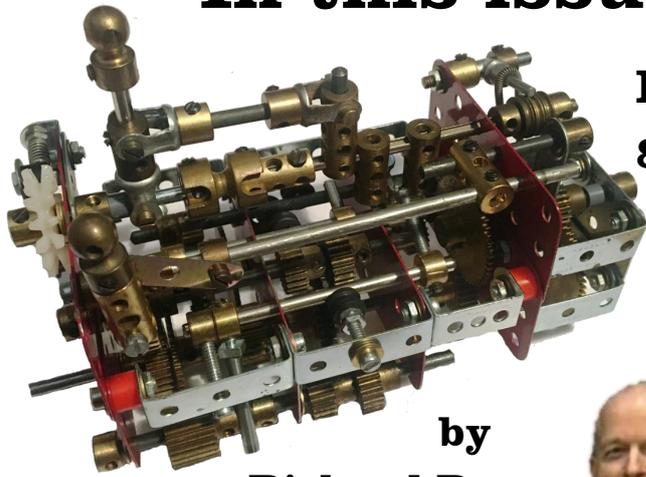




BOOK OF MODELS
VOYAGE DE MODELS
LIBRO DE MODELLI
MODELLI
LIBRO DE MODELLI
LIBRO DE MODELLI
MODELLI

February 2020

In this issue

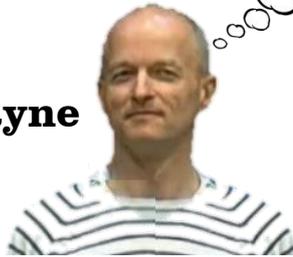


Build a gearbox in 80 steps

Page 5



by Richard Payne



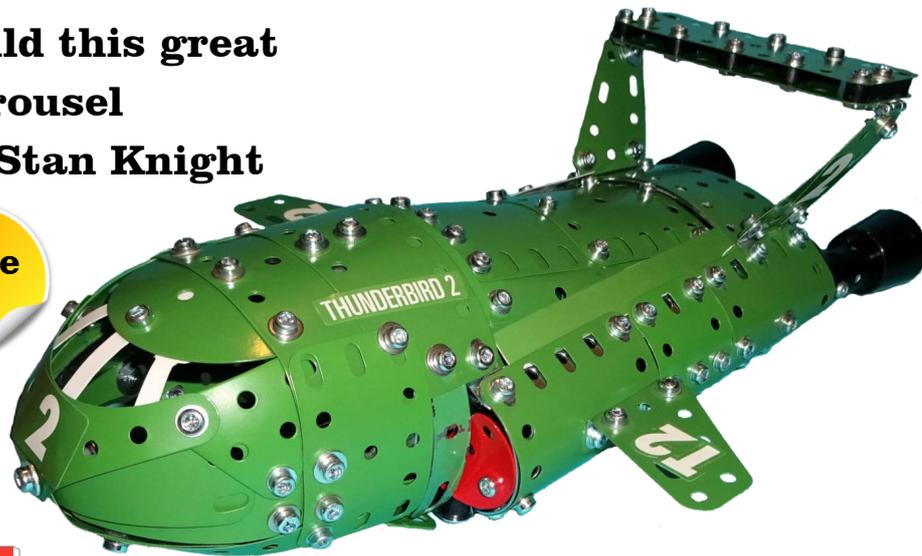
Page 14

This month's Meccanoboy is Arup Dasgupta



Build this great Carousel by Stan Knight

Page 2



THUNDERBIRDS

Are Go

How to improve your Thunderbird 2 by Nigel Pope

Page 6

PLUS our new Fireside Fun section!



Page 16

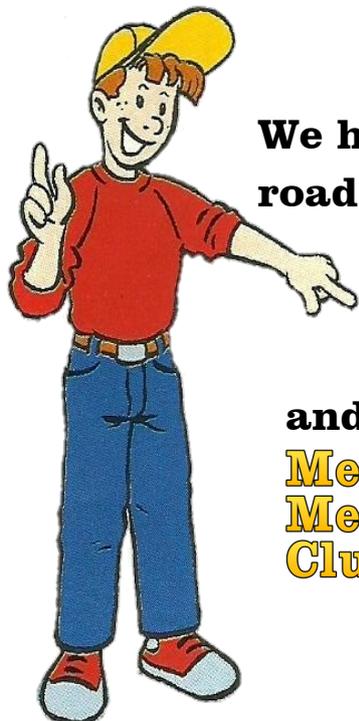
Remember this? I hope our jokes are better.

We hit the road and visit

Hainault Hangout

and our own Melbourne Meccano Club

Page 9



Carousel



**Stan Knight
- Idaho USA**



Alan Esplen left with Stan Knight right

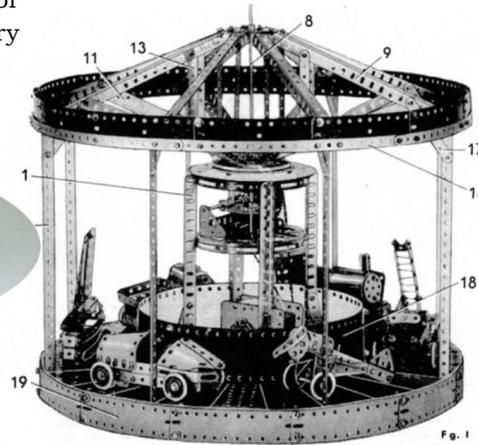
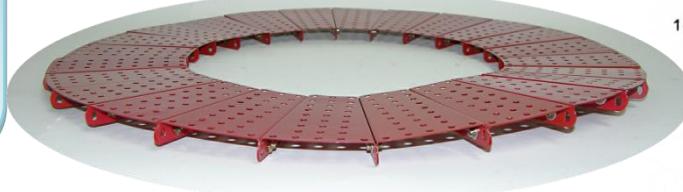
I am an ancient Brit and I moved to USA 30 years ago. I still have family in UK (England, Wales, and Ireland!!) so I periodically return to London to visit them. I first contacted Alan through his personal Meccano website some years ago (we are both Graphic Designers and Meccanomen so we have quite a bit in common) and we correspond frequently even now. He and his wife have visited us in Idaho and I have stayed with Alan a number of times when I have been in England. He lives in Maldon, Essex. This occasion in his 'hobby room' was in 2011.

MECCANO MAGAZINE

CONSTRUCTEURS DE MODÈLES

There were lots of picture references for Bobcats on the internet, but one day I actually spotted one in a field near our house, so I took some photos of my own. At the time I couldn't find the owner, so I was expecting to hear gunshots at any minute (this is North Idaho after all)!

I stumbled across this 'Manège' in a French MM for May 1956 a while ago, and I found it to be a very attractive model. My dictionary doesn't give a translation for 'Manège', but I presume it refers to a Fairground Carousel or Merry-Go-Round.

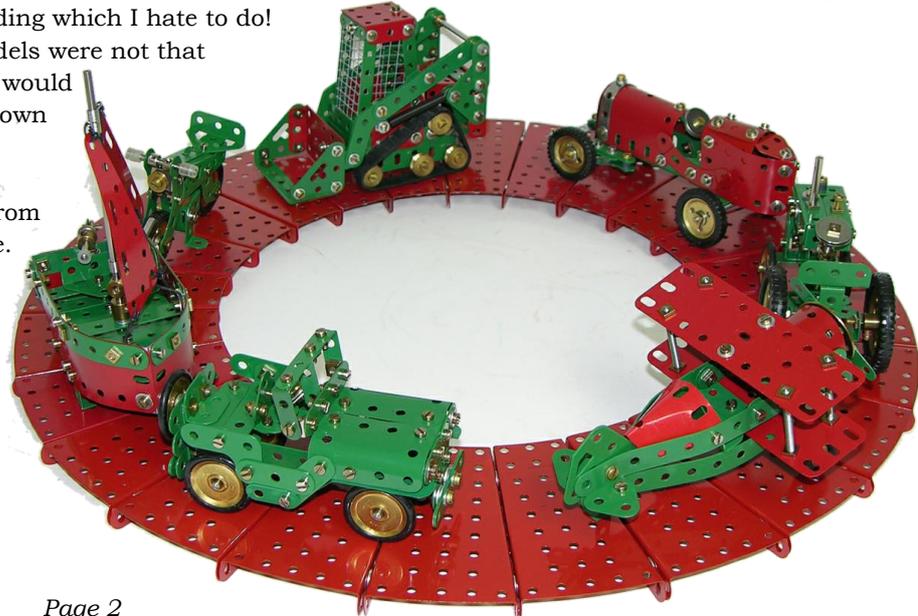
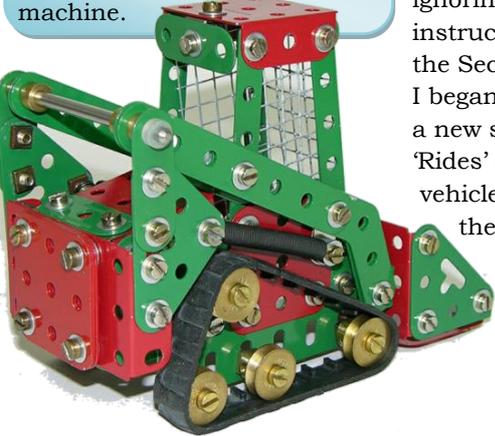


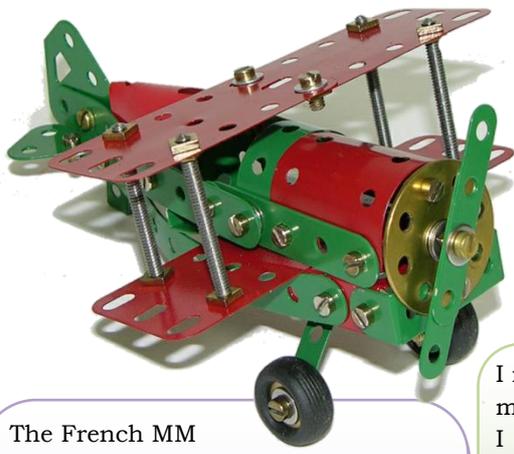
The first major obstacle in my way was that the Manège required 24 Sector Plates to make the circular Platform and I only had 10! In the event, my son, Dave, in Llanelli came to my rescue and was able to supply the extra 14. Bert Love mentioned this feature of the Sector Plates in his *Meccano Constructors' Guide*, but he failed to warn us that you need 24 pristine Sector Plates to construct the circle! Mine come from many and various sources and are in 'all sorts and conditions', so you may see in the photo that, when assembled, the platform didn't lie flat. I had to dismantle and reassemble this many times, 'readjusting' flanges and inserting Washers between some of the plates before I achieved a reasonably level circular base. After I looking more closely at the structure of the tower and the individual 'Rides' in the French MM model it became clear that a lot of Perf Strip and Flex Plates needed bending and even Strip Plate bending which I hate to do!



