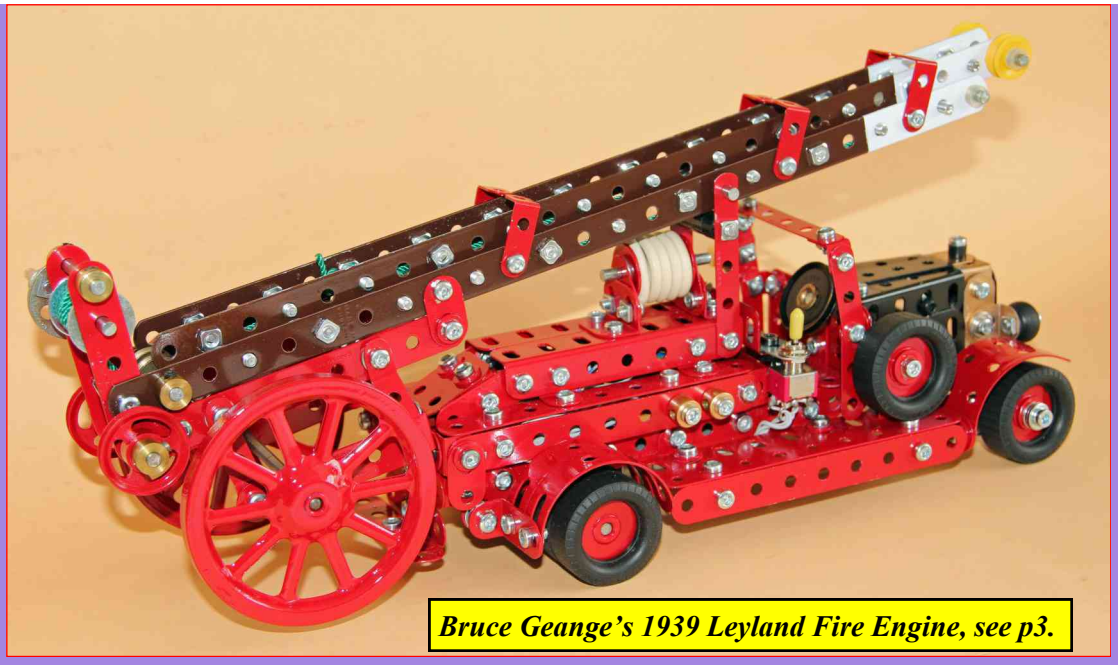
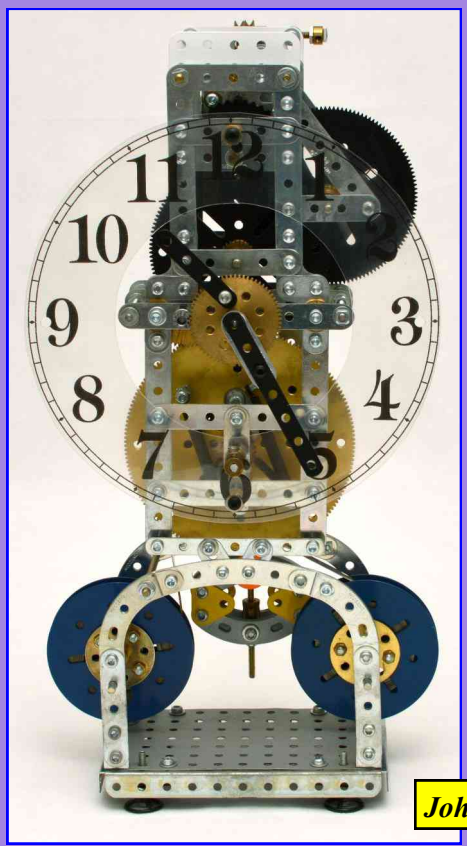
NZFMM MAGAZINE

Volume 39, No. 1 February 2015



Bruce Geange's 1939 Leyland Fire Engine, see p3.



John Stark's Skeleton Clock, see p12.

Included in this issue:

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NZ Federation of Meccano Modellers Magazine

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EDITORIAL

This issue begins the new subscription year and as can be seen below we have had to increase the subscription rates across the board. This is the first change in rates for several years and is mainly due to increases in printing costs and postage. The increase in colour printing also increases the cost but I'm sure you would agree that colour is much better than the 50 shades of grey of years past. For those who find the increases beyond their means there is always the electronic alternative; the best value for money around. When I compared the subscriptions with other international Meccano magazines the NZFMM Magazine appears to be the best value for money. Take my word for it! This magazine will be the last you receive if you don't pay your new sub by May.

Thank you to those of you who "hit the keyboard" after my begging letter at new year soliciting articles. However lack of copy is a constant problem and more material is needed regularly. The lack of articles is nothing new as you can read in Peter Hancock's summary of the NZFMM Magazines in the late 70s (see p22).

The 2015 Easter Convention/Exhibition is fast approaching and Stan Baker tells me there are now over 50 registrants, so a very large display of models is assured. *Spin Master* are sending out the latest, award winning, Meccanoid Robot and all the latest models which are not yet available. Read Stan's Convention information report on page 20. It will be an exiting year with these new releases, most of which contain lots of metal "classic" parts and much less plastic than in the recent past. One set, *London's Tower Bridge*, actually contains four (yes 4) Flanged Plates, P/N 52 in zinc.

Today (19 February) I was told of the passing of **John Ince** (ISM 95), a long time member of the MWT club and Compositor of the magazine from 2001 till late 2011. John was 85 and a full obituary will be in the May issue.

Les M

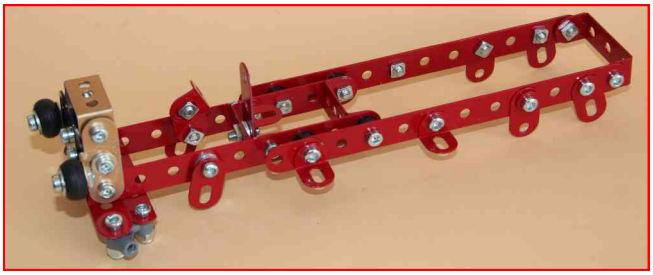
Contents

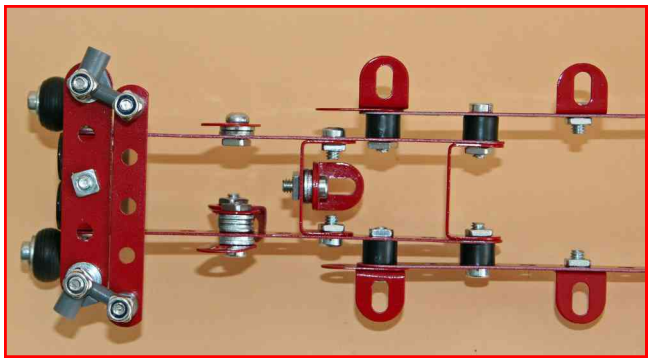
Meccano Fire Engine with Ladder based on a 1939 Leyland a

by Bruce Geange

The idea for the model came from a magazine about the 1939 Leyland Fire Engine with escape ladder and a search on the net found a few more pictures. The model was intended to be a push along one but I found that there was room for a motor and batteries to be fitted. The escape ladder clips onto the back of the model and held in place by a short axle at the front. The ladder can also be extended. The model was originally built with zinc parts and then old and new parts were cleaned and painted in the approximate colours for the model described.

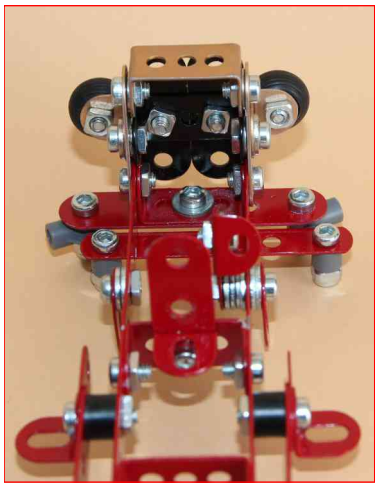
Start building the model by bolting an $1\frac{1}{2}$" Strips (radiator sides) with a $4\frac{1}{2}$" Strip to either side of a 1"x$\frac{1}{2}$" Double Angle Strip with a $2\frac{1}{2}$" Strip to the centre hole (front axle). In hole four on the left side has a Fishplate fixed by the round hole and spaced with two Washers. On the right side the Fishplate is fixed with a $\frac{1}{2}$" Bolt with four more Washers on the inside of the strip and a second Fish Plate by the round hole. Bolt an Angle Bracket by the slotted hole to the outside of the fishplate for the steering axle. In hole six bolt the second 1"x$\frac{1}{2}$" Double Angle Strip and fix an $1\frac{1}{2}$" Strip with an Angle Bracket to the centre hole spaced with two Washers. Parts that fit to hole seven by a $\frac{1}{2}$" Bolt are an Angle Bracket, Fishplate by the slotted hole, a $5\frac{1}{2}$" Strip and a ¼" Plastic Washer. Hole nine has an $\frac{1}{2}$" Bolt, ¼" Plastic Washer and an 1"x$\frac{1}{2}$" Double Angle Strip. Hole eleven has an Angle Bracket on either side with hole fourteen having Fishplates by the slotted holes with a Washer. In hole sixteen two more Fishplates secured by the round holes at an angle and the last holes have a $1\frac{1}{2}$"x$\frac{1}{2}$" Double Angle Strip spaced with a thin washer on either side. Two more 1"x$\frac{1}{2}$" Double Angle Strips are bolted to the radiator sides spaced with thin washers at the sides, one in the middle with two $1\frac{1}{2}$" Strips bolted to the front and Angle Brackets on the outside for the head lights by the slotted holes, the other at the top. Each light is made up from an Aero Tyre and ¼" Plastic washer bolted to the angle bracket with a $\frac{1}{2}$" Bolt and a Washer.

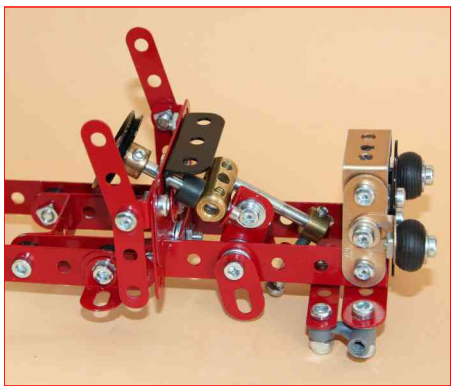




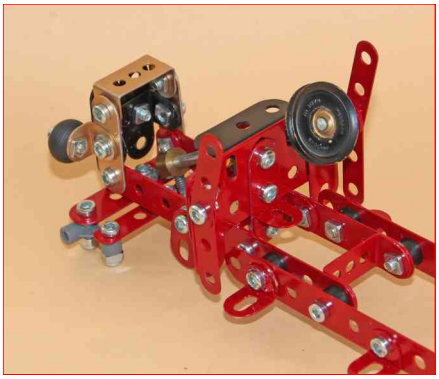
The bulkhead is a $2\frac{1}{2}$" Flat Girder bolted to the $1\frac{1}{2}$" strip on the second 1"x$\frac{1}{2}$" DAS by the round hole. To the slotted hole add an $1\frac{1}{2}$" Angle Girder with a Fishplate by the round hole. This fishplate holds the steering shaft in place in the slotted hole. Bolt a Narrow Angle Bracket with an $1\frac{1}{2}$" Strip to the slotted hole on either side. Bolt two $1\frac{1}{2}$" Narrow Strips to the round hole of each narrow A/B and fix two more Narrow Angle Brackets at the top strip and bolt a $2\frac{1}{2}$" Narrow Strip across the top for the windscreen. Bolt one more Narrow Angle Bracket to the left side of the windscreen for the bell which is a ½" Pulley held by a ¾" Bolt.

The steering has an 1½" Axle Rod with a 1" Pulley at one end passed through the slotted hole of the flat girder with a ¼" Plastic Washer and Coupling and the rod end in the angle bracket. Adjust the fishplate on the bulkhead to keep the axle in position. A second 1½" Axle Rod extend from the other end of the coupling with a Collar. The front axle has a Steering Arm (A423) fixed either side with a 2½" Narrow Strip for the tie rod all bolted with Pivot Bolts (A247). Bolt a Obtuse Angle Bracket that has been flattened a little to the centre hole in the tie rod and fit a long Pivot Bolt (A347) through the slotted hole and into the collar. Short Pivot Bolts (A247), 1" Loose Pulley and Washers bolt to the front axle assembly and Bike Tyres are fitted.



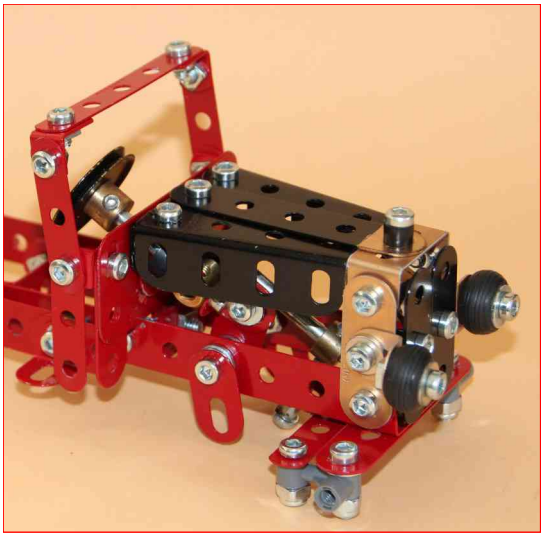


The steering should now work.



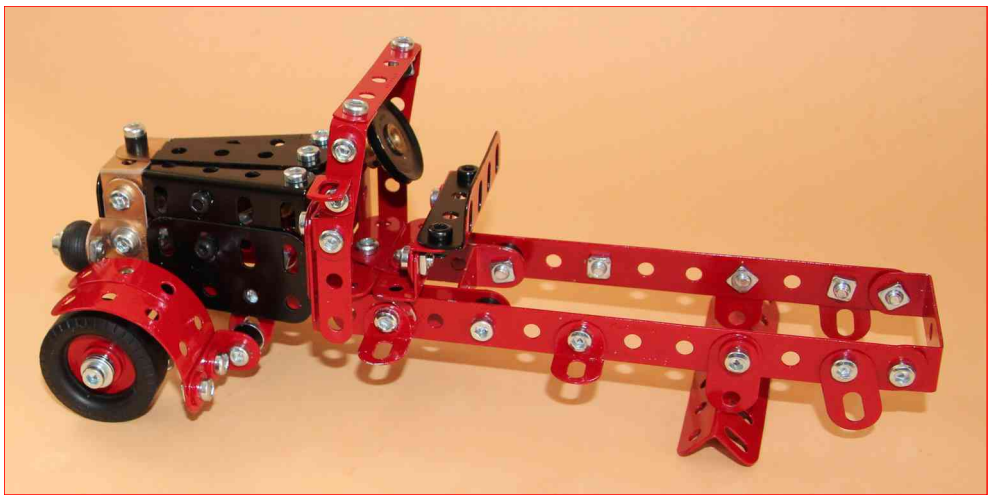
The bonnet consists of a 2" Angle Girder bolted either side of the A/G on the bulkhead by the round holes with a 2½" Strip down the middle spaced with a Narrow Washer. Each bonnet side is a 2" Flat Girder with a Fish Plate bolted to the second hole from the front spaced with a thin Washer. Bolt the right side to the A/G first and then the left side (a bit difficult).

