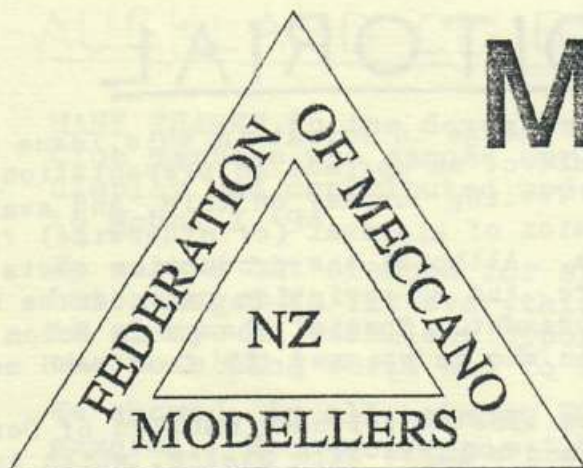
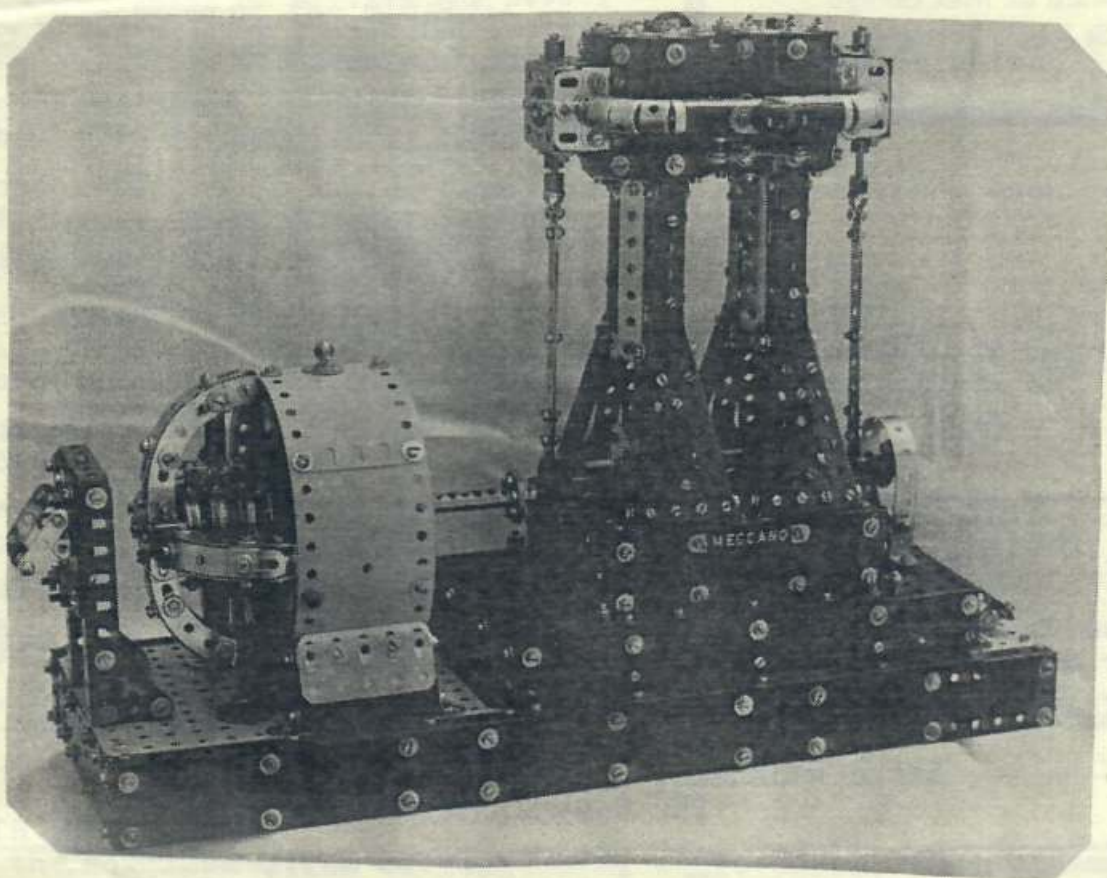




MAGAZINE

Vol 18 No 3 August 1994



DAVID WALL'S TWIN-CYLINDER ENGINE
AND GENERATOR, shown at MODEL-X.

*The aims of this magazine are to unite Meccano clubs
and individual Meccano modellers; to generally promote and
encourage the enjoyment of Meccano*

EDITORIAL

NZ FEDERATION OF MECCANO MODELLERS

Editor: Bill Watt
8 The Esplanade
Campbell's Bay
Auckland 1310
New Zealand

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issues per year posted within
New Zealand.

Forward to: Max George
3A St John's Terrace
Tawa

The change in format in this issue is the start of an upgrade in presentation. We are feeling our way on this, and await expression of approval (or otherwise) from members. Although the production costs a bit more, the subscription rate can be held as at present. Special thanks to Brian Buchanan who redesigned the front and second pages.

Some time ago, I made mention of Derek Strickland's Large Axle System, which has been well described in C.Q. over the past couple of years. Nowhere, until now, have I seen any article on actual models using this system, but here I am very happy to present Gin Grey's experience with some of these components which are advertised as 'Progress Products'. I hope to have some of these parts myself shortly as I think there is a place for them.

Please note the preliminary notice for the next Convention in Christchurch at Easter 1995.

Bill

ERRATUM: The Tractor on the front page of our last issue was wrongly attributed to Daryl Anderson. It should have read 'By Robin Rye'. My humble apology to Robin for this careless error. Ed.

N.Z. MECCANO CONTACT PERSONS

These are the persons to contact if you need information about your nearest Meccano Club or about MECCANO generally:

AUCKLAND: David Wall, 502 East Coast Road, Mairangi Bay.
Ph. 0-9-4786825
Brian Buchanan, 288b Manukau Road, Epsom.
Ph. 0-9-5245186

WAIKATO: Don McClelland, 32b Hazelwood Ave., Hamilton.
Ph. 0-7-8474503

Hawkes Bay: Trevor Adam, 22 Ferguson St., North., BayView, Napier.
Ph. 0-6-8366827

MANAWATU Tom Pittams, 79 Maria Place, Wanganui.
WANGANUI Ph. 0-6-3456788

TARANAKI: Lindsay Bond, 93 Hathaway St., Stratford.
Ph. 0-6-7655665

WELLINGTON: Colin Croft, 21 Beach St., Island Bay.
Ph. 0-4-3835441
Simon Moody, Blue Mountains Rd., R.D. 1, UpperHutt.
Ph. 0-4-5283032

CANTERBURY: Graeme O'Neill, 49 Hindess St., Christchurch.
Ph. 0-3-3227456
John Ince, 37 Burnside Cres. Christchurch.
Ph. 0-3-3587351

OTAGO: Karen Murcott, 15 Greenock St., Dunedin.
Ph. 0-3-4764920

AUCKLAND CLUB AT:

MANY THANKS to the dozen or so Club members who manned our display and contributed models to Model X '94.