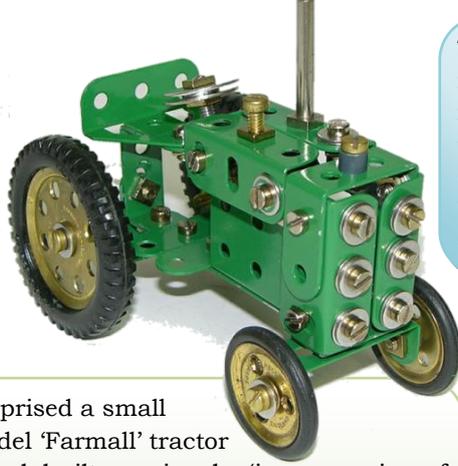
The half-width track runs very well on the 1/2 inch Pulleys and seems to be in scale with the rest of this compact machine.

In fact the small models were not that great. So I thought I would attempt to build my own Carousel, totally ignoring the French instructions, apart from the Sector Plate base. I began by building a new set of small 'Rides' and oddball vehicles - just for the heck of it.





The French MM instructions also have a small prop plane 'Ride'. My bi-plane is based on the old Meccano Aero Constructor models. The ones I have seen are on Alan Esplen's website. The wings are held with Screwed Rods cut to size. The rear body section is a small Plastic Plate. It hasn't cracked yet!



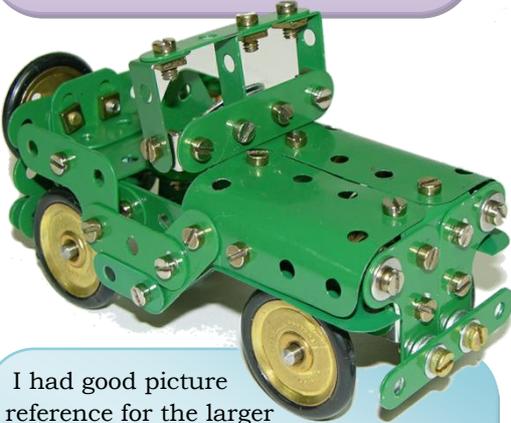
I reprised a small model 'Farmall' tractor I had built previously (in my series of models where I was trying to make good use of the tyres for 1 1/2 inch Pulleys). I omitted the working steering, as it wouldn't be needed on the static Ride!



The French Manège included 'un bateau' in their 'Rides', but I thought it rather crude. My dinghy has a moving rudder and adjustable sails.



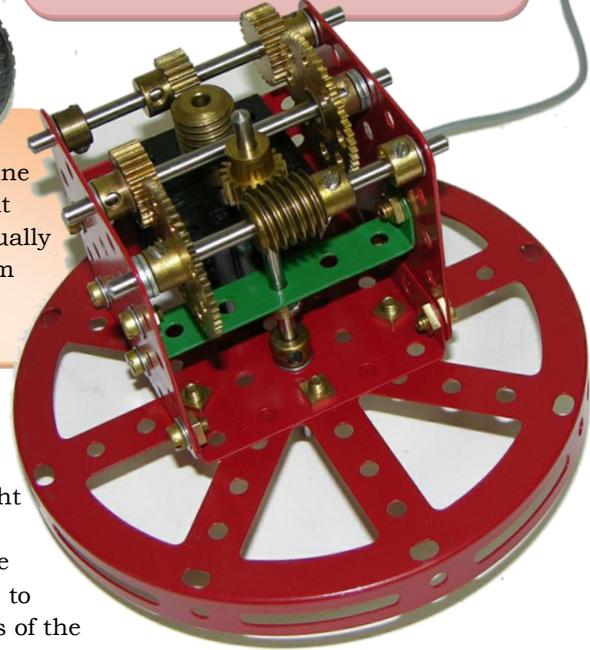
I found some very good references on the internet for 1930s racing cars, with an especially clear side elevation of a 1933 Bugatti.



I had good picture reference for the larger WWII Willys Jeep I had built before, but this miniature version wasn't so easy. I cheated with the bonnet - I cut two small Flex Plates from my scrap box down to 3x4 holes, drilled an extra hole, bent them and sprayed them



There's a clever little motorbike in the English MM for June 1956. Clever, because it can be built from the tiny Outfit 0 and yet it actually looks like a motorbike! I started from that model then added some details and improvements of my own.

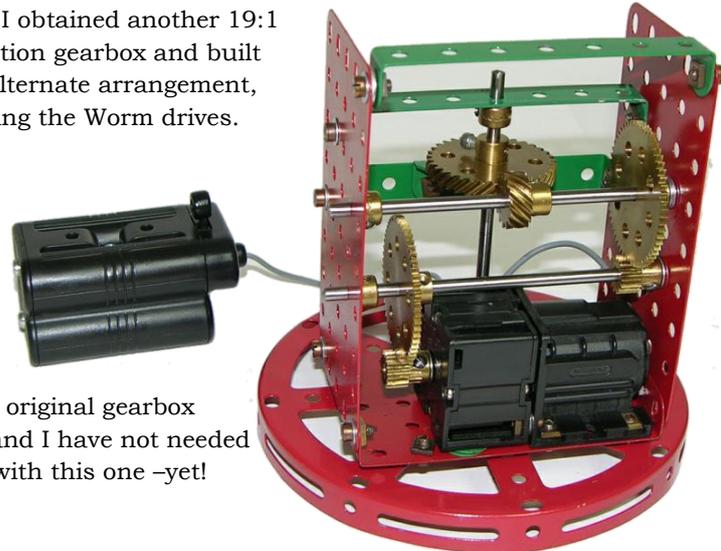
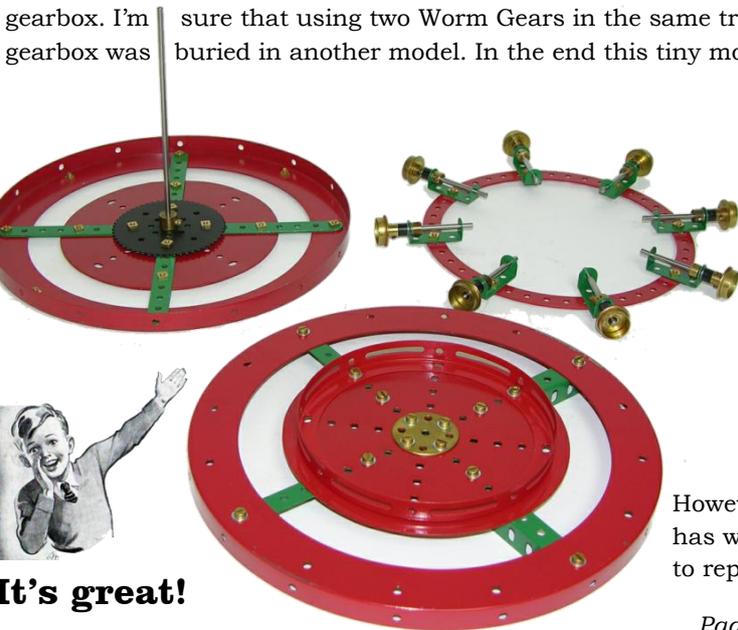


Having completed my set of 'Rides' I started think to about the Carousel structure. From the outset I was concerned about supporting the weight of the Sector Plate platform and my heavy 'Rides'. In the French model the

tower unit is stationary and the canopy and platform revolve around it. I decided to support the platform at the bottom on a heavy duty roller bearing. The large boss of the central Sprocket provides a secure anchor for the driving Axle Rod.

I don't know how to power a motor for a model that rotates, so I was restricted to using a self-contained motor and battery box. The Carousel is heavy so I was not sure whether the 6v Motor would be able to turn it, so I put together a multiple reduction gearbox. I'm sure that using two Worm Gears in the same train is not a good idea, but I had little option. My only 19:1 reduction gearbox was buried in another model. In the end this tiny motor does turn the Carousel, albeit sedately!

Later I obtained another 19:1 reduction gearbox and built this alternate arrangement, omitting the Worm drives.



However, the original gearbox has worked and I have not needed to replace it with this one -yet!



It's great!



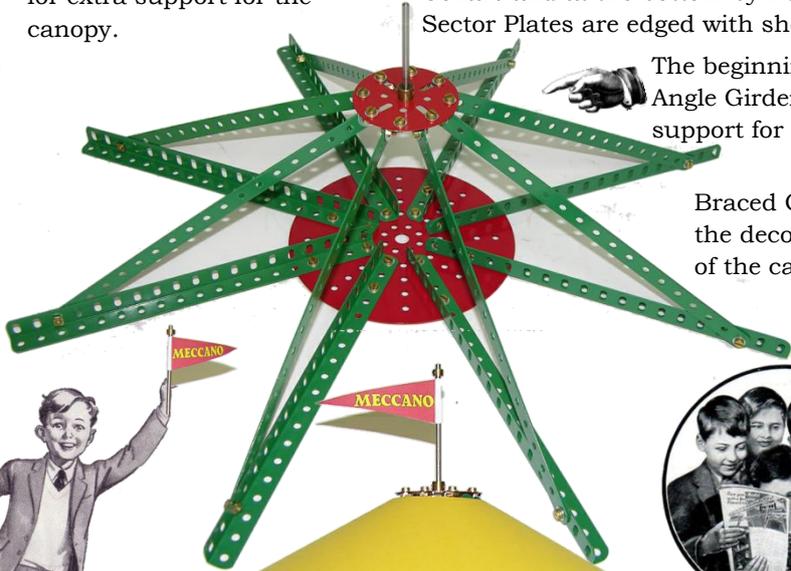
Here is the gearbox set inside the beginnings of the round tower. I doubled the Angle Girders to anticipate the need for extra support for the canopy.



The supporting long Axle Rods are held at the top by Collars and at the bottom by Rod Sockets. The 24 Sector Plates are edged with short Angle Girders.



The tower has been plated and bolted to the top Flanged Ring of the roller bearing. The flattened Formed Slotted Strips will connect the roller bearing to the inside of the Sector Plate platform.



The beginnings of the canopy. The radiating Angle Girders will be used to form part of the support for the outside of the circular platform.



