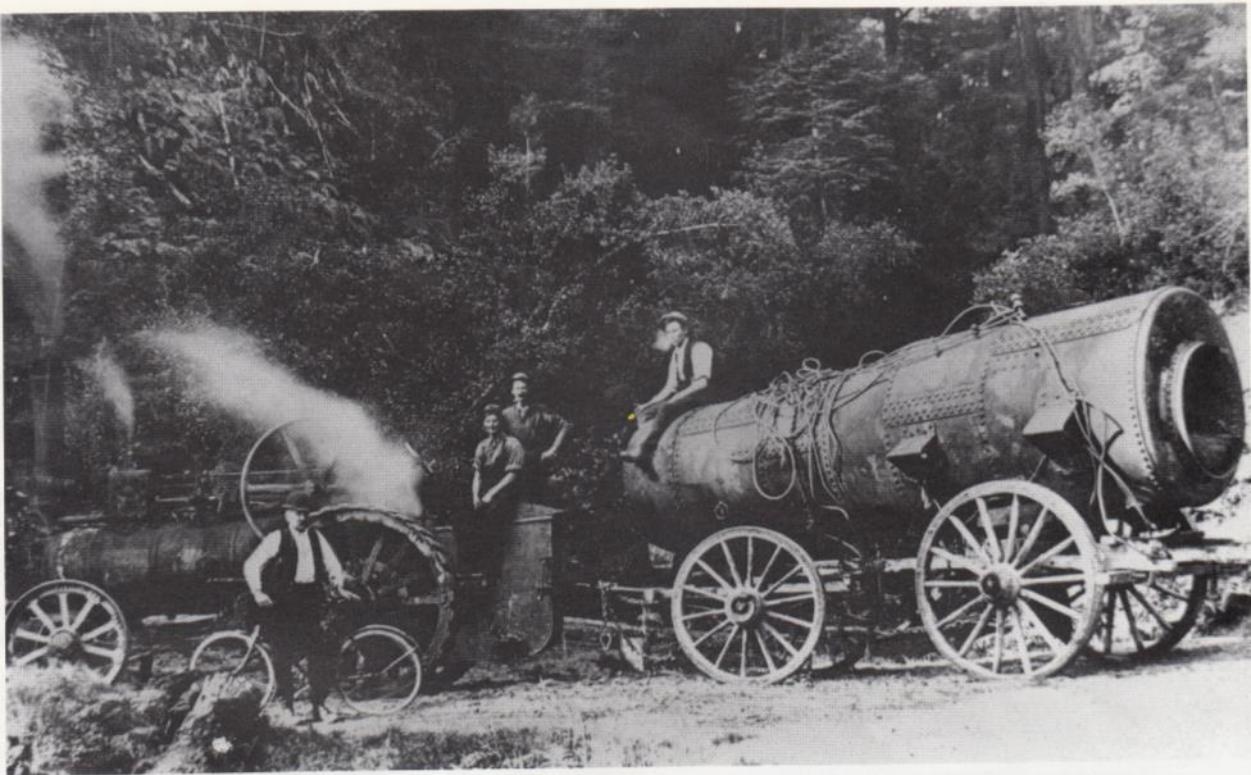
the next project for the Kerr-Tibbles partnership?

"We've got a few irons in the fire", says Ian. "There's a new steam-driven sawmill being built at Shantytown which is going to be an interesting project." The Maori has been used several times to test run the mill during construction.



