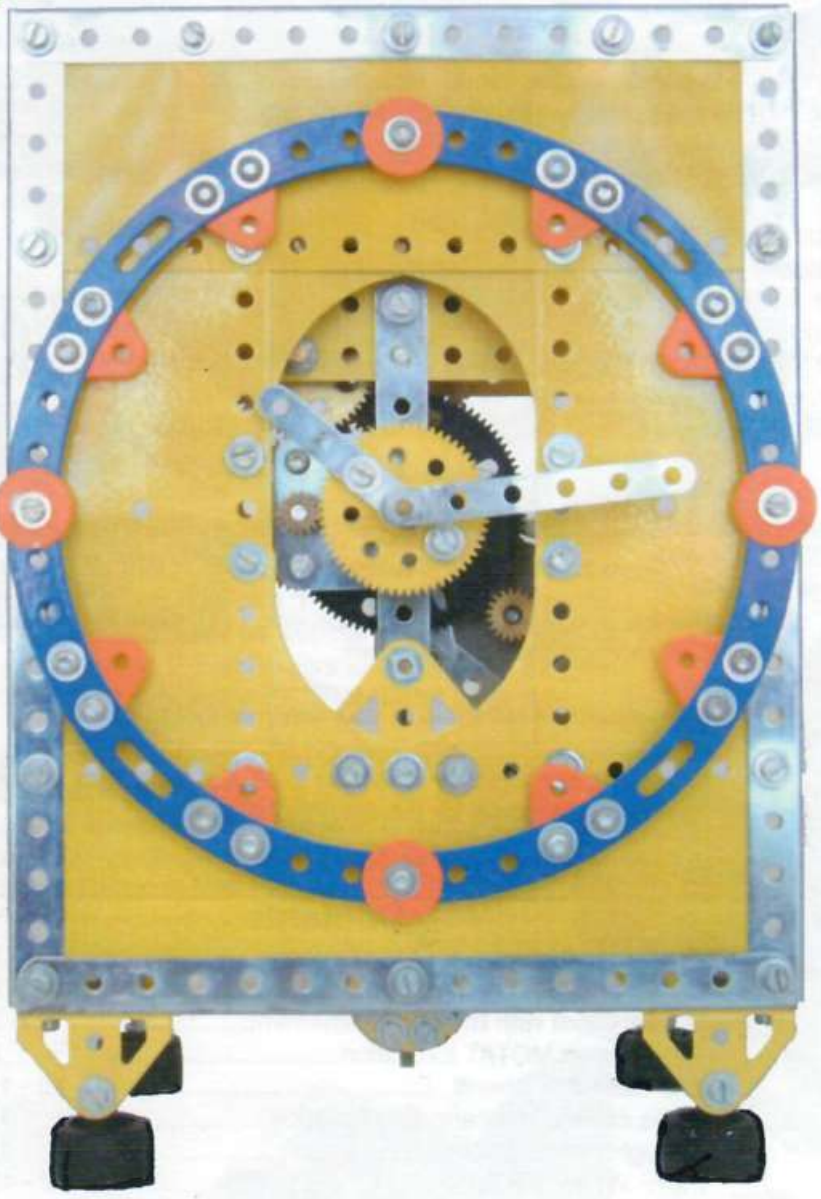
NZFMM MAGAZINE

Volume 27 No 6 December 2003



Does the Sheriff know that the time on the Mantel Clock is 10.14pm on Christmas Eve? We are not sure.
If you would like to build these MECCANO models then you will find the instructions and some more photographs inside.

Published by The New Zealand Federation of Meccano Modellers

NZ Federation of Meccano Modellers Magazine

Editor: Bruce Neilson,
P O Box 1009,
Palmerston North. 06 355 0776
Email: <rbneilson@infogen.net.nz>

Compositor: John Ince,
5 Lennox Place, Feilding. 06 323 7075
Email: <johnince@man.quik.co.nz>

Roving Reporter: Bob Prescott,
16 Watford Drive, Kapiti Village,
Paraparaumu 6010. 04 9052963
Email: <bobandanne@paradise.net.nz>

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.

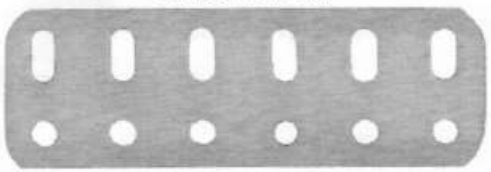
Letters are welcome and may be sent by post or by email. The author's name and address must be supplied. Publication of letters will be at the editor's discretion.

Subscriptions are payable annually in March. Please send to:
Lloyd Spackman, Villa 22, Redwood Village, Main Road, Tawa, Wellington, New Zealand.
Email <fishplate@paradise.net.nz>
Cheques and bank drafts should be made payable to the "NZFMM magazine account".

New Zealand	$23.00pa
Overseas Airmail	$33.00pa

NZFMM Internet site hosted by Wes Dalefield <www.dalefield.com/nzfmm>

Front cover photos by John Stark and Bruce Neilson

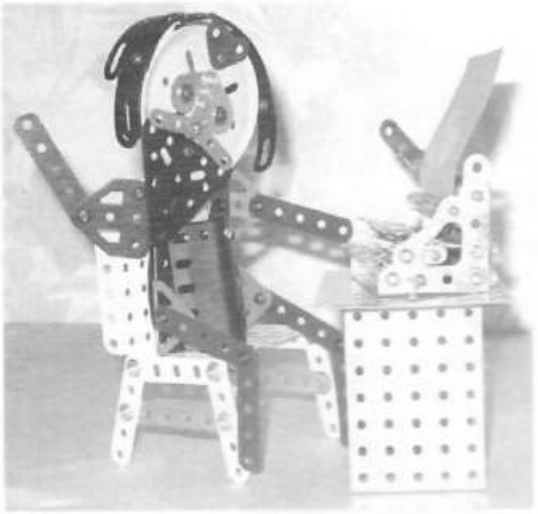


Too Little – Too Much

Christmas is coming and traditionally gifts are exchanged. Meccanomen look forward to Meccano items subtly suggested to their nearest and dearest. However do those gifts have the same excitement as when you were younger and Money, Meccano and Time were a lot harder to come by?

Money - When I was a boy, pocket money had to be earned by a paper round. When I was a young married man, Meccano hobby money had to be earned with a part time job.

Meccano – I always seemed to be short of enough Meccano parts to finish that massive model. Christmas presents were awaited with enormous expectations. Advertising and hunting for second hand Meccano had the thrill of the chase and the delight of finding gems in the middle of the dross.



From the desk of the editor!

Time – Hobby time is stolen from the demands of earning a living and family life placed upon one during the timeline from school to work and finally to retirement.

All of the above made Meccano modelling an excitement to be savoured.

Today most of us have surplus money available for acquiring Meccano, sufficient Meccano squirreled away to require the floor to be strengthened, and, if you turn off the television set, more than enough time to build a Meccano model each week.

But is the excitement still there in your environment of plenty?

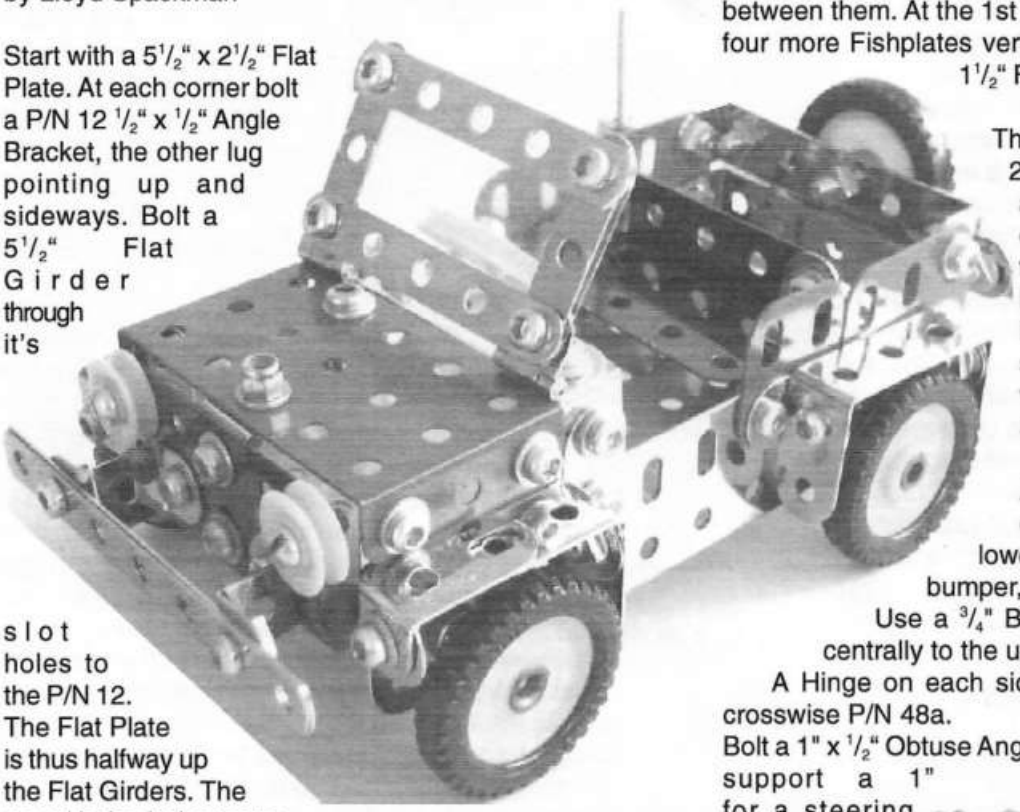
Merry Christmas and a Happy New year to all. Eat well, drink sensibly, and do build a Meccano model for the delight of the soul.

R. Bruce Neilson.

Contents

Building Instructions for Lloyd's Jeep

by Lloyd Spackman

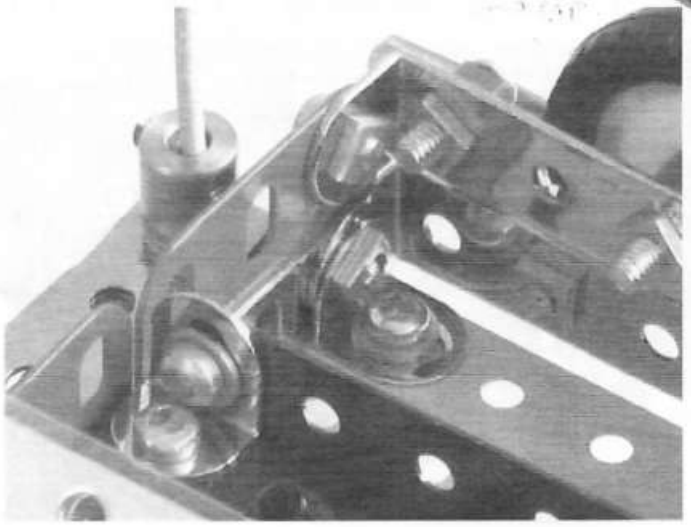


Start with a 5½" x 2½" Flat Plate. At each corner bolt a P/N 12 ½" x ½" Angle Bracket, the other lug pointing up and sideways. Bolt a 5½" Flat Girder through it's slot holes to the P/N 12. The Flat Plate is thus halfway up the Flat Girders. The round holes below carry 3½" Axles for the 1" Pulleys Wheels (plus Tyres).

At the REAR fix a P/N 48a 2½" x ½" Double Angle Strip on the same Bolts that hold the Flat Girder. These Bolts also hold the rear round hole of a 1½" Flat Girder each side. Join their rear slot holes by another P/N 48a. In front of them are a pair of 1" Flat Girders also bolted to the side girders. Alternatively, use a 2½" Flat Girder each side.

For the SEAT bolt two P/N 12 to the floor at the outer 4th holes from the rear. Bolt a 2½" Flat Girder vertically to them. Bolt two more P/N 12 to another 2½" Flat Girder, then bolt them to the vertical Flat Girder to form the seat.

Detail at the rear right of the jeep



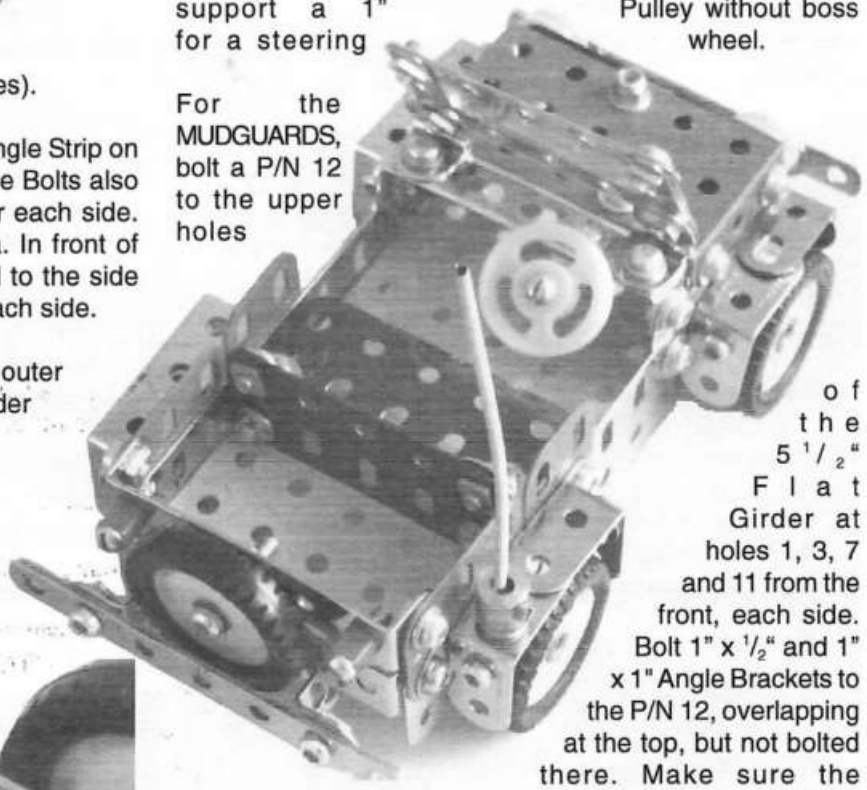
THE BONNET: Bolt Fishplates vertically to each 5½" Flat Girder at the 4th holes from the front. Bolt a P/N 48a across between them. At the 1st and 3rd holes from the front bolt four more Fishplates vertically and to them bolt a 2½" x 1½" Flanged Plate.

The front of the bonnet is another 2½" Flat Girder held by P/N 12 top and bottom. Before fixing this, bolt on to it two yellow ½" Pulleys for the headlamps. Also two ½" Reversed Angle Brackets one hole in from the lower edge, each side, to hold the front bumper which is double 3½" Narrow Strips.

At the rear, bolt two more P/N 125 one hole in from each end of the lower P/N 48a. These carry the rear bumper, also doubled 3½" Narrow Strips. Use a ¾" Bolt to fix a fifth Pulley with tyre centrally to the upper rear P/N 48a.

A Hinge on each side holds the windscreen to the crosswise P/N 48a.

Bolt a 1" x ½" Obtuse Angle Bracket in under the bonnet to support a 1" Pulley without boss for a steering wheel.



For the MUDGUARDS, bolt a P/N 12 to the upper holes of the 5½" Flat Girder at holes 1, 3, 7 and 11 from the front, each side. Bolt 1" x ½" and 1" x 1" Angle Brackets to the P/N 12, overlapping at the top, but not bolted there. Make sure the mudguards clear the tyres.

The radio aerial is a short piece of Spring Cord held in a Rod Socket which is bolted to the rear hole of the mudguard.

A machine gun mounting and a gun could be fixed in a corner of the rear luggage space.

