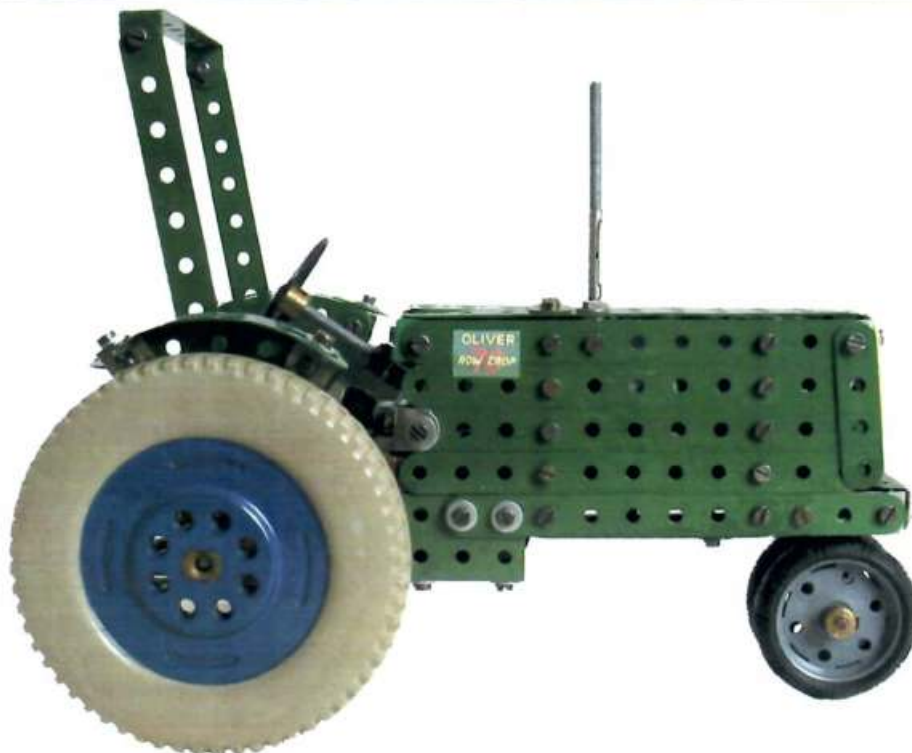




NZFMM MAGAZINE

Volume 31 No 4

August 2007



Bruce Geange has been at work again and has produced another tractor. This one is the Oliver 70 Row Crop machine. Full instructions for building this model start on page 3. The prototype is below.



NZ Federation of Meccano Modellers Magazine

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Letters are welcome and may be sent by post or by email. The author's name and address must be supplied. Publication of letters will be at the editor's discretion.

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The Theft of Retirement Time

The following disturbing comments came from a couple of retired Meccanomen on Spanner recently.

"I retired almost five years ago and the time I have available for Meccano and my other interests is nowhere near as much as I had hoped. Some of the plans I had for projects around the home and garden have still not been started yet I never seem to have any spare time. Before retirement I would work on the current Meccano model most evenings for a couple of hours, but now I have to make an appointment with myself to make the time. It's not that I have any less interest in the hobby, but I think that time now runs faster or I just operate at a much slower pace. It is true though that family and friends seem to draw quite freely on my time assuming that now retired they can use me 'on demand' to:- collect the grandchildren from school, hang a door, take the in-laws to the pub for lunch (and pay as well) etc. etc."

"So far as the poor chaps who have retired and find they have less time than ever for Meccano, I too am retired and I refuse to let mundane things such as gardening, decorating and other household chores get in the way of my Meccano hobby. I worked hard for many years often doing things which I did not particularly enjoy and I intend my declining years to be spent doing what I want to do, not what others think I should be doing! (I have my wife's permission to say that!)"

Are we in getting into a new 'norm' where elder abuse by the current 'Me-Me' generation is becoming more inventive? Not content with living (bludging) off parents until the age of 30, expecting further financial support from parent's savings, dumping child rearing responsibilities onto grandparents (count the growing number of pushchairs in the mall being pushed by harassed oldies) and living the high life (in more ways than one); now we are getting the theft of the "Golden Years"!

If you don't have the strong willpower of the second Spanner above, I could suggest that you have a large fake or real heart attack which prevents most physical or mental work outside your own interests and carefully guard your remaining time from unwanted outside interference. Even go a step further and join your local S.K.I. club, buy more Meccano and travel to distant Meccano Exhibitions every year.
S.K.I. club? Spend Kids Inheritance ☺

Yours unrepentantly, Bruce N.

Contents

Tractor – Oliver 70 Row Crop.....	3 - 8
A 1929 6v Electric Motor.....	9
Luffing My 1/8th Scale Grove Rough Terrain Crane.....	10 - 11
Metallus.....	12
Progress report from Ross Mitchell.....	13
NZFMM Magazine Index Vol. 30, 2006/7.....	14
Pitch and Roll Mechanism.....	14
Tuning Cars Set No. 4952.....	15
Mechanical Workshop Set No 0532.....	15
Spanner.....	16
Lloyd's Bits and Pieces.....	17
Maylands Meccano & Hobbies Club.....	18
Off the Wall.....	20
Club Reports.....	19 - 21
John's eBay Auction Column.....	22
Club Diary	23
Buy & Sell.....	23
Two of Gerald Hart's Models.....	24
Action in the Feilding Library.....	24



Tractor – Oliver 70 Row Crop

Designed and built by Bruce Geange

Photographed and described by Bruce Neilson.

Pic 27a - Prototype

Streamline styling and a six cylinder motor made the Oliver 70 Row Crop stand out when it was introduced in America in 1935. It had a 23 horsepower engine which ran on 70 octane petrol; 84,000 were built up to 1948. The tractor came in a variety of wheel and transmission options and a full range of implements were available to work in crops and orchards. The Oliver was imported into the UK in 1943 under the lend-lease agreement when labour was scarce and the British cultivated every acre available.

Commentary

The reasoning behind this model was to have motorised steering. This was accomplished by the use of a second motor. The model was reverse engineered i.e. taken to pieces, each module photographed and written up as I went and then the whole process reversed and renumbered. It is recommended that each photo be enlarged out to A4 to peer into the internal workings, or ask the Editor for a CDRom containing all these pictures plus additional pictures in full colour which can be zoomed in on your computer.

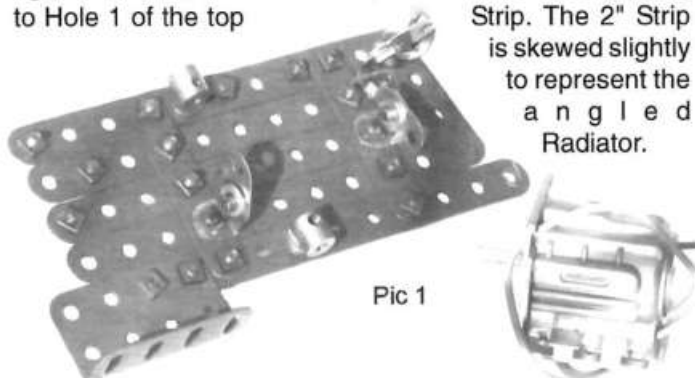
The listing of the parts is deliberately by Part Number and by Description to cater for all modellers.

As always, examine all the photographs for information as modules appear more than once in the series

Pic 1 - Both Bonnet Sides.

Make Mirror images of the Bonnet Sides with four P/N 2, Perforated Strip, $5\frac{1}{2}$ ", laid side by side and two P/N 2, Perforated Strip, $5\frac{1}{2}$ ", on top of each other and set forward one hole. All these Strips are attached to two P/N 5, Perforated Strip, $2\frac{1}{2}$ ". The doubled up $5\frac{1}{2}$ " Strip also has a P/N 161, Girder Bracket, $2" \times 1" \times \frac{1}{2}"$, bolted on by two bolts with P/N 38, Washer, Standard, under the Bolt heads. A P/N 64, Threaded Boss, is bolted to the top Strip in the 7th hole from the front and a P/N 12, Angle Bracket, $\frac{1}{2}" \times \frac{1}{2}"$, is bolted, with a P/N 6, Perforated Strip, $2"$, to Hole 1 of the top

Strip. The $2"$ Strip is skewed slightly to represent the angled Radiator.



Pic 1

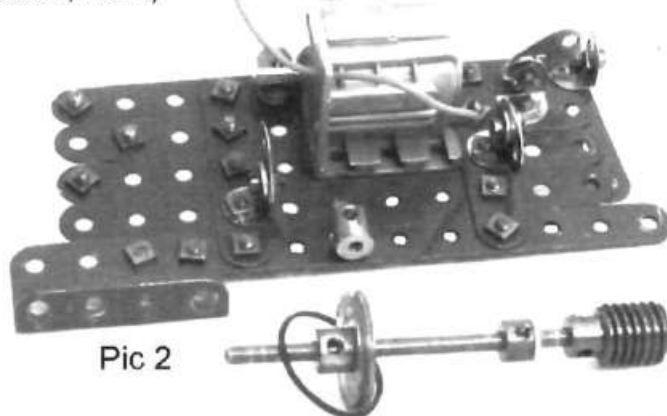
Pic 1a - Bonnet Left side.

In addition the following items are bolted on to attach other modules.

Three P/N 12, Angle Brackets, $\frac{1}{2}" \times \frac{1}{2}"$, each carrying a P/N 10, Fishplate, $1"$; P/N 64, Threaded Boss and P/N 770, MO Motor.

Pic 2 - Power Steering Shaft.

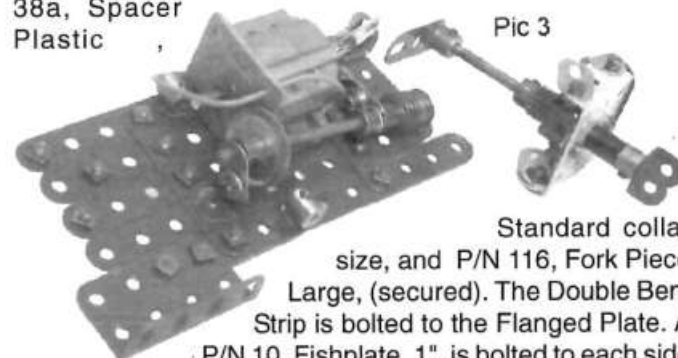
A P/N 16, Axle Rod, $3\frac{1}{2}"$, passes through the Fishplate, and carries a $1"$ diameter Driving Band, P/N 23, Pulley with Boss, $1"$, (fixed), P/N 59, Collar, (fixed), P/N 38, Washer, Standard, passes through the Fishplate, P/N 32, Worm, $\frac{1}{2}" \times \text{Right Hand}$, (fixed with a P/N 69c, Grub Screw, $7/64"$.)



Pic 2

Pic 3 - Front Wheel Steering Column.

A P/N 16, Axle Rod, $3\frac{1}{2}"$, carries from top down, P/N 62, Crank, (fixed, limits the turn of the front wheels), passes through the Fishplate bolted to the left Bonnet side, P/N 26c, Pinion, $15T \times \frac{7}{16}" \times \frac{1}{4}"$, (secured), P/N 45, Double Bent Strip, P/N 51b, Flanged Plate, $1\frac{1}{2}" \times 1\frac{1}{2}"$, two P/N 38a, Spacer Plastic

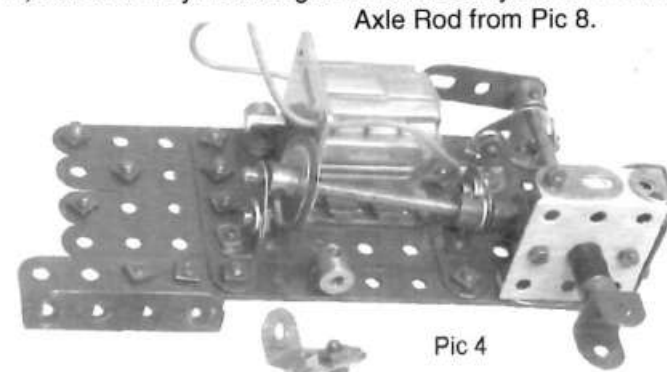


Pic 3

Standard collar size, and P/N 116, Fork Piece Large, (secured). The Double Bent Strip is bolted to the Flanged Plate. A P/N 10, Fishplate, $1"$, is bolted to each side of the Flanged Plate for crucial spacing when the securing Bolts are inserted. A P/N 9f, Angle Girder, $1\frac{1}{2}"$, with a P/N 12, Angle Bracket, $\frac{1}{2}" \times \frac{1}{2}"$, bolted to each end is placed across the end of the Flanged Plate (Angle Bracket lugs on the outside and held in place by the Bolts that secure this module to the sides of the Bonnet (Pic 5). (Awkward insertion of the Bolts).

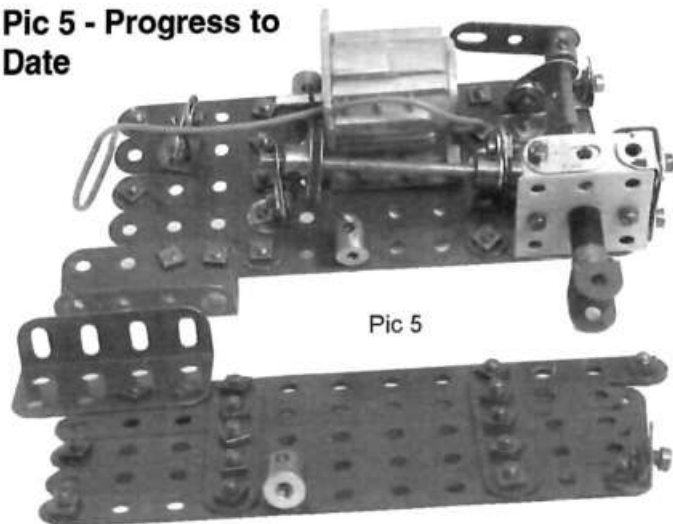
Pic 4 - Dummy Steering Wheel support.

A P/N 12b, Angle Bracket, $1" \times \frac{1}{2}"$, has a P/N 10, Fishplate, $1"$, bolted to it by the elongated hole to carry the end of the Axle Rod from Pic 8.



Pic 4

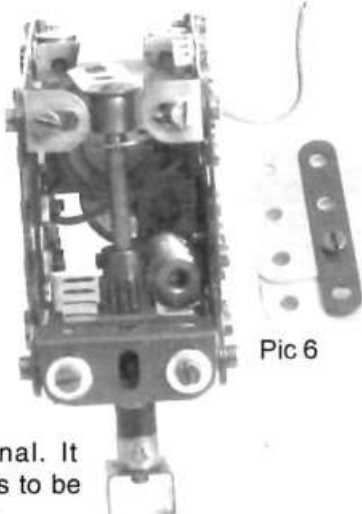
Pic 5 - Progress to Date



Pic 5

Pic 6 - Radiator.

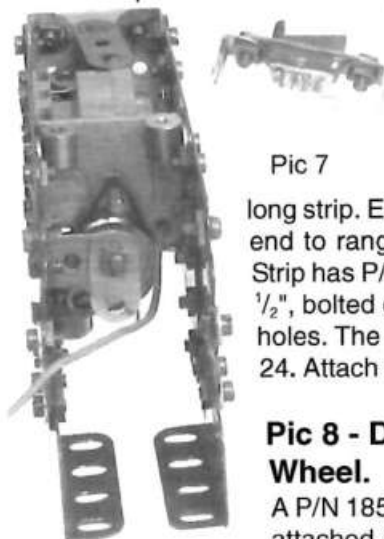
A P/N 74, Flat Plate, $1\frac{1}{2}" \times 1\frac{1}{2}"$, and P/N 103h, Flat Girder, $1\frac{1}{2}"$, are bolted together to make a plate $2" \times 1\frac{1}{2}"$ and the securing bolt also carries a P/N 235h, Narrow Strip, $2"$. Attach to Bonnet



Pic 6

Pic 7 - Female 9 pin Socket.

