



NZFMM MAGAZINE

Volume 28 No 6

December 2004

**Christmas Greetings to our readers.
We hope you will not be feeling like this
monkey after your Christmas Dinner!**



Published by The New Zealand Federation of Meccano Modellers

NZ Federation of Meccano Modellers Magazine

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The NZFMM Magazine is published six times a year in February, April, June, August, October and December. The publisher is the NZ Federation of Meccano Modellers. The purpose of the magazine is to publish articles and photographs about Meccano and Meccano models, to report the meetings of New Zealand Meccano Clubs, to print letters expressing the views of Meccano modellers, to keep members informed of future events and to print advertisements of Meccano related things. The views expressed in the magazine are not necessarily those of the editor or of the Federation.

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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Subscriptions

Your subscription renewal form for 2005/2006 will be included with our February 2005 issue.

Christmas comes but once a year

According to Wes Dalefield on Spanner II, there are in fact four ages of Man.

1. You believe in Santa Claus.
2. You don't believe in Santa Claus.
3. You are Santa Claus.
4. You look like Santa Claus.

Actually 2004 has been a good year for Meccano enthusiasts in a number of ways.

Continued production of new sets and parts by Nikko. Sourced from China with their low costs of production, new parts appear to finish off a new model then disappear from production fairly rapidly. Colour is whatever enhances the sales prospect of the new set and also to help in the assembly of the one off model.

The second hand and replica Meccano industry is in full production to the extent that some official Meccano prices are well undercut to the benefit of the big model builder.

Meccano literature both new and old is becoming freely available on paper and on CD (see the CD 'Everything about Peter Goddard's Blocksetting Cranes'). Modelplans, magazines, sale brochures, posters, etc can be viewed on computer screen in full colour at very little cost.

The continuance of the Internet discussion group Spanner II certainly gives a lifeline to isolated Meccanomen and brings to light some very rare items, answers to questions within an hour, and an increasing use of pictures from ubiquitous digital cameras.

And definitely the introduction and maturing of Andrew Wells Meccanisms MotorVator™ computer control which has the ability of bring Meccano and robotics to the attention of the modern person who wants to experiment across two areas of mechanics and computers. To see what our Lego competition has achieved, have a read of the article "Mindstorms Not Just a Kid's Toy" on <www.spectrum.ieee.org/pubs/spectrum/0901/mind.html>

We have given you in this issue enough modelplans of small models that you can certainly build something before the first club meeting in 2005.

I would like to thank all the people who have made 2004 another good year for the NZFMM Magazine from the contributors (new and old who had their arms twisted in the nicest possible way), to the team who put the magazine together and delivered it to you, and wish you all a Merry Christmas and a Happy New Year.

R. Bruce Neilson.

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Smallest Meccanograph

by Daryl Anderson.

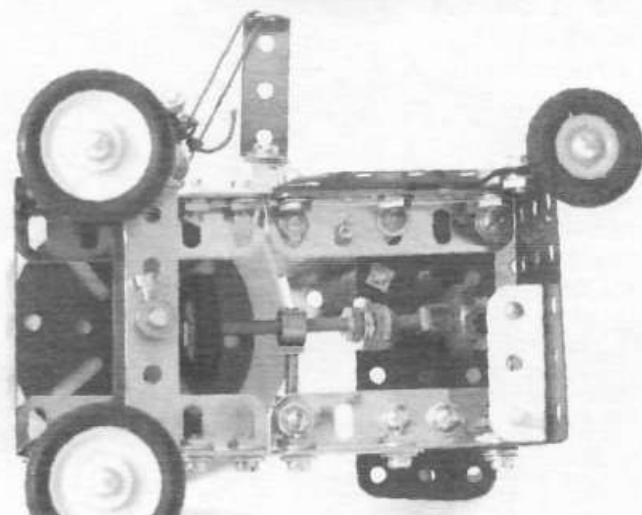
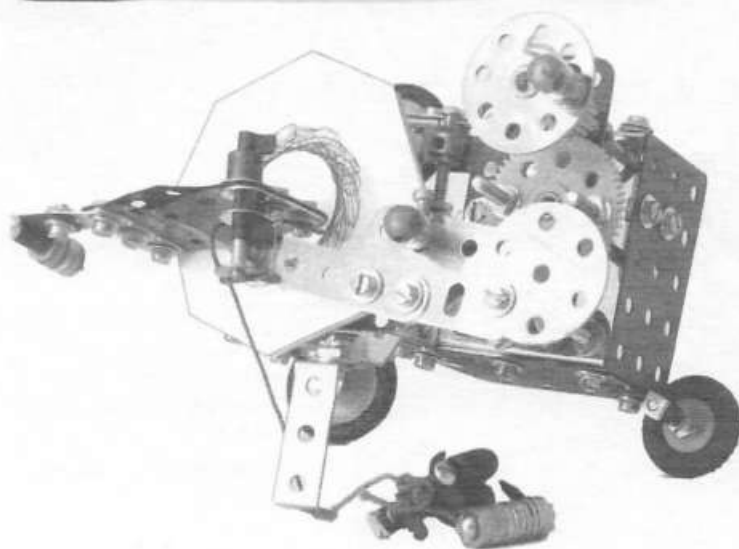
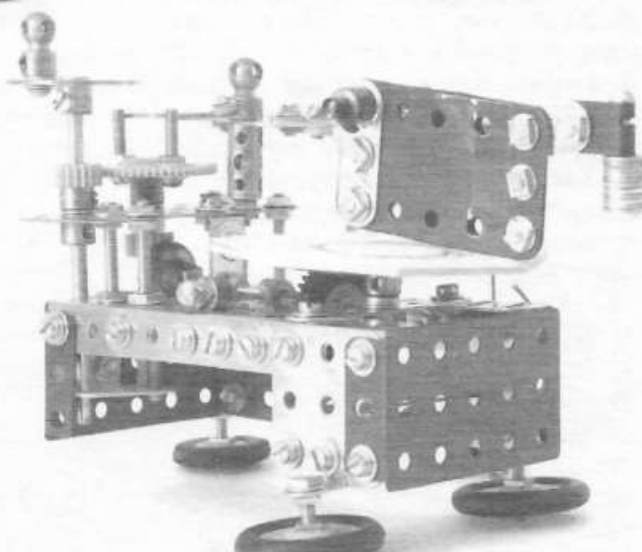
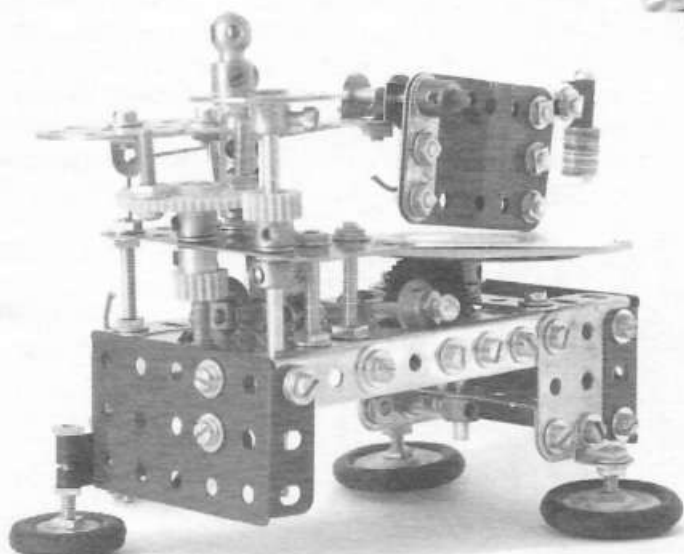
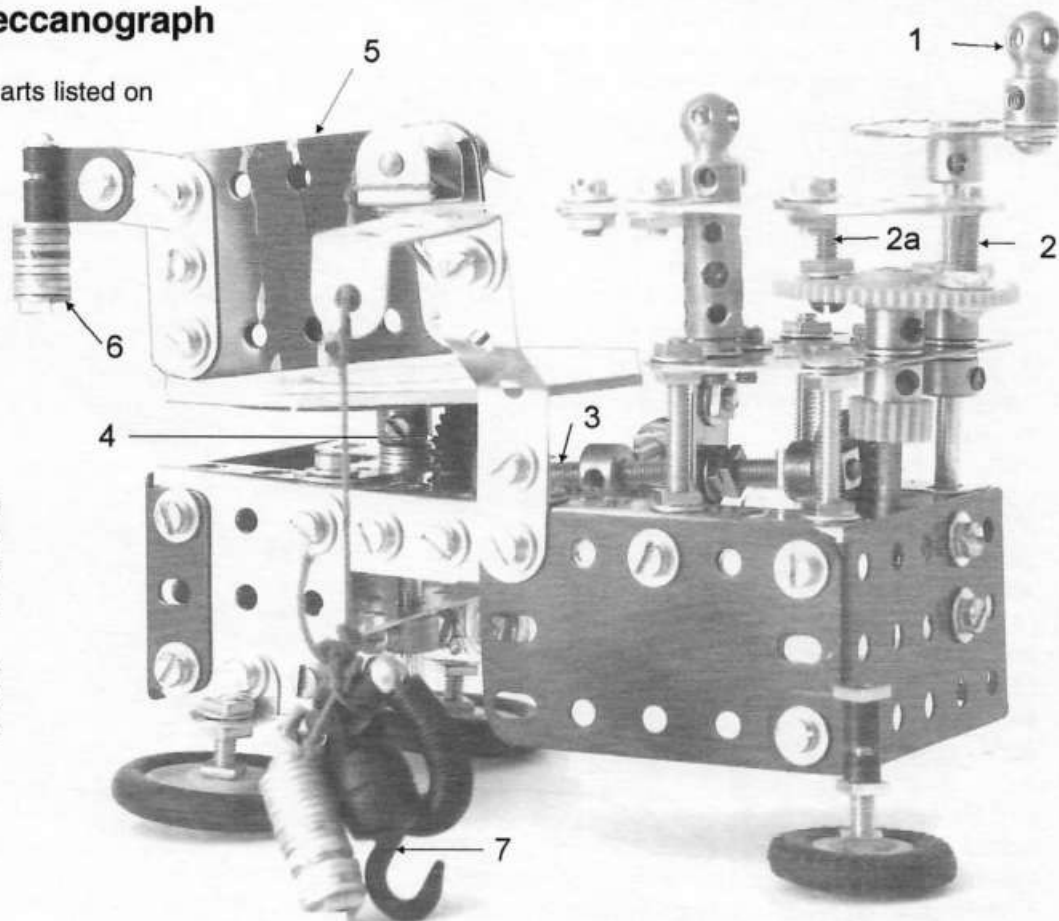
Uses the limited supply of parts listed on page 19 of the August 2004 NZFMM magazine.

- 1 – Turn the handle.
- 2 & 2A – Bolts to bumper arm P/N 24a Wheel Disc.
- 3 – Revolving Drive.
- 4 – Friction drive onto P/N109 Face Plate.
- 5 – Pivoting pen holder.
- 6 – Counterweight.
- 7 – Counterweight

Here are five different views of the Meccanograph which should contain enough information for you to build it.

A ball point pen may be clamped between the two Flexible Plates, (5) to do the drawing.

Have a go!



The Bates Steel Mule Tractor 1918

design and text by Bruce Geange.
photographs by Bruce Neilson.

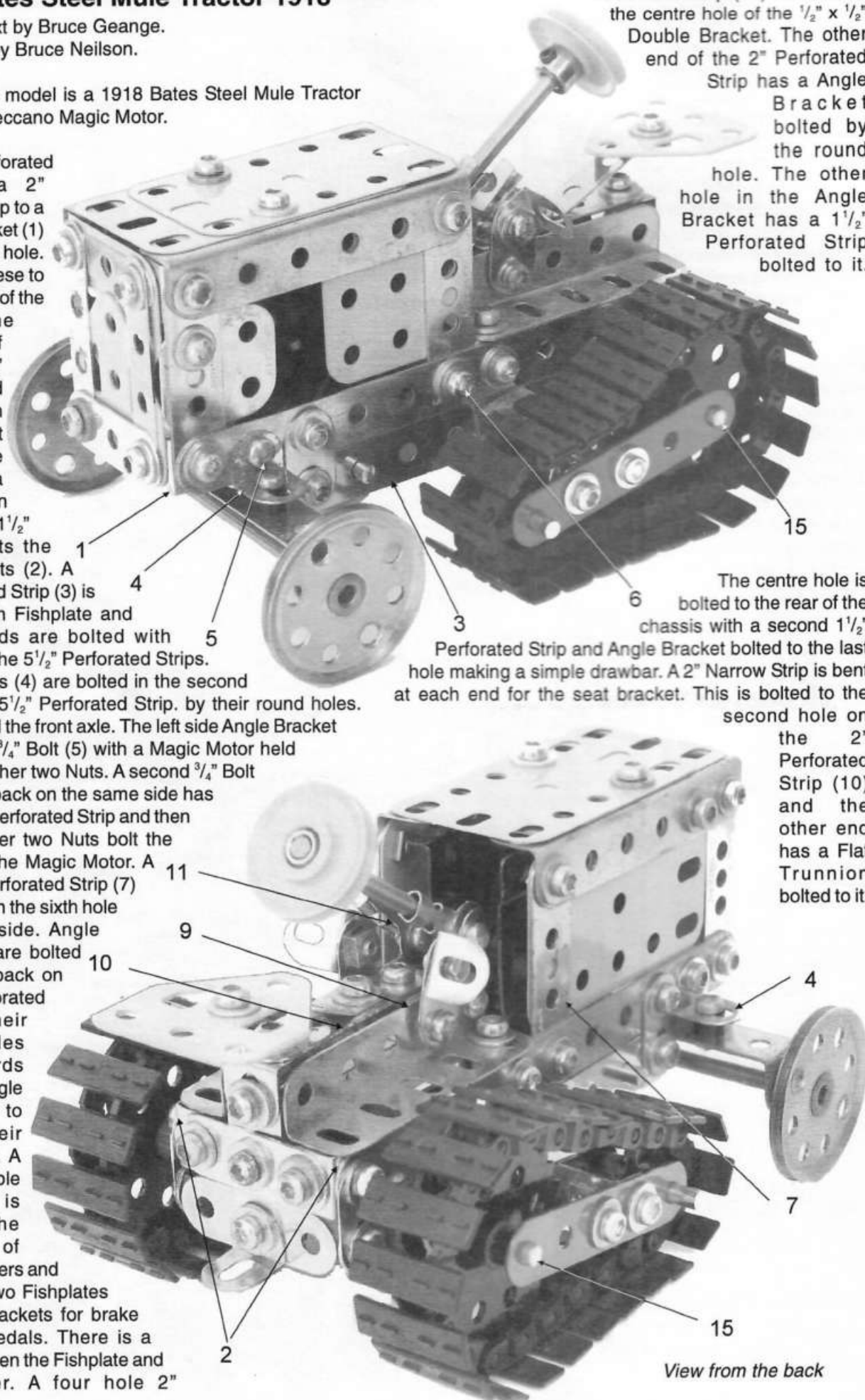
This Meccano model is a 1918 Bates Steel Mule Tractor driven by a Meccano Magic Motor.

Bolt a 5½" Perforated Strip and a 2" Perforated Strip to a ½" Angle Bracket (1) by the slotted hole. Build two of these to make the front of the model. The other ends of the 5½" Perforated Strips have an Angle Bracket (2) on the inside and a Fishplate on the outside. A 1½" Strip connects the Angle Brackets (2). A 4½" Perforated Strip (3) is bolted to each Fishplate and the other ends are bolted with

Angle Brackets (4) are bolted in the second hole on each 5½" Perforated Strip, by their round holes. These will hold the front axle. The left side Angle Bracket is held with a ¾" Bolt (5) with a Magic Motor held between a further two Nuts. A second ¾" Bolt (6), six holes back on the same side has a five hole 2" Perforated Strip and then a Nut. A further two Nuts bolt the other end of the Magic Motor. A five hole 2" Perforated Strip (7) is also bolted in the sixth hole on the right side. Angle Brackets (8) are bolted seven holes back on the 5½" Perforated Strips by their round holes facing inwards with a 2½" Angle Girder bolted to these by their slotted holes. A ½" x ½" Double Bracket (9) is bolted in the second hole of the Angle Girders and also carries two Fishplates with Angle Brackets for brake and clutch pedals. There is a Washer between the Fishplate and Angle Girder. A four hole 2"

Perforated Strip (10) is bolted to the centre hole of the ½" x ½" Double Bracket. The other end of the 2" Perforated Strip has a Angle Bracket bolted by the round hole. The other hole in the Angle Bracket has a 1½" Perforated Strip bolted to it.

The centre hole is bolted to the rear of the chassis with a second 1½" Perforated Strip and Angle Bracket bolted to the last hole making a simple drawbar. A 2" Narrow Strip is bent at each end for the seat bracket. This is bolted to the second hole on the 2" Perforated Strip (10) and the other end has a Flat Trunnion bolted to it.

