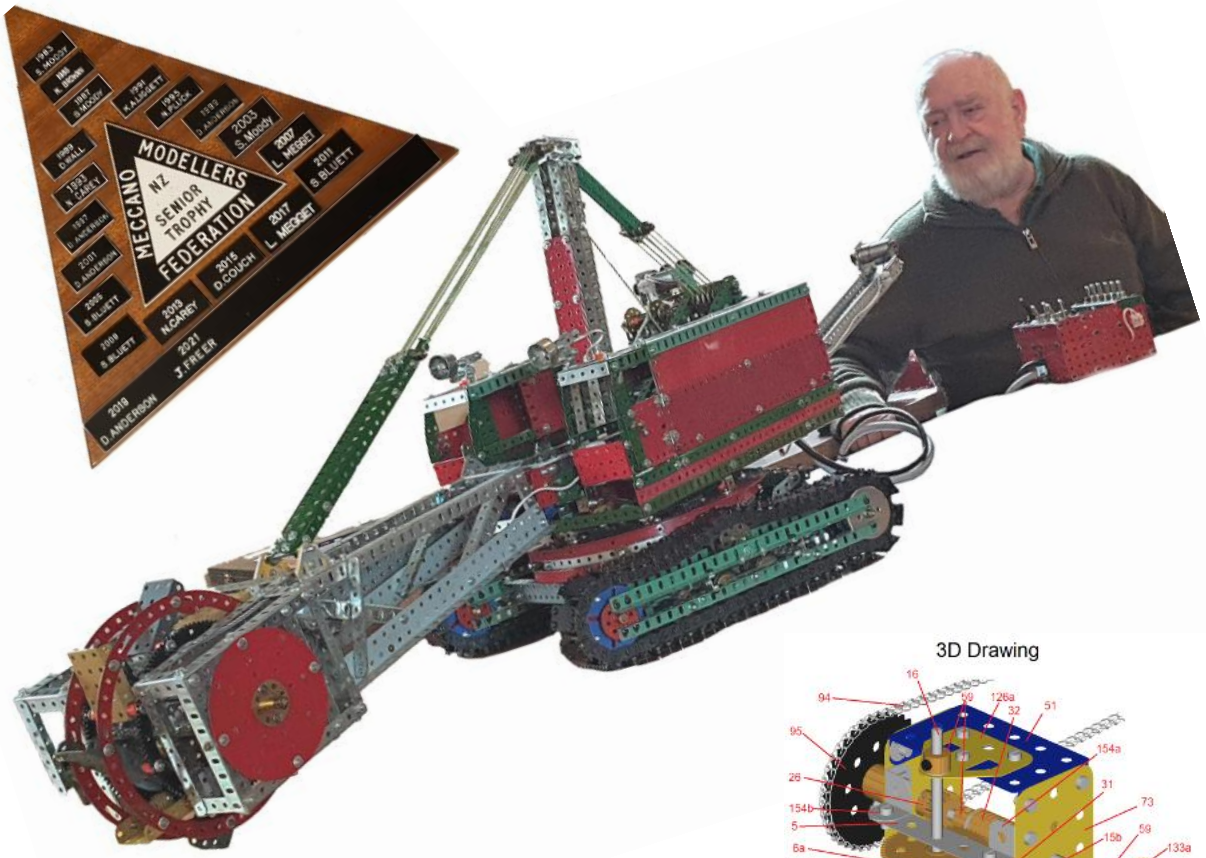
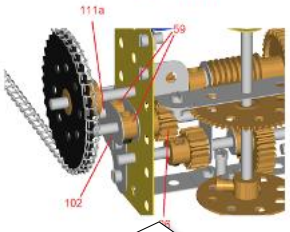
NZFMM MAGAZINE

Volume 45, No. 3 **August 2021**





- Build a Lilliputian Lorry
- NZ Club news
- Meccano reaches for Mars
- Complexity made simple with an automatic reversing mechanism

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From the Editor

Morena Modellers All

The now daily newscasts recording record breaking weather events, both hot and cold, dry and wet, from some point on the globe have become mind numbing. The unrelenting Covid rampage, often on the same spot, serves only to remind me how unbelievable lucky I am to live in Aotearoa. (Actually, it's mostly competent, scientifically moderated management mixed with a *soupçon* of luck.) Anyway, it all has the effect of driving me out to the shed to indulge in something that I can control in a familiar and non-threatening environment—not that it has made my models any better. I am sure there are others who also seek solace in a $^{5}/_{32}$ world during troubled times on planet Earth.

Bruce Geange (MWT**)** is back with another charming, nay Lilliputian, truck. **Steve Westmoreland** (WMC), in collaboration with **Paul Roberts**, unravels the mysteries of a complex self-reversing gearbox.

We have the usual club reports from up and down the country, with the minutes from the NZFMM AGM. Our President, **Reg Barlow** reports on the discussion around the question of federation, as well as a plea for us to boost our social media presence. This is an effective and easy way to keep our hobby alive.

Lastly, please, please make sure you are vaccinated against Covid-19. This is an effective, safe and easy way to protect yourself and your whanau from a potentially deadly scourge. Do not give the social madness that is the anti-vax movement oxygen.

Best wishes
Richard (MWT)

CONTENTS

Meccano Six Wheel Lorry

By

Bruce Geange MWT

Having constructed a few wooden toy lorries I thought a Meccano model would be appropriate. (*Figs 1, 2 & 6 overleaf).*

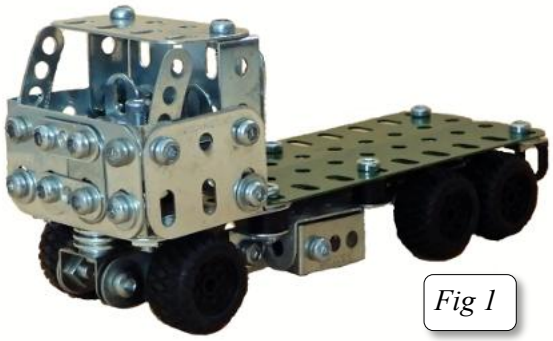


Fig 1

Start by bolting two $3^1/_2$" Narrow Strips to a Narrow Double Bracket spaced with a Washer. In hole four bolt Angle Brackets by the round holes spaced with two Washers. In hole six bolt another two $3^1/_2$" Narrow Strips and in hole seven bolt two Angle Brackets as hole four with a second Double Bracket. At the end of the strip bolt a third Double Bracket. The top of the chassis (*fig 3*) consists of five $5^1/_2$" Strips stacked together and extended one hole with three facing the front and two at the rear. Washers space the strips at either end. The front of the strips has a $^1/_2$" Bolt from below and screws into a Threaded Boss with a 2" five hole Strip. To this strip Bolt a 2" Strip either side with Angle Brackets by the round hole facing the front.

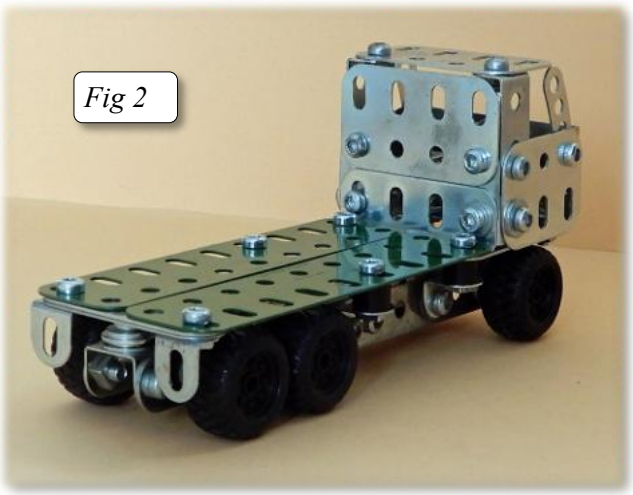


Fig 2

Next build the tray using two $4^1/_2$" Flat Girders bolted side by side at one end with a 2" Strip and Angle Brackets for mud flaps. Fix the tray to the rear angle brackets spaced with Plastic Spacer and a Washer either side using a $^1/_2$" Bolt. The front mounting has a 2" Angle Girder by the round holes under the tray and a Plastic Spacer with the bolt passing through the 2"strips. The Wheels PN A502 fit onto $1^1/_2$" Axles. (*Fig 5 overleaf*).

For the cab bolt a Angle Bracket (round hole) and a Fishplate to each side of the angle girder with a 2" Flat Girder to the fishplates for the rear of the cab. A second 2" Flat Girder becomes the cab front with the radiator Fishplates

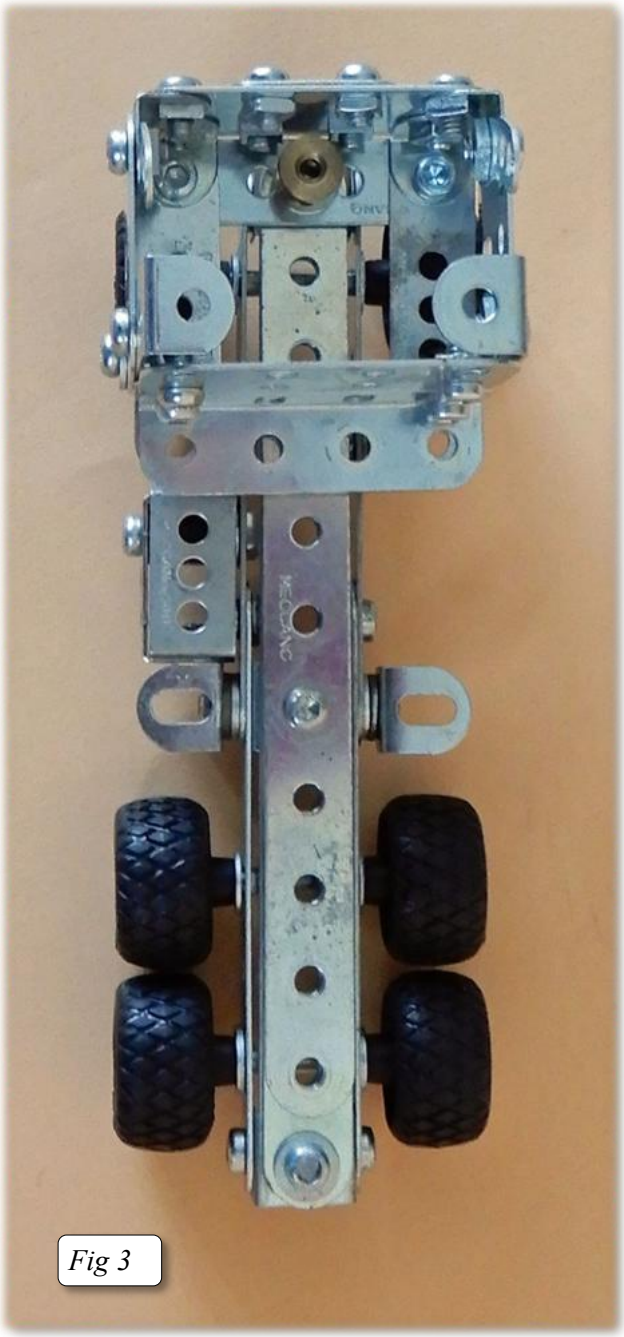


Fig 3

and 1" three hole Narrow Strips. Secure this to the angle brackets at the front with Washers under the bolt heads. Bolt Angle Brackets to the remaining holes at the front by the round holes and secure $1\frac{1}{2}$" Flat Girders to either side of the cab with Narrow Curved Strips (28 mm, PN C960) at the front in hole four. 1" x $\frac{1}{2}$" Angle Brackets bolt to the end of the FG. Construct the cab interior (*fig 4*) from a $1\frac{1}{2}$" Strip with a reversed Angle Bracket bolted at each end and a Fishplate in the middle by the round hole using a $\frac{3}{8}$" Bolt for the gear lever. A $\frac{1}{2}$" x $\frac{1}{2}$" Double Bracket fits over the end hole on the fishplate with a $\frac{1}{2}$" Bolt and a Plastic Spacer secured into the threaded boss. You may need to remove the top radiator grill to fit this. Bolt a 2" Flat Girder to the 1" angle brackets for the cab roof. The fuel tank on the left side has two 1" Double Angle Strips bolted together at one end and fixed to the chassis with a $\frac{3}{4}$" Bolt and two Plastic Spacers.