This module is optional. It allows the power cables to be

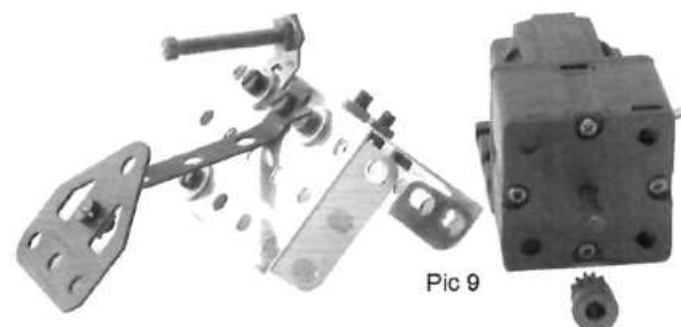


Pic 7

disconnected from the model rather than being hard wired in. A 9 pin female socket comes with a $\frac{1}{2}"$ wide $\times 1\frac{1}{4}"$ long strip. Elongate the holes on each end to range from $1"$ outwards. The Strip has P/N 12, Angle Bracket, $\frac{1}{2}" \times \frac{1}{2}"$, bolted on each end by the round holes. The electrics are shown in Pic 24. Attach to Bonnet

Pic 8 - Dummy Steering Wheel.

A P/N 185, Steering Wheel, $1\frac{3}{4}"$, is attached to the end of a P/N 16b, Axle Rod, $3"$. The Axle Rod carries in order a P/N 59, Collar, (fixed), P/N 12c, Angle Bracket Obtuse, $\frac{1}{2}" \times \frac{1}{2}"$, (round



Pic 9



hole), P/N 59, Collar, (fixed) and the end is held in the Fishplate shown in Pic 4. The Obtuse Angle Bracket has a P/N 48, Double Angle Strip, $\frac{1}{2}" \times 1\frac{1}{2}" \times \frac{1}{2}"$, bolted to the elongated hole.

Pic 9 - MO Motor with 19:1 built in gearbox. (P/N 770 and P/N 760)

Pic 9 - Drivers cab.

A P/N 51, Flanged Plate, $2\frac{1}{2}" \times 1\frac{1}{2}"$, is bolted to a P/N 51f, Flanged Plate, $1\frac{1}{2}" \times 2\frac{1}{2}"$, to form a right angle. The seat is made up of a P/N 235, Narrow Strip, $2\frac{1}{2}"$, with each end bent to make the seat, a



Pic 8

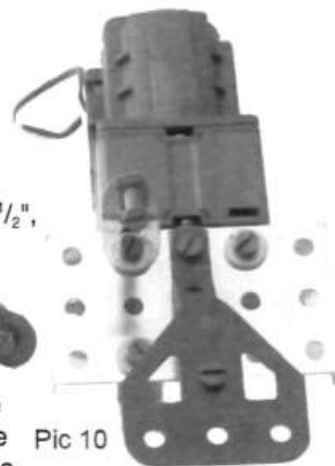
P/N 126a, Flat Trunnion, parallel with floor of the cab. The gear lever is a P/N 111d, Bolt, $1\frac{1}{8}"$, attached to a P/N 12c, Angle Bracket Obtuse, $\frac{1}{2}" \times \frac{1}{2}"$. Bolt on a P/N 64, Threaded Boss. This module will be bolted to the gearbox of the MO motor through the 51f.

Pic 9 - Drive Pinion.

12 tooth pinion, long.

Pic 10 - Clutch Pedal (fixed).

A P/N 6a, Perforated Strip, $1\frac{1}{2}"$, is bolted to a P/N 12b, Angle Bracket, $1" \times \frac{1}{2}"$. A further P/N 6a, Perforated Strip, $1\frac{1}{2}"$, is bolted to the lug of the 12b by its middle hole. A further P/N 12, Angle Bracket, $\frac{1}{2}" \times \frac{1}{2}"$, is bolted to the top of the first P/N 6a to form the foot pedal.



Pic 10

Pic 11 - Dual Brake Pedals (fixed).

Two P/N 6a, Perforated Strip, $1\frac{1}{2}"$, and a P/N 12b, Angle Bracket, $1" \times \frac{1}{2}"$, are bolted together at the lowest end. A further P/N 6a, Perforated Strip, $1\frac{1}{2}"$, is bolted by its middle hole to the lug of the 12b. Two P/N 12, Angle Bracket, $\frac{1}{2}" \times \frac{1}{2}"$, are bolted to each side of the doubled P/N 6a to form the actual pedal. (The prototype brakes operated either the left or right side brakes or both).

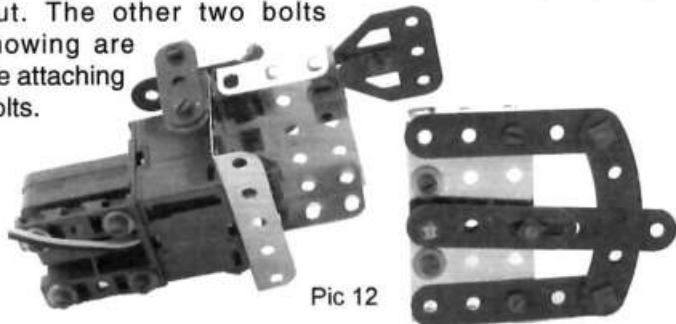


Pic 11

Pic 12 - Tow Bar.

A P/N 51, Flanged Plate, $2\frac{1}{2}" \times 1\frac{1}{2}"$, has a two P/N 5, Perforated Strip, $2\frac{1}{2}"$, bolted on and joined across the ends

by two P/N 90, Curved Strip, $2\frac{1}{2}$ ", which are separated by P/N 38, Washer, Standard, The loose swivelling draw bar is a P/N 6, Perforated Strip, 2", bolted to a P/N 55a, Perforated Slotted Strip, 2", which has a P/N 111c, Bolt, $\frac{3}{8}$ ", The order from this Bolt head down is 55a, Nut, 51, Nut. The other two bolts showing are the attaching Bolts.

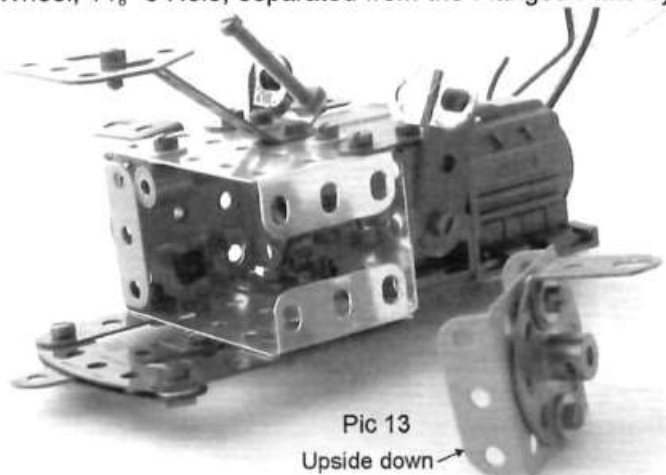


Pic 12

Pic 13 - Rear Axle Bearings.

Make mirror images

P/N 51b, Flanged Plate $1\frac{1}{2}$ " x $1\frac{1}{2}$ ", has a P/N 24, Bush Wheel, $1\frac{3}{8}$ " 8 Hole, separated from the Flanged Plate by

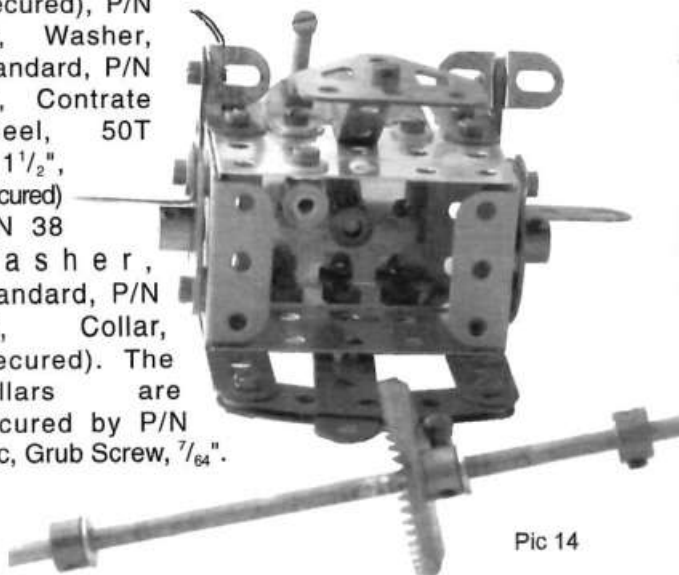


Pic 13
Upside down

P/N 38, Washer, Standard, and is secured by a P/N 111c, Bolt, $\frac{3}{8}$ ", which also carries a P/N 12b, Angle Bracket, 1 " x $\frac{1}{2}$ ". (I have reassembled this unit incorrectly by putting the P/N 12b, Angle Bracket, 1 " x $\frac{1}{2}$ ", upside down. The correct position is shown in Pics 14 and 15).

Pic 14 - Rear Axle.

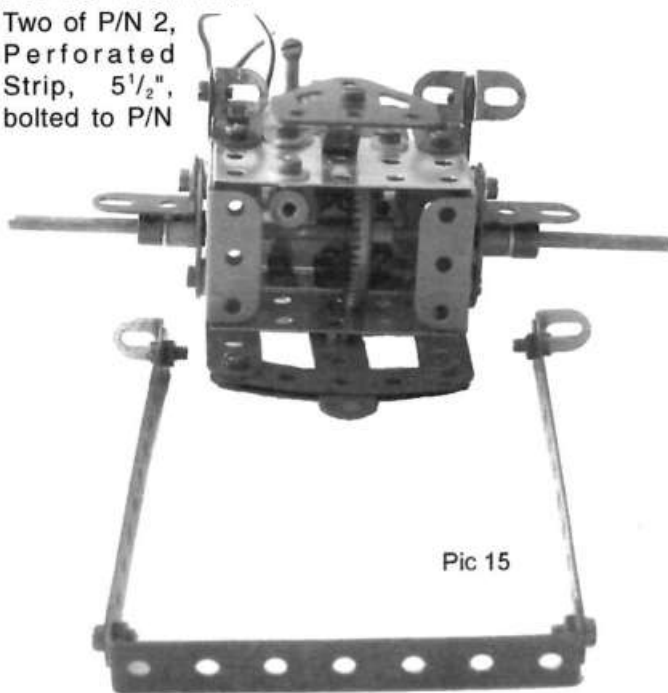
P/N 14 Axle Rod, $6\frac{1}{2}$ ", carries in order; P/N 59 Collar, (secured), P/N 38, Washer, Standard, P/N 28, Contrate wheel, 50T x $1\frac{1}{2}$ ", (secured) P/N 38 Washer, Standard, P/N 59, Collar, (secured). The collars are secured by P/N 69c, Grub Screw, $\frac{7}{64}$ ".



Pic 14

Pic 15 - Roll Bar.

Two of P/N 2, Perforated Strip, $5\frac{1}{2}$ ", bolted to P/N

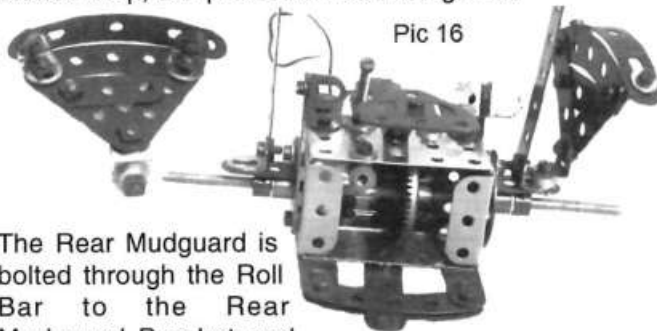


Pic 15

48b, Double Angle Strip, $\frac{1}{2}$ " x $3\frac{1}{2}$ " x $\frac{1}{2}$ ", and P/N 12, Angle Bracket, $\frac{1}{2}$ " x $\frac{1}{2}$ ", on each of the other ends by the round hole.

Pic 16 - Rear Mudguards.

Two P/N 6, Perforated Strip, 2", 4 holes, bolted at the ends of a P/N 90, Curved Strip, $2\frac{1}{2}$ ", and the other ends overlapped and bolted to a P/N 12, Angle Bracket, $\frac{1}{2}$ " x $\frac{1}{2}$ ", by the elongated hole. P/N 6a, Perforated Strip, $1\frac{1}{2}$ ", two P/N 12, Angle Bracket, $\frac{1}{2}$ " x $\frac{1}{2}$ ", and a P/N 215, Formed Slotted Strip, complete one Rear Mudguard.



Pic 16

The Rear Mudguard is bolted through the Roll Bar to the Rear Mudguard Bracket and P/N 12, Angle Bracket, $\frac{1}{2}$ " x $\frac{1}{2}$ ", by a P/N 111c, Bolt, $\frac{3}{8}$ ", which carries four P/N 38, Washer, Standard. Make two Rear Mudguards as mirror images

Pic 17 - Rear Axle cover.

A P/N 51b, Flanged Plate, $1\frac{1}{2}$ " x $1\frac{1}{2}$ ", has attached to it by a P/N 115, Threaded Pin, $\frac{9}{16}$ ", and a P/N 38, Washer, Standard, a P/N 12, Angle Bracket, $\frac{1}{2}$ " x $\frac{1}{2}$ ", which carries a P/N 133a, Corner Bracket, 1 " x 1 ", secured by a Bolt and two Washers.



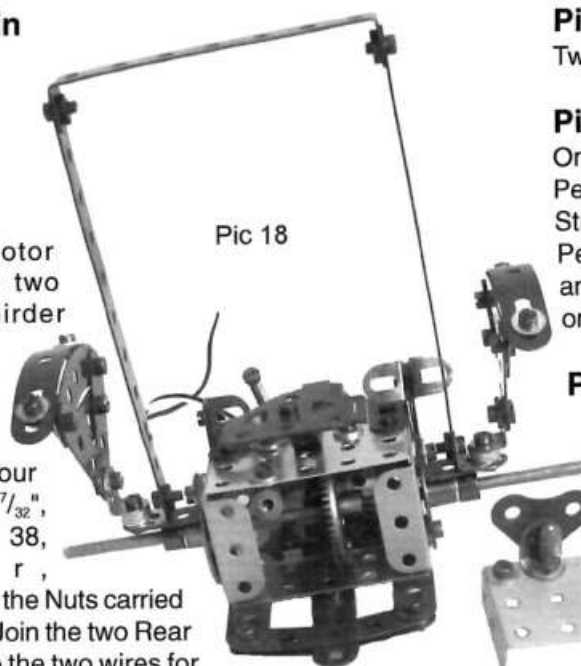
Pic 17

Pic 18 - Attach Rear Axle Cover to Rear Chassis module.

Insert P/N 37b, Bolt, $\frac{7}{32}$ ", Through Rear Axle Cover into P/N 64, Threaded Boss.

Pic 19 - Join Bonnet module to Rear Chassis Module

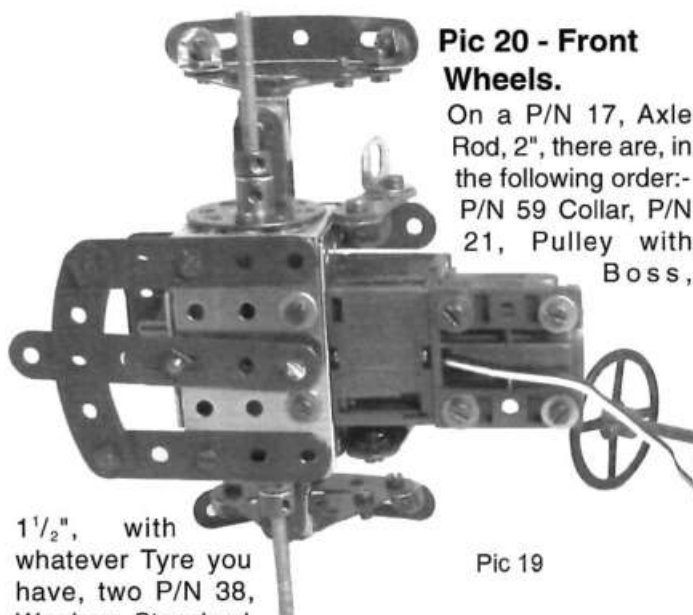
Slide Motor between the two P/N 161, Girder Bracket, on the underside of the Engine module and secure with four P/N 37b, Bolt, $\frac{7}{32}$ ", and four P/N 38, Washer, Standard, into the Nuts carried by the Motor. Join the two Rear Motor wires to the two wires for the rear axle drive on the nine pin connector. (see Pic 24 Wiring diagram).