The seat has two 2" Angle Girders bolted together by their round holes. This section bolts to a third Angle Girder bolted by the slotted holes with the seat to the front and a Fishplate bolted to the second round hole from the left. Bolt this assembly to the angle bracket at the rear of the bulkhead with a 2" Strip.

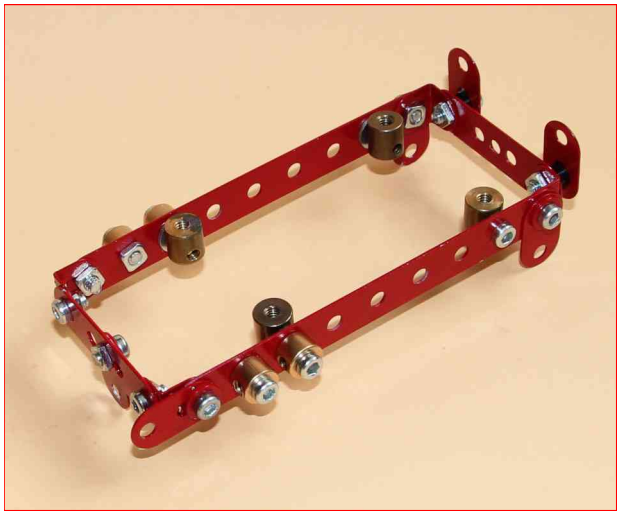


The front mudguards are 2½" Strips put through the rollers to form the shape and bolted to a 1"x½" Angle Girder with Washers under the heads then bolt to the fishplate on the chassis spaced with a ¼" plastic Washer and a Washer by a ½"Bolt. The rear guards were made from Formed Slotted Strips with more curve rolled in and fixed as per the front and spaced with Washers. 4½" Flat girders are used for the running boards and bolt to the angle brackets on either side. 4½" Strips bolt to the sides of the running boards using two Angle Brackets either side. The rear axle is a 3½" Axle Rod with two 1" Pulleys either side spaced with two Washers and a ¾" Contrate Wheel in the centre. Fit four Bike Tyres to the rear wheels. The spare wheel bolts to a 1"x½" Angle Bracket with a ½" Bolt and spaced with Washers. This assembly bolts to the second slotted hole on the right running board from the front. A No.2 motor with a 250 rpm output from Stan Baker bolts to the holes in front of the rear axle with Angle Brackets on the top holes of the mounting plate. A F-O-R switch fitted to a Fishplate bolts to the right side of the seat. All wires will join above the motor where the batteries sit.

The upper rear body part is made up from two 4½" Strips with Angle Brackets at each end fixed by the round holes.

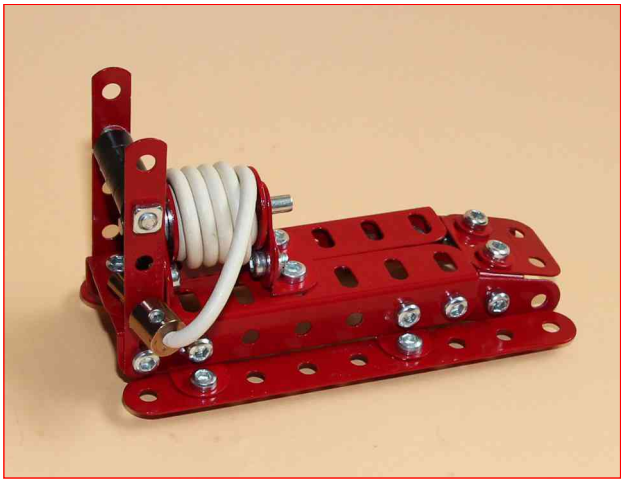


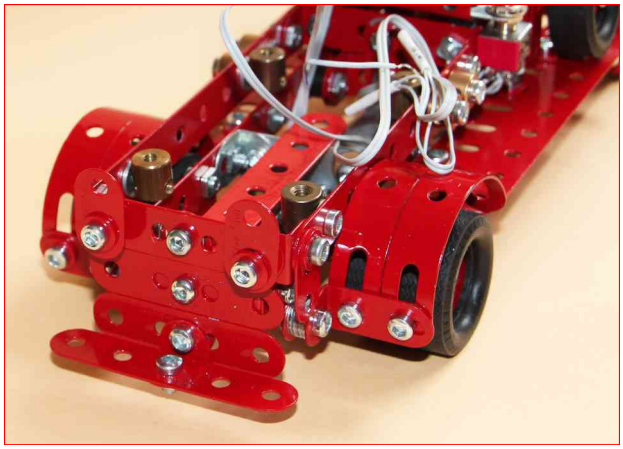
The rear end also has a Fishplate using the slotted hole and the left front has a third Fishplate. 2" Strips are fixed across the ends with a Fishplate in the centre hole at the front and two Fishplates at the rear spaced with 5mm Plastic Washers using $^{3}/_{8}$" Bolts. Bolt a $1^{1}/_{2}$" Strip to the centre hole of the rear 2" strip spaced with a Washer. Four Threaded Bosses and four Collars are bolted to the strips as per the picture. This assemble bolts to the model by two bolts and fits between the rear mudguards, one at the rear to the 1"x$^{1}/_{2}$" DAS with a 2"Strip on the outside and an Angle Bracket on the inside with a 3" Strip bolted to the other hole on the AB. This prevents the batteries from falling out. The fishplate at the front bolts to a 1"x$^{1}/_{2}$" DAS. The last hole on the $1^{1}/_{2}$" strip at the rear has an Angle Bracket and a 2" Strip spaced with a Washer. Bolt a $2^{1}/_{2}$" Strip to the slotted hole of the AB.



Begin the top section of the rear with two Angle Brackets using the round holes bolted to a $4^{1}/_{2}$" Strip in holes two and six from the front. You require a left and right of these. Bolt a $3^{1}/_{2}$" Angle Girder by the round holes to the AB (see picture).

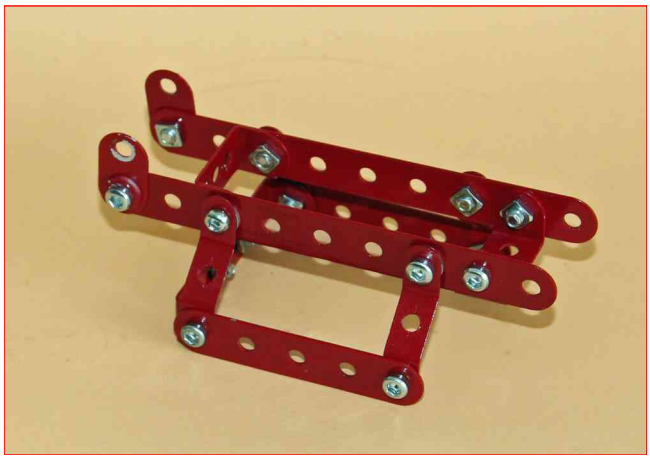
These sections are joined together at holes one and four by 1" Angle Girders using the round holes. A 1" triangular Plate bolts to the AG with the nuts facing out. The hose reel is made from a $1^{1}/_{2}$" Axle, two Washers, two ¾" Washers, Collar with Plastic Washers as spacers. A short length of silicone round rubber fits into the collar thread and winds around to form the hose reel with an Adaptor for Screwed Rod on the end. The front end of the $3^{1}/_{2}$" angle girders bolt a $2^{1}/_{2}$" Narrow Strip for the ladder to rest on. An $1^{1}/_{2}$" Threaded Rod with four ¼" Plastic Washers on is locknutted in the 2nd hole from the top. The other end of the AG has a $1^{1}/_{2}$" Strip spaced with a Washer bolted to it. To the middle hole bolt a 1"x$^{1}/_{2}$" Double Angle Strip and fix a1" Flat Girder to it by the slotted holes. This assembly bolts to the threaded bosses on the engine.





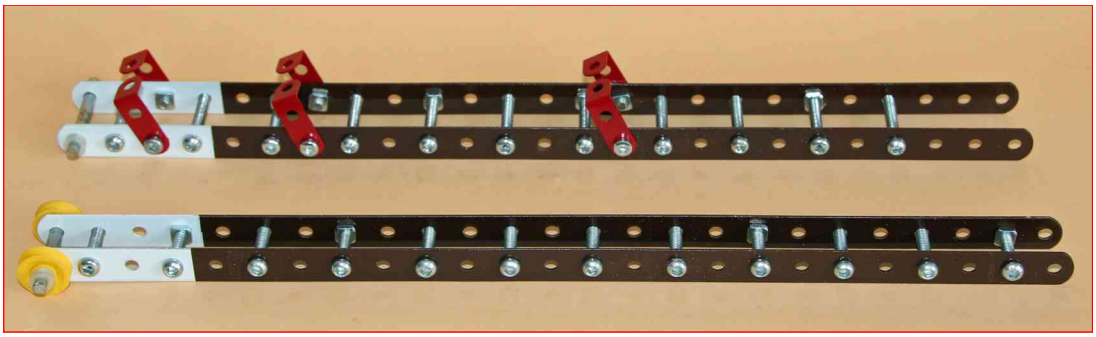
The Escape ladder

Bolt two 1"x$^1/_2$" Double Angle Strips between two 4$^1/_2$" Strips in holes three and eight. Hole three also has a Narrow Obtuse Reversed Angle Bracket added either side spaced with a Washer. Holes seven have more NORAB spaced again with washers. The other end of these obtuse reverse angle brackets join with 2$^1/_2$" Strips either side and 1"x$^1/_2$" Angle Brackets at the front that are connected with a Fish Plate. Fish Plates bolt to the front of the 4$^1/_2$" strips by the slotted holes with a Washer under the bolt head.



Two 12$^1/_2$" Strips form the sides of the ladders. The top section is spaced with twelve ¾" Bolts bolted to one side and locknutted to the other in four places. An 1$^1/_2$" Axle fitted through the top holes carries two ½" Plastic Loose Pulleys secured with two Plastic Grips (59c). The lower section of the ladder uses another two 12$^1/_2$" Strips and spaced with eleven 1$^1/_8$" Bolts fixed to one side and locknutted to the other side in four places. Six 1"x$^1/_2$" Narrow Angle Brackets bolt to holes three, seven and fifteen on either side. Adjust these to allow the top section of the ladder to run freely through. Secure another 1$^1/_2$" Axle to the top holes (see picture). Bolt 2$^1/_2$" Strips by the second hole to the inside end holes on the lower ladder. The rear of the base fits to the 2$^1/_2$" strips with a 2$^1/_4$" Axle that has two Washers, 1" plastic Pulley (3 spokes) and a Collar on either side. The fish plates bolt to the ladder on hole nine. Hole two on the lower ladder holds a 1$^1/_2$" Axle a 5mm Plastic washer, two ½" Brass Loose Pulleys, a second 5mm Plastic Washer with two Collars securing the axle.

The winch fits on a 1$^1/_2$" Axle with a 1" Bush Wheel and two Washers on one end with a $^5/_8$" Threaded Pin for the handle. This fits on the left side through the second hole from the top of the 2$^1/_2$" strips and has a ¾" Washer, Coupling, and another ¾" Washer. The coupling has a Bolt and two Washers in the centre hole with a Grub Screw opposite. A 1$^1/_2$" Axle fits through the top hole held by Collars.



The two halves of the ladder can now be fitted together and a length of cord will be locked under the washers on the coupling. You will require about two ladder lengths with almost the same for the lowering. The extending cord runs around the brass pulley and under the ladder and around the axle at the top then down between the ladders and ties off on the third ¾" bolt on the top ladder from base. Wind several turns for the lowering cord on the winch and take up between the ladders and tie off on the same bolt. If you have done it correct the ladder will extend and lower from the winch. This complete assemble fits over the fish plates at the rear of the engine with an Axle passing through the ladder supports and ladder. You are now set to roll.