Braced Girders form the decorative edge of the canopy.



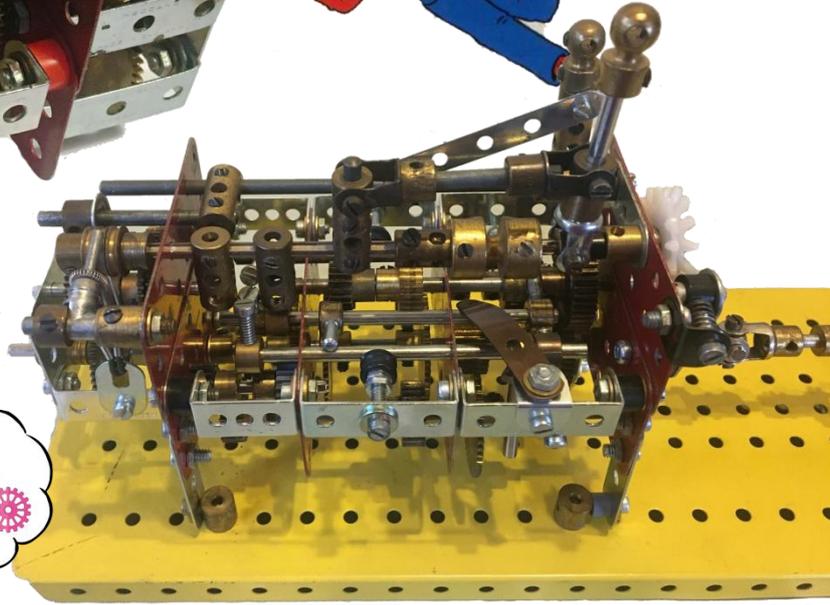
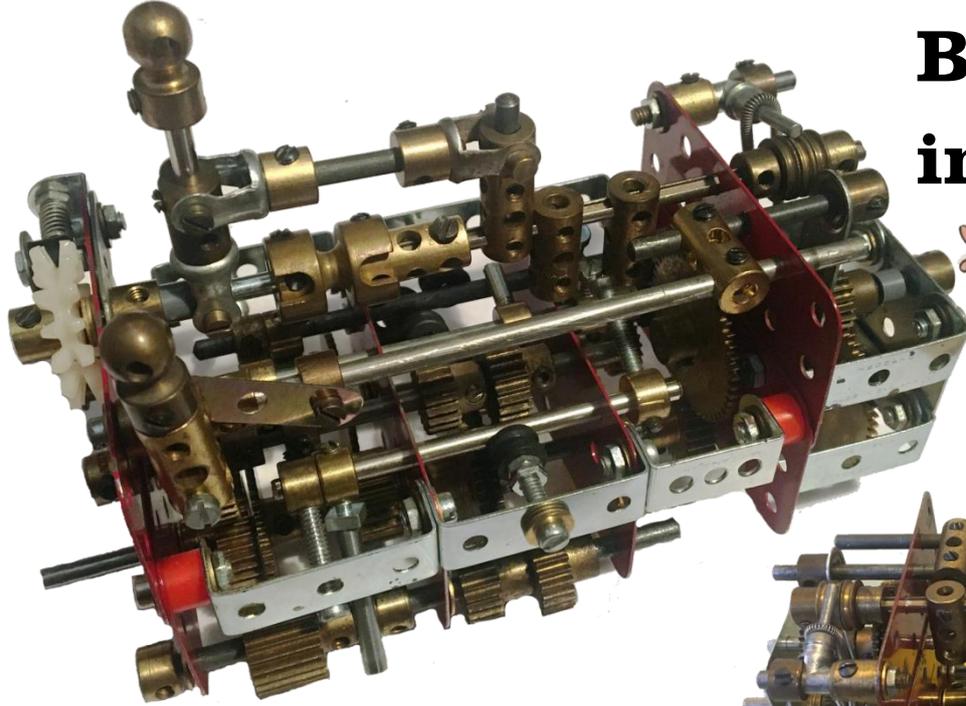
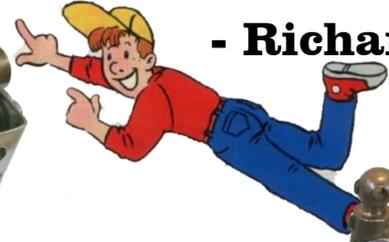
I was pleased that my structure is strong enough to support the heavy platform and 'Rides', and that the tiny 6v motor is sufficient to turn the whole thing via my weird gearbox. To increase its fairground pizzazz I cut a yellow canopy out of art paper, and added yellow Braced Girders and stars around the tower. Flashing 'fairy' lights provide the finishing touch. (My Meccano labels and pennants are courtesy Alan Esplen.)



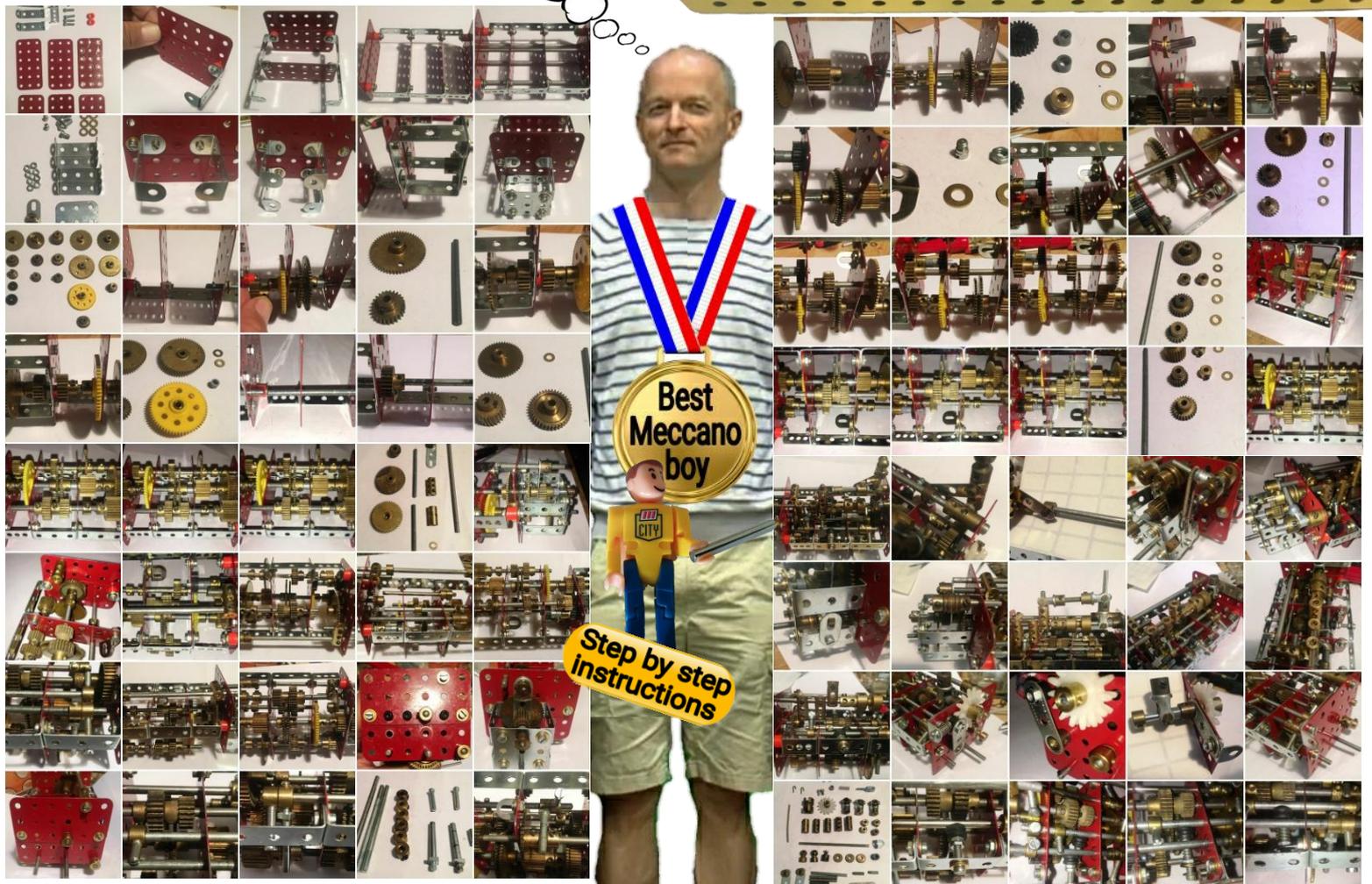
This is the roller bearing in place in the completed model. Only the bottom Flanged Ring is static.

Build a gearbox in 80 steps

- Richard Payn



Richard has gone to great lengths to document his build of a 10 Speed Forward, 2 Speed Reverse Gearbox. There's no room in the magazine to publish all 80 photos so I've condensed them into thumbnails to give you an idea of the scope of this project and you can follow the link to the NZM Gallery for more detail.



This gearbox gives equally spaced gears that are between 40% and 43% apart, much like a real truck gearbox. The parts required are shown in the photographs along with part numbers and explanations of why some specific parts are used. eg. "The unit will work just as well if the 20t and 56t gears are swapped with 19t and 57t gears."

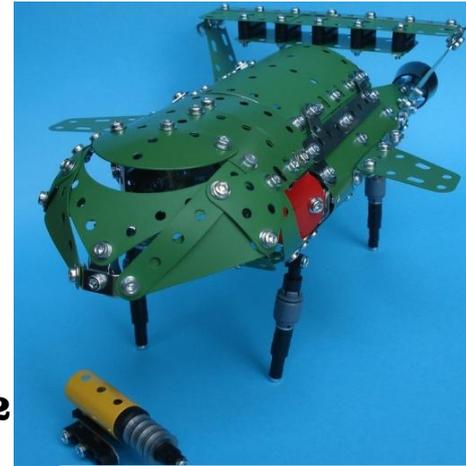
See all the steps in the NZM Gallery

[CLICK HERE >> http://www.nzmeccano.com/image-143777](http://www.nzmeccano.com/image-143777)

Each photo is accompanied with text describing what you need to do for that particular step. Good luck! Send us some pics if you succeed.

THUNDERBIRDS

ARE



The NSG (Not So Good) original.