Photos by Lloyd Spackman

MY STORY OF A LORRY MOUNTED CRANE

by Colin Cohen, Cape Town, South Africa

This is a story about the oldest model which I still have assembled. I've always had an interest in cranes, possibly from watching the cranes at work in our harbour. Access was easy in those days and my boyhood friend Michael Adler and I were frequently down there after school on our bicycles. Anyway, some thirty years ago I picked up a dealer's catalogue on various types of Jones Cranes at a local flea market and one that took my fancy was the KL 15-30 mounted on a Foden Lowline Chassis. For some years I had wanted to tackle this subject but lacked sufficient parts as it is after all two models in one. But my collection had been growing and I reckoned that without too many visits to the local Meccano agent, the time was ripe. I had a large scale in mind, using 6" ashtray tyres, but these had already become scarce and so I decided to go to the other extreme, and hence the $2^1/_2$" Plastic Road Wheels. Because of restraints in size I did not include an optional auxiliary hoist for a fly jib, nor free fall lowering of the hoist with a brake as opposed to powered lowering.

Figs. 2 and 3 show the underside of the chassis. The vehicle is powered by a remarkably powerful Marx milliperm motor with wafer type gearbox housed in the engine compartment, through a clutch, 4-speed and reverse gearbox, auxiliary gearbox giving overdrive and under drive and single differential driving the rear Wheels, all located between a $2^1/_2$" wide chassis assembled from Flat Girders. The three selector shafts for the main gearbox may be seen centrally beneath the driver's compartment, arranged to slide in $1^1/_2$" Angle Girders. The pairs of Collars to the front are each fitted with a Bolt and a Centre Fork on the lower end of the gear lever engages between their heads in order to slide the Rods to and fro. The tips of Rods, which are positioned vertically beneath the seat, protrude through a 3" Strip so as to engage under spring pressure in the gap between the second set of Collars, thereby holding the selector shafts in the neutral position. The clutch being between the selector shafts and the gearbox, the linkages are required to pass up behind the seat and through the engine compartment and then down to the gearbox. Similarly for the auxiliary gearbox. The two long Rods are for disengaging the clutch.

The differential (fig. 4) is of the spur type with a Helical Gear crown wheel of the Liverpool design. In order to couple the two, fit a long Grub Screw to the boss of the gear, screwing it down onto the Rod and then back one turn or so. Slip the round end of a Rod and Strip Connector onto the Rod and against the boss such that the edge of one side of the portion that is intended to grip a Rod engages into the screwdriver slot of the Grub Screw. The two are now locked and will rotate together. The free end of the Rod and Strip Connector locates between the ends of adjacent Rods or a Bolt and Rod protruding through the Wheel Disks housing the differential. The Helical Gear is thus linked to the differential cage. Who needs the Argentinian design with radial holes! Admittedly the tapped bore of the Helical will not last long if you are going to drive the vehicle around the floor, but I have always had the wheels running freely and wear seems to have been negligible after having been displayed at countless exhibitions.

Each outrigger is formed from two $5^1/_2$" Double Angle Strips bolted together at their ends. These locate in and slide in the housing as shown in fig. 2. The

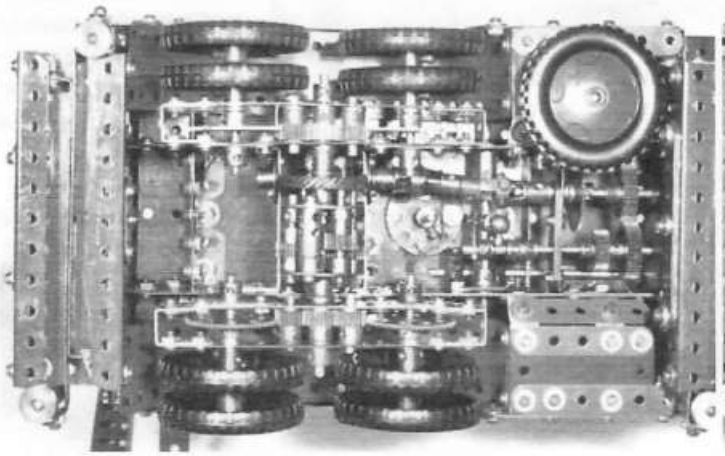


Fig. 3 - rear

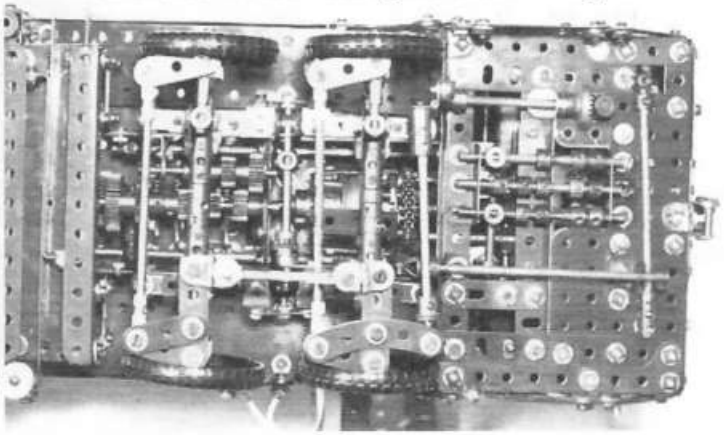


Fig. 2 - front

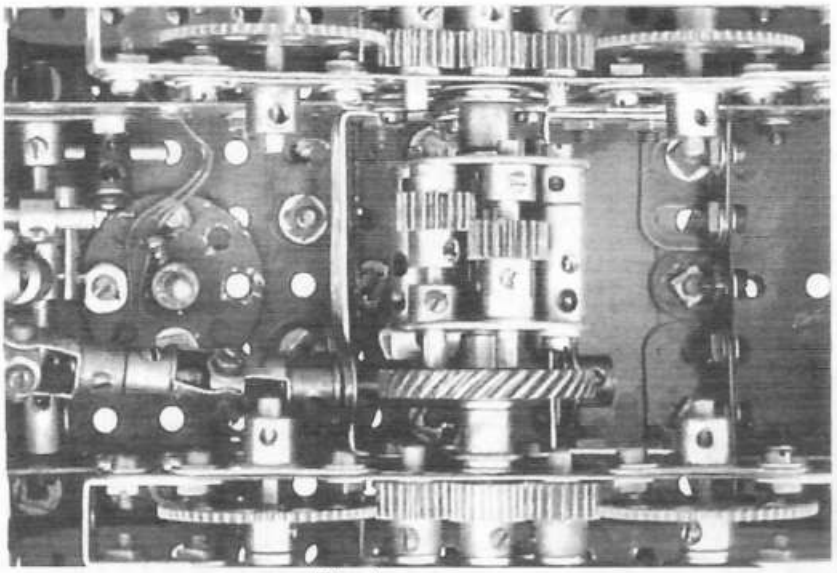


Fig. 4

Bolts that enter the sides of the housing have spacing Washers fitted beneath their heads such that the shanks of the Bolts only just protrude beyond the face of the nuts. Placing a $5\frac{1}{2}$" Strip over these shanks will then provide a smooth sliding surface for the outriggers.

Modelled in red and green, the inside of the drivers compartment is contrasted in yellow and zinc, this requiring double Plates and Strips and brass Bolts with zinc Nuts (fig. 5). The full width seat is 'upholstered' in checkered blue and gold. Shown here to is the door latch. Secured to a $\frac{3}{8}$" Bolt is a Pawl without Boss to serve as the handle on the outside and a Fish Plate on the inside. A second $\frac{3}{8}$" Bolt holds three Fish Plates with spacing Washers in between such that the outer two fit on either side of an Axle Rod as shown, with the round hole of the inner pivoting on a Bolt fitted to the first-mentioned Fish Plate. With the edge of the inner Fish Plate bearing against the Rod, the assembly thus acts as a Bell Crank such that when the handle is depressed, it rotates clockwise and the outer Fish Plates push against the left hand Collar thereby unlatching the right hand end of the Rod from the door post. The Compression Spring on the left returns the Rod and handle. A 2" Angle Girder positioned across the lower edge of the window is bolted to the Threaded Boss seen above the Compression Spring. Apart from finishing off the door, this will also prevent the assembly from lifting upwards.

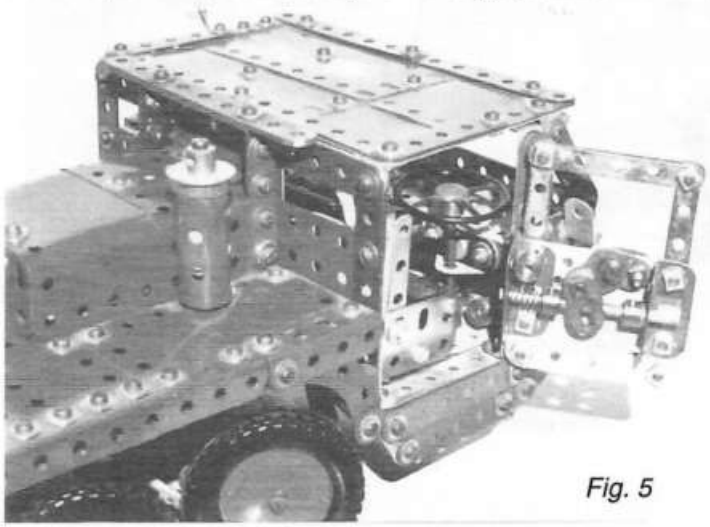


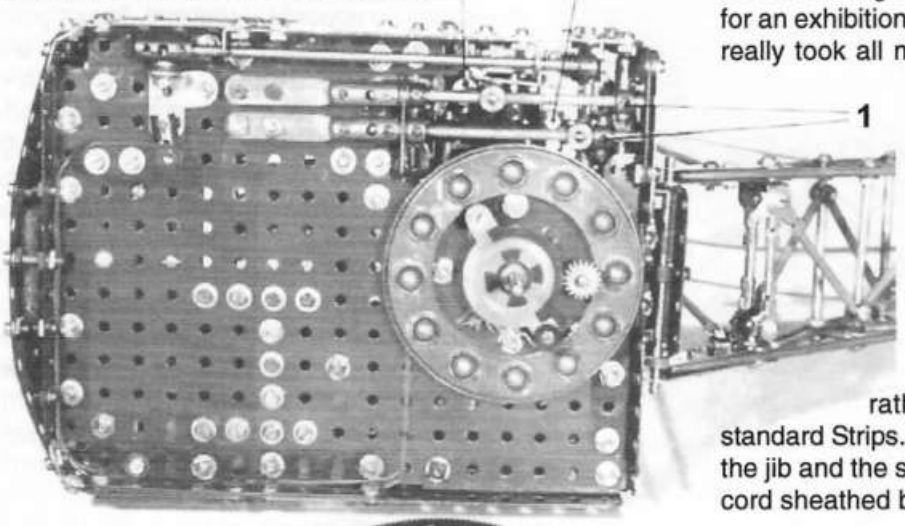
Fig. 5

The crane is powered by a PDU through a clutch acting on the $1\frac{1}{2}$" Gear Wheel and 4-speed gearbox situated behind the winding drums (fig. 5). A Pinion on the output Rod drives two further Pinions below and these in turn rotate the first sets of gears to their left (derricking) in opposite directions. These gears mesh with the next set to the left (hoisting), and these with the third set (slewing) which is partially hidden in the front end of the machine house. The movements are engaged through friction clutches each consisting of the respective Gear Wheel, a 1" Pulley without Boss fitted with a Rubber Ring and a Bush Wheel which is secured to the Rod. The clutches are engaged by pushing the Gear Wheels from side to side by means of Rod and Strip Connectors positioned between their bosses. These in turn are attached to transverse Rods extending across to the drivers side.

Fig. 7

Fig. 7 shows the drivers cabin, also in zinc and yellow. The operating levers are more or less in their correct positions. The right hand lever extending up from the floor is for the hoist, whilst that to its left is for changing gears. The slewing and luffing levers take the form of Threaded Pins fitted to Collars on the console situated beneath the

front window. I was pondering for some time over how to link these controls in a practical manner to their respective drives when Nature called and it was then when I wondered whether Healds would do the trick. Chasing up Nature and hurrying back, I excitedly got out a couple of Healds and with their centre hole held by the Threaded Pins and their ends on Bolts



on either side of Collars 1 (fig. 8), they proved to be just the right length.

Fig. 8

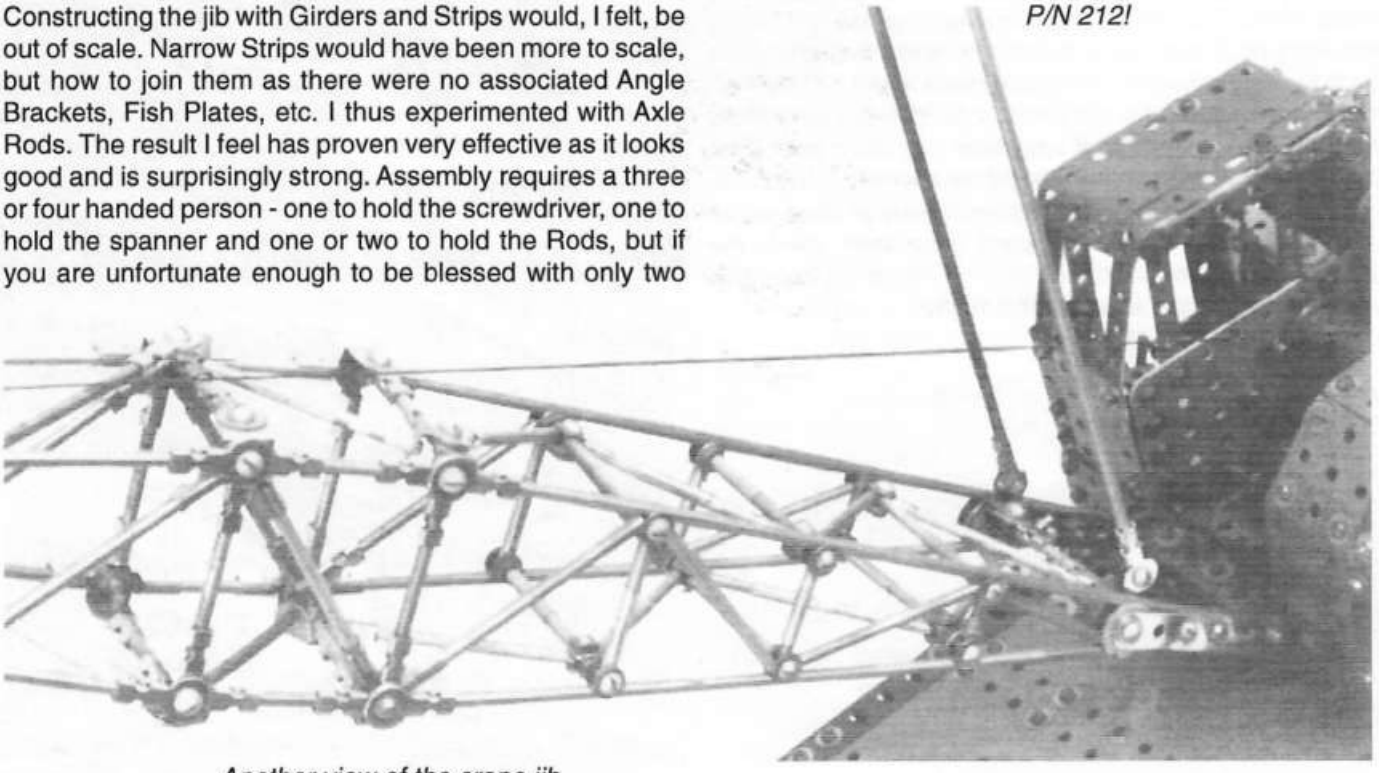
Moving the levers to and fro thus causes the Rods to rotate against the springing action of Elektrikit Wiper Arms to the left. Threaded Pins then fitted to the cross bores of Couplings secured to the Rods locate between Bolts fitted to Collars on the transverse Rods mention above, that for slewing visible at 2. The Rod supporting the hoisting lever is linked to Collar 3 also by means of a heald, rotation of the Collar imparting movement to the respective transverse Rod. The third and longer Rod is the clutch linkage.