Pic 18

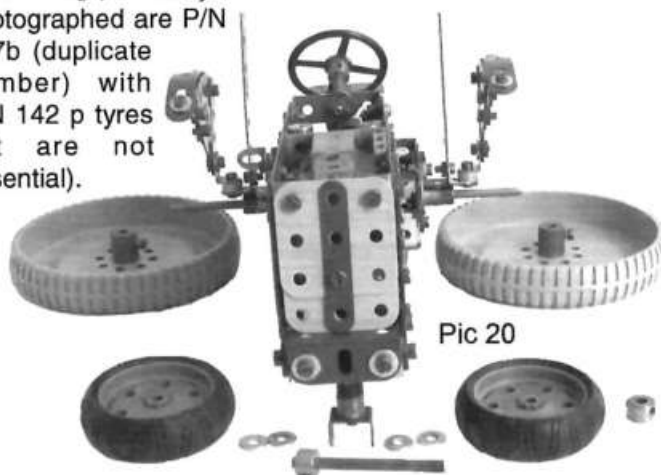
Pic 20 - Front Wheels.

On a P/N 17, Axle Rod, 2", there are, in the following order:- P/N 59 Collar, P/N 21, Pulley with Boss,



Pic 19

$1\frac{1}{2}$ ", with whatever Tyre you have, two P/N 38, Washer, Standard, then through the P/N 116, Fork Piece, Large, (already attached), two P/N 38, Washer, Standard, P/N 21, Pulley with Boss, $1\frac{1}{2}$ ", with whatever Tyre you have, P/N 59, Collar. (The $1\frac{1}{2}$ ", Pulleys photographed are P/N 187b (duplicate number) with P/N 142 p tyres but are not essential).



Pic 20

Pic 20 - Rear Wheels.

Two P/N 187b, Road Wheel, $4\frac{1}{2}$ " Plastic, fix to rear Axle.

Pic 21 - Bottom of Bonnet.

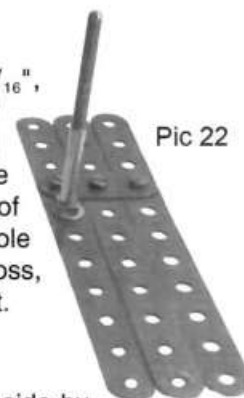
One P/N 4, Perforated Strip, 3", one P/N 5, Perforated Strip, $2\frac{1}{2}$ ", one, P/N 4, Perforated Strip, 3", are side by side bolted to P/N 6a, Perforated Strip, $1\frac{1}{2}$ ", in the second holes and then bolted to P/N 64, Threaded Boss, on right side of bonnet.



Pic 21

Pic 22 - Exhaust pipe.

P/N 115, Threaded Pin, $\frac{9}{16}$ ", extended by P/N 213, Rod Connector metal, 1", and P/N 17, Axle Rod, 2". This module is secured through the Top of Bonnet (Pic 22) in the fifth hole and into P/N 64, Threaded Boss, on the right side of the bonnet.



Pic 22

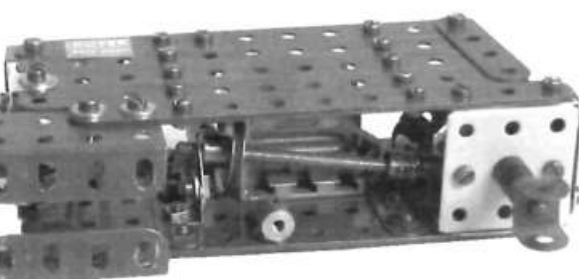
Pic 22 - Top of Bonnet.

Three P/N 2, Perforated Strip, $5\frac{1}{2}$ ", side by side held in eighth hole from the front by P/N 6a, Perforated Strip, $1\frac{1}{2}$ ". Module 99 is bolted to P/N 64, Threaded Boss, on left side of bonnet.



Pic 23 - Sign writing

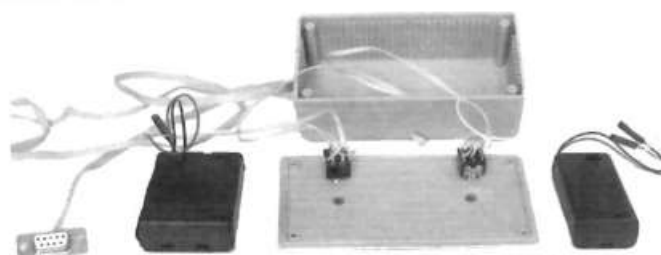
The signs were photographed from the prototype and are available as a .jpeg file. Or use a software program such as CorelDraw to colour the paper as background and type the lettering.



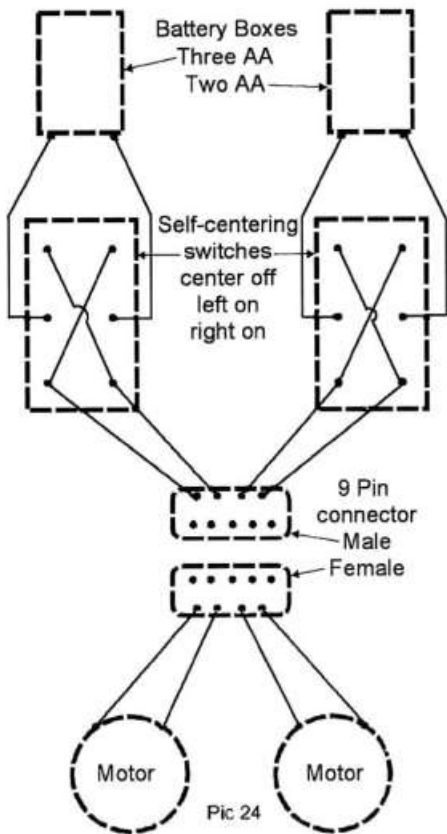
Pic 24 - Wiring Circuit

Pic 25 - Control Box

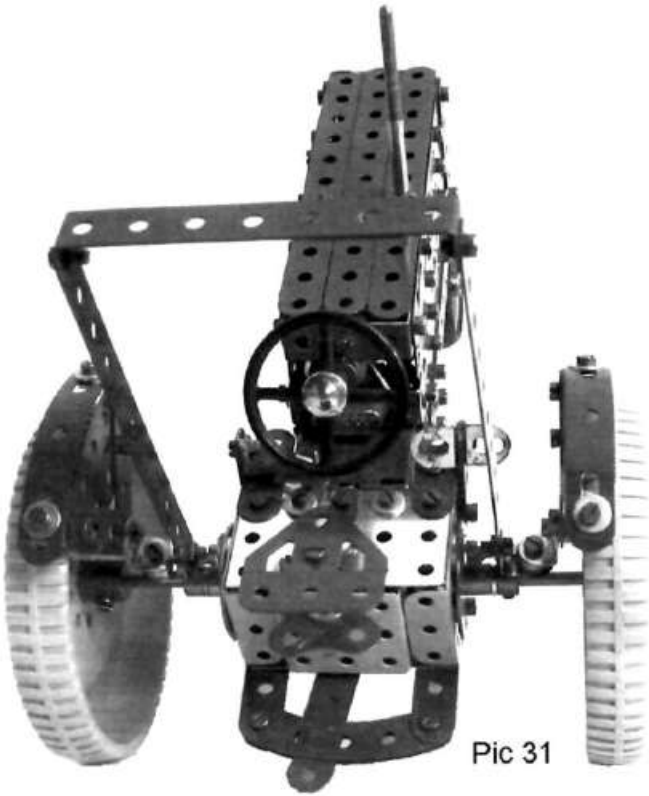
This is whatever you wish to do. The box, battery boxes, switches, 9 pin pair of sockets and ribbon wires come from your local electronics shop. The end effect is to have one switch wired to the motor under the bonnet to give motorised steering to the left and to the right. The other switch is to the rear chassis motor to drive the rear wheels in forward and reverse