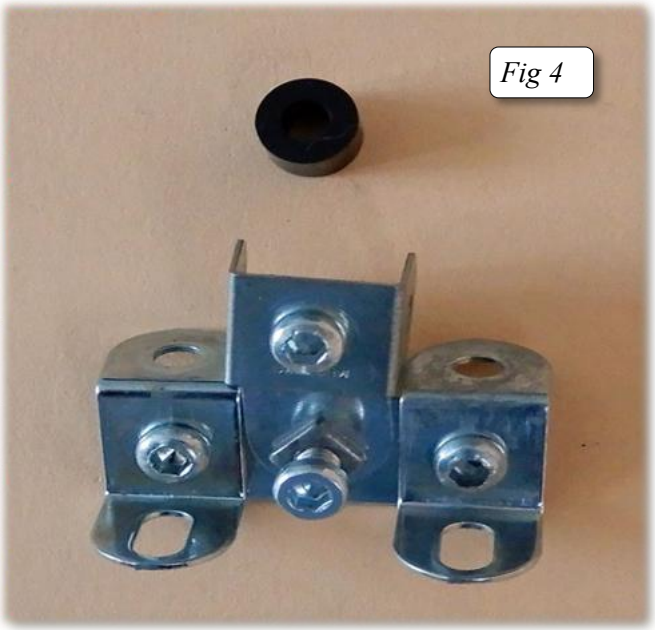


Fig 4

Fig 5

Perfect for carrying your miniature tractors...

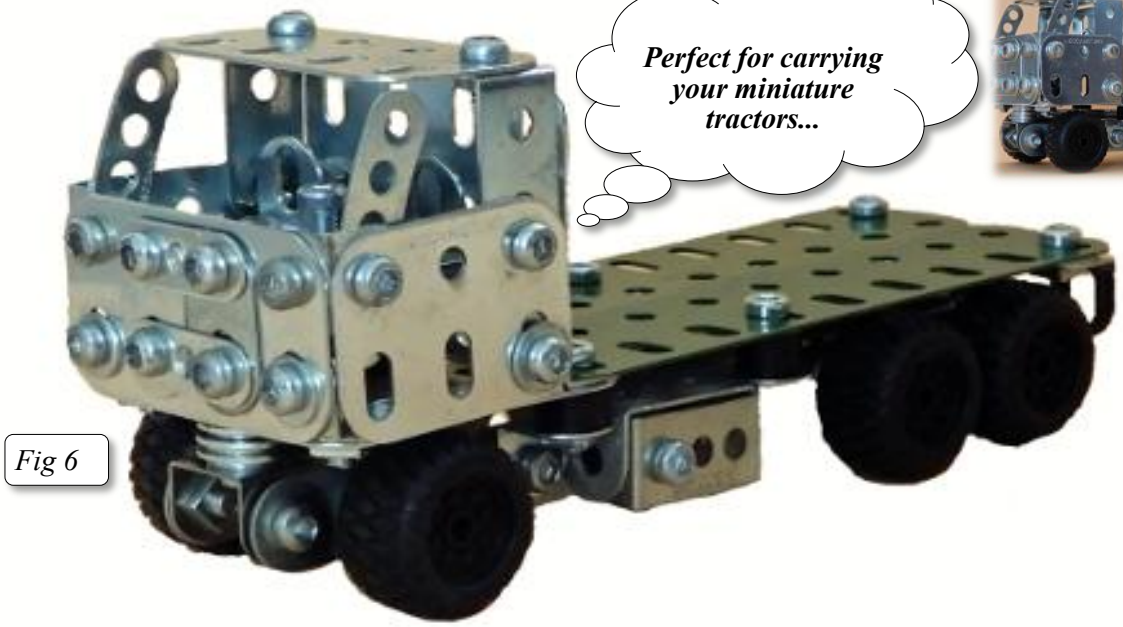


Fig 6

President's Report

Winter is here, and Meccano modelling was supposed to be underway, as the garden and lawns have gone into hibernation. The Meccano room needs a good spring clean/tidying. Has it happened? In a word; NO. I want to move my Meccano into the lounge where it's warmer, but I also wish to keep my marriage in a happy place, (decisions, decisions.) To be fair it shouldn't be a problem, it's just that I'm too lazy to start.

One of the tasks of my new-found, reluctant fame, following on from our last AGM, is to put together some ideas, nay plans, for some guide lines for our National group. I sent out an email to all the club Presidents suggesting that they talk to their members about what they would like to see, and then I would put together some guidelines, not hard and fast rules, just something we all could live with. I didn't want to hear from all members who may have hidden agendas and loud voices, just the top dogs.

All that is just about come together and I'm sorting through a few ideas. Interestingly the suggestions I am getting are all on the same wavelength, which is a positive step forward. It will happen!

How many of you follow and contribute to **Spanner II**? It is sad to see the number of postings getting less and less. But there is a wealth of knowledge lurking inside Spanner. Just ask a question, it doesn't have to be Meccano related, and you can guarantee that you will have a couple of helpful hints within hours.

Now **Facebook**. Love it or hate it, it has its uses. There is a plethora of Facebook groups and pages related to Meccano. I am often asked to '*like'* a request from someone who wants to join our Facebook group (Wellington Meccano) Have a look! We have close to 100 members, most of them from overseas. Maybe they want to come to NZ as visitors to our beautiful land,? That ain't gonna happen for a few years! All I ask them to do is to post and share photos of their models. But what it is doing, is to spread the word of how great a hobby we have. Do a Google search and you will be surprised how many Meccano groups there are!

At a recent display at the Cable Car Museum, we had a big screen showing **YouTube** videos that had been put together to run for six hours; it looked impressive. They were mainly videos of exhibitions from overseas and NZ, and was an impressive back drop to our models on display. Why I brought this up is to show that Social media (YouTube) can be used to our advantage. Many visitors to the display were intrigued with the models on the screen.

So, therefore, the use of 'social media' can be used to enhance our hobby and give it a wider audience, which, in turn gives us, hopefully, more members to our groups.

Until next time, happy modelling

Reg Barlow
President NZFMM

MODEL CHALLENGE

Reg offers this picture as a model challenge subject.

"The steam powered Westport bucket dredge Mawhera at work just off the main Wharf. She was kept busy maintaining a safe depth of water for shipping until 1979. "

Mechanical Automatic Reversing Mechanism

by

Steve Westmoreland, *WMC*
drawn by **Paul Roberts** *WMC*

This article describes the design for improvement of a mechanical automatic reversing mechanism (or forward / reversing gearbox). The basis of the mechanism was first described by **Bert Love** in the March 1970 *Meccano Magazine.* The mechanism was utilised in my auto reversing double decker bus with a 2.3m long 'road' model, as displayed at the recent Meccano convention and Wellington Cable Car Museum exhibitions earlier this year.

With reference to the 3D drawing (*fig 1*) or photo, (*below)* for simplicity, the 2x 1" gear wheels are forward (*on the ri*ght) and the 3x ½"pinions are reverse (*on the left),* when engaged. The improvement relates to the addition of a 1½" strip, whose *centre* hole is used to support the idle pinion – necessary when in reverse. This was because I found that when using the original design this pinion 'graunched' badly because of the high torque required to move the bus, due to it's weight. Further support of the 2" idle pinion shaft is by using a single bent strip (*fig 2, opposite page*) attached to the outside of the left 3" x 1½" flat plate. (The drawing omits the layshaft washer's detail & the channel bearing - see "how to build" 5th paragraph).

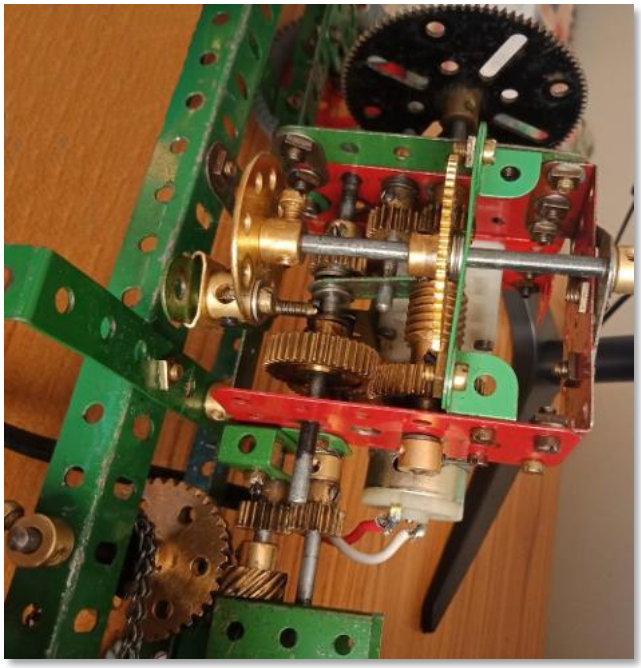
Bert has the worm drive and sliding 2½" strip as one part, in the middle of the mechanism, with a short bolt head between gears to move the layshaft. This does not allow my improvement, because there was no room to fit the 1½ strip vertically that moves horizontally for engagement so ending on a diagonal on the input, idle and layshafts; and confining the bolt head precisely.

Consequently I moved the sliding strip part out to one end and the worm drive became two parts, as can be seen. The 1½" strip ends out on a slight diagonal when the layshaft is moved to be at either extreme in forward or reverse. The layshaft 1" gear and ½" pinion are only engaged 2-3mm as the 57 tooth gear very slowly moves around, and the bush wheel mechanism slides the layshaft horizontally, so that the max. equal and opposite diagonals that the 1½" strip has to achieve is 3-4 mm. (This distance includes the bus pausing for 20-30 seconds in the middle, when the layshaft is disengaged between forward & reverse, that equates to the bus stopping 100-200mm (an inexact distance in practice - due to build -up of small gaps in auto-gearing) from each end of the road. Here there is an additional movement of approximately 1 mm for the 1½" strip). 3-4mm is probably the maximum diagonal from right angles that this 1½" strip design can get away with without creating too much friction on these three axle shafts.