Constructing the jib with Girders and Strips would, I felt, be out of scale. Narrow Strips would have been more to scale, but how to join them as there were no associated Angle Brackets, Fish Plates, etc. I thus experimented with Axle Rods. The result I feel has proven very effective as it looks good and is surprisingly strong. Assembly requires a three or four handed person - one to hold the screwdriver, one to hold the spanner and one or two to hold the Rods, but if you are unfortunate enough to be blessed with only two hands then you will require endless patience. Rotating the Bolt causes the Washer beneath to rotate and thus the Rods will naturally roll to one side. So you then rotate the Nut in order to roll the Rods back again - unless the Rods have fallen out in which case you start all over again. I've used commercial Bolts due purely to a lack of sufficient Meccano long Bolts. Recently, whilst preparing the model for an exhibition, one of the Bolts came loose and fell off. It really took all my patience just to repair that, so I doubt whether I will ever construct in this way again. I would be delighted to hear of anyone adopting this method of construction as the resulting effect is most rewarding. I do now however make extensive use of Rods fitted with Rod and Strip Connectors and fitted to Angle Girders which form the main members for bracing. It looks good and it enables me to place the bracing where it should be rather than trying to match up holes using standard Strips. The supporting cables between the top of the jib and the support frame for the derricking pulleys are cord sheathed by lengths of Spring Cord.

The slewing bearing is as shown, the balls running on a Geared Ring which locates loosely over Bolts fitted to a second ring below and attached to the chassis, presenting a smooth surface as for the outriggers. Power to the crane is transmitted from the chassis through earth and a commutator.

Ed. Colin has provided some biographical notes which we have printed on page 19.

He has also provided all of the photos plus an extra photo of the crane jib to help you understand the ingenious method of construction. Warning - you will need a truck load of P/N 212!



Another view of the crane jib.

Mantel Clock with Briggs' Escapement

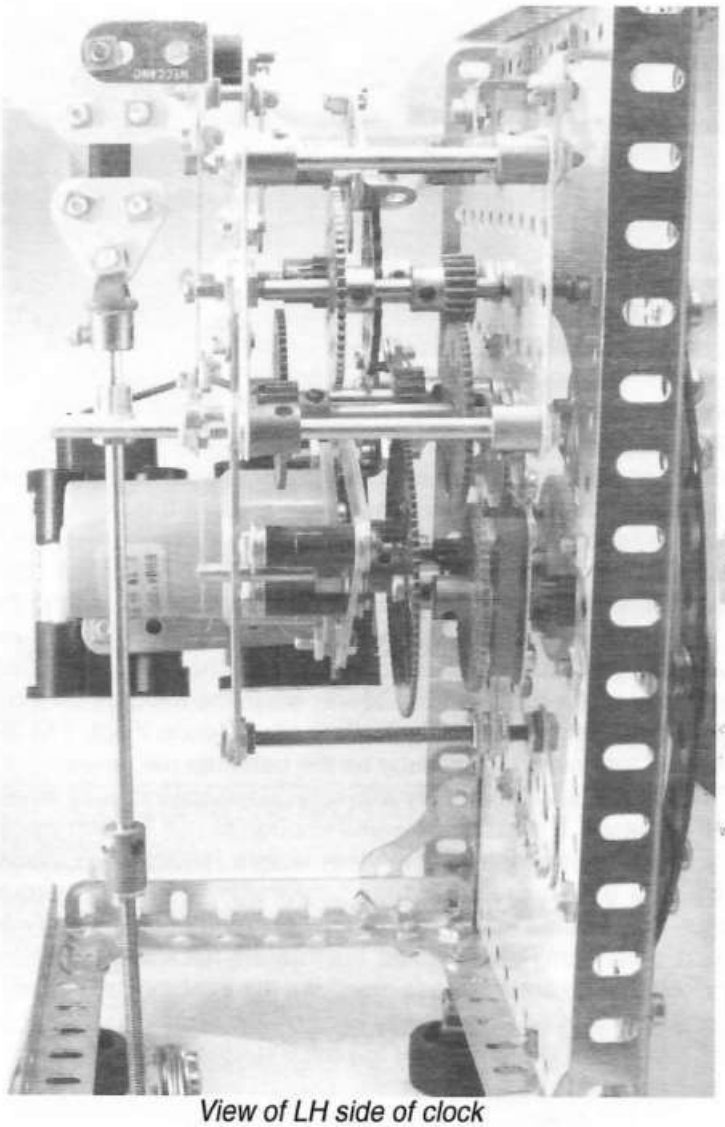
designed, photographed and described by John Stark

This model was one of two clocks that I exhibited at the April 2003 NZFMM Convention in Hawera. My interest in clocks as subjects for Meccano modelling stems from the fact that I prefer making models that have lots of moving parts -especially gears. Clocks are ideal subjects for Meccano model building; well-designed and made they can run unattended for long periods and keep good time too. There are three critical (and interrelated) factors to consider when designing a mechanical clock:-

(1) The number of teeth on the escape wheel,

(2) the length of the pendulum, and

(3) the reduction ratio between the escape wheel shaft and that of the minute hand (which must rotate once per hour). Pat Briggs wrote an article entitled "Basic Clockwork" that



View of LH side of clock

can be obtained from Michael Adler's website <http://users.actcom.co.il/meccano/>. Pat provided four formulae to simplify the calculations required.

1) R = 30 * B / E

2) L = 144,000 / B2

3) L = (3600 / E * R)2 * 10

4) N = L * M / 22.5

Where R = reduction ratio between the escape wheel rod and that of the minute hand.

B = beats of the pendulum per minute.

L = theoretical length of the pendulum in inches.

E = number of teeth on the escape wheel.

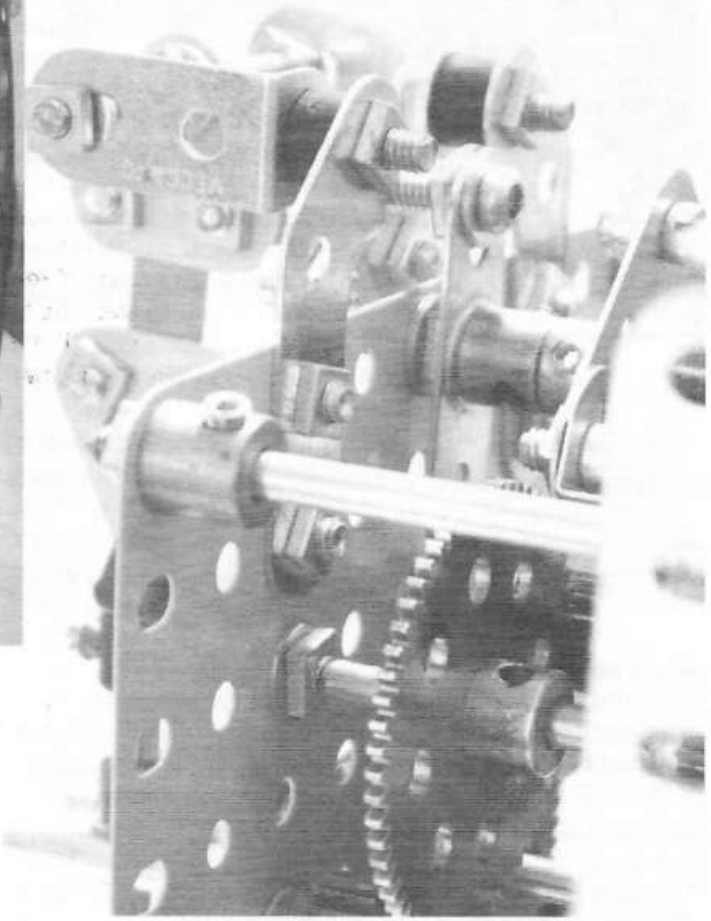
N = number of turns of the rating nut to adjust for one minute per day.

M = minutes lost or gained per day.

The trap for inexperienced clock builders in using these equations is that the theoretical length of the pendulum (L) is always considerably less than the actual length required because allowance must be made for the suspension spring support at the top, the finite size of the bob, and for the screwed rod extension at the bottom for the rating nut. In fact, the practical length of the pendulum is likely to be closer to L + 3 or 4 inches.

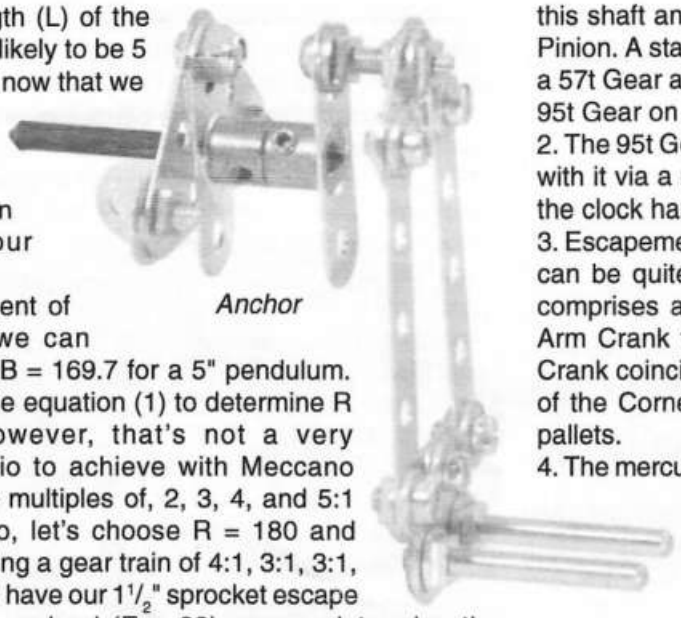
Designing a clock using these formulae can be an iterative process, but often the first step is to choose the escape wheel. It also helps to know that the theoretical length of a so-called "one-second pendulum" is about 40" and it beats 60 times per minute (L = 40", B = 60). A half-second pendulum (B = 120) is one quarter the length (L = 10"), and a quarter-second pendulum would be only 2.5" long (B = 240/minute).

I wanted to design a clock for the NZFMM Easter 2003 15" cube competition. That immediately constrained the practical length of the pendulum to substantially less than 15". I also wanted to use a $1^1/_2$" sprocket (28 teeth) as the escape wheel. I determined that a convenient height for the clock was around $11^1/_2$" leaving room for a pendulum approximately 9" long. That meant that the



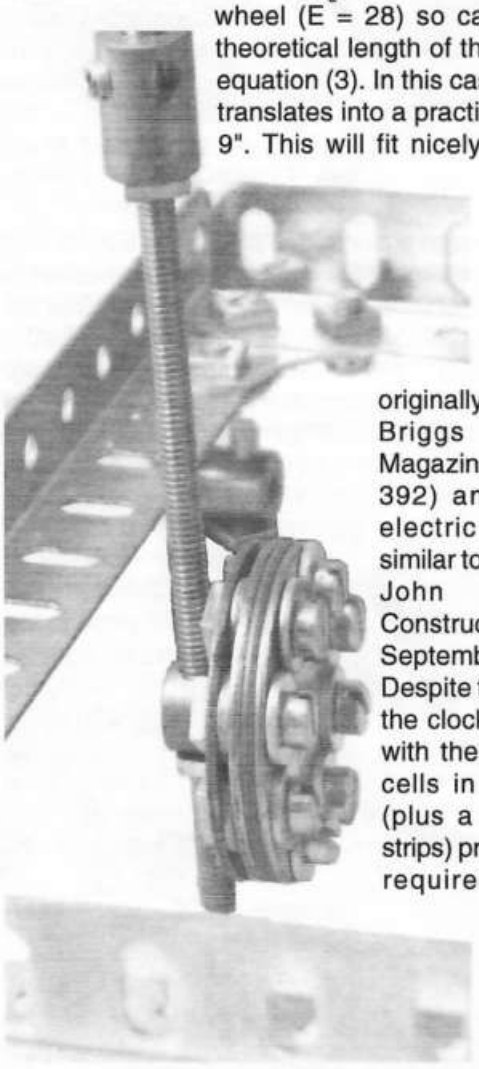
Escapement

theoretical length (L) of the pendulum was likely to be 5 or 6 inches. So now that we know E (=28) and have a best guess at L (say 5) we can begin our calculations.



Anchor

By rearrangement of equation (2) we can determine that B = 169.7 for a 5" pendulum. Now we can use equation (1) to determine R = 181.82. However, that's not a very convenient ratio to achieve with Meccano gearing, where multiples of, 2, 3, 4, and 5:1 are easiest. So, let's choose R = 180 and achieve this using a gear train of 4:1, 3:1, 3:1, and 5:1. We still have our 1½" sprocket escape wheel (E = 28) so can determine the theoretical length of the pendulum from equation (3). In this case L = 5.1", which translates into a practical length around 9". This will fit nicely in the available space.

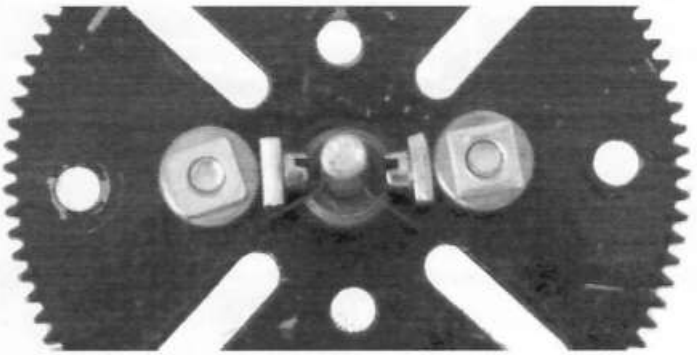


Bob and foot

The resulting clock is a mantel clock using an escapement originally designed by Pat Briggs (see Meccano Magazine July 1968 p390-392) and a sun-planet electric rewind system similar to that described by John Wilding (see Constructor Quarterly 33, September 1996, p4-11). Despite the electric motor, the clock is weight-driven with the motor and 4 AA cells in battery holders (plus a few extra 2 ½" strips) providing the weight required. A mercury switch, which is wired in series with the motor and 6V battery pack, trips the rewind mechanism every few minutes.

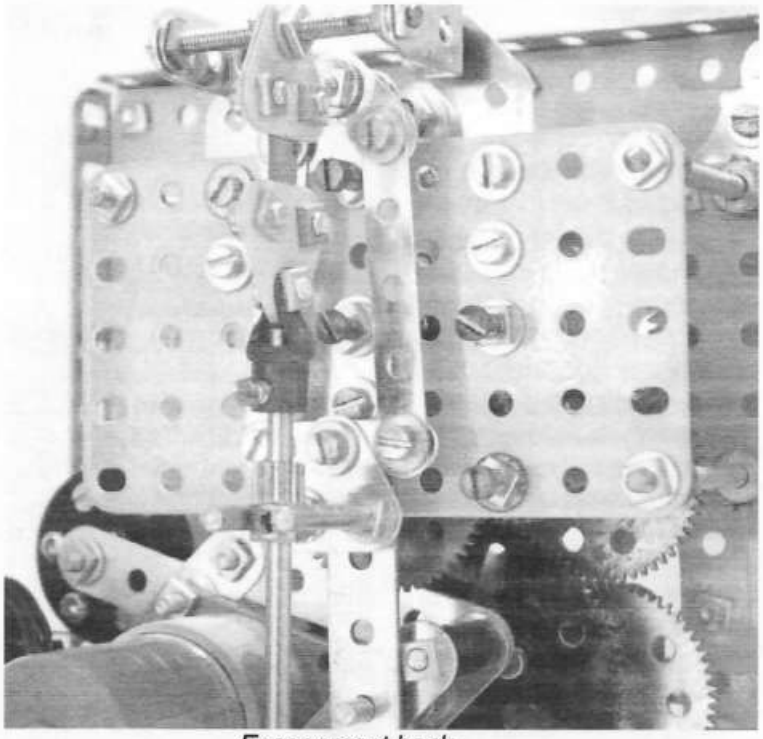
Hopefully, the photographs (combined with your imagination) will reveal sufficient detail to enable construction of this clock. The following notes may assist.