Nigel Pope – UK improves the Thunderbird 2

Last Christmas, Santa very kindly brought me a Thunderbird 2 set and I made the model. You can see the model in the photograph standing up on its extending legs. However, I was not very happy with the model. The main reason for this is that it only has a passing resemblance to Thunderbird 2. There are all sorts of things wrong with it. Here are a few of the ones I particularly didn't like:

The front is far too wide and covers the air intakes to the engines. There is no floor to the cockpit. I am sure Virgil Tracy did not have his feet sticking out of the bottom like Fred Flintstone.

The body should taper towards the back but the model is dead straight. The pod is the wrong shape and is in constant danger of being scratched.

The engine exhausts fall off all the time.

The pod has no floor. This greatly reduces its play value. Also there is no back to the model and the tailplane is the wrong shape and far too wide.

I could go on, but rather than do this, I thought I would have a go at making a better model. However, I did not have enough parts in Thunderbird green. Then recently I saw that Amazon were advertising a used TB2 set at half price.

I bought this set and found that it was only the box and instructions that were damaged and I was going to throw those away in any case. So I set about making an improved version.

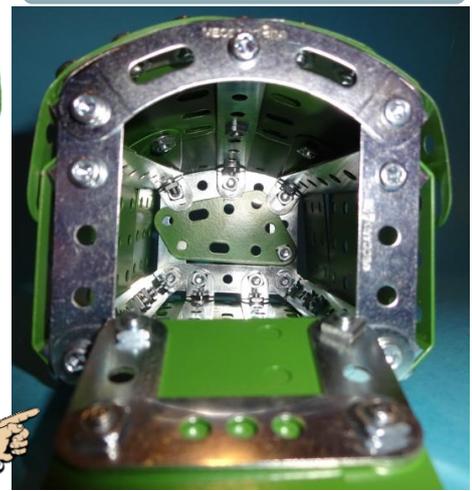
The pod door is now comprised of two flex plates instead of one.

Inside view. A floor is important.

The white strips in the windscreen are made from a bit of springy white plastic which began life as the back of a document folder. They are actually *all* one piece which is secured with the nut at the top.

The key element is getting the pod to be the right shape. It must taper towards the back and have no bolt heads on the sides.

Pod is higher



I decided to dispense with the long legs as they don't really add anything to the play value of the model. I suppose they are supposed to be telescopic and to go inside the fuselage when Thunderbird 2 is in flight. However, Meccano rods are too long to be stowed conveniently in the model.

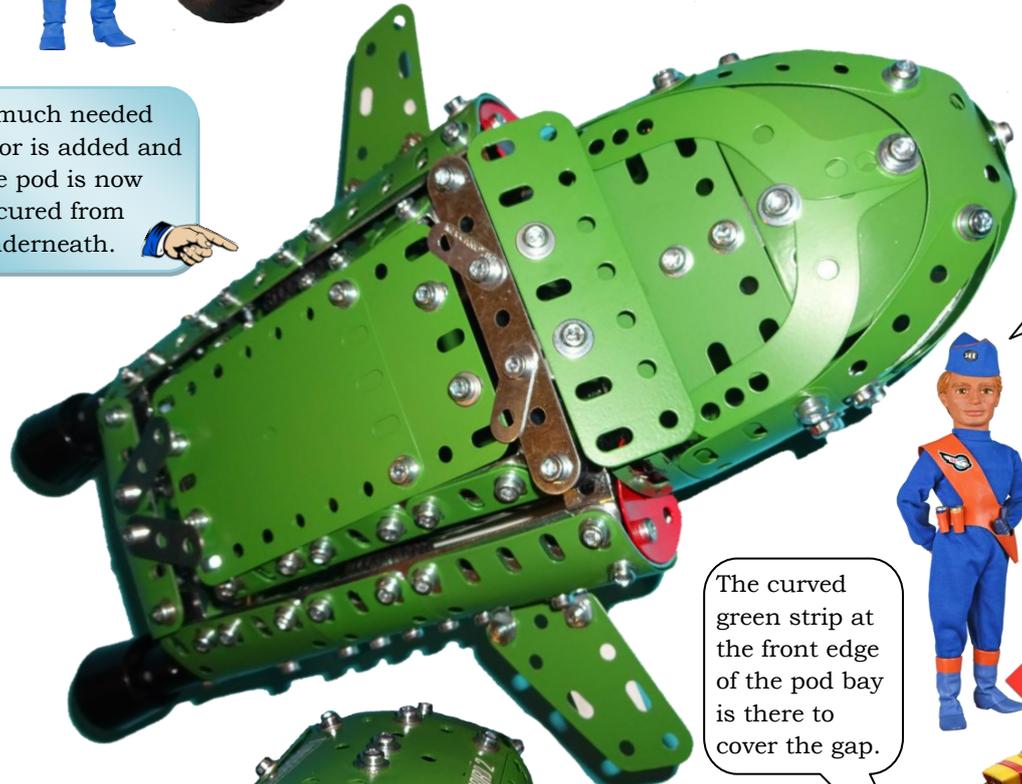
Even in the puppet TV shows you can see that the makers of their model actually pushed the legs up from underneath the set.

The pod is prevented from moving sideways and from getting scratched by a couple of small rubber wheels which are just pushed onto a long bolt.



The green strips that cover the gap between the pod and the top of the fuselage are made from the left over parts of the sticker sheet which came with the set.

A much needed floor is added and the pod is now secured from underneath.



There are new arrangements underneath to hold the pod in place.



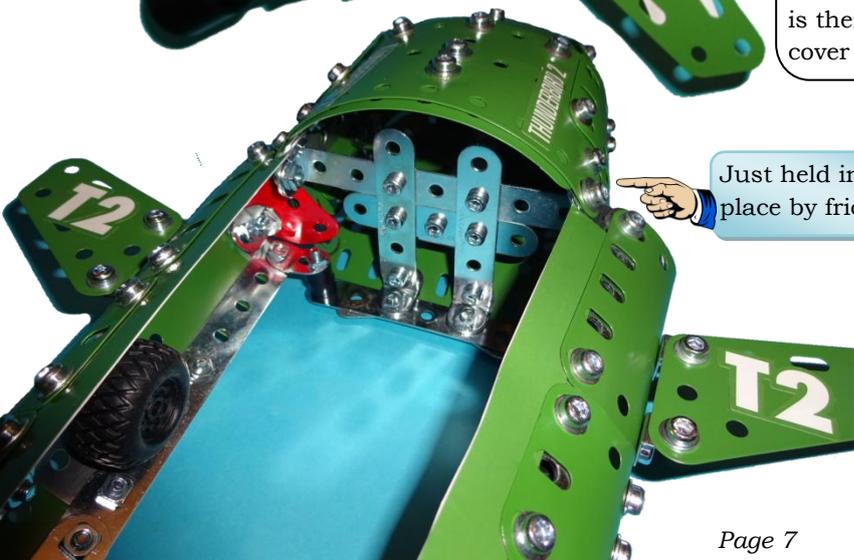
The curved green strip at the front edge of the pod bay is there to cover the gap.



Brilliant, Nigel! I'll s-s-start making changes



Just held in place by friction.



Sayan Chowdhury

- India



My name is Sayan Chowdhury and I live in Kolkata in the state of West Bengal in India. I am a Data Analytics architect at a multinational company.



FROM OUR READERS

Early days in Meccano:

I was hooked to Meccano at a very early age when my grandma gave me a Meccano clockwork motor which belonged to my father.

However nobody in my home was into Meccano, hence I had to learn all of the tips & tricks by myself. As I progressed further into the hobby I kept receiving Erector sets bought by my uncle from the US and sometimes by my Dad during overseas tours. That was pretty much my only source of Meccano at a young age. Later I got to know about Ashok Banerjee from whom I bought a lot of Meccano with my pocket money.

Current Collection:

These days there are a lot of Meccano compatible sets in India which are good quality, so I periodically buy lots of these sets. I'm also fortunate to have found couple of elderly Meccanoboy in India who were willing to sell their collections for a reasonable price.

Meccano Train:

Inspired by the train tracks my son plays with I thought of building a Meccano train which could run on those tracks and some accessories like a platform to enhance the beauty of the model. My son loved it a lot and it was very satisfying to watch it run smoothly. I didn't have a ready design, so I built a couple of iterations of the main engine in a week and then kept on adding the bogies and the carriages over the next week. I was particularly satisfied with the platform design and it's one my favourite parts of the model. – Sayan Chowdhury.



Eek! What's that I see!



You can see videos of all Sayan's wonderful models and subscribe to his YouTube channel by clicking the link below.



<https://www.youtube.com/user/saimorph>

The Hainault Hangout



By Richard Smith - UK

Held at the Hainault Baptist Church on Saturday December 7th 2019



Preparation started the night before getting as many models as I could into two large plastic containers but my Double Decker Bus didn't fit and would have to travel separately.

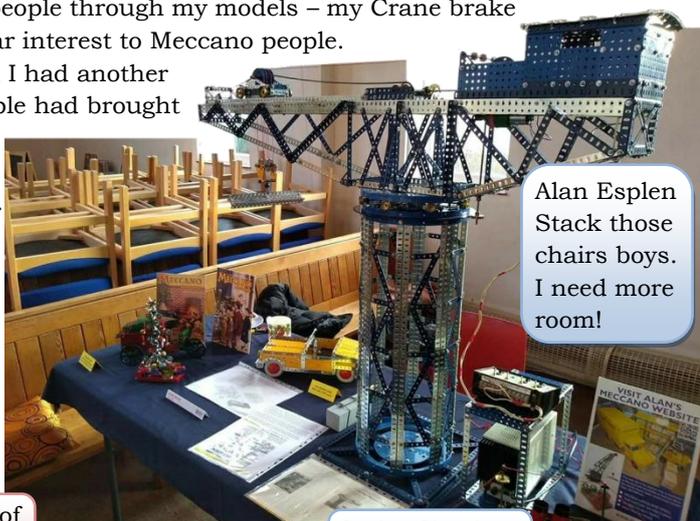
I left the house in darkness at 6:30am to drive over to Roger Upson Smith's aiming to leave his house at 7am. Roger had already filled his car boot with models and I put my boxes on the back seat of his car, the Bus travelling in the footwell. We set off not much after our scheduled time and had a good run down the A12 from Ipswich to Hainault arriving around 8:15am. Our destination was the Hainault Baptist Church, a relatively modern building comprising a church with a function room, restrooms and a kitchen. We were met by Tim Surtell who directed us to the tables assigned to Roger and myself, which had been covered with blue cloths. The room had been laid out in a very professional looking PDF document that had also been emailed to us in advance. Roger and I were amongst the first to arrive and having set out our display we were able to chat with the other NELMC members as they arrived. Dave Taylor had set up his Meccano business and it was difficult to resist a quick look at what was available – I needed a few spare parts to try and complete a set I had recently bought 2nd hand and I was very pleased to find a 5x3 hole Double Obtuse Flanged Plate in grey which was on my list! The room began to fill up and soon the doors were opened to the general public. I grabbed a quick coffee and sausage roll then settled in to the routine of talking people through my models – my Crane brake controlled by differential was of particular interest to Meccano people.