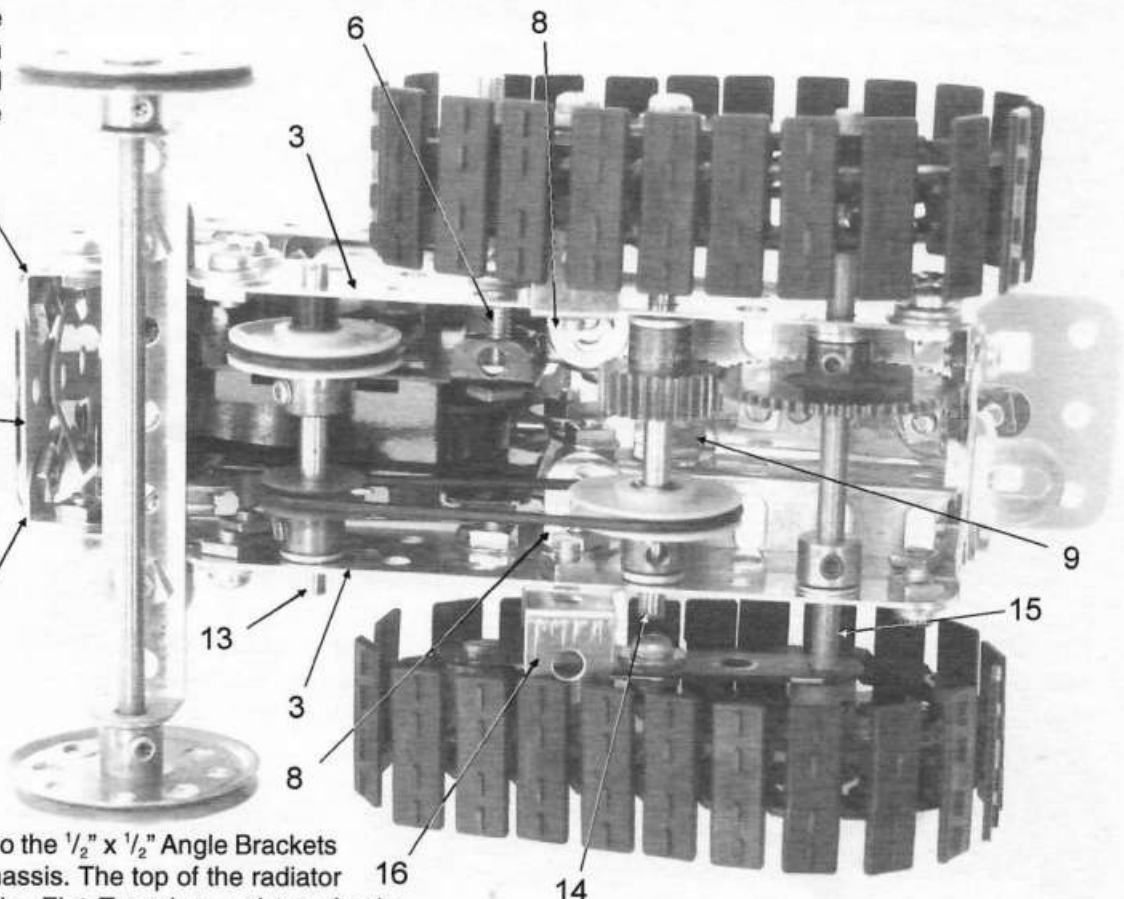


View from the back

The steering is a 2" Axle Rod with a 1" Pulley on one end and a Rod and Strip Connector on the other. A Narrow Fishplate is bolted to the Rod and Strip Connector. The Narrow Fishplate is bolted to the front hole on the right side Angle Girder spaced with two Washers. A Rod and Strip Connector (11) is bolted to the brake on the Magic Motor.

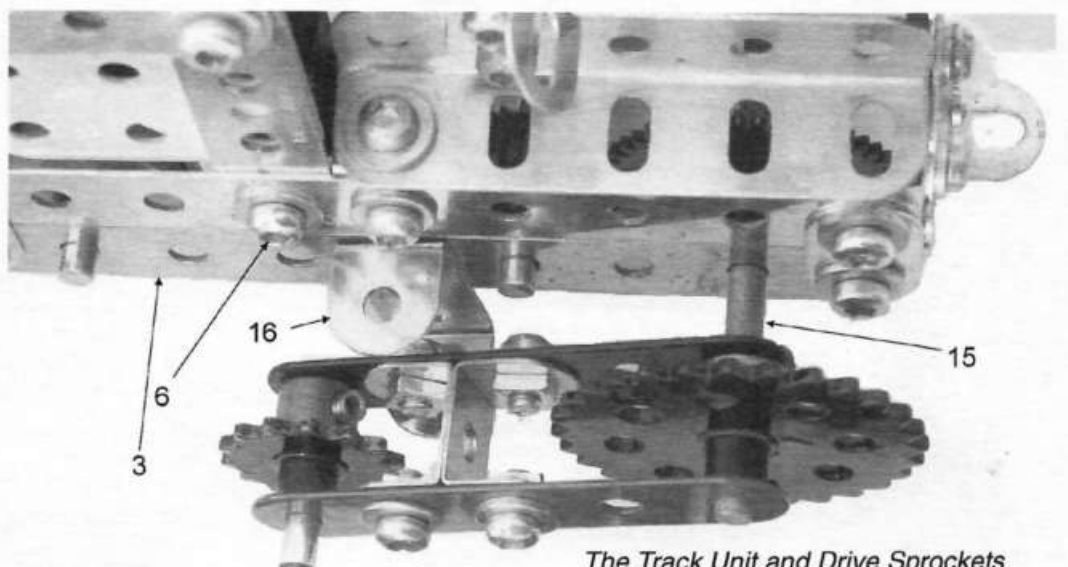
The radiator is made up from a Flat Trunnion (12), two 2" Narrow Strips and a 1 1/2" Perforated Strip bolted to the 1/2" x 1/2" Angle Brackets (1) at the front of the chassis. The top of the radiator has a 1 1/2" Narrow Strip, Flat Trunnion and two Angle Brackets secured by their round holes. A 3" Angle Girder is bolted between the 2" Perforated Strips that form the bonnet. The right side has a 2 1/2" x 1 1/2" Flexible Plate also. The left side has a 1 1/2" x 1 1/2" Flat Plate and a 1" x 1" Flat Girder leaving room for the Magic Motor key. Two 2 1/2" x 1 1/2" Flexible Plates form the top of the bonnet held by two Bolts. A 2" Axle Rod (13) is fitted in the second holes of the 4 1/2" Perforated Strips and carries a 1" and a 1/2" fixed Pulleys with suitable spacers. A second 2" Axle Rod (14) is in hole six and carries a 3/4" Pinion and a 1" fixed Pulley with Washers. The rear 4" Axle Rod (15) has a 1 1/4" Gear Wheel and a Collar spaced with Washers. 'O' rings are used for driving bands. The front Axle is a 3 1/2" Double Angle Strip bolted to Angle Brackets (4) and spaced by a P/N 38b Plastic Spacer using 3/8" Bolts. A 4" Axle is used with two 1 1/2" Pulleys.

The rear track units are made up using two 2 1/2" Perforated Strips spaced by two 1/2" Double Brackets in the second and third holes. These are fitted back to back. A 1" Axle in the first

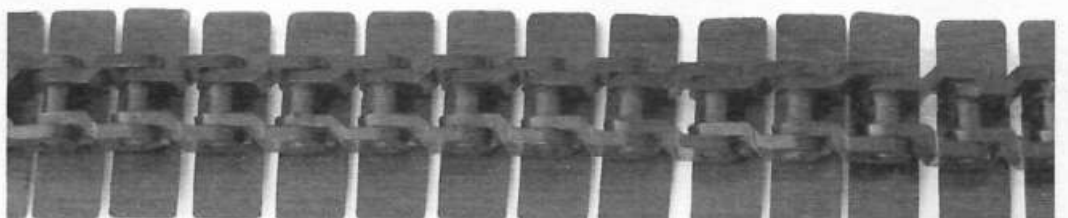


The Tractor viewed from underneath

holes carries a P/N 38b Plastic Spacer and a 3/4" Sprocket. The fifth holes fit into the rear Axle (15) of the tractor and carry a 1 1/2" Sprocket and a Plastic Spacer. To prevent the tracks flopping around when the model is picked up, a P/N 48e 1" x 1/2" Double Bracket (16) is bolted in the fifth hole on the 4 1/2" Strip at a slight angle.



The Track Unit and Drive Sprockets



Boy and Scooter

designed and built by Selwyn Bluett.
text and pictures by Bruce Neilson.

Comments.

This little model appeared at the April 2004 MWT meeting. All washers are about half the thickness of standard Washers.

Background -

The model is not complicated and all features are clearly shown in the figures. Most but not every detail has been supplied so a careful study of the modelplan is required. A CD Rom containing additional large digital photographs is available. Contact the Editor.

Instructions.

(A) Scooter. - (A1) Handlebar. P/N 18a, 1 1/2" Axle Rod. (A2) Front Pivot. P/N 17, 2" Axle Rod, carrying. (A3) Front Fork. P/N 179, Rod Socket, carrying. (A4) Foot Pivot. P/N 125, 1/2" x 1/2" x 1/2" Reversed Angle Bracket, by slotted hole. Adjust bends to tilt (A2). Washer. P/N 37a, Nut, tight onto P/N 11a, 1" x 1/2" x 1" Double Bracket. P/N 37a, Nut tight on P/N 11a.

(A5) Front Axle. P/N 111, 3/4" Bolt, carrying P/N 37a, Nut. P/N 11a, 1" x 1/2" x 1" Double Bracket. Washer, six of. P/N 23b, 1/2" Pulley No Boss, with Tyre. Washer, four of. P/N 11a, 1" x 1/2" x 1" Double Bracket. Washer. Bolt head.

(A6) Foot rest. P/N 6a, 1 1/2" Perforated Strip, bolted to (A4) and (A7) on top and (A8) underneath.

(A7) Mudguard. P/N 12c, 1/2" x 1/2" Obtuse Angle Bracket, which carries another P/N 12c and P/N 10.

(A8) Back Forks. P/N 12, 1/2" x 1/2" Angle Bracket, which carries two P/N 12, 1/2" x 1/2" Angle Bracket, by round holes which in turn carry two P/N 10, 1" Fishplate, by slotted holes to form forks for the back wheel.

(A9) Back Axle. P/N 111, 3/4" Bolt, carrying P/N 37a, Nut. Washer. P/N 10, 1" Fishplate. Washer, six of. P/N 23b, 1/2" Pulley No Boss, with Tyre. Washer, six of. P/N 10, 1" Fishplate. Washer. Bolt head.

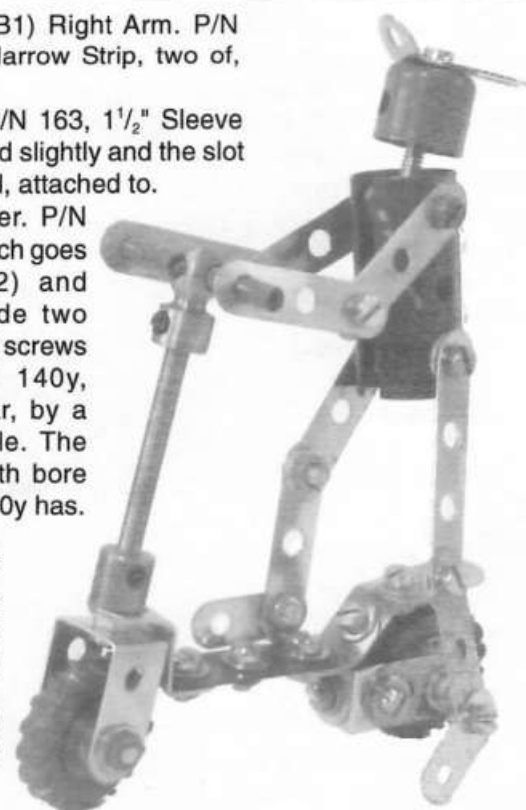
(B) Boy. - (B1) Right Arm. P/N 235g, 1 1/2" Narrow Strip, two of, attached to.

(B2) Body. P/N 163, 1 1/2" Sleeve Piece, opened slightly and the slot faces forward, attached to.

(B3) Shoulder. P/N 37b, Bolt, which goes through (B2) and carries inside two Washers and screws into a P/N 140y, 4 hole Collar, by a threaded hole. The centre smooth bore of the P/N 140y has.

(B4) Neck.

1 1/4" Bolt which starts at the bottom with a P/N 37a, Nut. Washer. P/N 140y, 4 hole



Collar. P/N 37a, Nut. P/N 37a, Nut. Washer. P/N 164, Chimney Adaptor. P/N 12c, 1/2" x 1/2" Obtuse Angle Bracket. P/N 10, 1" Fishplate. Bolt head.

(B5) Left Arm. P/N 235g, 1 1/2" Narrow Strip, two of, attached to (B2) by a Bolt and Nut.

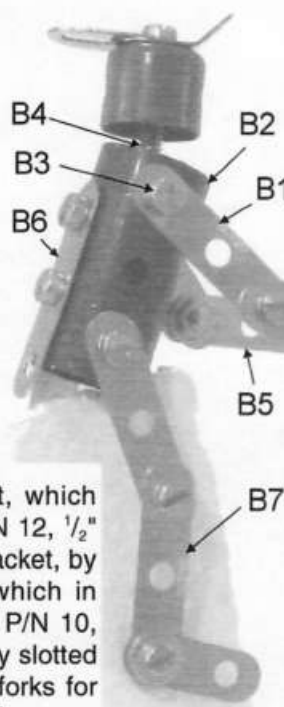
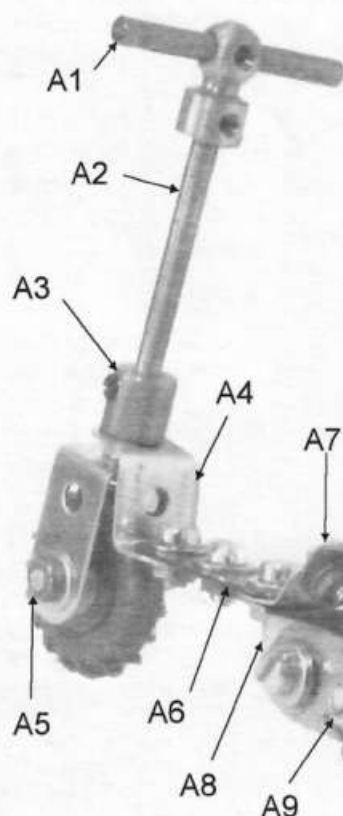
(B6) Backbone. P/N 235g, 1 1/2" Narrow Strip bolted to the back of (B2).

(B7) Right Leg. P/N 235g, 1 1/2" Narrow Strip, two of, bolted to (B2). P/N 806b, 1" Narrow Strip as a foot.

(B8) Left Leg. Differs from (B7) as a P/N 235h, 2" Narrow Strip is bolted to (B2), then P/N 235g, 1 1/2" Narrow Strip, then P/N 806b, 1" Narrow Strip.

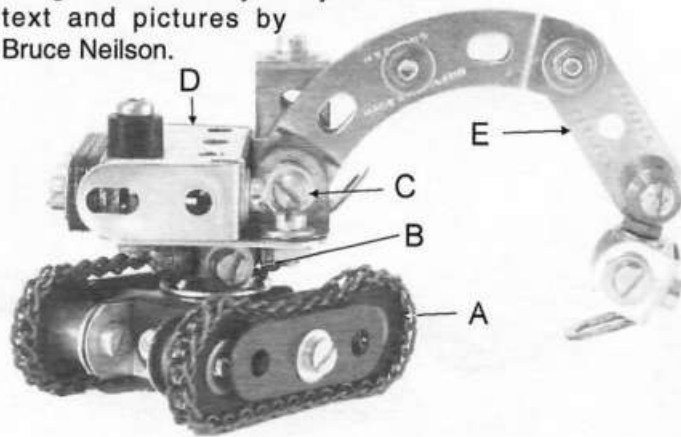
Parts List

Pt No.	Description	Size	Qty
6a	Perforated Strip	1 1/2"	1
10	Fishplate	1"	4
11a	Double Bracket	1" x 1/2" x 1"	1
12	Angle Bracket	1/2" x 1/2"	3
12c	Angle Bracket Obtuse	1/2" x 1/2"	3
17	Axle Rod	2"	1
18a	Axle Rod	1 1/2"	1
23b	Pulley No Boss	1/2"	2
37a	Nut		25
37b	Bolt		20
38	Washer		6
111	Bolt	3/4"	2
125	Reversed Angle Bracket	1/2" x 1/2" x 1/2"	1
136a	Handrail Coupling		1
140y	Collar 4 Hole		1
163	Sleeve Piece	1 1/2"	1
164	Chimney Adaptor		1
179	Rod Socket		1
235g	Narrow Strip	1 1/2"	8
235h	Narrow Strip	2"	1
806b	Narrow Strip	1"	2
	Washer		30
	Tyre	1/2"	2



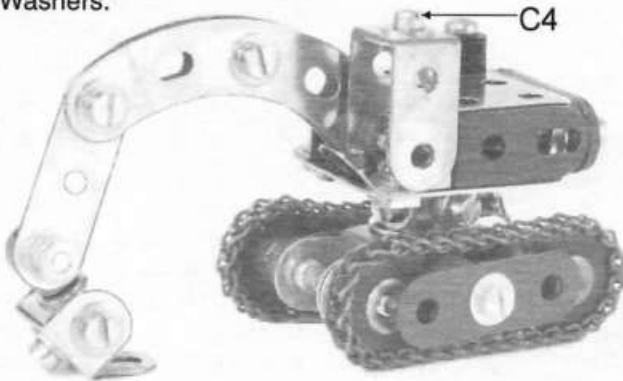
The Smallest Working Digger

designed and built by Selwyn Bluett.
text and pictures by
Bruce Neilson.



Comments.

This little model appeared at a MWT meeting and immediately took my eye. The digger has a number of moving actions and just what you need to impress visitors. All washers are about half the thickness of standard Washers.



Background -

The model is not complicated and all features are clearly shown in the figures. Most but not every detail has been supplied so a careful study of the modelplan is required. A CDRom containing additional large digital photographs is available. Contact the Editor.