1. Four 2" Pivot Rods provide low friction shafts for the anchor, escape wheel shaft and the next two shafts down the gear train. The escape wheel shaft carries a 28t Sprocket and a 15t Pinion. This Pinion meshes with a 60t Gear on another Pivot Rod that carries a 19t Pinion. Below this shaft another Pivot Rod carries a 57t Gear and a 19t Pinion. A standard 2½" axle in midline of the clock carries a 57t Gear and another 19t Pinion, which meshes with the 95t Gear on the minute hand shaft (3½" Axle).
2. The 95t Gear is loose on the minute-hand shaft but turns with it via a metal Spring-Clip friction clutch. This enables the clock hands to be set.
3. Escapements using standard Meccano Sprocket Wheels can be quite tricky to set up. The "anchor" escapement comprises a 1½" Corner Bracket attached to a Double-Arm Crank through its elongated hole. The boss of the Crank coincides with the vertical slotted hole in the centre of the Corner Bracket. Two ½" Angle Brackets form the pallets.
4. The mercury switch must be wired in series with the motor and 6V battery pack. The end of the switch that the wires emerge from must face outwards from the clock.
5. I slid a 23c over the mercury switch (be careful not to break the glass envelope!) and mounted it between ¾" Bolts projecting from adjacent holes on a 6-hole Insulating Bush Wheel. The boss of the Bush Wheel is fixed to a short Threaded Pin, so that it can be rotated to adjust the arc of the rewind. ½" Bolts in diametrically opposed holes in the Bush Wheel act as terminals for the mercury switch wires. One of these has a motor lead, and the other one of the battery leads attached. Make sure that the motor runs the correct way when the mercury switch is activated. Reverse the battery connections if not. The arc of the rewind will reduce as the batteries run down.



Clutch

6. The ideal motor for the sun-planet rewind is internally geared. It must be powerful enough to pull its own weight (plus batteries and any other weight required) up around the 95t Gear and not fall backwards when the mercury switch turns the power off. I used a motor obtained by mail order from Bull Electrical, but they are not always available from that source these days. If a different motor is used, a pawl can be arranged to bear on the pinion on the motor output shaft to prevent roll back (Michael Adler, personal comment.).
7. The rewind should be adjusted (by rotating the insulated bush wheel) so that the motor works through an arc equidistant above (after the rewind has occurred) and below (when the rewind starts) the level of the minute hand shaft. The driving weight (comprising the motor etc.) is greatest when the motor shaft and the minute hand shaft are on the same level.
8. The pendulum comprises a 5" Axle joined to a 3½" Screwed Rod using P/N 64a. The Screwed Rod is passed

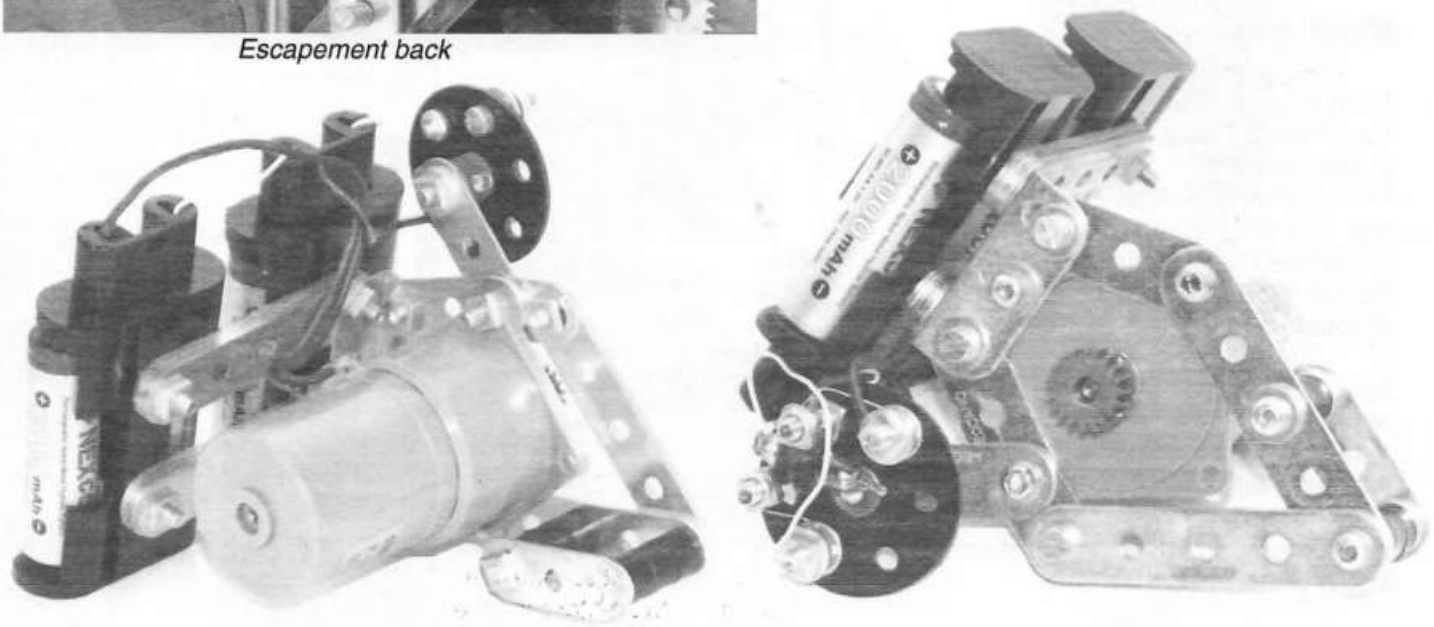


Escapement back

through the threaded bore of an 8-hole Bush Wheel. A few Wheel Discs are added for extra weight. A hex-Nut below the Bush Wheel locks it in position when the clock has been adjusted to keep accurate time. The pendulum suspension spring is a 1" length of spring steel.

9. Once the clock is level, ensure that the tick is even by adjusting the position of the Angle Brackets on the anchor, the height of the $1^1/_2$" Corner Bracket above the escape shaft (adjusted by loosening the Bolt (with locknut) in the slotted arm of the Double Arm Crank), and the relationship between the anchor and the crutch.

10. The effective length of the pendulum can be altered by moving the bob up and down to adjust the time-keeping. Set the clock to the correct time and let it run for a while. Record how many minutes (or hours!) fast or slow it is and use equation (4) to determine how many turns to raise (if slow) or lower (if fast) the pendulum bob.



The rewind mechanism seen from both sides.

Progress on MOTAT Exhibition

by Andrew Wells

The MOTAT Meccano exhibition is now locked in for 1st February 2004 through to after Easter.

The final format will be:-
Glass cases of traditional models including static and working models.
Glass cases of models built from current sets, with sample boxes.
Display of literature/advertising materials.
Limited Stock of current sets for sale in MOTAT shop.
MOTAT are excited about the venture, and the timing will mean that we get good coverage through school groups in their first term of the new year, plus the entire Easter/School holiday break. Logistically, we will require models to be available in the latter part of January, for placement in the cases, and for any wiring etc to be put in place.

Would all those who have offered (or still want to offer models), please confirm to me directly as follows:
Model description.
Space requirement (height, width, depth).
Power requirement (if any).

I am still looking for models, including the current series. Once we have the final list, I can plan the placement within the available cases. We can then work the details of transportation, regular maintenance etc.

Contact Andrew at Andrew@ampworks.co.nz., phone 09 523 4447, fax 0800 MECCANO or write to Box 26179 Epsom Auckland 1003.

The Canadian Sheriff

originally designed by Andreas Konkoly
with new pictures and text by John Ince

As Andreas Konkoly said:
The murderer from Winnipeg climbed up, fled to the top, the sheriff clambered up afterwards - on a cord. This moment is seized in this very exciting, moving model. The figure in climbing so realistically is, a true, living, man.

Body.

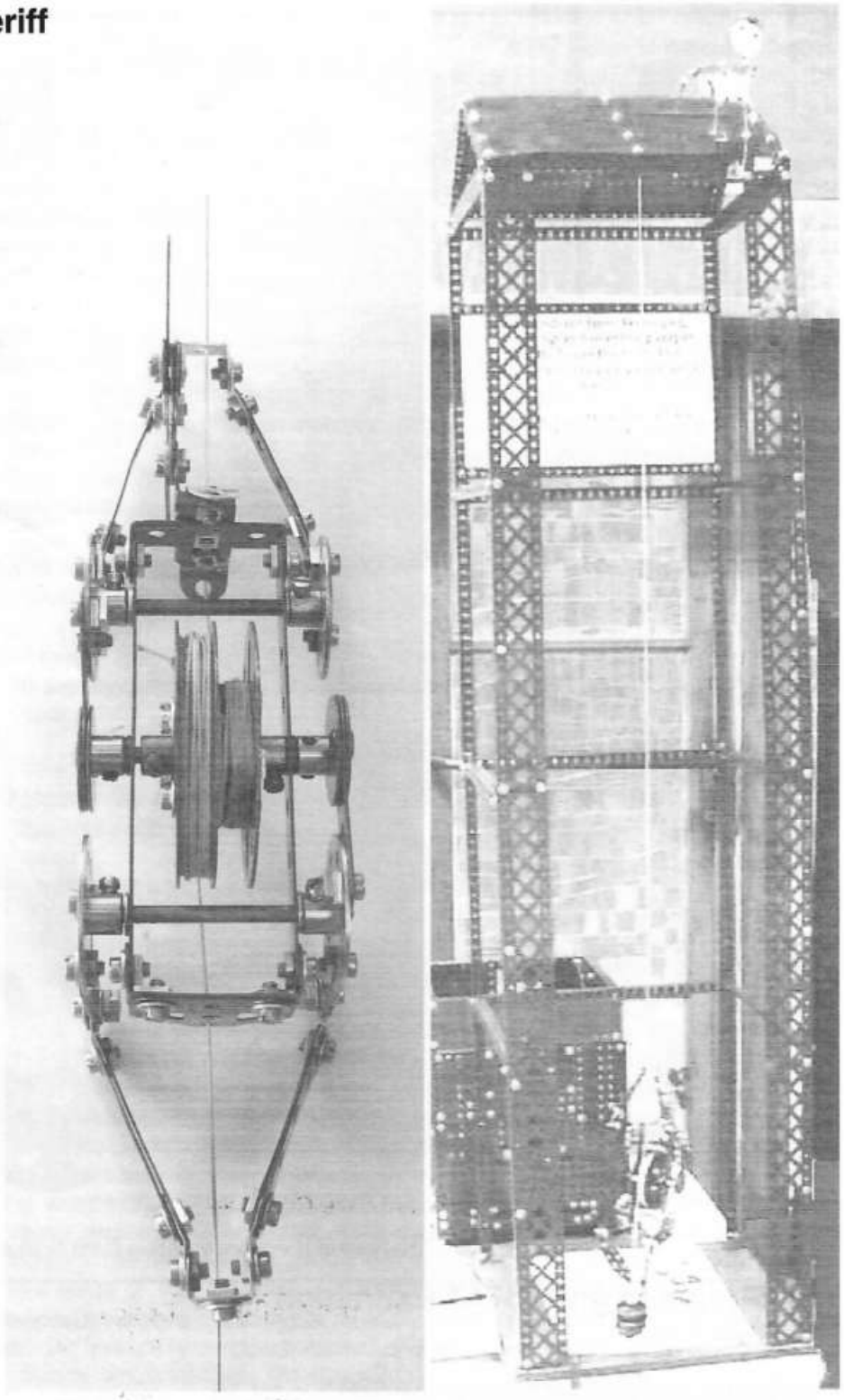
Take 2 of Pt No 3, 2 of Pt No 48. On the upper Pt No 48 Double Angle Strip, set a Pt No 24c at the right and at the left 2 of Pt No 12c and 2 of Pt No 126 as the neck. On the lower Double Angle Strip fix a Pt No 126a, Flat Trunnion.

Mechanism.

Form a double drum with 3 Pt No 109 Face Plates. These are mounted on a 2" Rod with a Pt No 3 3 1/2" Strip and a Pt No 130a Single Eccentric on each end. The RH Face Plate has a Pt No 137 Wheel Flange bolted to it with 4 Pt No 111 3/4" Bolts. Tie a 120cm length of cord to one of these bolts.

Space the next Face Plate from the first with a Pt No 59 Collar. Place 4 Pt No 111a 1/2" Bolts in the slotted holes of this Face Plate and secure it to the third Face Plate with 4 Nuts using Washers as necessary. Fix a 70cm length of cord to one of the Pt No 111a Bolts.

We now have a double drum with the RH one being of a slightly greater diameter than the LH.



Parts List

Part No.	Description	Size inches	Total Parts
3	Perforated Strip	3 1/2"	2
5	Perforated Strip	2 1/2"	2
6	Perforated Strip	2"	10
10	Fishplate		4
11	Double Bracket		2
11a	Double Bracket (long)		1
12c	Obtuse Angle Bracket		10
16a	Axle Rod	2 1/2"	4
24	Bush Wheel	1 1/2"	4
24a	Wheel Disc	1 1/2"	3
37a	Nut		65
37b	Bolt		39
38	Washer		32
48	Double Angle Strip	1 1/2" x 1/2"	2
90	Curverd Strip	2 1/2"	4
109	Face Plate	2 1/2"	3
111	Bolt	3/4"	4
111a	Bolt	1/2"	4
111c	Bolt	3/8"	4
123	Cone Pulley		1
126	Trunnion		2
126a	Flat Trunnion		3
130a	Eccentric single throw		2
147c	Pawl without boss		1
	Hank of Cord		

The above picture, by Peter Hancock, shows the Canadian Sheriff ready to climb the rope and capture the murderer who is escaping across the roof of the warehouse.

This model attracted a lot of attention from the kids who pulled the cord so much that it finally broke!

Arms.

The upper arms are made from two Pt No 2 Strips fixed opposite the Eccentric on the Pt No 24 separated by one hole. Their other ends come together and are lock nutted to a Pt No 12c. The fore arms are single Pt No 2 Strips bolted to the Pt No 12c and to another Pt No 12c at the hand which is a Pt No 11.

Legs

The upper legs are Pt No 2 Strips fixed to the Pt No 24 the same way as the upper arms. A Pt No 12c forms each knee while the lower legs are each made from two Pt No 90 bolted, convex curves facing, to the Pt No 12c ankle. A Pt No 11 forms the foot with a Pt No 10 the toe.

Head

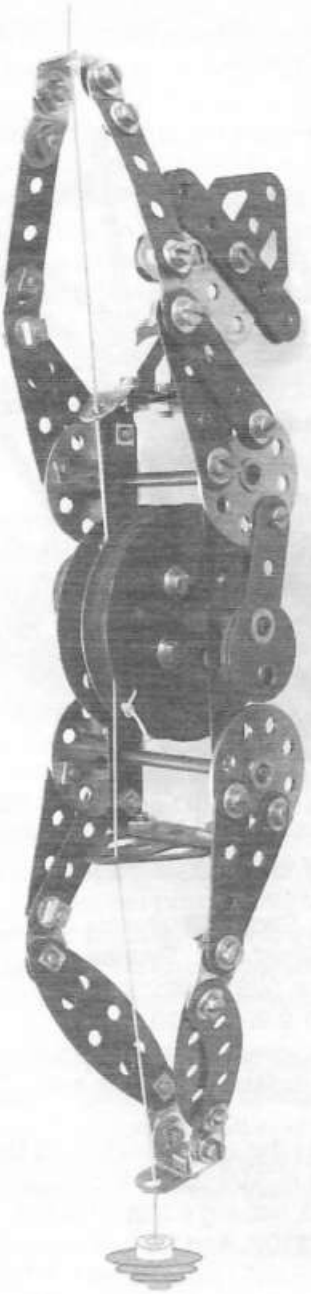
The head is a Pt No 24a and has two Pt No 5 Strips and a Pt No 126a Flat Trunnion for the hat. Two Pt No 10-Fishplates form the nose with a Washer for the eye. A Pt No 147c Pawl forms the beard. The neck and shoulders are a Pt No 126 Trunnion on a Pt No 24a Wheel Disc with two Pt No 12c front and rear. This assembly bolts to the Pt No 48 on the top of the body.

