

JOHNNY'S MAGAZINE

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www.hsomerville.com/mwmailorder/

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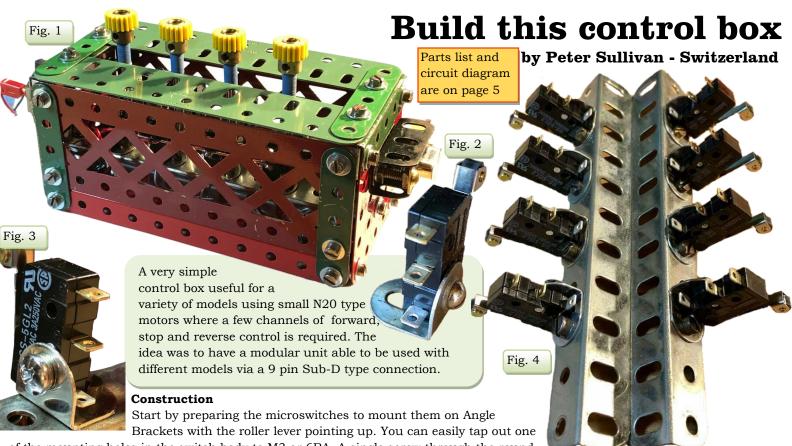


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of the mounting holes in the switch body to M3 or 6BA. A single screw through the round hole of an Angle Bracket will hold the switch tight enough for the light action required. (Figs. 2 & 3) Use a Set Screw to fasten the Angle Bracket/switch assembly to the Girder. The small head of the Set Screw will just fit snugly against the switch body and help stabilise the microswitch-bracket assembly. Note you will need 4 left-hand and 4 right-hand mounted switches so the rollers line up. Using Set Screws, fasten four switch assemblies to each 5½" Girder, spacing them one inch apart. The two Girder/switch units must be mirror images of each other - see Fig. 4.

Fig. 5

Assembling the box frame and levers.

Bolt a Flat Plate to each end of the Flanged Plate, together with a 2½" Angle Girder and two Angle Brackets at the top of each Plate. (see Fig. 1 & 6). The control levers consist of 2" Rods secured in one end of a part 63 Coupling.

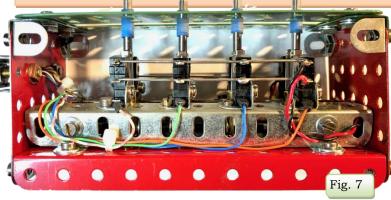
Four lever assemblies, with separating Washers in-between, are slid onto a 4½" Rod using the bottom hole of the Coupling. The Rod is held in place between the 2 Flat Plates by part 63c Threaded Couplings bolted to centre holes just above the Flanged Plate. The final alignment of the levers is made by using Spring Clips on the 41/2" Rod to keep them in place, although if you have plenty of Collars you could use those instead. Mount the two banks of microswitches to the Flanged Plate using two Angle Brackets each side, and then adjust the loose play on the 2" lever Rods by slightly bending the Angle Brackets holding the 5½" Girders in place. The microswitch rollers should hold the lever Rods vertical with a very small amount of play, so neither switch is activated with the control Rod in its vertical position, and so the control circuit is off. The next step is to bolt the 51/2" Flat Girders on top of the frame. These have an important function of acting as mechanical limit stops for the control levers instead of the fragile microswitch arm itself. We've all seen the hidden powers of young kids when