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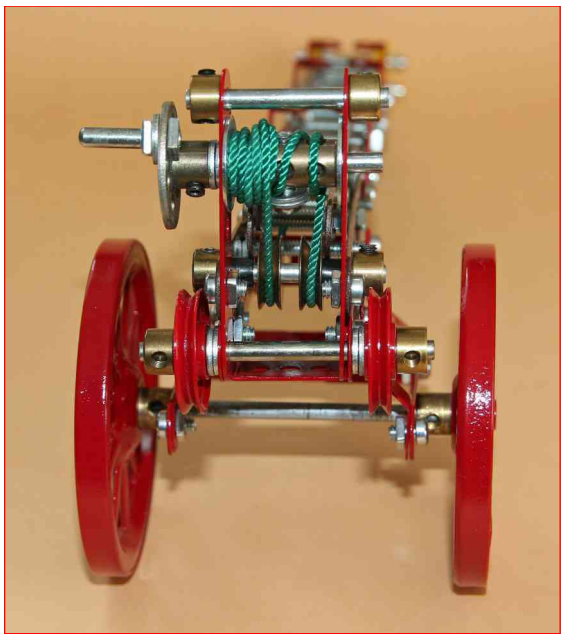
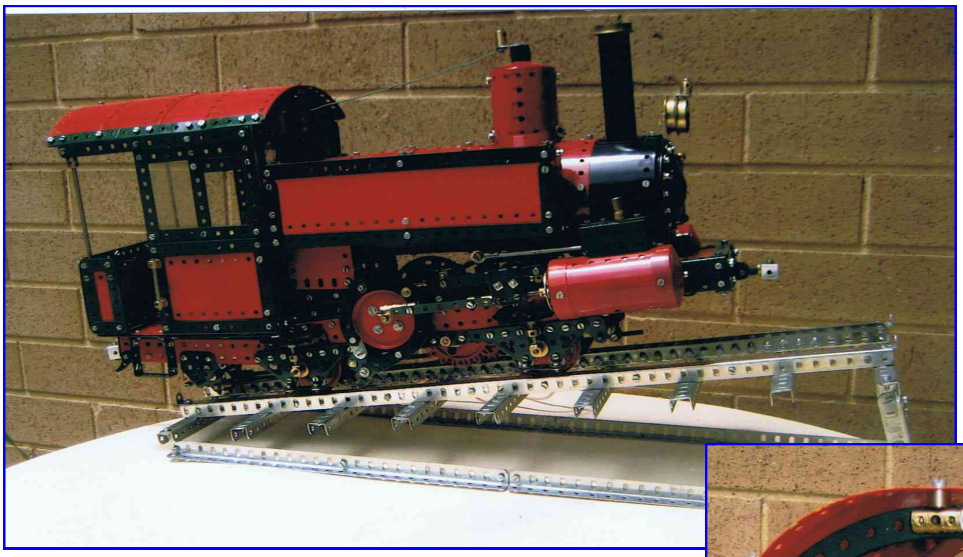
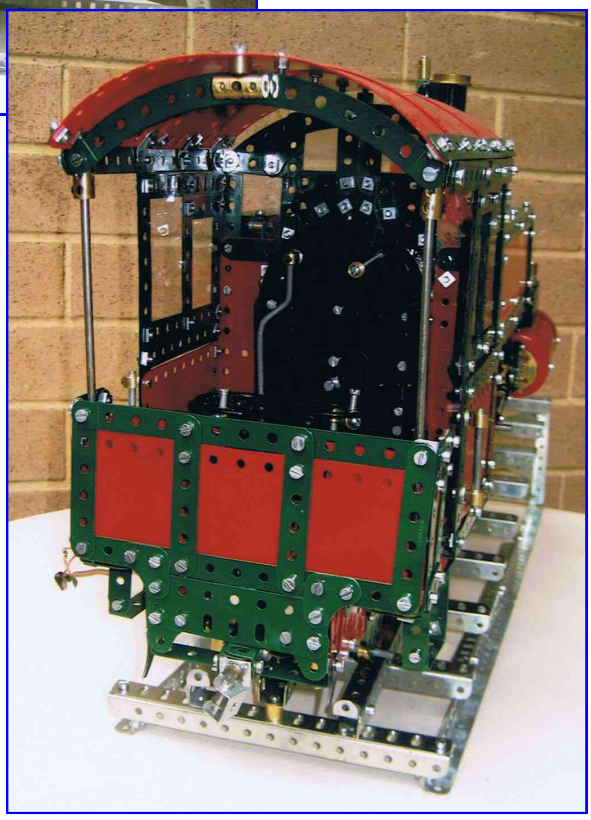






Malcolm Booker ((NSW, Australia) send me these photos of his model 1885 Baldwin 0-4-0 Rack and Pinion Locomotive. It uses the Swiss Riggenbeck system of cog gearing for 15% gradients.

Model is built from GMM leaflet No. 56, July 1975, written by Dr. Keith Cameron from the USA using repainted red, green and black parts.

The motor is a Meccano M5 set on 12:1 ratio and the pinion is a Junior Plastic red 24 tooth gear wheel. The zinc track has a gauge of 2.5" at 1 in 6.6 gradient. The rack is made from channelled Angle Girders with 0.75" bolts at 0.5" spacings and fitted between the rails.

SML No. 5

by David Wall (A.M.G.)

The model illustrated closely follows that described in Super Model Leaflet No.5 (828/5) Travelling Bucket Dredger or Conveyor.

For many years I thought it was little more than a fanciful creation of Meccano Ltd's Model Department i.e. a contrivance not based on any known prototype. However a recent visit to the Kew Steam & Water Museum in London dispelled this erroneous belief. Prominently displayed within said museum were two photos showing canal and reservoir dredgers at work. These machines seemed a likely basis for the Meccano model.

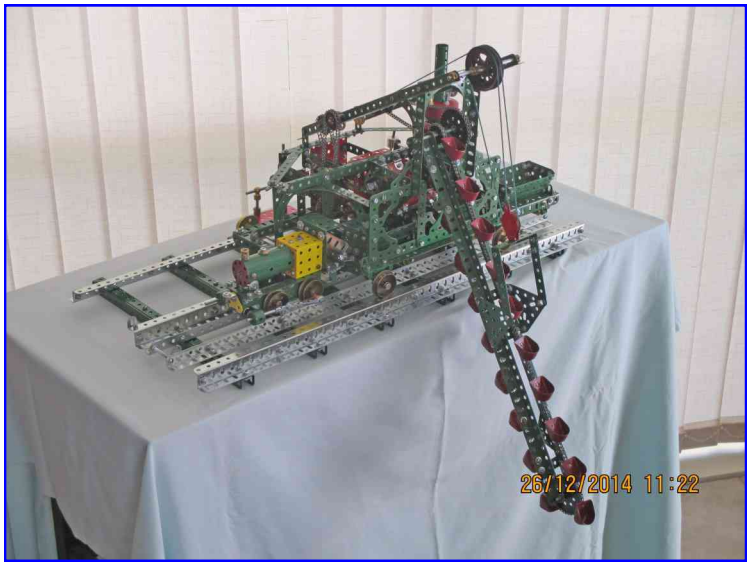
I closely followed the instructions and was rewarded with a model that was relatively simple to construct, easy to control and worked well. However, I could not resist the temptation to add one or two embellishments including a vertical boilered two cylinder "steam" engine and a rake of Meccano hopper wagons in lieu of the Hornby items shown in the instructions. These are hauled by a non-powered contractors well tank loco. (The track at 60cm is too short to warrant a powered loco.) I was also in the fortunate position to be able to add a few more buckets to hasten dredging operations.

One shortcoming of the model is its logistical limitations which make it difficult to pack and transport. I have overcome this by making the bucket arm detachable and which, I hope, will prove equally readily attachable when I go to assemble it for display at Te Papa. Fellow modellers beware, my language could get a trifle salty if problems arise!

In conclusion the model is well worth constructing, not only did such machines actually exist but the model has novelty value – it's different.

Power is provided by a 6 ratio motor, energized by 4 x AA batteries concealed in the boiler. The motor gear box is set at 6:1 or 12:1 depending on the state of the batteries.

Have fun...I did.



Auckland Meccano Guild Meeting

8th November 2014

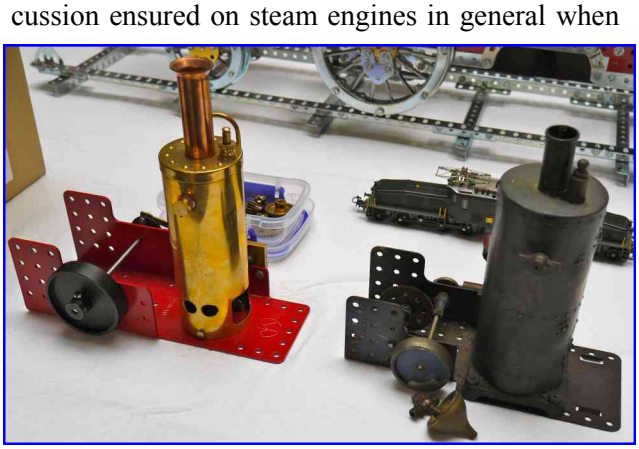
Reporter: Peter Hancock, Photos: Les Megget

The meeting attended by eleven members and five partners was hosted by Les and Shirley Megget at their home at Papakura on a rather cool November afternoon which may have contributed to the reduced number of Meccanomen and partners in attendance.

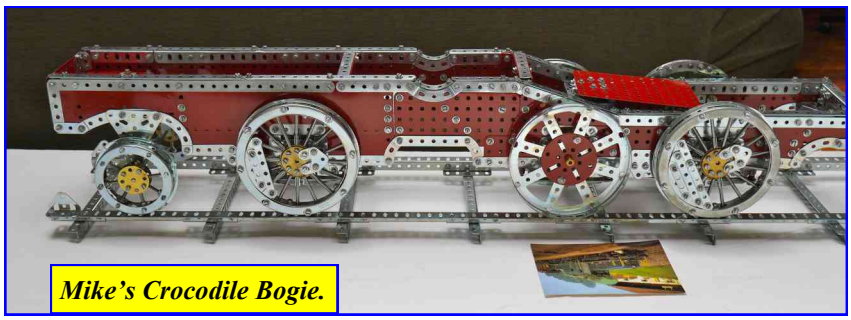
An apology had been received from **Gary Higgins** who rarely misses a Guild meeting or function and usually reports our Guild activities to this magazine. Gary's absence was as a result of his being away on the high seas sailing towards New Zealand acting in his capacity as a New Zealand Customs Officer accompanying passengers who were travelling to our fair country. Further apologies were received from **Brian Cotton, Neil Carey, George Ovenden and Jeff Clark**.

Members warmly welcomed **Mike Walmsley** who had made a trip through from Paeroa to attend the meeting. It was a great opportunity to catch up with his news and he with the members in attendance.

Mike Walmsley had brought with him a modern version of a vertical steam engine [not yet fired] which he had imported in October 2012 at the cost of €145 [approximately NZ$225.00] plus freight of €42 [approximately NZ$65.00]. Considerable discussion ensured on steam engines in general when Les brought out his 1920s version for comparison [refer to photo below].



Mike Stuart displayed one of the bogie assemblies of a *Swiss Crocodile 2-6-6-2 Electric freight locomotive* [used on the Swiss Federal Railways system] that he is building. The work completed to-date is beautifully executed and this will be a stunning model when it is completed.



Mike's Crocodile Bogie.

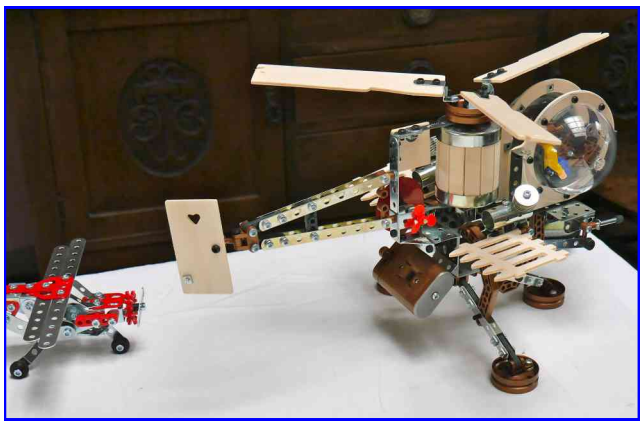
Rick Vine had his version of the funky *Helicopter* that he had built using a kitset from the "Crazy Inventors" series on display along with his replica of a *Dinky Toy Meccano delivery van*.

David Wall's offering was a miniature *Bi Plane*. David has and is working on several models that he plans to display at the 2015 Meccano Convention in Wellington.

Anthony Caldwell showed off his attractive *Car Transporter* he had assembled from parts from his Evolution series set.

Graeme Mills displayed a yellow and black *Buggy* assembled from one of the more recent single model sets.

Henry Porter demonstrated his continued love of steam powered models by showing off his "Steam Powered Waggon" (see next page).



Rick's Helicopter with part of David's aeroplane to the left.

Les Megget: There are several entrances to the Megget's generously proportioned combined lounge and kitchen area which makes it such an ideal venue for Guild meetings. There are several ways to access this room and it does not matter which you use as one will immediately understand that a passionate Meccano modeller lives here. There are a number of large and small models tastefully arranged around the lounge area. Les has one corner of the room well set up as a dedicated model building station. On this meeting day, Les had the models that he had planned and built over recent months ready to go it seems for the upcoming 2015 Meccano Exhibition to be held at *Te Papa* next Easter available for us to view. Les's apparent readiness was a little disconcerting and placed just a little pressure on those of us who have yet to complete our Exhibition offerings.

Les's incomplete LMS 2-6-2T.

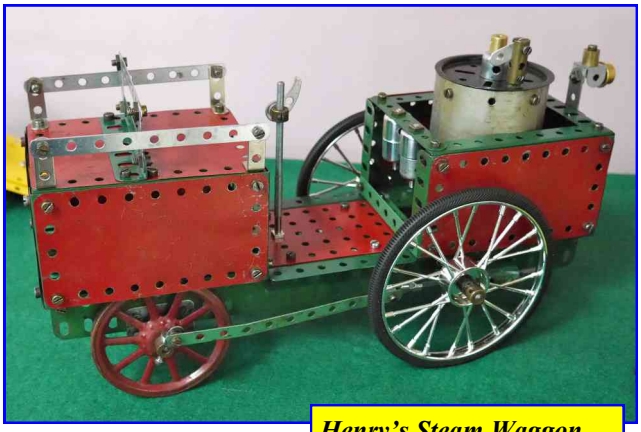
Amongst the various models on display was Les's magnificent BR70 Railway Breakdown Crane built in his 'trade mark' yellow livery accompanied by his large scale LMS 2-6-2 Tank Engine built in Red and Green. On the sideboard was Les's exquisite Austin-Healey 3000 alongside which sat an Evolution Crane Truck. Les had been tinkering [perhaps filling in his time between major models] and had assembled a small Dump Truck from a current Multi 10 Model construction set.

Graeme Wrightson reported on the successful outcomes of his Junior Engineers model building sessions held for young people at several venues in east Auckland during the July and September/October school holidays. He had run four two hour sessions during each holiday period and was heartened to have up to eight attendees at each session which was a significant increase over the previous year. Hopefully possible Meccano Modellers of the future.

Others in attendance at this meeting included **John Denton.**

A short discussion was held over a sumptuous afternoon tea during which it was determined that AMG will participate in *MODEL-X 2015* at the Wave Centre at Henderson over the Queen's Birthday three day holiday period next June. Peter is to complete the application form and we will reuse our standard planning schedule for this event without change. The Model X Committee to be advised that regretfully this is the final time that AMG will participate in the event as we will not have sufficient physically fit personnel available to 'man' the stand for the three day event going forward.

A brief discussion regarding the 2015 Meccano Exhibition to be held at Easter determined the details of the general travel plans of those who are attending have made. It is confirmed that those attending the event representing AMG with models are Les Megget, David Wall, Garry Higgins and Peter Hancock. **William Irwin** is planning to attend as a visitor for a short period but will leave during the event to travel overseas. We are expecting that **John Pond** from the UK will visit the event for several days with David Wall.



Henry's Steam Waggon.

Anthony's Car Transporter.