Stringing.

The length of cord required depends on how high the top support (wall) is. The bottom of the lower cord is counterweighted with a cone pulley but if you do not have one something else of similar weight but not as rare will do. For extensive use a braided synthetic cord should be used rather than Meccano cord.

Operation.

When the lower cord is pulled downwards, the Canadian Sheriff scrambles up the cord to the top!



News of new Meccano sets for 2004

by Andrew Wells

I saw a sneak preview of the planned 2004 catalogue recently. Many of the new items, particularly the Meccano City range, are now to come out of Hong Kong. Good to see two planned buckets of Meccano City parts along the lines of traditional Plastic Meccano – no fancy pre-molded parts, just good old strips, plates, axles etc. Maybe the harbinger of a move back to standard metal sets?!

For Metal Meccano: The Ferris Wheel Set is now available ex HK and will be in NZ sometime in 2004. Gone are the Future Master series. There is one additional Crazy Inventors set with a clock theme, but using a packaged "$3" clock mechanism rather than attempting to use any Meccano mechanics in the actual timekeeping movement. There are more Design Series coming through the year, including a radio controlled 4WD, and a range of small Design sets that will retail for somewhere around the $15 mark and so hopefully tap into the market below the current two Model sets. The retail counter display will have a number of these sets in a 'dispenser' arrangement reminiscent of the Pocket Meccano sets. Also coming, a series of collectors sets building different landmarks, including a new Eiffel tower set. Look out for a special collectors' set in the middle of the year, building a very smart looking model. More on this one next issue.

Thoughts on turntables

by Andrew Wells

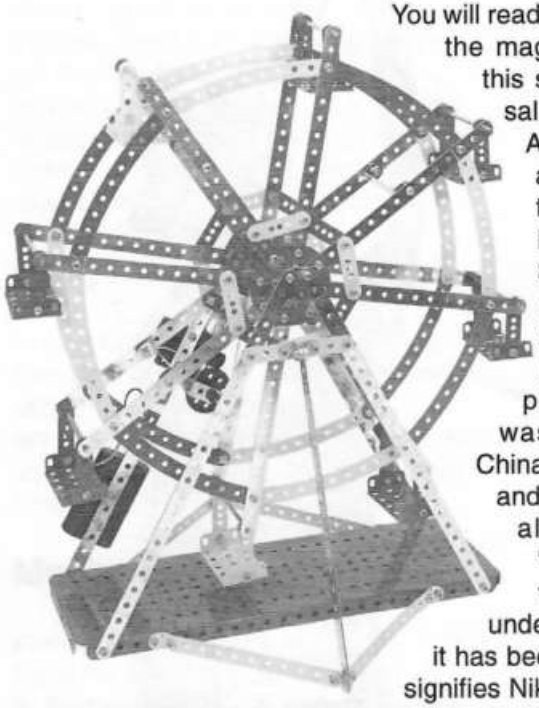
Thought some might be interested in some work I've been doing on a simple ball turntable, now that P/N 168 is no longer available.
Started off with the traditional two 3" pulleys plus wheel

(continued on page 16)

Ferris Wheel Set 8257

Notes for New Zealand Readers

by Bob Prescott



You will read elsewhere in the magazine about this set that is on sale in Australia. Apparently it is a re - issue of the 1994 Erector set 8256 marketed only in North America. This particular set was made in China for Meccano and the parts are all marked "MECCANO©" with a "(N)" underneath which it has been suggested signifies Nikko.

Do you want a set? I have just bought mine from Hobbyco in Sydney and their details are:-

Hobbyco, Shop 402, Gallery Level, Mid City Centre,
197 Pitt Street Mall, Sydney.
Telephone: 0061 2 92210666
Fax: 0061 2 92210710
Web Site: <www.hobbyco.com.au>
Email: <info@hobbyco.com.au>

They retail the set for AU$74.95 but the tax free price for overseas is AU$68.14 and postage to New Zealand is AU$23.50, making a total of AU$91.64 which converted is about NZ$107. And the set - well, it is very colourful with some very useful parts - a red P/N 236 $13^1/_2$" x $4^1/_2$" Flanged Plate, 16 x P/N 89, 8 yellow, 4 blue and 4 red, 2 x P/N 109 blue Face Plates to mention but a few. The manual printed in China is of a good standard and the many colours in the set lends itself to interesting two dimensional shapes as well the Ferris wheel and other models.

Andrew Wells of Ampworks has indicated "that it won't be available in New Zealand until at least into the New Year and then only if there are enough other sets coming out of Meccano Hong Kong to justify a container sized order from there rather than from Calais".

I received a prompt service and it was well packed with plenty of bubblewrap, and even allowing for postage and the currency exchange, in my view it still represents good value.

Additional Notes from the Internet Spanner Group

Australian Dick Smith Electronics stores have several Meccano Sets on special at present, as follows: -

Special Edition Train.	0507	AU$99.00
Ferris Wheel - All Metal	8257	AU$69.84
Motion System	20	AU$39.96
Motion System	30	AU$69.96
Motion System	40	AU$69.86
Motion System	50	AU$109.00

The Ferris Wheel Set No.8257 looks to be a particularly good bargain being all genuine metal Meccano, including brass bossed plastic gears etc., also two P/N 109s, an MO motor etc. 477 parts in all. *Alby Victor, Australia.*

2 - I have it on good authority that the Ferris Wheel Set as being sold in Australia is a special out of Meccano Hong Kong rather than Calais. This may tie in with the comments about different stampings on the parts. It may well be the start of a split supply policy from Meccano, with some sets ex - Calais and others ex - Hong Kong.
New Zealand's should note that it won't be available in New Zealand until at least into the New Year, and then only if there are enough other sets coming out of Meccano Hong Kong to justify a container sized order from there rather than from Calais. *Andrew Wells, Auckland, New Zealand.*

3 - Thanks for all the interesting information re the Ferris Wheel set. One now wonders if it's turned up in this form only in Oz and it didn't seem to be semaphored in any way that it was coming. Re Hobbyco, if you're a Hobbyco Club member you get 10% off which brings it in about AU$2.50 under DSE price.....and if you bought two sets or one set and some parts, (i.e. more than AU$75 all up) postage Oz wide is free. *Alby Victor. Australia.*

4 - The Hobbyco price is $74 odd and you have to add postage which then makes it maybe $15 over Dick Smith's price. On the other hand their Centenary Crane set at $99 is quite a good buy? (Oz dollars!). *David Wells, Australia.*

5 - A little more information re the Ferris Wheel Set. It appears to be a reissue of the 1994 Erector set 8256 originally marketed in North America only. The new Meccano set is number 8257 and the Erector reissue is 8258. The contents of mine are as per Oscar's list with the exception of the new 700 series motor and four of 1" bolts. If you point your browser at the Hobbyco site, you will see that Woolworths (Dick Smith) is not giving us a particularly

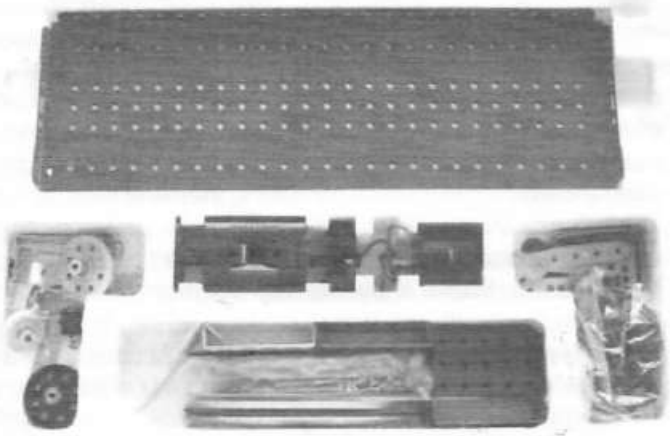
great cut off the RRP (Recommended Retail Price). I suspect that Patrick is right about the markings. The design and placement of the stampings is suggestive of new or heavily reworked tooling. There are also differences in the end profile of parts No 1, 1a and 1b in this set. Also the rods are cropped but the ends have been sort of rounded and appear to be nickel plated.

I don't believe in the tooth fairy, so I will say that these sets are entirely made and packed in China. The manual is explicit in this. In three languages, the back cover proclaims "Made in China for Meccano SN". The Erector box will confirm because of the country of origin requirements there. Also, even at Hobbyco's pricing this set is broadly comparable in price with the new Design 3 set from Calais. The number of parts and the amount of powder coat on the parts together with its effects as a cost driver preclude French production at this price point.

I suspect that we are now finally seeing the consequences of the Nikko purchase - traditional Meccano, manufactured in Asia, with design and marketing based in Europe, if the French are very, very lucky. The most probable scenario is a warehouse located in the part of Europe that minimises operational costs. It is not well known, but nevertheless a fact, that Binns Road engaged in a bit of Asian manufacture as early as the mid sixties. So this is not a new trend. I suspect we will next see either a re - launch of the Enthusiast/Techno sets 1 - 6 or (sigh) the Evolution series, if this experiment generates the ROI (Return On Investment) Nikko is looking for. If it means a gradual return to real Meccano sets with lots of metal in them, as well as some of the bigger parts, it can be no bad thing.

Having compared these new Asian parts with the contents of a Multi Model 50 set (Calais manufacture) bought when Dick Smith had them for $A99, I know which parts I would prefer in my stock.

One more observation, in Constructor Quarterly No 34 , December 1996, page 18 in about 1996, Bert Love did a write up of the original set. Boy, did he give it a serve. He basically said that it could not be built as per the manual. I always regard myself as a bit of a hacker and scraper in these things, but my set almost fell together exactly as per the instructions. Everything fitted perfectly and certainly I experienced no dishing of the wheel and did not have to enlarge the end holes on any of the parts 89 at all, much less by as much as Bert's quoted $^1/_{10}$". I really don't know what to make of this. *Lindsay Carroll*



Photos by Bob Prescott

6 - Thanks for the information of Meccano sets at Dick Smith Stores. Much to my surprise their Hobart store had the Ferris Wheel 8257 set in stock so I obtained one. Very happy to see a set with a minimum of plastic and no push on bits and pieces which always fall off. You didn't mention the P/N 236 $12^1/_2$" x $4^1/_2$" Flanged plate in red which was a nice bonus for me as I have seen it used recently in models. I see in Oscar Felgueiras' spreadsheet on French Meccano sets 1989 - 2002 the Ferris Wheel set is listed as 8256 released in 1994. The manual is printed in China in 2003 but the box does not indicate the source of the parts. All the strips etc. are stamped MECCANO © with (N) stamped underneath . I have not noticed this Marking on any of the recent sets. One wonders if this is a new run of parts or old stock. Perhaps a more knowledgeable Spanner can comment? *John Phipps, Hobart, Tasmania.*

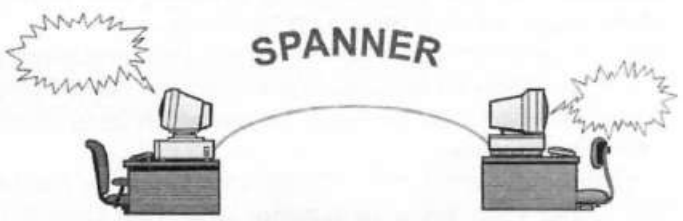
7 - The "N" is probably signifying Nikko - the new owners of Meccano. The Meccano logo has also changed slightly under their ownership, it includes a little red triangle, perhaps the Rising Sun peeping over the logo and the sign of a return to "Real Engineering in Miniature"? *Patrick O'Shea.*

8 - Parts List

Ferris Wheel Set 8257 from John Phipps.

Key to finish: - zn - zinc, bl - blue, rd - red, yl - yellow, bl - black.

Part	Item	Size	Qty
1	Strip - zn	$12^1/_2$"	4
1a	Strip - zn	$9^1/_2$"	2
1b	Strip - zn	$7^1/_2$"	16
2	Strip - yl	$5^1/_2$"	4
3	Strip - yl	$3^1/_2$"	2
4	Strip - zn	3"	2
6	Strip - bk	2"	10
6	Strip - rd	2"	10
6	Strip - yl	2"	12
12	Angle Brackets - zn	$^1/_2$" x $^1/_2$"	4
12c	Obtuse Angle - zn	$^1/_2$" x $^1/_2$"	8
15	Axle Rod	5"	1
16	Axle Rod	$3^1/_2$"	8
16a	Axle Rod	$2^1/_2$"	2
21	Pulley with Boss	$1^1/_2$"	1
22p	Pulley with Boss	1"	1
23c	Rubber Pulley	8.5 mm	22
27ap	Gear wheel	$1^1/_2$"	1
32p	Worm - bk		1
34	Spanner		1
36c	Allen Key	3 mm	1
36d	Allen Key	2 mm	1
37a	Square Nuts - zn		133
37b	Socket Head Bolts - zn		120
38	Washers - zn		12
38a	Plastic Washers - bk	$^1/_2$"	16
46a	Double Angle Strip - zn	$1^1/_2$" x 1"	1
48	Double Angle Strip - zn	$1^1/_2$" x $^1/_2$"	1
48a	Double Angle Strip - zn	$2^1/_2$" x $^1/_2$"	4
51	Flanged Plate - bk	$2^1/_2$" x $1^1/_2$"	3
51	Flanged Plate - rd	$2^1/_2$" x $1^1/_2$"	3
51	Flanged Plate - yl	$2^1/_2$" x $1^1/_2$"	2
69a	4mm Grub Screws - zn		3
77	Triangular Plate - zn	1"	2
89	Curved Strip - bk	$5^1/_2$"	4
89	Curved Strip - rd	$5^1/_2$"	4
89	Curved Strip - yl	$5^1/_2$"	8
109	Face Plate - bk	$2^1/_2$"	2
111	Bolt hex head - zn	$^3/_4$"	2
111a	Bolt hex head - zn	$^1/_2$"	8
111c	Bolt hex head - zn	$^3/_8$"	3
186a	Driving Band light	6"	2
236	Flanged Plate - rd	$12^1/_2$" x $4^1/_2$"	1
700	Electric Motor 3v		1
720	Battery Holder 2AA with switch		1



August and September 2003

The use of email from the Spanner group is acknowledged.

Konkoly Model Plans - At the Runnymede Meccano Guild meeting last Saturday I discussed the question of Andreas Konkoly's Modelling instructions. I now have several volunteers who have all agreed to have a go building and re-writing the instructions. I would like to point out that if an individual was to complete one set of instructions a fortnight then it would take him 10 years to complete the project. We still have many things to sort out, least of all, how we intend to distribute the fruits of our labours. I will keep you all informed of the progress on this project over the coming months. *Nick Rodgers.*

Plastic Rod Connectors - Tip: go to your Hardware shop and have a look at what they offer for tubing sold by the metre (or foot or whatever). At Home Depot here they sell various types, including ones suitable for use as Rod Connectors and others which make good replacements for the little soft translucent collars (p/n 59b or 59c or something). *Lynn Krause, Toronto, Canada.*

Hornby Trains Live Steam - "Hornby have just unveiled an incredible range of train models that are entirely powered by steam. The trains are powered by a miniaturised steam boiler that will replicate the driving action of classic steam trains...that will mean that you get the authentic sound and smell of a real steam train...we see this as a potential blockbuster product that could appeal to the masses, not just train-spotter anorak types...the unique features of the Hornby Live Steam System will enable us not only to create a significant market in the UK, but also to spearhead the establishment of the Hornby brand in international markets...investors will be pleased to learn that the key technologies of this new range are patent protected....initial reaction has been extremely positive....we understand that the first production run is already sold out, and it is unlikely that one will be able to purchase a new set until after Christmas... since January 2003 shares have climbed from 540p to 1020p, up 89%....". *Joe Attard, Malta.*

2 - According to Mike Dennis who lives near the Hornby factory at Margate, there are only four demonstrators in existence, all faulty, and the first deliveries won't be until about March 2004. Each shop except the largest will only be allocated one each. If things proceed as previously with this sort of project, the price (£500) will eventually come down but they will still be unreliable! And yes, made in China of course. *Dave Taylor, Essex.*

Batteries - The following might be of interest to Spanners. Twenty page .pdf file on batteries, their manufacture, use and charging characteristics. It's available from <www.yuasa-battery.co.uk>.