Pic 25a

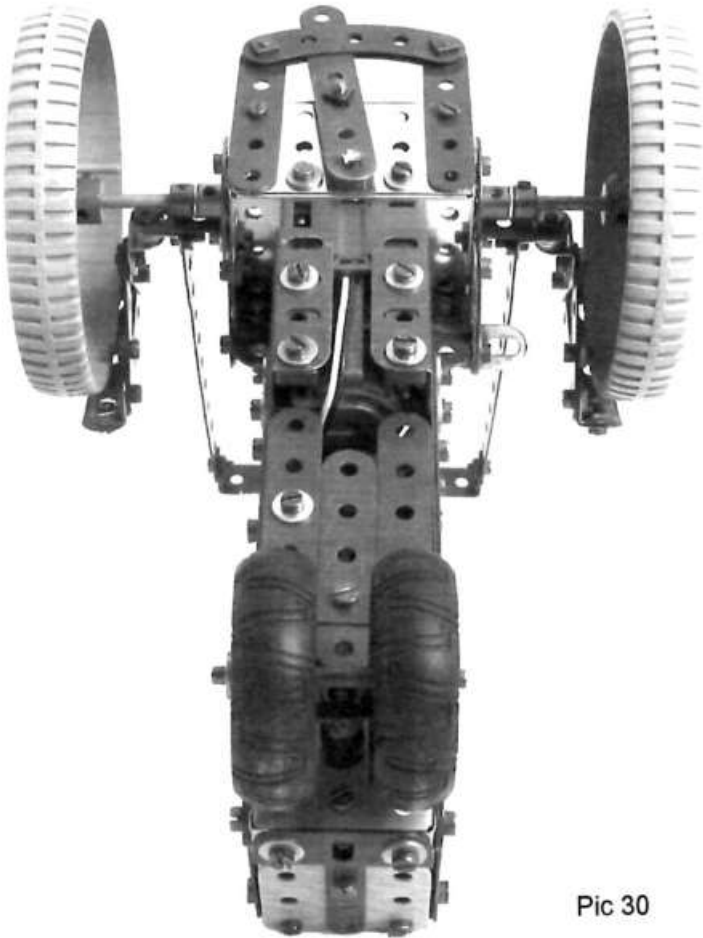


Wiring Circuit



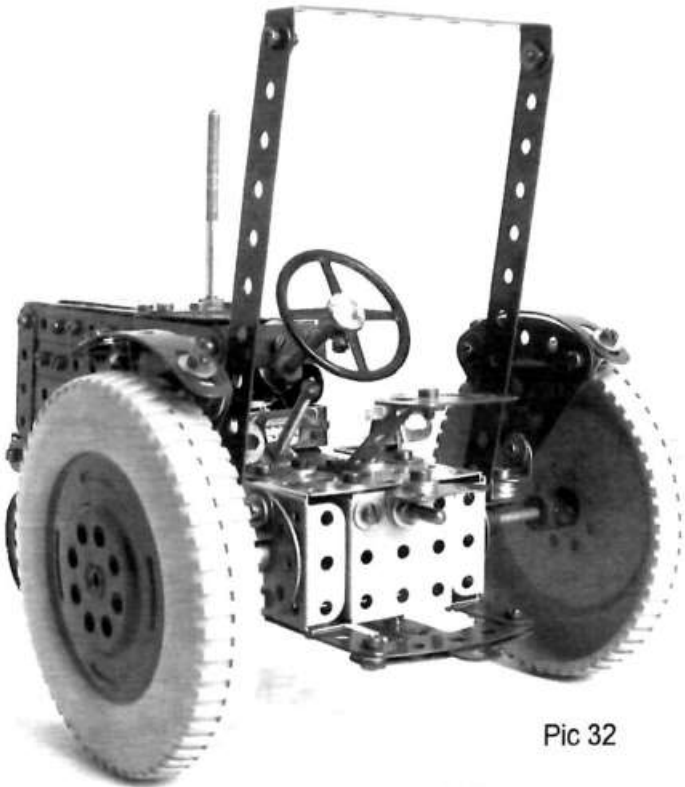
Pic 31

Completed Model Top



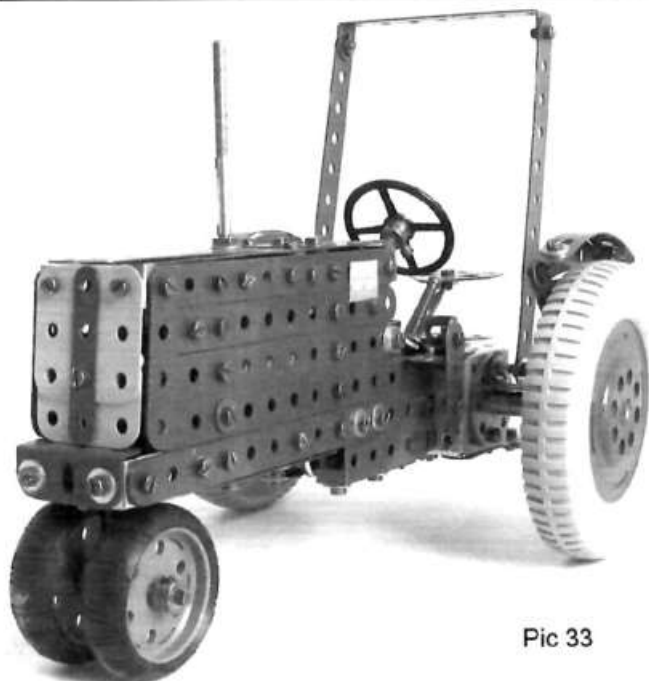
Pic 30

Completed Model Underneath



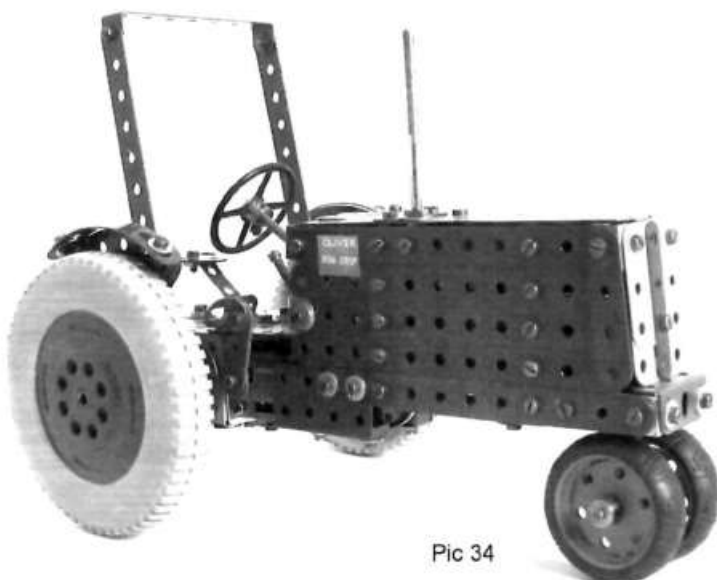
Pic 32

Completed Model Rear



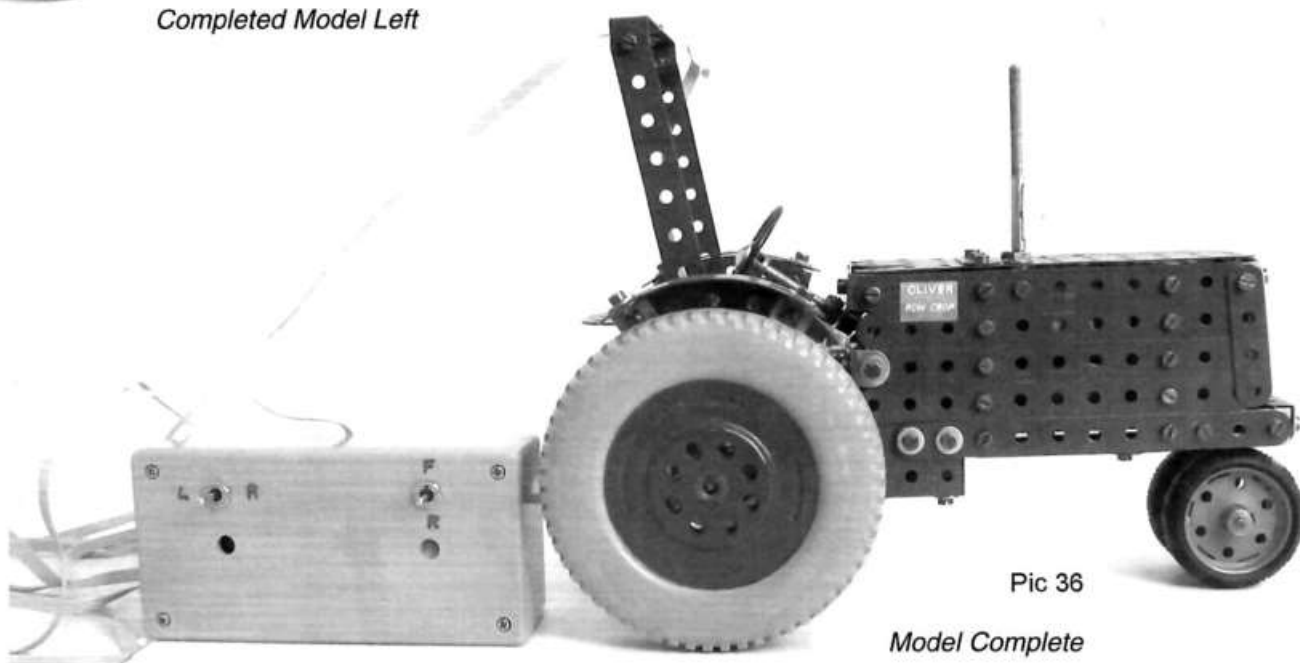
Pic 33

Completed Model Left



Pic 34

Completed Model Right



Pic 36

Model Complete

Parts list

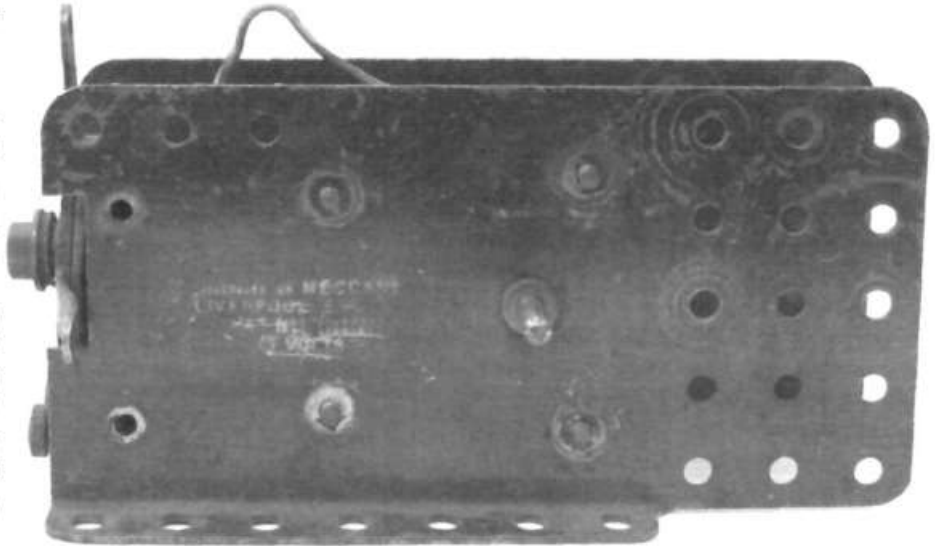
P/N	Description	Size	Qty	P/N	Description	Size	Qty	P/N	Description	Size	Qty
2	Perforated Strip	5 1/2"	17	38a	Spacer PlasticStandard collar size 2			161	Girder Bracket	2" x 1" x 1/2"	2
4	Perforated Strip	3"	2	45	Double Bent Strip		1	185	Steering Wheel	1 3/4"	1
5	Perforated Strip	2 1/2"	7	48	Double Angle Strip	1/2" x 1 1/2" x 1/2"	1	187b	Road Wheel	4 1/2" Plastic	2
6	Perforated Strip	2"	7	48b	Double Angle Strip	1/2" x 3 1/2" x 1/2"	1	213	Rod Connector metal	1"	1
6a	Perforated Strip	1 1/2"	9	51	Flanged Plate	2 1/2" x 1 1/2"	2	215	Formed Slotted Strip		2
10	Fishplate	1"	7	51b	Flanged Plate	1 1/2" x 1 1/2"	4	235	Narrow Strip	2 1/2"	1
12	Angle Bracket	1/2" x 1/2"	21	51f	Flanged Plate	1 1/2" x 2 1/2"	1	235h	Narrow Strip	2"	1
12b	Angle Bracket	1" x 1/2"	5	55a	Perforated Slotted Strip	2"	1	770	MO Motor		1
12c	Angle Bracket Obtuse	1/2" x 1/2"	2	59	Collar		7	770	MO Motor with gearbox		1
14	Axle Rod	6 1/2"	1	62	Crank		1	??	Pinion 12 tooth		1
16	Axle Rod	3 1/2"	2	64	Threaded Boss		4	??	Driving Band 1"		1
16b	Axle Rod	3"	1	69a	Grub Screw	5/32"	9	Dick Smith numbered electronic parts Switches – DP3T miniature centre off toggle – P7684 Battery Box – 2 x AA – S6155 Battery Box – 3 x AA – S6153 9 Pin Plug – P2684 9 Pin Socket – P2685 Plastic Box – H2878			
17	Axle Rod	2"	2	69c	Grub Screw	7/64"	2				
21	Pulley with Tyre (any sort)	1 1/2"	2	74	Flat Plate	1 1/2" x 1 1/2"	1				
23	Pulley with Boss	1"	1	90	Curved Strip	2 1/2"	4				
24	Bush Wheel	1 3/8" 8 Hole	2	103h	Flat Girder	1 1/2"	1				
26c	Pinion	15T x 1/16" x 1/4"	1	111c	Bolt	3/8"	6				
28	Contrate wheel	50T x 1 1/2"	1	111d	Bolt	1 1/8"	1				
32	Worm	1/2" x Right Hand	1	115	Threaded Pin	9/16"	2				
37b	Bolt	7/32"	105	116	Fork Piece	Large	1				
37c	Nut		108	126a	Flat Trunnion		1				
38	Washer	Standard	60	133a	Corner Bracket	1" x 1"	1				

A 1929 6v Electric Motor

by John Ince

Recently Peter King, one of our subscribers who lives out of Christchurch, purchased a large collection of Meccano which included a 6v electric motor. In his email he says:-

The box of parts the motor came with is more or less the large pre-war No 7 with lots of pre-WWI and post WWII parts included; there are three No.1 clockwork motors, 1912 'Wurtemberg'; 1921 -" Liverpool; 1934 15/16" Liverpool. The box took two men to lift!!!!



Peter notes the motor features:-

Meccano long frame electric motor like DSM 2034 and similar in part to 1915 4v. The reversing switch is end mounted on a red fibre block with no projections into frame. The short bearing sleeves are like 2034; the screw top brushes are inside the frames to barrel type commutator. There are only 10 laminations whereas the 1915 4v had 11. The motor windings with cotton insulation

On examination of Peter's photographs I concluded that this motor is practically identical to DMS 2023, the 4v motor made from 1927 to 1928. I have one of these motors. Even the paint colour is the same. The following extract is taken from the Meccano Magazine November 1929, p 869:-

The New Meccano 6-volt Motor

The Meccano Electric Motor has recently been re-designed, and it now works from a current of six volts instead at four. The improved Motor, shown in the accompanying illustration, is identical in size and external details. In the old 4-volt Motor, the winding only being changed. It is of much greater all-round efficiency, and although it runs from a higher voltage, the actual current consumption is smaller. It consumes from approximately 1 to 1.5 amperes, according to the load; hence the wear and tear on the brushes is reduced, and the accumulator will last longer for each charge. Finally, the 6-volt Motor is considerably more powerful than even the 4-volt type, which was by far the strongest electric motor of its kind available.: Where the house electric supply is alternating current, the 6-volt Motor may be run from it by using a Meccano Transformer, thus dispensing with the accumulator. The Motor will not run satisfactorily- from dry cells. The price of the Motor is not changed (15/6 each). Those boys who possess Meccano 4-volt Motors can have them converted to 6-volt working at a cost of 4/- (including postage each way). They should hand their Motors to their dealers, or forward them, together with a remittance of 3/6, direct to Service Department, Meccano Ltd., Binns Road, Old Swan, Liverpool.

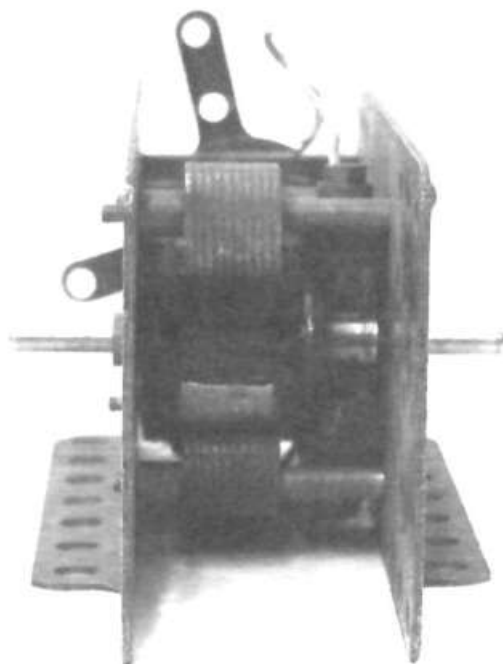
motor as it has full length flanges but that would be typical of Meccano Ltd.

My response to Peter was:-

Theory 1: Your motor is one which went back to the factory and was converted to 6v. Check the "6 VOLT" on the side plate. Has the 6 been superimposed on a 4? You may need to carefully clean off some of the rust and paint to see clearly.

Theory 2: The company used up old parts from the 4v series and made minor modifications to the laminations, windings and side plate identification words.

Peter's closer examination of the side plate stampings disclose that the "4v" has been over-stamped "6v". As the owners of this Meccano collection have always lived in Christchurch I think **Theory 2** is the correct one.



The picture in that magazine does not represent the correct

Luffing My 1/8th Scale Grove Rough Terrain Crane

by Les Megget

After the problems I had with luffing my previous Meccano crane-truck I knew that raising the boom on this Rough Terrain (RT) crane would be a major issue. The previous crane detailed in the NZFMM magazine of June 2005 used Meccano Threaded Rods 11 1/2" long and they tended to buckle at a boom angle greater than about 40 degrees with no load on the hook! Also a sky-hook (me) was required to assist the luffing mechanism to complete the boom luffing; the motor and gearing just could not cope with the applied forces. At least in this new design the maximum length of the Meccano Axle Rods was only 5" but the three section boom was a little heavier at 12 lbf (40 Newton). I always intended to use Meccano Threaded Rods in this crane as they were approximately to scale and I try to keep "within the system" wherever possible.

THEORETICAL MODELLING:

Initially I did some structural design calculations just to convince myself that Meccano Threaded Rods would do the job. At full luff (70 degrees to horizontal) the Threaded Rods are about 5" long from the top of their pseudo hydraulic cylinders to the pin joint where they connect to the boom's underside. By assuming that the rods were laterally and flexurally fixed at the cylinder top (basically a cantilever and a pretty crude assumption) and using Euler's buckling formula I calculated that each rod had a buckling strength of about 87 lbf. This assumes an effective length of the rods as 2.2 times their actual length (as per the NZ Steel Structures Standard for an unrestrained cantilever) and that the effective radius of a standard Meccano threaded rod was ~0.063" (1.6 mm measured to near the bottom of the threads). I also assumed steel rods rather than brass, as the Young's Modulus for steel is about 2.5 times that of brass (buckling strength is proportional to Young's Modulus, viz. Modulus of elasticity). This of course is the theoretical strut strength and doesn't take into account initial non-straightness (who ever heard of perfectly straight Meccano rods?) and dynamic load effects, etc.

So what actual force does each Threaded Rod carry in the model? Well from some simple statics knowing the weight of the boom, the positions and angles at which the reactions are applied and the maximum luffing angle, I got a force in each rod of about 12 lbs when the boom is not extended. Sounds like plenty of safety there ($87/12 = 7.25!$). Of course when the boom is extended to its full length of about nine feet the safety factor is halved due to the doubling of the force in each rod and this is before there is any load being lifted. When the boom is luffed to only 20-degrees the force in each rod increases nearly three times but the effective length of the rods is reduced by a factor of five due to the geometry of the hydraulic cylinders in relation to the boom. Therefore, as the buckling strength is inversely proportional to the effective length squared, the chances of buckling failure are far less than they are at full luffing.

Some estimate of the maximum load on the hoist that could be carried before buckling occurred would be interesting, I thought. Using the theoretical strength of the two rods (174 lbf) and with the boom not extended (load applied 40" along the boom from its pivot) gave a maximum load of nearly 13lb. Although I didn't anticipate carrying such a load I thought the safety factors a bit too small and being a conservative engineer I designed an extra lateral restraint in the vertical buckling plane. Incidentally the scale maximum load my model should carry would be the actual capacity (40,000 lbf) at full luff and closed boom divided by the scale factor cubed. This gives a load of 78 lbf. Thus my model isn't as strong as it should be but I reckon this crane is near the limit of Meccano anyway.

The extra restraint took the form of a 4mm diameter stainless steel rod pinned at the boom connection with a handrail coupling and running in a five hole Coupling rigidly fixed between the two pseudo hydraulic cylinders (see Figure 2) thus producing a pure cantilever beam. This beam keeps the cylinders and piston rods straight thus reducing their tendency to buckle in the vertical plane. Of course if the lateral force required restrain the rods from buckling exceeds more than a few pounds force at full extension then the stainless rod will yield with dire results.

MECCANO "HYDRAULIC" CYLINDERS:

The guts of the pseudo hydraulic cylinders are made up from a



Figure 1: Overall View of Luffing Cylinders, boom at 70-degrees. Brass Thrust Bearings visible below blue cylinders.

square section "cylinder" of four 4 1/2" Narrow Strips bolted to a Threaded Coupling at the top and Couplings along their length to preclude the Strips from buckling (see photo of exploded cylinders, Figure 2). The Bolts needed two or three Washers on them to allow the Threaded Rods to turn freely. The threaded piston rods run through the Threaded Coupling as these inner cylinders

rotate. Drive to the cylinders shown in the photo (Figure 3) is from a large Exacto (90RPM) motor and two sets of 25t Pinions and small Contrates with a 2:1 reduction in between. The force from the inner cylinders is transferred to the stiff rotating frame by small 3/4" thrust bearings (P/N 168r) thus reducing any compressive force transfer through the Contrate/Pinion gearing. The supporting frame has Crank bosses as bearings at the outer edges next to the rod's support frame (thus nearly eliminating bending in this rod). The outer aesthetic cylinders are double blue Cylinders (P/N 216) joined by inner Narrow Strips. These are capped with large Flanged Wheels. Initially I used broken Flanged Wheels sans boss with rubber Collars stuffed in the hole but there was too much lateral movement possible and the inner cylinders kept jamming up under load due to the Bolts holding the Narrow Strips clashing with the Bolts in the outer cylinders. The piston rods are lock nutted into Short Threaded Couplings at their outer ends, the reason being that every millimetre saved in length meant that the boom could be lowered to horizontal for travelling.

The resulting luffing mechanism has worked well so far (after the usual three rebuilds/redesigns). It may be a little slow at about three minutes from horizontal to full luffing but it does it by itself without complaint and human intervention. I did try it with a 1:1 gearing in place of the 2:1 reduction but gears began to jump teeth, Axle Rods bending and the motor was on the verge of overload. The mechanism has withstood the rigours of the Easter Convention and the supporting struts have carried the jib at 70-degrees for four weeks while on display at the University, without collapsing, thus maintaining my professional reputation!!

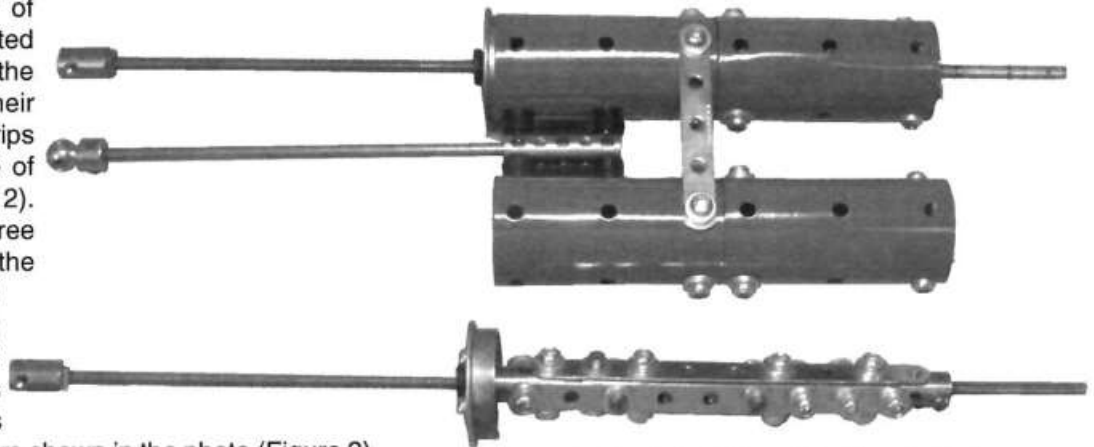


Figure 2: Exploded view of Luffing Cylinders

Editor - Les has recently partially retired after twenty years at the University of Auckland, Dept of Civil & Environmental Engineering teaching structural design. He is a Fellow of both IPENZ, the Institution of Professional Engineers and the NZ Society for Earthquake Engineering. His mobile crane model and this article illustrates that prior calculation is better than the 'try and try again' method.