MWT Club Christmas Function

Members and partners attended the Manawatu, Wanganui Taranaki Meccano Club end of year function which included a 25th birthday cake. Yes we are 25 years old. This was held at the Hikurangi Stay Place, a grand old building in Wanganui where we had a BBQ lunch with deserts served

after. Following on from a good feed a group photo was taken outside, from here we were back inside for the cutting of the cake that had been designed to resemble our club badge. Photos were taken and then three foundation members cut the cake. This was consumed with a drink and much talking. An enjoyable time to finish the year.

MWT Foundation members Tom Pittams, Bruce Geange and Chris Morton cut the cake.

Bruce Geange

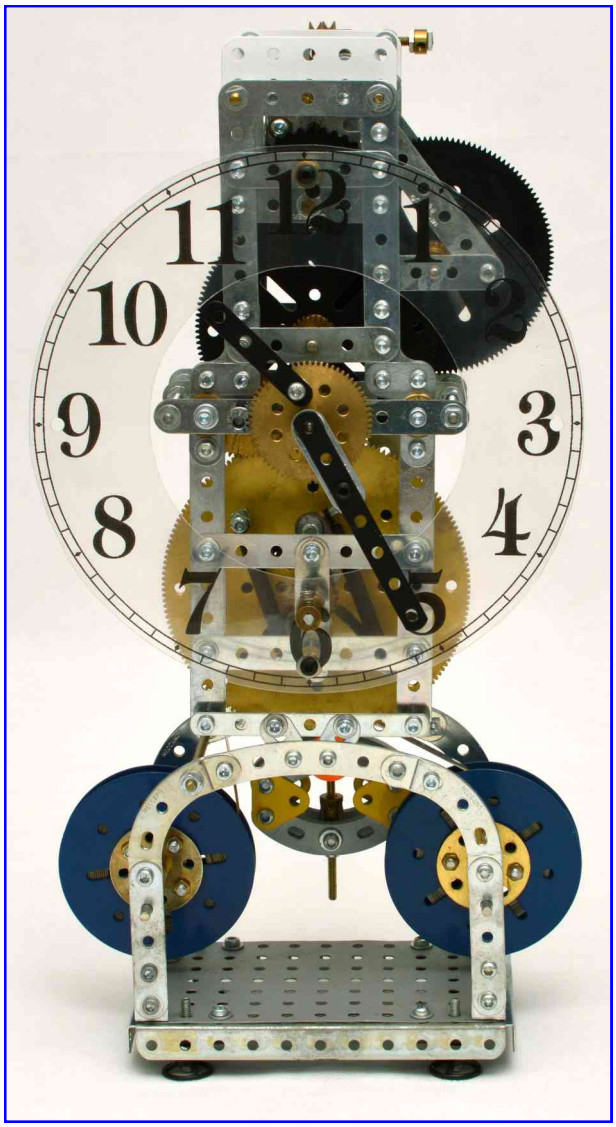
No one seems willing to tell me who all these Meccano people are, so your guess is as good as mine!

A SKELETON CLOCK POWERED BY TWIN CONSTANT TORQUE SPRINGS

Described and photographed by John Stark, Nelson, New Zealand

Introduction

This is the fifth in a series of skeleton clocks I have built based on an original design by Mike Edkins (Constructor Project 80 in the July 2007 issue of The Meccano Newsmag 108). Mike powered his clock with a Magic Motor, but I used a spring from a broken No. 1 Clockwork Motor for my first one and constant torque (CT) springs for subsequent versions. My fourth CT spring-powered skeleton clock was described in detail in *Constructor Quarterly* 106: p38 – 45 (December 2014) and ran for 38 hours on one winding.



In researching CT springs on the internet, I discovered that CT springs did not have to operate singly but could be paired or tripled to increase the torque. This alerted me to the possibility that an even longer run-time could be achieved by using, for example, two CT springs in tandem. Thankfully, I had two spare CT springs of similar length – both extracted from the power cord rewinds of *Miele*® vacuum cleaners.

Constant Torque Springs

CT springs are very different from conventional springs such as those used in Meccano clockwork motors. There is no friction between tightly wound coils (so no lubrication is required), the torque does not reduce markedly as the spring winds down, and it does not get harder and harder to wind as the spring becomes fully wound. Consequently, CT springs are ideal for clocks since uniform torque delivery to the escapement is a primary requirement for accurate time-keeping.

A CT spring requires two winding drums – a storage drum (on which it is in a tightly wound state) and a slightly larger torque (or output) drum onto which the spring is coiled when the clock is wound up. The path of the spring forms an S-shape from one drum to the other, so when wound onto the torque drum the curvature is reversed and it tends to unwind back onto the storage drum. The two drums are mounted a short distance apart – it is the straight portion of spring between the two drums that provides the power. A second storage drum can be added (as in this clock) and the spring interleaved with the first one as it is wound onto the torque drum.

As with any clockwork spring it is essential to avoid a sudden release – the unwinding will be rapid and a spring-steel bird's nest will result. This is to be avoided at all costs because it is potentially hazardous, it takes a surprisingly long time to untangle, and I know from experience that the CT spring can also be damaged.

CT springs have been used with Meccano previously. Pat Briggs, an expert Meccano clock maker, first alerted the Meccano community to CT springs in 1995 (The Meccano Newsmag 72:4 – 5) but, to my knowledge, never wrote an article describing a clock that used one. In June 1996, Dr Keith Cameron provided detailed instructions for building a motor using a *Tensator*® brand CT spring (*Constructor Quarterly* 32: p46 – 47) and in the September 1996 issue he described two versions of a Tensator® mantel clock (*Constructor Quarterly* 33: p34 – 39). Dr Michael Adler illustrated a Meccano CT spring motor and the Grimthorpe three-legged gravity escapement clock powered by a CT spring on his website (http://www.meccanotec.com/).

Then there is my skeleton clock in *Constructor Quarterly* 106. There may have been other CT spring-powered Meccano clocks of which I am unaware, but given their advantages, I am surprised there have not been more Meccano clocks powered by CT springs.

Clock description

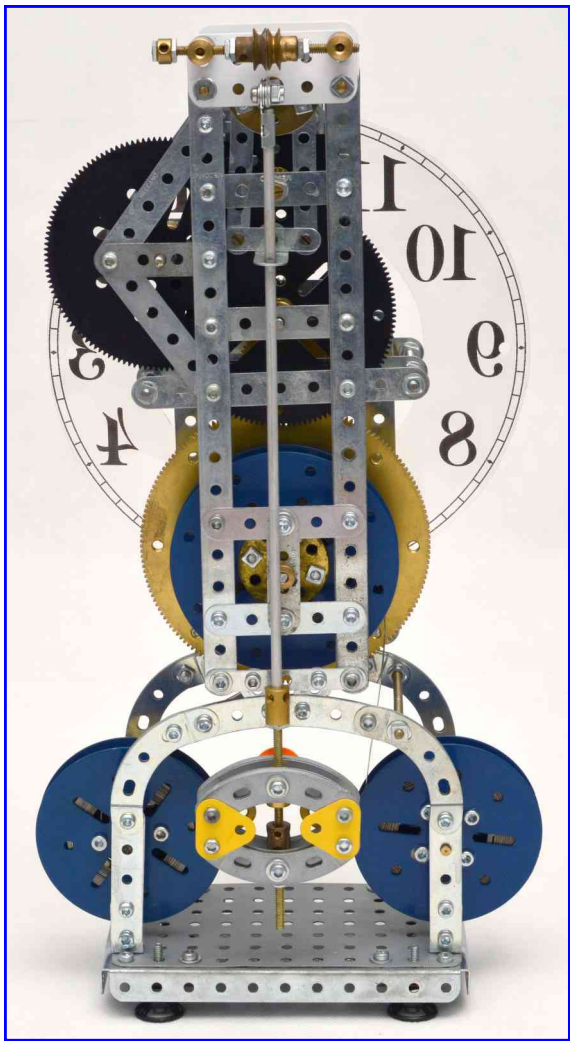
It is not my aim to provide blow-by-blow building instructions for this clock in this article. The basic framework of the clock is comparatively simple and should be evident from the photographs. Instead, I will outline the main features of the clock.

The base of the clock is provided with four adjustable feet – one at each corner. These are small black plastic steering wheels held in long bolts threaded into a transverse bore of couplings fixed on the underside of the base. The ability to level the base is very helpful if the clock is placed on a sloping surface.

The two storage drums for the CT springs are mounted between the legs of the skeleton clock. The ends of the CT springs are fixed near the centres of each. These springs are interleaved onto the torque drum (which is of larger diameter because it has spring from both storage drums) and fixed together on a collar ½" out from the centre of the drum. This drum is fixed tightly to the triflat rod which is the mainspring shaft and carries a collar with set screw at the front end. A key made from a socket coupling engages with this for winding the clock. I use a small battery-powered electric screwdriver for winding the clock – clockwise of course! The tri-flat mainspring shaft also has a ratchet wheel attached to it. A 171t gear wheel (a $^1/_8$" face *MeccGear* special) is loose on the rod but has a pair of pawls that are held against the ratchet wheel by tension springs. The ratchet permits the clock to be wound.

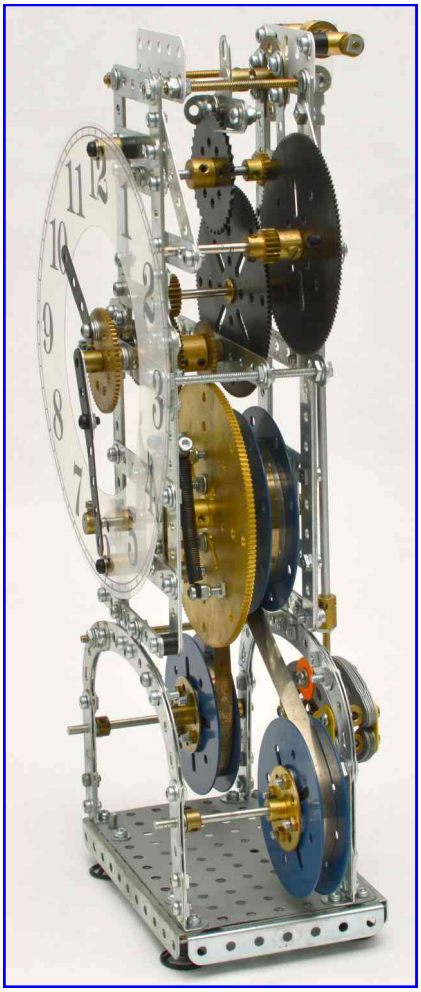
The 171t gear meshes with a narrow face 38t gear above it. It is essential that these gears do not slip out of mesh, so the fact that the 171t gear has a wider face than a genuine Stokys® alternative is an advantage here. The 38t gear is loose on the minute-hand shaft but connected to a 50t gear by a short socket coupling. This gear pairing is trapped between a narrow collar behind and a 25t pinion to the front with a short, stiff non-Meccano compression spring between the 25t pinion and 50t gear wheel. This provides the friction clutch for setting the hands. The 25t pinion meshes with a 50t gear on an adjacent shaft, which carries an 11t pinion that meshes with a 66t gear on which the hour hand is fixed. This provides the necessary 12:1 reduction between the minute and hour hands. The minute hand is fixed to a rod socket on the forward end of the minute-hand shaft.

The remainder of the gearing leads up to the escape wheel. The 50t gear in the short socket coupling meshes with a 25t pinion above it in the mid-line of the clock on a shaft that also carries a 133t gear. This gear meshes with a 19t pinion mounted on a rod out to the 3 o'clock side of the frame. This rod also carries another 133t gear that meshes with a 19t pinion on the escape wheel shaft. This shaft is a 2" pivot rod and also carries the escape wheel – a 2" Ashok replica sprocket. The anchor is also mounted on a 2" pivot rod and the hollow crutch goes around the escape wheel shaft with a narrow 1" x $^1/_2$" angle bracket projecting rearwards to engage with the pendulum. The pendulum comprises a Clock Kit aluminium pendulum rod extended by a threaded rod. The pendulum suspension 'spring' is a fishplate-sized piece of flexible acetate sheet. The pendulum bob is threaded onto the bottom of the pendulum and can be raised (if the clock runs too slow) or lowered (if the clock runs fast). The bob is lock-nutted in position after the clock has been adjusted and found to keep good time.



A horizontal (side-ways) adjustment for the pendulum suspension has also been provided. This, plus the adjustable feet, makes the business of getting an even tick-tock much easier.

Getting any Meccano clock that uses a metal sprocket as the escape wheel to tick evenly and work reliably can be a mission. With most Meccano sprockets it is impossible! This is because most of them (in my experience) are eccentric – only about 1 in 15 or 20 might be good enough. It is essential to test them to ensure that they run true. I use Ashok replica sprockets as escape wheels – they are much more likely to run true.

