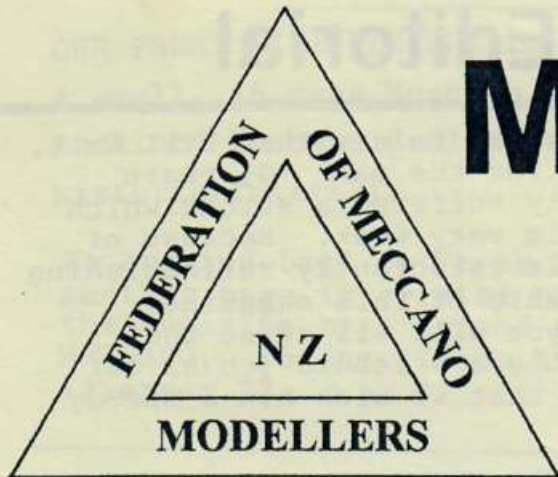




MAGAZINE

Vol 20 No 3 August 1996

July 21st, 1927.

THE NEW ZEALAND MECHANITAN.

Page Three

Build Your Own Toys.



N.Z.

MECCANO

HISTORY -

SEE

PAGE 3.

There are hundreds of models in the big Meccano Instruction Manual, and they work just like their big brothers in real life.

There is no skill required, and anyone can start to build just when he likes. The best age to start Meccano is anywhere between 5 and 70.

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

NZ FEDERATION OF MECCANO MODELLERS

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Editorial

I am sorry to say that Bill Watt, our Editor for the past 10½ years has recently suffered a stroke which has left him very weak. Because of this Bill is reluctantly relinquishing his Editorship of this magazine. I am sure you will all agree that Bill has done a splendid job as our Editor and that we wish him a speedy recovery.

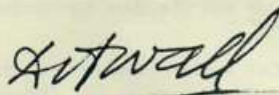
Whilst Lloyd Spackman and I are willing to continue producing the magazine for the next couple of issues we both feel that it is an opportune time to seek a new editor. I have always considered that access to a

desk top publishing system would be a great asset for this position.

In view of the foregoing I urge all readers to seriously consider the selection of a new editor to take over from Bill in the near future. In the meantime contributors are requested to continue to use Bill's address when forwarding material for publication.

On a happier note I do hope that the MWT Club's "Meccano Migration" held on Saturday the 16th July was a great success.

Finally Auckland Members are urged not to forget our next meeting at Neil Carey's home (see below).



DAVID

CLUB MEETINGS: AUCKLAND on Saturday, August 10, from 2pm, at Neil Carey's home, 23 Eaton Rd., Hillsborough.
M.W.T. on Saturday, August 3, at 3pm, at St. Luke's Church Hall, Cornfoot St., Wanganui.

New Zealand Meccano Contact Persons

These are the persons to contact if you need information about the nearest Meccano Club, or Meccano generally.

AUCKLAND:	David Wall, 502 East Coast Road, Mairangi Bay.	0-9-478 6825
	Brian Buchanan, 288b Manukau Road, Epsom.	0-9-524 5186
WAIKATO:	Don McClelland, 32b Hazelwood Avenue, HAMILTON	0-7-847 4503
HAWKES BAY:	Trevor Adam, 22 Ferguson Street, Bay View, NAPIER	0-6-836 6827
MANAWATU/	Bruce Geange, 4 Winchester Street, PALMERSTON NORTH	0-6-357 0566
WANGANUI/	Tom Pittams, 28 Pauri Village, R.D. 2, WANGANUI	0-6-345 6788
TARANAKI:	Lindsay Bond, 93 Hathaway Street, STRATFORD	0-6-765 5665
WELLINGTON:	Bryan Jones, 9-21 Lalington Street, Trentham, UPPER HUTT	0-4-528 3988
	Laurie Webb, 70 Calabar Road, Mirimar, WELLINGTON	0-4-388 9638
CANTERBURY:	Graeme O'Neill, 49 Hindness Street, CHRISTCHURCH	0-3-322 7456
	John Ince, 37 Burnside Crescent, CHRISTCHURCH	0-3-358 7351
OTAGO:	Karen Murcott, 56 Aytoun Street, Shiel Hill, DUNEDIN	0-3-454 3457

NEW ZEALAND MECCANO HISTORY

OUR FRONT PAGE PICTURE is a reproduction of the front page of a small, 16 page Meccano magazine published in 1927 by an Auckland Meccano dealer. It is therefore of considerable historic interest.