We were a bit cramped for space, but managed to fit everything in, one way or another. Model X is always an excellent opportunity to meet old acquaintances in the modelling world and to make new friends.

We showed, in all, almost 50 models as some members contributed several. Meccano France 100, 200, 300, 500 and Dynamic Series models made impressive debuts and created much interest among visitors and our own members.

Here are some of the models:

1920's breakdown crane and steam lorry - Graeme Wrightson

Ingenious model gymnasium showing 4 different exercises being done by in-proportion figures - Tony Henderson

Three replicas of N.Z.R. Classic Steam Locomotives - each about 18" long - working models - Bob McCracken

Container truck and low loader - Bruce Haines

Hand operated swing boats; "Samson", pushbutton operated; 1905 Rolls Royce; Tip truck & crane; Steady Hand Game; a full selection of 100, 200 and 300 'starter' models - George Ovenden

Boulton & Watt Bell Crank Engine, 1802; Matthew Murray's Hypocloidal Engine, also 1802 - Bill Watt

The 3 500 series Space Ships; Mini Traction Engine; Torque Converter; small Beam Engine (about 1813) - Lloyd Spackman

Double Cylinder Engine & Generator; Brough Superior Motor Cycle & sidecar; Double Acting Electrical Solenoid Motor from the Elektrikit set - David Wall

The Dynamic Series Helicopter, Motor Cycle, Dragster and All Terrain Vehicle - Peter Hancock

FAIR EXCHANGE?

In the 'Toys' section of Trade & Exchange paper, 19/5/94 --
"MECCANNO spanner ; swap for any FUNHO toy".

M.W. MODELS STAFF MEMBER, Mrs. Ann Richards, visited New Zealand earlier this year. While in Christchurch she met John Ince and Graeme O'Neill. Unfortunately, while in Auckland, Ann suffered a cardiac arrest. She was cared for at Greenlane Hospital and says the staff there were marvellous to her. Ann says she is now fully recovered and has, fortunately, suffered no permanent damage. We hope Ann will come to N.Z. again and will meet some more of her M.W. Models customers.

THE 500 SERIES STARTER SETS:

In the three 500 series sets I found one black P/N 221 which was not completely sprayed and still showed some undercoat. There is a dearth of washers in all these sets for any modeller who is accustomed to putting a washer under each bolt head and nut (where possible). The parts count was not completely accurate, but fortunately was more often over than under. The instructions are easy to follow and, when finished, the models are in themselves most attractive.

4.

WELLINGTON MECCANO CLUB MEETING NOTES Reported by Bryan

Jones and Mike Highley. (Slightly abridged to save space. Ed.)

Models presented at June meeting:

Max Beauchamp: Display of Cardboard Meccano parts and a wooden construction set believed to have been made in N.Z. in 1940s.

Colin Croft: Ferris Wheel and Tower Crane.

Don Flowers: Chassis for Swiss "Crocodile" electric loco bogie.

Mike Highley: Articulated Lorry from 6 Manual and Dump Truck from 4 manual.

Brent Houston: Strip Bender based on Simon Moody's but wider.

Bryan Jones: Ancient motor car from mar 1930 MM.

Simon Moody: Test rig for wharf crane gearbox and grab.

Max would like to hear from anyone who may have cardboard parts for sale. He may be contacted at 21 Southern Cross Crescent, Island Bay, Wellington.

Also at the meeting were two display models from Cave Toys Ltd; a Ferris Wheel and a Tower Crane.

At the July meeting there were 10 visitors from the MWT Club. Models were presented as a competition judged by Federation rules. The models, with judging points were:

Frank Abbott: Windmill (not judged)

Daryl Anderson: Maze-negotiating Robot (90) Forklift using L*** hydraulics.

Don Blakeborough: Motorcycle and Buggy (not judged)

Lindsay Bond: Traction engine and trail (92) Display of early Meccano sets.

Colin Croft: Don Quixote(95) Kenworth Truck Chassis(97)

Don Flowers: Chassis for Swiss "Crocodile" electric loco bogie(77)

Bruce Geange: Caterpillar Tractor(97)

John Hansen: Keintz oscillating Steam Engine(87)

Mike Highley: Articulated Lorry from 7 Manual(not judged)

Bryan Jones: Ancient motor car from Mar1930 MM(64)

John Jordan: Mini Loco(not judged)

Simon Moody: Test rig for wharf crane gearbox and grab(75) Vintage plane from Aero Constructor Outfit.

Timothy Moody: Derrick Crane from Supermodels book(68)

Chris Morton: SEL Steam engine.

Lou Nichols: Invincible ordinary bicycle(67)

Tom Pittams: Tractor, Dragster, and Torque Drive(78)

Robin Rye: Torque Converter(75), Antiaircraft Gun from War models outfit, Samson the Great, 3 racing cars, harvester, tractor with round hay baler.

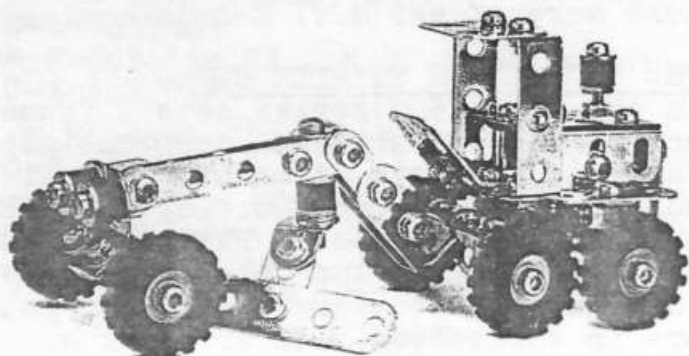
Alistair Tong: Beam Engine(not judged)

Laurie Webb: 50 ton Hammerhead Crane(85).

Colin's Kenworth Truck and Bruce's Caterpillar Tractor were judged to be first equal, Colin's Don Quixote second, Lindsay's Traction Engine and trail third, and Daryl's Robot fourth. Wellington would like to thank the MWT members who braved the weather and helped make the afternoon the success it was. Next meeting to be held on Friday 5 August, 7.30 pm.