To build this mechanism, a ¾"bolt is attached to hole 4 of the 2½ strip (pivoted at hole 5, obscured) with its head confined on the layshaft in the order of parts as shown in the photo. Also, there are a couple of mm gaps between the top (input) shaft's ½" pinion / collar /4 thin washers and worm gear (obscured) at either side of the top hole of the 1½" strip on the input shaft, for positioning the strip and it's eventual diagonal slopes. In the drawing, a 1:3 reduction is shown at the output shaft. To achieve a 2.3m road that I thought was reasonable for an exhibition bus distance, a third 1"gear (obscured) was utilised in my design on an output shaft that meshes with the layshaft 1" gear using the 3"x1½" flat plates with a 1"corner bracket & channel bearing support. The channel bearing, on its side, is bolted to the bottom of a 2 ½" x 1 ½" flanged plate that overlaps by one hole length along its left side to the flat plate. The gears used were found by experimentation starting with a 12V **Crouzet** motor, with the standard maximum number of epicyclic gear reduction rings (3) for maximum torque (and a 1:5 gearing reduction at the mechanism's input).

A further improvement I gained was to make the mechanism about two-thirds the size of Bert's design, enabling it to fit inside the bus; i.e. the mechanism was formed around flat plates, whereas Bert used 3½" x 2½" flanged plates.

I hope that I have described a mechanical automatic reversing mechanism that can be used for 'any' (!) high torque low speed application. I enjoyed the challenge that creating this design gave me.



Note: Mechanism shown engaged in **forward.**

The order of parts from **left** to **right** on the layshaft should be as follows:-
½" pinion – 2 x thin washers –
bottom hole – thin washer
¾"bolt head – thick - 1" gear wheel+ 1 x thick washer
½" strip + thick washer - washer

Steve Westmoreland, WMC

3D Drawing

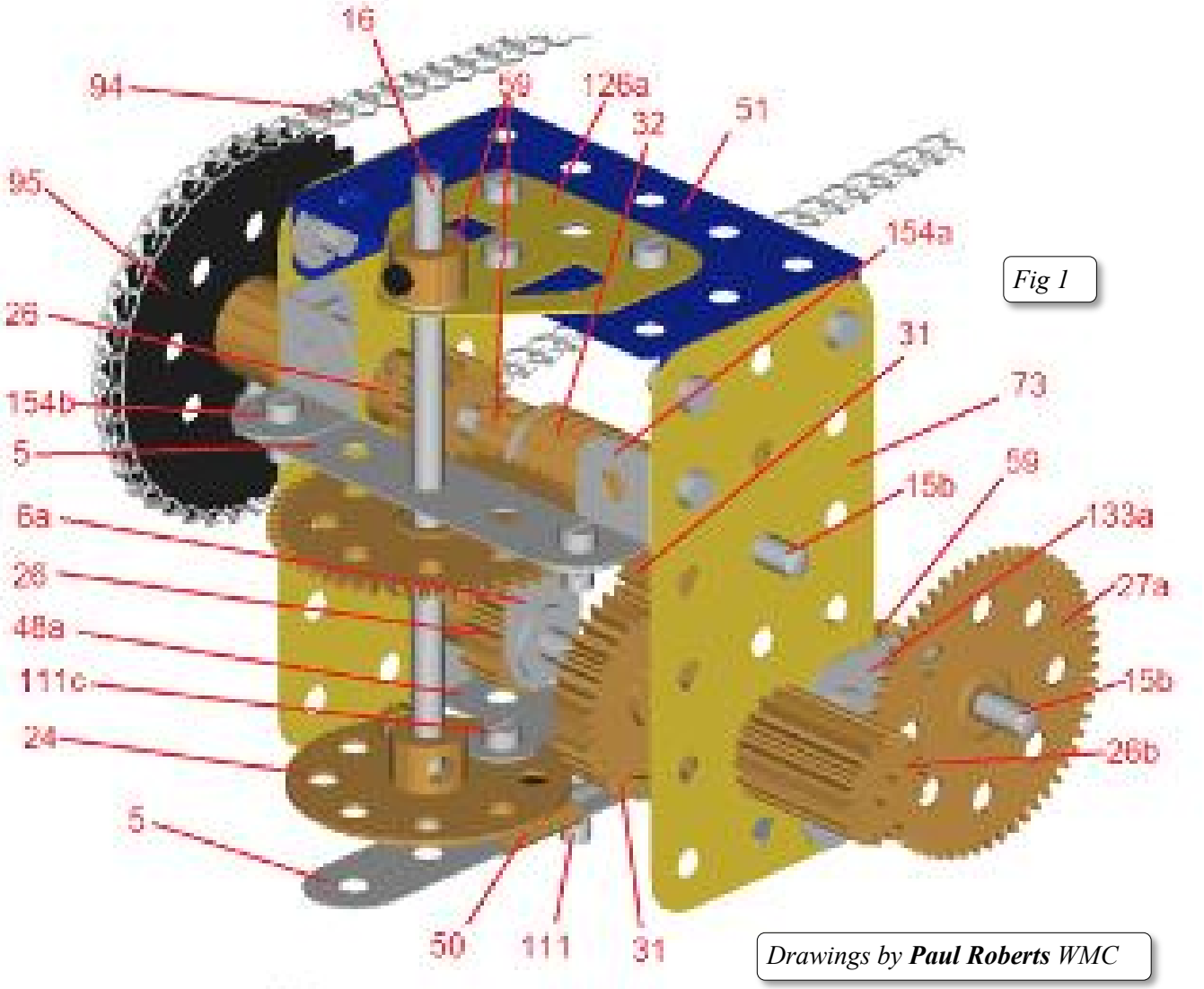


Fig 1

*Drawings by **Paul Roberts** WMC*

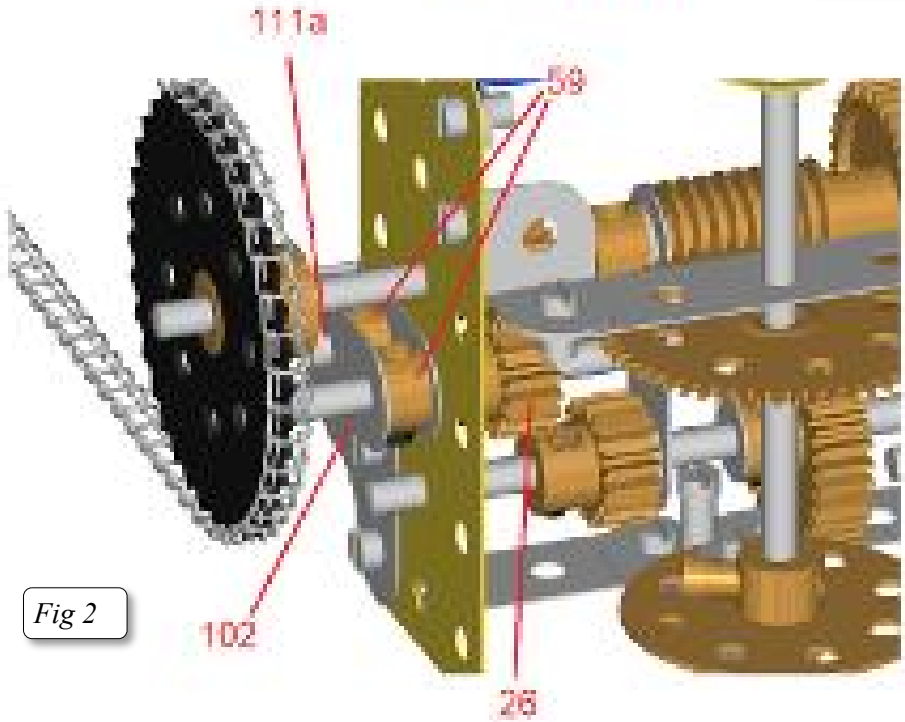


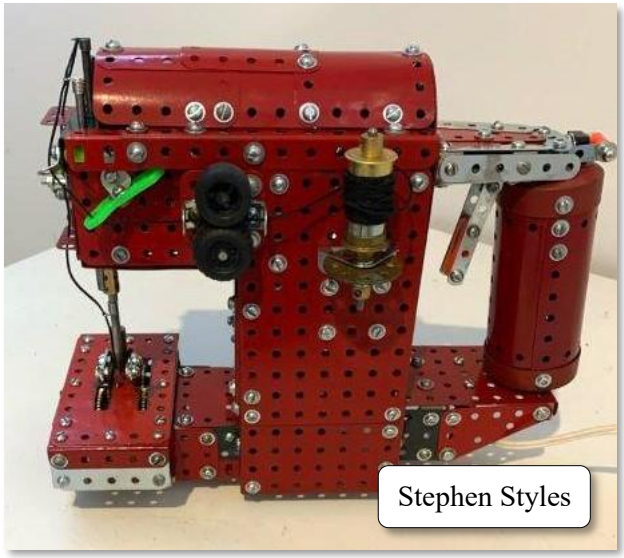
Fig 2

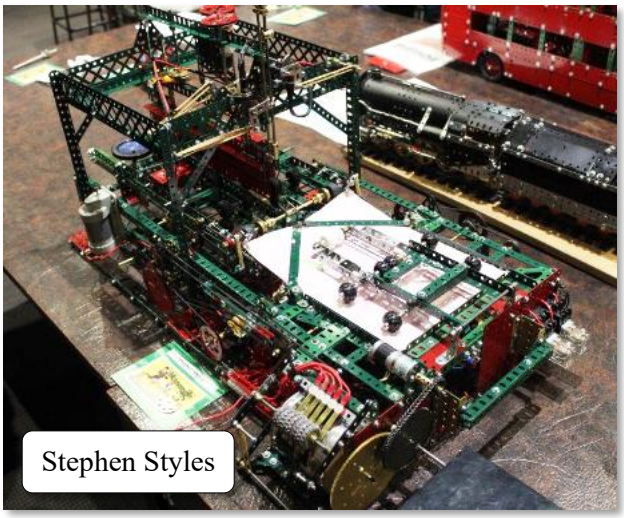
<u>*Notes*</u>: A large *thick* washer must be used immediately either side of the ¾" bolt head for best confinement because of it's greater diameter, otherwise a thin washer slips around the bolt head in practice when the layshaft moves to either extreme because the washers end up being pushed slightly diagonally too. A "*thick*" washer is a standard Meccano washer PN 38, 1.5mm thick, 10mm diameter (nom.); and a "*thin*" washer is an engineering washer 1mm thick, 9mm diameter (nom.). (or two electrikit washers PN 561, 0.5 mm thick).

Christchurch Meccano Club

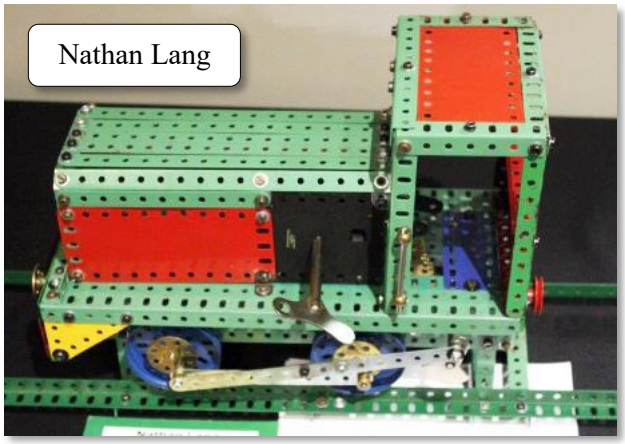
By
Roland Jaspers

It is with sadness that we have to advise the passing of **John Hamlyn.** John suffered from cancer which flared up severely over the last few months. He fought hard and without complaint and retained his good humour and interest in Club matters right to the end. John has been a member of the Christchurch Meccano Club for 41 years (1959-68 & 1981-21). His models were technically excellent and he often amazed us with the mechanical detail and workings he managed to squeeze into a small place. He will be greatly missed by all members of the Club. A couple of examples of his models are included in this Club report.