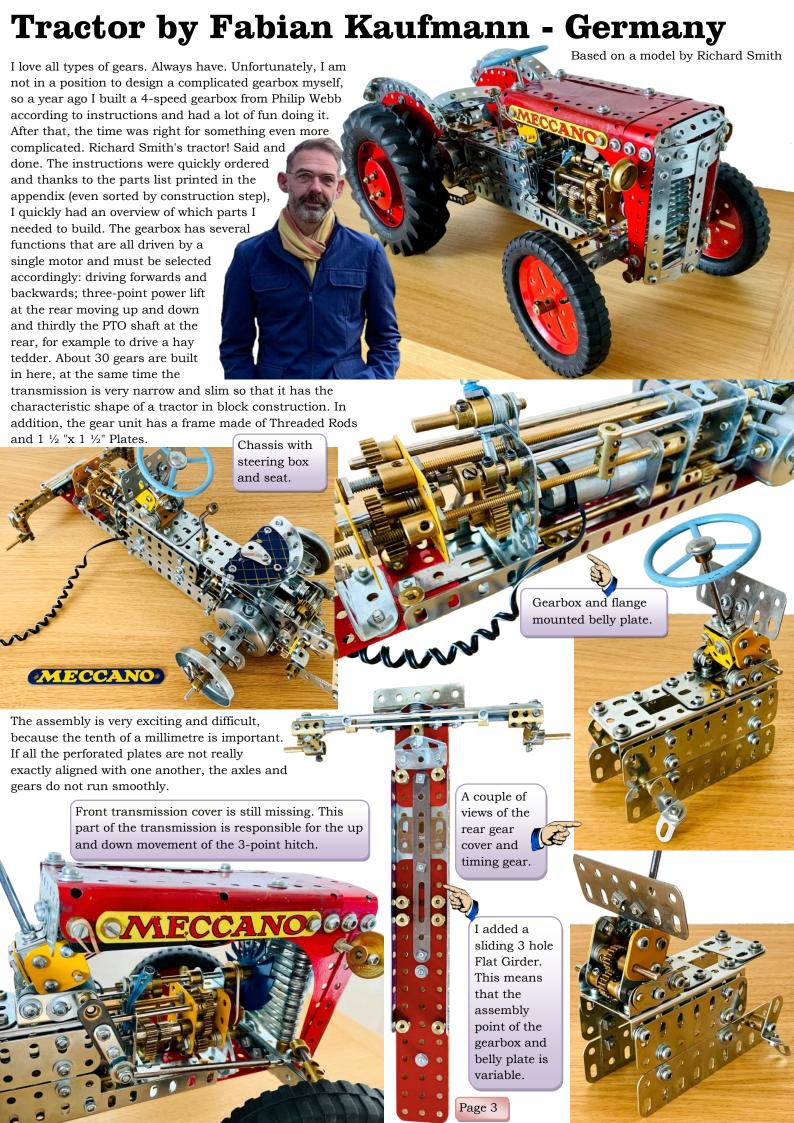
it comes to playing with levers! Adding rubber sleeving (Fig. 6) over the control Rods makes for a soft landing when they hit the Flat Girder's limits. You'll need to adjust the spacing of the top girders via their slotted holes, so the control lever movement

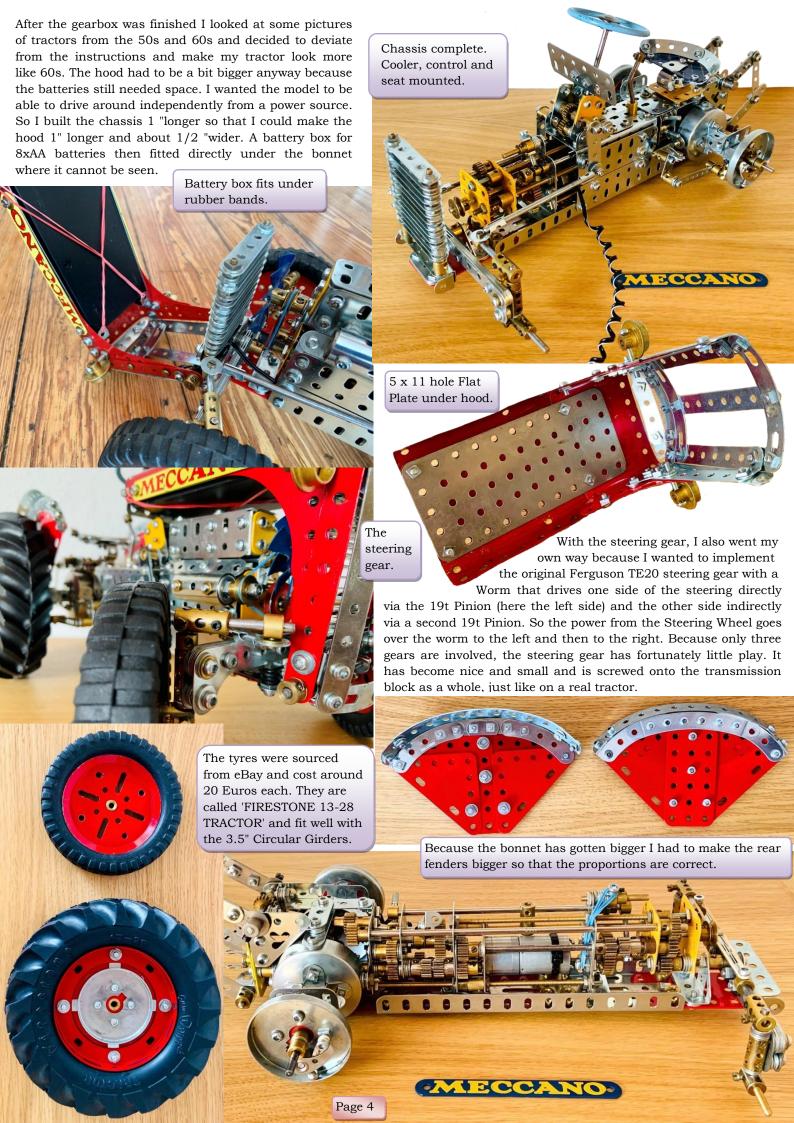
activates both FWD and REV microswitches cleanly.