WANTED: Gear selector retaining ring (black plastic) for PDU Motor. Any condition, your price paid or swap for Meccano Magazines or what-have-you. Doug Harris, Box 68392, Newton, Auckland, Tel 09 522 1881 work, 09 520 7817 home.

ROAD LEVELLER 106
NIVELEUSE
NIVELADORA

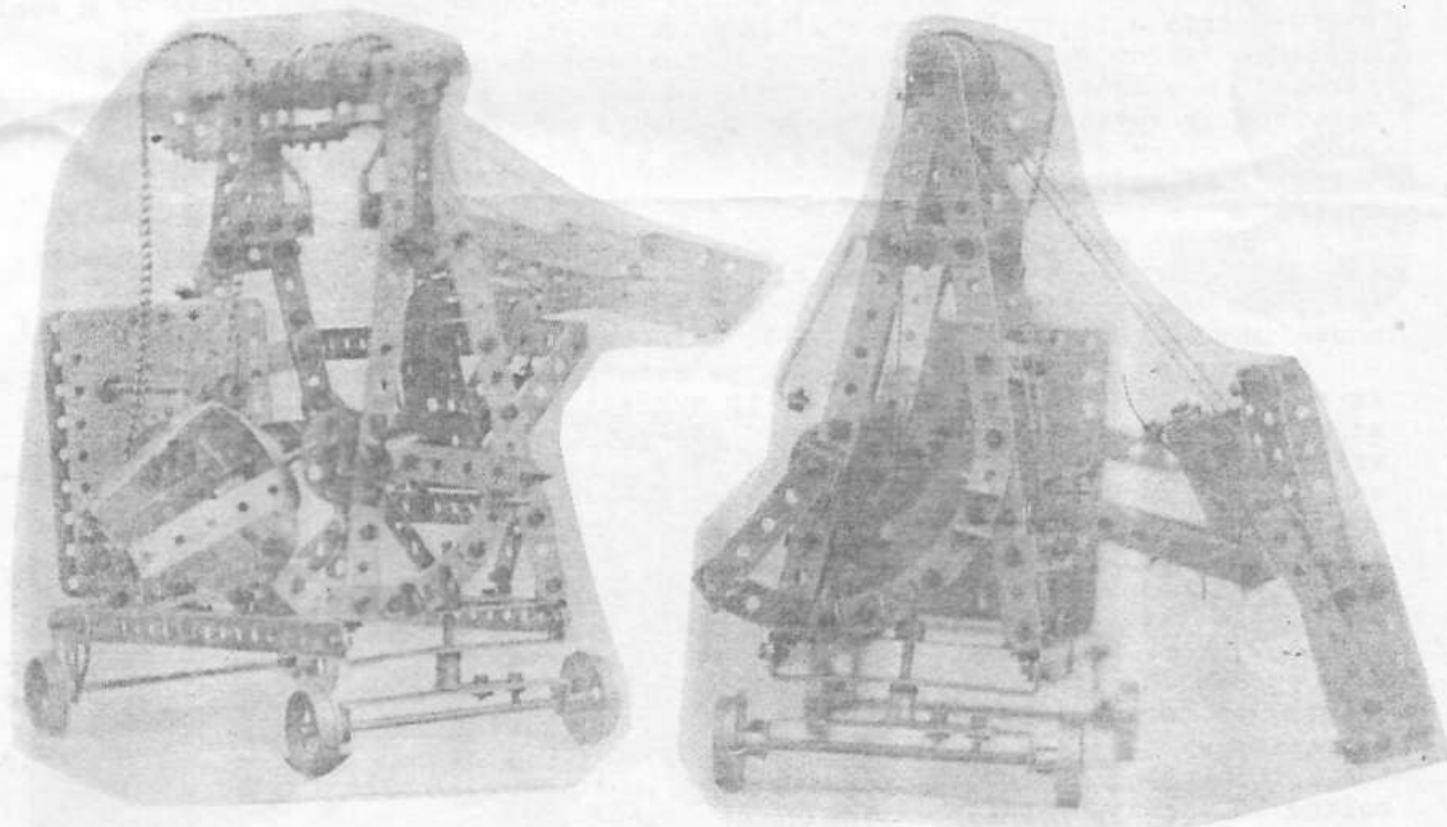


One from the past.

Contributed by
Doug Harris,
Auckland.

Herewith a small slice of Meccano history. I recently purchased from Mrs Fryer the pre-war M.M.s advertised in the October 1993 Federation Magazine. She told me about her brother's efforts in the 1920s, and I enclose her letter and a couple of prints, the best obtainable from very weathered glass plates. This may be of interest for the Magazine.

Extracts from the letter: "The concrete mixer was built in 1926 or 1927 and he designed it himself. The photo is of the model he made for the J. Wiseman and Sons Competition. He won a consolation prize for that. He later rebuilt the model, entering it in the Lands Bag Shop Competition, gaining first prize."



Christchurch Meccano Club - July Meeting.

Reported by John Ince

The July 1994 was well attended but unfortunately neither President nor Secretary were able to attend. We had fifteen others there however and a good collection of models. These included a fine new merry-go-round by **David Lange**. The passenger cars moved up and down by means of an ingenious arrangement with each car on a hinged segment which was guided by a wheel running on an underlying "hilly" surface made of flexible plates. The model came complete with flashing lights and taped fairground music. Asked whether this model would be available for the next convention David said that he may have version two by then! **Ian Torrens** displayed a partly completed double ferris wheel which is certain to be around next year as is **John Ince's** partly completed model of Cook's *Endeavour*. Both of these models are demanding of particular parts, pt. no. 48a in the ferris wheel and pt. no. 2 in the ship. **John Hamlyn** brought the chassis of his off-road Terrier crane and received a few tips on the arrangement of the differentials. **Maurice Evans** brought the boom of his huge face shovel. We have seen other parts of the shovel at previous meetings. **Grant Wells** showed us a partly completed Van der Graaf machine - not made in Meccano unfortunately. **Cameron McFarlane** had some small models including a motorcycle & side car, tractor and spray bar and a tip truck. John Ince also brought the tower crane made for F.W Cave (Toys). The crane is now complete and has the battery box and control switches for the hoist, luff and slew all made from current Meccano parts. It is hoped that this model will be on display in a shop soon.

During the meeting another batch of good quality second hand parts was sold to boost the Club funds with next years convention in mind. Judging by the way members buy more parts there must some interesting modelling going on. Most of these parts have come from some recent purchases of large sets. If there are still parts left next year they will be sold at the Convention. In the mean time anyone wanting specific parts should write or telephone **John Ince**, 37 Burnside Cres., Christchurch - Ph: (03) 358 7351 - after 10pm is OK. Also available are cheese head nickel plated bolts and zinc plated square nuts price \$6.50/50 or \$100/1000 post included. Prices of other quantities by arrangement.