Stephen Styles


Stephen Styles

The last few months have been quiet. Not much planning to do yet for Convention 2023, so the meetings were mainly used for socializing and admiring/ discussing models of which there were many excellent examples. Model themes were bridge, open model and sewing machine. The last one defeated most club members but resulted in one excellent example by **Stephen Styles.**


Nathan Lang


Nathan Lang


John Hamlyn


Kevin Downie

Roland Jaspers
CMC

Christchurch Meccano Club

(*Top*) **David Littlefair's** delightful rendition of "Boris' Bus"; aka Route-master

(*Left*) A windmill by **Linda Woermann**

(*Right*) A lift-bridge from **Neil Pluck.**

(*Bottom*) Rail Bridge by **Graeme**

Auckland Meccano Guild

May Meeting Report

by

Gary Higgins

AMG

The current meeting of the Auckland Meccano Guild was held at **Neil Carey**'s residence in Hillsborough on the second Saturday of May 2021.

Les Megget, Keegan Wrightson and **Mike Stuart** sent their apologies

Rick Vine had built a helicopter from the new spin master motorized movers set number 19602, this set has a new electric motor powered by 3 AAA batteries and works well. The set comes in a nice plastic storage case with moveable inserts.

Rick had built up a halftrack using Army construction parts from the 1970's and he has a space 2501 set in excellent condition. This set had the uncommon white ½" pulleys the more common colour being red.

Rick also had a very nice working model of a vertical oscillating steam engine and a *Bayko* house complete with garage.

Gary Higgins had built up the three models from the new Space set no 18214 which included a rocket similar to the space X rockets capable of take off and landing and had fold up fins for this purpose. It also included a Mars rover which although small had the correct details and a space shuttle with opening bay doors and a robotic arm. (*Overleaf*)

Gary had built a Rhinoceros from the Serengeti Safari set no 16207 which can build any one of four different models of a Rhino, a Cheetah, a Elephant and an antelope. (*fig 5)* He also built a small red and silver monoplane from an earlier set.

He had brought along a 4x4 remote control truck which had *Steelworld* branding but was in fact a rip off. It used USB to recharge a small onboard lithium battery which was rather neat.

Gary also had a large rubber tyre (*fig 1*) which was sold attached to a rope as a dog chew. These come in 3 sizes and would be great for Meccano models with the inner diameter fitting Meccano parts. It has dog bone pictures on it but these could be painted over or removed.

Gerald Hart had built the weight lifting man model from a model plan which worked well and he had built an armoured car model using the plans in a Meccano Magazine which he had altered to suit the model. It had a clever steering mechanism and Gerald had used some original Mechanised Army Parts (1940) in the model.

David Wall had made up his version of the Crazy inventors helicopter , but he did make an effort to point out that it was in fact a steampunk vessel, I was most impressed with his depth of knowledge on this subject. He informed me that the tail fin was of his own design and therefore it was no longer a crazy inventors model! It did work very well.

Anthony Caldwell had modelled a horizontal steam engine in yellow blue and silver which was powered by a hand crank. (*Top right opposite page*) These are great for children at exhibitions where you can replace the 'Don't Touch' signs with one encouraging them to have a go.

Holly Wrightson had brought along a twin swing model which was motorized and worked well.

Neil Carey had his huge model of a "ja" class oil fired locomotive which he had made by converting his NZR "j" class model. (*fig 6, overleaf)* The loco was number 1285 of which 16 of the prototype were built by the North British Locomotive Co. of Glasgow in 1951 and Neil fired no 1285 on a semi-regular basis in the first half of the 1960's on the remaining steam hauled express passenger trains in and out of Auckland.

William Irwin brought along some examples of overseas magazines and he also had a lot of original boxed Meccano parts for sale.

There were quite a few discussions about how the convention went and it was fortunate that we had four of our members in attendance. **Holly** and **Keegan Wrightson, David Wall** and **Rick Vine** .

Fig 1

Afternoon tea was hosted by the ladies and was a great end to an excellent meeting.

Fig 2

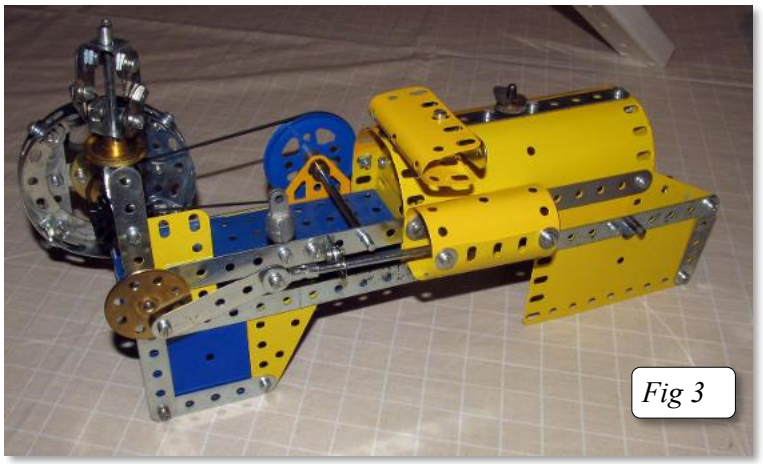


Fig 3


Fig 4

Fig 5

Below: **Holly Wrightson** discusses her motorized twin swing set (*inset image*) at the **Auckland Meccano Guild May Meeting, 2021**.

Fig 6

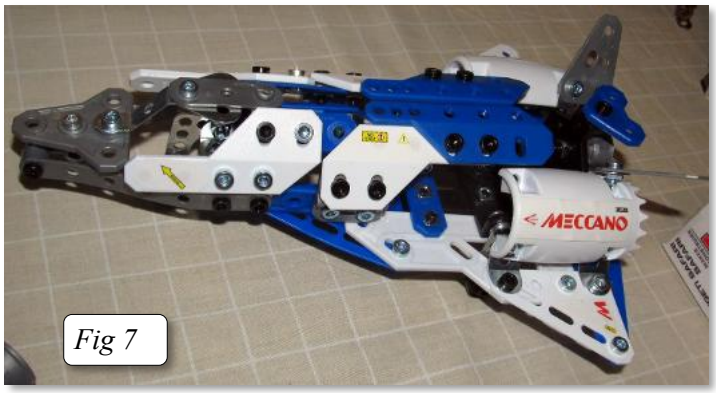


Fig 7

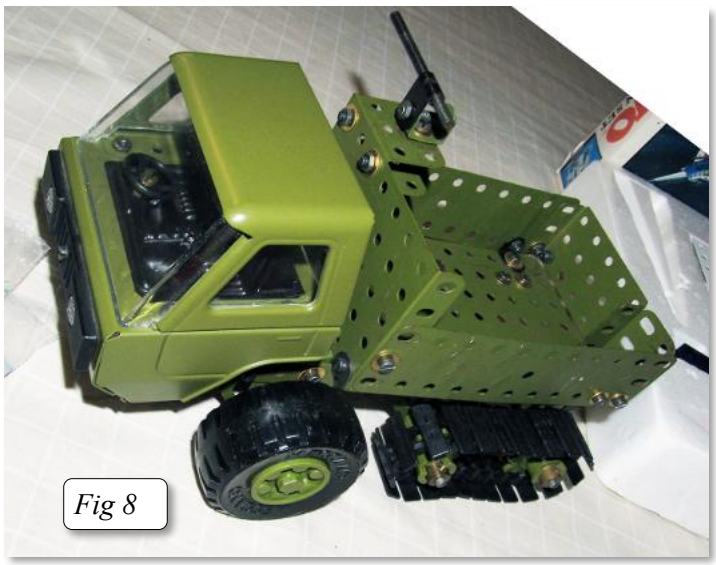


Fig 8

Fig 10

The **AMG** members display a cornucopia of **Meccano** vehicles, covering almost every mode of transport on Earth and on Mars. A reminder that Mars is the only planet inhabited solely by robots.

Fig 9

SPREADING THE WORD

A selection of snaps taken of NZFMM President **Reg Barlow** (WMC) talking to the Waikanae Rotary Club in early June about the history of Meccano. He had built a number of models to display the various eras of Meccano production. Reportedly his talk was well received, activating more than one pleasant memory in the audience.

Life imitates art, or should that be the other way round? A series of works by local artist **Andrew Cox** on display at the TSB Arena recently. These strips were made from laser-cut sheet steel which was then painted. These works bear a close resemblance to my desktop in the days leading up to a Meccano meeting. Never thought of framing them. Sale price was $1250.

Nelson Mail

Weeke

In a nation famous for its inventive thinkers and No 8 wire tinkerers, it's no stretch to think that a Kiwi came up with the hydraulic excavator after mucking about with a Meccano set, writes **Gerard Hindmarsh.**

Opinion

Did a relatively unknown engineer in Golden Bay invent the first oil-powered hydraulic digger?

The Hitachi Construction Machinery Corporation of Japan is widely credited with its evolution their first commercial excavator being the UH03, launched in 19 and seems set fa grandchild use. Meccano m sustainability, as well as in the young to engineering.

Perhaps Ms Collins, lik never played with Mecca no reason to despise it. A the point.

Finance Minister Grant Richards speaks of re-establishing manufacturing in New Zealand. Assembling wagons at Hillside should be just a start, leading to manufacturing wagons, and eventually, one hopes, reliable engines, as in the past.

★ ★ ★

Around 1950, Couper became inspired with the idea of building a pressurised oil-driven hydraulic excavator capable of digging ditches to drain wet paddocks and swamps.

Until then, it was largely a matter of hand digging or using explosives to blow sizeable trenches and then trying to tidy them up with a shovel. That was not only hugely laborious, but the result was often messy.

Using a Meccano set to mock-up his final creation, Couper then, it is said, spent the best part of a year manufacturing his oil-powered hydraulic digger which sat on a axle, dual-wheeled trailer towed behind a tractor. sat on a seat and operated the machine's Providing

nd 38 or the llside

he huge edin, but sing g locally gainst going nder at the h KiwiRail g asbestos- eaking down,

Chinese engines,

MECCANO NEVER GROWS OLD

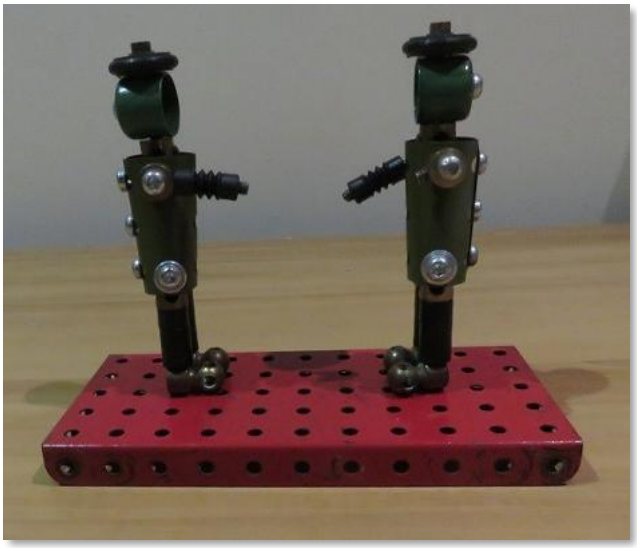
David Glenday spotted these references to Meccano in several recent newspaper articles. **'Meccano'** has become the generic term for mechanical innovation.