Roger Auger

Jamie Plicio – Meccanoid robot



Things quietened down around 2:30 and I had another good look at all the amazing models people had brought with them. About 4:30 it was clear that no more people were going to come in and some people had started to pack up. Tim Surtell drew the raffle and there were cheers as various people picked up Meccano based prizes. After saying our farewells we headed home via the KFC (20 minute wait for KFC!) and got back to Roger's at 6.40pm. A great day out with excellent company. Thanks NELMC and Tim for organising it! – Richard.



Alan Esplen Stack those chairs boys. I need more room!

Gregg Worwood – Murray Blenkinsop steam



John Gay - Duchess of Atholl loco below



Cathy Claydon NAAFI Van left

Gregg Worwood pedalling



Melbourne Meccano Club

Chris Curnick's South Seeking Chariot, Tractor and Martian Orrery at our December club meeting.



The South-seeking Chariot is one of many Meccano models of the beast. This one is by Terry Morris, published in MM January 1977. Not sure why I chose this one – it is one of the more compact Meccano models. It can give a bit of grief if the spoked wheels slip on the table top. A better version would use wheels with tyres, but since rubber tyres were not part of the Chinese landscape in whenever BC, I opted for ‘authenticity’.

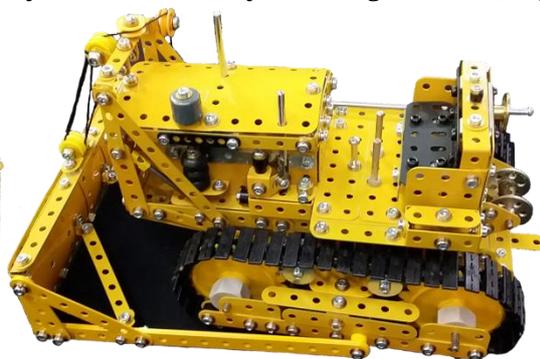
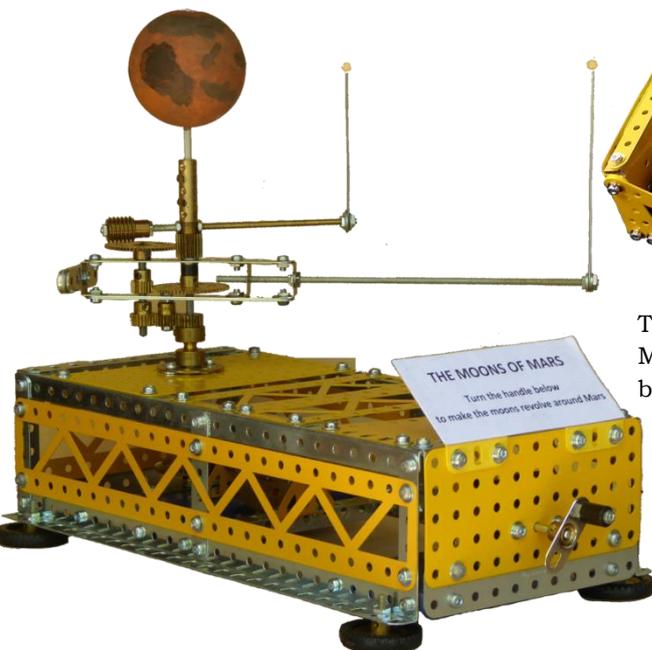
The unknown model in the middle is of the 1918 Bates Steel Mule tractor. This model was designed by Bruce Geange and published in the Sept 2019 CQ. Bruce’s model is driven by a Magic Motor, with a couple of belts and a stage of gearing to the back axle. My version needs a bit of work to get it to run. The motor is almost strong enough to drive the crawler half-tracks, but I have not yet found drive belts that are tight enough not to slip on the pulleys, but not so tight as to lock up the drive train. Perhaps a geared electric motor is called for.

The Orrery was published as A Simple Martian Lunarium in the North Midlands Meccano Guild Newsmag, July 1997. Pat Briggs wrote it up and John Nuttall was the whiz who worked out the gear trains. This is a very simple model, using only seven standard gears (apart from a few needed to take the drive from the crank handle to the ‘works’). Despite the simplicity of gearing, the relative motions of the moons are accurate to about 1%.

Mars has two moons, Phobos and Deimos, which are about 20 km and 12 km across, not spherical, but more ‘potato’ shaped. They are very small when compared to Mars at 6800 km diameter. As well as being small, their orbits are relatively close to Mars, only 1.4 and 3.5 Mars diameters away. This means that their orbits can be modelled to scale without having to build a ridiculously-sized model (as would be the case with Earth’s Moon which orbits 30 Earth diameters away). Because the moons are so close to Mars, they are not visible from the Martian surface near the north and south poles.

An astronaut on Mars would see both Deimos and Phobos display phases, just like Earth’s Moon, as they move around in their orbits. And they also are eclipsed as they pass through the shadow of Mars. However, neither is appears big enough from the surface to hide the Sun if they pass in front of it.

Phobos whizzes round in its orbit in just 7.7 hours, much faster than Mars rotates (a Martian day is 24.7 hours); in fact, it is the fastest natural satellite in the Solar system. Deimos moves more leisurely at 30.8 hours per orbit. However, our astronaut on Mars observing the moons has to take account of the rotation of Mars as well. So our Martian will see Phobos, orbiting faster than Mars rotates, rise in the west, stay above the horizon for only about 4 hours, and set in the east. Then about 11 hours later, it will rise again. Deimos shows different behaviour – it rises in the east, but because it orbits slightly slower than Mars rotates, it stays above the horizon for about 65 hours or nearly three Martian days. During that time, it goes through two complete cycles of phases. – Chris Curnick.



The December meeting of the Melbourne Meccano Club also featured these models by Barry McDonald who travels 150km from Colac to attend.

Both the D8 Bulldozer above and the Caterpillar Generator right were based on original models by Bruce Geange in New Zealand.

Graeme O'Neill - NZ



Re-builds the Cat. 140H Grader



NZFMM MAGAZINE

Volume 39, No. 4

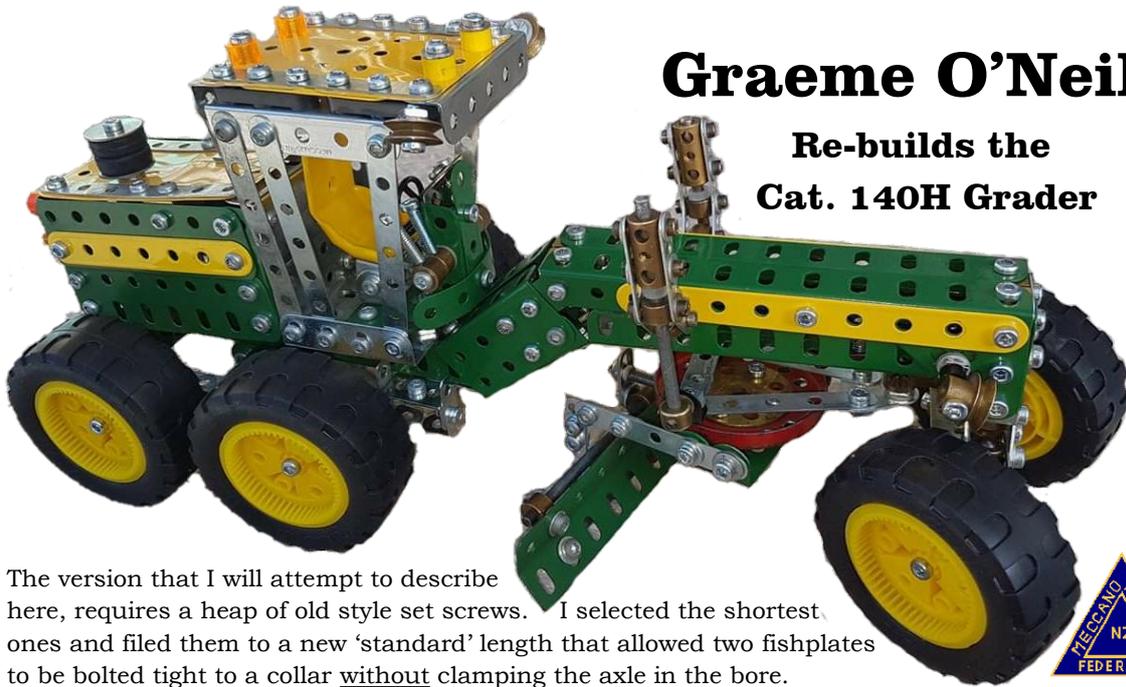
November 2015



The Editor's small scale Cat. 140H Grader, see p3.

Visit the NZFMM website here

<http://www.nzfmm.co.nz/>



The version that I will attempt to describe here, requires a heap of old style set screws. I selected the shortest ones and filed them to a new 'standard' length that allowed two fishplates to be bolted tight to a collar without clamping the axle in the bore.

I achieved this by using a threaded brass strip with suitable packing strip and filing down to the surface of the strip. Of course, using modern hex screws is not impossible, by either using washers or trimming the length. Also required are a number of 4-hole collars and shoulder bolts, and optional 6-way threaded cubes. I'll describe the build, but, first starting with the #137 that needs re-engineering.