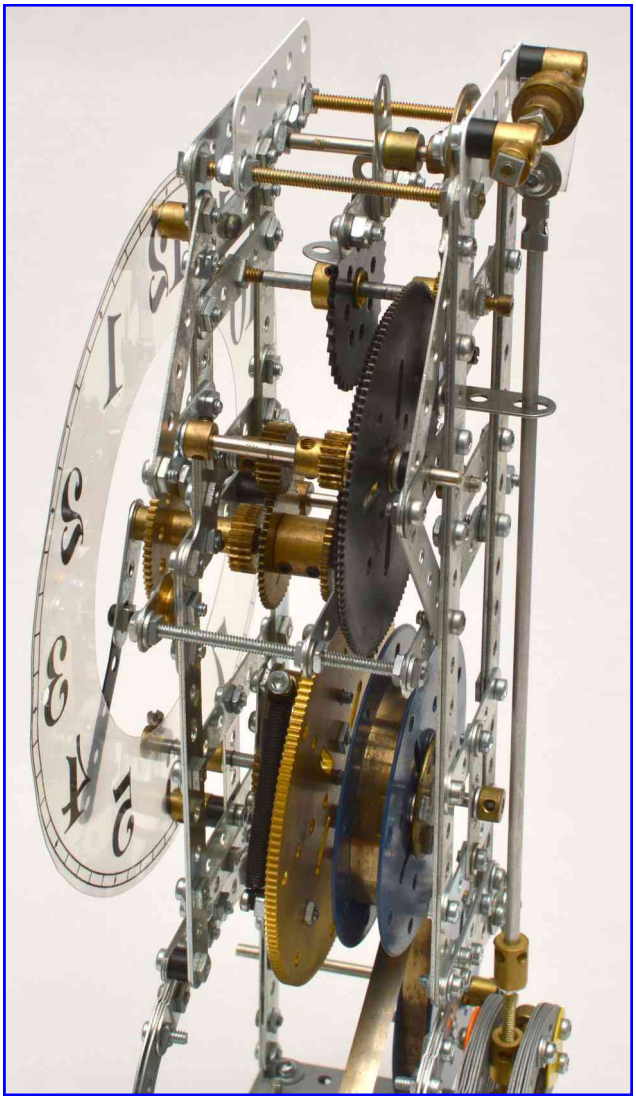


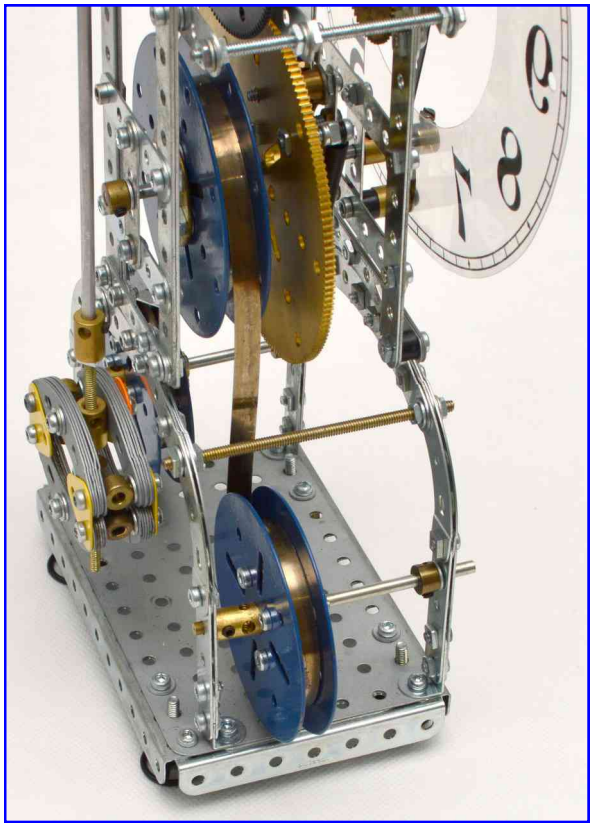
Conclusions

Pat Briggs once said that a Meccano clock does not qualify as a real clock unless it can run for at least 30 hours on one winding. The single CT spring-powered clock I described in *Constructor Quarterly* 106 exceeded that standard with a 38h run-time although I have no doubt that by altering the gearing a runtime of 75h would have been possible.

The twin CT spring clock described here runs for 215h (nearly 9 days) on one winding, which is testimony to the incredible attributes of CT springs. I am not aware of any other wind-up Meccano clock that has achieved anywhere near that.

Anyone who would like further information on the construction of this clock can contact me by email (jdstark@paradise.net.nz).

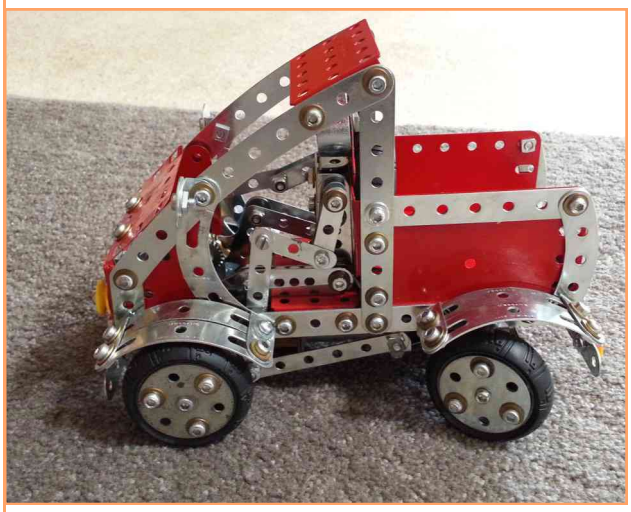




Mike Warmsley (Paeroa) builds

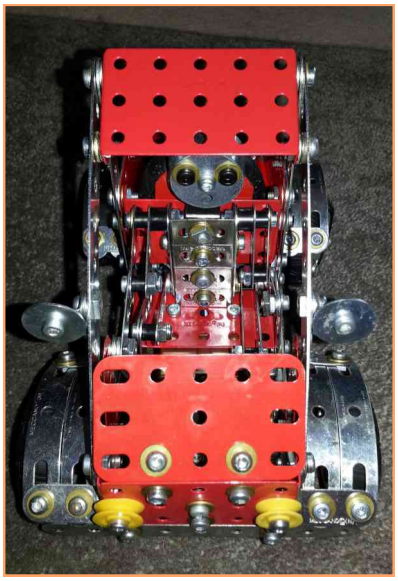
Bernard Perier's Hupomobile

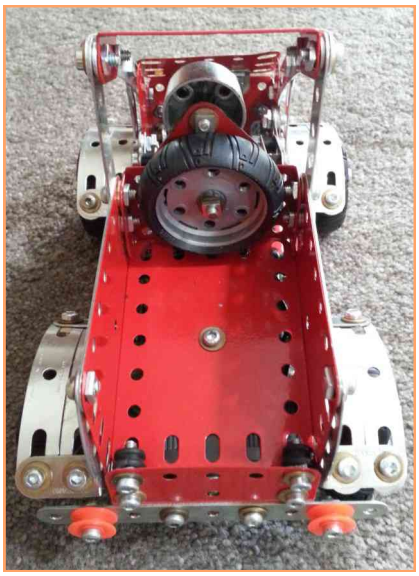
It has been over 6 years since I have been able to do any modelling; work commitments preventing me from doing so. However this Christmas I was determined to get something under way, probably something small. I chose to reproduce Bernard Perier's Hupomobile featured in his Constructor Quarterly publication "*ZKWYX Meccanaut*". I have to genuflect every time I open this book.

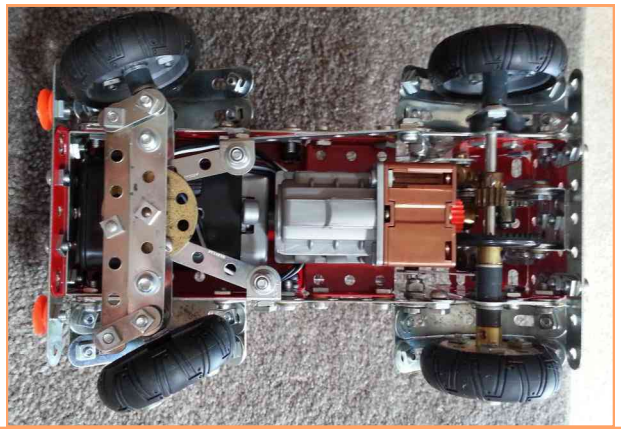


The model is that of a small open truck with a driver who appears to power the machine by pedalling, and steers by operating two levers. The drive is at the front and the steering at the back. The drive is actually only to one of the front wheels (it is powered by the ubiquitous 770 electric motor and 760 gearbox). The driving axle also operates the driver's legs to give the appearance of a pedalling motion. Obviously my modelling capabilities are far below those of M. Perier and the process was most frustrating. My first few attempts at building the driver can be charitably described as an omnishambles and it took several attempts to get my version to function as the driver's elbows and legs kept fouling, although to be fair that is exactly how I drive my old Landrover. The tolerances are very fine, and I used traditional locknuts in some places in lieu of the modern Nylock nuts 37h. However once set up the drive is remarkably smooth, except in reverse I still have issues from time to time which I haven't sorted yet. In the original M. Perier's drive to the pedals required 3 25-tooth narrow pinions. Despite doing the *haka* I could not get these gears to mesh, but I found that by using a 15-tooth 26c from the driving axle, things worked perfectly. Also in the original the battery box under the floor of the tray was fitted with the switch to the rear. With all the bellowing in the world I was quite unable to get it to fit that way, but by turning it around, it fitted perfectly.

The steering is somewhat unusual with the driver's arms operating two levers, backward and forward, similar to a crawler tractor. The steering mechanism itself is entirely usual however. I didn't bother with the windscreen (193a).







COWANS SHELDON 75 TONNE TELESCOPIC JIB CRANE
Part 2; THE RELIEVING BOGIES

by Les Megget

The relieving bogies on this BR hydraulic breakdown crane are totally different from previous British railway breakdown cranes because they use the rotating hydraulic outriggers to transmit some of the crane's axle loads to the 2 axle relieving bogies (Figure 1). Because the outriggers were not long enough to reach the centre of the relieving bogies, to equalise the axial loads, a special new design was required. Manfred Buttkereit of *Clark Chapman* (had become Cowan Sheldon's parent company) designed this sophisticated bogie and was issued a patent for it in August 1975. As the crane carrier weighs nearly 140 tonnes (on 4 axles) and the axle load limit is nearly 20t about 60 tonnes has to be redistributed to the total of 4 relieving bogie axles (viz. about 15t to each axle).

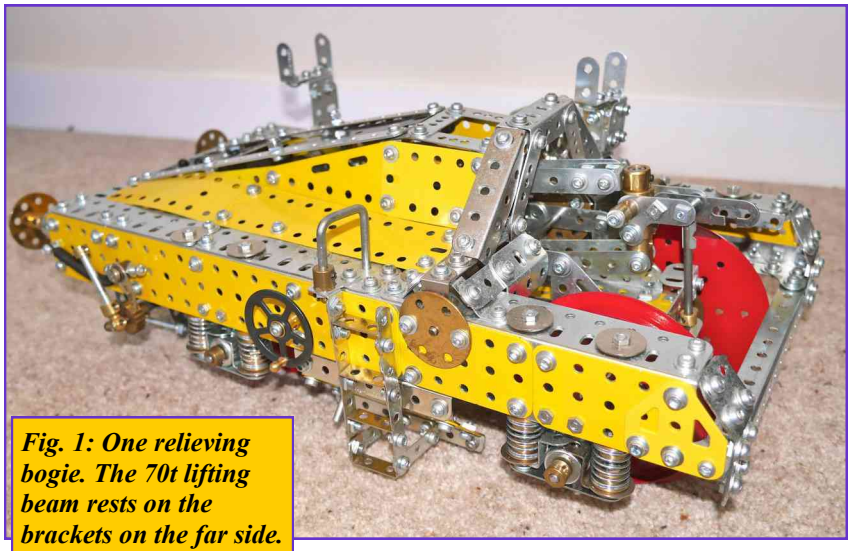


Fig. 1: One relieving bogie. The 70t lifting beam rests on the brackets on the far side.

My reference book, *"Railway Breakdown Cranes"*, Vol. 2 by Peter Tatlow devotes nearly 7 pages to the design and description of this relieving bogie but I will give only a brief description here. The two outriggers at each end are coupled together when the crane is set up to travel. The crane is moved close to each bogie so that the hydraulic outrigger jacks rest on the end of a longitudinal lever. This lever runs nearly the entire length of each bogie and is pivoted on a transverse support positioned centrally between the 2 axles of the bogie, see Figure 2. The lever can be pre-set to a vertical position depending on how much load is to be transferred to the bogie's axles. The outriggers and this lever are locked together and the hydraulic jacks are then lowered thus transmitting some of the crane's axle loads to the reliving bogies. Putting this simply the jacks transfer load to the lever and the carriage wheels attempt to lift off the rails thus reducing the crane's axle loads. Once the lever has been locked the pressure in the outrigger jacks can be reduced.

That all sounds pretty simple but you have to remember that the coupling between the outriggers and the bogies has to be able to go around curves and take into account super-elevation (cant) of the track, etc. A "spherical" bearing which pivots on the lever arm directly behind its support shaft carries the coupling bracket which locks the crane to the bogie, Figure 3. The spherical bearing on the model can rotate about a horizontal axis using a square-section Coupling and also rotates about the vertical axis using Couplings top and bottom running on short Axles locked into the square Coupling. At the outer end of the 7-hole top links and 8 -hole bottom links (rigidly attached to each Coupling) is the "load transfer coupling" which comprises a Large Axle Collar bolted to each link. A 2" long Large Axle is fixed in these Collars with a Large Axle Socket Coupling able to rotate between the Collars. The coupling bracket (hook) is fixed to the Socket Coupling using 2 by 3-hole Corner Brackets and a 2" Slotted Strip which I've cut a slot out of to form the hook. This mechanism allows the coupling to rotate horizontally as well as allowing the link mechanism to move sideways a bit, thus allowing articulation between the crane carriage and the bogie. Figure 4 shows a schematic of the bogie from the Tatlow book.

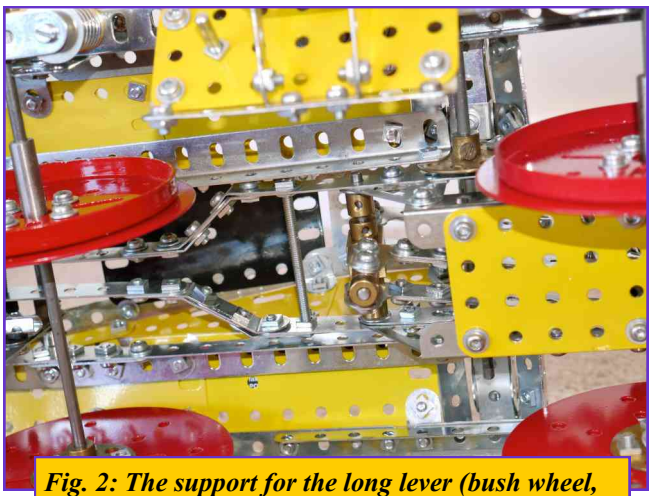


Fig. 2: The support for the long lever (bush wheel, right) with the spherical bearing at the centre.