Finishing up and wiring.

Before fitting the front/back covers to the box, the wiring will need to be completed. On the prototype, Braced Girders were used to close up the sides, but you could also use transparent Plates etc as you wish! The tops of the levers can be left unadorned, but you can jolly them up by adding Handrail Supports or plastic Pinions as in Fig. 1. Adding rubber feet to the base to avoid scratching furniture could be another useful improvement. **Continued on page 5.**











Neil Bedford also tried his hand at Richard Smith's tractor. He made a blog about it with pictures and text about his approach.

https://neilsmeccanoandstuff.jimdofree.com/neil-s-meccano-models/

I took over the slightly modified rear and front axle construction from him and modified it a bit again. So with every new building by different people, modifications and variations arise again and again, which I find very exciting. It should also be said that the built-in engine is not a 60 rpm engine, as specified by Richard Smith, but 125 rpm. I couldn't find the 60 rpm model and so the tractor now drives twice as fast as intended. But it is strong enough to drive the tractor despite the higher gear ratio.

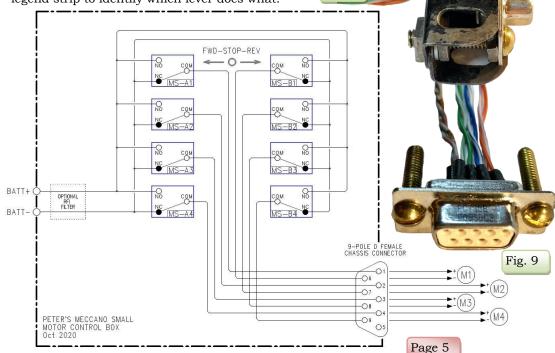


https://youtu.be/mCGakaql1jY

The wiring of the microswitches is shown in the circuit diagram below and in Fig 7. All the Normally Open contacts are connected to Positive and all the Normally Closed to Negative. The prototype used a 9 pin D connector for the motor outputs and banana plugs for the power input.

Final test.

Before you close up the sides of the box with Braced Girders or plastic transparent Plates, it's a good idea to test the wiring with a single motor, trying each control circuit in turn. When all is good you can close up the sides, connect the power source and try it out for real on your model! Finally you can add a neatly printed Fig. 8 legend strip to identify which lever does what.



Control Box cont.

Part No.	Description	Qty
5	Strip 2½"	6
9	Angle Girder 5½"	2
9d	Angle Girder 2½"	2
9f	Angle Girder 1½"	2
12	Angle Brackets ½"x½"	16
15a	Rod 4½"	1
17	Rod 2"	4
35	Spring Clip 7	
37a	Nut	50
37b	Bolt 7/32"	36
38	Washer	12
52	Flanged Plate 5½"x2½"	1
63	Coupling	4
63c	Threaded Coupling	2
69	Set Screw	8
72	Flat Plate 2½"x2½"	2
100	Braced Girder 5½"	2
103	Flat Girder 5½"	2
111	Bolt 3/4"	2
	Control knobs	
26	19T Pinion	4
136a	or Handrail Couplings	4
	Non-Meccano parts	
SS-5GL2	Omron MicroSwitch	8
M3x6	Screw M3 x 6mm	8
SubD 9F	9 pin D connector	1
2mm Skt	2mm Banana Socket	2
Sleeve	Heatshrink	4
	4mm thin washers	

Another idea for a compact ram drive

This one is tough!