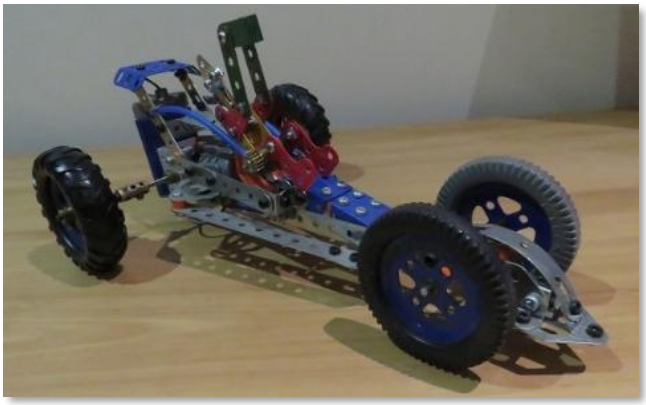
The Wellington Meccano Club Meet ng

Reporter – Max George

Meeting Date: Friday 4th June 2021 at 7:30pm at Stan Baker's place, Lower Hutt.

Reg Barlow: Displayed one of Lou's small models – Two little Men. (*Below*)

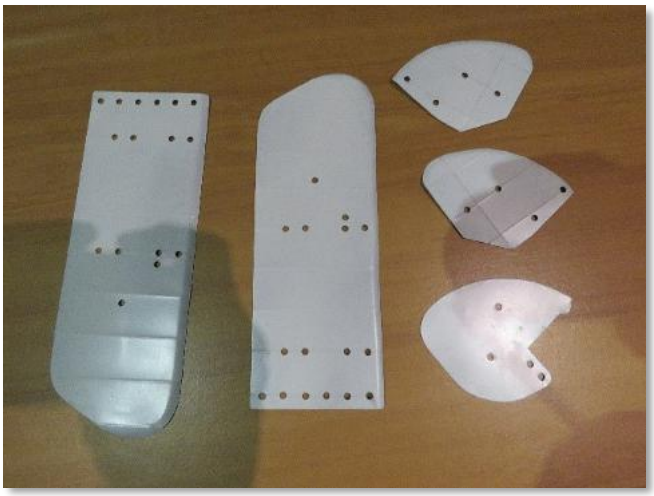




Reg also made a Mars Rover. (*Above*)

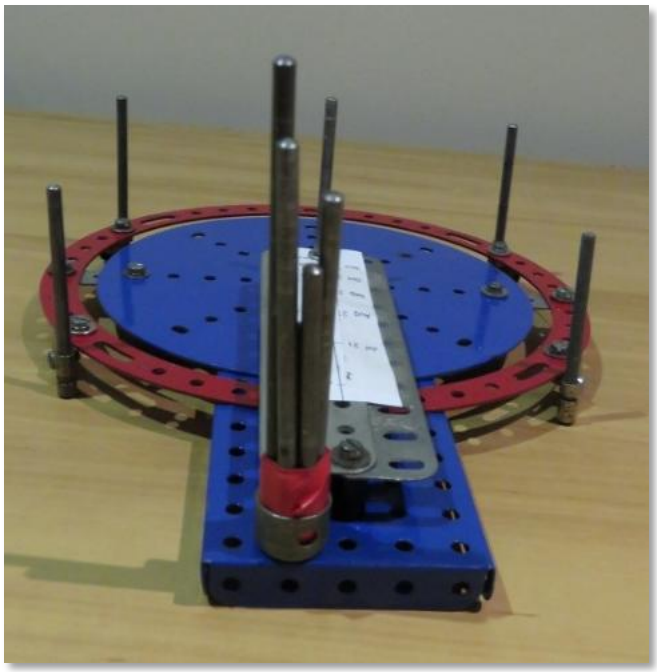
Campbell Morrison: Has made up a roller out of an old computer arm which he put is a vice and then creates replica Meccano aeroplane parts of tin plate.

(*Above*) Roller used to make replica aeroplane parts. Which puts the grooves in the pieces. Some of the parts of the aeroplane shown here. (*Below*)



He will have to make a die for the fuselage.

Paul Roberts: Visited Stonehenge Aotearoa and decided to make a Solar Calendar, based on the Henge. He explained how it works with the 7 stars of Matariki.



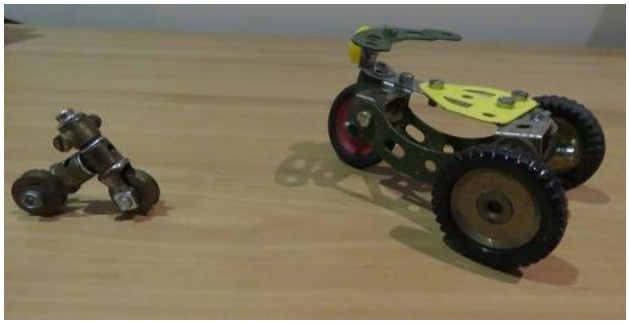
(*Above*) Solar Calendar based on Stonehenge.

Paul has been busy using CAD to draw Meccano parts that Stan Baker has the used to create replica Meccano parts with 3-D printing. Examples shown below.

(*Fig 1).* Dredger buckets P/N 131.

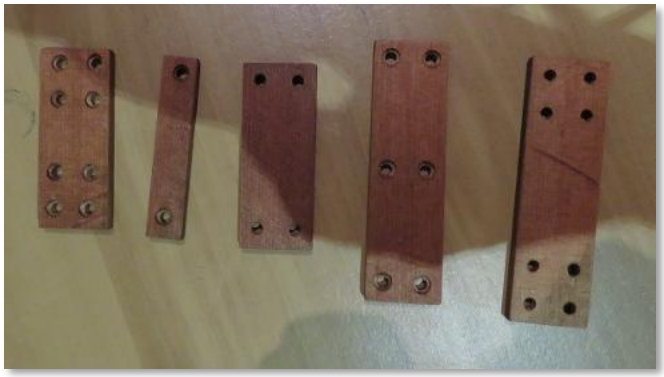
(*Fig 2)* Other parts – 27f Multi purpose gear wheel. Note the slots to hold nuts as the printed part doesn't hold screws very well. The rollers were not very successful.

Trevor Green: Made some small models. (*Below*)



At the other end of the scale, he has made the Special edition set 0525 with some modifications due to not all the parts being in the set he bought. Spitfire (*Above*)

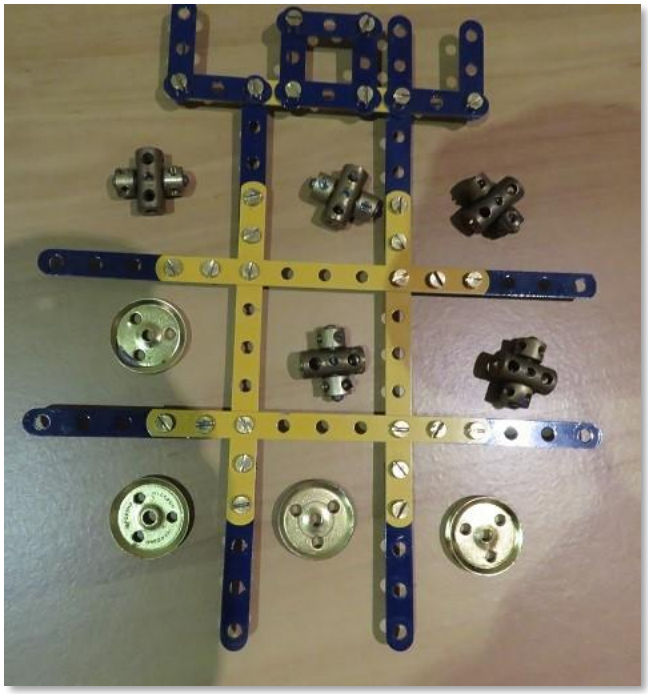
Trevor has a wooden Primus set for which he is making parts to use with Meccano as shown below.



Ross Quayle: Is having fun making models from a small number of parts. A dome made from narrow strips. (*Below*)

(*Above*) 'Thing' made out of Left-Hand and Right-Hand Corner Brackets.

Stephen Westmoreland: Kept things simple this time. (*Below*) Noughts and Crosses.



(*Above*) Keeping with models Lou previously made, Stephen built the fisherman.

Brian Petersen: Brought three aeroplanes he has been working on.

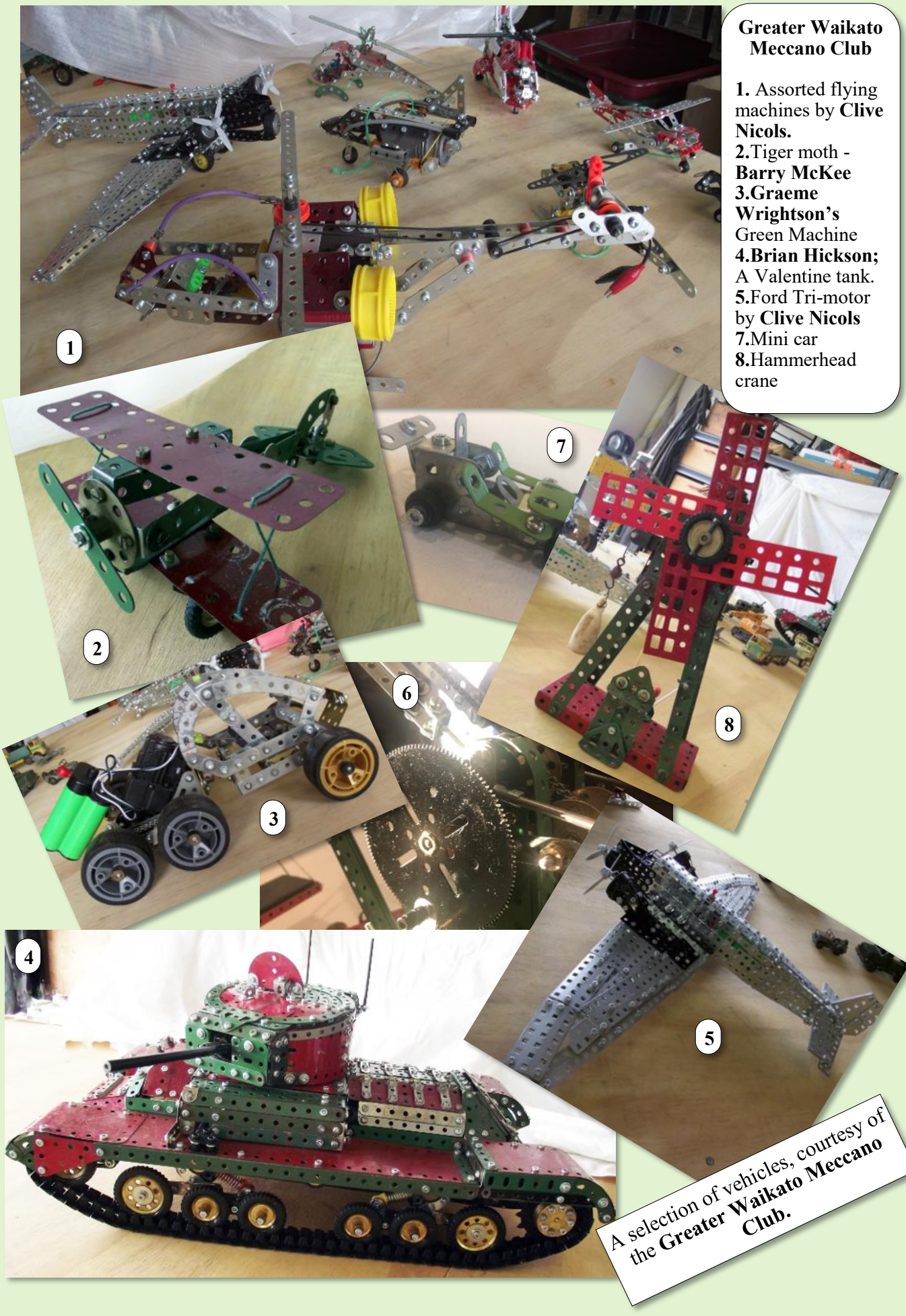
(*Below*). A French version of the Red Arrow Hawk.