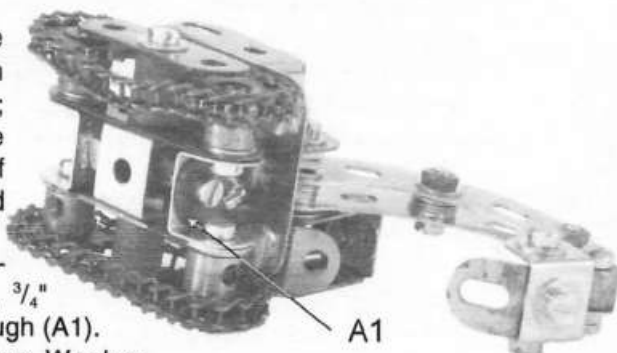
Instructions.

(A) Base - P/N 111, $\frac{3}{4}$ " Bolt carries; P/N 6a, $1\frac{1}{2}$ " Perforated Strip. P/N 38a, Standard Spacer Plastic, two of. P/N 6, 2" Perforated Strip, five hole. P/N 11, $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ " Double Bracket, all on. Repeat for other side.

P/N 96a, 14T Sprocket Wheel, with grub screw. Washer. P/N 6, 2" Perforated Strip, five hole. P/N 11, $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ " Double Bracket; all on loose P/N 111a, $\frac{1}{2}$ " Bolt. Repeat.

(A1) - P/N 48e, $\frac{1}{2}$ " x $1\frac{1}{2}$ " x $\frac{1}{2}$ " Double Angle Strip, with centre hole; bolts to the middle hole of the two end P/N 11.

(B) Turntable - (B2) P/N 147f, $\frac{3}{4}$ " Pivot Bolt, through (A1). P/N 38d, Large Washer.



P/N 140y, 4 hole Collar, ((which carries P/N 37a, Nut. Washer, two of acting as wheels; and bolt head); repeat four times.) P/N 38d, Large Washer. P/N 74, $1\frac{1}{2}$ " x $1\frac{1}{2}$ " Flat Plate. Washer. P/N 37a, Nut, two of, lock nutted.

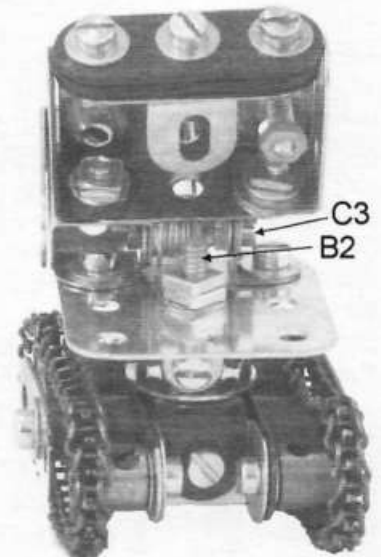
(C) Front Hinge - Bolt head of (C3) P/N 111, $\frac{3}{4}$ " Bolt. Washer. P/N 12, $\frac{1}{2}$ " x $\frac{1}{2}$ " Angle Bracket. P/N 37a, Nut, two of, lock nutted. Washer. P/N 90a, $2\frac{1}{2}$ " - 90° Curved Strip. Washer, six of. P/N 90a, $2\frac{1}{2}$ " - 90° Curved Strip. Washer. P/N 11, $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ " Double Bracket. P/N 11a, 1 " x $\frac{1}{2}$ " x 1 " Double Bracket. P/N 37a, Nut. Tightness will determine looseness of digger

arm. The other legs of P/N 11 and P/N 11a are bolted together. P/N 12c, $\frac{1}{2}$ " x $\frac{1}{2}$ " Obtuse Angle Bracket bolted to P/N 74 to form floor of cab. Bolt (C4) fixes P/N 12, $\frac{1}{2}$ " x $\frac{1}{2}$ " Angle Bracket, to P/N 11a to form back of cab.

(D) Motor and bonnet - P/N 51a, $1\frac{1}{2}$ " x 1 " Flanged Plate. P/N 12b, 1 " x $\frac{1}{2}$ " Angle Bracket, two of. One on each side. P/N 6a, $1\frac{1}{2}$ " Perforated Strip, six of at back with; P/N 111c, $\frac{3}{8}$ " Bolt, three of.

P/N 12, $\frac{1}{2}$ " x $\frac{1}{2}$ " Angle Bracket. All of bonnet bolted to P/N 12 and secured by; P/N 147g, 1 " Pivot Bolt, carrying; P/N 38a, Standard Spacer Plastic right through P/N 74.

(E) Arm - P/N 90a, $2\frac{1}{2}$ " - 90° Curved Strip, two of with spacing washers. P/N 6a, $1\frac{1}{2}$ " Perforated Strip. P/N 111c, $\frac{3}{8}$ " Bolt. P/N 59, Collar. P/N 37a, Nut, two of lock nutted. P/N 11, $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ " Double Bracket. P/N 12, $\frac{1}{2}$ " x $\frac{1}{2}$ " Angle Bracket. P/N 12c, $\frac{1}{2}$ " x $\frac{1}{2}$ " Obtuse Angle Bracket



Parts List.

Part No.	Description	Total
6	Perforated Strip 2"	2
6a	Perforated Strip $1\frac{1}{2}$ "	9
11	Double Bracket $\frac{1}{2}$ " x $\frac{1}{2}$ " x $\frac{1}{2}$ "	5
11a	Double Bracket 1 " x $\frac{1}{2}$ " x 1 "	1
12	Angle Bracket $\frac{1}{2}$ " x $\frac{1}{2}$ "	4
12b	Angle Bracket 1 " x $\frac{1}{2}$ "	2
12c	Angle Bracket Obtuse $\frac{1}{2}$ " x $\frac{3}{2}$ "	2
37a	Nut	25
37b	Bolt	16
	Washers Half Thick	50
38a	Washer Spacer Plastic	5
38d	Washer Large	2
48e	Double Angle Strip $\frac{1}{2}$ " x 1 " x $\frac{1}{2}$ "	1
51a	Flanged Plate $1\frac{1}{2}$ " x 1 "	1
59	Collar	1
74	Flat Plate Perforated $1\frac{1}{2}$ " x $1\frac{1}{2}$ "	1
90a	Curved Strip $2\frac{1}{2}$ " - 90°	2
94	Sprocket Chain	12"
96a	Sprocket Wheel $\frac{3}{4}$ " 14T	4
111	Bolt $\frac{3}{4}$ "	3
111a	Bolt $\frac{1}{2}$ "	4
111c	Bolt $\frac{3}{8}$ "	4
140y	Collar 4 Hole	1
147f	Pivot Bolt $\frac{3}{4}$ "	1
147g	Pivot Bolt 1 "	1

AN OLDIE BUT A GOODIE - THE MECCANO MONKEY

by Bob Prescott

Well, not such an oldie but certainly a goodie - Andreas Konkoly's Meccano Monkey published in the July 1973 Meccano

Magazine.

I first tried to make this model some years ago but could not complete it, probably because I followed the building instructions in the magazine! This time I used the article as a guide and this is how I built my Meccano Monkey.

The monkey's head is a six hole Wheel Disc to which I attached two P/N 147c Bossless Pawls to represent the ears (or you could use large washers), plus two black Bolts and Washers for the eyes. The head is attached to a P/N 89a 3" Stepped Curved Strip through a $\frac{1}{2}$ " plastic coloured Pulley with a $\frac{1}{2}$ " bolt.

The arms (two P/N 90 $2\frac{1}{2}$ " Curved Strips) are fitted to a P/N 90a $2\frac{1}{2}$ " Stepped Strip through the elongated hole beneath the head on a P/N 147g 1" Pivot Bolt in the following order: the $2\frac{1}{2}$ " Curved Strip, a P/N 38a Washer Plastic Spacer, the $2\frac{1}{2}$ " Stepped

Curved Strip, a Washer, then through the body (the P/N 89a), another plastic Spacer and the other curved strip arm, then lock-nutted with a P/N 37h Captive Locknut or if you prefer, the two Nut method.

The body (the $2\frac{1}{2}$ " and 3" Stepped Curved Strips) is joined at the bottom by a P/N 133a Corner Bracket through the base of the 3" Stepped Curved Strip and the bottom elongated hole in the $2\frac{1}{2}$ " Stepped Curved Strip.

The legs and tail are connected through the base hole of the P/N 153a Corner Bracket on a 1" Pivot bolt in the following order: the $2\frac{1}{2}$ " Curved

Strip right leg, P/N 38b Plastic Spacer Mini, the Corner Bracket, the body $2\frac{1}{2}$ " Stepped Curved Strip, a P/N 235b $3\frac{1}{2}$ " Narrow Strip representing the tail, another Mini Plastic Spacer, the $2\frac{1}{2}$ " Curved Strip left leg and finally a captive Locknut. If you prefer you could use Collars or stacked Washers instead of the Mini Spacers. A Fishplate is connected to

the end of the tail. The monkey is now complete.

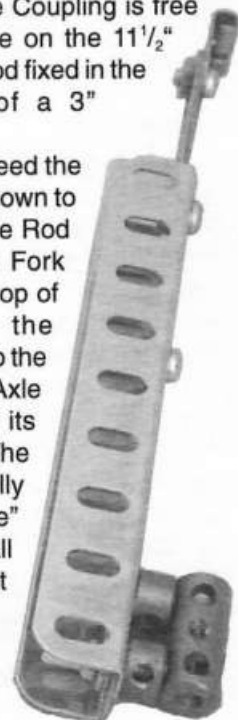
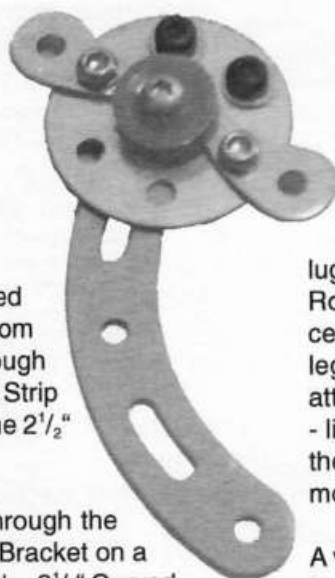
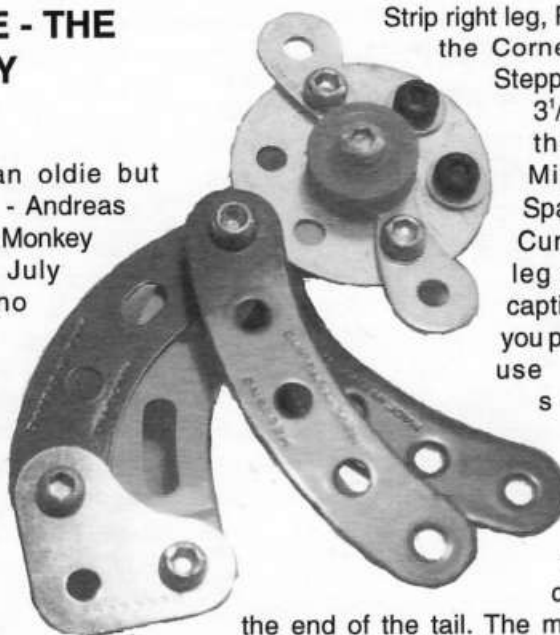
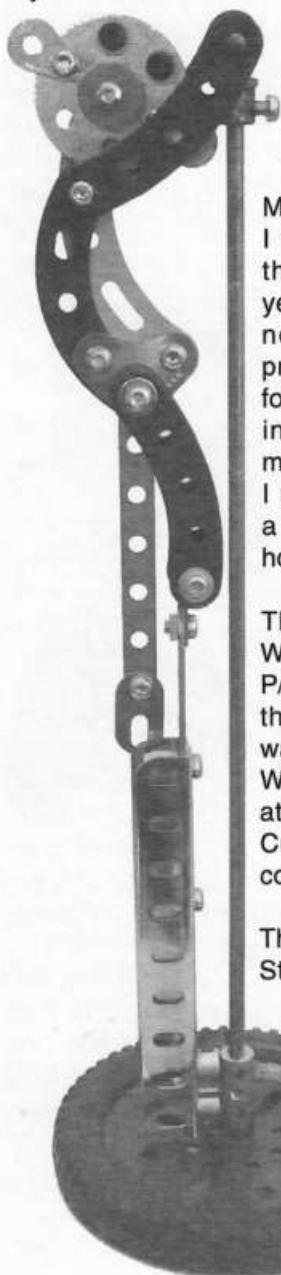
To build the operating handle, two $4\frac{1}{2}$ " Angle Girders are bolted together to form a "U" and the top fixing Bolts hold two $3\frac{1}{2}$ " Perforated Strips sandwiched together for strength extending from the "U"

girders by three holes. A P/N 212a Rod and Strip Connector is bolted to the top hole of the $3\frac{1}{2}$ " Perforated Strips. A Coupling is bolted to the bottom of the handle spaced from it by two Collars (or you could use plastic Spacers) ensuring that the Coupling is free to move on the $1\frac{1}{2}$ " Axle Rod fixed in the boss of a 3"

Pulley and Motor Tyre.

To complete the model, feed the handle and the monkey down to the base of the $1\frac{1}{2}$ " Axle Rod and connect a P/N 116 Fork Piece by its boss to the top of the Axle Rod. Fix the monkey's arms pivotally to the lugs of the Fork Piece using a $1\frac{1}{2}$ " Axle Rod held in position by a Collar at its centre (the MM article instructed "The legs of the Monkey are then pivotally attached to the lugs of this Fork piece" - little wonder that I didn't finish it!). All the pivoting joints of the model must move freely.

A very clever Konkoly design - he will be missed.



Peter the Pedaller MKIII

by Bob Prescott

You will remember "Peter the Pedaller and Lazy Larry" in the February 2004 magazine. Although I enjoyed the challenge of building the model from three photographs, it was as I call it a "maintenance model". It did need attention, adjustment, was quite noisy and had several exposed gears so I decided to build a much simpler version still using Peter and Larry from the original.

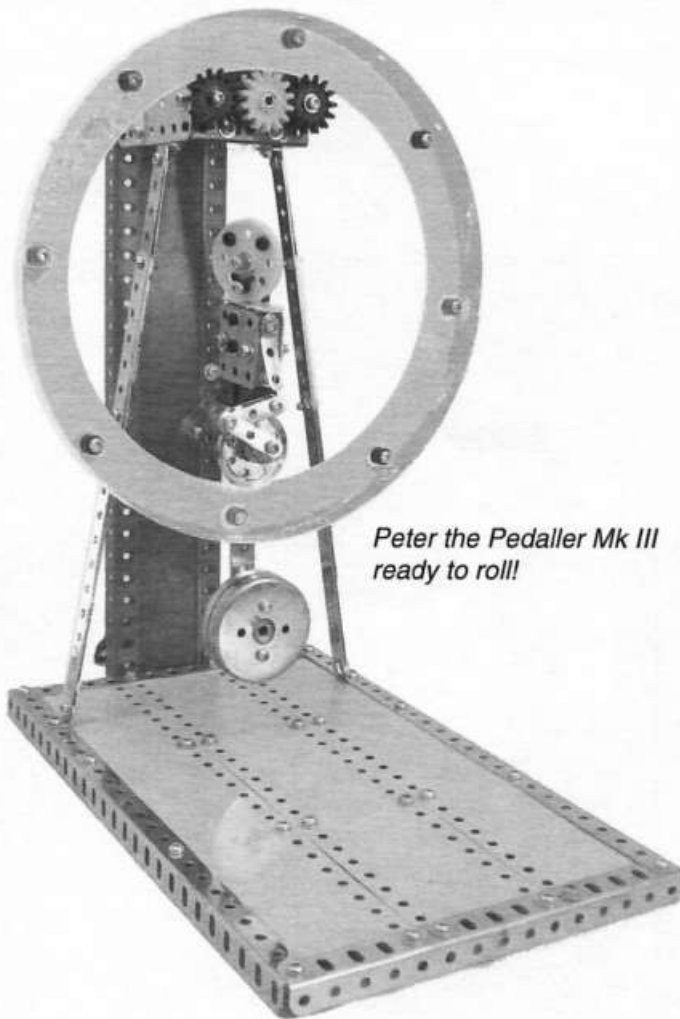
The base is framed by two $12\frac{1}{2}$ " and two $7\frac{1}{2}$ " Perforated strips with three $12\frac{1}{2}$ " x $2\frac{1}{2}$ " Strip plates forming the floor with three $7\frac{1}{2}$ " Perforated strips bracing the strip plates underneath.

The tower consists of two $12\frac{1}{2}$ " Angle girders sandwiched together on each side for rigidity with a $12\frac{1}{2}$ " x $2\frac{1}{2}$ " Strip plate between.