These N20 motors have been on eBay for a while and I often browse the listings looking for bargains. I have picked up some for two dollars! Most have 3 mm shafts but I noticed some had M4 threaded shafts. I thought they might be useful so I ordered a few. Now the easiest way to use the M4 threaded shaft is to use an M4 nut but I was thinking of ways to modify (mutilate) a part 64 Threaded Boss. I'd just purchased 3 of them and I even had the 5/32" BSW tap ready but I just couldn't bring myself to try it. Stefan Tokarski tells me it CAN be done but I just can't see how you can

change the pitch over approx 1/4" without damage.

often up

Either one nut or two but

If you use one nut there may be slack between the Collar and the Double Bent Narrow Strip which was home made from a 5 hole Narrow Strip and a hammer!

Thread Angle Major Diameter, Minor Diameter and Pitch.

Major Diameter Diameter

Minor Diameter

Minor Diameter

Minor Diameter

Minor Diameter

Pitch
Diameter

There are many ways to do this. Top right shows 2 nuts and 1 Collar. Below is 2 Collars and 1 Nut. Bottom right video shows a double bent Narrow Strip. Be careful bending Narrow Strips. They break!

There are many ways to do the Nu Nut is collecting square learning photo, locked

So the bas

A common technique for making assemblies smaller is to use part 69b Long Grub Screws and Hex Nuts. I was short on genuine 69b and searching eBay for 5/32" BSW grub screws that were 7/32" long was fruitless. I eventually settled on 5/32" BSW 1/4" long as shown below. Screw them into the Collars just enough to grip

without protruding into the hole. Then fix the Narrow

The N20 motor has a part 11 Double Bracket bolted on with 1.6mm bolts. See July 2020 issue of Johnny's Meccano

Magazine for details.

The link to the eBay item may or may not work depending on your country.

You Tube

 M4
 5/32" BSW

 Major Diameter
 4 mm
 3.969 mm

 Minor Diameter
 3.141 mm
 2.951 mm

 Pitch
 0.700 mm
 0.794 mm

Comparing the thread components I saw that the Major Diameter was so close it wouldn't matter. It was just the pitch (the distance between ridges of the thread) that was a bit smaller. So what happens if you try to put a Meccano Nut on an M4 thread? It starts and with a bit of force you may even get it to continue but it will be difficult and you may end up stripping the thread. After running the M4 tap through the Nut it turned freely on the threaded shaft of the motor but now I discovered that a standard Meccano Nut is not big enough. My idea for the ram drive was to bolt Narrow Strips to Collars with the Nut between them. Unfortunately the diagonal of a 1/4" Nut is less than the 3/8" diameter of a Collar. I had a large collection of square nuts made by Walter Ashburn from Bendigo, Australia and they measured in at 7.95 mm or 5/16" square which was perfect. This whole exercise was just a learning experience and a bit of fun. As you can see in the photo, I also had an M4 hex nut that was big enough to be locked in place by the Narrow Strips and didn't need tapping.

So the basic premise of this build was to build a ram drive as small as possible by utilising the N20 that comes with an M4 threaded shaft. You only need 2 Collars, 1 Plastic Spacer, 2 part number C770 Narrow Strips, 4 Long Grub Screws and 4 Hex Nuts.

5/32" large square nut M4 Hex Nut Meccano Nut

I used 2 nuts here to take up the slack

Try clicking on the Grub Screws.

Might work?