Photos by Les Megget

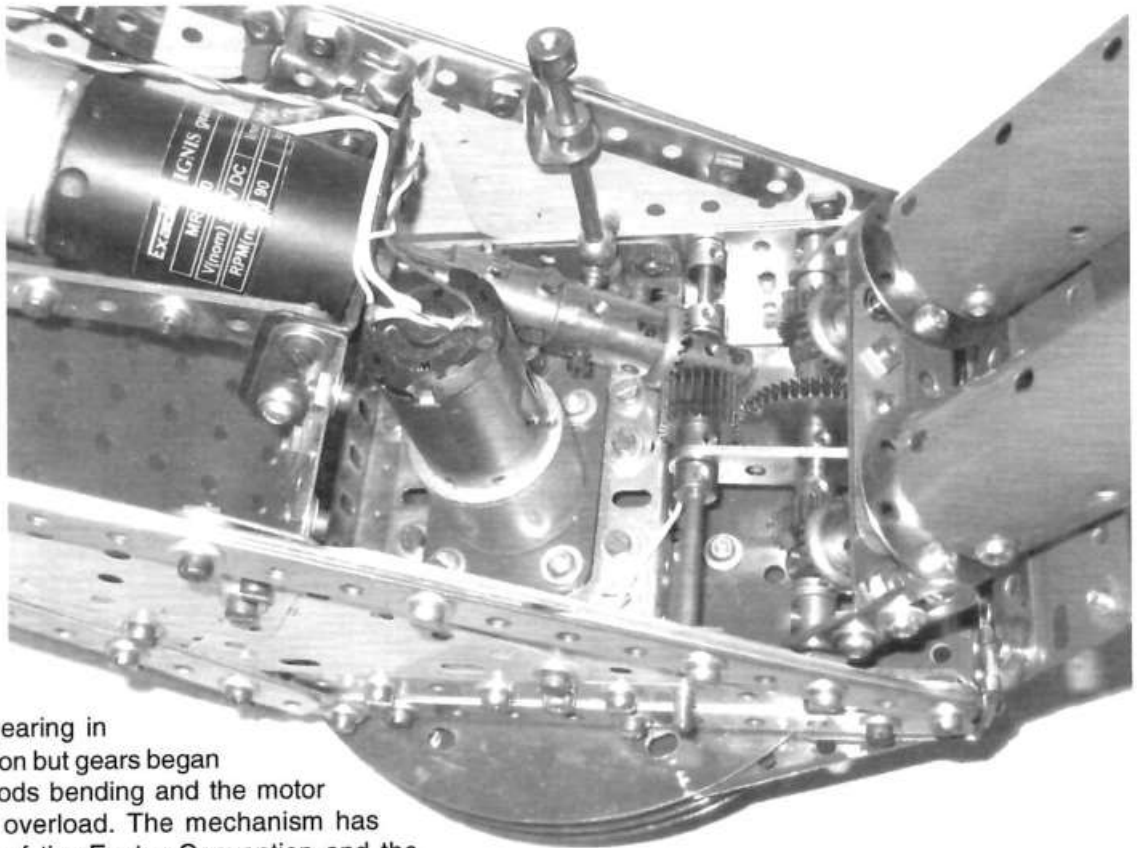


Figure 3: Luffing Motor & Mechanism. Thrust bearings can just be seen above the Wheel Disks. Smaller motor is for slewing crane.

METALLUS

E-Mail: info@metallus.de

Web: www.metallus.de

More than 100 years ago the first construction sets came on the market. The idea was quite simple, by means of several component parts, screws and nuts, impressive models could be developed. The various possibilities to combine and arrange the parts inspired many young people and in the process they also learned the mechanical basics through play. To this day, many of them still rave about their masterworks built during their childhood.

But more and more other toys like computer games or plastic toys overstocked the market.

Thus the large manufacturers stopped the production of metal component systems.

But where these companies left off, a small company in the rural Lower Saxony, Germany, picked up. With the aim to retain the construction sets and the assurance that there are still many people who enjoy this fantastic toy, Gerhard Rekers developed a new product, METALLUS, on the basis of the former Märklin product range. From perforated strips, to flexible plates, to gear wheels, the METALLUS products are fully compatible with the old Märklin and Meccano construction units.

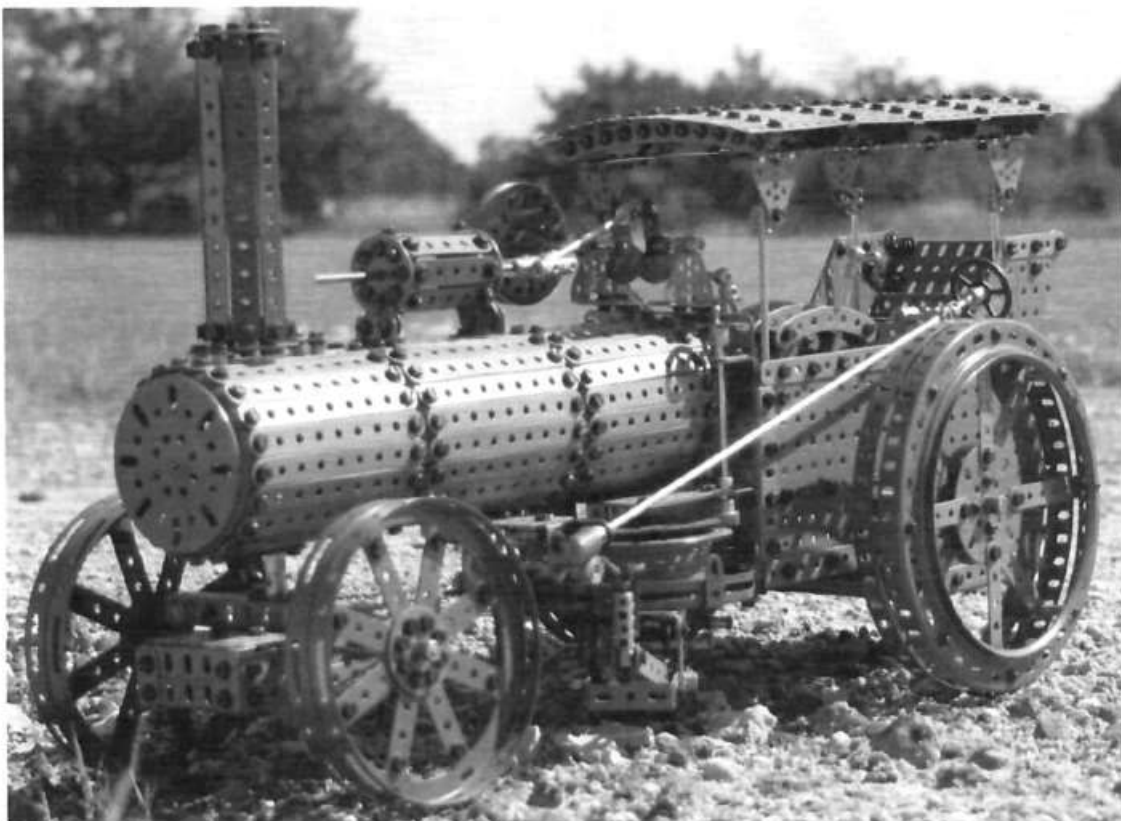
So not only was the way into the world of construction sets smoothed for beginners, but also the established collectors have the possibility to extend their inventory with METALLUS parts.

The concept succeeds. In the meantime METALLUS offers more than 1,000 different parts and develops new models. Thus last year appeared a model of the Ottomeyer Steam Locomobile, which was used fifty years ago to cultivate

whole bog areas in northern Germany. The newest model is a Post Mill. The oldest European type of windmill owes to its name to the base frame called post. On top the mill house is pivot mounted. But the METALLUS developer will not run out of ideas. For the future, already many models are planned. But how these will look like won't be revealed yet...



The Post Mill, pictured above, is a metal construction set containing 3,153 parts including electric motor. The cost is €497.54 (NZ\$909) plus postage



The Locomobile, pictured below, is a metal construction set containing 3,165 parts including electric motor €497.54 (NZ\$909) plus postage

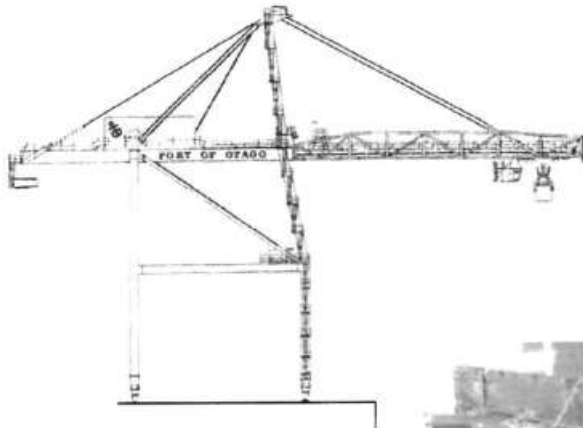
Send an email to [<info@metallus.de>](mailto:info@metallus.de) to receive electronic newsletters

Progress report from Ross Mitchell of Oamaru.

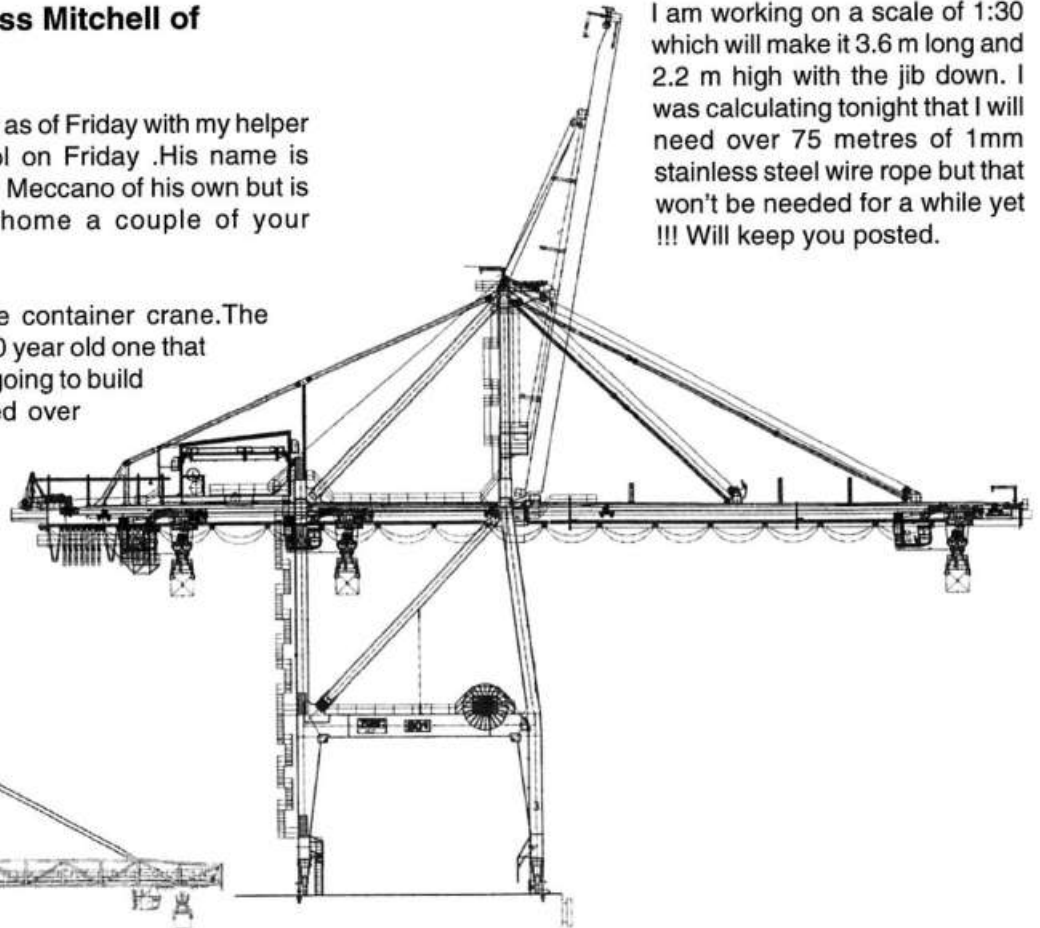
Enclosed is a photo of the crane as of Friday with my helper who comes round after school on Friday. His name is Roman Johnson who has some Meccano of his own but is as keen as mustard. Takes home a couple of your magazines each time.

Also enclosed is a plan of the container crane. The smaller container crane is the 20 year old one that Port Otago has and what I was going to build until their two new ones arrived over the last 12 months.

I am working on a scale of 1:30 which will make it 3.6 m long and 2.2 m high with the jib down. I was calculating tonight that I will need over 75 metres of 1mm stainless steel wire rope but that won't be needed for a while yet !!! Will keep you posted.



The smaller container crane



Here is Roman Johnson working on the container crane.