Designing Models - How do people go about designing models. I guess for me the process is something like:-

1) Pick possible prototype.
2) Research it.
3) If there are any real problem parts to model then try a mock-up at least to solve problem area.
4) If possible locate a set of plans and enlarge to size of model using a key part as fixing scale (e.g. for MP100 the front wheels).
5) Build model copying drawings as far as possible.
6) Get it working.
7) Take it to several local events and fix things which go wrong and reinforce the bits which fall off.

Tony Brown, UK.

2 - This looks like a perfectly logical approach to me. The only additional point is that I like to find an example of a real-life prototype. Sometimes the drawings can be a little hard to interpret — especially old cranes where there was only one engine. *George Turner, Ottawa, Canada.*

3 - I like cranes and lorries and models that operate mechanically as they should do. When I built my Grove Lorry mounted crane (over 5 feet long and 85kg in weight) I just started with a small plastic model and built it up from there. I didn't use any drawings, I just tried to think of Meccano solutions to the various problems.

The main aim was to get each movement working, from steering and travelling along the ground, to lifting itself up on its own outriggers and finally raising and extending the telescopic jib.

Each section was a challenge in itself. It also meant building the model on quite a large scale (to make the outriggers work) which then meant certain parts had to be bought for specialist areas (e.g. about 40 of P/N 53 were used in one of the jib sections as they could be bolted together without needing nuts and bolts vertically, so easing sliding clearances).

I like to use the freedom of limitless parts as a means to creating the model that can work (not that I have limitless parts, just extras if they are my solution for a certain problem).

My current model will have over 100 19t pinions as there are nine differentials and hub reductions, but this means the model will do what the original does.

I have to say I am amazed at some of the recent 10 set models – especially Tony James' creations. Tony Parmee also sometimes rebuilds models from smaller outfits with great improvements - he truly knows how to get the best from a Binns Road standard set of parts. *Richard Payn, Bromley.*

4 - For my aircraft models I identify some interesting prototypes, often by looking at the engine first since I don't want to build aircraft with the same engine twice in a row. The first research I do is into the availability of plans and photographs for several prototypes, and usually that narrows down the final selection quite quickly.

For basic structural detail plastic kits should not be despised. It is often easier to see what a detail really is in a 3D kit than in a 2D plan drawing or an old photograph and most kits provide at least a basic scale 3-view plan (for the painting). Plus you get a nice toy to build and display should you be so inclined. Seeing the real thing is very useful and taking photographs (if you can get permission) is great as well, especially when, as often seems to be the case, the

bits you are most interested in (the mechanisms) are not the bits that most book publishers are interested in (nostalgic visual appeal).
I don't blow plans up to the appropriate size. I scan them and print them out and use a slide rule to convert measurements from plan to model. Never use the original plans to work from! Always use a copy which you can scribble on. Slide rules are better than calculators for maintaining a set conversion ratio across a whole range of measurements.
I try to solve problems within the collection of parts I have, although that is now bigger than a 10 set. Aircraft (biplanes) take up huge amounts of flexible and strip plating compared to just about any other model subject I can think of, except perhaps large locomotives, which seem to eat up a truckload of everything if you do them properly!! I don't usually mock up problem areas first, but then the sort of problems I have building WWI aircraft only become problems when built into the whole model (e.g. sagging wings, wire controls). *Chris Bourne, London UK.*
5 - Chris, Do you have one of those six foot long lecturer's demonstration slide rules? One of those at the end of your workbench would make conversions really easy. *Roland, UK.*
6 - Trick I found a while ago that helped me out a bit: I know I'm not the only one here with CorelDraw!, and I'd imagine you could do this in similar programs too. Basically, when drawing straight lines, you have a number of options including one which lets you mark the end points and how far out you want to go, then it draws a sort of ruler in the middle (Dimension Tool). Now, what I've done here is to scan in and blow up an image so that it prints at the same scale as I'm building. Then, go over it and plaster it in these happy measurements (which CorelDraw! at least will let you make at any angle you want so no problems there) and print and, alongside a photographic reference, you've got a measurement chart.
I can't vouch for its usefulness in massive detail simply because I've not done enough building since I twigged it was possible to comment! Seems a useful way to do it so far, though, so long as you can break things down into A4 size chunks. More than that and you'll either need a good printer or a driver that can handle poster printing. *Greg Webb.*

Mending Mainsprings - I've successfully used a length of wire around the mainspring, twisted with narrow pliers, allowing the spring to remain wrapped for safe withdrawal. This may be more tricky if your mainspring is broken and therefore less compact. Wire might not be the best idea here. How about using a plastic cable tie, as wide as the spring? *Chris Shute.*
2 - The following URL describes how to service the No. 1 Clockwork motor
<http://www.meccanonut.com/lightred/service1.htm>.
I should have pointed out specifically the footnotes by Thomas Smith and Robert Simpson that advise that winding up and restraining the mainspring is not necessary. I have successfully repaired a No 1 motor (spring had broken off winding shaft attachment) by leaving the tail of the spring uncoiled and winding the motor up after it had been assembled until the tail caught on the post. You just need to make sure that the free end of the spring is poking out of the motor in the correct place (i.e. just above or to the right of the top left post in the diagram). I would not recommend doing it any other way. A coiled spring that is released suddenly is not something you really want to be close to. *John Stark, Nelson, NZ.*

Meccano as Airline Luggage = weapons of mass destruction - I recently carried a No 8 Set by airline from Brisbane to Melbourne as cabin baggage, no faith in baggage handlers. The airline, Qantas, did not have any problem with it but I must say the look on the Security peoples faces was unbelievable when it went through their security scanner and lit the screen up like a Christmas Tree. The gent sitting down looking at the screen asked for it to be put through a second time because he could not believe his eyes the first time and then asked one of the attendants to retrieve it from the machine so he could view it visually. From where I was standing I thought it was quite humorous but I guess the rest of the passengers weren't amused as the machine was stopped twice. The saga did continue as I then had to explain to the security people what I was trying to board the aircraft with. To my surprise all they seen to be worrying about was the nuts and bolts. I did not dare mention the axles and screwdriver contained within the set. All in all an entertaining experience. Mind you, the existence of the Meccano Set on board was highlighted to the flight crew as I had one of the crew, second in command, mention to me that he had a sizeable Meccano Set as a kid. *Mike Wright.*
2 - A friend of mine that travelled back from the AC Gilbert Heritage Society meeting (Erector/Meccano and other toys) had a similar experience in the US and they made him dump the entire contents of a 1933 no 8 set that had all the parts correctly pinned in their original places. Bob Galler.
3 - The Heathrow security must be getting used to it by now, I shipped 70lbs or so as well when I returned from the UK in July! I am careful to include any electrical parts in carry on (so they don't think it is a bomb in a checked bag) plus expensive brass bits I don't want to lose, the rest in the checked baggage. *Simon, CT, USA*
4 - I have just returned to the US from the UK with over 70 lbs of the holey stuff in my checked baggage. No questions asked at Heathrow, even though a surprisingly small bag weighed in at the 31kg weight limit for an individual bag. I even had a half dozen 145's in my carry on (so they wouldn't get bent) and they went through the X-ray with no problem. There is still hope for those of us remote from the centre of the action. *Tim Robinson, California.*

Spring Cord - An alternative to spring cord, for decorative purposes, are old guitar strings. Music shops will usually give you these free of charge. *David Williams, Canada.*

Zinc Rot - Deciding to take the Kawasaki bike I made a couple of months ago to Henley this weekend, I duly picked it up from its display position from the mantelpiece, when I noticed that the zinc and brass had spots of white corrosion which were quite severe in places. The model was built only three months ago with new or re-zinced parts! The cause - the mantle shelf is made of solid mahogany! So if you have zinc models keep them away from your wooden furniture. The bike looks OK now I have changed the worse of the parts and buffed the rest up! *Dave Harvey.*

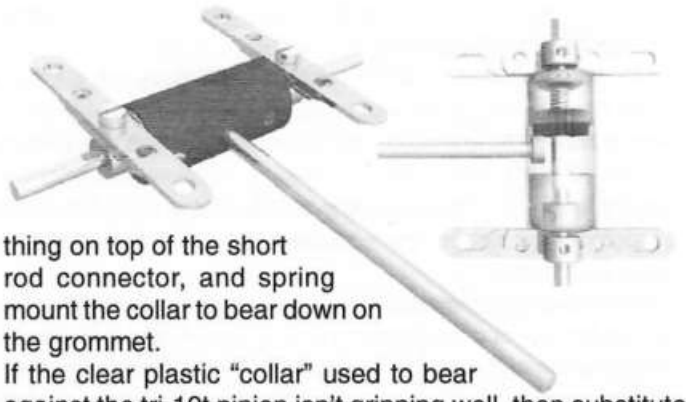
Removing Powder Coat - If Meccano France uses powder paint then ordinary Poly Super Strippa does a great job. I have just finished getting the paint off a whole bunch of French Meccano and Poly Strippa lifts the entire surface off in one piece. *Ed Barclay, Canada.*

Meccano Stamps - The UK Royal Mail will be issuing a set of stamps next month on the theme of toys? Three of the five stamps depict Meccano, Hornby and Dinky products! Unfortunately the Meccano stamp is a 1931 'Constructor Biplane' rather than what I think of as real Meccano. *Doug Harris, New Zealand.*

2 - As always, there is a Website that will supply all the relevant information. Start at <www.royalmail.com>. The address of the Philatelic Bureau is: British Philatelic Bureau, 20 Brandon St., Edinburgh, EH3 5TT, Scotland. *Colin Hoare.*

Lightweight axle for motor vehicles - Attached find an axle I have used while motorising the bus featured in the Canadian MeccaNotes March(?) 2003, which may be useful for other small scale models using 1" pulleys and tyres (or even $1^1/_2$"). Somehow a 11t pinion and 25t contrate just didn't look right! If carefully adjusted, the friction drive can supply sufficient torque to drive small and even heavy models (such as the bus). It's mostly self-explanatory, but I haven't included part numbers.

A short rod connector has been used to split the axle. Fiddle a bit to ensure one side grips the driven half shaft firmly, and the other side allows some friction, enough to allow decent cornering, but still drive the wheel. The collar inside the sleeve piece is used to retain the half shaft in place. An alternative method for this friction mechanism which I haven't tried yet is to fit a black rubber grommet/collar/pulley



thing on top of the short rod connector, and spring mount the collar to bear down on the grommet.

If the clear plastic "collar" used to bear against the tri-19t pinion isn't gripping well, then substitute it for one cut from similarly sized silicone tubing. The silicone should have a higher grip.

The small non-Meccano dished washer and 2.5 mm ball bearings are optional but the thrust bearing certainly improves performance!

The sleeve piece can also be mounted to the chassis, with the leaf springs being purely decorative (for example they can bear against spacers on the chassis). Passing bolts from the inside of the sleeve piece is a tricky business (not shown)! It requires bolts to be passed through the chimney adaptors from the inside. This can be done by tying thin cotton to the shanks of the bolts, passing the cotton through the relevant holes, assembling the sleeve piece and components, then pulling the bolts from the inside out. You will have to rely on the friction inside to ensure a tight fit, since you won't be able to get a screwdriver to the bolts.

The motor I used was the latest Meccano MO motor with the 19:1 gearbox, driving a universal then directly into the "diff".

Warning: not something intended for continuous running! Eventually the friction mechanism will decay, but it should be robust enough to demonstrate models several times.

For those interested, the see-thru graphic was created using 3 separate renderings (one complete model, one model with no sleeve piece or chimney adaptor, one with chimney adaptors only). They were then brought into PaintShop Pro and the layers combined with differing levels of transparency, then recombined and overlaid onto a complete rendering of the axle. <http://www.mecworld.co.za> - Free parts (bit out of date, I'll get to that eventually), <http://www.ptc.com> - Free 3D CAD package. *Anthony Els, Johannesburg, South Africa.*

(continued from page 12)

flange and $^3/_8$" balls. Works fine (the centenary crane set uses this with 38d washers which are not quite as good as balls).

Problem is, driving it requires either locking up the centre shaft or taking an external drive band to the 3" pulley. So I thought that there might be a way of adapting the P/N 187c modern hub's internal gearing. The picture shows the result.

The bottom race is a bossless 3" pulley (actually half of a mutilated original 3", boss removed, then the outer holes drilled out to remove the over-peening). The 187c is parted off in the lathe, with 1mm inside the inner ring from the gear side. This measurement leaves all the meat of the web where the mounting holes sit. Also I faced down the 'knobs' on the inside, the reduce the height of the nuts so they clear the 19t pinion. The balls are $^5/_8$" to give the required clearance. Works beautifully, as long as the 187c is centred properly.

THE BEST CHRISTMAS GIFT: I was in Toyworld one day, examining their stock of Meccano sets. Alongside me a lady was doing the same so I asked how old her son was. "Its not for him", she replied. "Its for my husband. He complains his brothers used to take away all his Meccano parts, so I am going to buy him a Meccano set for Christmas".

1938 MECCANO MAGAZINE: The March issue of 72 pages had 20 about railways (real and model) but only 10 pages of Meccano news and models. However, its contents support its claim to be the premier boys' magazine at that time. There were articles on the first crossing of the Atlantic by a steam powered ship not using sails; the K.L.G. sparking plug factory; the German Dornier 'Wal' flying boat; the new 200 inch telescope at Mt. Palomar observatory; the cork harvest in Portugal and a page about Griffith Taylor's 'Robot Gargantua'.

MY MECCANO CAREER: ".....From then on Meccano accessory sets were my usual Christmas presents while money gifts from relatives were spent on more parts.....My first Meccano competition success was the CPR locomotive entered when I was 9 years old. This was the first of many successes and I used my prize money for the more expensive parts. In this way I accumulated a huge collection of Meccano, all of which I still have and use, not for making models now, but for experimental purposes —test rigs, jigs — in fact any temporary construction".
(Don Unwin, aged 85, writing in 'Model Engineer' No. 4195)

JOHN'S 'ENDEAVOUR': Following the story and pictures in our last issue about John Ince's Meccano model of 'Endeavour', I visited the Museum again and found John's model without difficulty, tucked away around a corner in its glass case. It is well lit, with a description alongside which includes some Meccano history and there is even a stool to sit on while you admire the ship. The photo in our Magazine does it justice but it is good to see the model 'in the flesh'. And while you are in the Museum of Wellington, City and Sea, do examine the magnificent rimu staircase leading to the first floor. They were REAL craftsmen in 1892.

STILL GOOD STOCKS: Although they are dwindling, there is still a good selection of Motion System and City Meccano sets at Toyworld. MS 6520 at $79.99; 8540 at $149.99. Dick Smith's prices for these two are $10 and $20 less, respectively. In the UK, at Maplins, the prices are 19.99 GBP and 39.99 GBP.

ADVERTISING, 1938 STYLE: The MM for March, 1938, carried some interesting advertisements such as for Celluloid mudguards for your bicycle; Lines Bros. 'Minic' clockwork toys; Voigtlander cameras; Raleigh bicycles with 3 speed Sturmey-Archer gears; Seccotine and Lotts Chemistry sets. Only one or two of these products still exist.

THAT WIMSHURST MACHINE: If you haven't already built one, Mike Chrisp in 'Model Engineer' No. 4193 explains how it works——"The Wimshurst machine generates static electricity by contra-rotation of two large discs. The charge collects on sectors of the discs and is transferred to two Leyden jars where it is stored until sufficient has accumulated to ionise the air between the two large brass discharge balls and jump the gap in the form of a large spark".