Our editor has asked me to comment on my use of these. At the time, I had, as illustration, only three models, of vehicles, and those under dis-assembly so the parts shown(drawing) are only a section of his range though basic to it.

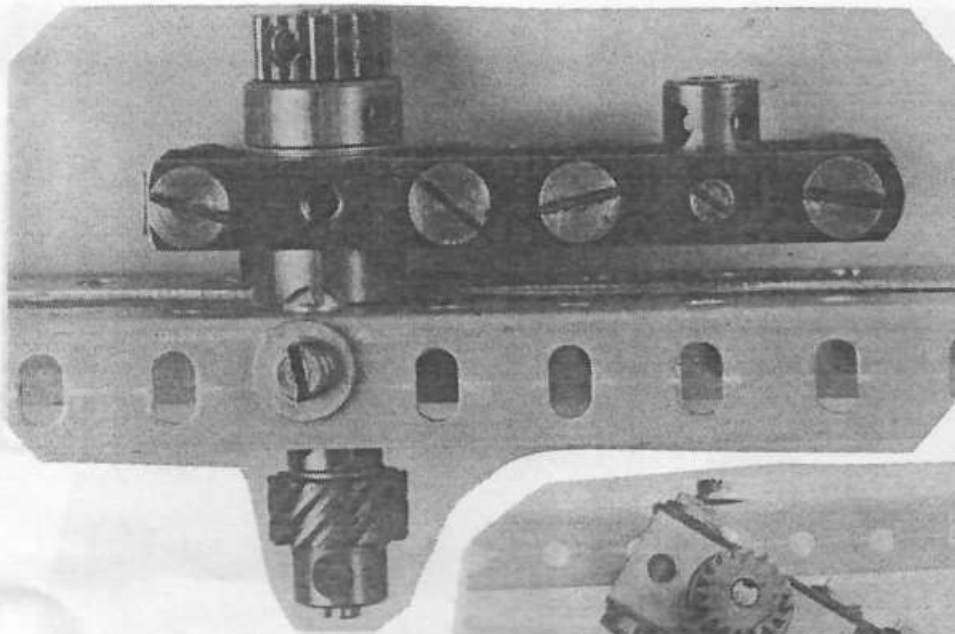
The first photographs,(A1,A2) show wheel stations and a leading/trailing suspension arm for a 6x6 (all wheels driven) vehicle. The basis is a plain block(DS) screwed and bolted between the side members of the chassis. That grips a 1½" hollow axle(DS) on which the wheel arm pivots. Two similar blocks bolted between 3" narrow strips, make up the arm which is spaced out from the chassis by a large collar and washer(DS) and retained laterally by a similar pair. A standard axle within the hollow one carries the final drive by a small helical from a lateral drive shaft(not shown) to the external pinion or sprocket unconstrained by movement of the suspension. The road wheel is carried on a dead axle which, for mechanical soundness, should also be a large one, but my wheels are unsuited, so I used a short coupling fixed in the lower block to carry a standard axle on which, with a coupling as hub, the wheel turns. In models of up to 6Kg across rough going, I have had no bent axles. Typical mileages eg, 0.1Km, may be a factor. Obviously the axle may be fitted in any one of the three holes of the lower block and springs are easily attached. The mechanism is as strong, lighter, slimmer, and more to scale than those cumbersome similar assemblies I have made from standard parts(partially shown in the illustration on page 5 of NZFMM mag for October 1992)

In tracked cross country models my main problem has been the sprocket axle. As well as carrying the torque, it is subject to a bending moment towards the adjacent road wheel plus ground impulses via the track, and the sprocket is well outboard of the axle bearing. For all save the smaller models, the standard axle is inadequate. To run a thick axle-coupling along a rod- in a short socket coupling takes a lot of polishing and the bearing is brass on brass. Round solenoid cores along a threaded rod disguise the problem without solving it.

In the smaller tracked vehicle(pictures B1,B2) the sprocket is carried on a hollow axle(DS) with a block(DS) as lateral bearing. An obtuse angle girder runs across the front of the model between the lower side angle girders of the chassis to form the lower edge of the nose plate with a block bolted to each extremity of its free edge. The 45degree angle of attack carries the front of the sprocket(and the track) clear of the lower nose plate. An angle girder bolted to the upper parts of the blocks runs between them and bracing to the rear is by way of a second angle girder. Medial to the block, the sprocket axle carries a large washer and collar(DS) and is extended by a standard axle gripped in it(carrying the final drive pinion) to a central bearing. That pinion engages with one behind it driven from the double differential by a small contrate.

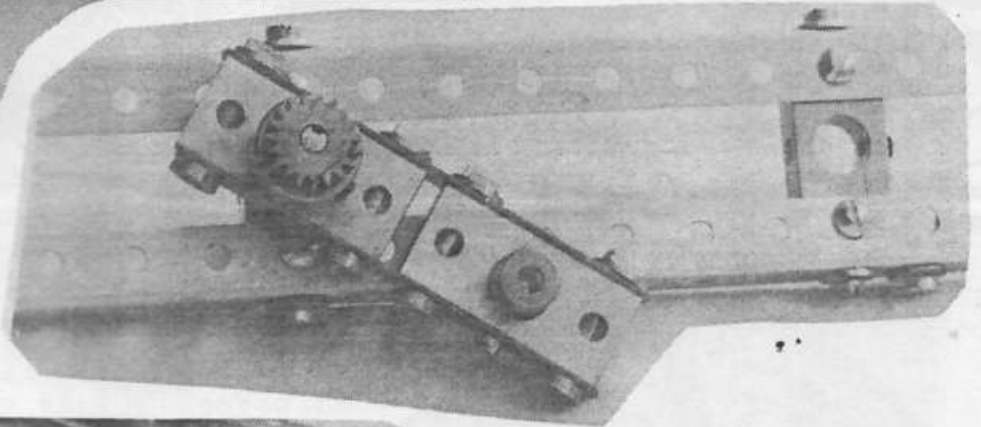
In the second(C1,C2) larger tracked model with two sprockets per (non standard) track, arrangements are in principle the same, but the need for two-stage gear reduction makes a central bearing for the sprocket shaft inconvenient. A long coupling(DS) is used as a single bearing mounted on a short obtuse angled girder(scarcely visible). That is overlapped and linked by a similar girder across the model to its twin on the other side. The sprocket shaft is held in the long coupling by a large washer and collar(DS) laterally, and internally by a washer and the final drive pinion(on a standard axle as before). That is driven by its fellow with a 4-hole coupling as bearing. The latter is clamped to the long coupling(DS) by bolts through a bracket(Marklin) bolted to the side chassis girder. Originally a cross chassis member, screwed to their upper surfaces, also linked the long couplings(DS).