We are indebted to Frank Davis of Rotorua for sending it to us. Another page is printed hereunder, full size. Frank was given the magazine by a friend who knows of his (Frank's) interest in MECCANO. Do any of our historians know anything about Browning, Ifwersen ??

BROWNING, IFWERSEN'S MONTHLY

New Zealand Mechanitan.

Published in the interests of Boys and Girls in New Zealand and Fiji.

Vol. 1. No. 6.

July 21st, 1927

GRATIS

It is with very great pleasure that I present to the boys and girls of New Zealand the sixth edition of the New Zealand Mechanitan. This issue, which has been specially enlarged for the Winter Show, is the biggest we have yet published, and we trust it will enjoy as popular a reception as the previous numbers.

It is very gratifying and encouraging to have such nice reports from boys all over New Zealand, and we now feel amply repaid for our venture.

We have already had sufficient evidence that, in producing this paper, we are meeting a long felt want among the aspiring young engineers of this Dominion.

Suggestions Welcome.

We are always pleased to receive useful suggestions for the improvement of this journal, and, if you can think of anything that will be of use to boys in New Zealand generally, we shall be only too pleased to have your letter.

We cannot say, at present, what the future size of our paper will be, because there are several factors to consider.

A POSTAL BALLOT.

Will You Vote?

We have had so many requests to enlarge this paper that we are taking a postal ballot amongst all Meccano Boys and Girls in New Zealand with a view to finding out whether they are prepared to

pay a penny for a sixteen-page issue of this paper. We must, however, receive a large number of replies, so please post yours to-night, together with

The Old and New Meccano Referendum.

The object of this momentous issue is to discover how many New Zealand Boys and Girls prefer the old style nickel Meccano parts to the new coloured ones.

Please let me have your vote AT ONCE. See Page 12.

THE WINTER SHOW.

I have already had the privilege of seeing the very fine display which has been arranged for the huge exhibition, and I am sure the Mechanitans will be very interested in it.

OUR SPECIAL ANNOUNCEMENT.

We are pleased to draw your special attention to the reduction in price of some of the Hornby Train Sets, owing to the various improvements that have now been effected. The other train sets and accessories are receiving the attention of Messrs. Meccano Ltd., and, if it is possible to make further alterations, they will be announced in our paper as soon as they are received.

Now, boys, I must "close down" until the next issue, as I have utilised all the space at my disposal.

Yours sincerely,

THE EDITOR.

BITS AND PIECES

from Lloyd Spackman

ROBIN RYE'S little Agricultural Tractor was featured in our issue of Dec., 1995. It has been mentioned again in the model report by Mike Cook in Midlands Meccano Guild's report of its 58th meeting on March 30th. 1996, as alongside: →

WELCOME BACK to the Canadian Meccano News, renamed "Canadian Meccanotes". The Canadian Club has been re-titled and is now:
"Canadian Modelbuilding Association for Meccano and Allied Systems"
It operates mainly in Eastern Canada. It is also pleasing to see the British Columbia Meccano Club's Newsletter once again.

THIS MONTH'S LIMERICK:
From Keith Cameron:

The wife of a man from Milano
Demanded that he buy her a piano.
He replied, "Oh, my dear
We've no money, I fear,
But I'll build you a good one in Meccano."
(see Brian Rowe's piano, cover of C.Q. No.30).

SOME NOTES FROM I.M. 18, May, 1996:

STAINLESS STEEL MECCANO! Alberto Richini in Argentina has produced flat girders made of stainless steel. He says he can make them at no higher cost than that for enamelled ordinary steel. It is an idea worth pursuing for strips and girders, though I have found re-plating in nickel and palladium gives a long lasting, scratch resistant finish.