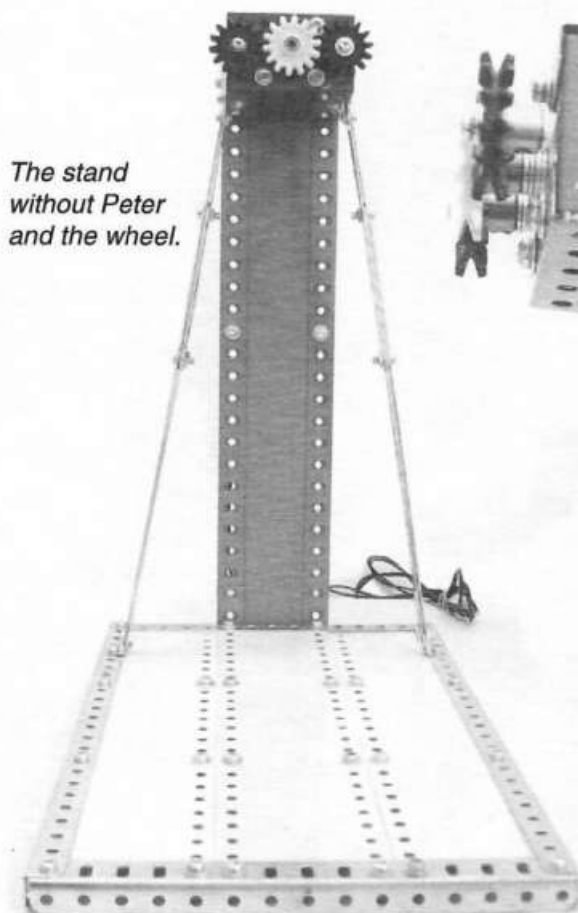
The drive box is formed by two $3\frac{1}{2}$ " x $2\frac{1}{2}$ " Flanged plates top and bottom joined by a $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flat plate at the front and two $1\frac{1}{2}$ " Perforated strips at the back. The box is supported by two $9\frac{1}{2}$ " and two $5\frac{1}{2}$ " Perforated strips sandwiched together on each side adjusted to the correct length. The box is completed by two $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flexible plates overlapped three holes on each side.

The drive is by way of a 3 flat shaft MO motor and a P/N 760a 19 to 1 Gearbox mounted on the front of the drive box driving a P/N 27f Multi purpose gear wheel. This in turn drives two other free wheeling Multi purpose gear wheels mounted on pivot bolts. As before I powered the model via a Hornby Control Centre but any transformer around 6v 400ma would do the job.

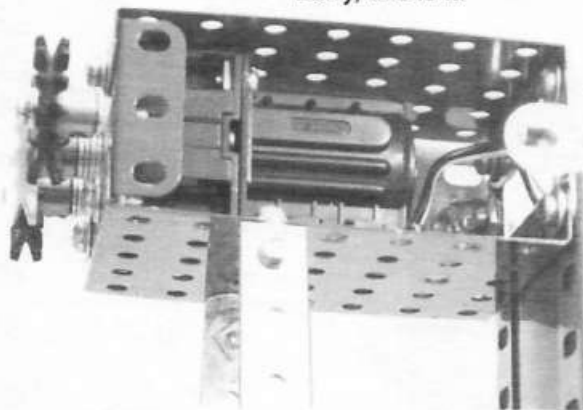
The model is now maintenance free, much quieter and a crowd pleaser and if you want a much simpler Peter and Larry, this is it!



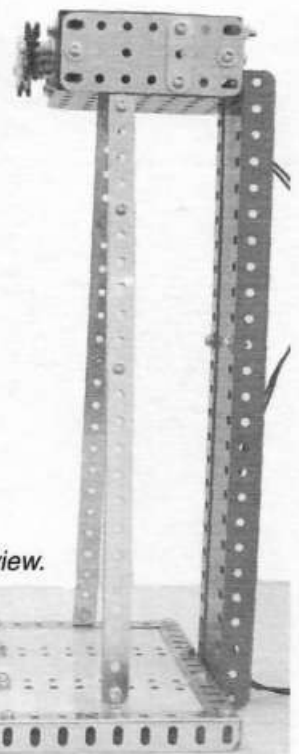
Peter the Pedaller Mk III ready to roll!



The stand without Peter and the wheel.



The Motor and drive box with the side plate removed.



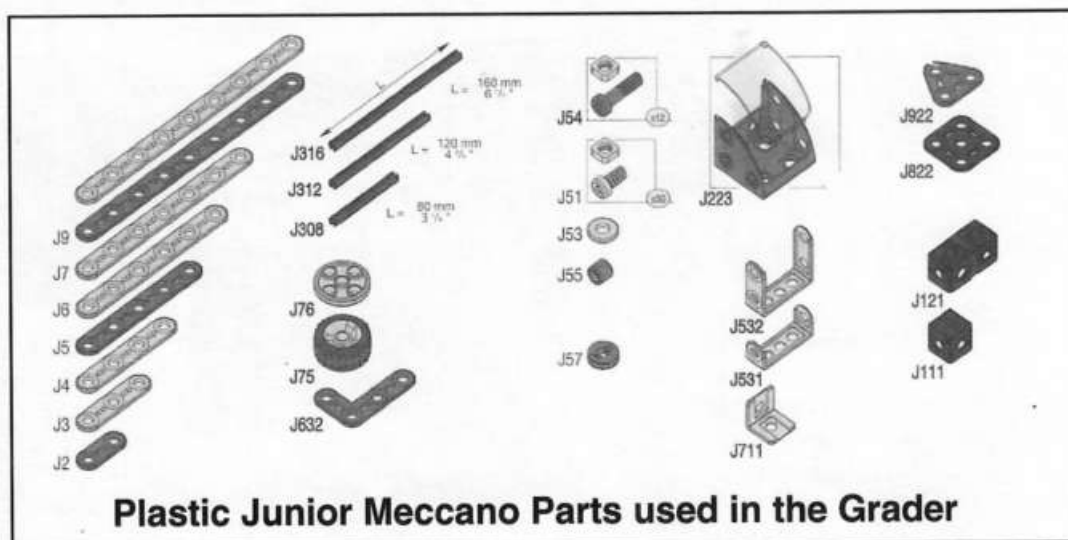
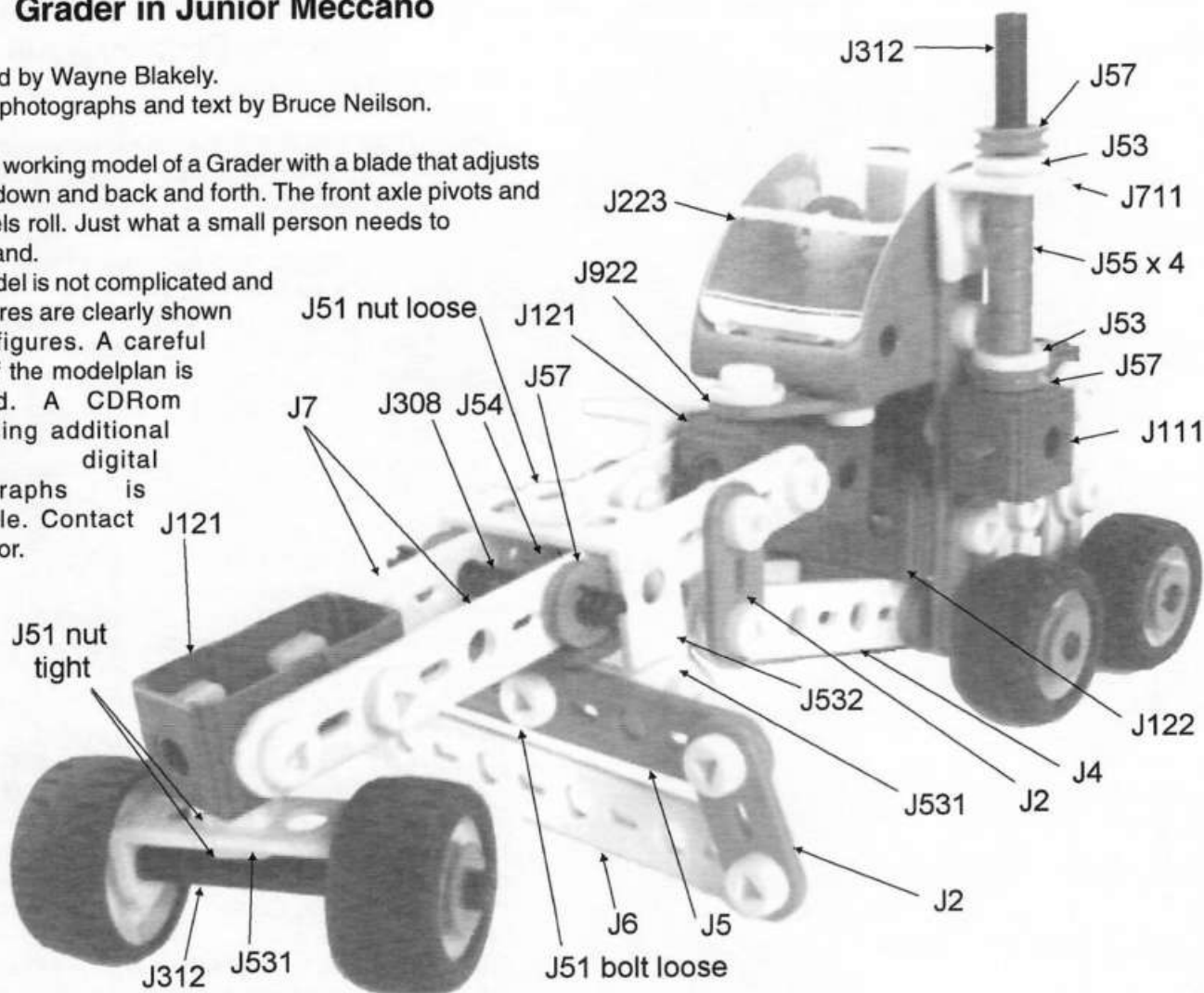
A side view.

Grader in Junior Meccano

designed by Wayne Blakely.
rebuild, photographs and text by Bruce Neilson.

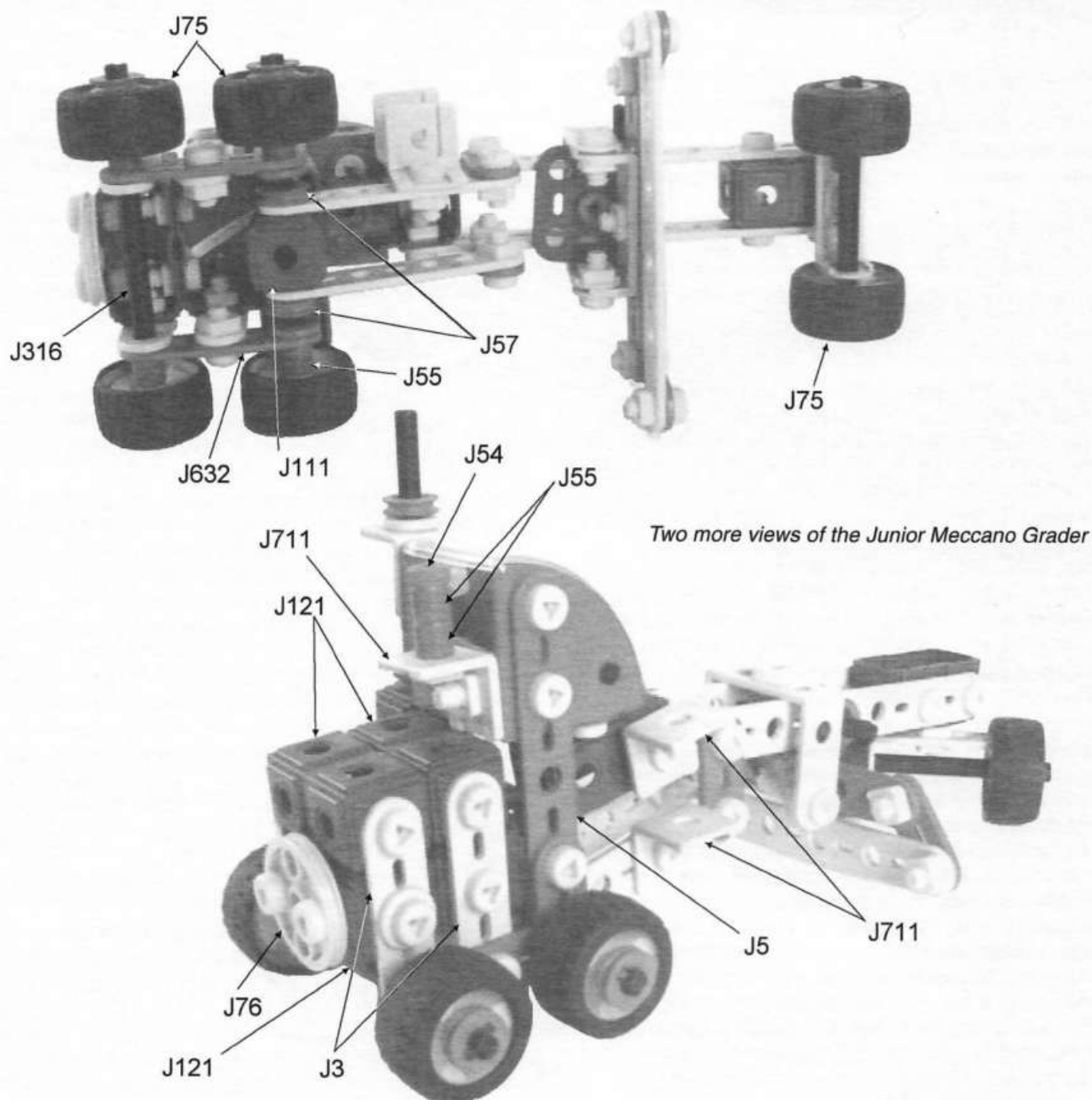
This is a working model of a Grader with a blade that adjusts up and down and back and forth. The front axle pivots and all wheels roll. Just what a small person needs to move sand.

The model is not complicated and all features are clearly shown in the figures. A careful study of the modelplan is advised. A CDRom containing additional large digital photographs is available. Contact the Editor.



Parts List

Pt No	Description	Size	Qty	Pt No	Description	Size	Qty	Pt No	Description	Size	Qty
J2	Flat strip	2 holes	4	J54	Pivot Bolt and Nut		2	J312	Axle Rod	4 7/8"	2
J3	Flat strip	3 holes	4	J55	Spacer		10	J316	Axle Rod	6 1/4"	2
J4	Flat strip	4 holes	2	J57	Locking Clip (Pulley/Collar)		14	J531	Short Double Bracket		2
J5	Flat strip	5 holes	3	J75	Wheel and Tyre		6	J532	Long Double Bracket		1
J6	Flat strip	6 holes	1	J76	Large Pulley		1	J632	Long Corner Strip		3
J7	Flat strip	7 holes	2	J111	Cube		2	J711	Right Angle Bracket		2
J51	Bolt and Nut		47	J121	Double Cube		5	J822	Plate		1
J51N	Square Nut		1	J223	Cab with Windscreen		1	J922	Triangle		1
J53	Washer		2	J308	Axle Rod	3 1/4"	1				

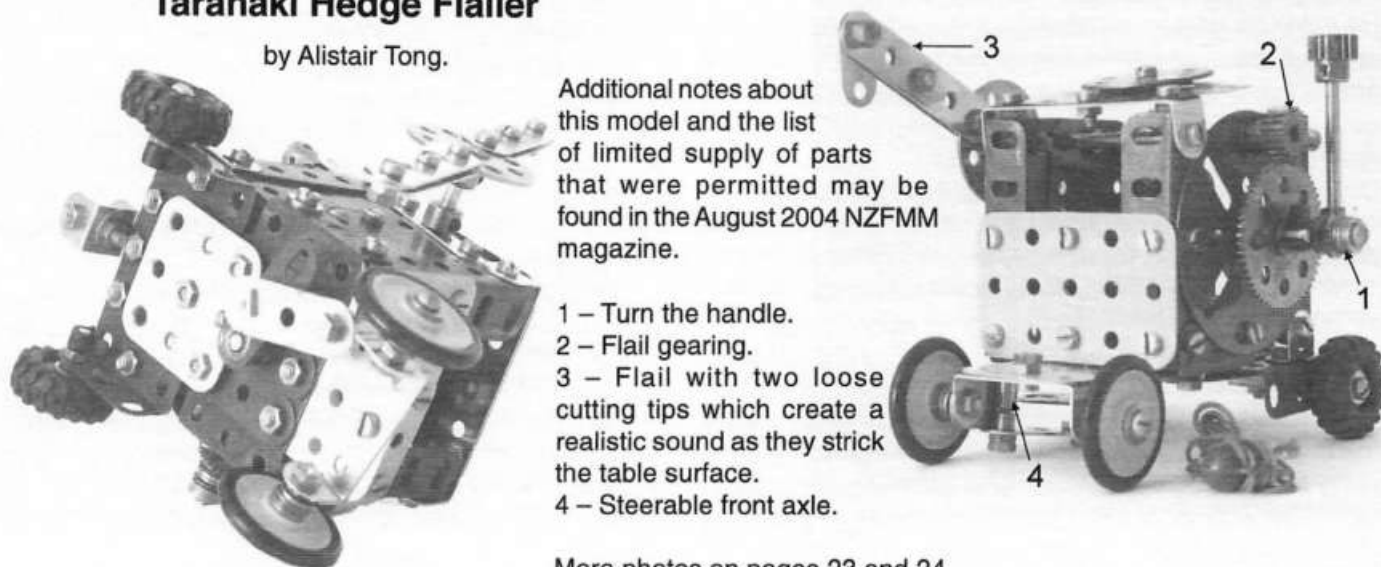


Taranaki Hedge Flailer

by Alistair Tong.

Additional notes about this model and the list of limited supply of parts that were permitted may be found in the August 2004 NZFMM magazine.

- 1 – Turn the handle.
- 2 – Flail gearing.
- 3 – Flail with two loose cutting tips which create a realistic sound as they strike the table surface.
- 4 – Steerable front axle.



More photos on pages 23 and 24

YOU, RETIREMENT, and MECCANO

by Bruce Neilson.

What does retirement mean to you? Loss of friends from work? Reduction in physical exercise? Decrease in intellectual stimulation? Availability of extra time? Boredom and depression?