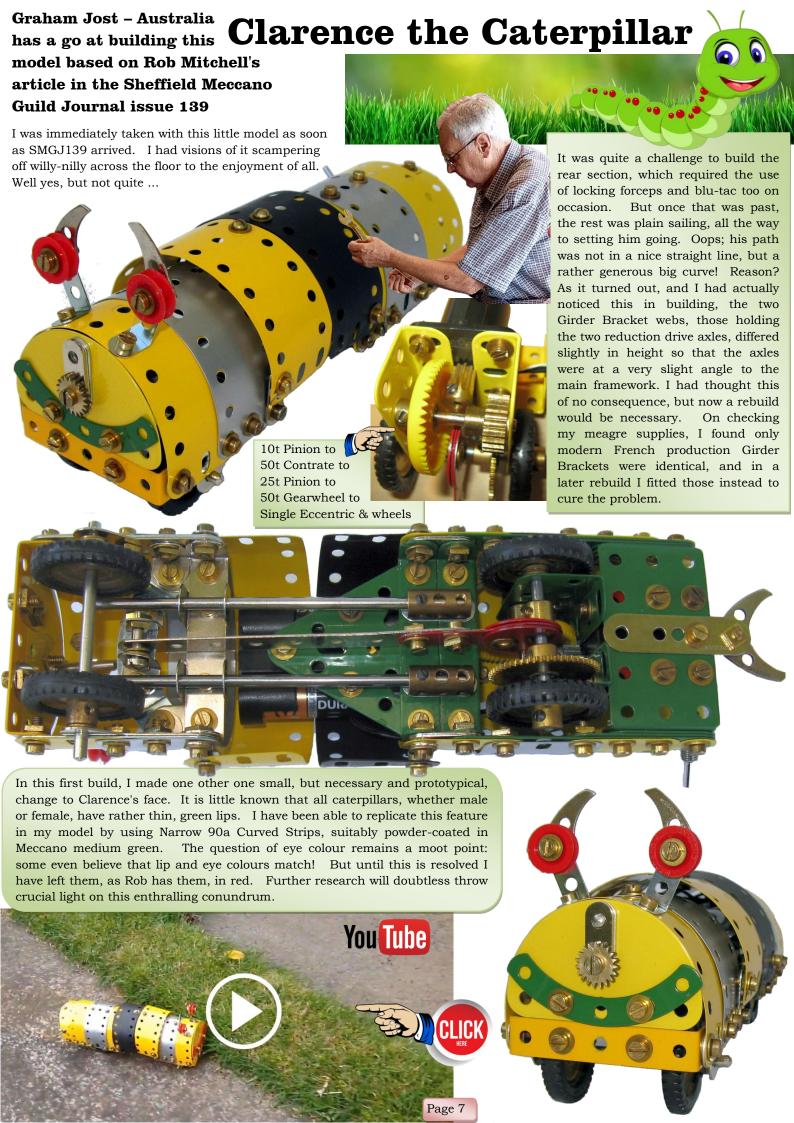
Strips on with the Hex Nuts.

Or

https://youtu.be/15M1b48OR5c

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CLICK HERE





The Henley Gathering 5th Sep 2020 The gathering at Henley-On-Thames by Richard Payn



I turned up early and met Tim Gant for breakfast. Tim has made a tradition of bringing his home grown potatoes for the chef to fry up and add to our English breakfast. Tim got there quicker than I did with his red Porsche but my people mover suited me. Mike Rhoades was well setup with his mobile home! It was delightful to have all those parts available and Tim certainly availed himself of the opportunity to stock up on parts for his Kobelco Crawler Crane.

A lovely time was had by all and I look forward to the next gathering.

Luffing Crane



Mike Rhoades



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FROM OUR GOOD IDEAS DEPARTMENT

Anyone who has built the modern
Tower Crane will be familiar with
the Plastic Spacers that fall out
of the thrust bearing and roll under
the table. This is a better idea using
the same 3" Pulleys but securing

Tower Crane will be familiar with the Plastic Spacers that fall out of the thrust bearing and roll under the table. This is a better idea using the same 3" Pulleys but securing the Spacers using Part 213a 3 way Rod Strip joiners with 1" Bolts wedged in tightly. There are 6 small plastic Spacers then 6 large plastic Spacers all free to turn. - JM

The spanners with the folded end are very useful for getting to a nut that's in a very tight place.

John Slinn - UK

has sent in this

great Universal

Coupling.
Parts
list
below.

Tips and Tricks from our readers

When I didn't have
many washers I always
had the curved side of the hex nut
against the paint - left fewer marks. – Richard Payn

Thrust bearing

Curved

Flat

David Dalton – UK, flattens part 215 Formed Strips and adds 2 extra holes to make a very useful part.

MECCANO

MADE IN ENGLAND

Bashing them flat with a hammer is my method but Rob Kirk from the UK says his plate/strip roller avoids hammer rash.

Click on the photo of Rob Kirk's plate roller to see a video of the Meccanoboys building it.