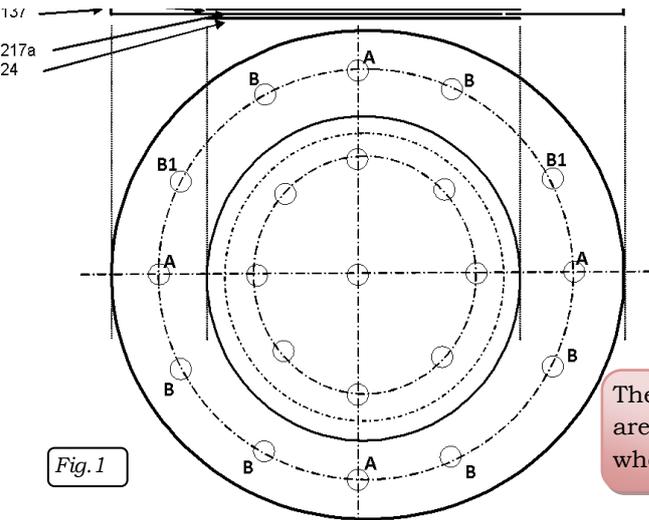


Fig. 1

This was originally built around a narrow strip ring that I didn't want to buy. But, on inspection, I found this was the same size as a flanged disc #137. I had an old #137 disc that needed repaint, so sited four radial holes (A) at 90° apart, diameter to match a new 8h narrow strip (h = 1/4" spaced holes), each with a hole (B), 1/2" each side of it, on the same circle of 1 3/4". (I also found that holes B1 are 4H apart and these were the only 2 holes I ended up using on this bearing!) (H = 1/2" spaced holes). This was done prior to drilling and filing out the centre to match an X-series wheel disc. Two wheel discs were then sandwiched between 2 standard wheel discs for a lovely smooth bearing, as shown in the sketch above and photos below. This is the only major modified part.

The drag frame that attaches behind the front wheels
The collars on each side of the wheel flange are the height of the control ram mounts

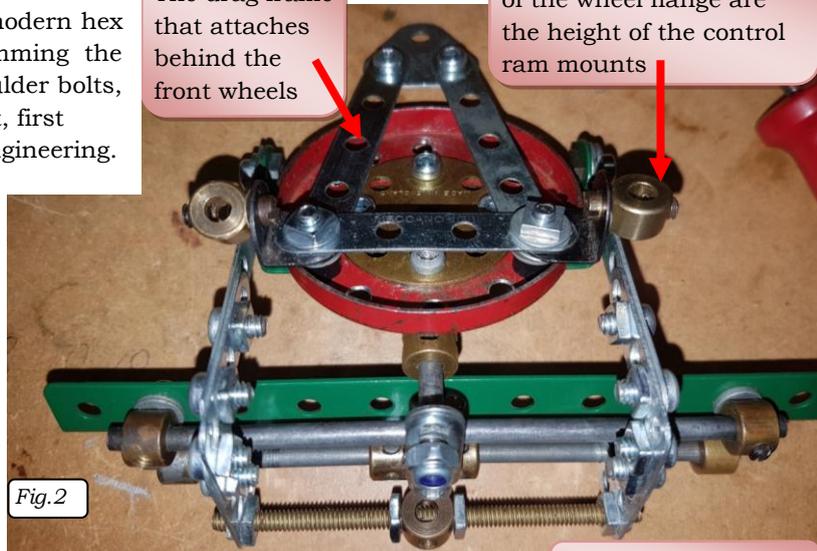


Fig. 2

The 3 bolts holding the 2 DAS are spaced away from the wheel disc by small spacers.

The top rod across the blade is the tilt control

Lower rod is for pivot/height control

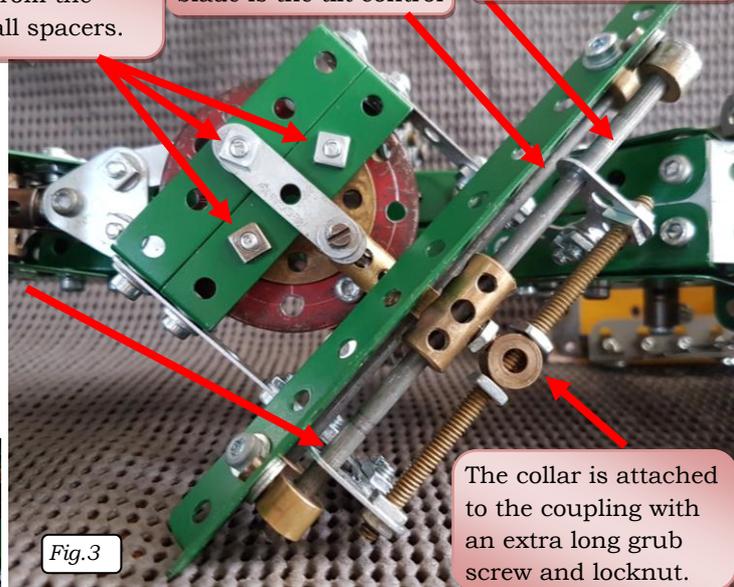


Fig. 3

The collar is attached to the coupling with an extra long grub screw and locknut.

Chassis rear section details

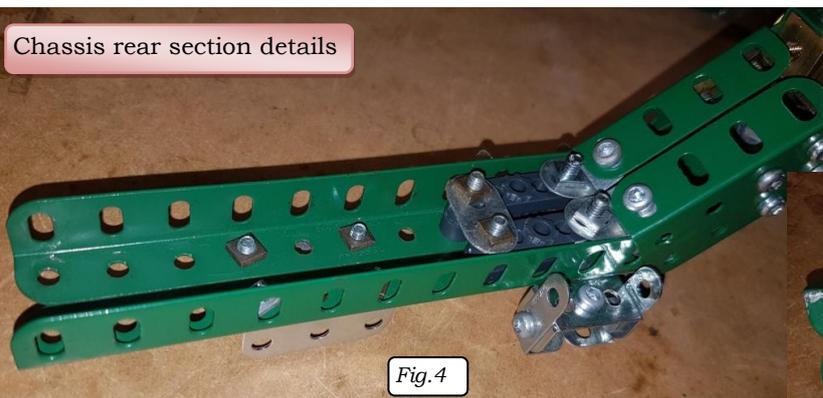


Fig. 4



Fig. 5

Chassis Rear Section

The bottom portion of the chassis is built from pairs of angle girders all with slotted holes upwards, and bridged by Fishplates. The rear end 11H girders are joined to the 4H girders for the upward bend, by a pair of #12d under the 4H girders. The bolts are $\frac{7}{8}$ " through the 11H girder end and each carries in order a single 4H strip across the frame (this will hold the steps), the #12d (slotted hole), the 11H girder (second hole), the end of two #A420 plastic strips running backward, and a nut (temp). A pair of #161 is mounted on the centre 4H girders, with a pair of #12c bridged by a #10 on the rear end of the flange. This is placed under the temp nuts just mentioned – and secured. Similar bolts are fitted to the rear ends of the #A420, with a #10 across them and secured as in Fig 5. Another pair of #161 is then mounted on these four bolts by the edge holes with additional nuts. These #161 are the cab floor. Also bridging the pairs of 11H girders; at the rearmost holes and spaced down by two plastic spacers is a #161 flange up and extending back one more hole (Fig 14). Under the rear chassis is a rear axle mount made from a #51b with a #45 on each side. Completion of rear wheels, cab and engine housing will be done as in later modules.

Chassis Front Section

The lower point of a pair of #133 plates is joined by a #48e (facing down) spaced by washer each side, with the bolts also poked into the end bores of a loose coupling (Fig 7). The centre front holes of the #133 have another #48e (facing forward), and another coupling - with a $1\frac{1}{2}$ " axle down through the coupling centre holes and passing through the lower #48e – the axle is held by a pivot bolt through a #116 and washer into rear centre thread bore of the top coupling and a short grub screw in the lower coupling. This will be the front axle mounting. The front 9H girders (Fig 8) are similarly joined by a pair of #12c bridged by a #10 for the bridge section.

Details of what's inside the head unit

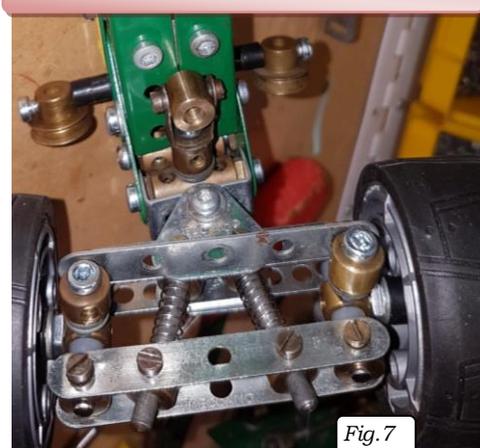


Fig.7

Fig.6

Another #10 is fitted at the third hole from the front end (9H girder). The front end of the 9H girders now joins the #133, to the centre holes, but pushed up to its limit. This bolt is $1\frac{1}{8}$ " long and is first screwed through the boss of a #23, a small spacer, a nut and washer and then locked by a second nut on the inside. This represents the headlights. The front section top now; a pair of 11H girders firstly have a #64 mounted to the outside, on a #111c (washer both sides of girder) semi firmly, at the 4th from rear end side hole. A hex grub screw is fastened into the outer end of each #64. The #64 is mounted with crossway holes away from frame. This will later hold the blade raise rams. A $\frac{1}{2}$ " cube is mounted inside each end of the girders, by the top slotted holes only, with the cubes linked again by a #10 on the inside, before mounting as follows. The #161 of the mid section are extended forward one hole by a 3H strip each side, this slides between the 11H angle girder and the cube. The front end of each top girder is bolted to the corner of the #133 and the pair of cubes. A pair of 3H strips is now vertically attached, by their top holes to the front of the brass blocks – retaining the #10 mentioned. Then the strip centre holes, packed by a washer to the centre coupling end cross threads.

Blade & Mounting Sub-Frame

Fig 2 & 3. This was completely rebuilt using ideas from the original. A pair of 5 x 1H DAS are mounted (spaced by small plastic spacers) from the wheel disc bearing described and built above. A 5H narrow strip extends back from the legs of the DAS (spaced by washers to clear the #137 rim) then extended down by a 5h x 3h narrow corner bracket and another one coming back. Overlapping is shown on the photos.

My blade is an obtuse 11H girder, (but a pair of 5H strips joined by obtuse brackets would do same - *mount these under the same screws as the four collars mounted second holes in from both sides of the blade*). A pair of axles link these collars horizontally, with a loose collar on the top one, and loose coupling on the lower one. The lower axle is mounted as high as the mounting in the slotted hole of the girder allows, and also feeds through the forward end hole of the mounting bracket above. (Fig 8) A threaded rod with a collar at its centre is mounted directly behind the lower axle just mentioned. This Collar is joined to the coupling with an extra-long Grubscrew and locking nut. This simulates the blade sliding ram mechanism. The blade tilt ram connects to the upper axle loose collar, via a pair of narrow fishplates (round hole). The slotted hole holds a loose mounted long threaded rod sliding in a coupling, that is mounted to the 4th hole in the wheel disc bearing. A 3H narrow strip runs forward to the front 5H DAS at the top of this section. The coupling mounting screws are free of the axle sliding action.