I.M.says 'FIGHT METRICATION MANIA:

It seems the Central European Administration could quite likely ban all measurements in inches as well as Whitworth threads, etc. in ALL future products made in the E.U. (which includes France and the U.K.). This could force Calais to metricate MECCANO which would kill off the continuity of 1/2" measurement sizes which we have used for almost a century.

I.M. says - if you want to help stop this adverse change write your protest (with reasons) to:

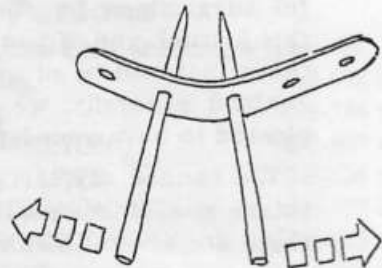
British Weights & Measures Assn,
9/5 New Bells Court, Edinburgh,
EH 6 6 RY, Scotland, U.K.

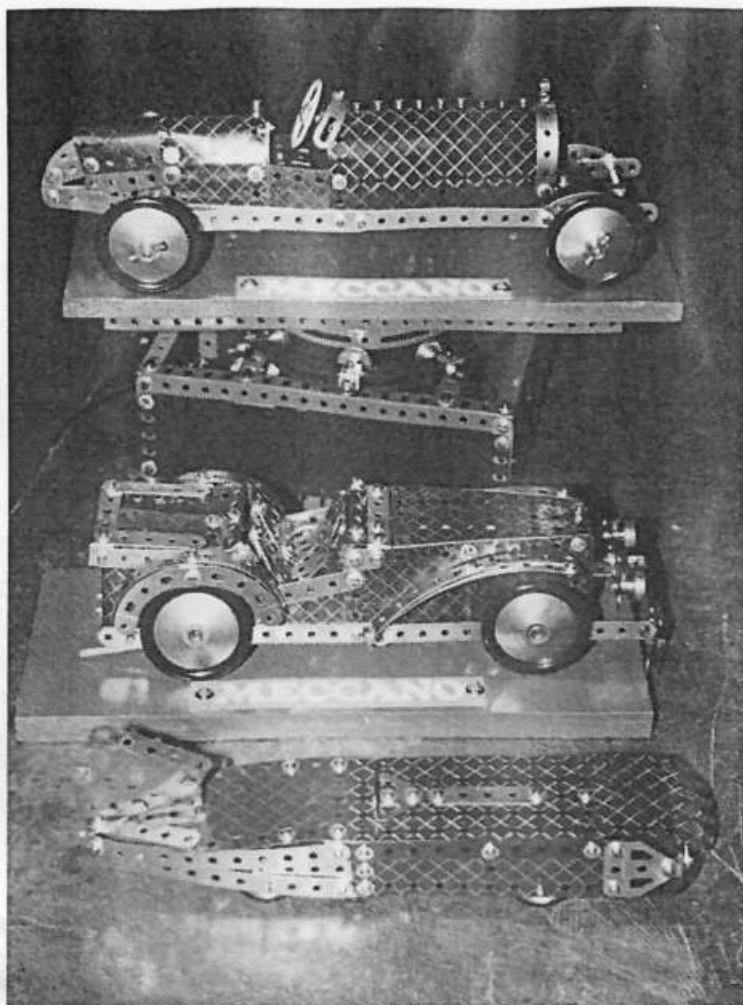
Demand non-metric plenary indulgence for MECCANO.
Mention International Meccanoman and send I.M. a copy of your submission.

A MOVE TO METRICATION WOULD AFFECT EVERY PRESENT MECCANO MODEL-
LER, ALL OVER THE WORLD.

First away on my personal model tour was our secretary Ernie Chandler who showed me what was possibly the smallest and most complex model at the meeting. A very small agricultural tractor based on a model featured in the New Zealand Gazette. The model made excellent use of many of the newer small parts to be found in the modern small French sets and incorporated a surprising amount of representational detail. It just goes to show what can be achieved with a modest collection of small parts!

HOW TO BEND STRIPS WITHOUT A BENDING MACHINE: Insert drifts or axles as shown, tweak, gently. Repeat as necessary. This avoids bending at the HOLES. Patience brings good results, say Bob Brooker and Francis Paine of South East London Meccano Club.