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Qty	Part No	Description
2	518	1" Wheel Disk
5	59	Collar
2	115	Threaded Pin no shoulder
1	18b	1" Rod
4	111a	1/2" Bolt
4	38	Washer
4	38a	Plastic Spacer
2	A053	Plastic Washer
2	69a	Grub Screw

Now I know some of you will say some of these ideas were in MM years ago, or Joe Bloggs already thought of this but keep in mind that good ideas can still be had by Meccanoboys that have never seen or heard of it before. Not everyone has an encyclopaedic knowledge of every Meccano model ever made. So I'll always try and credit the original builder but I can't guarantee it.



This Month's Meccanoboy Dad's first car

When and where were you born?

April 1954 in Brighton, on the UK South coast, 50 miles from London, and famous for its Palace

Pier and the Royal Pavilion.

What about school? Did you go to university? I attended local Brighton primary schools and ended up at Varndean Grammar School gaining "A" levels in

Maths, Physics & Chemistry in 1972. After school I went on to study Astronomy at UCL (University College London).

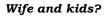
I discovered however I was really more interested in electronics and having a good time with other friends and acquaintances during that time in London! An old Brighton friend of mine from that time, Chris Littledale, founded the Brighton Toy Museum later on in 1990.

https://www.brightontoymuseum.co.uk/

What was your first job?

In 1975 I began my career in the broadcasting industry as a Technical Assistant with the BBC. Based at Broadcasting House, London, I was stationed in the Communications Department which dealt with many technical aspects of Radio broadcasting such as equalising external audio lines for live stereo broadcasts. I managed to get a short attachment to the Telex Exchange department which looked after a couple of ageing DEC PDP9 computers based on transistor J-K flipflop cards, a ferrite bead core memory, thousands of wire-wrap connections and a wardrobe sized hard disk which probably held no more than a few hundred of kb of data! I had some fun there writing Fortran-4 programs for some of the outside audio line eq settings. After 3 sessions at the BBC Evesham engineering college, I became a fully qualified BBC engineer, passing the exams with very good marks. While working with the 'Beeb' I had an assignment to the microwave video link section at BBC Wales and spent many times up remote Welsh cart-tracks helping with live TV transmissions as a mid-point between the event and the Cardiff switching centre. As I was the young engineer lad, it was my job to climb the slippery ladder to adjust the alignment of the dishes

on top of the mobile truck tower!



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During my university days I met my wife Alwena (from N. Wales) who was preparing for a PhD in French literature at Bedford College. When time allowed, she managed to earn a bit

of money from teaching! We all shared the same digs in Finchley with 10 others, students, teachers, and also a journalist. Those were fun and formative years and we made many lifelong friends. I got off to an unorthodox start by dating Alwena's roommate first, but fate deemed that was not to be, and I wisely came around to the fact I had been dating the wrong girl! We got married in 1976, and went on to have 3 children, a boy and two girls. Today we are now proud grandparents to three little ones!

Peter Sullivan

Switzerland



What was your career after marriage?

After the BBC, I worked with a small touring theatre in Mid-Wales at the end of the 70s dealing with all technical aspects of their productions. During that time, I created a recording studio at their Llandrindod Wells base which included building the audio mixer completely from scratch! (would you expect less of a Meccano boy?) Ingenuity was the order of the day as the production director was never short of strange requests. At the beginning of the 80s I returned to my hometown to take up a post at Brighton Art College as an A/V Technician in their Fine Arts Dept. This was followed by a second stint at the BBC Lime Grove for the new Breakfast TV transmissions in the mid-80s, and then onto Sony Broadcast as a Field Service Engineer where I had the opportunity to travel widely around Europe and Africa meeting people of many different creeds and races.



Wow! Sounds like you travelled a lot?

BBC microwave link van

Yes, and that was not all! In 1985 we all moved to Geneva when I was hired by a Swiss company Avexco, which headed up the European distribution of Snell Television Conversion products. Included were some interesting and challenging times in Poland installing studios and supplying OB Trucks for Polish National TV soon after Poland became independent in 1989. During one visit to Warsaw I remember when McDonalds opened their first restaurant there and being stupefied by the size of the queue waiting to enter, requiring a platoon of security guards to control the crowds! Fortunately, their new-found craving for hamburgers died down and within a few weeks it was possible to get in without waiting!

Will Switzerland be your final resting place?