Fig.8

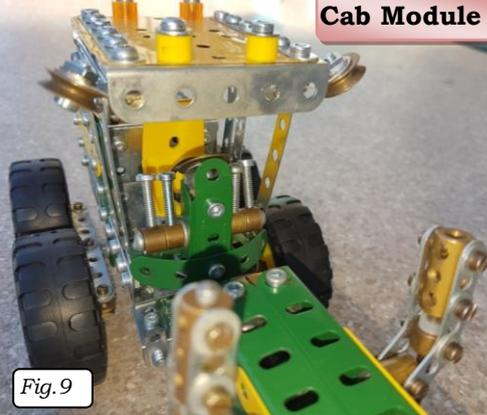
Blade Turntable Support & Control

See the Figs. 2, 3 & 8. The support frame is mounted on the holes marked B2 on the turntable sketch, by bolts #111c – up through the modified wheel flange, small spacer, a washer (free of the rim edge), a 5H NS facing forward, a #12 (from the clock kit if possible), a 4H NS across them, washer and nut. The 5H NS are joined at the front on a #77. The third front hole holds a threaded boss by the end bore and nut. The cross bores connect to the fork piece at the front of the frame by shouldered bolts.

Another 12 set screws and 6 shouldered bolts from universals are needed. The height rams are similar in operation to the NZFMM model, but mounted between pairs of narrow obtuse strips using shortened setscrews and washers, onto the coupling and collar pairing. The axles must be free. A plastic spacer was used as the rubber one was found to be too hard to move. The lower end of the axle is mounted onto the turntable frame by a collar that is mounted by a shouldered bolt. The front connection to the chassis can be completed now to the Threaded Boss.

Multi-Functional Steering

Figs. 6 & 7. The original only had conventional style Ackerman mounted on a beam. My version added the tilting camber, and larger wheels – A187 and A045. *Warning;* Another 8 set screws, 14 shouldered bolts and 2 4H collars from universals are needed. The kingpins are each made of #18b axles, fitted with a 2H collar, small plastic spacer, 4H collar, small plastic spacer, 2H collar. The 2H collars are fixed by shouldered bolts to the axles, through a pair of new 9h narrow strips, for the top beam, and a pair of standard 5H narrow strips, for the lower beam. The beams are free to allow camber adjust. *Note I have used the small h for 1/4" spaced strips and capital H for holes in standard 1/2" parts dimensions).* The 4H collar has a short pivot bolt steering tie rod – this carries a collar, a nut, and spacing washers to allow the collar to turn when the nut is locked to the collar thread. A third 5H narrow strip is then coupled between these collars by shouldered bolts. Then, a suitable long pivot bolt for the wheel stub axle at 90° this being also lock-nutted and spaced to suit the wheel. On the top beam, mounted in the centre, a pair of #77 triangular plates, on the outside of the strips, point upward for the swivel point. Between these #77 is also a pair of collars screwed onto set bolts holding the beam. A similar arrangement on the lower beam, but using shouldered bolts, and sloped out to match the strip holes. These four collars are 'only just loose' to swivel, and the near vertical #18a axles (each carrying a #120b spring between the collars) is fitted and held only by the screws in the top collars (these will need to be selected for length to achieve this). This simulates the camber control rams. Then a 4H collar is mounted at the peak of the #77, between these plates, with standard bolts spaced with washers, so when tight on the fixed axle down from the frame it can still just rock but grub screws stop the collar turning.



Cab Module

Figs. 9 & 10. The cab roof is made of two 5 x 3H flex plates bolted to 5H angle girders but spaced from them via #A420 and overlaid with 6H narrow strips. The front and back edges have 5H angle girders as well. Also large spacers representing hazard lights fitted as shown. The supports are all 7H narrow strips, mounted as shown, with rear ones standing vertical. The two front corners also have #12c mounted under the girder and point up with a #23 pulley as a floodlight on each.



Fig.10

Engine Housing

The wall behind the cab is two #164, joined by two 4H girders. Lower #164 has girder forward to later bolt to back edge of the cab floor. Top #164 faces back. On each side two 7H flat girders extend rearward and use the slots of the angle girders to droop like modern machines. The rear end has 5H angle girders extending down one hole. Rear end then is two 4H flat girders. The flat girders overlap top over bottom as louvres. Tail lights fitted as shown and captive nut devices fitted – I used cubes on sides and threaded bosses on corners. The top is made of a pair of modern 4 x 7H triangular flex plates, joined down long sides by 7H narrow strips. The modern parts are needed because the slots on the hypotenuse of old pre 1980 DONT match up ! On one slot is mounted the exhaust – just a long threaded pin, the other has the air cleaner made of two tyres mounted on large spacers and three large washers to sandwich them. Three washers space unit off the housing. The housing can now be bolted to the cab floor and the #161 on the rear of the chassis (spaced from it by plastic spacers). The top can then be bolted on.

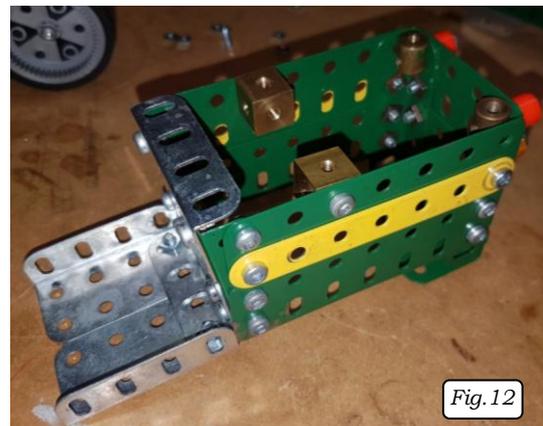


Fig.12

Seat Module



Fig.11

Starting from the floor (fig 11)- 4H flat girder, a #77 triangular plate on the front slots. A #12 on the #77 third hole, facing up. Two 3H girders, both have two collars fitted on centre round hole. One girder then has a small steering wheel and #12c mounted on top end as shown. A dial (large washer) is on the top of the #12c. the other one has a 4H strip bolted along it on the slotted hole side. This will extend behind the dial. This is all assembled onto the #12 using a long bolt through in order; curved 5H strip horizontal (bent round to have only a 4H length), the 4H strip (vertical), a 3H girder, the #12, 2 spacers and washers to suit and second 3H girder. The seat is then fitted as shown.

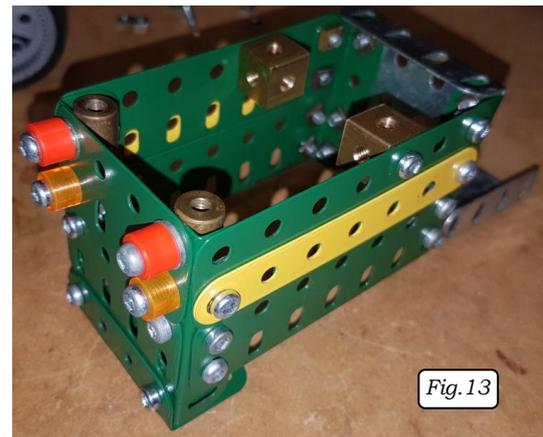


Fig.13

A #64 fitted to mount to the cab door sill. You may need to undo the cab front corner narrow strip at bottom on one side to give access.

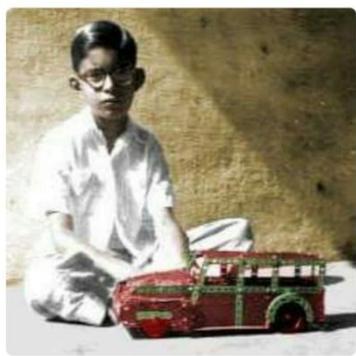
Rear Axle Assembly Module

Fig 14. Each beam is three 7H narrow strips, joined at the ends by 4hole collars using washers to allow the stub axles to screw into collar third hole. The centre point is similar using threaded boss and standard bolts/washers. A pivot bolt then is threaded through the centre housing and lock nutted into the boss as shown.



Fig.14

This Month's Meccanoboy – Arup Dasgupta



1956, in Sarojini Nagar (earlier Vinay Nagar)

Arup is a most interesting Meccanoboy being highly educated with a most exciting career in the Indian Space Research Organisation. You don't have to be a rocket scientist to build Meccano but it helps!



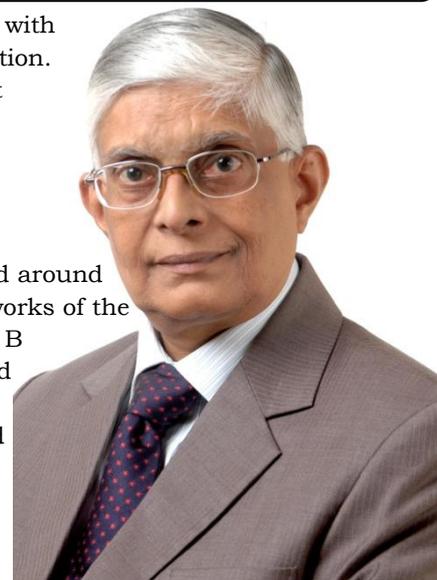
We asked him a few questions.

When and where were you born?

I was born on April 1, 1945 at Calcutta, now Kolkata.

What schools did you attend?

I started my formal education in St Mary's Convent, Allahabad around 1949 when my Father was posted to look after the electrical works of the UP State including the Taj Mahal at Agra. I continued in Miss B Hartley's in Calcutta till 1955 when my Father was transferred to Delhi. After a year at the Summerfield's School I was admitted to St Columba's High School from where I completed my Senior Cambridge or GCE-O level. Then on to a Bachelors in Physics from St Stephen's in Delhi University followed by a second Bachelors and then Masters in Communications Engineering from the Indian Institute of Science.



Did you have Meccano as a child?

I woke up on my fifth birthday morning to find a red box next to my pillow containing dark green perforated strips, a dark red plate and a carton of bright brass nuts and bolts and other goodies. It was a #0 set. This happened every birthday till I had sets 0 to 3. At this point Meccano sets became a bit expensive so a Magic Motor was added. After reading all the information contained in the manual I proposed to Dad to go for the

A sets and the birthday gifts resumed with 3A, 4A and 5A being added followed by another Magic Motor to replace the old one which had stripped the gear on the governor. A reversible No.1 motor completed the acquisitions. Meccano became a rare commodity after that because of very strict import regulations. A much desired cricket ball motor became too expensive.