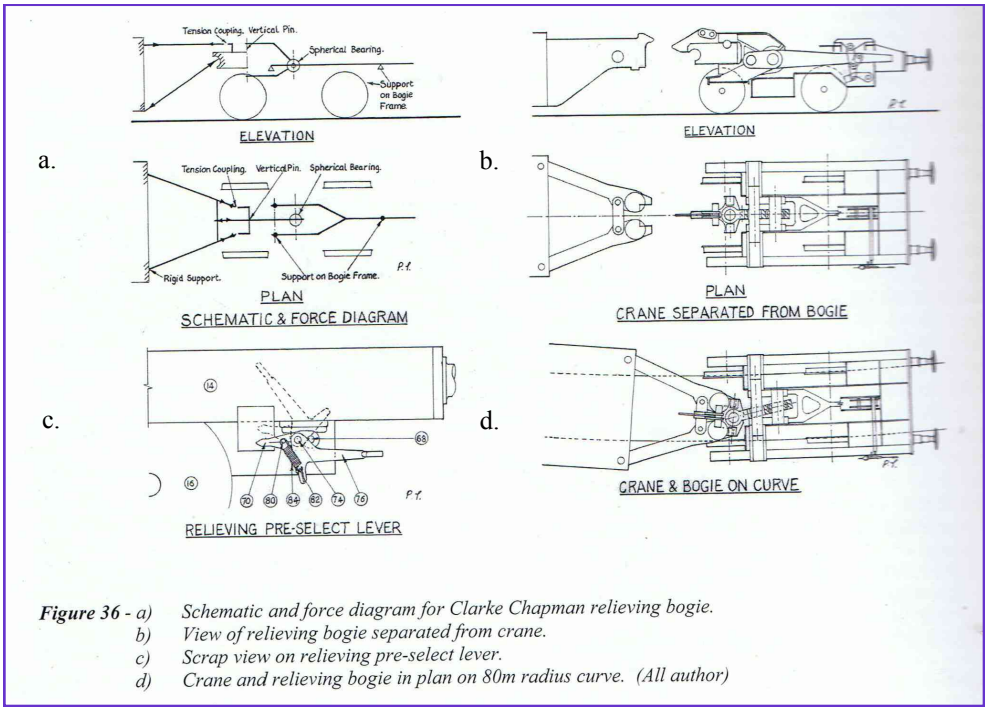


Figure 36 - a) Schematic and force diagram for Clarke Chapman relieving bogie.
b) View of relieving bogie separated from crane.
c) Scrap view on relieving pre-select lever.
d) Crane and relieving bogie in plan on 80m radius curve. (All author)

Fig. 4: How the relieving bogie works. From "Railway Breakdown Cranes", Vol. 2 by Peter Tatlow.

adjusting shaft from rotating. The long lever cantilevers to the outer end of the bogie so that if the release mechanism fails, due to loss of hydraulic pressure say, the crane can be used to lift the lever a little to release the mechanism (after removing a hatch on the top surface).

The wheel boxes, suspension and bogie wheels are identical to those on the crane carriage using non-Meccano springs again. The *Tranz Rail* version of this crane uses a more conventional design for its relieving bogies.

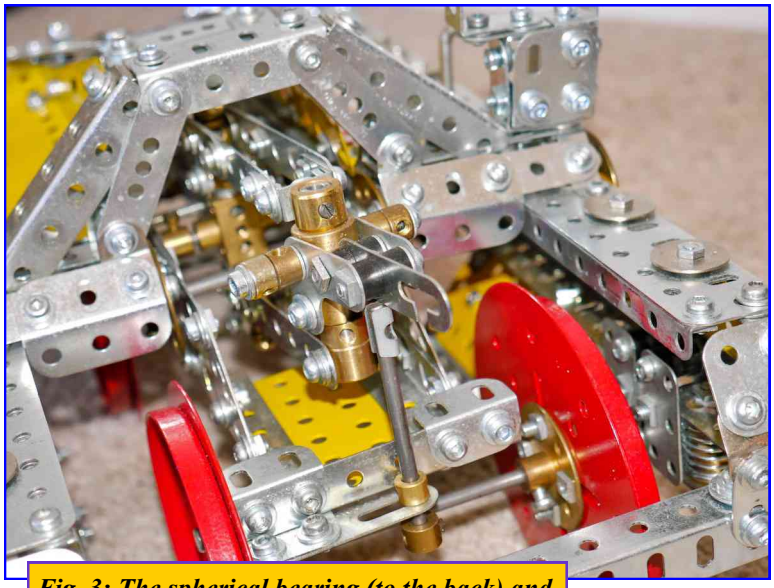


Fig. 3: The spherical bearing (to the back) and the articulating hook coupling, which connects to the brace between the 2 outriggers. The outrigger jacks transfer the load to the two 2-hole Angle Girders in the foreground.

The 75t capacity lifting beam can be carried on brackets on either relieving bogie as there is no match truck with this crane. Also the designers decided that the hook should not rest on top of a bogie during travelling and another mechanism was devised. A pair of cables attached to the outer section of the boom run over small pulleys near the outer end of the telescoping boom section and are attached to the hook. The boom is then extended a couple of feet until the hook is pulled up against the bottom of the boom's inner section. There it is clipped into position and the boom can be returned to its short travelling length.

The load adjustment mechanism at the outer end of the lever comprises a Crank with a 5-hole Strip on a transverse axle bearing in the bogie's Angle Girder chassis (15+5 holes). This arm has a $^{3}/_{8}$" Bolt in its lower hole which can be locked between a Strip Connector and a Crank on the adjustment shaft (Figure 5) running between the outer frame members (25-hole AGs) on each bogie. The adjustment shaft has a Ratchet Wheel at one end with a 1½" Axle lever in a Handrail Coupling . A sprung Pawl restrains the

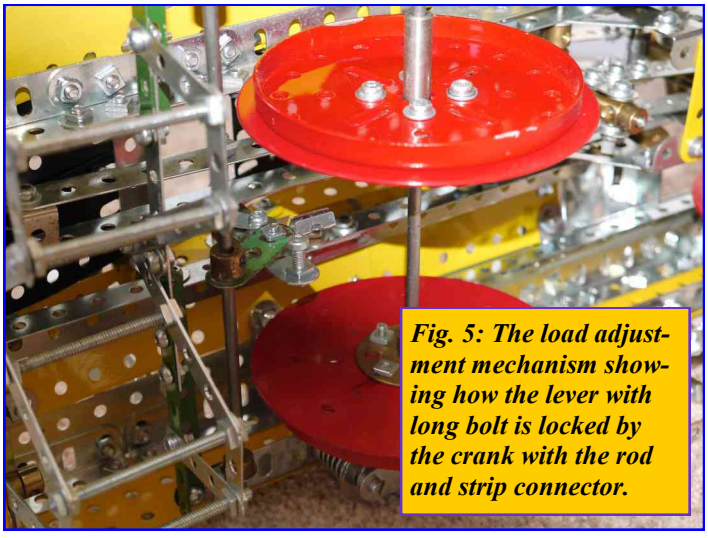


Fig. 5: The load adjustment mechanism showing how the lever with long bolt is locked by the crank with the rod and strip connector.

Christchurch Meccano Club

(Est. 1929)

February 2015 Quarterly Report

by

Mike Howse

It is very pleasing to report that we have had record numbers of members and their Meccano models attending our December 2014 and February 2015 club meetings.

In a break from tradition the clubs December Xmas function was a barbeque held at **Donald and Mary McKenzie's** home.
There was an excellent turnout of member's on a fine sunny day.

The February meeting held at the Papanui RSA was also very well attended with an excellent selection of models on display.

President **Neil Pluck** reminded members that there were only a few weeks to go before the Te Papa Display.

Arrangements have been made for the transportation of models to Wellington with Roland and Donald's home set as the designated drop-off points.

There certainly looks to be a good representation of models going to Te Papa from the CMC.

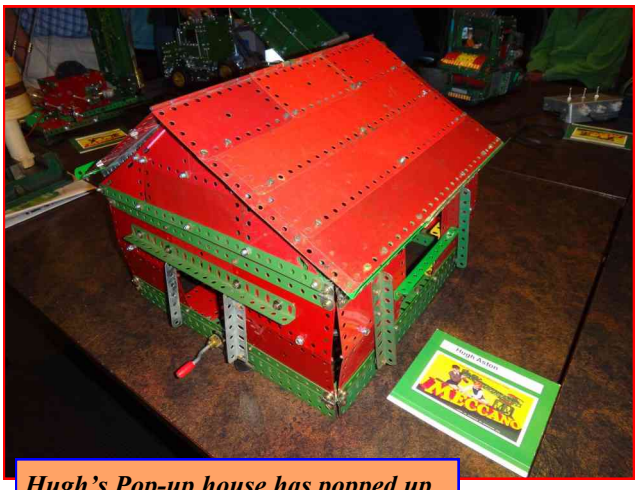
Club members were canvased re their interest in the club holding the 2017 NZFMM Convention in Christchurch, there was a 100% agreement that President Neil Pluck relay this message to the NZFMM Executive.

Also discussed were a couple of Exhibition options for the CMC in 2016, these included Oamaru, during their Steam Punk Festival and Dunedin in conjunction with their Steam Museum, both options will be discussed in greater detail after the Te Papa Display 2015.

Of this month's pictures, particular interest to Cantabrians for obvious reason is the pictures of **Hugh Astons** "Pop-Up" House.

Also, the CMC can now claim to have a serious contender to Simon Moody`s hold on the "tall crane" crown. At our February meeting CMC member **Alan Bensley** displayed a fine example of an electronically controlled tall crane.

Alan's tall crane.



Hugh's Pop-up house has popped up.

Hillary Satterthwaite's Grader.

Neil Pluck's vintage car. Could it be a Rolls Royce Silver Ghost?

EASTER CONVENTION UPDATE

from Stan Baker (WMC)

Planning is proceeding well for the Convention and an information pack and further update will be sent to all Registered attendees 2 or 3 weeks prior to the event, We particularly want to thank the NZ distributors of Meccano for their generosity in meeting some costs, ensuring that the exhibition part of the Convention will be very well attended, and good prizes will be offered to exhibitors.

Some highlights are:

- Over 50 registrations in to date and about 80 will attend the dinner on Saturday night. It's not too late to register provided your model is small!!
- The huge range of models being to be exhibited has meant that the 900 sq metre Visa gallery will be filled with Meccano and the Hornby train working display. We are hiring 124 tables so will have over 210 linear metres of table.
- Congratulations to the Christchurch club for having the most registrations followed by MWT. There are more overseas registrations this year than ever before
- With totally free entry and museum staff at the main door encouraging the public to go to the gallery we expect huge crowds to visit. Over 30,000 are expected to visit the museum and a large proportion will visit the Meccano display. We are absolutely confident that this will be the most viewed Meccano exhibition ever in NZ.
- Good breakout facilities with tea, coffee and refreshments will be available throughout all days for exhibitors to take regular breaks.
- The model judged best by Exhibitors will receive a voucher for Meccano to the value of $500, second prize $300 and third prize $200. All prizes are courtesy of the NZ distributors for Meccano and if desired the vouchers can be held till later in the year and put towards the purchase of new sets being released then, including the *Meccanoid*.
- Meccano NZ have arranged that **the new products that have recently been exhibited in London, Nuremburg and LA Toy Fairs will be at Te Papa.** In particular it is planned that the new 1.2 metre high *Meccanoid* robot model will be at the door welcoming guests with a hand shake or a " high five".
- We are looking for volunteers from the partners or others with models that do not need attendance to staff the hands on area for children. More details in the registration pack. Provided we have sufficient help we will have tables for 12 children at a time to build a current Meccano model. Those that make a good fist of completing the model will be given the set to take away.
- There have been thousands of flyers printed to be distributed to the schools that include the feature of building a model and keeping it. The flyer has a place for a name and address and if dropped in an entry box during the event will be in the draw to win one of several current *40 Multi-Model sets*. Additional flyers will be available at the show for those who did not get one and wish to go into the draw.

We look forward to spending time with you at the Convention over Easter.

Tower Crane model announced at the recent London Toy Fair.

Wellington Meccano Club

Meeting Report

Date: 30 January 2015

The Editor gatecrashes a WMC meeting

As we were having a holiday on the Wellington Gold Coast I decided to drop in on the WMC meeting on Friday 30 January. This meeting was held at **Max George's** home in Tawa and the GPS got me there with no problems.

Max's Firth of Forth Bridge.

Several members had already arrived and they seemed a little surprised to see this JAFA coming up the drive but as I pay rates in Porirua City I guess I'm still partly a Wellingtonian!

We stood around outside for a time, being bitten by sandflies or mosquitos, while having a good look at Max's large model of the Firth of Forth Bridge, which is so long it can only be assembled outside. This will be one of Max's Convention models and it is planned to have a Hornby gauge 0 train running across it.

We moved inside and chatted about the other models on show:

Reg Barlow showed a Meccanograph, which has yet to be motorized and he expressed difficulty in obtaining unlined paper for it. He also had a recent purchase from *Amazon.us*, a rocket set of a decade ago seldom, if ever, seen in NZ.

Lou Nichols had a lovely small-scale 2-4-2 steam loco with tender. It is a model of a 19th century NZ loco manufactured in the US. Lou was having some problem with stiffness of the motion but **Keith McCullam** gave him some suggestions to rectify that.

Simon Moody had a partly completed crane, which will be on show at the Convention and I promised not to show a photo of it in the February Magazine!

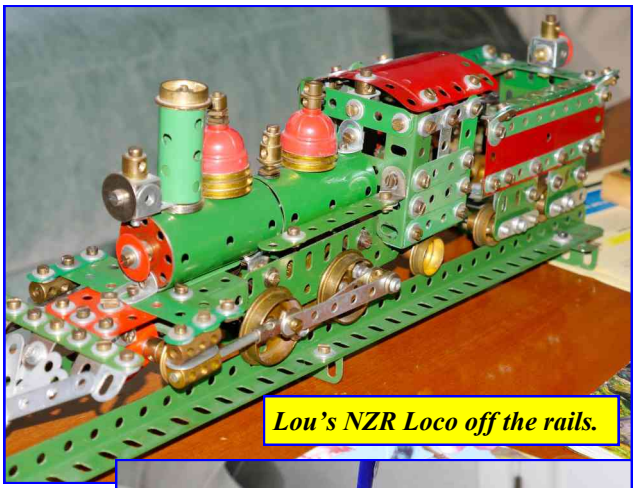
Stan Baker arrived with bits of his Convention model, a very long ball roller which will race one marble against another. This is similar to a model displayed at the recent Melbourne Meccano Exhibition and delighted the children there Stan said.

Bob Prescott had the recent Evolution model of the yellow ATV (4-wheel bike). He told us that the Paraparaumu *Toyworld* shut down prior to Christmas and he picked up the model at a very reasonable price. Simon moaned that Bob hadn't told anyone about the closing down sale but Bob said he wanted to get in first and the next day most of the Meccano had gone (cheap Chrissie gifts I guess).