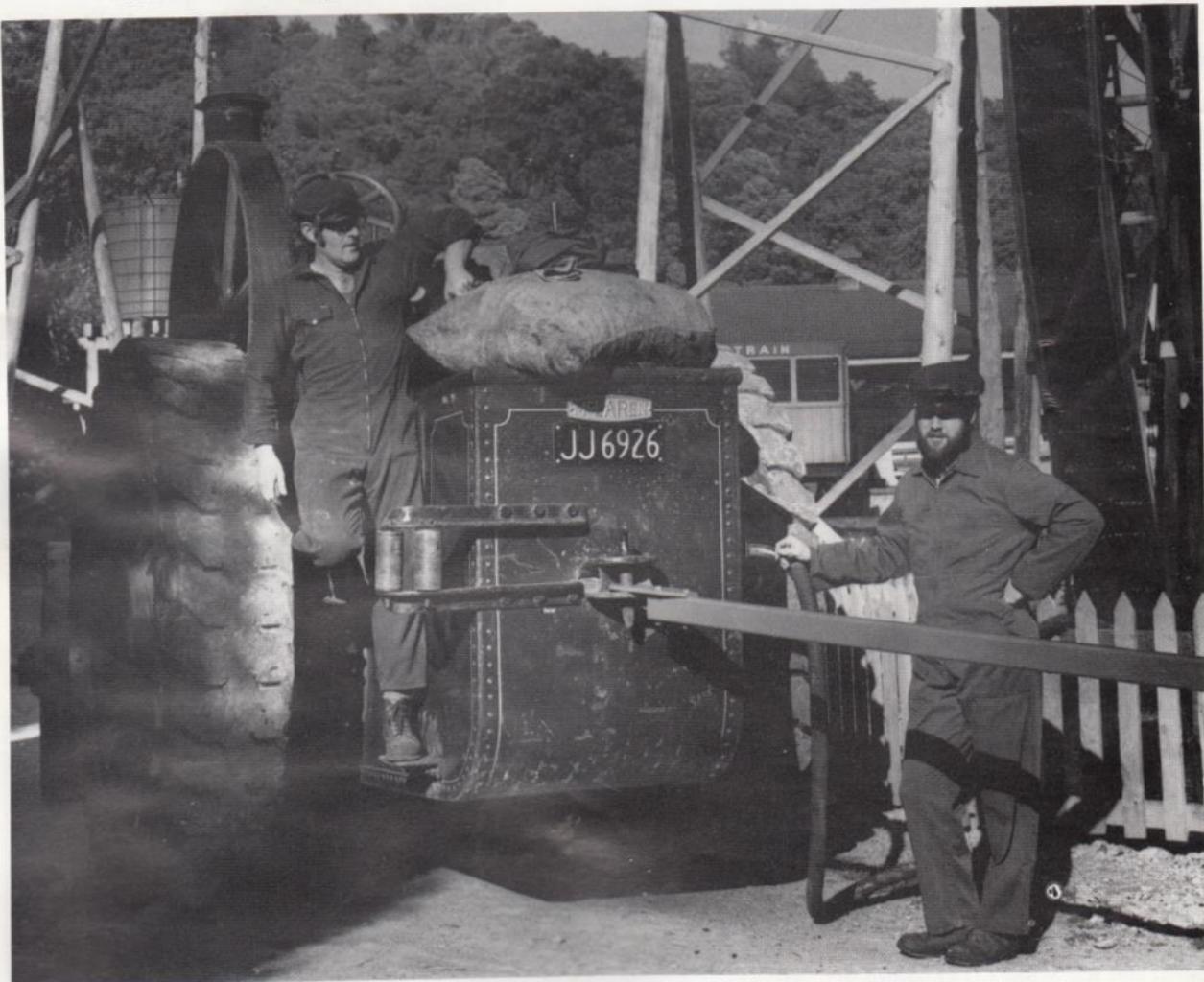
Three young steam buffs getting soot up their noses. With Ian Tibbles, from left, Jobin Platt, Korrin Watson and Michael Henderson.