Do you have children?

I have one daughter, Enakshi and a granddaughter, Aadya.



Where do you buy your Meccano in India?

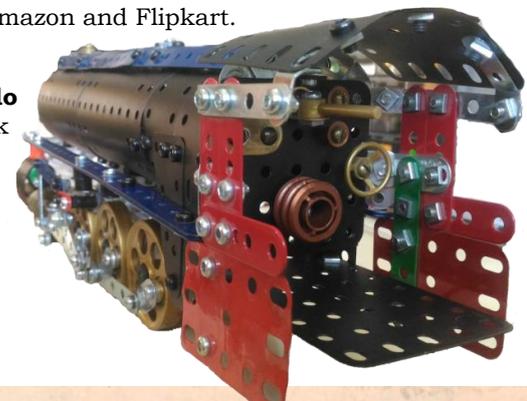
In Calcutta my Father did the buying and I do not remember the shop's name. In 1955 after we moved to Delhi I used to buy from the India Hobby Centre. Meccano Magazines were available from Ramchander and Sons. Both were in Connaught Place. Meccano disappeared from the toy scene by 1958 or so. When I resumed buying Meccano in 1995 or so, I mainly bought repro parts from Ashok, who was a neighbour about whom I came to know from a mutual contact in Canada. The miracle of the Internet. Later, Meccano was imported by a baby goods store called First Cry and sold online. Now it is available from Hamley's and Funkskool as well as online from Amazon and Flipkart.

When and how did you meet your wife?

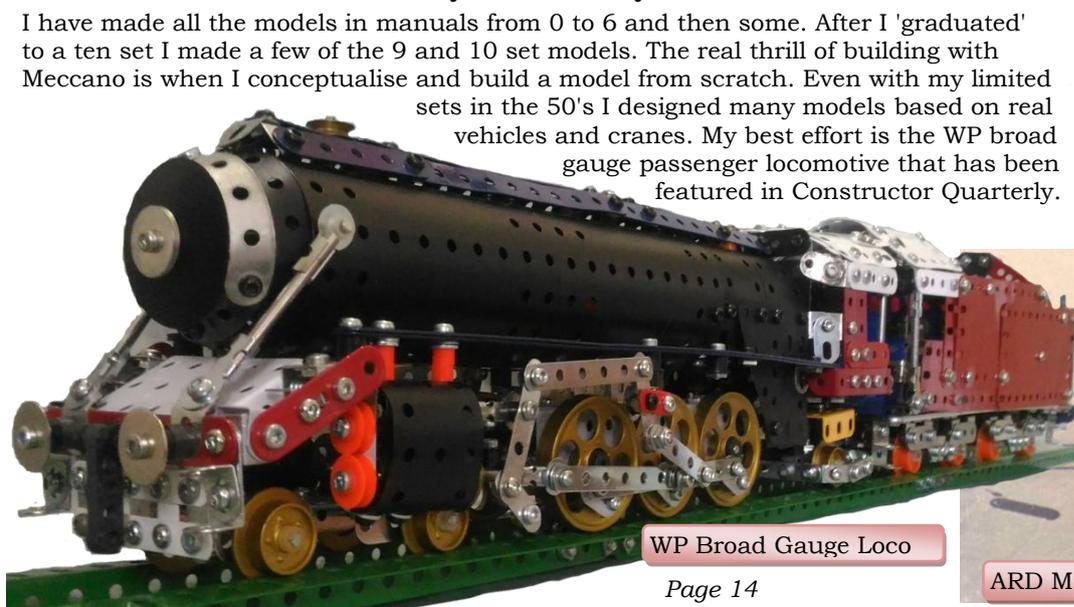
Like all Indian eligible bachelors I finally succumbed to my Mother's entreaties to get married and married Swapna in 1974 at Calcutta.

How many models have you built and what do you think was your best?

Difficult to count. I think I have made all the models in manuals from 0 to 6 and then some. After I 'graduated' to a ten set I made a few of the 9 and 10 set models. The real thrill of building with Meccano is when I conceptualise and build a model from scratch. Even with my limited sets in the 50's I designed many models based on real vehicles and cranes. My best effort is the WP broad gauge passenger locomotive that has been featured in Constructor Quarterly.



ARD Mobile Crane from my childhood



WP Broad Gauge Loco

Do you have a favourite Meccano theme like cranes or gears?

My favourites are vehicles, locos, cranes. I still hope to build a model bristling with gears and mechanisms and RC. Not there yet. This is my Saloon Car from the 1950s number 4 manual.



Saloon Car 4.35

What was your 1st paying job? I joined the Space Applications Centre of the Indian Space Research Organisation in November 1970. That was my first and last job.

What was that like? (In a hundred words or less lol.) It was great. Surprisingly, getting into Space Applications actually brought me closer to ground realities. My first project was to bring satellite TV to under-developed rural areas. Later I worked on using satellite imagery for natural resources management. In my final years in ISRO I converged three technologies of communications, computers and imagery to develop solutions for rural and urban development.



Did Meccano ever help you in your career? Indirectly, yes. For example, I could help design dish antenna structures and train Technicians on assembling techniques for CKD antennas.



With Kees and Maria Trommel in Den Haag, Netherlands

Have you travelled much?

Yes, as a part of my job I have travelled all over India touching almost every state at least once. Internationally I have been to Japan, USA, France, Germany, Indonesia, Bangladesh, Austria, Netherlands, UAE, Malaysia, South Africa, Thailand, China, Switzerland and Singapore.



UNECE conference in Geneva

Did your travels ever extend to Meccano meetings or purchases in other countries?

I made friends in South Africa and the Netherlands where, through my Spanner contacts, I met many other Meccanomen. I was gifted sets and also bought some from USA, South Africa and UAE.



L-R Arup, Anthony Els, Tatchell Venn & Chris Els in Johannesburg

How would you describe the influence Meccano has had on your life?

In my formative years it was a great introduction to engineering and ignited my interest in engineering. I have a sneaky feeling that my Father was nudging me to follow his footsteps! Spanner and the Internet opened up a new international club as it were and my coming back to Meccano after retirement has been and is a fantastic way to relax and yet keep my mind active.



Below, the 'Man Cave'

What are your views on the future of Meccano?

Bleak, I am afraid. The movement started by Frank Hornby has been derailed by Spin Master. What brings some cheer is that construction toys are still being made in India and China and they are selling.

Do you have any advice to the next generation of Meccanoboy(s)?

(and girls of course. I use the term Meccanoboy in a gender neutral way). There is no way we can bring back the Magic of Meccano as it existed in its heydays. The world has changed too much since then but human ingenuity and creativity remains and that is why we need to keep alive construction toys and engineering in miniature.

School Class Loco



Caravan 4.3

Watch  YouTube

<https://youtu.be/H8oprJJLR-w>



A few of my favourite things.

We are John & Johnny. A father and son team who like Meccano. We're nothing to do with Spin Master who own the brand. Contact us at MeccanoNews@gmail.com
Follow Johnny Meccano on



New Zealand

<http://www.nzmeccano.com>

<http://www.nzfmm.co.nz>

<https://www.facebook.com/MWT-Meccano-Club-1476153515979522/>

Australia

<http://www.mmci.com.au>

<http://www.sydneymeccanomodellers.org.au>

<http://www.webjournalist.com.au/maylands/index.html>

South Africa

<https://www.facebook.com/Meccano-Club-of-South-Africa-464753870326296>

USA and Canada

https://www.spinmaster.com/brand.php?brand=cat_meccano

<https://www.usmeccano.com>

<http://www.meccano.com>

<http://www.cmamas.ca>

<http://www.bcmeccanomodellers.com/meccano-in-canada.html>

<http://www.meccanoquebec.org/index2ang.html>

Meccano suppliers

<http://www.meccanohobby.co.uk>

<http://meccanoman.co.uk/catalog>

<https://www.meccanospares.com>

<https://ralphsshop.com>

<http://www.hsomerville.com/mwmailorder>

<http://www.metalconstructiontoys.com>

<http://www.meerlu.com.au/>

http://members.tripod.com/Ashok_Banerjee/Meccanoville/Welcome.htm

France

<http://club-amis-meccano.net/>

<http://meccano.free-bb.fr/>

Other Countries

<http://www.meccanogilde.nl>

UK

<http://www.internationalmeccanomen.org.uk>

<https://londonmeccanoclub.org.uk>

<https://tims.org.uk>

<http://hsme.org.uk>

<https://nelmc.org.uk>

<https://runnymedmeccanoguild.org.uk>

<https://www.selmec.org.uk>

<http://www.hsomerville.com/wlms>

<http://www.midlandsmeccanoguild.com>

<https://southwestmeccano.org.uk>

<http://www.northwestmeccano.co.uk>

<https://www.meccanoscotland.org.uk>

<http://www.corlustmeccanoclub.co.uk>

<https://nmmg.org.uk>

Personal pages

<https://www.alansmeccano.org>

<http://www.users.zetnet.co.uk/dms/meccano>

<http://www.dalefield.com/meccano/index.html>

<http://www.meccano.us>

<https://www.meccanoindex.co.uk>

<http://www.meccanokinematics.net>



My girlfriend is such a cheat and a liar. I've been going out with her almost a year now, and I never would have known she was married until my wife mentioned it just the other day.

A man walked into a bar on a slow night and sat down. After a few minutes, the bartender asked him if he wanted a drink. He replied, "No thanks. I don't drink. I tried it once, but I didn't like it." So the bartender said, "Well, would you like a cigarette?" But the man said, "No thanks. I don't smoke. I tried it once, but I didn't like it." The bartender asked him if he'd like to play a game of pool, and again the man said, "No thanks. I don't like pool. I tried it once, but I didn't like it. As a matter of fact, I wouldn't be here at all, but I'm waiting for my son." The bartender said, "He is your only child, I'm guessing."

John was on his deathbed and gasped pitifully, "Give me one last request, dear," he said. "Of course, John," his wife said softly. "Six months after I die," he said, "I want you to marry Bob." "But I thought you hated Bob," she said. With his last breath John said, "I do!"

After eating an entire bull, a mountain lion felt so good he started roaring. He kept it up until a hunter came along and shot him. The moral: When you're full of bull, keep your mouth shut.

There are 2 types of Meccanoboy:
1. Those who can extrapolate from incomplete data

If you have any funny (CLEAN) jokes, send them in. Meccano related jokes will take precedence.
MeccanoNews@gmail.com