PHOTOS FROM M.W.T.
Club's visit to
Wainui-o-mata on 6th
July when they held
a joint meeting with
Wellington Meccano
Club.

Top: Blue/Gold
models, 1935 + by
Lou Nichols.

Lower: Helicopter
built by Lindsay
Bond as a display
model.



S20 EXTRA! EXTRA! S20

A prize has been donated for a model vehicle with
THREE road axles, maximum overall length of vehi-
cle 15", to be judged at the meeting 3 August. The
judge will take into consideration junior and less ex-
perienced members ability and the judge's decision
will be final.

Bruce G and Bruce N

AND ALSO FROM THE
MANAWATU!, WANGANUI!,
TARANAKI! CLUB
this
Competition



President - Bruce Geange; 4 Winchester St.; Palmerston North; (06) 357 0566
Secretary - Tom Pittams; 28 Pauri Village RD. 2; Wanganui; (06) 345 6788

MEETING REPORT 4 May 1996

Members gathered at Wanganui and Meccano items were presented as follows:

Wayne Blakely - Presented the partly built chassis of Model 10.5, 1953 Sports car being progress to date. Wayne's comments on the poor quality of the instructions and the necessity to count the holes in the diagram to ensure correct modelling were taken to heart.

Don Flowers - (See Photo 1) A partly built chassis of a self designed 4 x 4 Jeep utilising ash-tray tyres on hubs made from 3" pulleys spaced with bolts.

Simon Moody - Revived an old favourite being a partly built Forklift with tilting mast with a two stage telescopic action. The model will eventually have 4 motors to control the necessary actions. This model has had a varied history having been scavenged for parts for other more urgent models (even Simon runs out of parts! Ed.) but this time round, the intention is to complete it.

Robin Rye - A partly built Maudsley Table Engine from a CQ and Brian Rowe. We learned what a 'Top hat' bearing looked like and how to use multitudinous Hinged Plates 198 as fill in plating for the base.

John Hansen - A boxed 1935-36 No 1 set.

Daryl Anderson - The commencement of a Merry-go-round (Carousel) from MMGG 13 with 24 Sector Plates 54 forming the circular base. Also a very nice Ezybuilt set 7 in an enamelled tin box from the late 1940's complete with a mini engineers square. An electric Hornby Train set 3 rail electric E602 Goods about 1950 was appraised.

Don Blakeborough - A coincidence in that this was the second model presented to the club requiring 24 Sector Plates 54 as the circular base. Only this time Don's Walking Dragline is of such large dimensions that it requires 3 of these bases to make the base plate that rests on the ground and

then the rotating superstructure. The base has running and check rails on the outside and hook rollers in the open centre. The base, cab and motor house were presented for viewing. The dimensions are such that the mast will be 10 feet long and the cab will not fit through a standard doorway. All of this to be fitted into Dons small car for transportation !?? We await future developments with keen anticipation.

Lindsay Bond - Realised one of his boyhood memories with a very nice refurbished boxed No 8 red and green Meccano set of 1948. He has also collected Boxed No 2 Dinky Builder, 1A Dinky Builder, Dinky Builder pre-war parts, Jiffy Joyna Wooden toy set, No 1 Meccano set 1925/26 with a mixture of coloured and nickel parts, and Mk 2 Combat set 1975.

And just to complete his collection a genuine Geared Roller Bearing 167. Lindsay's model was an AA gun in army green.

Bruce Geange - (See Photo 2) From the July 1949 Meccano Magazine, a construction site dumper with working steering and powered by a Magic Motor. Bruce's skills in restoration were demonstrated in a variety of Hornby rolling stock and 0-4-0 locomotive rescued from rust and dilapidation and returned to very presentable items