Life with three children in a Geneva apartment block soon met its limitations, and in 1992 we were lucky to find a weekend retreat with a garden in a neighbouring quiet country area in France, known as Le Bugey. Since then, most weekends and holidays have been spent in our old Bugey stone farmhouse. Horses followed, and with the acquisition of a few fields, a tractor and mowing implements to look after the rebellious brambles and brushwood that so quickly grow if you don't mow the fields regularly! With age and grandchildren, the desire to visit new realms has somewhat diminished, and our roots have settled here, with one foot in Switzerland and one foot in France!



What Meccano Clubs have you been in?

I joined the Swiss Meccano and Metal Construction Club "AMS" in 1996. I wish I could speak and understand German better as most of the members are in the German speaking area of Switzerland! Maybe in my next life! A couple of years later I also became a member of the ISM too. On my bucket list would be to join CAM as I spend quite a bit of time in France building models with French Meccano.

Has Meccano helped you in life?

Definitely! Model building experience gained as a youth honed my love and appreciation of mechanics and how to work around a hitch

which helped me greatly during my professional career. Today, the active circle of Meccano girls and boys to be found on social media groups are a continuing source of inspiration and motivation. I'm always looking forward to discussing the finer details of this model, that outfit or part.



Granddaughter Susan lends a hand





Daughter Judith above and below in the 1990s.



Today I'm flabbergasted when I meet young professional technicians who have no idea how to properly tighten nuts & bolts, plan a project, or even correctly fit a mains plug! Young guys and girls – time to get those Meccano sets out and get started on a project!

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What are your main Meccano interests? I'm interested in both building and collecting. My enthusiasm for Meccano began as a young boy in the very early sixties when I received a No. 2 outfit as a Christmas present. This was followed shortly after with a bigger No. 5 outfit in the light red/green of that time. I remember well the excitement of receiving the No.5 outfit and to my young eyes it seemed enormous! Unfortunately, my parents weren't keen on photography, so I have no photos from that time showing my modest Meccano collection. During that period, my father occasionally away from home on training sessions, but he always remembered to come back with a "Dinky Toy" model car for me also iconic products from Binns Road. With other interests such as electronics and music fighting for my attention, my passion for Meccano waned in my later adolescent years, and then came university, marriage, children, jobs and the challenge of making headway in the real world! It was not until the 1990's, after we had moved to Geneva, that my interest was rekindled while seeing if any of our children might be keen on Meccano modelling. My son did keep an interest in modelling, but he went over to the 'dark side' and is keener on that well known plastic system. A lucky find at Zwicky's, a longestablished Geneva toy & modelling shop a stone's throw away from our apartment, allowed me to start a collection of older Red/Green Meccano from the 1920/30s. This started my fascination for the history of Hornby's Meccano Ltd. Knowing I was interested in Meccano, the owner must have recalled he had an almost forgotten box of parts collecting dust on a top shelf of his premises, and he suggested I might like to purchase the lot. I did without hesitation! I discovered after it also contained parts from

an older set from about 1915 in a blackened steel finish, wheels & pullies with single tapped bosses, and a brass worm tapped 6BA. Fortunately, the parts had been stored in dry conditions and both they and the outfit boxes were still in good condition. Literature, books, more vintage Meccano followed, and with the address in France came the possibility to easily collect Meccano France outfits, in their attractive Gold/Blue finish. It's been a refreshing and enjoyable experience to build some of the classic models with Blue/Gold hatched plates and Gold strips. That aside, I haven't made many vast and complicated constructions, just a few 10 set models including the MP114 4-6-0 Loco and many less ambitious projects, but I find you can enjoy simple models as much as highly complicated mechanical wizardry, and easily share the enjoyment of exploring small creations with children, young and the not-soyoung. My systems engineer experience comes in useful for debugging often mysterious and conflicting instructions that have issued from Meccano Liverpool - but that's all part of the fun, isn't it!

What other interests do you have besides Meccano?

Music, electronics & valve/tube HiFi, horse-riding, astronomy, photography, gardening etc. Music has always been a part of my life and relaxation. In my youth I frequently

participated and performed in the UK folk club scene, and still have my guitars and banjo today. My old fingers can still screw up Whitworth screws, but sadly are a bit stiff to manage chords on a guitar. Here the piano came to the rescue, and I've taken to plodding through various classical and other pieces these days for my own enjoyment. One interesting project in the late 80s was to build a small harpsichord from a kit sold by the UK Early Music Centre at that time. Perfect for a Meccano Boy!