Age, wealth and education are only limiting factors if you choose to perceive them as roadblocks.

At least ten years before you expect to retire, start preparing mentally, physically, emotionally and financially.

1 - Planning Your Retirement

Refer to the Internet site <http://www.agewell.org.nz/planning_ahead.htm> for the planning information you should be considering. Age Concern New Zealand's booklet titled *Ageing is Living* has some excellent information regarding planning for older age. The booklet talks about 'the need to include not only financial preparation, though this is obviously important, but also how to meet changing needs in relation to health, lifestyle, roles and relationships'.

2 - Realising Your Dreams

Refer to the Internet site <<http://www.retirementwithapurpose.com/audreams.html>> for thoughts on 'His and Hers Retirement Dreams' and how do *you* picture your future and how do you think your ideas line up with your partner's hopes and dreams?

3 - The Elements of Retirement

Your new retirement lifestyle will require four components, each of which should be present to make your retirement a satisfying and enjoyable one.

(1) You need intellectual stimulation in your life to make life interesting and a challenge. Choose activities that stimulate problem-solving, organizational and creative skills.

(2) You need physical exercise to keep from turning into a hippopotamus. Walking, swimming, yoga, and exercising at the local gym will keep your bones and muscles from atrophying.

(3) Choose at least one activity that touches you emotionally and provides a sense of personal satisfaction and accomplishment.

(4) Find friends and relatives to share your hobbies and activities with. They make shared activities seem easy and fun.

4 - What About Hobbies?

One item in your list of preparations should be a long term hobby. These are things to think about in the selection process, keeping in mind that you are looking at an age duration span of between say 50 to 90 years old. *Meccano comments are in italics.*

4a - Intellectual.

- Training – Do you have the skills? Some hobbies are easily taken on and give early satisfaction (gardening). Others really need a long apprenticeship to achieve precision and excellent craftsmanship (model engineering). Initially

Meccano only needs the ability to follow a modelplan and use a screwdriver and spanner. Experience will improve inventiveness and problem solving.

- Mental stimulation – Watching television is not a hobby. Card games such as bridge and cribbage have unlimited potential regardless of your age. *Designing models from scratch, converting a prototype into model form, getting parts into difficult places, improving performance, rebuilding to achieve excellence, all use the brain.*

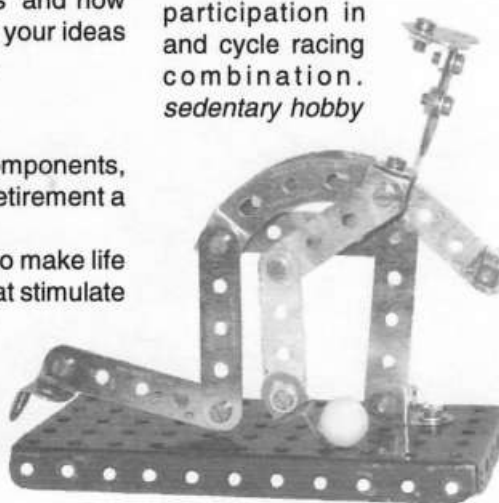
- Infinity – Is your hobby going to reach an end when you have collected every known specimen? Or is there always a challenge ahead? *Building has no limits in the models chosen or to be invented. Collecting still has many unknowns and unfound.*

4b - Physical.

- Energy requirements – How much physical energy will be required? Climbing mountains get harder as age advances. *Very little until you build that very large model but even that can be modularised.*

- Age deterioration – Allow for physical body deterioration. Eyesight, knee joints, heart, etc are not the same at 70 as they were at 50 so a private pilot's licence is harder to keep current. *Meccano only requires the ability to hold a screwdriver and spanner by whatever means.*

- Loss of body function – Will illness and frailty eliminate participation in and cycle racing combination. *sedentary hobby*



Bowls is a nice gentle sport!

your hobby? Loss of balance do not make a good Meccano is basically a and can be enjoyed even when the Meccanoman is confined to bed as proved by many a Meccano boy.

4c - Emotional.

- "Joy of leisure becomes reality of boredom". Does your hobby have sufficient 'guts' to keep you going? Jigsaw puzzles all day is questionable. *The variety of*

models and mechanisms, research into 103 years of history, collecting Meccanabilia, and the range of literature past, present and future gives depth of interest

- Social standing as an expert – With time and study, is there sufficient depth in your hobby to rise through the ranks of beginner, competent and expert as judged by yourself and fellow hobbyists? *Yes. Skilled builders, knowledgeable collectors of vintage parts, historians of Meccano Ltd and it's products and librarians of Meccano related literature are recognised as valuable Meccanomen.*

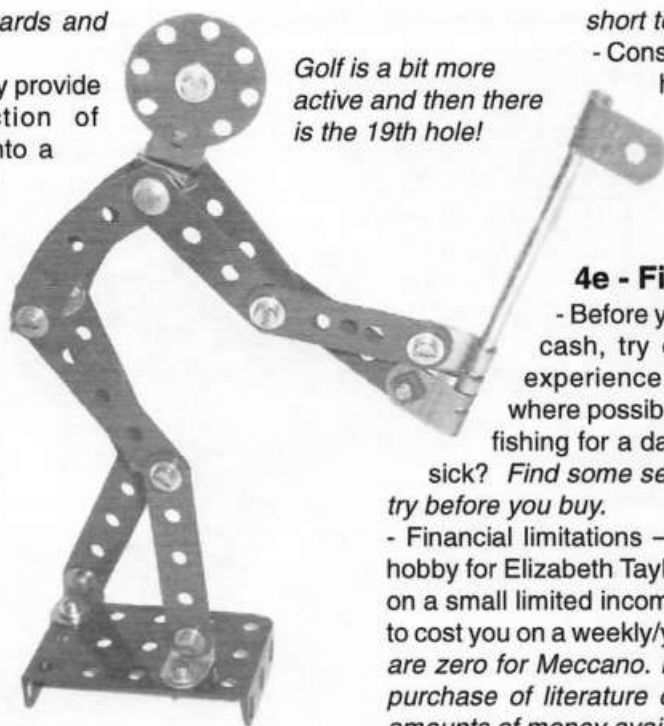
- Satisfaction – Does your hobby provide a feeling of satisfaction on achievement of a goal. *Meccano building has the aim of completing a model and getting it to operate successfully. After the work put in, satisfaction is achieved.*

- Collecting – Does your hobby provide a good collecting environment and emotional highs? *Meccano collecting has a reasonable sized market through the eBay and Trademe Internet auction sites, and the chances still remain to find*

bargains in peoples backyards and garages.

- Building – Does your hobby provide the pride and satisfaction of converting raw materials into a finished product? *The main principle of Meccano is turning a pile of separate Meccano parts into an acceptable model thereby making the builder happy.*

- Recognise your limitations – Not everybody can paint like Picasso so be happy in what you can achieve and accept the differences. *Meccano caters for all skill levels from the building of models from published instructions to the production of new concepts.*



Golf is a bit more active and then there is the 19th hole!

short term group gatherings

- Consider other people – How does your hobby affect other people? *Positively with entertainment, as a learning and experimental medium, and preservation of old memories.*

4e - Financial.

- Before you retire and while you have spare cash, try out a variety of hobbies for the experience. Hire equipment and expertise where possible. i.e. hire a boat and go deep sea fishing for a day/week. Did you get bored or sea sick? *Find some second-hand Meccano and you can try before you buy.*

- Financial limitations – Collecting diamonds is OK as a hobby for Elizabeth Taylor but not so realistic for someone on a small limited income. How much is your hobby going to cost you on a weekly/yearly basis? *Weekly running costs are zero for Meccano. Expenditure will be optional in the purchase of literature or additional Meccano parts. The amounts of money available for Meccano before and after retirement are quite different. I would suggest that before retirement you buy up large, and after retirement, when time is long and money is short; refurbish parts and build models like crazy. Compensate for the shortage of money by doing projects that take time such as re-reading literature and taking notes, doing some writing on an aspect of the hobby, take on some club duties, build models that you have on your list, update your inventory list, correspond with friends through email, etc.*

- Money in or money out – Some hobbies are all money out with very little to be seen for your efforts (making and drinking home brew), while others have the side benefit of being able to generate money (making and selling home brew). There is a fine line between a hobby and a business but usually a hobby loses money while you have fun. *Meccano building is usually considered as a money out hobby but there is a limited market for selling complete models. Meccano collecting and the value of parts are broadly determined by the international Internet market but bargains can still be found in private dealing.*

4f - Size and Space.

- Size of house – You may not always live in your large three bedroom house with double garage. Setting up all your woodwork machinery in a one bedroom retirement unit may mean that your car lives out on the driveway. *Think outside the normal. i.e. why fill a spare room with permanent beds which are used for say five nights a year? Buy some folding beds and make better use of the space.*

- Size of work area – How much floor space will you need for the construction phases of your hobby? *The space taken up by Meccano can be anything from a tray over the arms of the armchair to a moveable desk/table with storage drawers.*

- Size of models – Are we talking watch mending or railway locomotive restoration? *A Meccano model can be as small or big as the Meccanoman chooses and can be modularised when necessary. I would also suggest that you have a folder with photocopies of models you really like and want to build.*

4d - Social.

- Family – Can your hobby be part of your family environment? *Traditionally Meccano building has been done at home rather than at outside venues. Meccano is a solo person occupation acceptable within the family circle. I would suggest that you build some of your Meccano models or modules in the family room to maintain harmony and togetherness.*

- Friends – Does your hobby attract and retain good friends? *A common interest makes a good foundation for friendship. From personal experience the answer is yes.*

- Club – “I want a hobby that has a club attached to it.” “Sounds like ‘hanging out with the boys’ to me.” What rubbish. To keep your interest alive, gain access to information and skills, have help with problem solving, mingle with likeminded cognoscenti and generally have a good time, check if your hobby offers a club environment. *Join a Meccano club and go to the meetings even if you have to stay overnight. New faces, old friends, new ideas, renewed interest, invitations to visit. etc. will enhance your interest.*

- Penpals – Can your hobby cater for penpals? *The exchange of Meccano news and pictures has been an old snailmail tradition and is even easier under modern electronic means.*

- Internet discussion group – Is there an Internet discussion group for your hobby? *The ‘Spanner’ group is a strong discussion group and source of Meccano information.*

- Internet – Does your hobby have Internet sites and pages? *The Meccano Webring is an index of over 80 sites.*

- Team or Solitary? – Do you want a team hobby where numbers are essential or a hobby where you can survive on your own? A team hobby will impose obligations of attendance, performance and financial outlay such as uniforms, travel and competitions. *Meccano is basically a solo person hobby but multi-model collaboration between Meccanomen to produce dioramas has been achieved. Club meetings and annual conventions provide common*

Small models which can be built in a couple of days are good relief from building the big model. Also handy if a child visitor is due to arrive.

- Storage of parts – Where do all those 'essential' materials, duplicates, and running materials (coal, oil, petrol) get stored? Meccano can be stored in quite a confined space (wooden drawers, steel chests) but watch the weight factor and your weak back. For paper storage (books, magazines, modelplans), use file boxes (not large for weight and accessibility). Make the file boxes pretty not tatty.

- Storage of models -. Where do the completed hobby items get displayed/stored? (die cast toys, model aeroplanes, orchids, tumbled rocks, dressed dolls). A principle of Meccano is the dismantling of models to reuse the parts into the next model. Models can be displayed as needed, stored in transport containers for future exhibitions, captured on photographs, digital pictures and movies, and then dismantled with no regrets, cost or waste.

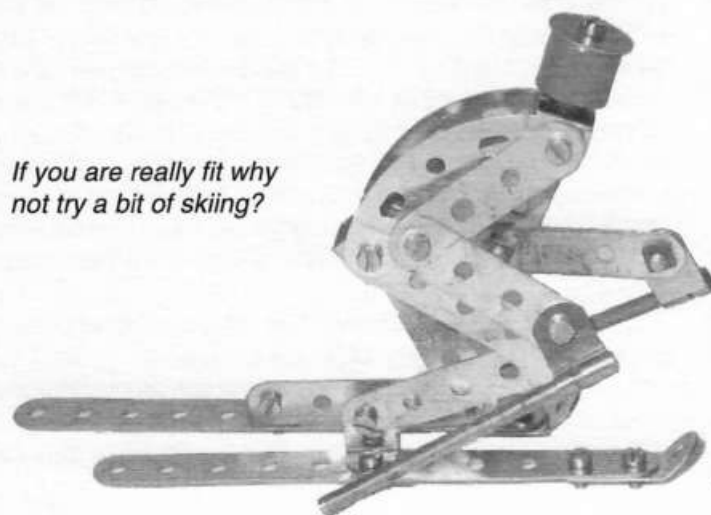
- Size of car – For most of us, the vehicle size shrinks as we get older and money gets scarcer. Towing horse floats requires horsepower under the bonnet. Match the size of your models to the carrying capacity of your car/bicycle and design/modularise accordingly. New car designs such as the Suzuki Wagon R+ offer a very high roof and ample cargo space.

4g - Time.

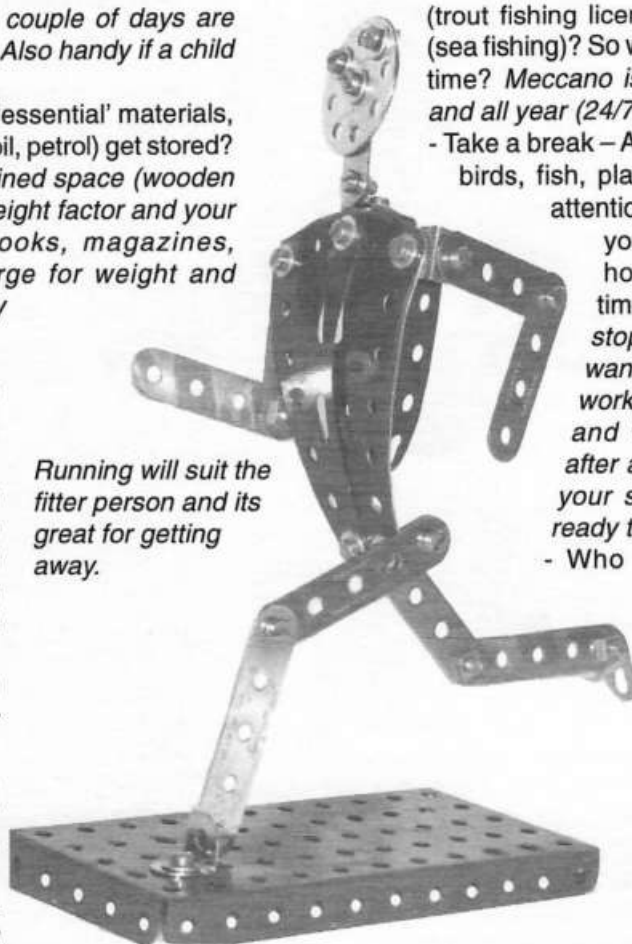
- Time management – Most time management books recommend that you plan and allocate time for each day but most of us retire to escape that pressure. However keep in mind that time is limited and your days are numbered so don't waste a day. So does your hobby lend itself to having daily time allocated? Meccano lends itself to a daily/weekly programme to achieve set goals. In fact a daily dose of modelling keeps the enthusiasm going and the model growing.

- All year round – Is your hobby seasonal (skiing), subject to the weather (gardening), night/day (astronomy), permit times

If you are really fit why not try a bit of skiing?



Running will suit the fitter person and its great for getting away.



(trout fishing licence), phase of the moon (sea fishing)? So what do you do in the slack time? Meccano is an all weather, all time and all year (24/7) hobby.

- Take a break – All living hobbies (animals, birds, fish, plants) require daily/weekly attention. Will your hobby allow you to go on holiday, go into hospital, or take enforced time out.? Meccano can be stopped and started as you want. Throw a sheet over your work area to keep the dust off and walk away. Come back after a months holiday, pick up your screwdriver and you are ready to continue.

- Who is in charge – Do you control your hobby or does it control you? 'Have to be at the hall on Thursday night at 7pm (indoor bowls)' or 'I have spare time after morning tea (knitting)'. With Meccano, you control the time, space and pace.

- When can I do my hobby – Most of us are brain washed into

thinking business hours. Work 8am to 5pm, go to bed at 10pm to sleep, and get up at 7am. If your domestic arrangements are suitable, you can consider keeping what ever hours you fancy as you are no longer bound by social niceties. A late night becomes a normal night and you go to bed at 3am and get up at 10am. If this is tempting, can you do your hobby? Tuning hotrods at midnight does not thrill the neighbours. Meccano is an acceptable 24/7 hobby as decided by the Meccanoman.

4h - Miscellaneous.

- Ease of relocation – If you go and live in another town/country, can you take your hobby with you or will you be forced to abandon hundreds of hours of work? (gardens, fish ponds, house renovations, topiary). Transport your Meccano from A to B, pay the bill and that is it.

- Environment friendly and 'green' – Does your hobby pollute or use scarce resources? Meccano is the original and only? recycling toy designed to use the same parts again and again. The use of steel, paint and plastic for the parts is minimal and acceptable.

- One hobby at a time – To get the maximum input, benefit and satisfaction from your hobby, I would suggest that you concentrate your efforts on one hobby at a time. Multi-hobbies finish up with very little being achieved.

5 - Conclusion.