NZFMM MAGAZINE INDEX Vol. 30, 2006/7

Compiled by Lloyd Spackman

	Vol.	Page		Vol.	Page
Accounts, NZFMMM 2006/7	30/3	7	Meccanograph (John Ince)	30/2	19
American Convertible Car (Alexander)	30/2	19	Mecc. Mag. & F. Hornby (This England)	30/4	9
A.M.G. at Model X, 2006 (Hancock)	30/5	18	Mecc. WW Mail Order (Somerville)	30/5	21
Art Work - Meccano (Spanner)	30/1	12	Min. Locomotive (Steadman/Spanner)	30/6	24
Ashok Banerjee Set 9 (Keith Major)	30/3	13	Modelcraft & Hobbies Ltd. (Spackman)	30/6	16
Ashok Banerjee's parts (Stan Baker)	30/6	19	Model Plans - Accuracy of (John Ince)	30/5	16
Ashok's N.Z. Agent (Stan Baker)	30/3	23	Model Plans - Accuracy of (Spanner)	30/4	14
Barrett David (U.K.) Obituary	30/4	3	Motor Vator (Andrew Wells/ Spanner)	30/6	18
Big Ben (the small one) (Neilson)	30/5	10	New Zealand in Mecc. History (Anon.)	30/3	8
Blakeborough Golden Wedding	30/1	16	Oostwegel, Ben - History	30/2	16
Bowden Cable (Graham Russell)	30/2	8	Palmerston Nth M.E. Show (Geange)	30/5	20
Cameron, Ian Obituary	30/4	3	Patent Application, 9/1/1901 (Hornby)	30/4	13
Cars - Meccano Constructor (Spanner)	30/3	10	Patent Slip, Wellington (Lou Nichols)	30/3	5
Caterpillar Pipe Layer (Kind - Skegex)	30/4	24	Poster for 006 Games (Lou Nichols)	30/2	24
Childhood Memories (Johnson)	30/6	15	Poster Illustrated (Doug. Harris)	30/3	24
Christchurch MC. History (MM. May 69)	30/3	16	Powder Coating parts (Spanner)	30/5	15
Christchurch M.C. at Canmod (O'Neill)	30/1	20	Quad Bike (Bruce Geange)	30/1	24
Clocks for beginners (Spanner)	30/3	11	Racing Car Speedplay (Vodanovich)	30/2	21
Collecting Meccano (Spanner)	30/3	10	Railway Crane (Alistair Tong)	30/2	20
"Concorde" Set 0517 (Prescott)	30/4	13	Road Roller (Bruce Geange)	30/3	1
Concrete Mixer (Vodanovich)	30/1	7	Road Roller (Bruce Geange)	30/3	3
Conventions in the Future (Moody)	30/1	15	Road Wheel Centre -Ashok (Photo)	30/6	23
Crane Automatic Brake (Alistair Tong)	30/4	7	Rogers K88 Locomotive (Campbell)	30/1	3
Crane Motor (Spanner)	30/6	17	Rotating Motor Chassis (Tong/Neilson)	30/5	24
Cricket Ball Motor (Spanner)	30/6	17	Roundabout and Stamper (Westwood)	30/5	9
Crocodile (John Westwood)	30/2	6	Roundels in Aeroplane Sets (Irwin)	30/6	24
Dealers Display Models (Lou Nichols)	30/5	10	Saw Bench, 1920's (Spanner)	30/2	14
Design 3700 Racer (Bruce Geange)	30/1	4	Saw Bench - Replica (Bruce Geange)	30/6	13
Design R/C Truck 2006 (Spanner)	30/6	17	Screwdriver - Cordless (Dick Smith Ltd)	30/1	6
Differential Contrates (Spanner)	30/2	14	Set 10 Cabinet (Les Megget)	30/1	15
Digger - Sumitomo SH120 (Babbage)	30/5	1	Set 10 Displayed Les Megget)	30/1	24
Display Case mini models (Prescott)	30/2	6	Set 10 - search for (les Megget)	30/1	14
Drifts (Spanner)	30/6	18	Silver Steel Axle Rods (Stark/ Spanner)	30/3	11
Elektron parts (Picture)	30/1	12	South Goodwin Lightship (Nichols)	30/5	24
Feathered Shaft (M.M. 1928)	30/3	7	Speed Play Dinosaur & Robot (Higgins)	30/5	8
Flywheels & Gears, Real ones (Nichols)	30/3	5	Speed Play Robot (Tom Pittams)	30/2	24
Frank Hornby ("This England")	30/4	11	Spitfire (John Denton)	30/3	21
Farm Quad Bike (Geange/Neilson)	30/1	10	Sumitomo SH120 Excavator (Babbage)	30/5	3
Galleon (Mike Whiting, Skegex)	30/4	24	Telescope (Chris Fry/ Spanner)	30/6	24
Gator 6 x 4 Utility (Geange/Neilson)	30/6	1	Tornado by John Thorpe (Skegex)	30/4	24
Geange Models in U.K. (Paul Voaden)	30/3	17	Traction Engine 1:4 Scale (Geange)	30/2	5
G.R.B. - Advice from Ashok	30/1	23	Tug Boat (Mel Plows)	30/2	19
G.R.B. Substitutes (Graham Russell)	30/2	8	Tuning R/C Set 6950 (Bob Prescott)	30/5	16
Hamish McKarno robot (Wm. Irwin)	30/4	1	Tuning R/C 8950 Set (Bob Prescott)	30/3	14
Harris, Doug. - Posters, etc.	30/3	15	Traction Engines at Turangi	30/2	10
Hawkes Bay visit by M.W.T. Club	30/1	18	Turangi Comment (Bruce Neilson)	30/2	17
Horseless Carriage (Bruce Geange)	30/2	1	Turangi Photos	30/2	18
Horseless Carriage (Bruce Geange)	30/2	3	Vampire by Ken Senlar (Skegex)	30/4	24
Hedge Cutter (John Freer)	30/3	20	Warrior (John Westwood)	30/2	6
Index NZFMMM 2005/6	30/3	12	Washers (Graham Russell)	30/2	8
John Deere 6 x 4 (Geange/Neilson)	30/6	3	Westwood John, Autobiography	30/1	5
John Jordan honoured with MNZM	30/3	15	Zkwyx Meccanaut Book (Paul Dale)	30/2	9
Jumping Toy Man (Bob Prescott)	30/2	24			
Kangaroo - walking (Bob Prescott)	30/1	16			
Kmex Parts (Picture)	30/1	12			
Kendricks Cottage, 1863 (Wilson)	30/6	20			
Locomotive Rogers K88 (Campbell)	30/1	1			
Level Luffer Crane (Michel Breal)	30/4	24			
London R/T Bus (Bob Prescott)	30/2	7			
Lubricating C/W motors (Spanner)	30/4	16			
Meccano Mags. on CD (MW MailOrder)	30/4	23			
Marklin Seilbagger Model (Robin Rye)	30/5	5			
McKarno Robot (Wm. Irwin)	30/4	4			
Meccano Collecting (George Ovenden)	30/2	15			

Pitch and Roll Mechanism.

In the April issue there was a description of a mechanism to provide pitch and roll for a model ship. Some additional comments are necessary after comments from readers who have attempted to build the mechanism.

First the mechanism in some of the illustrations is a rebuild based on some photographs and memory. It is intended to show the way the thing works but changes will be necessary in an actual ship model. I have some more photographs of the mechanism installed in the Endeavour model. Please contact me by email if you would like copies. <johnince@man.quik.co.nz>

Tuning Cars Set No. 4952

by Bob Prescott

This set has a manual with building instructions for two different cars. The one I made reminds me of the new VW beetle and it took about two hours to make the 6" long model.

There are two interesting new parts in the set, the first I would call a "vehicle chassis" and the second a curved car bonnet or roof part (see photo).

The spring steel parts have a nice matt finish, an



improvement on the normal glossy surface which seems to chip easily. As usual I have added my own washers against the painted surfaces.

The wheels are 1" black pulleys and hubs caps pressed into standard P/N 142k tyres.

A mystery which may be solved by the time you read this is the "Meccano" stamp on the parts. As you will be aware since Nikko became the owners, "Meccano" has been followed by "(N)". In this set the "Meccano" is followed by "(E)"?

The set retails for \$39.95 but a sale price of just over \$26 makes it very good value.

Mechanical Workshop Set No 0532

by Bob Prescott

This recently introduced set has 727 parts based on the "3 flat axle rod" system – a mix of zinc, painted "spring steel" and plastic parts. The set has a standard 6V motor and 19:1 gearbox. The 2" wheels with low profile tyres can be fitted with the spoked hubcaps provided.

The excellent 130 page manual has full building instructions for fifteen models, e.g. vehicles and aircraft and pictures of a further ten. Most of the vehicle models feature a "working" engine with moving pistons and rocker gear and rack and pinion steering.

I built my version of the Formula one racing car and it really is a great looking model but I would describe it as "fragile" – it has a very lightweight construction. Having said that the real thing is not built with any crash safety classification. The set's biggest failing in my view is the lack of any sort of fixable collar. Rods and wheels are expected to stay in place using P/N 59c mini clear spacers. In my model I replaced most of them with aero or standard collars.

An interesting and useful addition to the Meccano stock.



Removing Tobacco Smoke and Bubble wrap

I recently bought one of the Meccano Design sets from a seller on eBay. The box and contents smell of tobacco smoke. Have any other Spanners had this problem and is there a way to get rid of it? *(Roger Thorpe)*.

After my sister (who is the only person allowed to smoke in the house) has visited, we use little bottles of smell neutraliser with a wick (Neutradol from Quality Save is one brand). You could put one of these in a large box with the Meccano for a day or two, before sorting and cleaning. You can get similar products in an aerosol spray. We use these for tomcats - in some cases as a preliminary for more drastic treatment. *(Dick Watson)*.

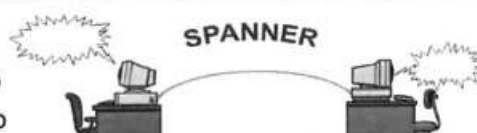
I have found the best way is set everything out on some sort of rack (oven shelves, cake cooling rack etc) and leave outside in the fresh air for some hours on a DRY windy day. May need a couple of goes. Large parts can be pinned up on a clothesline!

BTW The only ironing I do is Meccano Ltd. leaflets and similar, so the above is not at all out of the ordinary for a Meccanoman. *(Roland)*.

Depending on what the box is made of, you could try rubbing it gently with a damp cloth onto which a drop or two of Vanilla ESSENCE (do not use the 'good stuff' SWMBO best Extract). Simply washing the parts (ordinary washing up liquid), drying them thoroughly on a soft cloth should work. And leave it all open to the air as long as you can. This is a practical female method, but males will have other, more complex methods no doubt. :-)) *(Margaret Barrett)*.

I have had this problem with second hand books, which really can't be cleaned with anything, so this may be relevant to cardboard boxes. I followed the advice given by Roland and put the book on a shelf, pages as open as possible (sometimes with something holding the book upright at the right angle), either in the garage on a mild summer day or in the basement. Unfortunately, the basement then stinks of tobacco for a while, but it passes. The garage is easier as it can be kept open to the outside for a few hours. Repeated applications have been necessary for some. Tobacco has a lingering quality, unfortunately. Sometimes, the tops of boxes (and model train rolling stock) are found with a layer of grunge that's hard to remove as well. *(Marwan Nusair)*.

This problem is also common in the toy train world, and whilst leaving items outside on a dry but windy day will usually get rid of the smell, it will not get rid of the thin film of tobacco, or whatever it is that forms on everything in a smoky room. Most tin toy trains, and Meccano, will cope with a good wash - I run them through the dishwasher, which seems to get rid of many years worth of accumulated 'stuff', without harming the original finish. I put the tablet in the bottom of the dishwasher, rather than in the dispenser, which seems to minimise any washing 'aggression', yet cleans parts. Small parts go in a cloth bag, tied tightly - a pillow case will do. Many a pillow case full of Lego has



been washed in the washing machine. Spin drying is a little noisy, though :-)) *(Graeme Eldred)*.

I would be wary of dishwashing litho items, Graeme. I once washed a grotty Hornby No.2 coach and a grey bloom appeared which luckily disappeared after a while, for which I was eternally grateful. Meccano seem prone to losing a lot of paint sometimes. I have just finished cleaning up a No.2 Aeroplane which appeared to have been left in a dusty attic for years. It needed a spray liquid to remove the dirt which also took off the gloss somewhat. Fortunately, Pledge polish brought it back and it looks a lot better for a clean. I have however, washed tinplate track in the dishwasher with great success. *(Brian Willis)*.

I have the same problem with books - about the only thing you can do is to open the book/s up to lots of fresh clean air (we have plenty here in NZ - come and try some!), and opening at various places through the book. It can take a long time - I have one which still stinks of cigar smoke even after repeated attempts. Maybe it's the particular paper used. The book was packed in bubble wrap for its trip from the US - probably only a couple of weeks - but the bubble wrap also stuck to the smooth hardcover, and I have been unable to remove the marks. I tried dishwashing liquid, meths, white spirit - even polished it with museum wax - nothing worked. Don't ever use bubble wrap for your collection! Also had the same problem with a valuable gauge 1 Bassett Lowke tank engine - just got it in time - if you look closely, you can see where the marks were starting. I've also had the same odour problem with LP covers, particularly the thick American ones - I bought some from an American gent here in Auckland. His whole house smelled like a bar room at 2:00am! And my clothes and hair, when I left. *(Doug Harris)*.

I have consulted my personal advisor! To get rid of bubble wrap marks, first determine if the book is leather or cloth bound? (or a laminated cover?). Leather - sorry no suggestions. Cloth bound - try lighter fuel or go on line to <sales@charnwoodbooks.co.uk> (no relation!) and ask for Backus Bookcloth Cleaner ref. X021. Laminated - apply Pledge and leave for 5 mins. before polishing. No guarantees given Re the smoke odour - advisor has been told (but in this case has not personally yet experimented) that standing the offending open book in an airtight container, together with a proprietary pet odour remover, for some 10 -14 days, will remove odour. Hope it works but again no guarantee. *(John Lacey)*.

Motorvator Users

There is a new article posted at <www.meccanisms.com/modules/xfsection/article.php?articleid=35> which gives a full walk through showing how to open up MeccCompiler on your PC, connect to the MotorVator, load source code, compile source code, download the compiled code to the MotorVator, run the downloaded program. For those just starting out, this gives a step by step guide with Screenshots at each step, so you can work your own way through the first steps. *(Meccanisms Limited)*.

Use of Spanner emails is acknowledged

QUOTATION: "I don't know who my grandfather was. I am much more concerned to know what his grandson will be." (*Abraham Lincoln*).

1957 BOYS' INTERESTS: The wide range of things boys were interested in in the 1950s is shown by articles in the Meccano Magazines of 1957. Cycling, model boats, photography, television (then quite new), engineering, bridge construction, flying boats, railways in all their aspects, nature study, stamp collecting, automobiles, motor racing, aircraft, dinky toys, volcanoes, chemistry, pistol shooting. The list is endless. How does it compare with the interests of boys in 2007 - fifty years later?

SPEED PLAY MODELS: These models can be flimsy to handle so Reg Hall gives a couple of hints on Spanner. Substituting long bolts, with nuts, in place of the Rawlplugs helps to stabilise them. Another way is to wipe the plastic part of the fixing with a damp tissue, then dip it in Vim or similar scouring powder. Then screw up the metal part as normally.

WHAT A WASTE !: Malcolm Smith tells on Spanner how he came across ten dark green 12" Angle Girders at a sale. He nearly bought them when he realised they had been cut down from 24½" Girders. The seller had cut them in half to fit in his box to take to the sale !!

PLASTIC COLLARS P/N 59C: These useful little collars are often difficult to push on to a rod. I push a drift through them before trying. It makes life a bit easier. (L.S.).

VIRTUES OF THE INTERNET: "It is fantastic to realise how access to the Web has made it possible for me to know what and where things are available, what other fans are doing in far away places, and to meet virtually (and sometimes personally) so many interesting and agreeable persons. It has enriched significantly my leisure time." (*Edmundo Veiga, Rio de Janeiro, Brazil, on Spanner*).

A BRIEF HISTORY OF THE MM: Meccano Magazine was published by Binns Road until July, 1967. They were losing money on it by then, and stopped. It was taken over in January, 1968, by Model Aeronautical Press Ltd. They made a good fist of it until December, 1972, when they were forced to give up — not profitable. It was started again as a quarterly publication by Meccano Ltd. from 1973 to 1976. The content was purely Meccano in those years. It was re-formatted in January, 1977, by a group in Henley-on-Thames, but had to be taken over again by Meccano Ltd. with the April/July/October issue. It carried on until finally dying in Spring, 1981. (*from Wes Dalefield on Spanner*).

SKYSCRAPERS: To accompany my book on Bridges (see P16 of our Dec., 2006, issue) I now have, in the same format, its companion book on Skyscrapers. Formidable in size and shape, it is a fascinating photographic essay on notable skyscrapers, principally (as one might expect) in the USA (L.S.).

THE HORNBY vs AMERICAN MODEL BUILDER COURT CASE: About 1915 Meccano Ltd. sued Francis Wagner for



copyright infringement. Many of his American Model Builder parts were direct copies of Meccano and his instruction manuals were almost completely identical to the Meccano ones. Hornby eventually won the case and AMB ceased production about 1920. (*Jim Bobyn on Spanner*).

A 'ROYAL' FIND: Peter Haigh says on Spanner there is a Saturday market in Leek where a stall holder keeps an eye out for Meccano for him. One of the boxes he got for Peter had a very rare Royal Meccano tin at the bottom. Peter says he paid about GBP40 for the box so it was one of his better buys.

TYRES IN 6520 SETS: I have two of these Motion System sets. In each, all four tyres (P/N 142R) are tapered. Not so good for building an authentic model of a road roller. Can anyone please explain the taper? Is it a manufacturing glitch? (L.S.).

AXLE ROD DIAMETERS: George Illingworth says if rod diameters are 5/32" or even 4mm, they would be undersize for Meccano axles, but would be acceptable for many other applications. 5/32" = 0.156 inches; 4mm = 0.157 inches; 8swg = 0.160 inches. Tim Robinson says in North America they have a numbered system for diameters and size 20 = 0.161 inches.