Brian made some pf the parts out of plastic and the nose cone out of cardboard.

(*Above*). McDonnell Douglas F/A 18 Hornet.

(*Above*). McDonnell Douglas F15 Eagle.

Max George: Brought along models built by his U3A Meccano building group.



Greater Waikato Meccano Club

1. Assorted flying machines by **Clive Nicols.**
2.Tiger moth - **Barry McKee**
3.Graeme Wrightson's Green Machine
4.Brian Hickson; A Valentine tank.
5.Ford Tri-motor by **Clive Nicols**
7.Mini car
8.Hammerhead crane

A selection of vehicles, courtesy of the **Greater Waikato Meccano Club.**

The New Zealand Federat on of Meccano Modellers AGM

Reporter – Max George

Meeting Date:
Saturday 20th March 2021 at 4:30pm at Waikanae Memoria Hall, Waikanae.

Present: Thirty Nine members were present from the five Meccano Clubs around NZ. A separate list records their names.

Apologies:
Five members apologised. A separate list records their names

Passed Away:
Nine members or their wives have passed away since the last AGM A separate list records their names.

Meeting:
This meeting was chaired by the NZFMM President Chris Morton.
Chris welcomed us all and asked us to stand for 2 minutes in memory of those that had passed away since the last AGM.

Minutes of the Previous AGM:
No one took minutes at the previous AGM.

Treasurers Report:
Peter Hancock handed out the Treasurer's report for 2021 2022 and reported on the problems branches had with not being able to hold meetings over the various Covid-19 lockdowns. He thanked people for their magazine subscriptions as this is the only funds that the NZFMM holds the account for.
A request to those paying using PayPal to add NZ$2 to the quoted subscription rate to cover what PayPal charge.

The BNZ bank requests that the Federation has three signatures. At present these are **Peter Hancock** (Treasurer), **Gary Higgins**, and **Les Megget**. BNZ have also asked that **Bob Prescott's** name be removed to tidy up their files as he was the previous treasurer. Les Megget or personal reasons would like to resign as a signatory. This leaves us with only two signatures.

Chris Morton indicated that to accommodate these changes we need to move and second the following motion:

I, Christopher Morton, President of NZFMM Magazine, move the following Motion:

"That the members of this Biennial Meeting of the New Zealand Federation of Meccano Modellers Magazine, advise our bankers, the 'Bank of New Zealand', that the following amendments be made to our account Bank Signatories as follows:

- **Les Megget** be removed from the signatory list as he has requested.
- That the treasurer **Robert Prescott's** signature be removed from the bank records as a cheque signatory.
- That **Kegan Wrightson** be appointed as the third signatory of the NZFMM Magazine bank account."

The motion was seconded by David Shand.

Discussion:
Roland Jaspers was concerned that the account was for a magazine account and not a Federation account. We can't be members of a magazine account. General discussion about this was made indicating that the only reason for the account is for the subscriptions for the magazine and that the Federation does not hold any other monies. If you subscribe to the magazine, you are automatically a member of NZFMM.

A motion was put to amend the original motion to remove the magazine for the original motion.
All in favour. (Not recorded who proposed and seconded the motion).

The following amended motion was passed with all in favour:

I, Christopher Morton, President of NZFMM, move the following Motion:

"That the members of this Biennial Meeting of the New Zealand Federation of Meccano Modellers advise our bankers, the 'Bank of New Zealand', that the following amendments be made to our account Bank Signatories as follows:

- ***Les Megget be removed from the signatory list as he has requested.***

- ***That the treasurer Robert Prescott's signature be removed from the bank records as a cheque signatory.***

- ***That Kegan Wrightson be appointed as the third signatory of the NZFMM Magazine bank account."***

The motion was seconded by David Shand.

The Federation of Meccano Modellers account was presented by **Peter Hancock. (***See overleaf***)**

At this stage we have not paid the extra subscription to Microsoft for Publisher. The total would be the same as last year $160.

The cost of printing the magazine hasn't changed in two years. However postage is going up.
A discussion was held as to whether the magazines should be bulk posted to each club and then are distributed to members. Not a good idea as members like to get their own copy as soon as it is ready.

Moved by **Peter Hancock**, seconded by **Roland Jaspers** that the account as presented be accepted.
All in favour.

New President of NZFMM:
The presidents of the clubs have already voted for Reg Barlow to be the incoming NZFMM president.
These presidents who voted are Reg Barlow (Wellington Meccano Club), Chris Morton (Manawatu Wanganui Taranaki Meccano Club), Neil Pluck (Christchurch Meccano Club), David Wall (Auckland Meccano Guild), and Graeme Wrightson (Greater Waikato Meccano Club).
Richard Feltham thanked the magazine contributors and has not received any complaints.
Stan Baker thanked Richard for his work.
The May issue should be great with reports and photos from this expo.

Graeme Wrightson (GWMC) is concerned with the use of plastic envelopes and shouldn't we be changing to paper ones - he would like this to be looked into.
Peter Hancock says it is cheaper and easier to use plastic envelopes. It save a lot of time as with paper ones, someone would have to buy the envelopes and individually put them in the envelopes and add the stamps. The plastic ones are done automatically.
Graeme Wrightson proposed that we go to paper envelopes – no seconder.

Reports from the Clubs:
Greater Waikato Meccano Club - **Graeme Wrightson**.
They cancelled two meetings due to Covid-19. They did have one coffee meeting catch-up.
The club has six paid up members and two juniors.
A meeting was held in November and again a couple of weeks ago.

Auckland Meccano Guild - **David Wall**.
Their club has been very quiet over the past three years with last year being especially bad due to Covid-19.
Not much to report and no younger members.

Wellington Meccano Club - **Reg Barlow**.
The last six months have been busy organising this exhibition. With a lot of emails going between members.
We successfully tried a model theme which helped with the number of models brought along to the meetings.
Last November the club was invited to be the major display at RailX in Taita. This was very successful and we are likely to be invited again.
We will be displaying at the Cable Car Museum in April.

Christchurch Meccano Club - **Neil Pluck**.
One meeting cancelled and they recently held a successful display.

Manawatu, Wanganui, Taranaki - **Daryl Anderson**.
Having a theme is a great idea and they get lots of models.

General Discussion about the future of Meccano:
Reg Barlow discussed the company now dealing with Meccano in NZ now that *Elephanta* is no longer the importer. He will try and find out what they are doing about Meccano. We need to try and keep the Meccano name alive.

Roland Jaspers asked what the future of Meccano is as we are all getting older and young people are not interested in building with Meccano. Do we continue doing what we are doing and hope that it gets better.

Reg Barlow said we need to market to the new generation by using Facebook, Google.

Graeme Wrightson says he has been working with children for the past 10 years having 'camps' over the school holidays where there were up to 30 children and many brought their dads along.
They built plenty of models and they needed regular sessions. Need to be committed to once a week.
He mentioned that the train group ran a junior session in Cambridge a couple of weeks ago where70 attended.

General Business - Constitution:
Peter Winter said we need to amend the constitution to be changed to have five clubs.
Auckland Meccano Guild
Greater Waikato Meccano Club
Manawatu Wanganui Taranaki
Wellington Meccano Club
Christchurch Meccano Club

The difficulty is that we do not have a constitution for NZFMM.
Peter Hancock (AMG) said that they tried creating one a few years ago and decide not to.
Roland Jaspers wants a constitution and if not then some basic rules for the federation
The following motion was put –

That the 5 presidents consider whether or not to revise and update the current verbal constitution and rules. The presidents will consult with their membership on the matter.

This was accepted.

Meccano March Madness 2022 NZ:

Simon Moody (WMC) has organised another March Madness for next year.
Saturday, 5th March 2022, 9.00am to 4.00pm.At: St Andrews Anglican Church, 91 Titiraupenga Street, Taupo. (Same venue as previous gatherings). One day only. Enthusiasts, partners and family only.

$10.00 donation per enthusiast to help cover the cost of the hall and light refreshments. Lunch and meals are your responsibility.

Group evening meal. Taupo Cossie Club, probably.

Clockwork Motor Challenge:
Leonardo da Vinci Machine powered with any Standard Meccano Clockwork Motor.

Bring the picture to show what inspired your choice.

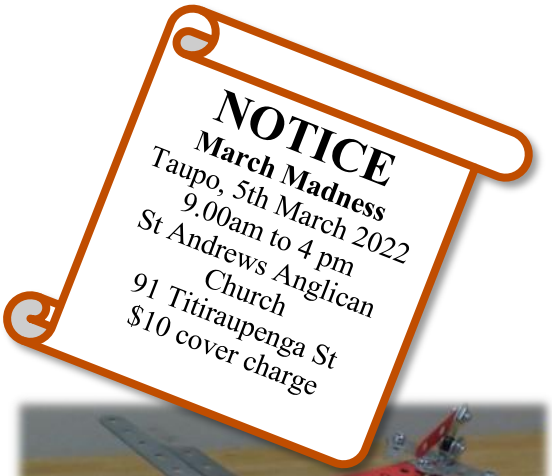
Multiple entries permitted.

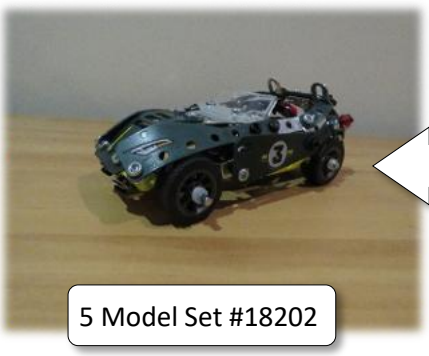
Other models welcome to be shown.

Meccano items of interest can be brought and demonstrated.

Next Convention:
No date had been decided for it or where it will be.
This could be hosted by either CMC, GWMC, or WMC.