A LITTLE HISTORY: In 1922 Meccano Limited established its factory in Elizabeth, New Jersey, U.S.A.. In late 1929 A.C. Gilbert bought the New Jersey factory and moved everything to his own facilities in New Haven, Connecticut. (Charlie Pack on 'Spanner')

HAND DIGGING: In 1863 there were 40,000 labourers, mainly Egyptian, helping to dig the Suez Canal.

HAZARDOUS ENGINEERING: In the mid-1800's engineering was clearly a hazardous profession and the railway engineers most in demand in those years did not live long. Robert Stevenson died at 56, Joseph Locke at 55 and Ismabard Brunel at 53, all within a year of each other. The stress on them to meet deadlines was horrific. And, at that time in polite British society, engineers were not considered to be 'gentlemen'. (from "Building the 19th Century" by Tom F. Peters)

NON-MECCANO SPROCKET CHAIN: Metallus in Germany bought all Temsi's equipment and remaining stock after Temsi in Holland closed down. Many Temsi parts are listed on the Metallus web-site <www.metallus.de>. Temsi sprocket chain does not fit Meccano sprockets as it has a different pitch. However, Marklin chain, which is still available, does fit.

SAD END TO A 50 YEAR PARTNERSHIP: In "The Toy Story" the author, Anthony McReavy, tells how at the time of Frank Hornby's death his wife, Clara, was away on a Mediterranean cruise with friends. Somehow the family kept the news from her until she returned home. But by then the funeral had taken place and her husband of 50 years had been interred in the quiet graveyard of St. Andrews Anglican church in Maghull.

TREASURE TROVE: "My family gave me a cardboard box of very old Meccano for Christmas last year. It was fascinating delving into the contents. Talk about a treasure trove !! When I tipped it out a cloud of 70 year old dust arose". (Frank Davis, Rotorua, NZ)

QUOTATION:
"Where have you been, John?"
"Aunty Clarissa was showing me her Meccano, Mum".
(from "A Private Inquiry" by Jessica Mann)

Bruce's Choices From Around The World

by Bruce Neilson

Canadian MeccaNotes - March 2003 - 28 pages with outside covers in colour.

Pick of the articles – Cyclist in the Ring by David Williams.

Ingenuity is always at the fore with Meccanomen. Take a P/N 167b Flange Ring, hang it from the tip of a leaning tripod and friction drive the Ring to rotate. A counter-balanced cyclist balances on the Ring and steadily pedals for ever around the inside rim. There is enough detail in the seven photos and a page of text to allow the average Meccanoman to complete. This model would be just the item for public entertainment and marvelling.

Other articles include 2003 Design sets, Review of the CQ modelplan "Eric Taylor Giant Lorry Mounted Crane", CMAMS system of ordering Exacto and Meccano, Obituary Don Pearson, London RT Bus rebuild model plan, Maltese reduction gear mechanism, eBay excursion Part II, Simple jig for making accurate Meccano bends, Half Maltese Intermittent drive mechanism, Exacto products and Meccano 'X' sets. 16 pages text, 6 pages colour photos, 14 pages line diagrams, 2 pages parts list.

Runnymede Meccano Guild Newsletter - June 2003 - 50 pages.

Pick of the articles – No. 173 Super Space Mobile by Andreas Konkoly.

"The Mobile consists of five sparkling double-rings and are moving as a gyroscope. The rotating section moves over a platform and an observation station, which contains a No. 1 Clockwork motor that drives the Mobile from left to right". As a tribute to the late Andreas Konkoly, try this model. A clockwork motor drives large Gear Wheels inside the frame to create a left/right cam motion which makes the various Mobile rings to totter and stagger. As has been said previously, Andreas's models are different.

Other articles are 2003 Meccano sets range, Skegness 2003, CAMS Exhibition The Illusion model plan, Konkoly obituary, The 'Senior' and 'Advanced' Meccano sets, Right angle drive mechanism, Royal Mail Meccano stamps, Clock with a train pendulum model plan, Hints on vehicle chassis construction and Runnymede June meeting report.

Canadian MeccaNotes - June 2003 - 28 pages with outside covers in colour.

Pick of the articles – London RT Bus (in two parts March and June 2003) rebuilt by Ivor Setten.

This is a detailed modelplan to produce a Double Decker London Bus 11" long x 6" high x 4" wide. This model must be about as small as you can get an operating bus. For example the wheels are 1" pulleys with tyres, the stair case is P/N 125 $^1/_2$" Reversed Angle Brackets and the passenger seats are 1$^1/_2$" Flat and Angle Girders. There are in all 16 pictures, 10 pages of text and a parts list. Use lots of green strips and girders and for the 'right colour' modeller, there is room for some judicial black and brown paint to look like the prototype.

The other articles are Storing Sprocket Chain, CMAMAS sales update, Show reports of Ottawa meeting 3/2003, Kingston Rail-o-rama, Moose Jaw Hobby show and One day Meccano show; Restoring worn motor bearings, Three Meccano boys who won Nobel prizes, Metallus GRB and a reprint of page 220, June 1942 Side-tipping rail wagon and Crushing Mill.

International Society of Meccanomen Journal - September 2003 - 32 pages.

Pick of the articles – Two Rail Locomotive for 'G' gauge track by Bill Charleson.

A modelplan to build an 0-4-0 L&SWR K14 locomotive made in three modules consisting of main frames, boiler, and cab and side tanks. Split axles maintain electrical insulation for pickup from each rail. the locomotive measure up at 14" long, 7" high and 3$^1/_2$" wide. Finish off the train with a guard van.

Other articles include Golden Spanner Awards 2003 to Ernie Chandler and John Westwood, Konkoly obituary, Meet the Meccanomen Ernie Chandler and John Westwood, Modern building technology for steering joints, Oldham coupling, vehicle frame side rails, king pin inclination, P/N 187b Road Wheel, HGV rear axle, DNA string in Meccano, Modern engines, Exhibition reports from Sydney (Australia), Hawera (New Zealand), Tergnier (France), Fossano (Italy), Skegex (England) and Benthuizen (Holland), The art of coarse Meccano Part II, and screw hydraulics from Frizinghall.

Constructor Quarterly – September 2003 - 56 pages all in colour.

Pick of the articles – Propeller driven Flying Swing by Bernard Perier.

If you want to build a model in one day rather than a year, why not try this one? A tripod of 9$^1/_2$" Angle Girders supports a balanced beam of 24$^1/_2$" Angle Girders. One end of the beam carries a Meccanoman sitting on a swing below and a MO motor and propeller above. The other end of the beam carries the battery box, which provides the power to the MO motor, as a counterbalance. Three pictures and a page of text give sufficient details for 'follow the plan' modellers to build this model. **Warning**. This model is driven by a high speed propeller. In view of the legal liabilities existing today, this model needs to be protected from the public by a suitable enclosure.

Other articles include background information about Frizinghall Models, A review of the Exact Crane set, Generalised building instructions for DAF YA 328 Military Truck, Climax Railway Locomotive, Propeller driven Motorcar, Meccano Truck in modules, Platform Lorry and Eight arm fairground Octopus; Skegex 2003, Blocksetter Crane structural triangles, Structural considerations in scale modelling, The Meccano Kindergarten set 1907 and Fail safe Winding Drum mechanism.

Southern California Meccano and Erector Club Newsletter - September 2003 - 12 pages.

Pick of the articles – Demonstration model of the Variable Pitch Propeller by Andreas Konkoly. Originally described in Meccano Magazine Quarterly (MMQ) 4/76 and rebuilt for this article.
If you wished to demonstrate the intricacies of how a variable pitch propeller works to a class of learners, reach for your Meccano and this article, The model is straight forward and measures 5½" x 2½" x 7½" high.
Also included in this issue are Konkoly Horse and Chariot picture, Konkoly and Dubois obituaries, Exact 1929 steam engine replica, Erector square girders, Wright Bros Aeroplane from the 1914 American Model Builder (AMB), and Blake Huffam's 1953 model building competition certificate.

Canadian MeccaNotes - September 2003 - 28 pages all in colour.
Pick of the articles – Dating Parts – P/N 19b 3" Pulley by Ivor Setten.
There are two sides to this article. The first part is the process of doing the research and arriving at the conclusions. The second part is listing the variations of P/N 19b 3" Pulley with the variations of colour, groove, boss type and date of introduction and duration. A must for all Meccano collectors.

Also included are articles on Peg and lantern gears, Modern Meccano in the US, CMAMAS sales update, The Mellotron keyboard instrument and Meccano Chain, Obituary Jerry Dubois, Spray painting Nuts and Bolts, Threaded/screwed Rods and the Leduc West Antique Society show report.

The Sheffield Meccano Guild Journal - September 2003 - 34 pages – 2 inside pages in colour.
Pick of the articles – A Clockwork Recumbent Tricycle – rebuilt by Rob Mitchell.
The ubiquitous No 1 Clockwork motor drives this 'amusing model' across the floor. Inspired by a design from the Dutch Magazine *Meccano Nieuws*. Using P/N 89a 3" Stepped Curved Strips as back wheels and P/N 90 2½" Curved Strips for the front wheel, the tricycle comes complete with a rider who sports a P/N 129 Rack Segment as part of his 'bad hair' day.
Other articles are Alterations to CQ Walking Gyroscope, Show reports of Skegness 2003, National Engineering and Modelling Exhibition, Crich Tram Museum, Lincolnshire Steam and Vintage Rally and SMG annual show, Magazine reviews, and 250t Electric Overhead Track Crane Part II.

Colin Cohen - an autobiography

by Colin Cohen

My story of Meccano starts some time in the 1940s when I suppose I was about seven or eight years old and my parents bought me a Set 5 Outfit. Immediately I enthusiastically set about constructing a model of the 'Skymaster' passenger plane that my uncle had just arrived in on his annual visit to Cape Town to see the family. In those days there was no need for security and people would gather at the plane to welcome the arrivals. Needless to say I didn't get very far and was encouraged to build from the Instruction Manual. I was instantly hooked and after a couple of years they gave me a Gears Outfit. Learning that I could buy spares, I naively set off into town with a huge list extracted from the back of the Instruction Manual. The sympathetic shopkeeper looking at the list - "Do you have enough money to pay for all this?" Anyway I did manage to come home with a couple of items purchased out of the few shillings that I had nagged out of my mother.

In 1953 I subscribed to the MM and so read about the Cape Peninsula Meccano Club in the Club and Branch News page. I subsequently joined and that really opened my eyes to the world of Meccano as I had been on my own until then. Every year the Club exhibited at a week long hobbies fair in aid of charity and I would construct eagerly towards this. The Club eventually folded up as we approached our later teens and some years later, feeling a need to talk Meccano to others, I contacted those that I knew of and so formed the present Cape Town Meccano Club.

My collection has expanded vastly over the years. At first all my pocket money went towards spares, but later I could afford to buy second hand sets. When the writing was on the wall for Rhodesia, people were desperate to get their money out of the country. The Meccano agent did this by taking out his stock into neighbouring South Africa. Two of us bought it, sold a lot to get our money back and then divided the remainder of it between us. So this has also added to my collection. I believe that William Irwin now has the other half. I presently have about twelve models assembled, ready for exhibiting, some large and others small like my Woody Woodpecker that pecks is way down a pole.

I am married to my lovely wife Marion and we have a precious 30 year old daughter Melanie and they both eagerly follow my Meccano pursuits. I still have the Sleeping Meccanoman which John Ince is in the process of reproducing, (Ed without success to date!) Melanie having forbidden me to ever dismantle it.

My interests lie in all sorts of subjects, though I suppose mainly Cranes and Meccanographs. What I build depends on inspirations, which I should imagine is the case with all of us. For instance, the Sleeping Meccanoman. What triggered this off was when I attended a lecture one evening and the lecturer used the analogy of *the magic black box that switches itself off.* My mind was so taken up by this idea that I just didn't hear the rest of the lecture.

What are my other interests. I enjoy going to the live theatre and attending symphony concerts and I also enjoy fresh air and nature by hiking up in the mountains. But my main interest though is Meccano and will always remain so.

Obituary - Jock Clouston - 18 October 2003.

Jock was a man I had a lot of respect for as he had a varied life and could talk on many levels on widely differing subjects: Ex RNZ Navy, shepherd, rabbiter, piano-accordion player, rugby player, Turakina resident for 45 years, collector extraordinaire immortalised in the book 'Blokes and Sheds', member of MWT Meccano Club, etc.

My strongest memory of Jock would have to be as an inveterate magpie and I mean this in the nicest possible way, as I think there must be very few mechanical objects and devices that he had not explored and dismantled, and if some did not reach complete reassembly that was Jock.

Jock's Meccano collection reflected his collecting nature and invariably at our MWT Meccano club 'antique show and tell', Jock would have something to show. He disposed of his Meccano in recent years but this did not diminish his interest.

I will miss his smiling face and I am quite sure that many others will share the same sentiments.

Chris Morton.

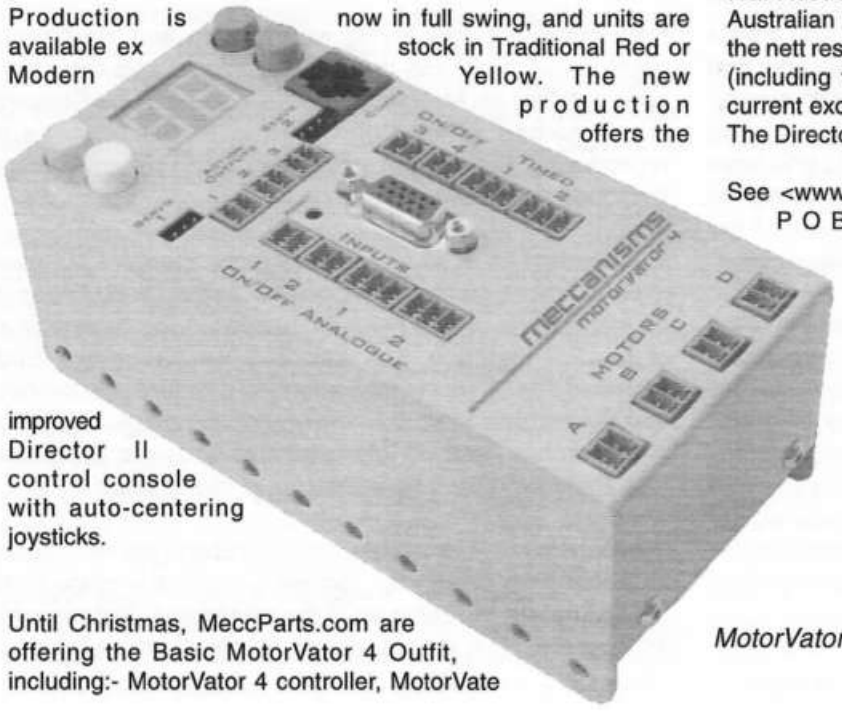
photo by Bruce Geange

Ampworks MotorVator™ Programmable Controller

by Andrew Wells

Ampworks advise that they have established Meccanisms Limited to take on the international marketing of the MotorVator™ Programmable Controller, and appointed MeccParts.com to manage direct sales. Meccanisms Limited will be exhibiting the range at the Nuremberg Toy Fair (the world's biggest) in February 2004.

Production is now in full swing, and units are available ex stock in Traditional Red or Modern Yellow. The new production offers the improved Director II control console with auto-centering joysticks.



MotorVator 4

Until Christmas, MeccParts.com are offering the Basic MotorVator 4 Outfit, including:- MotorVator 4 controller, MotorVate Programming environment (Windows PC required), PC Connect Cable, Storage Box and Spare Plugs at $NZ630.00 (inc GST). Included as a free bonus are 2 Servo Motors and Mounting plates, a free 6V 1.5A power supply plus free shipping within NZ (total retail value $NZ130+).

The Director 2 is available for an additional $NZ98 (inc GST).

Australian buyers can purchase free of New Zealand GST and free of Australian import duties. Australian Customs have said that Australian GST does apply but that they do not collect Australian GST on packages of under $A1000 in value. Hence the nett result for Australian buyers is a purchase price of $NZ560 (including the free bonus offers) plus $NZ20 postage. On the current exchange rate this is about $A505.
The Director 2 will add approximately $A77 (ex GST) to the total.