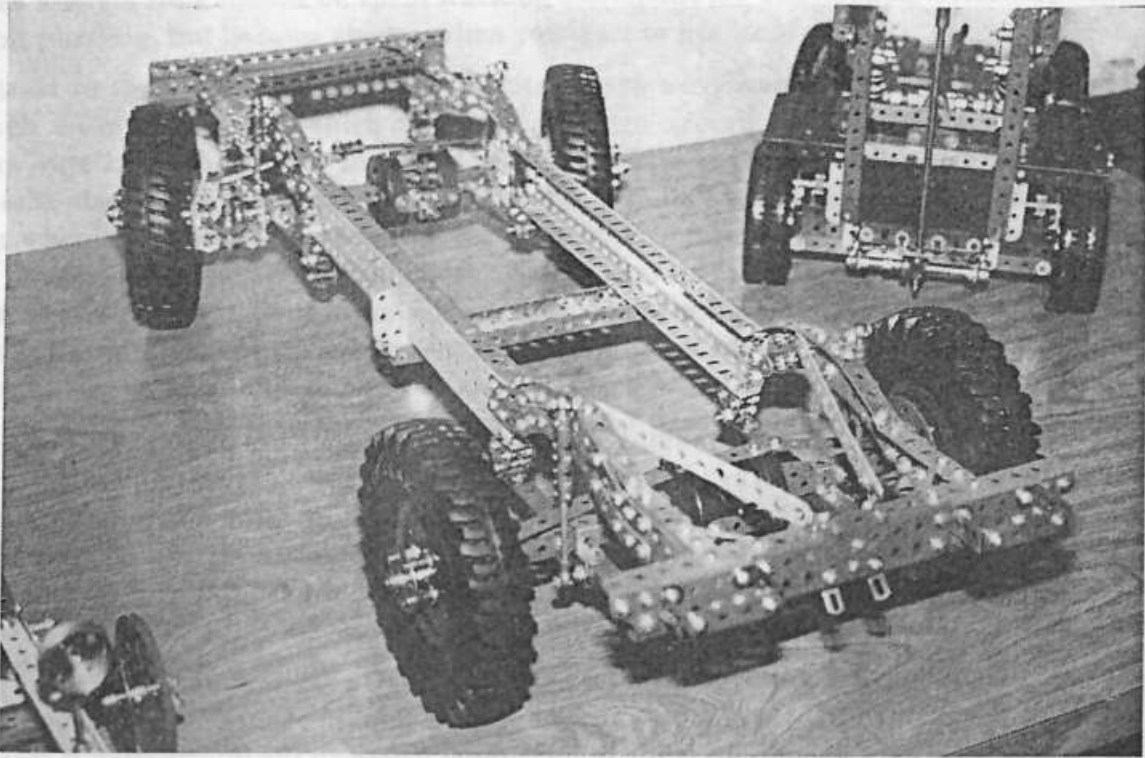
Wes Dalefield - Another coincidence in that Wes has also started a Walking Dragline using Model Plan 87. Smaller in scale than Don's model, this partly completed model was also at the base and cab stage. Wes also demonstrated on his computer the new 'MecInv' computer inventory programme to keep track of all Meccano parts in various colours and the programme also pops up a drawing of the part selected.

Auction - The first 50 lots of the auction realised \$164 and the collection of Meccano Magazines \$155.