Meeting Closed 6:05pm




5 Model Set #18202

These two models made by U3A members from the Meccano Group led by **Max George** from the **Wellington Meccano Club**


3 Model Set #3555

N.Z FEDERATION OF MECCANO MODELLERS

Income and Expenses - 01 February 2020 to January 31 2021

2019/2020			2020/2021
$2,451.66	Cash Book Balance February 01 2020 [Bank Statement No 270 dated February 01 2020]		$2,030.16
	INCOME		
3,687.00	Subscriptions N.Z	3,803.00	
460.20	Subscriptions Australia	369.29	
572.25	Subscriptions Rest of World	595.64	
-	Subscriptions in advance	47.00	
40.00	Back copies	-	
-			
$4,759.45			4,814.93
$7,211.11			$6,845.09
	EXPENSES		
2,990.00	Printing 4 issues [Feb,May,August,Nov]	3,003.80	
-	Printing back copies	-	
80.00	Plastic Wrapping	80.00	
1553.20	Postage	1,021.10	
385.25	NZFFM Web Hosting	385.25	
	Freight	-	
7.50	Stationery		
165.00	Annual sub Microsoft Publisher	-	
$ 5,180.95			4,490.15
$2,030.16	Cash Book Balance January 31 2021		$2,354.94

Bank Reconciliation

Closing Bank Balance - Bank Statement - Number 270 Dated 29 January 2021	$2,354.94

Peter Hancock
NZFMM Treasurer

MWT Meccano Club
Model report meeting
10 April 2021

Graeme Humphrey: A very old tin clockwork train made by G & C & Co of Nuremburg. Gauge 1. A collection of Meccano pieces in a very nice wooden box. The box was not of Meccano manufacture.

John Freer: He displayed his prize winning coal ex-excavator. The model was inspired by a huge machine now retired in the former East Germany.

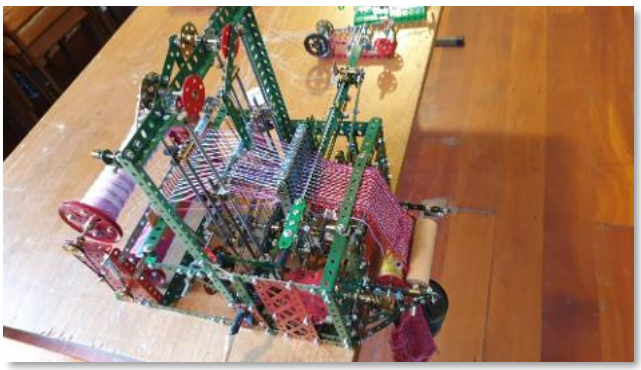
Reg Barlow: A poster for the upcoming Meccano show in the Wellington Cable Car Museum. The Kessler donated Hornby Companion book to pass on to someone. Reg displayed his travelling Meccano repair kit. Meccano itself, a Spitfire model, 2 Meccanoids and a skittles game.

Mikayla Lindsay: Was racing the Bryan and Nancy Jones 2006 era Meccano radio controlled car about the hall floor.

Stuart Lindsay: Had completed the Ferrari kit just bought and brought to the last meeting. He also had a rocket model and the Big Ben kit model.

Robin Rye: Non Meccano but had a new Hornby 00 scale locomotive and demonstrated its slow moving abilities and some of the available sounds that it can make. Digital Command Control for those in the know!

Hugh Ramage: The engineer in Hugh can recreate in Meccano intricate mechanisms found in sewing machines and had 3 of such on display. His loom model has progressed and was present. It features a rapier mechanism rather than the usual shuttle in the weaving process.

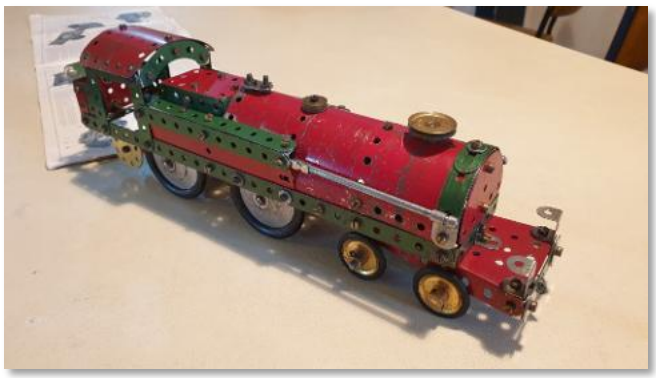


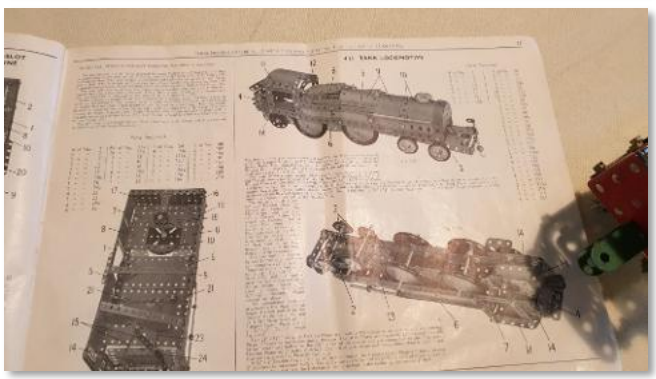
Chris Morton: Had visited The Warehouse and bought the Innovations Meccano set. The book "Frank Hornby" by Jim Gamble was there to peruse.

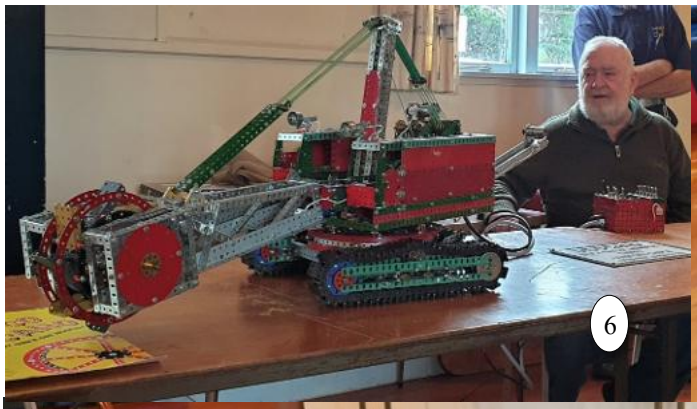
Peter Winter: Peter had bought the Innovations set also and reported how impressed he was with the parts contents but not so with the manual. He built a car model with the set that is controlled by smart phone.

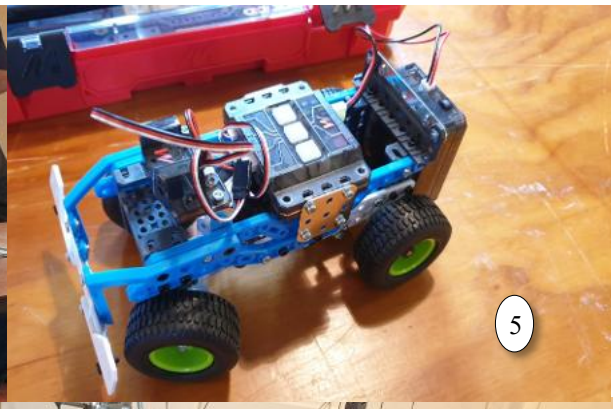
Paulette Morton: A Plastic Meccano series model built in association with a child.

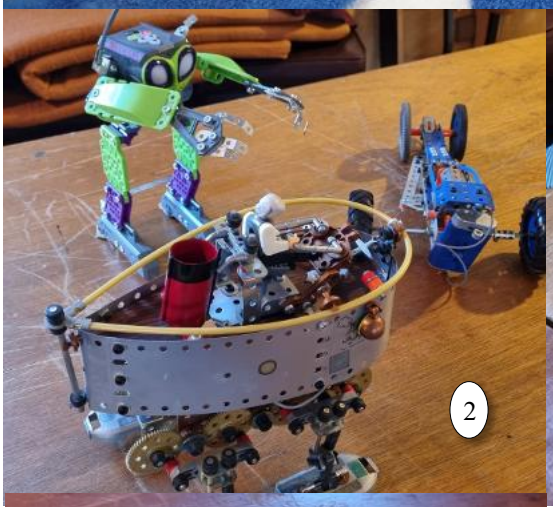
Paul Vodanovich: Winding a crank made a stunt man do an acrobatic performance on a horizontal bar and a loco model 4:23 set 4 of 1954. His superb nickel battleship was on display again.

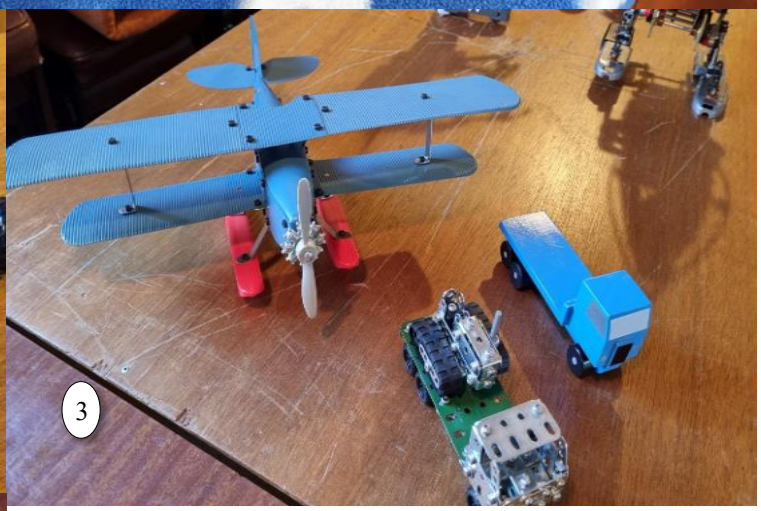


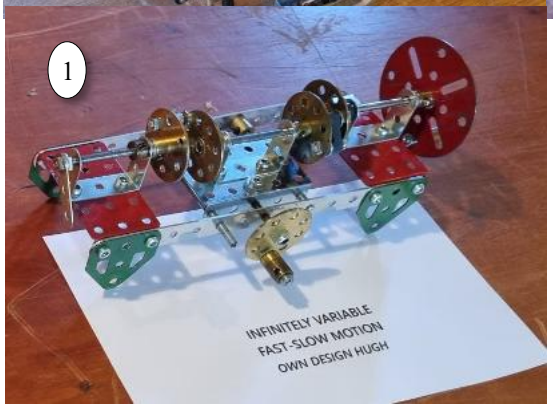












A SELECTION OF MWT CREATIONS

Hugh Ramage (*1*) demonstrates his mastery of ingenious mechanisms with this infinitely variable fast-to-slow device while **Reg Barlow** (*2*) explores the steam-punk world. **Bruce Geange** (*3*) displays miniature perfection on land and in the air while **Paul Vodanovich** (*4*) has a classic battleship, HMS Vanguard, down to a nickel-plated tee. **Peter Winter** (*5*) is firmly in control with his smart-phone operated racer from the Innovations set. **John Freer** (*6*) with his prize-winning coal excavator

MWT Meccano Club
Model Tour
12 June 2021

Model Challenge: As set by **Peter Winter**, build a Martian Rover. Peter to provide the Martian landscape for evaluation.. (*Fig 2, 2a overleaf, back cover*)

Hugh Ramage: Magic motor powered rover (*fig 4)*

Reg Barlow: Crazy Inventors set Stomper.

Richard Feltham: NASA approved, remote controlled Martian Lander, with real-time video imaging to his telephone.

Peter Winter: Ed Hillary type trans-Antarctica machine.

Steve Westmoreland: Jeep type rover

Selwyn Bluett: A large model of an articulated Martian terrain dump truck. This was beautifully designed and meticulously constructed, but ultimately lacked the necessary grunt for extra terrestrial work. *(Fig 3)*

Results: After the voting tokens were counted a draw was announced between Reg and Richard. Reg graciously offered the victory to Richard on the grounds his own model was a commercial design. A gesture in the spirit of a true Meccanoman.