Having two daughters keen on horses (have you ever met a young girl who is not!), I quickly found the best way to not get freezing cold watching riding lessons during the winter was to join in yourself. To my surprise I found that I much enjoyed the challenge of riding correctly and the contact with the horses. It wasn't long before we have acquired our own horses, and I started competing in TREC. (Timed trail riding from a map around a previously unknown trail). In 2006 I was lucky to be the TREC champion for my region in France - but no sweat, all Meccano Boys know how to read a map! Photography has been another of my lifelong friends, and fits in very well with my other activities. My interest really got going when my parents gave me a Pentax S1a 35mm camera while I was still at university.



with James The Uni Astronomy department fortunately had a well equipped dark-room, and I took full advantage of its facilities to process the negatives and enlarge prints and as you might guess, not many relating to my astronomy studies! Despite studying Astronomy academically, it didn't kill my interest in observing the heavens, and on occasional clear nights (not too cold!) you might find me outside with binoculars or a telescope spotting some of the heavenly jewels to be seen in our hemisphere. Of special interest this year was the Comet Neowise which was a spectacle to see through binoculars, and

provided an excellent subject for simple astro-photography.



Pentax S1a selfie

As a boy I never had the chance to subscribe to Meccano Magazine, and it wasn't until much later in life I managed to acquire a few second-hand issues. Looking through them now I see that I unknowingly followed the footsteps of later 20th Century Meccano Boys as photography, electronics & audio recording

Competing

and an interest in science in general were considered as essential things in addition to model construction aspire to!

Granddaughter Evie helping Granddad to pick out the correct parts with her nimble fingers!



My trusty steed James

Personally, I get a thrill just by holding a small piece of Meccano in my fingers. It's not just about the part itself, but what it represents - an icon that evokes 120 years of Meccano history, the inspiration, skills and creativity it's given to so many children and adults, the endless adaptability of this ingenious system and the worldwide friendships and enthusiasm that Hornby's invention

Any regrets?



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started.



A few of my favourite things.

Thought for the day.

A person who hasn't made a mistake hasn't made anything.

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

http://www.mmci.com.au

http://www.sydneymeccanomodellers.org.au

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

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

Personal pages

https://neilsmeccanoandstuff.jimdofree.com/neil-s-meccano-models

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



http://www.internationalmeccanomen.org.uk

https://londonmeccanoclub.org.uk

https://tims.org.uk

http://hsme.org.uk

https://nelmc.org.uk

https://runnymedemeccanoguild.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://northeasternmeccano.org.uk

https://www.meccanoscotland.org.uk

http://www.corlustmeccanoclub.co.uk

https://nmmg.org.uk

Other Countries

http://club-amis-meccano.net/ http://www.meccaninfos.com.ar/

http://www.meccanogilde.nl

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

https://www.aceam.org/es/

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/

https://tinyurl.com/AshokBanerjee

facebook What happened?

My wife found the receipts for all my Meccano



MeccGear Jeff Clark New Zealand jeff@kjd.co.nz No website yet but a pricelist with photos can be downloaded here http://www.nzmeccano.com/image-151916

Three old Grandmas were sitting on a bench outside the nursing home when an old Grandpa walked by.

One of the old Grandmas yelled out, 'Hey, we bet we can tell exactly how old you are!' The old man said, 'There is no way you can guess my age!'

One of the Grandmas said, 'Sure we can! Just drop your pants and undershorts and we can tell your exact age.'

Embarrassed, but anxious to prove they couldn't do it, he dropped his drawers.

The Grandmas asked him to first turn around a couple of times and then jump up and down several times. Determined to prove them wrong, he did it.

Then they all said in unison, 'You're 87-years-old!'

Standing with his pants down around his ankles, the old gent asked, 'How in the world did you guess my age?'

Slapping their knees, high-fiving and grinning from ear to ear, the three old ladies happily crowed.....

'We were at your birthday party yesterday.'

An older man, not in the best physical condition, asked the Trainer in the gym, "I want to impress that beautiful girl over there. Which machine should I use?" The trainer replied, "Try the ATM outside the gym!"

My neighbour knocked on my door at 2:30am this morning, can you believe that?? - 2:30am

Luckily for him I was still up playing my Bagpipes

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"Doctor! You've got to help me! I accidentally drank some poison and I'm going to die in exactly 59 seconds! "Don't worry - I'll be with you in a minute!" RiotMachineMark5