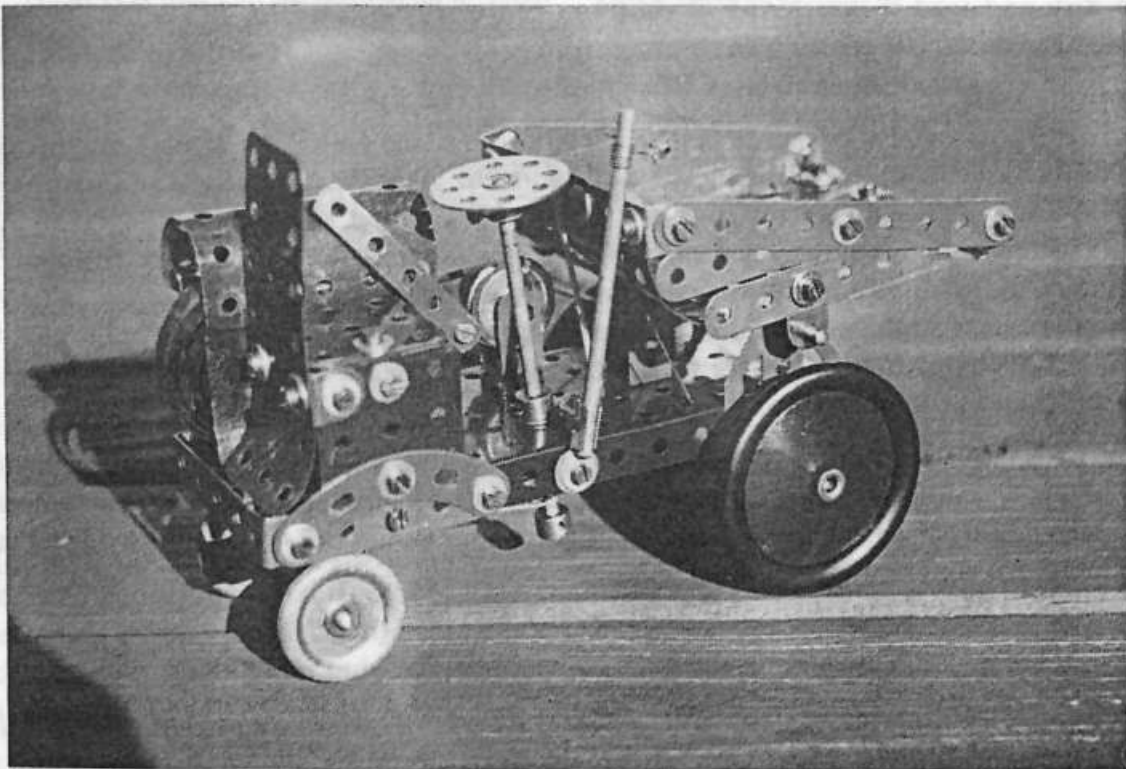
The other 80 lots of Meccano will be auctioned at the MWT visit to the Wellington Meccano Club on Saturday 6 July, 2 pm, Sunvalley School, 67 Meremere St, Wainuiomata. So Be There.

NEXT MWT MEETING - Annual General Meeting Saturday 3 pm, 3 August 1996 at St Lukes Church Hall, Cornfoot St, Wanganui. Approx. across the road from Don Blakeborough's place.

Subscriptions for 96/97 will be payable. Tea will be at 5 pm. Check meeting notice



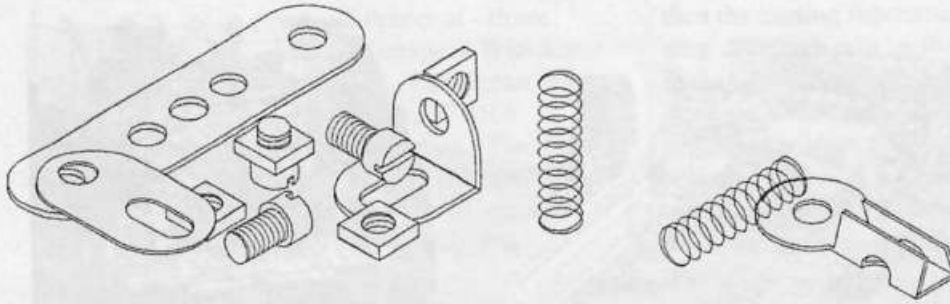
Don Flowers' chassis of an O/D 4 x 4 Jeep



Bruce Geange's Construction Site Dumper

COMPUTER GRAPHICS - IsoMec

BY COLIN CROFT



It's been almost twelve months since I purchased IsoMec and I thought it was time I reported my findings. First though, for the computer illiterate, perhaps a brief description of today's computers might be a good idea.

I say 'today's' because they are changing so fast. At present they are doubling in power every eighteen month or so. The average PC (personal computer) sitting in the corner of a room in the average household, would be several times more powerful than the computers that landed man on the moon. Back then they probably cost millions of dollars, if you were able to buy one; today you can have one for less than a number 10 would probably cost and that would include a printer and all the software.

Basically, a computer has a central processing unit (CPU) + random access memory (RAM). The CPU is the brain of the computer, while RAM is its thinking space. Another major player is the hard disk or hard drive. This is the filing cabinet where all the information is stored.