Main Tour Contributors

Reg Barlow: A number of new Meccano sets at set prices were on offer and a quantity of older Meccano for auction. One of the current small Meccanoid sets made up that has intelligence to interact with humans! (*Can it write the Model Report?)*

Daryl Anderson: Some photo albums of conventions past including one album of the late Lindsay Bond. The 1972 edition of the Development of the Meccano System (DMS) book.

Paul Roberts: Wairarapa Stonehenge model.

Brian Paterson: A miniature beam engine and 3 small car models.

Steven Westmoreland: Displayed the Bruce Geange publication of small models and some models made from instructions in the book. Also, two other small set models.

Selwyn Bluett: Had many Meccano and Ashok pieces bagged up for sale at set prices.

Stan Baker: Several Meccano copy pieces made by 3D printing with a solution to fixing those pieces to a rod if needed. Gears and a Dredger Bucket featured. Some mysterious Meccano like pieces.

Robin Rye: Several printed issues of Johnny Meccano's Meccano magazine (free to down load) and various Marklin Metal publications.

Hugh Ramage: A variable speed motion device and a delightful sausage maker., based on the one seen in the popular tv program, '**The Repair Shop.'** *(Fig 1)*

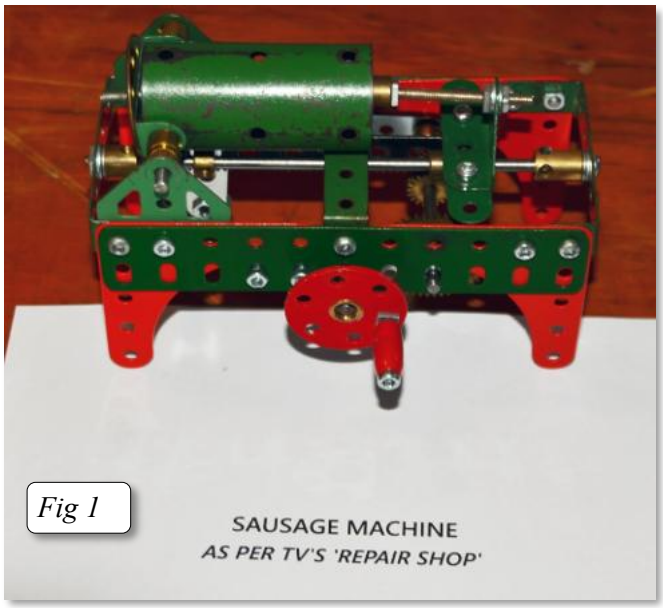


Fig 1

Peter Winter: A Davidson Hokitika 12 wheel bush locomotive. All 12 wheels to drive on articulated bogies which Peter is hoping to perfect in time.


Fig 2

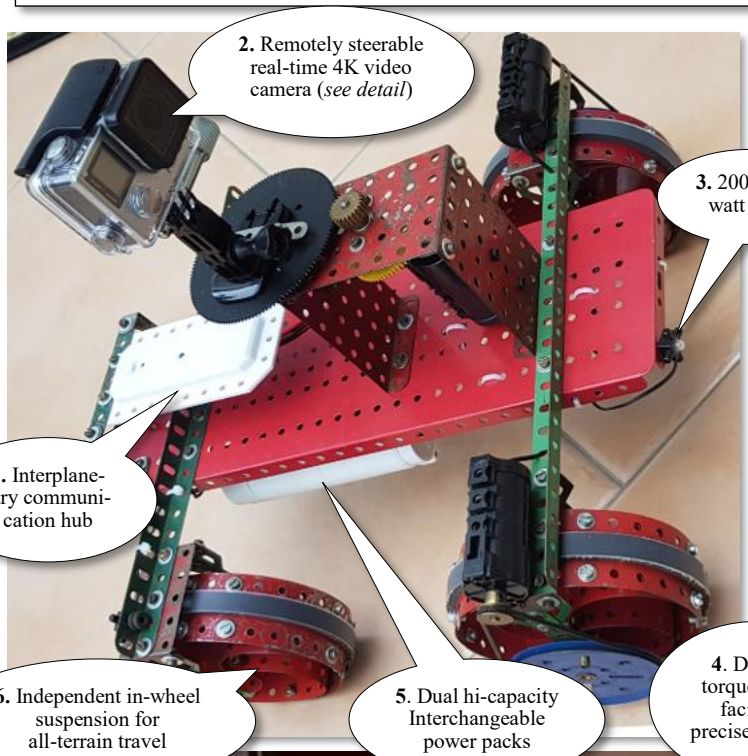
Bruce Geange: A deviation from Meccano, a model truck made from wood but, also, another truck with a crawler load made with Meccano. A **Bral** (Italian made) aeroplane very similar to the Meccano Aeroplane Constructor sets of the 1930's.

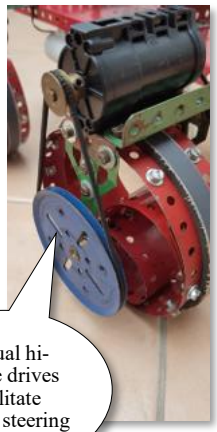

Fig 2a

THE 7 MINUTES OF TERROR

Anxiety is etched deep on the faces of MWT and WMC members as they watch **Selwyn Bluett's** master-piece struggle to conquer the unyielding Martian terrain. (*See back cover*)

Left to right: **Julie Hunt, John Freer, Paul Roberts, Daryl Anderson, Stan Baker, John Jordan, Robin Rye.**





ANATOMY OF A MARTIAN ROVER EXPLAINED…

1. IR control unit out of a tower crane.
2. An old GoPro
3. Pathetic **r**ed LED
4.Weakest Meccano motors available
5. 4x C cells (flat)
6. 4x bent flexible plates


Fig 3

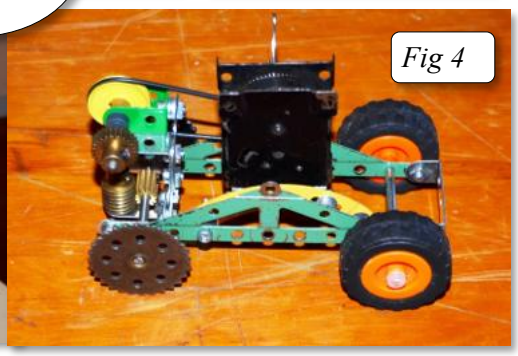


Fig 4

New Zealand Club Diary 2021

Auckland Meccano Guild

President: David Wall, Tel. (09) 426 1965
Secretary: Gary Higgins, Tel. (09) 832 4292
Meetings: Meetings are held quarterly in February May August and November on the second Saturday at 2 pm.

MWT Meccano Club

Chairman: Chris Morton, Tel. (06) 323 8001
Secretary: Robin Rye, Tel. (06) 764 8670
Meetings: Second Saturday of every second month, at 2pm. Held at St. Luke's Church Hall, Corner Cornfoot and Manuka Streets, Castlecliff, Wanganui.

Wellington Meccano Club

President: Reg Barlow, Mob. 021 955 488
Secretary: Max George, Tel. (04) 232 4200
Contact: Stan Baker, Tel. (04) 566 7150
Meetings: Begin 7:30pm on first Friday every second month.

Christchurch Meccano Club

President: Neil Pluck, Tel. (03) 382 0411
Secretary: Roland Jaspers, Tel. (03) 351 4389
Meetings: Start at 7:30pm on first Friday every month (except January) at Papanui RSA Club, 55 Bellevue Ave or No. 1 Harewood Road, Christchurch.

Greater Waikato Meccano Club

Contact: Graeme Wrightson, (Mob) 027 671 6004
Meetings: These are held on the first Saturday of every second month, except January. Most meetings are held in the Central Waikato area starting at 2 pm. Contact Graeme Wrightson on 027 671 6004, Matamata.

Other Meccano Contacts

Hamilton: Don McClelland, Tel. (07) 843 4198
Tauranga: Barry McKey, Tel. (07) 576-1623
Hawera: Daryl Anderson, Tel. (06) 278 7666
Palmerston North: Bruce Geange, Tel. (06) 357 0566
Nelson: John Stark, Tel. (03) 545 1025

Articles, etc. for the November 2021 issue of NZFMM Magazine should be sent to Richard Feltham before the 20th October 2021. at: richard.feltham174@gmail.com

Back Numbers: NZFMM Magazines from April 2001 are available. Please contact Bruce Geange.

UPCOMING

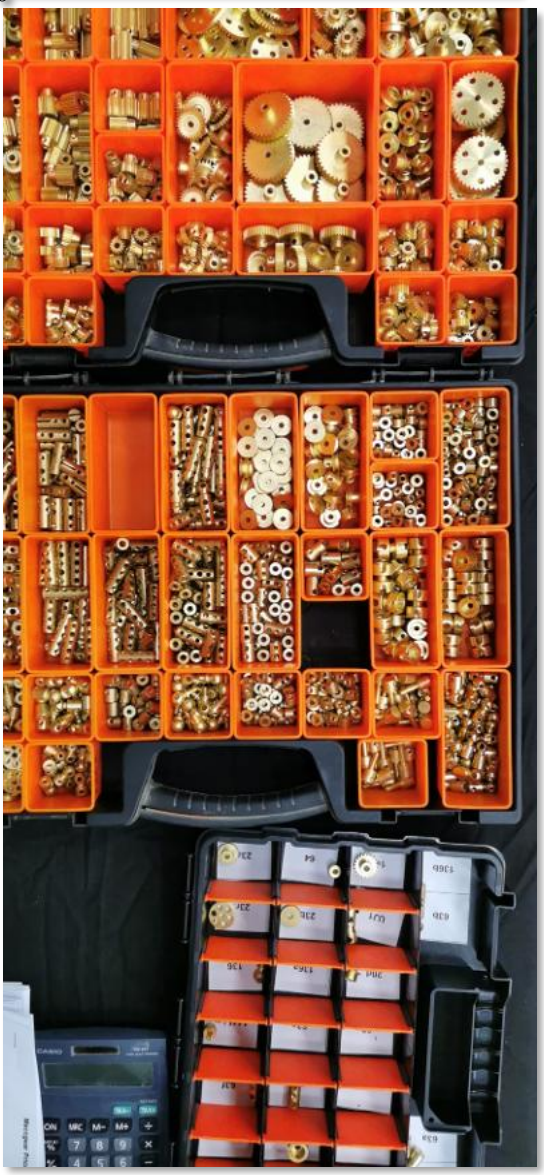
Meccano March Madness 2022

Saturday, 5th March 2022, 9.00am to 4.00pm.At: St Andrews Anglican Church, 91 Titiraupenga Street, Taupo. $10.00

Clockwork Motor Challenge:
Leonardo da Vinci Machine powered with any Standard Meccano Clockwork Motor.

Contact: Simon Moody

Buy, Sell, Auction & Exchange



MECCANO GEARS and BRASS PARTS

Contact **Jeff Clark**
jeff@kjd.co.nz
021 743 080
sales@meccgear.co.nz

COLONISE MARS!

In preparation for the forthcoming colonization of the Red Planet, as predicted by a certain Mr Musk, MWT members rise to the challenge with their collection of Martian Rovers. The complexity of some, like the offering from **Mr Selwyn Bluett** (*top left*) give ***Curiosity*** and ***Perseverance*** a run for their money while the simulated regolith, courtesy of **Mr Peter Winter** is a new high in authenticity. (*Above*) The wanna-be explorers line up in a manner reminiscent of the Oklahoma Land Rush of 22nd April, 1889.