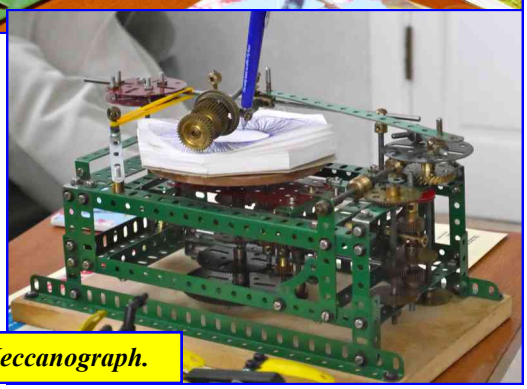
I bought my holiday project, an *Erector* remote controlled race car. This set was also purchased through *Amazon.us* and seems to be a reintroduction of a 2009 set.

Also present was **Robert Vale.**

Stan gave us a blow by blow report on the Convention organization; his summary appears on p20.



Lou's NZR Loco off the rails.



Reg's Meccanograph.

From the NZFMM Archives part 4, Researched by Peter Hancock

Volume 3- number 6- May 19th 1978:

The Editorial in this issue has a familiar ring to it. Editor Don was earnestly seeking support from members to front up with articles and model information that he could publish. He advised that several 'country members' had made contributions but more articles short or long, single or regular contributions are required, preferably related to MECCANO but anything of interest would be accepted. Members were reminded that **subscriptions** for the 1978/79 [senior $6.00, senior still at school $4.00, junior $2.50 and supporting members $3.00] fell due on the 1st of May and that members should 'pay up without delay' and 'keep up their part' in supporting the club. Payment to be made to Simon Moody recently appointed as Secretary/Treasurer. The current 'List' of registered NZ Meccanomen now containing 16 names [more expected] had been mailed out.

Model Theme A new annual model building programme would be released at the next meeting. Senior members were reminded that they needed to build a minimum of nine models a year, with six at least being chosen from this programme. A further three 'Free Choice' models can be built by members to meet the minimum target of nine. Members were reminded that if the building programme was not adhered to then 10 points would be deducted for each model that did not comply from the members accumulating annual total? An advertisement was included: **'FOR SALE'** Still a few thousand screws 5/32 x5/16 for sale at $1.20 per 100: *'Slightly longer than Meccano, BUT great buying'*. See the list of Stan Baker's parts, all homemade, ideal for electrical models as they are non-conductors of electricity. **Telethon 1978:** Don was seeking ideas as to how the WMC could participate in the upcoming event. Apparently WMC had donated $10.00 from club funds and had challenged the Auckland Meccano Association and Christchurch Meccano Club to match or better this effort during **Telethon 1977**. A joke included: "If a man smashed a clock, could he be accused of killing time?" "Not if he could prove that the clock struck first." Don continued with his series on **"Meccano Parts and their uses section 12". Pulley wheels and their uses:** Part numbers 22, 22a, 23, 23a and 23b. Parts 22 and 22a have been made in various patterns and in both steel and brass. In smaller sets they are most often used as road wheels while in larger sets mainly used as pulley wheels. A set of small hand drawn diagrams was included showing various methods of changing drive direction using pulleys and how to speed up or gear down input and output speeds and power by mixing and matching the various individual sized pulley/wheels listed above.

Volume 3- number 7- June 2nd 1978:

Editorial: Don reported that the Wellington Meccano Club had assisted in helping raise much needed funds for the Ngaio Union Church by mounting and manning a Meccano display at the Ngaio Town Hall recently. He reported that the Church membership through their Parish Council, Pastoral Care Committee and by individual member's comments had requested that Don ensure that club members be made aware of their grateful thanks. **MODEL** building competition: Don reported that year to-date in the junior section that: Paul Roberts has 366 points, Phillip Ngan 363 and Phillip Blakeborough 356 while in the seniors Don Blakeborough has 177, Max George 174 and Andrew Jardine 137. Several other members were close behind and so they should not become discouraged but continue to build 'neat' models. **"Meccano Parts and their uses section 13"**. Part numbers 24 and 24b bush wheels and part numbers 24a and 24c wheel disc's The history of colours, styles and materials used by the factory at different periods of production was detailed along with a large list of possible uses that these items can be put to in Meccano model building.

Volume 3- number 8- June 16th 1978:

Editorial: Meccano Magazines from the Wellington Public Library had recently been loaned to the Auckland Public Library and it is possible that this service could be extended to other libraries throughout New Zealand. Don suggested that members in other areas should inquire at their local library about the possible loan of them. Don felt that it must give other NZ Meccano Club members the same satisfaction that he is experiencing seeing these Meccano Magazines being used. **Meccano – 1978 Series sets:** MW Models of Henley had provided Paul Roberts with order forms for the current 1978 series sets mainly in dark blue and yellow. The contents of sets 1 to 5 completely revised. **Pricing:** Pocket Meccano:- £1.25; No 1 set:- £4.25; No1 MCS [motorised construction set] £7.95; No2 MCS set £7.95; No 3 MCS set £11.45; No 4 MCS set £19.95; No 5 MCS set £24.95; No 9 Master Mechanic set £75.00; No 10 set in three drawer wooden cabinet £254.50. No mention of sets 6, 7 or 8. **"Meccano Parts and their uses section 14".** This lesson covered of the various standard Meccano gears available at the time with instructions on how to calculate and effectively use a variety of ratios as well as taking care of all gears to minimise wear. **Parts available for purchase:** A current detailed list of parts produced by Stan Baker [many made from Epoxy-resin] was listed in this edition.

Volume 3- number 9- July 7th 1978:

Editorial: Given over to pleading for more materials to be forthcoming from members at large including the Auckland Meccano Association and Christchurch Meccano Club. The balance of this magazine contained a variety of notices and "For Sale" items.

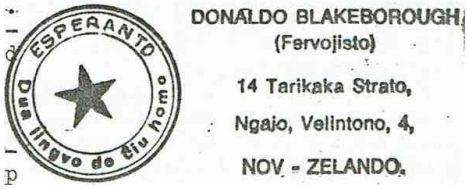
Volume 3- number 10- July 21st 1978:

This edition **c**ontained information on a variety of subjects. The following points of interest:-Noted that Meccano sets 6, 7 and 8 are now obsolete. The suggested retail value of a new Number 10 set at this date is now NZ$1495.00, also an article on wooden Meccano cabinets. Comments from Stan Baker after his visit to Meccano France:-No obsolete parts are being manufactured,

the parts in France are now the same as those made in England with the exception of one small motor, individual parts are increasingly hard to purchase as all parts are going into sets, second hand Meccano has become expensive as it is being snapped up by antique collectors. Meccano France is a highly diversified company and in addition to producing and selling Meccano, markets an extensive range of other products, some of which are made under licence in Hong Kong. **"Meccano Parts and their uses section 15".** Quite an extensive follow on to section 14 "Gears" in the previous magazine. **"STOP PRESS"** it was noted with considerable excitement that Susan Moody had just blessed Simon [WMC Secretary/Treasurer] with twins [one of each].

Volume 3- number 11- August 4th 1978:

Editorial: Opened with "How wonderful it would be if you could talk and be clearly understood by persons regardless of what country(s) they come from. Recently Stan Baker spent several weeks in Europe on business for the Post Office. While there he had to use interpreters' because of the language problems." It appears that Don had overcome the problem of conversing with the "many Meccano enthusiasts that he corresponds with in several countries" by using the international language 'Esperanto'. Don had a stamp made with which he marked his overseas mail.



The editorial ended with this statement: "Lernu kaj parolu Esperanto" [Learn and speak Esperanto]. **Meccano News:** Don reported that some months earlier he had noted in a newspaper that Meccano Limited [UK] were seeking financial assistance to the value of £300,000 from the UK Government which led him to think that they were in financial trouble. He learnt from Bruce Baxter that the money was supposedly to be used to assist the company to rebuild the Binns Road factory. Production would continue at half capacity while the factory was being rebuilt and the money was needed to assist in the payment of half of the work force during this rebuild [some 1250 workers]. Don went on to report that apparently things were looking good in the Meccano world with the company realising a profit of £2,000,000 from metal Meccano and £750,000 from plastic Meccano in the past year?? **Storage for Meccano:** This article along with a drawing had been provided by Lloyd Spackman [the first of a long list of articles that Lloyd was to provide over the years]. Letters had been received from Bruce Baxter, L Bond, F Dennison, Bruce Neilson and Bill Inglis [Melbourne].

Volume 3- number 12- August 18th 1978:

The major part of this issue reported on various day to day matters along with a write up on Matt Hudson's Version of a Meccano storage cabinet and advice on how to clean up rusty Meccano parts. **"Meccano Parts and their uses section 16"** related to gears and how to combine strips, plates wheel discs etc. to achieve non-standard spacing's.

Volume 3- number 13- September 1st 1978:

Editor Don was on holiday and it is difficult to determine who or how this issue was assembled. Following news received from the **Christchurch Meccano Club:** Thirty two members attended their last club meeting. The Club will celebrate their 50th Jubilee next year [1979] and they are planning to hold a 'Giant Meccano Exhibition' during which time they plan a celebration dinner for enthusiasts. **Lindsay Bond** is asking if any Meccano enthusiast had purchased any GOLD plated strips during the period 1936-1940 in New Zealand. Lindsay believes that none were imported. There was a list of rare parts that Lindsay is eager to purchase or exchange for other items included in this edition. He wishes to include these items in a Meccano Museum that he is looking to establish.

Volume 3- number 14- September 15th 1978:

This edition contains a repeat of a number of the items included in edition 13. Differences were that David Wall had written advising that he has an Auckland Meccano Association member looking for second hand parts including an E20 motor. David reported that he had received a loan of Meccano magazines from the Wellington Library. David is very disappointed in the number of sets and the significant number of parts being discontinued from the Meccano range, and appears to have concerns over the new colours being supplied. Bruce Neilson and his wife from New Plymouth had called on Don and spent several enjoyable hours with him. Bruce had built from model plan 57 a Blaw Knox Bulldozer which he had with him. Bruce was returning from Onslow Collage where he had been judging the annual National Fish display!

Volume 3- number 15- October 6th 1978:

Max George stood in as Editor for this issue as Don was shifting house. Don had visited and shared an enjoyable evening with David Wall from the Auckland Meccano Association while he was on holiday last August. Don has issued an updated national Members list. **Importing parts:** An article detailing the current New Zealand Customs rules and regulations as to how individuals can import Meccano sets and parts from overseas was included. **Storage Cabinets:** Letters from Mike Stuart [Takapuna] and Bruce Neilson [New Plymouth] have been received on this subject and details will appear in the next issue.

Volume 3- number 16- October 20th 1978:

Don reported that he was about to dismantle his Bulldozer which has now been displayed on many occasions. He has built a seven-foot eleven-inch tall Eiffel tower from the number 10 Meccano leaflet and had displayed it at the Bellevue School, Newlands where it "raised eyebrows to the ceiling". A further **"Meccano**

Parts and their uses section" is included. The material for this item had been reproduced from the July 1976 Meccano Magazine.

Meccano Cabinet's: Mike Stuart [Takapuna] advises that he uses two A.H.I Precision five drawer Steel cabinets. He uses shoeboxes cut down to appropriate size to make partitions. Mike has also built a 1/20th scale Wabco Haulpac 200 capacity Dump truck. Mike is now completing the electrical control system.

Club Badges: Triangular Wellington Meccano Club badges have been made [they are similar design to the old Meccano Guild badges]. Now available for purchase from Don and Simon Moody at $2.00 each.

Volume 3- number 17- November 3rd 1978:

This edition did not contain any new news or articles worth commenting on.

Volume 3- number .18 - November 3rd 1978:

Meccano Storage cabinets: Bruce Neilson had provided a detailed report on how he stores his Meccano parts and literature. Essentially he keeps his Meccano in an eight drawer cabinet, in which each drawer is twenty three inches wide by thirteen and a half inches long and five inches high. Each drawer is appropriately subdivided. He keeps parts that are infrequently required along with any excess quantities of parts that will not readily fit in his big cabinet in his second cabinet. **Don advises that the Christmas wind up will take place on the 15th of December** and that the club will reopen on Friday 2nd of February 1979.

Volume 3- number 19 – December 1st 1978:

Editorial: BIG NEWS [verbatim]

It has been suggested by several members that New Zealand Meccano Enthusiasts form a N.Z. Federation of Meccano Modellers. (N.Z.F.M.M.) Each club would still retain their own identity and each would be responsible for their own administration. Meetings of the proposed Federation could be held Bi-annually at the Meccanomen's Conventions, where small working committees could be elected. It has been further suggested that a N.Z.F.M.M. badge be made available. A similar shaped badge to the old Meccano Guild badge would cost about $2.00 each for the first 60 badges. Also suggested is that the W.M.C News could become the NZ.F.M.M. magazine, with space being allocated to each affiliated NZ Meccano Club. The possibilities are that more pages would be included but the magazine would only be printed 11 times per year, the November issue could be a double issue, thus giving Club Secretaries and the Editor a spell. There would probably be a charge for printing and also postage would have to be charged. However clubs could order several copies for their members which would reduce the overall costs, by sending them all in one letter. A year's subscription would cost around $2.40 plus postage. What do readers think of these suggestions? Should 1979 start with a new magazine? What format is best? Please let me have your opinion!!

It was reported that Lindsay Bond is going to open a shop in the New Year in New Plymouth. He intends to put in a manager for about a year and then probably run it himself after that. From information received he will have a good selection of parts available both new/used, red/green, and yellow/blue. How wonderful when a person's hobby becomes a full time occupation. Good luck is extended to Lindsay in this venture.

Volume 3- number 20 – December 15th 1978:

This is the final edition of the WMC for 1978.

Cup and Trophy winners: The Junior Improvers Cup has been awarded to Steve Westmoreland. Steven was placed fourth in the junior section but his standard of model building has improved tremendously during the year. Paul Roberts was awarded the "Junior Shield" with 1040 points. Runner up is Phillip Ngan with 918 points and third place went to Phillip Blakeborough with 812 points. Max George was awarded the Senior Shield with 690 points with Andrew Jardine second with 658 points and Don Blakeborough third with 464 points.

Obsolete Parts: With the recent "New Meccano Release" for 1978 the following parts became obsolete in the main Meccano system: 19a Spoked wheel; 36 Drift; 41 Propeller blade; 44 Stepped bent strip; 5 Windmill sale; 65 Centre fork; 106 Wood roller; 116a Small fork; 122 Loaded sack; 155 Plastic ring; 151 Single and 153 Triple pulley blocks; 165 Swivel bearing; 185a Large steering wheel; 187 Plastic road wheel; 194-194e Blue plastic plates; 213a and 213b 3-way Rod connectors; and 8 inch, 6 inch, 3½ inch and 4½ inch Screwed rods.