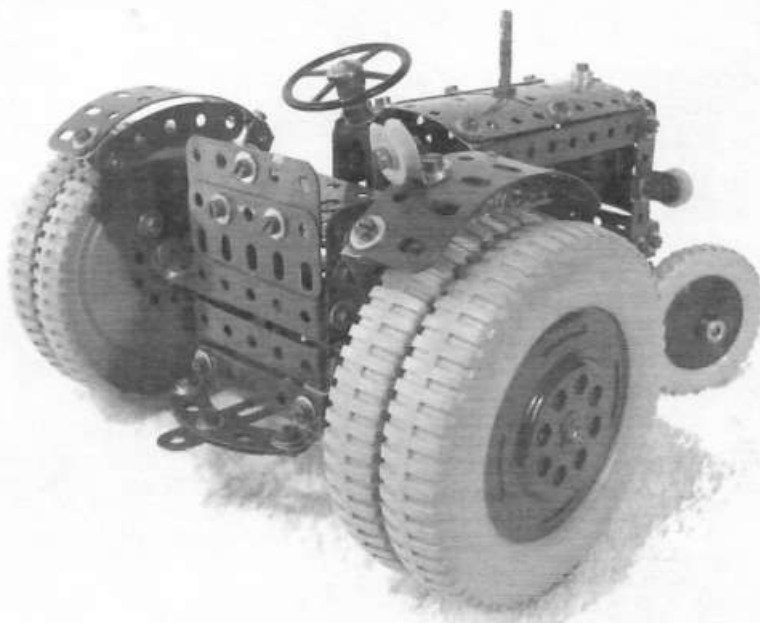
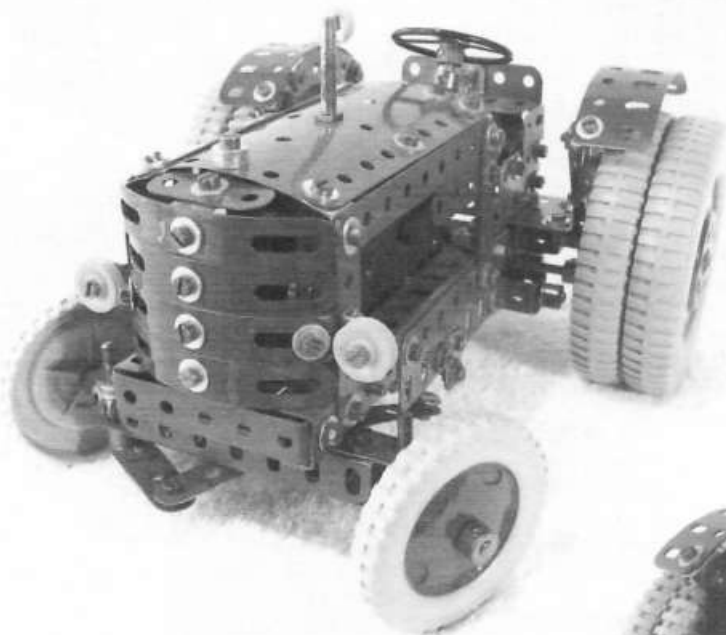
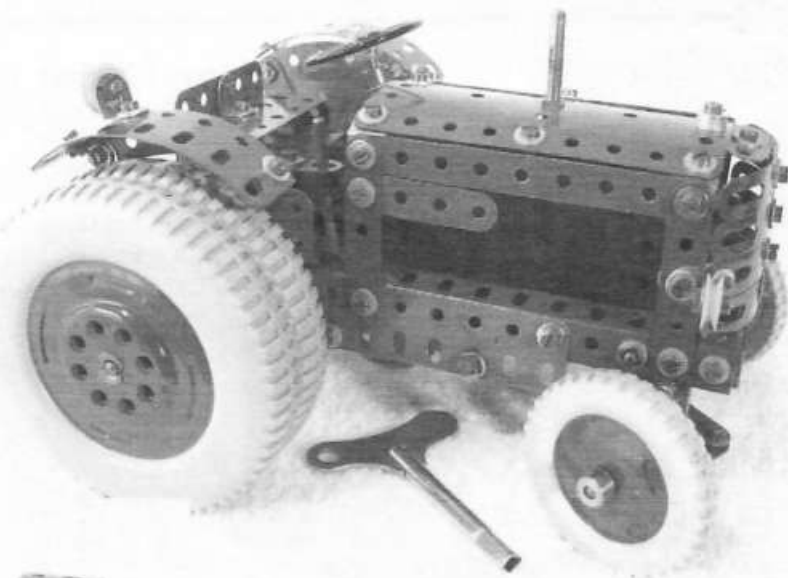
If you walk on a treadmill while nutting and bolting, Meccano is the hobby which meets all the criteria stated.

Meccano models by John Ince; photos by Bruce Neilson.

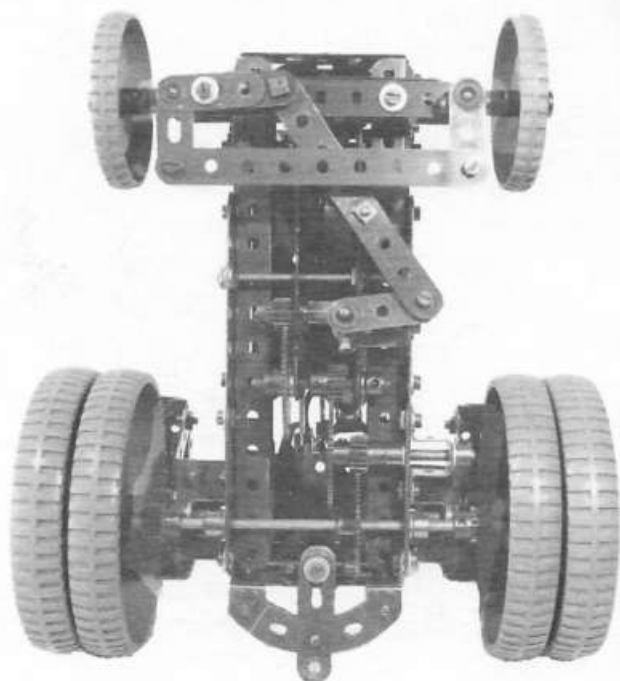
Tractor with No 1 Clockwork Motor

Designed by Bruce Geange
Text and Pictures by Bruce Neilson

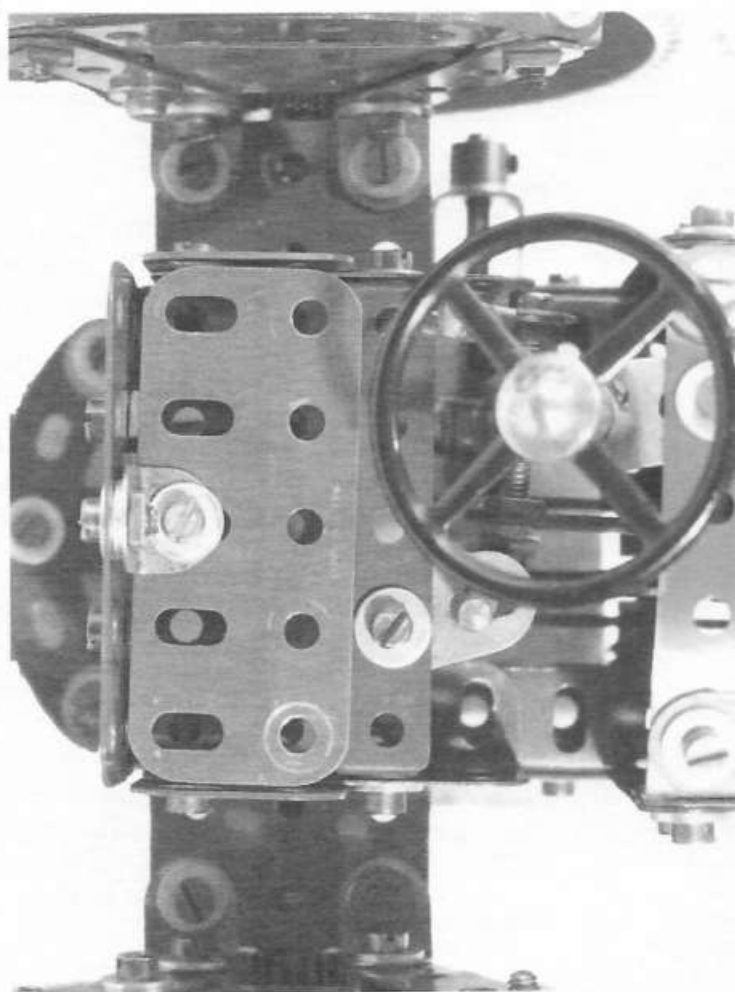
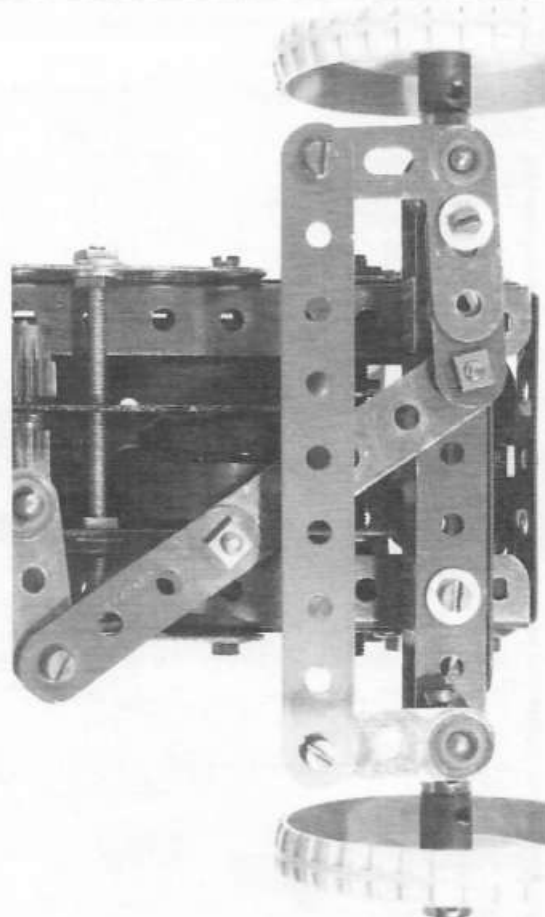
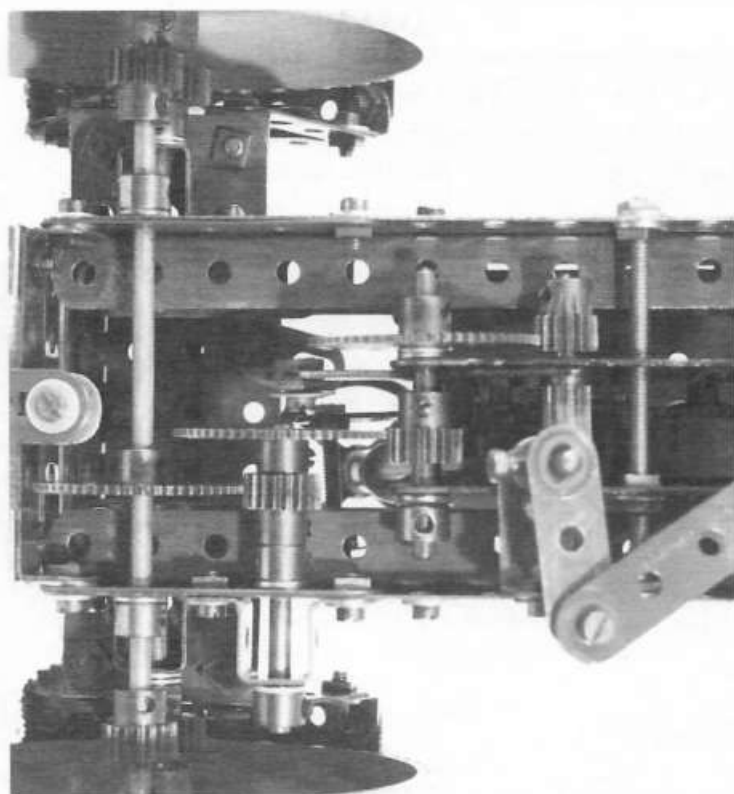
This model is based on the tractor shown in the "**More New Models Leaflet No 9**" which is reproduced on the next page. The design has been modified with changed seat, bonnet sides, gearing reduction, double rear wheels, steering, drawbar, etc. The original design required two P/N 187b 4 1/4" Road Wheels. The new design require four P/N 187b and is powered by a No 1 Clockwork motor.



View from behind showing the seat back and the drawbar.



A general underside view



The driver's seat and steering wheel from above.

The reversing lever

Obituary - Robert (Bob) McCracken (JP)

December 8, 1923 - June 7, 2004

It is with sadness that we record the death of our friend and fellow Meccanoman, Bob McCracken who passed away on the 7th of June 2004 after a period of illness.

Bob was well known to Auckland Meccano Club members, noted for the innovative models that he crafted and was a regular attendee of club meetings until ill health intervened.

Bob led a very full and fruitful life, being a real family man, deeply involved in the local community and a 'jack of all trades'. Amongst his many talents he was an excellent farmer, carpenter/builder, cabinet maker and engineer who had the 'eye' for detail. He demonstrated

woodworking skills and his eye for detail yet again when he made a beautiful casing to house the movement of the families Grandfather clock which takes pride of place in the family home.

He was interested in anything that ran on live steam, was an excellent hand at the lathe turning many



special parts for both his own and friends machinery as well as for his various hobbies which included both model and vintage steam engines and of course his beloved Meccano.

A writeup and pictures of Bob's Gottwald Mk 1000 crane featured in the NZFMM Magazine December 1993.

The sincere condolences and sympathy of the Auckland Meccano club and the New Zealand Meccano Federation family go to his wife and our good friend Joyce



This picture of the late Bob McCracken with his blocksetting crane was taken nearly 20 years ago. Another of his models was illustrated in the December 2003 magazine.

Viv Alexander writes:

I was interested in the article in John's eBay auction column, regarding the first 'Real' Meccano set - the 1908 one subtitled Mechanics Made Easy. Coincidentally, the Vectis auction for Oct 2nd had a similar set for auction, from the Tom McCallum collection. The condition of the box in the McCallum set was not quite as good as the eBay one. However, after all commissions, fees etc, it worked out at \$1200, half the eBay realisation. No, I didn't buy it, but I know which one I would try to get if I did want one.

John also asked how many there might be in the world. I know of at least three - the two mentioned above, and the one illustrated in Vol. 6 of the Meccano/Hornby series. (Which, from the photos has to be different from the other two - it has a surface tear at the top left corner).

Keep up the column please John. As a collector, I find it most illuminating.

Ed. For those who had not guessed the John who writes the eBay page is John Hansen.

Revolving Dial Clock

by David Wall
photos by Peter Hancock

1. Prototype.

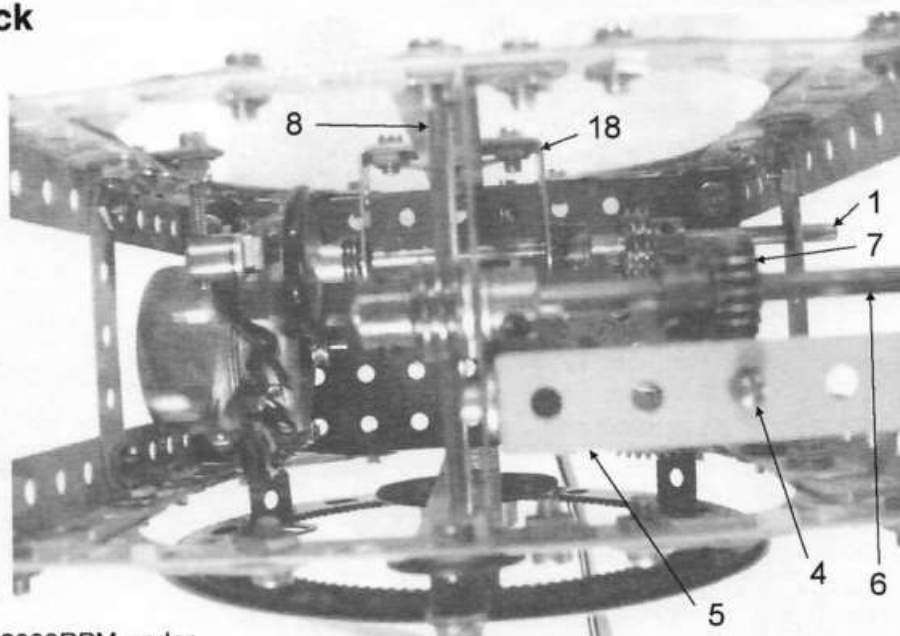
This clock is based on an example made by Suko Investment & Manufacturing Ltd and comes in several varieties including two dial types, round or square. Needless-to-say constructing the square dial variant was not an option. Accuracy is about 5 minutes fast per month.