Whether the sprocket shaft bearing is block or coupling, it will usually need spacing from underlying framework to give the top run of the track an appropriate level. Quite apart from their utility and precise manufacture, the Strickland parts are pleasing to sight and touch, and I have been very satisfied with them.

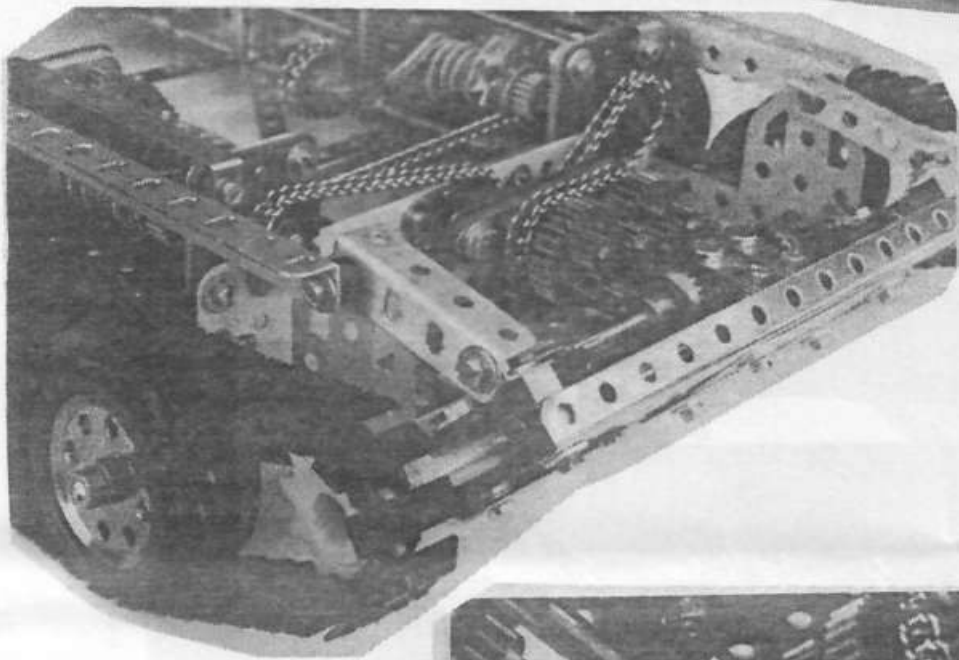


A.1.

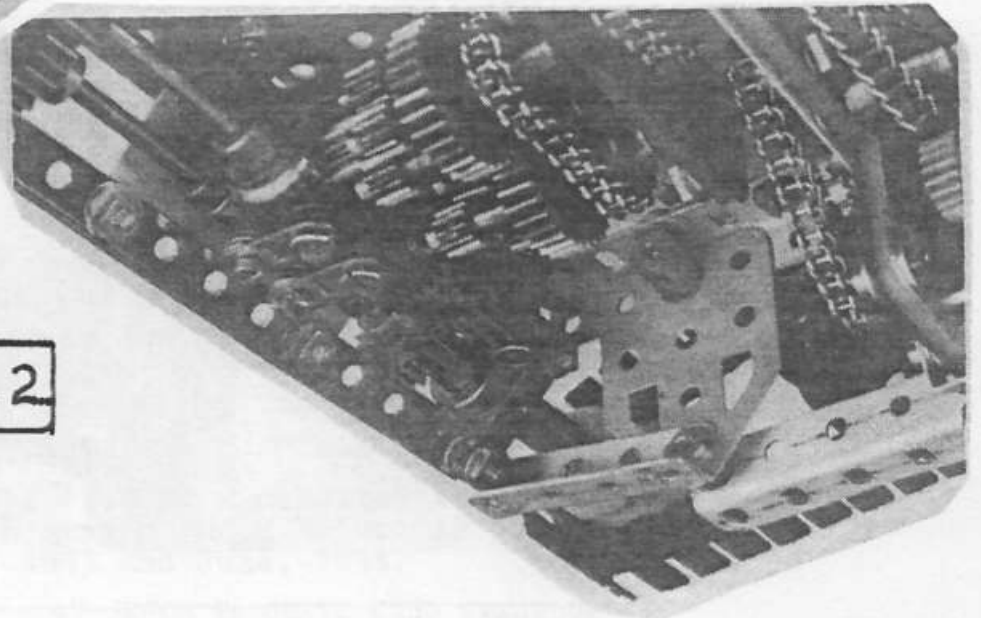
A.2.

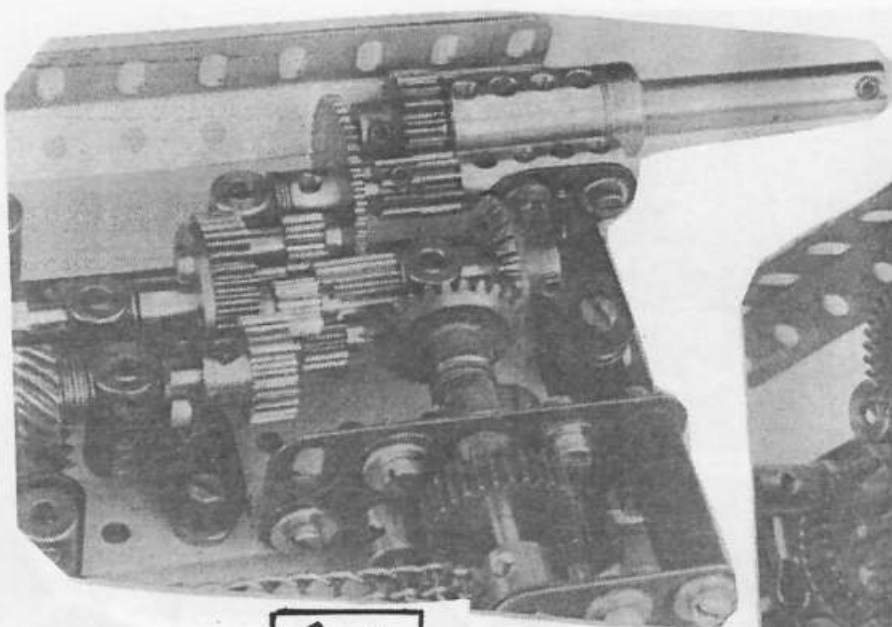


B.1.