NOTE: The Wellington Meccano News becomes the "New Zealand Federation of Meccano Modellers Magazine from January 1979.

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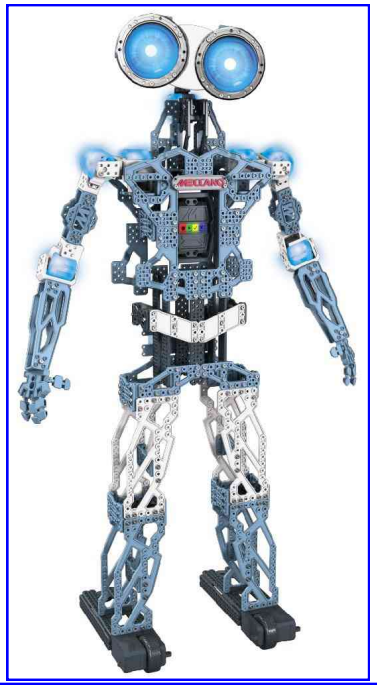


Coming to the Te Papa Convention is this new Meccano/ Spin Master Meccanoid robot. It is planned that he will welcome all visitors to the display.

MWT MEETING REPORT for October 2014

Article by Robin Rye

Bruce Geange: Pride of place in Bruce's display was his Golden Spanner Laureate diploma and Lapel Pin. Meccano, his Barford and Perkins road roller was displayed completed and the start of his Euclid TC 12 twin engine bulldozer.

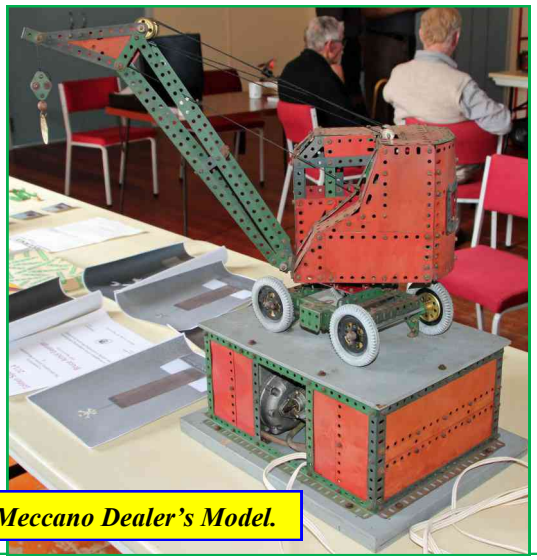
Viv Alexander: Recently bought an American Meccano set 3X of 1926/27 vintage on *Trade Me*. The X after the set size refers to the set containing a motor. The wooden box still had many of the parts securing methods within. Remaining with American Meccano, Viv also showed a 1925 Meccano Magazine and a 0 set that probably has never been used.

Richard Feltham: Model challenge contribution was a method of wheeled model movement by magnet.

Daryl Anderson: Model challenge model displayed a bump method of vehicle movement with a solenoid. His ever popular marble roller of 25 years has had a make-over including a new marble counter using lots of gears and his famous constant radius pawl to operate the counter.

John Freer: via **Selwyn Bluett**, had the ex-*Bunker's* shop Meccano dealer's model crane for sale. The model is a wheeled crane mounted on a base with a gearbox within. The output shaft enters the base of the crane through the turntable pivot and operates the hoist as well as turning the crane on a repeat cycle.

Robin Rye: Displayed the presentation to the Golden Spanner jury on behalf of Bruce Geange.



Meccano Dealer's Model.

Ross Quayle's Ball Roller.

Older Meccano related items displayed were invoices for Meccano purchases from both *Bunkers* and *Terrys* and a photograph of Robin opening a 7a from 1966. A price list of the short lived Mechanix New Zealand parts supplier was also on view.

Ross Quayle: His model challenge solution was a ball rolling through a clear tube made to undulate so the ball was always going down hill.

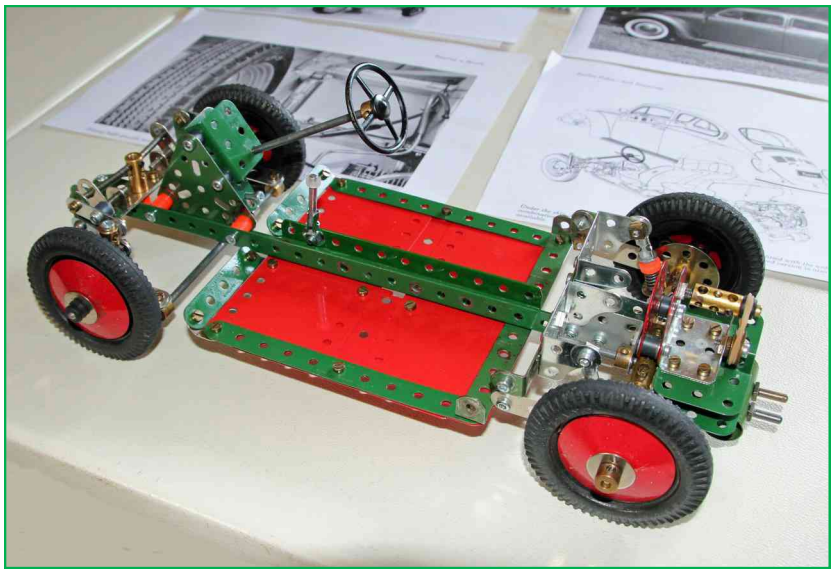
Paul Vodonovich: Has started constructing 10:18 Railway Service Crane. He said that having straight angle girders was of considerable benefit but he was having trouble understanding the plans. Various "other system" parts were displayed.

Tom Pittams: Solution to the model challenge was to move the vehicle by magnet which succeeded by a scooter or trolley following a revolving arm. His latest Meccano purchases included both a Turbo set and a Turbo radio control set. A collection of *Graham Farish* N scale English outlined model railway equipment completed Toms display.

Hugh Ramage: Has been busy constructing a Volkswagen Beatle chassis. Its suspension systems most interested him. Various members reminisced about their Beatle ownership and experiences.

Chris Morton: A recent $5 purchase was a NZ made Cranko steam engine. A Vogue set in non-original box.

The model challenge was won by Ross Quayle. He set the next challenge as your interpretation of a mythical monster/creature/person/dinosaur.



Left: Hugh Ramage's VW chassis.

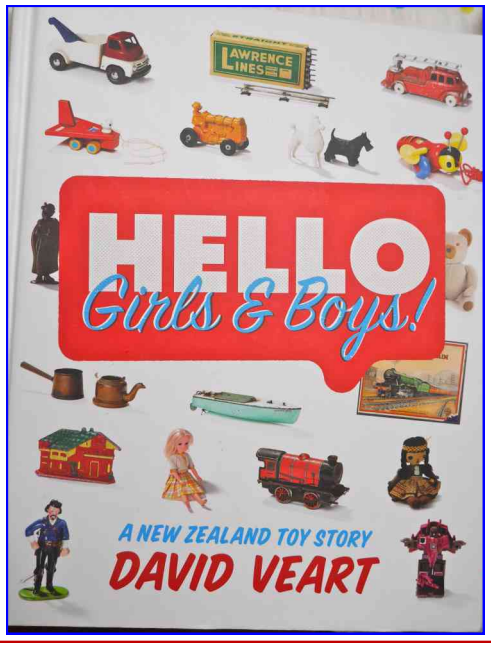
Below: The assembled MWT members listen intently to a model report as Robin Rye takes notes, oh well that's what it appears to be.

BOOK OFFERED AS A PRIZE

The NZFMM President **Neil Pluck** (CMC) has offered the recently published book "Hello Girls & Boys, A New Zealand Toy Story" by David Veart as a prize.

The Editor has decided to award the prize to the best article written for the May issue of this magazine about their Convention model or some aspect of the Easter event.

I have read the book and found it full of interesting NZ toy history, including the story of many toy manufacturers I had never heard of. There is a short chapter on Meccano and Hornby trains.



New Zealand Club Diary 2015

Auckland Meccano Guild

President: David Wall, Tel. (09) 426 1965

Secretary: Peter Hancock, Tel. (09) 535 5355

Meetings at 2pm on second Saturday every third month. The next meeting will be held on **Saturday 9th May at David & Elizabeth Wall's 45 Kath Hopper Drive, Orewa** starting at 2pm.

MWT Meccano Club

Chairman: Chris Morton
Secretary/Treasurer: Robin Rye, Tel. (06) 764 8670

Meetings at 2pm. Next meeting: **Saturday 14th March** at St. Luke's Church Hall, Corner Cornfoot and Manuka Streets, Wanganui.

Wellington Meccano Club

President: Stan Baker, Tel. (04) 566 7150

Secretary: Max George, Tel. (04) 232 4200

Contact: Lou Nichols, Tel. (04) 297 1515

Meeting at 7:30pm on first Friday every second month. Next meeting: **Friday 13th March** at **Max George's 3a St. Johns Terrace, Tawa.**

Christchurch Meccano Club

President: Neil Pluck, Tel. (03) 389 8134

Secretary: Roland Jaspers, Tel. (03) 358 1357

Meetings at 7:30pm on first Friday every month (except January) at Papanui RSA Club, 55 Bellvue Ave or No. 1 Harewood Road, Christchurch.

Additional Meccano Contacts

Hamilton: Don McClelland, Tel. (07) 843 4198
Hawera: Daryl Anderson, Tel. (06) 278 7666
Kapiti Coast: Bob Prescott, Tel. (04) 905 2963
Napier: Trevor Adam, Tel. (06) 843 4837
Palmerston North: Bruce Geange, Tel. (06) 357 0566
Nelson: John Stark, Tel. (03) 545 1025

Articles, etc. for the November 2012 issue of NZFMM Magazine should be sent to Les Megget before the 1st May 2015.

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

Buy, Sell, Auction & Exchange

Advertisements in this section are free.
First insertion will be printed in full.
Subsequent identical insertions (max. 1) may be abbreviated to fit space available.

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- Parts fitted with miniature roller bearings.
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Contact Stan Baker shb@ihug.co.nz
Phone +64 4 566 7150 Evenings or +64 21 421 750 mobile

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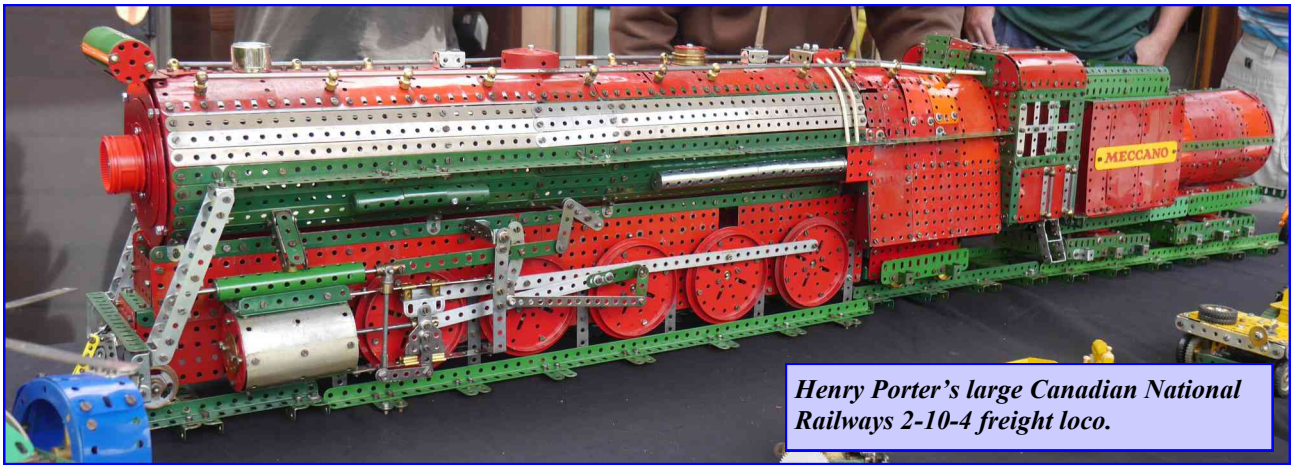
For Sale

John Ince's daughter is selling off John's remaining nuts and bolts. Zinc plated bolts, from $^1/_4$" up to $1^1/_4$" in, as new condition. Also some brass nuts and zinc washers.
Contact Janet Walbran, janet.walbran@gmail.com
Tel. 04 386 3791 or 027 249 2267

Models seen at the February AMG Meeting

Photos: Les Megget & Gary Higgins

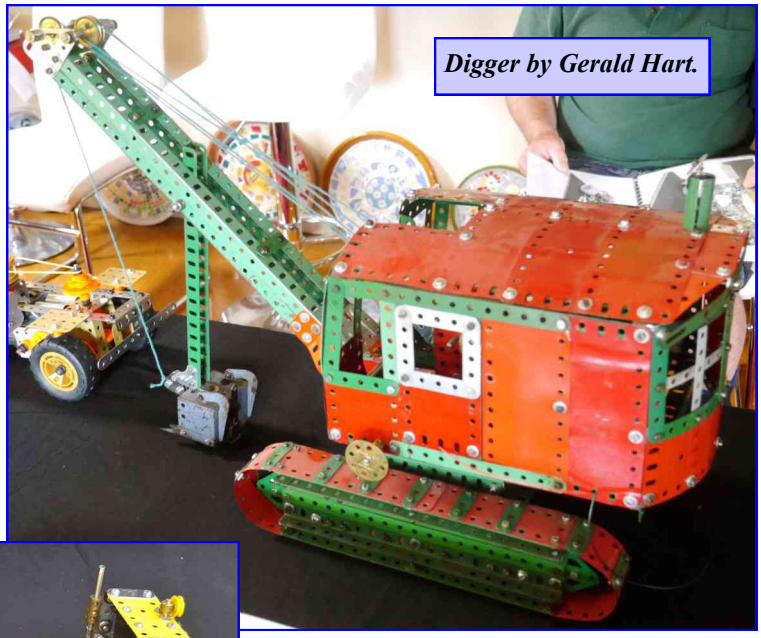


Henry Porter's large Canadian National Railways 2-10-4 freight loco.

Les Megget's 1950s Atkinson tractor with Scammell coupling.

William Irwin's rare Meccano parts.

John Denton's Tronico Tractor, note round bolts in square holes!



Digger by Gerald Hart.

Devid Glenday's Kenworth semi-trailer with Dinky bulldozer load.