2. The Model.

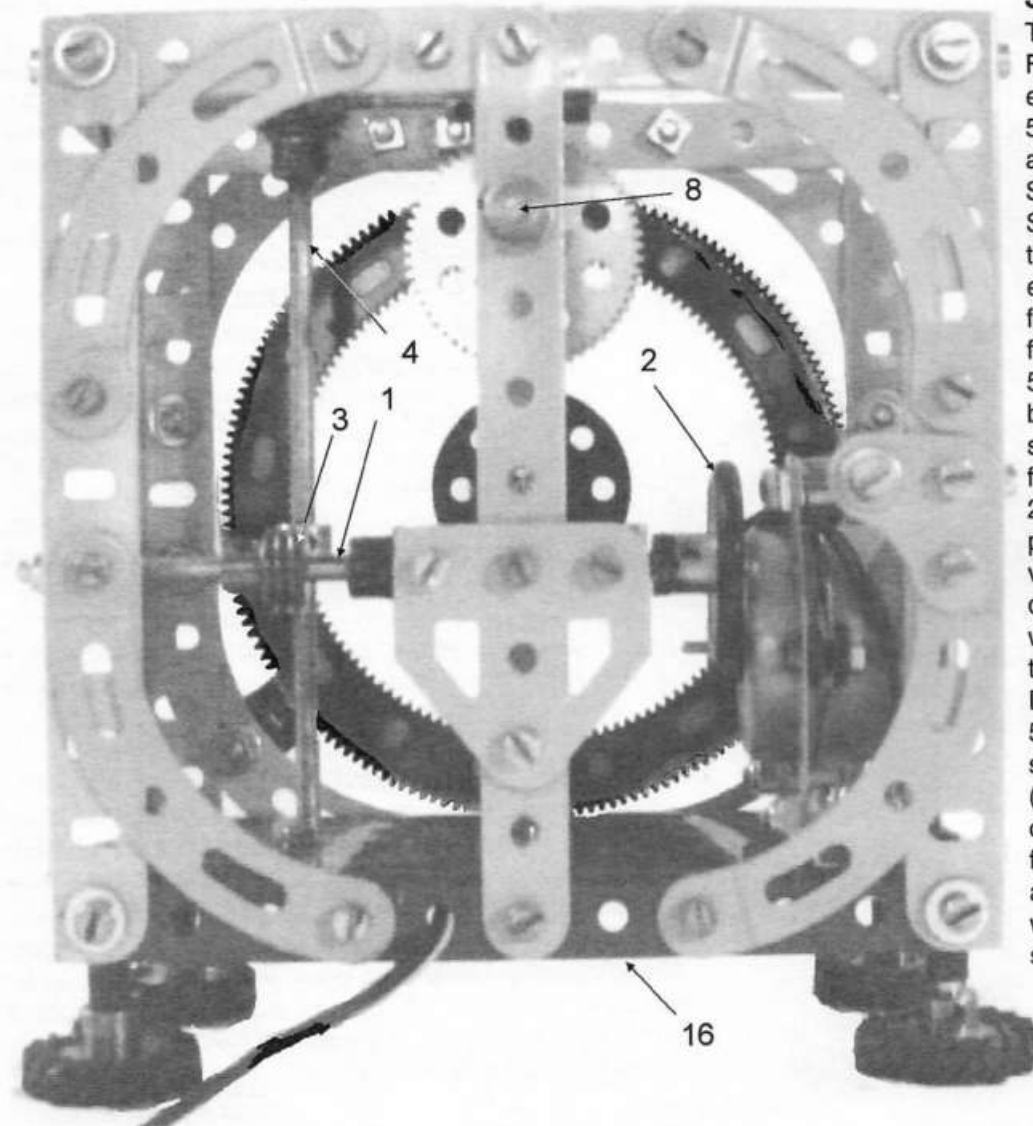
Although construction is straight-forward the dial may present a problem. It is a 133 & 177 teeth Gear Ring, (13), marketed some years ago by MW Models and given the P/N180b. The motor is a non-standard DC unit and runs at about 3000RPM under load. Some of this load is produced by adjustable friction.

The dial is hand-cut out of light card stuck to the gear ring with double-sided tape. It is subdivided into 48 segments

to provide for quarter hour markings.



The clock from above



The Clock seen from the back

3. Construction.

The frame foundation is a Flanged Plate, (16), P/N 52 at each corner of which is bolted a $5\frac{1}{2}$ " Angle Girder P/N 9. These are joined at the top by two $5\frac{1}{2}$ " Strips, (17), P/N 2 and two $2\frac{1}{2}$ " Strips, (15), P/N 5 forming a box, the corners are re-inforced by eight P/N 89a as illustrated. Both front and rear of the frame are fitted with a vertically mounted $5\frac{1}{2}$ " Strips, (14), P/N 2 to provide bearings for the mechanism. The sides of the frame at mid-point are fitted with horizontally mounted $2\frac{1}{2}$ " Strips, (11), P/N 5 also to provide a bearing. The front vertical P/N 2 carries an optional decoration at it's center point whilst the rear P/N 2 carries a transversely mounted $1\frac{1}{2}$ " x 1" Double Angle Strip, P/N 46a, (18), 5 holes from the bottom which is steadied by a P/N 126a. (Construction of the four legs is optional, I have used P/N 23a fitted with appropriate tyres. They are fitted to the base by P/N 115a with two P/N 38b per leg as spacers). A P/N 236d, (12), (narrow to prevent fouling the P/N 27a) is fitted across the frame seven holes from the motor end. To this is attached a Double Angle Strip P/N 48a as, (5), shown.

4. The Gear Train.

Note: Because of space limitations the Worms, P/N 32, in this model are the short three thread variety. If standard length ones are used some minor adjustments may be needed to the frame.

The drive train comprises four shafts as follows:- The primary shaft, (1), is P/N 15a journalled in a Double Angle Strip, (18). A 1" Pulley, (2), P/N 22 fitted with a P/N 155 is attached to the motor end of the shaft, it's function is to "mesh" with the fixed pulley on the motor output shaft. The other end of this shaft is fitted with a Worm, (3), P/N 32. Washers and Collars, P/N 38 & 59, are used to limit lateral movement. The secondary shaft, (4), is a P/N 14a the lower end of which rests on a suitably spaced P/N 212 which is attached with spacers to the base, thus providing a low friction end bearing. The top of this shaft is

journalled into the center hole of the Double Angle Strip, (5), P/N 48a. To the lower end of the secondary shaft is attached a $1\frac{1}{2}$ " Gear Wheel P/N 27a which meshes with the Worm, (3), P/N 32 on the primary shaft. The $3\frac{1}{2}$ " tertiary shaft, (6), P/N 16, journalled into the center holes of the $2\frac{1}{2}$ " Strip, (11), P/N 5 and Narrow Double Angle Strip, (12), P/N 236d. At it's center is fitted a $\frac{1}{2}$ " Pinion, (7), P/N 26 which meshes with the secondary shaft's Worm, P/N 32. The final shaft, (8), is a P/N 16 journalled into the vertically mounted $5\frac{1}{2}$ " Strip, (14), P/N 2, three holes from the top. At the center of this shaft is fixed a $1\frac{1}{2}$ " Gear Wheel, (10), P/N 27a which meshes with the Worm on shaft (6), while a $\frac{7}{16}$ " Pinion, (9), P/N 26c on the front end of the shaft meshes with the inner teeth of the "dial" Gear Ring, (13).

5. Ancillary Items.

(a) Dial restraint

The dial gear ring is prevented from slipping off the final drive pinion by two Reversed Angle Brackets, (17), P/N 125 attached to the center holes of the front lower 3" Curved Strips P/N 89a. The top restraint is provided by a 1" Narrow Strip P/N 806b and at the front a piece of straightened paper clip. This wire also forms a stationary "hand" for the clock dial.

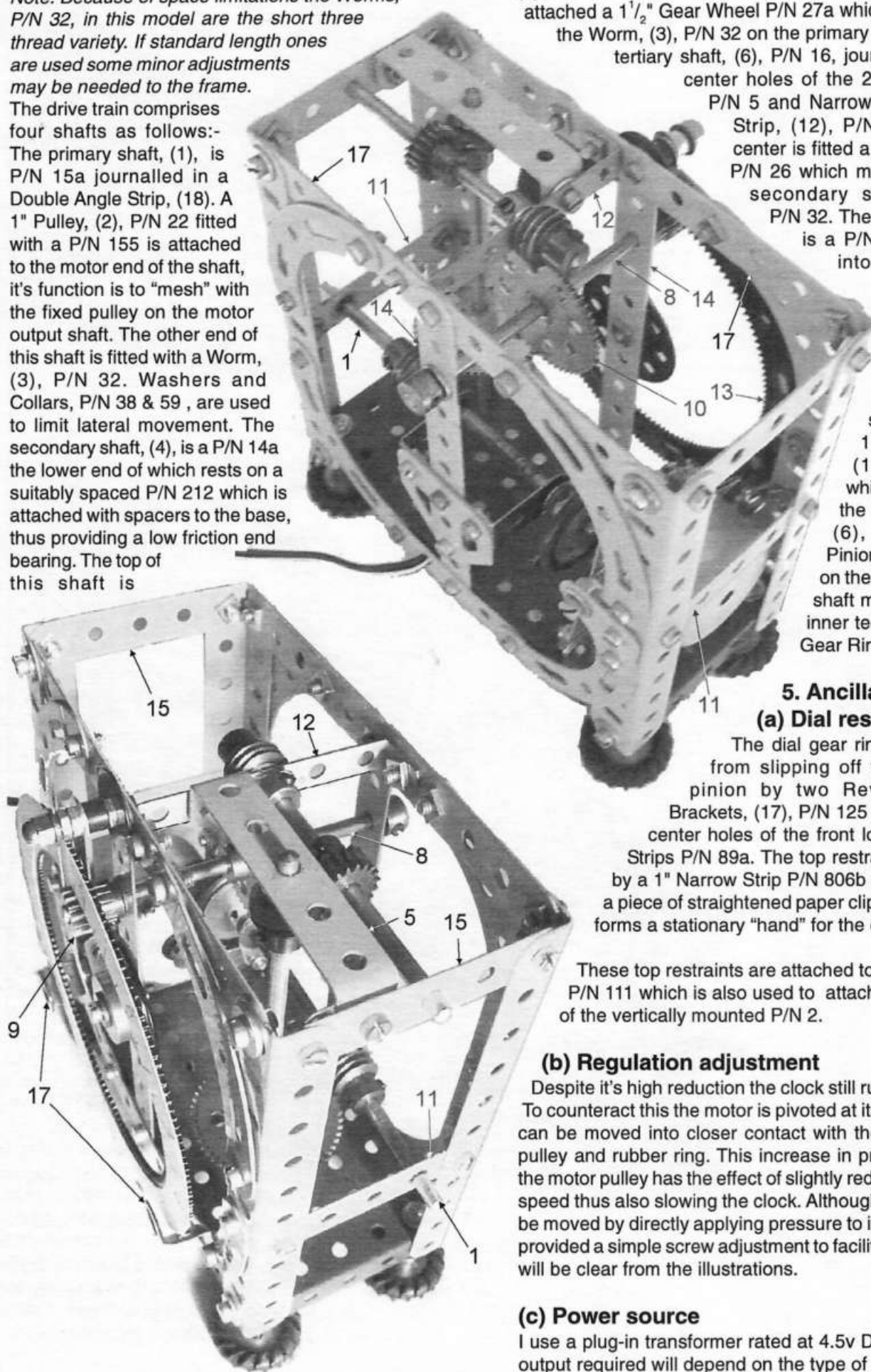
These top restraints are attached to the frame by a P/N 111 which is also used to attach the upper end of the vertically mounted P/N 2.

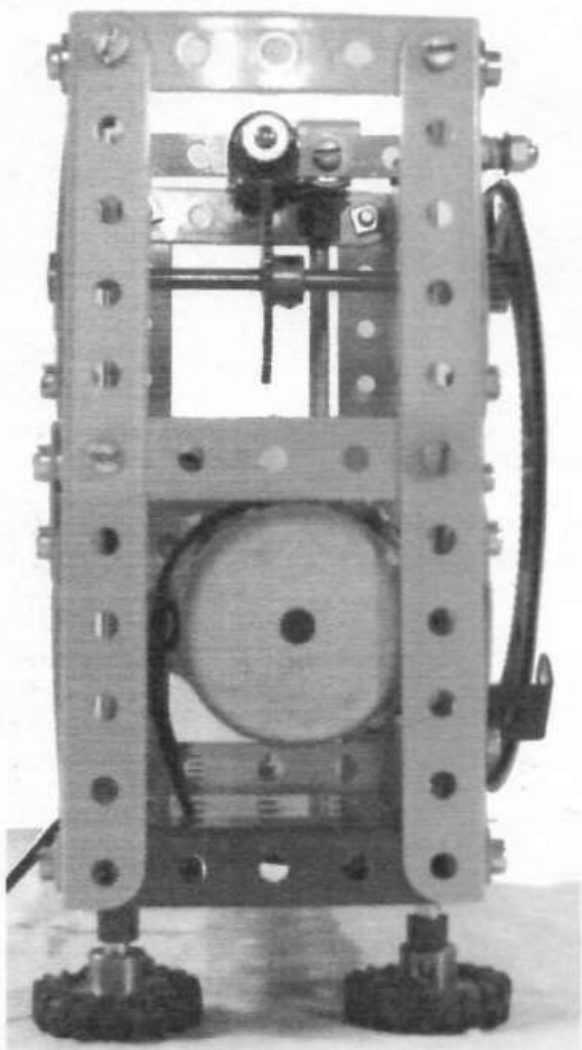
(b) Regulation adjustment

Despite it's high reduction the clock still runs slightly fast. To counteract this the motor is pivoted at its base so that it can be moved into closer contact with the primary drive pulley and rubber ring. This increase in pressure against the motor pulley has the effect of slightly reducing the motor speed thus also slowing the clock. Although the motor can be moved by directly applying pressure to its casing I have provided a simple screw adjustment to facilitate this. Details will be clear from the illustrations.

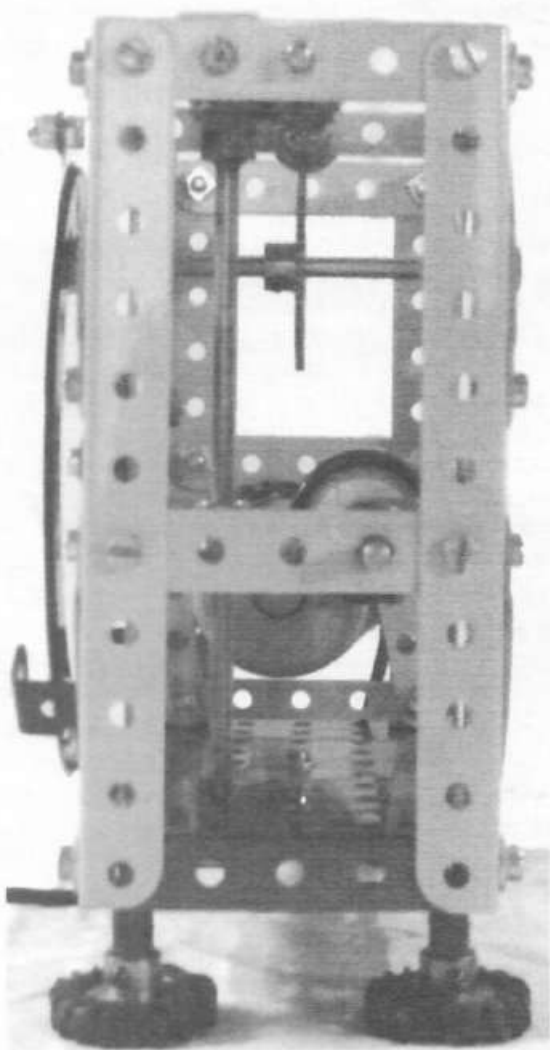
(c) Power source

I use a plug-in transformer rated at 4.5v DC, 250ma. The output required will depend on the type of motor used.





Clock left side



Clock right side

Ed. The gear train comprises the following ratios:-

- 1) Motor to shaft 1 - $\frac{5}{16}$ " to $1\frac{1}{4}$ " giving a 4:1 ratio
- 2) Shaft 1 to shaft 2 - worm to 57t Gear Wheel - 57 : 1
- 3) Shaft 2 to shaft 3 - worm to 19t Pinion - 19 : 1
- 4) Shaft 3 to Shaft 4 - worm to 57t Gear Wheel - 57 : 1
- 5) Shaft 4 to dial wheel - 15t Pinion to 133t Ring - 8.67 : 1

Hence the reduction from the motor to the gear ring is $4 \times 57 \times 19 \times 57 \times 8.67 = 2,140,008 : 1$. If the motor speed is nRPM, then for a 12 hour dial the speed is 720n revs/12 hours, so the required motor speed is $2,189,393/720 = 2972\text{RPM}$.

The front view of the clock is on page 24 in colour.

Parts List.

Pt No.	Description	Size	Qty	Pt No.	Description	Size	Qty	Pt No.	Description	Size	Qty
2	Perforated Strip	$5\frac{1}{2}$ "	4	26	Pinion	$\frac{1}{2}$ " x $\frac{1}{4}$ "	1	125	Reversed Angle Bracket		2
5	Perforated Strip	$2\frac{1}{2}$ "	6	26c	Pinion	$\frac{7}{16}$ " x $\frac{1}{4}$ "	1	126a	Flat Trunion		1
9	Angle Girder	$5\frac{1}{2}$ "	4	27a	Gear Wheel	$1\frac{1}{2}$ "	2	155	Rubber Ring		1
12	Angle Bracket	$\frac{1}{2}$ " x $1\frac{1}{2}$ "	1	32	Worm		2	180b	Gear Ring	133t/177t	1
14a	Axle Rod	$5\frac{1}{2}$ "	1	46a	Dble Angle Strip	$1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $1\frac{1}{2}$ "	1	212	Rod & Strip Connector		1
15a	Axle Rod	$4\frac{1}{2}$ "	1	48a	Dble Angle Strip	$\frac{1}{2}$ " x $2\frac{1}{2}$ " x $1\frac{1}{2}$ "	2	236b	Narrow D A Strip	$\frac{1}{2}$ " x $2\frac{1}{2}$ " x $\frac{1}{2}$ "	1
16	Axle Rod	$3\frac{1}{2}$ "	2	52	Flanged Plate	$5\frac{1}{2}$ " x $2\frac{1}{2}$ "	1	452	Rubber Tyre		4
22	Pulley with Boss	1"	1	59	Collar		5	806b	Narrow Strip	1"	1
22a	Pulley with Boss	1"	1	89a	Curved Stepped Strip	3"	8		Paper Clip		1
23b	Pulley No Boss	$\frac{1}{2}$ "	4	111	Bolt	$\frac{3}{4}$ "	1		Circular Dial (cardboard)		
24a	Wheel Disk	8 Hole	1	115a	Threaded Pin long		4				

The Parts List at the bottom of this page has been produced from the text and the photographs, not from the actual model. Some items may have been missed. Nuts, Bolts, Washers and Plastic Spacers have not been included.