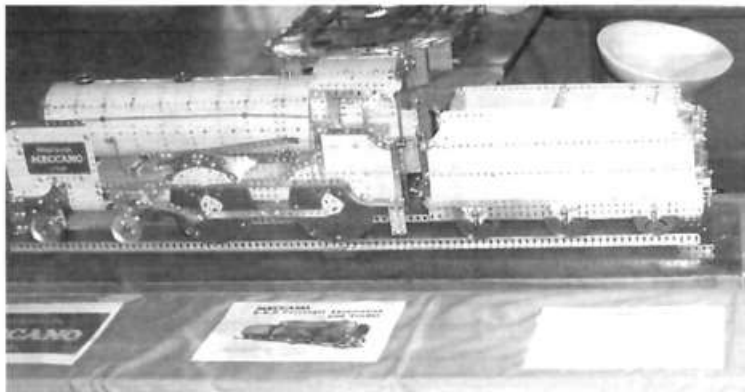
WHAT MIGHT HAVE BEEN: "Back in the 1970s I took a party from the Holy Trinity Meccano Club on a visit to Binns Road. I found the factory to be really antiquated with machines still being driven from overhead line shafts. The trade unions had a stranglehold and resisted every attempt to improve production methods. Painting was done by women placing parts on a conveyor which went through a spray; another team of women stood at the other end, turned the parts over, and sent them back to paint the other side. The irony was that stood against a wall was a complete automated spray plant all covered in plastic sheeting which the workers refused to use because it would have needed fewer people. In the packing department women counted out nuts and bolts by hand for the sets. When I suggested to our guide that they should invest in some proportional weighing machines he was shocked and said if the workers heard that they would be out on strike. **It was all so sad.** Given modern production methods or possible subcontracting out, Meccano may still have been made in Liverpool today. (*Tony Holmden on Spanner*).

MADE IN WALES ? There are reports that Meccano was manufactured by Lines Bros. at their South Wales factory in Merthyr Tydfil for a short time in 1980/81. (*Nev. Bond on Spanner*).

TOYWORLD IS 30: In their 30th birthday catalogue Toyworld devoted almost a whole page to Meccano. Unfortunately the illustrations were so small it was difficult to identify the sets. Their prices had 30% off, bringing (for instance) the price of the 15 model Multimodel set down from \$69.99 to \$48.99. This was, of course, eclipsed by Dick Smith's more recent sale.

MAYLANDS MECCANO & HOBBIES CLUB

Maylands club participated in the Australian Model Railway Association (WA) Branch (AMRA) show over the long weekend of 2,3 and 4 June, 2007. This annual show has over 50 exhibits from a wide range of scale and theme railway clubs from garden railways to Z scale. The major component of our exhibition was a rejuvenated club built (and parts) Tricky Track layout, as this fitted with the railway theme of the show and had not been exhibited for over twelve months. The only other construction in the space available was the 4-4-0 locomotive and tender built in Y/B/Z by Michael Hanrahan. This was much recognised and appreciated by a railway crowd.



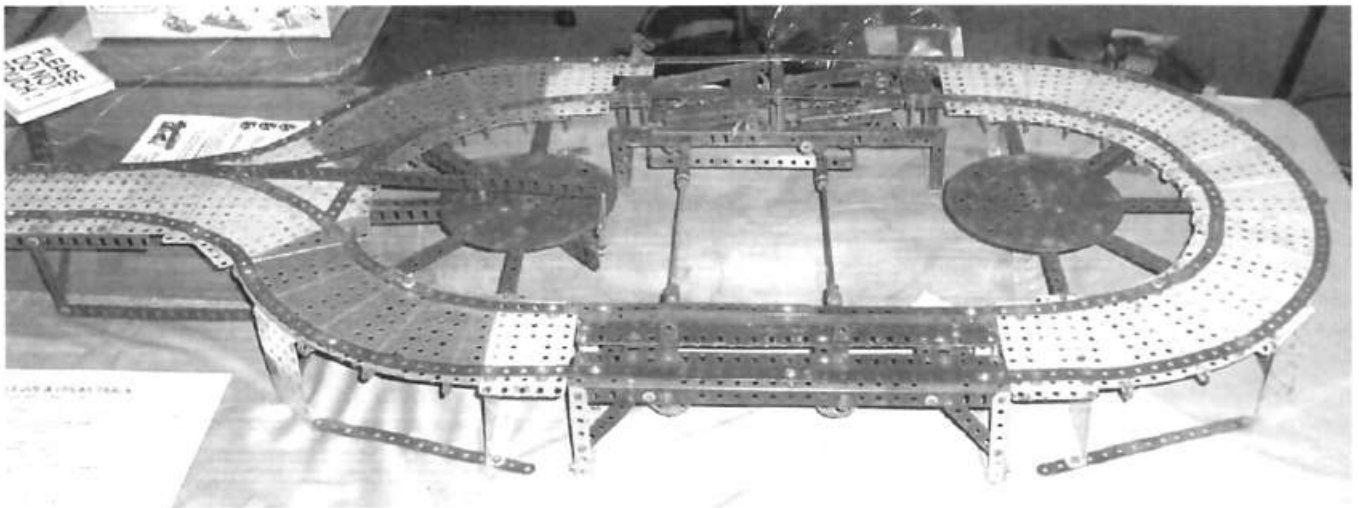
Considerable preparation of rebuilding, adjustment and testing in the lead up time paid rewards when the show got under way. The layout included all of the standard mechanisms in the Cameron model plan. Little Joe (three



Ross Smith, Clem Bond, and Dave Howe.

Meccano in general and Tricky Track in particular. There were several expressions of support in the public vote competition for stand displays. Lots of wide-eyed children were surprised by the mechanisms while some 'big kids' just had to know how it all worked. With no barriers around our tables, everyone could get up close to see the mechanisms in action. Some just had to touch! As this was a model railway theme show, the more technically aware visitors just had to see the turntable operate. This was most pleasing given the number of times it had been adjusted before the show. All weekend long visitors told us stories of their own memories and adventures with Meccano.

The organisers, AMRA, provided a debriefing session to report on the show. This included the awarding of prizes, procedural issues, and unsolicited comments from visitors being read out. We didn't win any prizes but didn't really expect to in a train show. However, several of the comments made particular complimentary mention of Tricky Track. On



of them) and the track mechanisms performed very reliably over the three days. This was quite an achievement given that all of the parts are in far from new condition.

Visitors seemed to like our display as most watched Little Joe activate all the mechanisms for a full circuit. With people several layers deep around the tables, our rostered club members had a busy time answering questions about

this basis we as a club are pleased with our effort, pleased with the performance of Tricky Track and pleased that at least some of the visitors appreciated the result. The challenge will be to do even better next year.

This report was sent to us from Perth, Western Australia, by Ross Smith, ISM 18

JUNE 2007, MEETING

In spite of the cold weather we had another successful meeting on June 15th with 16 members present and a good collection of small models. It was good to see John Neal again at our meetings.

Now for the models:

Simon Moody had his tip truck built on a Nikko truck chassis, a crane winding drum and a winding gear/grab release mechanism.

Lou Nichols had brought the beginning of his model of John Ince's pitch and roll from our April issue. Also one of Wayne Blakely's tiny \$10 racing cars.

Lloyd Spackman had mounted his mountain bike model on rollers to turn the wheels and added a rider pedalling along slowly.

Campbell Morrison had a Konkoly Intermittent centrifugal machine — work in progress.



Don Flower had brought along the very last bit of his now demolished crane — a set of vertical gears.

Andy Lin had built an impressive horizontal boring machine with the cutter mounted on the front of a multi-model vehicle.

Alex and Isaac Paterson opted for two small models — a reversing gears mechanism and a steam engine driven by a tiny electric motor.

In our formal meeting we discussed proposals for the future financing of the Club and agreed on an annual subscription from members. We also looked forward to the financing and planning of the 2015 Convention. Next meeting will be on August 3rd and the theme will be models using rarely used and obscure Meccano parts. [Finally, I owe Stan Baker an apology for missing his pingpong ball roller machine from the list of Convention models. (L.S.)]

AUGUST 2007, MEETING

We had a good attendance and a nice selection of models at our meeting on August 3rd.

Bryan and Nancy Jones, and Eldon Porter, whom we hadn't seen for a while, were especially welcome.

Brian Peterson showed us a varied group of models including his version of the "Red Arrow" jet plane. It was built from his own parts and his colour mix worked well.

Then there was a model railway goods shed reminiscent of many of the old ones still seen at country stations. An orange Nikko "Tuning" car and a tiny helicopter from the Design Series completed his lot.

Simon Moody spent some time putting together a "truck" using large diameter axles and bearings. He has manufactured them himself and intends using them in a future model.

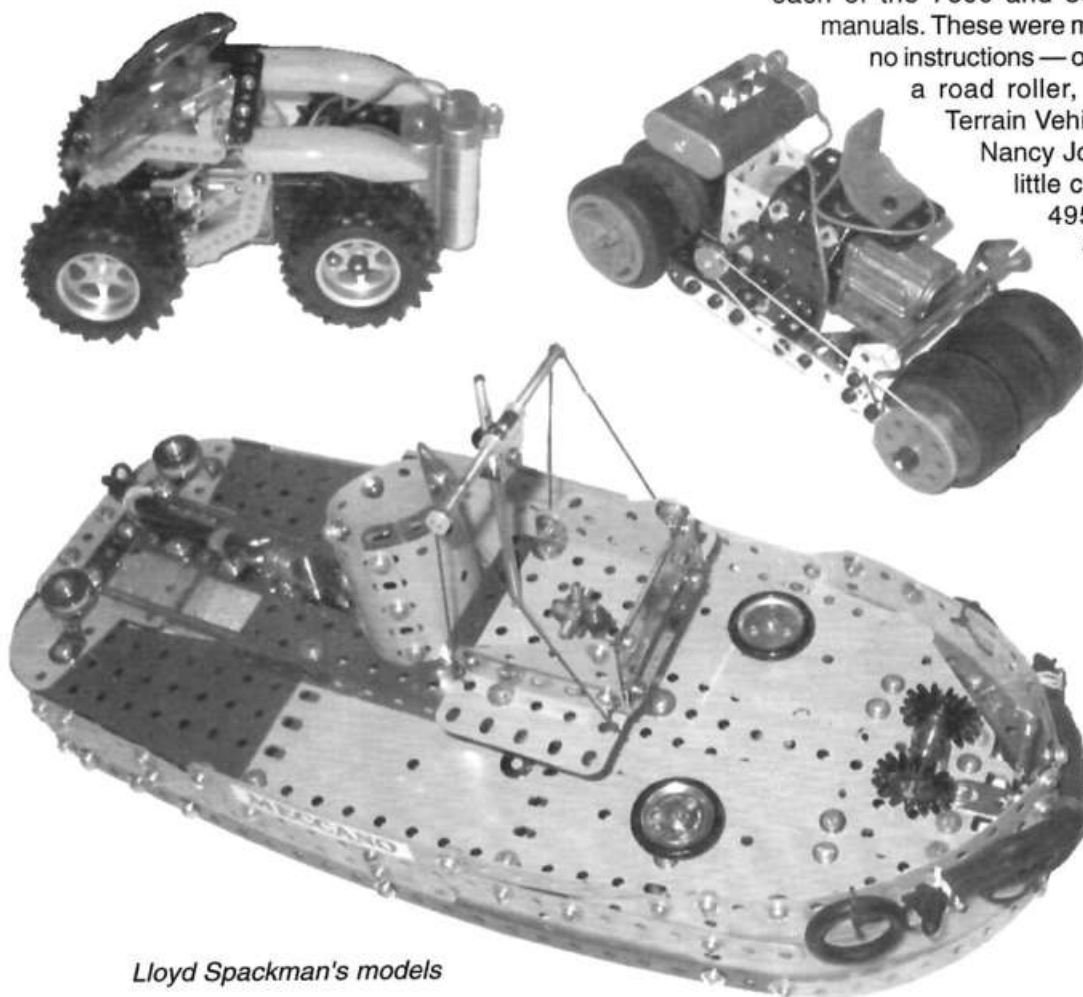
Lloyd Spackman had one model from the back pages of each of the 7600 and 8600 "Future Master" set manuals. These were models for which there were no instructions — only photographs. One was a road roller, the other a speedy "All Terrain Vehicle".

Nancy Jones brought along a neat little car from Tuning Series Set 4952. In purple and grape colours and without the gaudy transfers supplied with the set, it looked really nice.

Alex and Isaac Paterson again showed us their skills with a tanker truck sporting a flashing red light atop the cab and a three wheeler dragster bike.

In our formal meeting we agreed to an annual subscription of \$10 to cover running costs and a possible future levy of \$20 to build up a reserve for the 2015 Convention.

Because of the school holidays, our next meeting will be on October 12th.



Lloyd Spackman's models

MWWT MECCANO CLUB

**Meeting
14 July 2007**

A Fellowship Meeting was held at Wanganui with informality being the key. Members

brought along the following items

Viv Alexander – A collection of Meccano Ltd

items ranging biro pen, grease tube, labels, ruler and a 1936 set 1.

Daryl Anderson – A collection of replica Manuals and excess spare parts.

Don Blakeborough – Clock set Manuals of 1971 and 1972.

James Burnside – E29 motor

John Freer – Fidlers Gear.

Bruce Geange – Timber Tractor motorised, steering, powered winch and spades.

John Ince – XY Meccanograph.

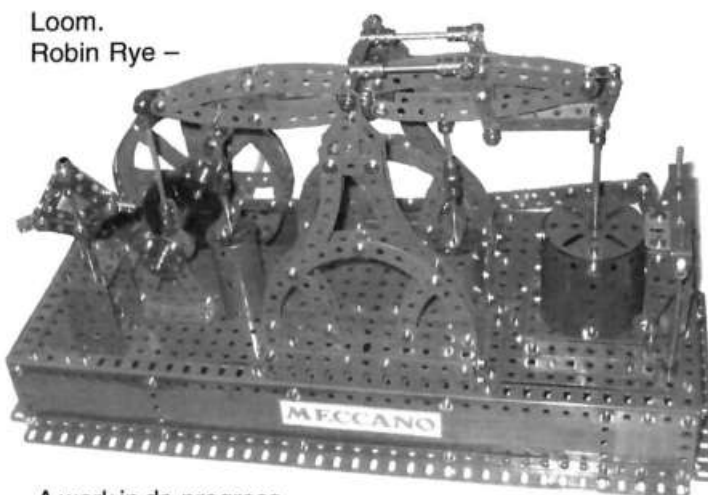
Lou Nichols – A work in progress of a pitch, roll and yaw mechanism.

Tom Pittams – Chinese copies of Meccano and a musical bus.

Bob Prescott – Transporter Bridge controlled through a MotorVator unit.

Hugh Ramage – A work in progress bandage

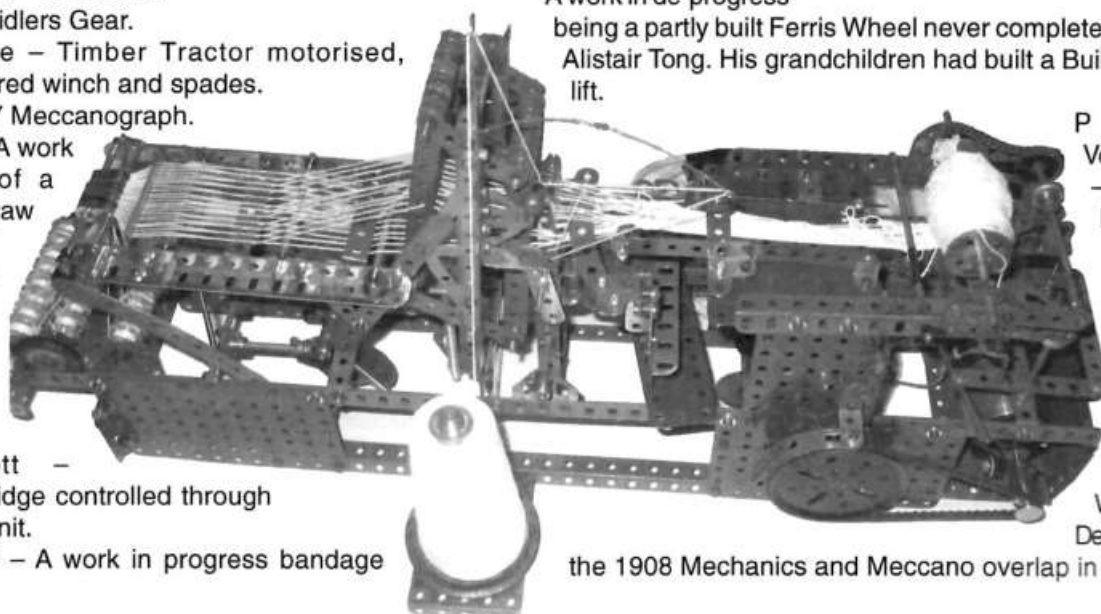
Loom.
Robin Rye –



A work in de-progress

being a partly built Ferris Wheel never completed.