If you were working on a word document in a word processing program, it would only exist in your PC's RAM. To make a permanent copy of your work, you have to ask your word processor to save it to the hard disk. The next time you switch on your PC, you can ask your word processor - via your operating environment (Windows) - to find that document on the hard disk and load it into RAM so that you can work on it again. It's a bit like the boss, asking his secretary (operating environment) to get a document out of the filing cabinet (hard disk) for him to work on at his desk (RAM).

A hard disk can store immense amounts of information. Quite often advertisements show PC's as having '1.2 Gb Hard disk'. The Gb stands for gigabyte. To understand just how large this is, I think it's best to start with 'bits'. A 'bit', in computer science, is a binary digit, either 1 or 0 in the binary number system. It is the smallest unit of information handled by the computer. In groups of eight they become bytes and are used to represent all types of information. For example, one letter of the alphabet or one of the digits 0 - 9. There are 1024 bytes to a kilobyte; 1048 kilobytes to a megabyte and 1072 megabytes to a gigabyte. Phew! Now that's an awful lot of 1's and 0's!

Although IsoMec will run on a computer with a 386 CPU, a 486 is preferred and a Pentium is even better. Pentium or 586 is the latest computer on the market. However, this too will soon be superseded by the Pentium Pro or 686. (The name *Pentium* is registered by Intel, as they were unable to copyright the number '586')

IsoMec requires at least 8 Mb of RAM and if you want to build large models, then 16 Mb is required. Better still 32Mb, as on the horizon is 3DCadMec; but more about that later.

Another requirement is CorelDRAW! Version 3 or 4. IsoMec cannot run on its own and needs CorelDRAW! to create Meccano models. CorelDRAW! is a graphics design tool that is used for drawing, charting, painting, etc. IsoMec was created in CorelDRAW! and is supplied as clip-art drawings, of all the Meccano parts', in isometric extension and in plan format.



To access IsoMec, you first have to open CorelDRAW! Once open it's a simple matter of going to the files and copying and pasting required parts' to the drawing board. Before loading IsoMec though, time should be spent learning CorelDRAW! They supply tutorials, which can be a bit puzzling, but become clearer when you start to use IsoMec.

You start to assemble a model by first switching to *wireframe*. This is so you can see right through all of the parts', which makes it easier to accurately line up the holes. Also, the redraw rate is much quicker in this mode. The mouse is used to drag and manoeuvre each part into place, with the arrow keys nudging it into its final resting place. It can get a little tricky when trying to fit a part that needs to be both in front of and behind another part. You have to use a method of grouping parts' together, but this is soon mastered. If you run out of a certain part, there is no need to go back to the files, as it can be duplicated with a couple of clicks of the mouse. Wouldn't it be nice if you could do that with real Meccano!

Once you've finished your model you can colour all of the individual parts', in any colour of your choice, by simply selecting one from the pallet with the mouse. If the colours are not to your liking, you can always mix your own.

In issue No 19 of this magazine, you may recall a drawing of a Multipoint Gearbox; the size of which was 990 kilobytes or almost 1 megabyte. This is equal to in excess of 500 pages of text in A4. It would be getting close to maximum, that the computer can handle, if 8Mb of RAM were available. 'Now this would seem hardly fair', you may think. Basically, the computer will only allow a certain amount of memory to be used to run applications. The rest of it is apportioned to other essential duties. If this is exceeded your work may not be able to be saved. So, in order to draw larger models, lots more RAM is needed. Fortunately this is dropping in price quite rapidly.

Obviously, the larger and more complicated a model is, the longer the redraw will take. This is regardless of the power of a processor or the amount of memory that a computer has. Rather, it is controlled by a local bus graphics accelerator; the size of which is usually 1 Mb of video Ram. However, this can be improved if 2 Mb of video Ram is installed.

It concerns me, that over the years, clever mechanisms and new ideas may not have been recorded and are now lost. This is one thing IsoMec can do; record those items with relative ease. Simon Moody's Multipoint Gearbox is a case in point. I know that Simon made several attempts to draw this up freehand and finally gave up; until I came along and offered to draw it up in IsoMec. Many people can now enjoy Simon's many sleepless nights that went into designing that gearbox.