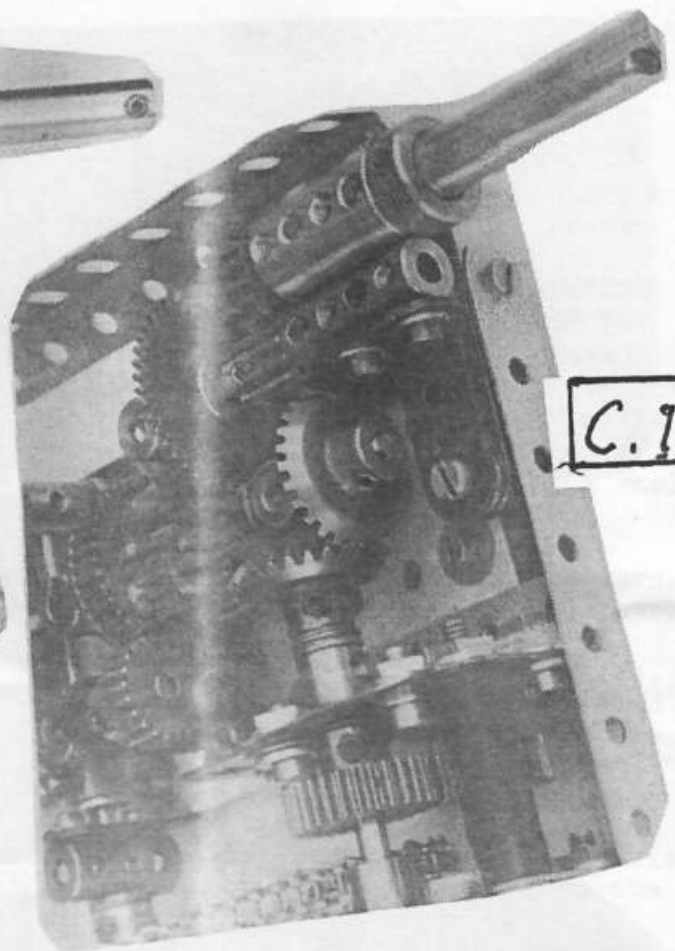


B.2.

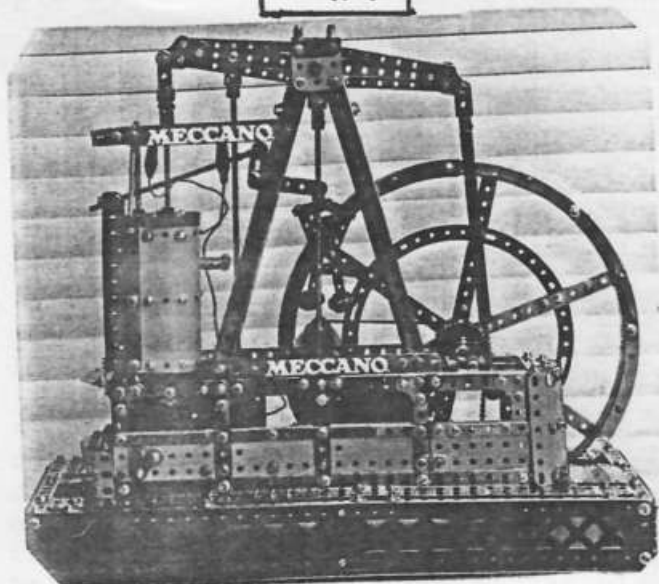




C.2.



C.1.



LLOYD SPACKMAN'S
BEAM ENGINE AT MODEL X.



AUCKLAND CLUB STAND AT MODEL X.

BITS & PIECES

from Lloyd Spackman

MANDUCA'S MECCANO - WHERE IS IT?

Many modellers will remember the contributions to M.M. made by Joseph Manduca of Malta, in particular his Disappearing Guns (M.M. Spring, 1981).

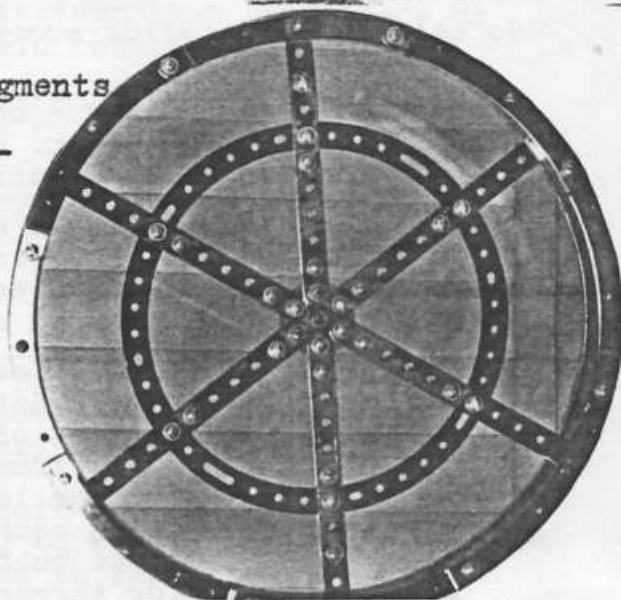
During W.W.II his Meccano collection was buried under the debris of his house which sustained a direct hit by a bomb. Fortunately Joseph and his family were in air raid shelters at the time. His storage cabinet was flattened but Joseph eventually recovered all his Meccano parts and went on modelling to become one of our legendary Meccanomen.

He died in 1990, but the whereabouts of his large Meccano collection is not known. Adrian Williams, President of the International Society of Meccanomen, has visited Malta a couple of times to try to track down Joseph's Meccano. We hope he succeeds.



6 Spoke Flywheels:

Building flywheels with Channel Segments (P/N 119) is easy with 8 spokes to fit to the rim. But 6 spokes present some problems. Here is one solution. Only the ends of two opposite spokes are bolted into the rim. The other 4 are clamped and are held in place by the circular strip (P/N 145).



MODELLING AID FOR SMALL MODELS:

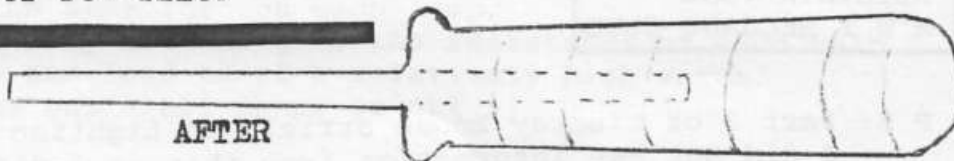
I have a flat 'Lazy Susan' type turntable 25cm diameter and only 16mm thick. It is rigid on both sides so sits firmly on the work bench or tray. When building a small model it saves me having to lift the model each time I want to work on the other side. It is available from Magna Mail, P.O. Box 51-092, Pakuranga, Auck. Price \$16.50. Their code ref. is H300 (Swivel Base).