Alistair Tong. His grandchildren had built a Building an a lift.



Paul
Vodanovich

–
Fleischman
Train set
with a
Meccano
Signal
Gantry
and
Overbridge
Don
Wilson –
Demonstrated

the 1908 Mechanics and Meccano overlap in the sets.

Off the Wall

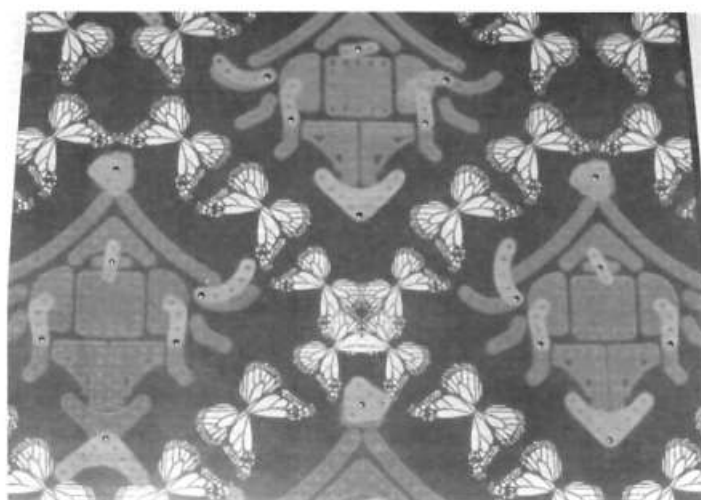
The thin line between Meccano art and Meccano model gets thinner regularly.

I am pleased to feature Natalie Babbage, a third year Massey University student in textile design, and daughter of Barry Babbage, Meccanoman of Tauranga.

The art is a 'Wallpaper' hang for the Meccano modelling room making good use of real and stylised Meccano pieces. Perhaps learning by osmosis ("the gradual, often

unconscious, absorption of knowledge or ideas through continual exposure rather than deliberate learning") in Natalie's early childhood did work ☺

Pictures and notes from Barry Babbage.
Write-up by Bruce Neilson.



Natalie with her creation

MWT MECCANO CLUB

**Annual
General
Meeting
11 August
2007**

President – Paul Vodanovich;
Treasurer/Secretary - Tom Pittams.
Winner Lindsay Bond Perpetual Trophy – Bob Prescott
The MWT Constitution and the first minutes of the
Wanganui and Districts Meccano Club 29 April 1989
were read and discussed.
The model of the meeting was from the Apprentice set
(AP) and formed part of the Model tour.
Daryl Anderson – AP Crane.
Don Blakeborough – A trick 1" gear Wheel not square
across the teeth. The chiming unit from his Grandfather
Clock with six notes from the pipe chimes.
John Freer AP Mobile Crane.



The MWT Club founding members (in August 2007)



Current MWT Club members present at the August 2007 meeting.

Bruce Geange – Fowler Narrow Gauge Locomotive running
on 'O' gauge track powered by a Magic Motor. A series of
photos from the first MWT run national convention.

Graeme Hawtree – A Set 9 box restoration using red
vinyl, yellow card, straw board, replica blue parts boxes,
and tin labels.

John Jordan – Four small plane models showing
deterioration of the zinc which the members
offered various cures.

Chris Morton – AP Telecom Tower.

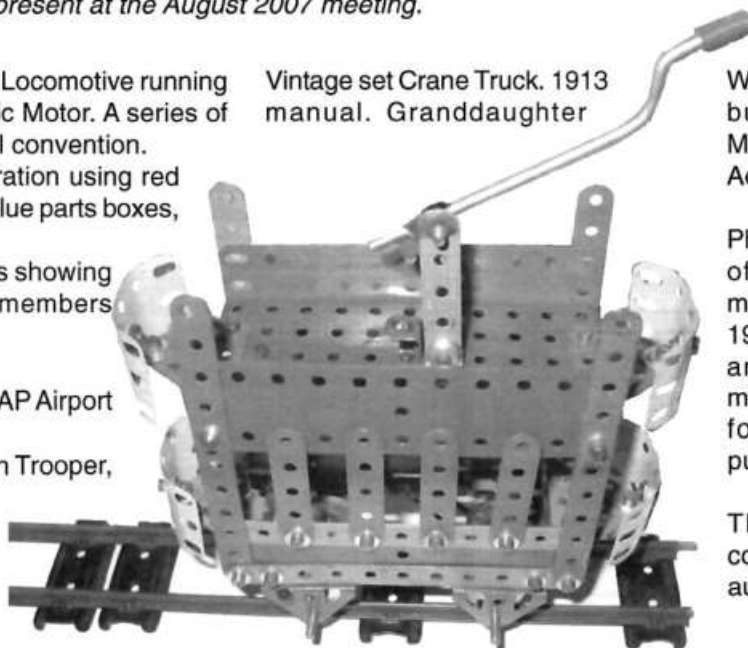
Paulette Morton – AP Crane. Daughter AP Airport
baggage train.

Bruce Neilson – Meccano Junior, Action Trooper,
City, Fairground, Chinese copy.

Lou Nichols – AP Tramcar ('O' gauge)
won first prize. Pitch and roll
mechanism.

Tom Pittams – AP 4-4-0 Locomotive.
Cable car, and a very collection of

Vintage set Crane Truck. 1913
manual. Granddaughter



Lou Nichols built this prize winning tramcar.

Mamod stem
toys.

Bob Prescott –
Triumph TR3
from CQ
magazine.

Hugh Ramage –
AP Skip Truck.

Lloyd Spackman
– Tug Boat from
1971 MM, Road
Roller (Motrion
System set).
Buggy (Future
Master set).

Alistair Tong –
AP Chair-o-
Plane with a
very effective
friction drive.

Paul
Vodanovich -
Windmill from the
built a neat
Meccano Junior
Aeroplane.

Photos were taken
of the surviving
members of the
1989 first meeting
and of all the
members present
for historical
purposes.

The meeting
concluded with the
auction and supper

Well another 2 months have flown by and the editor has gently reminded me that my eBay column is due. I normally keep a long list of auctions which may be of interest to you out there. I go through them and sort out the more desirable, unusual and sometimes just something different. Toys are such a big subject that there is plenty to choose from. Now for this months offering.



* French Dealers Cabinet. Unusual to see one of these as the usual ones are from the UK. The cabinet is made of oak, five drawers with metal pull handles. The Meccano parts are displayed in the front with the drawers holding the spare parts behind. Nice assortment of French Blue

and Gold parts. Looks in great condition, maybe around 1950s. No Meccano parts in the drawers. Sold for NZ\$1500.

* Meccano Saw bench. These turn up every now and then, considered rare. This one looks like it has been repainted in parts. Comes with blade and fence, top tilts. No box. Sold well at NZ\$600.

* Set of 6 Meccano Pewter figures. Introduced when Meccano were trying to find new revenue flows, unusual to find all six together. As new and realised NZ\$140.

* Lets look at some early Meccano magazines: French Vol 1 No 1. Very rare edition. Nice original condition NZ\$400. French Vol 1 No 3 In nice condition NZ\$130. French Vol 1 No 4 Also in nice condition NZ\$125.

* 1934-35 French Dinky Meccano Catalogue. Nice catalogue this featuring the Meccano, Dinky and Hornby range at its peak. Lovely condition a good buy at NZ\$120.

* Some of you may have the next item. Meccano 6 volt electric motor in original box. It is the "Cricket Ball" motor (EO6). Motor looks in great condition as is box. Sold very well at NZ\$130.

* Meccano Aeroplane- Rare advertising store display model. Here is how the seller described it "This very detailed all metal constructed four propeller vintage aeroplane is mounted on a metal and wooden platform base and is made entirely from Meccano vintage parts. The wingspan is approx 30" in length, 24 1/2" from the nose to the tail and 15" in height (from the top of tail to bottom of the base. The entire airplane is fully wired and electrified with the original vintage power cord. the inside of the fuselage is fully electrified and has six or more bulbs inside to illuminate the clear plastic windows and aircraft interior. There are two age stress cracks to the pilot's plastic windscreen. the four airplane props are wired and designed to spin as well. The vintage pedestal that the Meccano airplane sits upon is approx 12" x 12" x 6" tall and is constructed of a metal frame work resting on a painted black wooden base. Four vintage Meccano signs are marquee'd on the sides. This original vintage Meccano airplane store display is quite heavy and weighs approx 30 lbs. or more and is free of rust or corrosion. The original paint and finish is bright and shiny. Overall condition of this rare and unusual Meccano

advertising store display is excellent." A remarkable item that sold for NZ\$1550.

* Dinky Tank Transporter Gift Set. This set is Mint in Box, being the early striped box. Everything is in exceptional condition-hard to find better. NZ\$1000.

* 1943 AC Gilbert Chemistry Set No 1. Being a war time issue this set differs from other Gilbert sets in a few ways. Firstly it came out in a large two

piece cardboard box instead of the usual steel case. Also certain items could not be included due to the war effort. These included copper, zinc strips and nickel steel wire. Also due to shortage of chemicals, the supplies were not filled to the top of the vials. Set has had light use-lovely set to own. Sold for NZ\$70.

* No 1 Meccano Elektron Set. In nice condition, lid has one split corner and cork for iron fillings needs repair. Always sell well-NZ\$520.

* Original Constructor Car quite rare, this condition.

* Meccano P/N 36B

Screwdriver. In great handle. Another item that missing in sets. NZ\$90.

* Late 1940s Meccano Set set is complete apart from Some of the set has been

on the stringing cards. All stringing cards present plus all small parts boxes. Box is in nice condition. Manuals are OK although covers have come loose. A nice early set and sold for NZ\$1700.

* Boxed Meccano Puzzle Maker circa 1960s-1970s. Boxed with instructions and two of the four colour pictures are still intact. One picture of a cruise ship was cut into a jigsaw. Great condition and good buying at NZ\$12.

* Pocket Meccano Set. Mint in Box. Old store stock, never been used. NZ\$30.

* The ultimate Meccano manual to own-Chinese edition of the 1916 Meccano Instruction Book. In very good condition and looks if it is up to the largest set of that time. Sold for approx. NZ\$600.

* Unopened Meccano 3M Motorised set circa 1977. Has lost its outside cellophane covering otherwise in great condition as to be expected. Complete with manual. NZ\$100.

* And for last, something not Meccano but would make a great Meccano model. Technofix Holiday Camp #304 Germany 1950s. Seller describes what this tinplate toy does "On one end of the camp the merry-go-round is spinning as the two kids in the swing go swinging and the boat sails across the lake. On the other end there is a lady and a little boy comes flying out of the tent to meet up with some guy and a girl to find out what's going on with the two dogs running back and forth over at the trailer." Has a bit of rust but colours are bright, box a bit mildewy. The model measures 28" by 9". Neat tinplate toy and sold for NZ\$450.

Well that's all for this time, thanks for reading, until next time, farewell.

John Hansen. <happypastimes@ihug.co.nz>



Meccano No 1 Key. Getting one in "fair" NZ\$82.

Special condition, has steel sells well, usually

No 9. In wooden box-three hanks of cord. used and some is still

New Zealand Club Diary 2007

Auckland Meccano Club.

Contact - David Wall - Ph 09 426 1965.

Meetings at 2 pm on second Saturday every third month.

10 November Peter and Jan Hancock

Phone (09) 535.5355

MWT Meccano Club.

Contact - John Hansen - Ph 06 325 8211.

Meetings at 2 pm as listed. Wanganui meetings at St. Luke's Church Hall, cnr. Cornfoot and Manuka Streets, Wanganui.

8 September - Mortons at Feilding Fellowship.

13 October - Wanganui. Formal meeting.

1 December - Tour and Christmas Dinner, New Plymouth

Wellington Meccano Club.

Contact - Lou Nichols Ph 04 973 6177.

Meetings at 7.30 pm on first Friday every second month at Konini School, Wainuiomata.

12 October, 7 December.

Christchurch Meccano Club.

Contact - Graeme O'Neill Ph 03 322 7456.

Meetings at 7.30 pm on first Friday every month (except January) at St John's Hall, cnr St John St. and Ferry Rd., Woolston, Christchurch.

7 September, 5 October, 2 November, 7 December.

Other Important Dates

14-16 March 2008 - March Madness - Aotearoa Thermal Resort, Tokaanu, Turangi. Email <moodys@ihug.co.nz>.

10-12 April 2009 - Convention, Christchurch.

Additional Meccano Contacts

Hamilton - Don McClelland Ph 07 843 4198.

Hawera - Daryl Anderson Ph 06 278 7666.

Kapiti Coast - Bob Prescott Ph 04 905 2963.

Napier - Trevor Adam Ph 06 843 4837.

Palmerston Nth - Bruce Geange Ph 06 357 0566.

Wanganui - Tom Pittams Ph 06 345 9099.

Internet sites

International Society of Meccanomen (ISM)
<www.internationalmeccanomen.org.uk>.

Meccano Webring <www.meccanoweb.com/meccring>.

Category Indexes to articles in Meccano related Magazines <www.dalefield.com/nzfmm/constructorq/bneilson.html>

Articles etc. for the October 2007 issue of NZFMM Magazine should be sent to the Editor well before 7 October 2007

Back Numbers - NZFMM Magazines from April 2001 are available again. Contact the Editor.

Consolidated Index for NZFMMM 1976 to 2006 Vols. 1 to 30

28 pages in .rtf format can be sent by email only on email request to the Editor.

Buy, Sell, Auction, & Exchange.

Advertisements in this section are free.

First insertion will be printed in full.

Subsequent identical insertions (max. one) may be abbreviated to fit space available.

For Sale - from Meccano Supplies

The current range of new Meccano sets, Meccano spare parts, the Exacto range of Spare Parts, Nuts and Bolts. Contact Wayne Blakely, Patikipapa Rd, RD 1, Marton. Ph (06)3276184, <wayne@meccanosupplies.co.nz>

For Sale - Meccano Parts and Sets by the Wells.

All the genuine Meccano and junior Meccano parts and sets,!!! 1. There is also geared motors, the Meccanisms range and the new Speed Play Range.

News Flash - We go the extra mile at at Meccparts and are now providing spare parts from all current Meccano sets by breaking current sets to obtain parts, which will mean that some parts will be in shorter supply than others, but we welcome enquiries should builders have a particular interest in a part. The new parts include the remote control chassis and controllers.

MasterCard and Visa accepted, cheques and direct deposit most welcome.

Andrew & Vivien & Zoe Wells, P O Box 26-179, Epsom, Auckland 1003. Phone 09 523 4447, Fax 0800 MECCANO. email andrew@meccparts.com. <www.meccparts.com>

Internet Buy, Sell and Watch Agent Available.

John Hansen, Phone (06) 3258 211, email <happypastimes@ihug.co.nz>.

----- Reminder -----

March Madness 14-16 March 2008

Have you booked your accommodation or are you going to sleep in the snow?? See April 2007 issue for details.

Have you started your Ball Rolling model? Read the criteria in this issue. Good cash prizes to be won.

Have you started a / any / that / some / model to bring?

Where is Meccano in the Interests of Today's Youth?

The Manawatu Evening Standard reported on Tuesday August 28th that Palmerston North Boys' High School technology teacher, Chris Welch, had won the award for the Most Dedicated Mechanical Engineering Teacher. The award was also recognition of a job well done by the technology team at PNBHS.

Speaking after hearing of the award Mr Welch said. "Now more than ever kids need exposure to a range of opportunities. They don't get Meccano or Leggo sets, anymore - life's instant for them.

Most readers will agree that kids are not into model building like they used to be.



Two of Gerald Hart's Models

These two models are the work of Gerald Hart. The 1920s Steam Truck is based ModelPlan 162 and the Veteran Automobile on Leaflet No 15 in *The GMM Series of Modern Supermodels*.

The ModelPlans and Leaflets are available from MW Mailorder.

Photos by Gerald Hart



Action in the Feilding Library.



Pictured here are Bruce Neilson (above left) and John Ince (below left) during the July school holidays when they spent five mornings entertaining children with a range of hands-on models. The event was organised by Simon Johnstone, Feilding Librarian, and was held in the Feilding Library. As there was lots of interest from both the young people and their parents and grandparents, the event will probably be staged again next year.

Photos by Simon Johnstone.