The author has advised us that he plans to rebuild the clock from these instructions. We had not realised that he had already reduced it to a pile of parts and wish him luck in his new enterprise. Watch out for the clock next Easter. (or should we say clock out for the watch!)

MELBOURNE MECCANO CLUB Ninth Annual Exhibition 9 - 10 October 2004

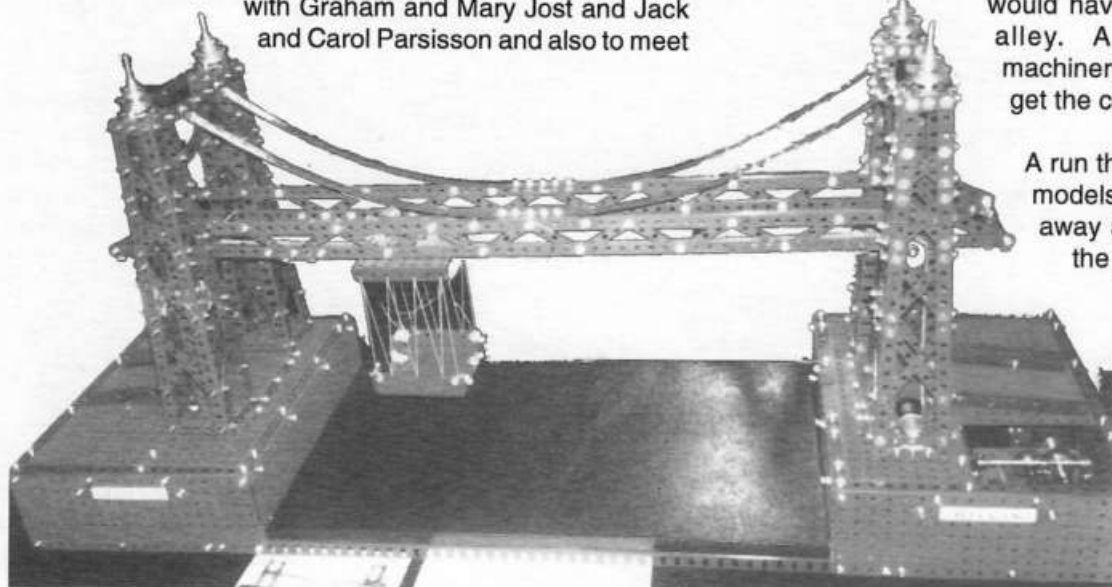
by Lou Nichols

If you happen to be visitors to Melbourne like we were and travelling from the city, go to Flinders Street station and have a pleasant rail journey out to Gardenvale. No need to have the worry of a car, the transport system in Melbourne is brilliant. It is then just a short walk to Bri Phil Hall at 80 Gardenvale Rd, Elsternwick, the permanent home of the Melbourne Meccano Club and you are assured of attending a very good exhibition. Make yourself known as a Meccano enthusiast and you will also receive a very warm welcome into the bargain. The locals are a friendly lot and as we had already met some of the members at our own 2001 Centennial of Meccano Exhibition in Upper Hutt it was really good to meet again with Graham and Mary Jost and Jack and Carol Parsisson and also to meet



ride to admire the view and then whoosh the seats are released and it looks as though they are plummeting to their doom, but no all is well, the clever brake mechanism comes into play and much to everybody's relief they live to tell the tale.

Are you mathematically minded? If so, then the replica of the "Babbage Engine", first built in the 1800's and the forerunner of such things as calculators, computers and differential analysers and such like would have been right down your alley. A very clever piece of machinery to do your sums on and get the correct answers.

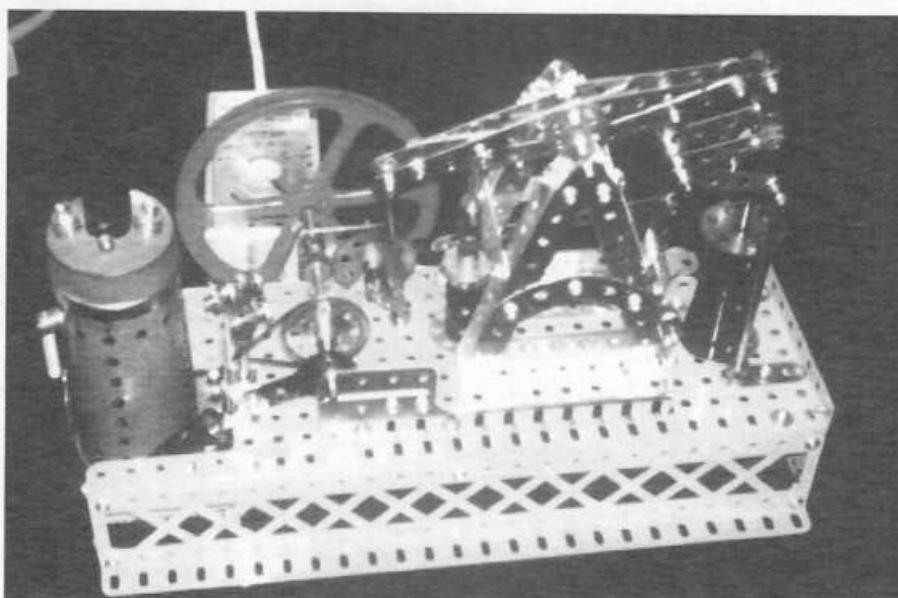


A run through some of the other models, most of them working away and doing their thing for the public and I think giving satisfaction to the modellers for a job well done. A replica of the Runcorn Transporter Bridge, likewise for the Wright Flyer, a Bentley Sports Car, Stephenson's Rocket, carriages and passengers, Shay locomotive.

and talk with quite a number of the MMC members.

A marvellous variety of Meccano models awaits the visitor and to view what other Meccano modellers are getting themselves into is of course one of the joys of visiting an exhibition in another country. For me the model I really enjoyed and had not seen one of its type before was a Meccano Theatre which worked really well and went through a sequence of the curtains opening and then witches and scary things flew from side to side on transparent cords and in the backdrop doors would open revealing skeletons in coffins and ghosts in shrouds. The children watching were enthralled as of course were the adults. Fairground models are always worth while and the 'Tower of Terror' was particularly good. Slowly, slowly the fairgoers are raised up the tower sitting on seats arranged around the four sides. A little pause, time for the people on the

Cranes, beam engines, marble roller, loom, braiding machine, vase of flowers, double fly-boats, carousel and lots more. Well done MMC, we enjoyed our visit.



New Zealand Club Diary 2004

Auckland Meccano Club.

Contact - David Wall - Ph 09 426 1965.

Meetings at 2 pm on second Saturday every third month.

2005 - 12 Feb, 14 May, 13 August, 12 Nov.

MWT Meccano Club.

Contact - John Hansen - Ph 06 325 8211.

Meetings at 2 pm on second Saturday every second month at St. Luke's Church Hall, cnr. Cornfoot and Manuka Streets, Wanganui.

2005 - 12 Feb, 9 April, 11 June, 13 Aug, 15 Oct, Xmas dinner.

Wellington Meccano Club.

Contact - Lou Nichols Ph 04 973 6177.

Meetings at 7.30 pm on first Friday every second month at ?? (contact Lou to get place of meeting).

2005 - 4 Feb, 1 April, 3 June, 5 Aug, 7 Oct, 2 Dec.

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.

2005 - 4 Feb, 4 Mar, 1 April, 6 May, 3 June, 1 July, 5 August, 2 Sept, 7 Oct, 4 Nov, 2 Dec.

Additional Meccano Contacts

Hamilton - Don McClelland Ph 07 847 4503.

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>.

Articles etc. for the February 2005 issue of NZFMM Magazine should be sent to the Editor well before 7 February 2005.

Back Numbers - NZFMM Magazines from April 2001 are available. These are printed to order and delivery will be up to six weeks after payment date. Contact the Editor.

The Two Inserts with this Issue.

One deals with accomodation in Auckland for Convention 2005 over Easter next year.

The other has been provided by Darryl Anderson and is a "For Sale" notice for the Meccano Binns Road factory in Liverpool. We would have placed this note in the next column - Buy and Sell - if it were not for the fact that the notice dates from the early 1980s! Just in case you want to make an offer, bear in mind that the buildings are no longer there, having fallen to the mighty bulldozer - not Bruce Geange's Meccano one!

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 - Meccano Parts and Sets

We accept Visa and MasterCard, cheques, cash or direct debit to our bank account.

To make it easy, shipping is at one fixed price (depending on region), regardless of order size.

Contact Andrew & Vivien Wells, MeccParts.com, PO Box 26179, Epsom, Auckland 1003, Phone (anytime) 09 523 4447, Free fax 0800 MECCANO, Email <andrew@meccparts.com>.

For Sale - Meccano Supplies.

Wayne Blakely, Meccano Supplies, Patikipapa Road, RD 1, Marton. Phone 06 327 6184, Fax 06 327 4184, New email address <info@meccanosupplies.co.nz>.

For Sale - Exacto Range.

To order Exacto parts, contact Wayne Blakely, Meccano Supplies, Patikipapa Road, RD 1, Marton. Phone 06 327 6184, Fax 06 327 4184, New email address <info@meccanosupplies.co.nz>.

For Sale - Meccano Sets.

Small French Meccano sets checked for rust (none) but contents unopened.

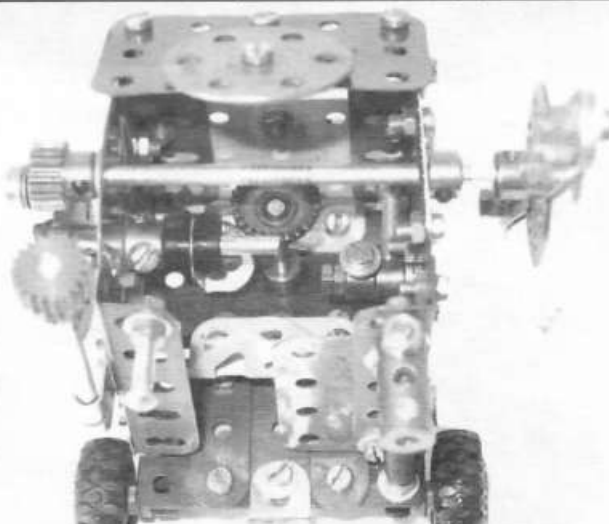
\$30 each - 101 Dump truck. 103 Bulldozer. 105 Truck mounted crane. 106 Road grader. 201 Tractor with cabin. 202 Trailer-sprayer. 303 Field roller. 204 Combine harvester. 301 Breakdown truck. 502 Space warrior.

\$35 - 503 Interceptor.

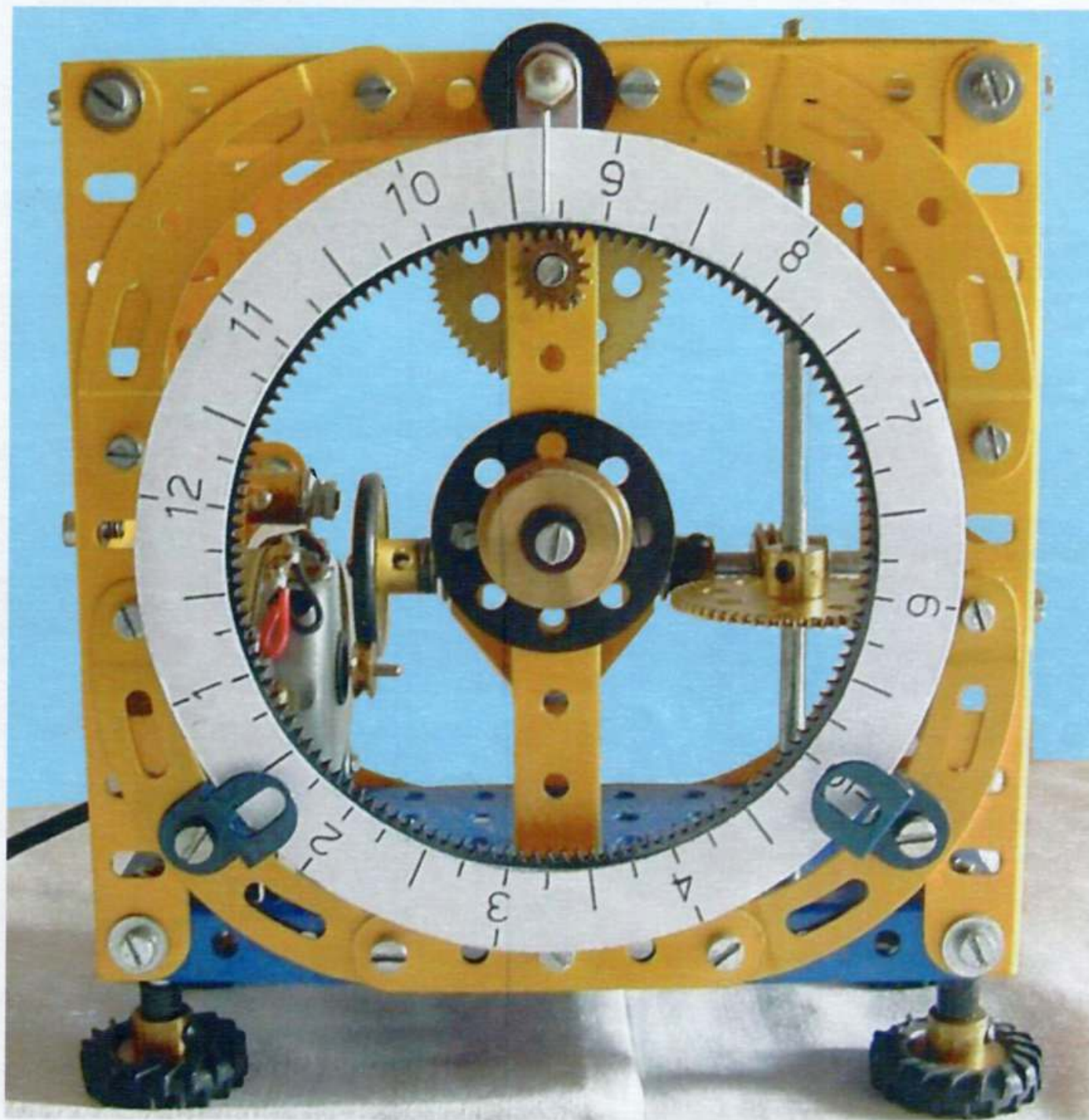
\$20 each unopened - Meccano collection 2207 Racecar. 2103 Plane.

\$15 each unopened - Motion system 1512. 1514. 1515. 1516.

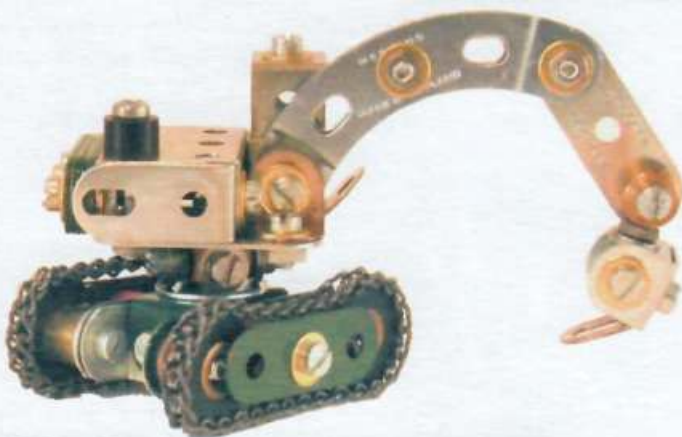
I will pay postage on all of above. Jim Crarer, 189 Avondale Rd, Greenmeadows, Napier 4001. Phone (06) 844 9862.



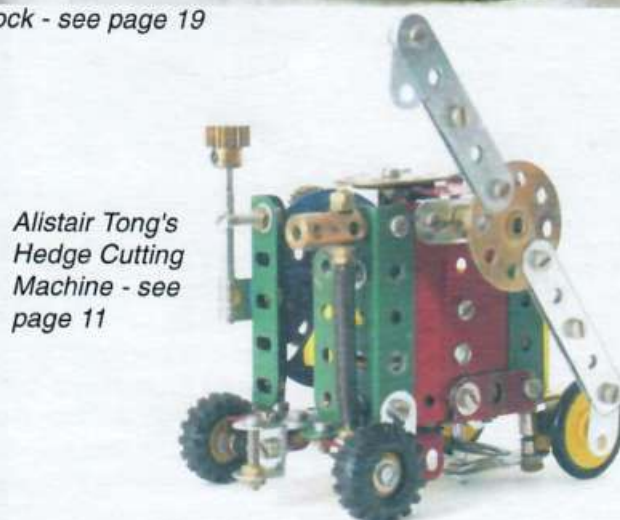
Underside view of Alistair Tong's Hedge Cutting Machine - see page 11



David Wall's rotating dial clock - see page 19



Selwyn Bluett built the Smallest Working Digger - see page 7



*Alistair Tong's
Hedge Cutting
Machine - see
page 11*