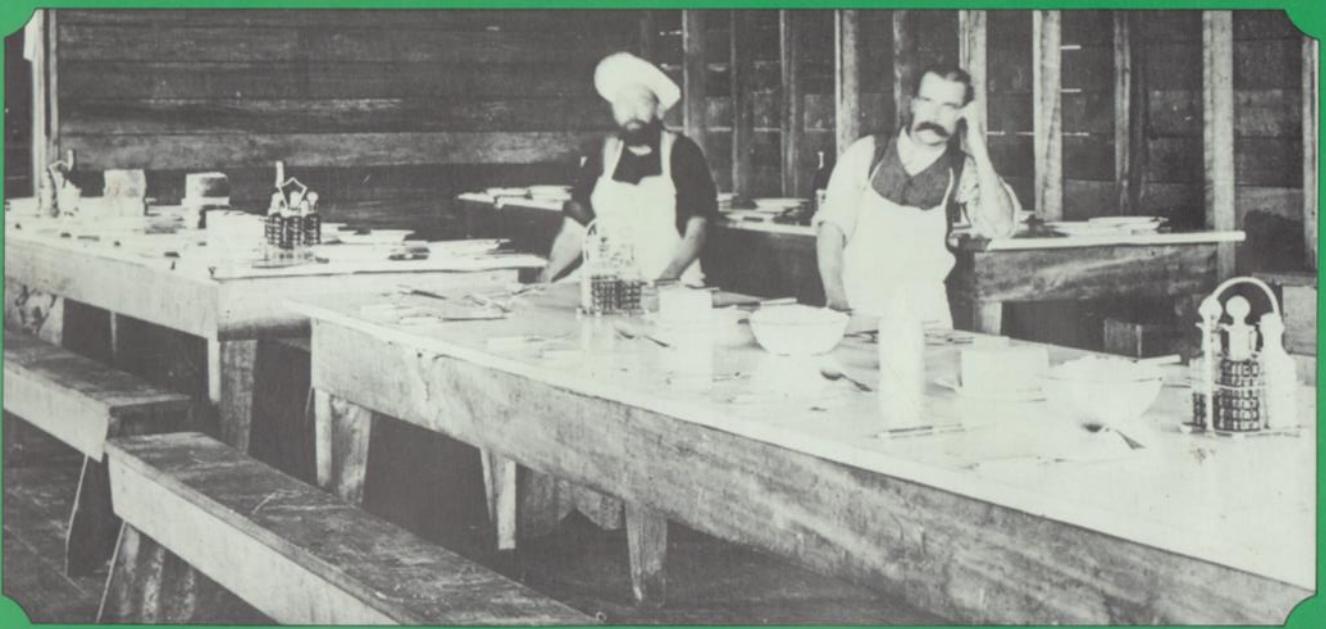
It's now another 34 years since this article was written. I wonder where The Maori is now and what is it up to???????????????????



Above: While owned by Consolidated Goldfields of Reefton, the Maori was used to transport heavy gear to their new mine at Waiuta. This picture shows a boiler en route at Horseshoe Bend on the Blackwater-Waiuta road c. 1910.

Below: The Maori taking on water at Shantytown with assistance from Karl Barkley (right) and Ian Tibbles.





Mokai Sawmill Cookhouse 1905.

Another picture from the Kanapine Timber and Hardware Calendar 1985

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Important Information

14th August 2020

TMMEC Covid Level 2 modus operandi.

Under Covid Level 2 NO public rides will be offered.

The club will still hold maintenance Tuesdays and Tuesday evening engineering nights, as numbers are usually low enough to maintain 1 metre “Social Distancing”, however the monthly “General Club Meeting” attracts about 25 members and the Committee feel that these shall cease immediately until **Covid Level 1** is again back in force.

Club Play-days will continue under **Covid Level 2**, with prior registration by any visitors, so as to manage the total number to a manageable number.

ALL Club members and ALL Visitors must sign into the Attendance Register, including any accompanying persons such as family, and on Play-day report to the Duty Operator so he/she is informed of your attendance.

If the Government raises the **Covid Level to 3** all club activities will cease immediately – except for one person to carry out security checks as and if required.

To reiterate, unless we are at **Covid Level 1** or lower, Club activities are restricted or curtailed until further notice.

Committee TMMEC

**Ladies, if a man says
he will fix it, he will.
There is no need to
remind him every 6
months about it.**



TMMEC 2020 CALENDAR