THE NEW M.F. SCREWDRIVERS:

I have found these awkward to hold. They suit a child's hand, but not an adult's larger grip. I solved the problem by cutting off the longer end just before the bend so that I had a straight piece of steel, 3½" long. Then I glued it into a small plastic handle. Warning: the M.F. driver is made from hardened steel and can only be cut with a tungsten tipped hacksaw blade or rod file.

BEFORE

AFTER



720 BATTERY HOLDER: Was it a misprint first time? The price of a 720 B.H. with switch in M.W. Models price list jumped 115% between Nov. 1993 and June, 1994.

Lighting of Meccano Models

In recent publications of the N Z Federation of Meccano Modellers there have been some very interesting articles by Lindsay Bond on this subject.

Part 1 'History' Vol 16 No.3 August 1992

Part 2 'The Choices' Vol 16 No.4 October 1992

So when it came time to 'light' my model for the M W T Meccano Club Exhibition in Stratford last Easter I found it very useful to refer to this information.

First of all I had to decide on:-

1. How many bulbs (lamps) I would use.
2. What sort of mounting would be appropriate.
3. What wiring was required.
4. How could I make the lights flash on and off.

The model of a 'Chair O Plane' that I built stemmed from the A & P shows when as a teenager I used to ride on such a contraption each November. At night there were lights on both this amusement ride plus all of the other normal fairground machines of the day (or night).

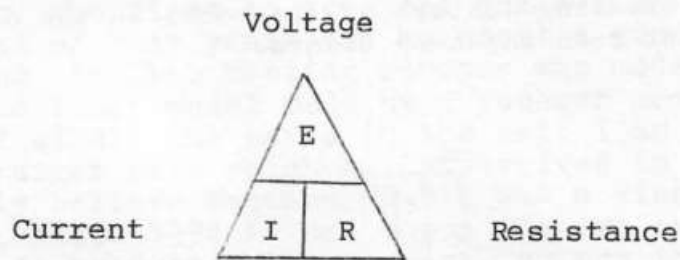
So using the criterion above I set out to solve the task thus -

- a) I would have 4 bulbs - one in each end of an arm - and use torch bulbs of 2.5 V/0.3 amp. On the clear glass I was able to apply both red and blue colouring using childrens water paints.
- b) As Lindsay suggested in his Part 2 the mounting of the lamp using 18-20 SWG copper wire provided a means of bolting the lamp to the Meccano strips at each end of each arm. Insulation tape was used between the bulb thread and wire holder.
- c) I decided to use a series circuit because of its simplicity and make use of a Trickle Battery Charger on 6v setting to supply power for the lighting of this model. Each lamp was joined by insulated wire - 1st from a commutator terminal in the base of the rotating body. The lamps were then connected using 'hook up' wire which lay along each arm and which was generally self supporting. The last bulb in the circuit had a wire from it to the 2nd commutator terminal in the base of the rotating body.
- d) A simple commutator made from paper clips !! was constructed inside the Ball Thrust Bearing. The lower thrust race had two brass screws mounted in holes and insulated using electrical 'spaghetti' over the threads. The heads of these screws were then rubbed by the paper clips mounted in the same way in the upper thrust race. This method proved most successful for making the lights flash on and off when the upper superstructure revolved on its base.

ALISTAIR TONG M W T MECCANO CLUB

P S; Part 3 of Lindsay Bonds article on Lighting is in Vol 16 No.5. I did not use information from this as I did not want to purchase more components than what I already had. However - the L.E.D.s may be worth considering in the future.

APPENDIX 1



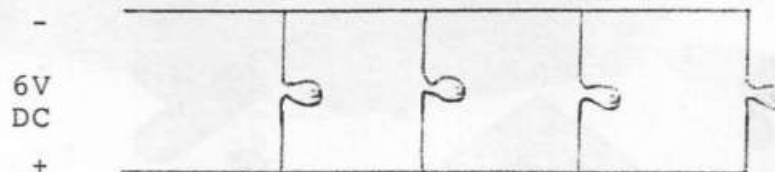
DEFINITIONS:

Power (Wattage). When we have voltage across a circuit and a current flow in the circuit power is dissipated in the circuit.

$$W = I \times E$$

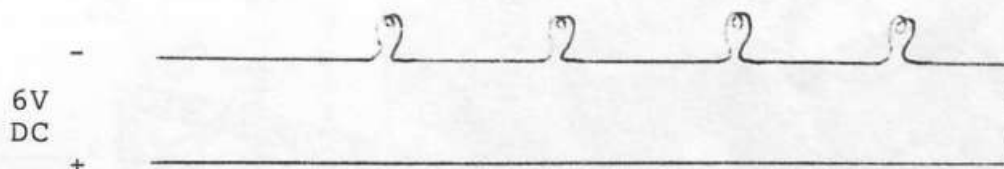
Ohms Law. In any circuit or resistance the voltage is directly proportional to the current flowing through that resistance or circuit provided the temperature is held constant.

Parallel Circuit



The voltage across each lamp is the same.
 The current through each lamp will vary depending upon the resistance of each bulb.
 The current draw and load in the circuit is of a low value.
 (Resistances share the load according to their value).
 If any bulb 'blows' the remaining ones in the circuit will continue to glow.