See <www.meccparts.com>, fax to 0800 MECCANO, write to P O Box 26179 Epsom Auckland 1003 or call Andrew or Vivien Wells on 09 523 4447 anytime. Cash/Cheque preferred, but Visa/MasterCard/PayPal welcome.

Director 2

Photos by Andrew Wells

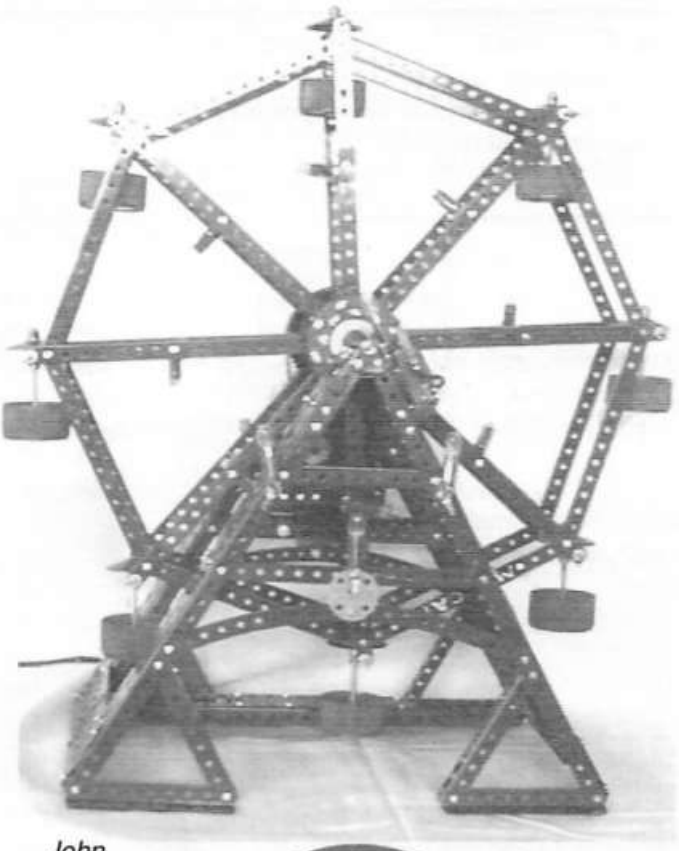
Auckland Meccano Club Meeting Report

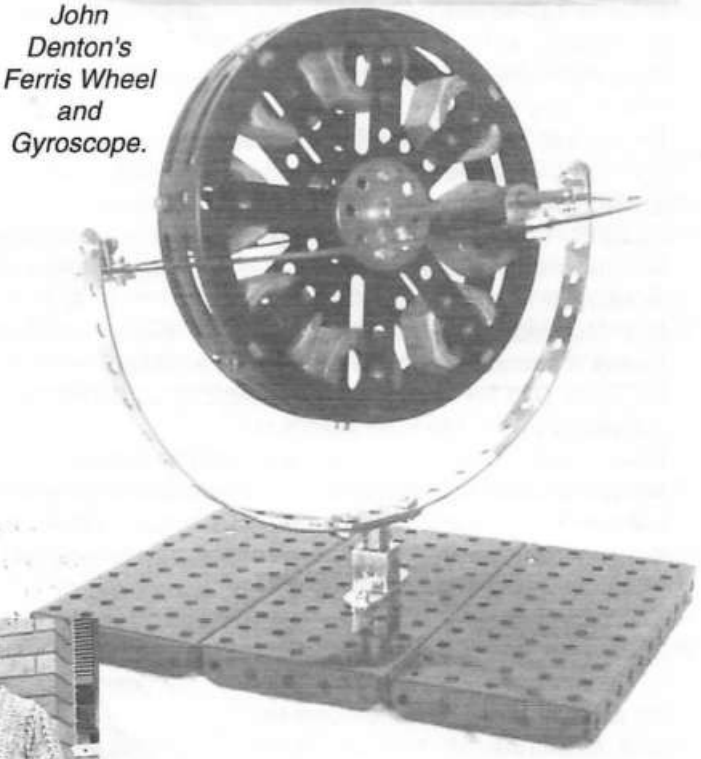
reported by Peter Hancock

The spring meeting, the fourth and final club get together for 2003 was held at the home of David and Elizabeth Wall at Orewa on Saturday afternoon 8 November. Eight members attended, two apologies were received, and we welcomed Simon Moody from that 'down South' part of the North Island as an honoured guest.

The formal section of the meeting covered several important issues. The first being members agreement that the secretary confirm to the organisers of *'MODEL X'* that we will participate in the 2004 Model X annual modellers and hobbyist expo to be held over the three days of Queens Birthday weekend 2004 in Henderson. The most important matter for consideration was the member's final agreement to proceed with the confirmation of the venue that had been singled out for the New Zealand Meccano Federation 'Meccano Convention Easter 2005'. Planning for this event is under way with consideration being given as how we can at least as a minimum meet the high standards set for us at the Hawera Convention by the team that organised that wonderful event.

William Irwin gave members an overview of the actions and negotiations that he has been involved in over recent months relating to the 'Meccano Differential Analyser', which is stored at MOTAT and is currently in very poor condition. Unfortunately the Auckland University with whom William had been discussing the future of the analyser for some time, have now lost interest in restoring the unit to a working state or to even assist with labour or finance to assist with conserving the remains of this 'machine' as a valuable historic exhibit. William is going to look to begin to recover some sections of the device and John Denton has offered to help him with this labour of love. William will have more to report next time we meet on various activities that he has planned for the future relating to this device and the promotion of it.





John Denton's Ferris Wheel and Gyroscope.

Andrew Wells reported on the 'Meccano' models that he plans to have on display at MOTAT for several months in the near future to promote MECCANO to the public. A number of New Zealand Federation modellers are building or will loan models for this display, which will depict what can be done with this great toy/modelling medium. There is to be a variety of models in various age era colours along with a display of what is available today. MOTAT will operate a Meccano shop with a variety of current (smaller) sets on sale for the duration of the display.

"The Gang"

Simon Moody, William Irwin, Andrew Wells, George Ovenden, Merv Mexted, David Wall, John Denton and Bob McCracken

It was then time to review models:
Simon Moody had brought several of his 'climbing'

models to show us and proceeded to demonstrate how these models could climb extreme slopes. The models were the product of a special Wellington Meccano Club members challenge held recently.

Yes, this is David Wall's Monkey on a tractor!

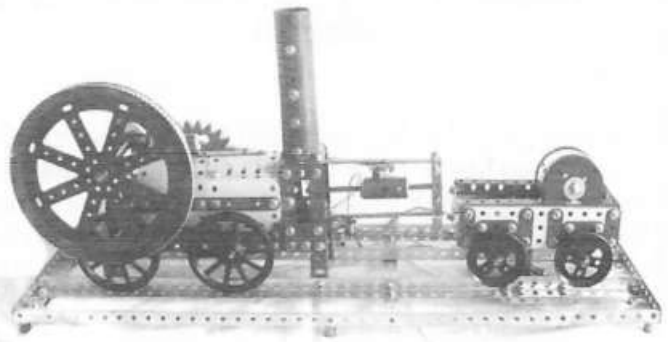
John Denton showed his Ferris wheel on which he has now installed an interesting lighting scheme and a gyroscope.

George Ovenden had made an ocean going tug based on a Bert Love model.

David Wall had departed from his various steam engines and flying machines and had produced a tractor complete with a monkey as the driver. The model had a very original name being called 'My Monkey'? (Ed. Nice to see that David has moved up the evolutionary tree from teddy bears to monkeys.)

Bob McCracken had built a locomotive known as 'New Castle' originally designed by Roger Le Rolland of Stoke on Trent. Bob had used plans available in Leaflet number 39 issued by the Meccanoman's club.

Merv Mexted showed off a group of the latest models that he has recently assembled which are currently on offer in various local shops. There was a new model set 'Ferris Wheel' recently released overseas and due on the market locally in New Zealand in early 2004 on display. (Ed. See notes elsewhere in this issue.)



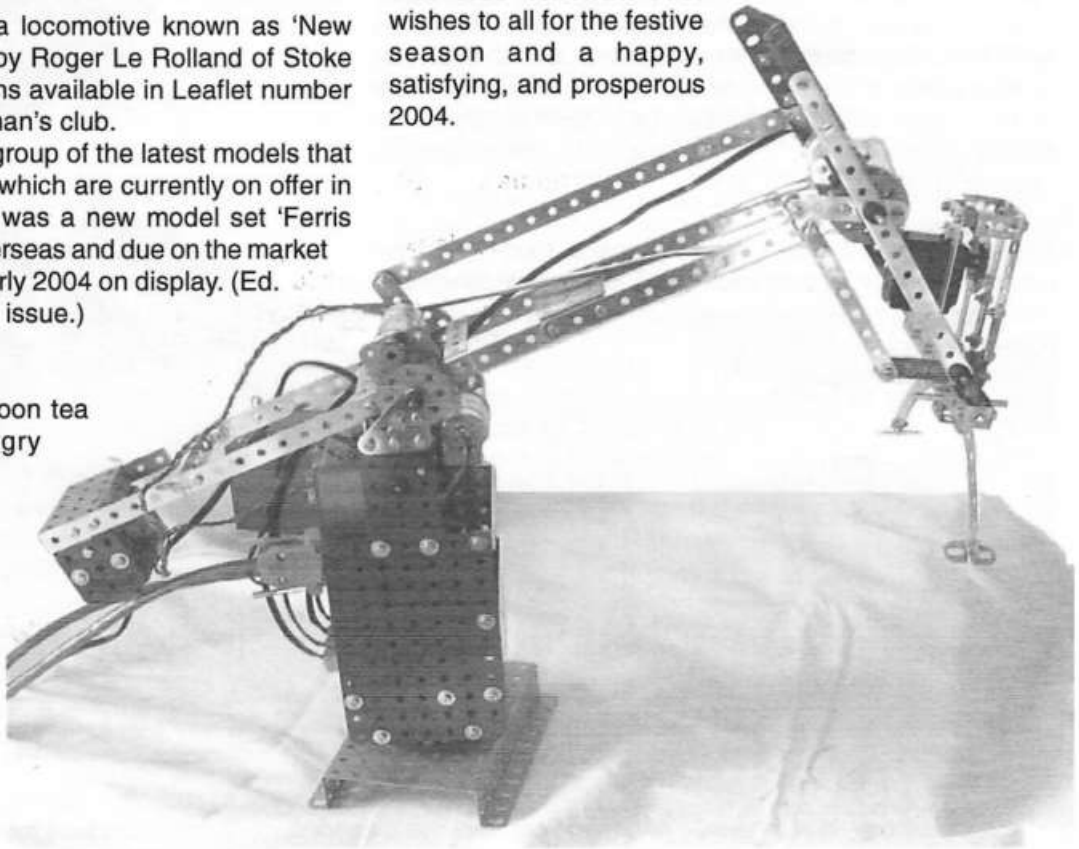
Bob McCracken's Trevithick Loco "New Castle"

Merv Mexted's Models from new sets.

Bev Mexted at their home at Whangaparoa, with the second (2nd Saturday in May) to be at Howick at the home of Jan and Peter Hancock. The 3rd meeting (2nd Saturday of August) will be at the home of Neil and Eileen Carey at Hillsborough and the final meeting for 2004 (3rd Saturday in November) will be at David and Elizabeth Wall's home at Orewa.

The club extends best wishes to all for the festive season and a happy, satisfying, and prosperous 2004.

As always, a superb afternoon tea was available to the hungry modellers who adjourned to join wives and partners in the kitchen when the weather deteriorated for a time. It was noted that a rearrangement of venues was necessary for the February, and November meetings in 2004. The first meeting of the year (2nd Saturday of February) is to be hosted by Merv and



Andrew Wells and William Irwin collaborated to make this Robot controlled by a Motivator.

New Zealand Club Diary 2003

Auckland Meccano Club.
Contact - David Wall - Ph 09 426 1965.
Meetings at 2 pm on second Saturday every third month.
2004 – 14 February, 8 May, 14 August, 20 November.

MWT Meccano Club.
Contact – John Hansen - Ph 06 325 8211.
Meetings at 2pm on second Saturday every second month at St. Luke's Church Hall, cnr. Cornfoot and Manuka Streets, Wanganui.
2004 - 14 February (Grand Tour), 10 April, 12 June, 14 August, 9 October, ?? 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).
2004 – 6 February, 2 April, 4 June, 6 August, 1 October, 3 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.
2004 – 6 February, 5 March, 2 April, 7 May, 4 June, 2 July, 6 August, 3 September, 1 October, 5 November, 3 December.

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 025 274 8486.

Internet sites
International Society of Meccanomen (ISM) <www.internationalmeccanomen.org.uk>.
Meccano Webring <www.meccanoweb.com/meccring>.

Articles etc. for the February 2004 issue of NZFMM Magazine should be sent to the Editor well before 7 February 2004.

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

Low and Cunning Dodges for Meccanomen Pt 4

(Culled from all over the place, all the ones tried, worked) by Peter King

PK15 - To remove damaged Grub Screws from a brass boss, put the part into a small plastic tray and add vinegar alias diluted acetic acid.

>>>>

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.

New Adverts

For Sale – Meccano Parts and Sets
MeccParts.com supply all current parts and sets at competitive prices. See <www.meccparts.com>, fax to 0800 MECCANO, write to P O Box 26179 Epsom Auckland 1003 or call Andrew or Vivien Wells on 09 523 4447 anytime.

Wanted – P/N 120dm Shock Absorbers
One or two pairs of P/N 120dm Shock absorbers from 1990s Motorbikes/Evolution sets. With or without springs. Cash or swap for any current parts. Andrew Wells, email Andrew@ampworks.co.nz.

For Sale - Meccano Supplies.
New Sets now available including the New Design 2 Helicopter. Postage free and discounted for NZFMM members. Price list available. Spare parts new and used can be ordered for you. Let me know what you want. Contact Wayne Blakely, Meccano Supplies, Patikipapa Road, RD 1, Marton. Phone 06 327 6184, Fax 06 327 4184, Now on email <meccano_supplies@hotmail.com>.

For Sale - Exacto Spare Parts Range.
Exacto make a extensive range of standard Meccano parts as well as parts of their own designs including a Large Axle range. These are all factory new parts. Exacto price lists available. For any further information, contact me at:- Wayne Blakely, Meccano Supplies, Patikipapa Road, RD 1, Marton. Phone 06 327 6184, Fax 06 327 4184, Now on email <meccano_supplies@hotmail.com>.

PK16 - To clean a Clockwork Motor, put it into a bath of kerosene (alias paraffin), soak for about 24 hours, then agitate around with a small stiff brush. Rewash in "Polyclens", then wash quickly in very hot water and put into the oven at about 50°C for about 10 minutes or spray with a water dispersant. A careful re-lube with a smear of graphite grease and "3 in 1" oil on the spring will restore it to near new.

PK17- If you can get access to a set of three rollers, put all your old battered flexible plates in pairs through them.

PK18 - For reeving the multiple pulleys on cranes, use thin 'Cod Line' or bulk 'String Line' (not nylon) as used by builders. It is laid like a rope and runs much better than Meccano Cord.

PK19 - Useful counterweights for cranes can be made from small unbleached calico bags filled with lead shot.

PK20 - Have a close look at small linear motors of the screw thread type for hydraulic cylinder simulation. See CQ 48 page 40.

Junior Prize Winners at the 2003 Easter Convention

At the top of the page is Ammon McClelland with the first prize he received for his gantry and truck.

Jamie Besley received second prize for his model of a crane - centre right.

Centre left is Andrew Babbage who was awarded third prize. His beach buggy is bottom left.

Photos by John Stark, Peter Hancock and Bruce Neilson

Kegan Wrightson won fourth prize, a new cap, with his crane.

Printed by Carrington Print Ltd., 11 Stafford Street, Feilding, New Zealand; email: murray@carringtonprint.co.nz