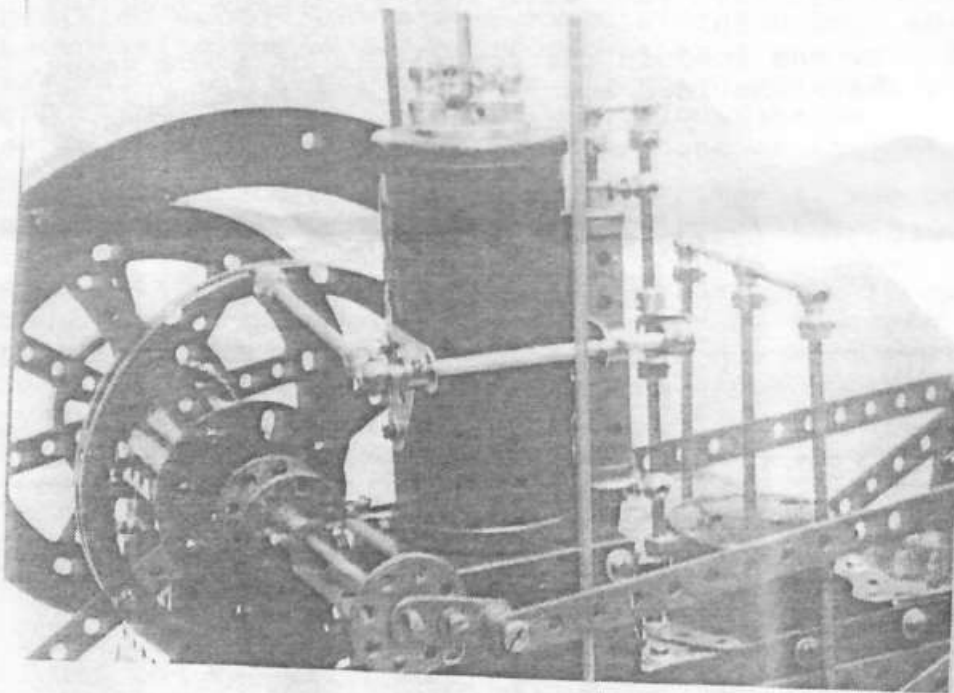
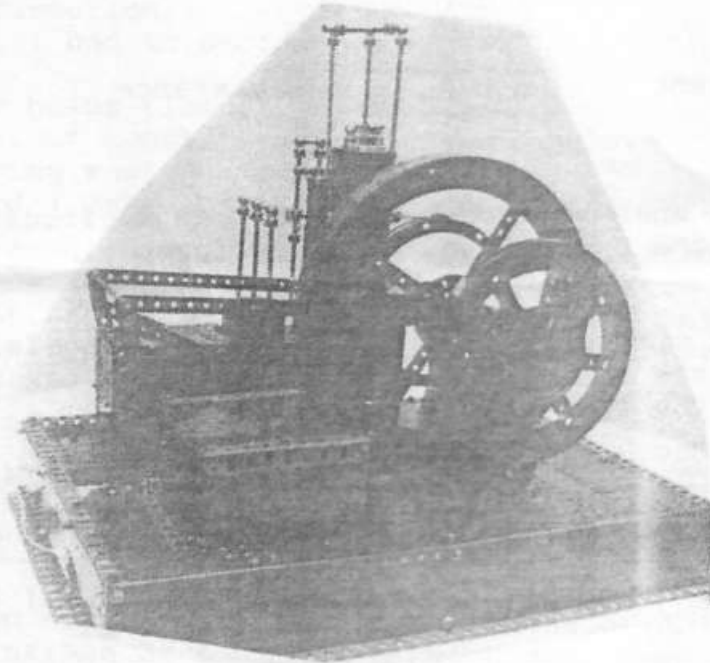
Series Circuit



The current is the same through each lamp.
 The voltage will vary according to the resistance of each bulb.
 The current draw and load is of a relatively high value.
 If any bulb burns out - all lamps go out !!

BRIAN ROWE'S BOULTON AND WATT BELL CRANK ENGINE.W.J.Watt
Auckland.

In C.Q.22 on page 24, Brian Rowe briefly described this model with one photograph. I built this, but had to guess at the details of the rear end which was obscure. For the flywheel, instead of channel segments, I used a pair of flanged rings back to back with faceplates at the centre. I used a Richards-Marx motor driving sprocket chains at right angles up to the output shaft. The most interesting feature of the model is the drive to the valve gear, which I have not seen anywhere before.



Shows the eccentric drive
to the valve mechanism.

CHRISTCHURCH



CLUB

The Christchurch MECCANO Club will be host to the 11th MECCANO Modeller's Convention to be held in Christchurch over Easter 1995.

The Club cordially invites you, your family and interested friends to attend the convention which will be held in the **Horticultural Hall** just off **Riccarton Avenue** in South Hagley Park on **Saturday April 15th and Sunday 16th 1995**. As usual the set up will be on Friday 14th from 9am until 5pm with cleanup on Sunday evening after the close of the convention. The venue will be open to the public from 10am until 5pm on Saturday and 10am until 4pm on Sunday. The evening function and dinner will be held in the downstairs lounge at the hall on Saturday.

This convention will have as its major theme the display of models made from both current production and from historic Meccano. There will also be displays of **Meccano** sets, rare and interesting components, **Hornby** Gauge 0 trains, **Dinky** toys, all from the classic period of **Meccano Ltd** when it flourished at Binns Road, Liverpool.

Because of the importance of the sale of **Meccano** products to the public the convention will also feature displays of sets and models from the current production of **Meccano France**. These will be supplied by **F.W.Cave (Toys) Ltd** whose assistance in mounting the displays at this convention is greatly appreciated.

For those who require motel accomodation the handyest places to the venue are:

Aalton Motel	17 - 19 Riccarton Road	3481024	\$72 - \$80 for 2	1km NW
Addington Lodge Motel	241 Lincoln Road	3388745	\$72 for 2	1.5km SW
Argyle Motel	145 Deans Avenue	3480530	\$87.5 for 2	1Km MW
Ashleigh Court Motel	47 Matai Street West	3481888	\$70 /1; \$80/2	1.75km NW
Gothic Heights Motel	430 Hagley Avenue	3660838	\$86 for 2	0.5km S
Hagley Motel	13 Darvel Street	0800655330	\$70 to \$81/2	1.25km NW
Raceway Motel	222 Lincoln Road	3380511	\$75/2	1.5km SW
Aarangi Backpackers	15 Riccarton Road	3483584	\$32/2 sh. kitchen	1km NW

The registration fee for this convention is likely to be \$20 for exhibitors and \$10 for partners which includes the cost of the Saturday evening dinner.

CONGRATULATIONS TO BILL AND ALL HIS HELPERS YOU'VE SURE MADE A DIFFERENCE TO OUR MAGAZINE.

This month's Specials.

Meccano Collectors Specials.

- 1980's No. 5 set, New, never been sold before,
Opened only to check condition, complete in every way,
Manuals, box etc. One only.....\$160..
*1980's No. 6 set, same condition as above but, unopened,
Rare in this condition. One only...\$199.
Freight and Packing \$8.. each.

Still a few of the last of the French Japanese Magic Motors
in Stock.... While they last \$16..

All the other Meccano at last month's prices.
Don't miss out, stocks are limited.
1994 Meccano Catalogues, Large and Small \$3, postage paid.

LINDSAY BOND ELECTRONICS
REGAN STREET,
STRATFORD.

PH. 06-765-5008.
FAX