Computer graphics can also be useful if you are trying to get a point across about a new or alternative method that you've discovered. Its quick and easy and there's no need to worry any more about that non-existent drawing skill.

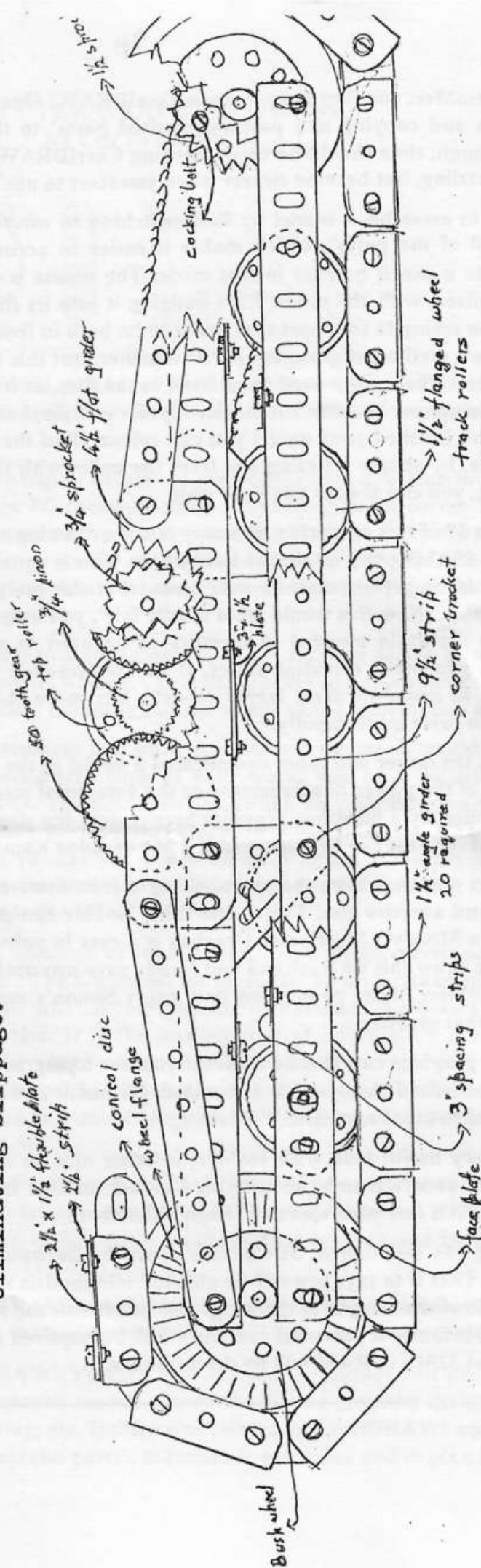
Another very useful tool, with IsoMec, is being able to design mechanisms in plan format. This is very accurate and can tell you whether an idea is going to work or not, before you actually build it (see plan views of Simon's Gearbox)

The future As mentioned, 3DCadMec is on the horizon. Unlike IsoMec, 3DCadMec is an Auto Cad. That is to say; you will be able to build models and then view them from any angle. An example of these types of drawings can be seen in the manuals that Meccano France now produce. Obviously a powerful computer will be required and it is envisaged that a Pentium with at least 32Mb of RAM will be the minimum.

TRACK DETAILS

FURTHER TO the photo and story about Douglas Muff's Giant Excavator, in our last issue, Douglas has now supplied more information about the construction of the crawler track, as follows (and also see the drawing on the next page):

"THE SIDE FRAMES are 12½ angle girders joined at each end by bush wheels which act as bearings for the driving wheels. The track runs on flanged wheels made up of face plates and wheel flanges. The wheel flanges have a flat rubber band stretched around them to provide grip. A conical disc on each side gives a neat finish. Between the face plates a 1½" sprocket is secured. A long bolt secured in the socket engages a hole in a face plate, thus eliminating slippage.



In practice the track works well, though slowly. Slowly because with the weight of a large model to carry and the limited power of an E20R motor, considerable reduction gearing is necessary. I trust these few notes and the drawing will make everything clear."

Douglas Muff.

TIPPING MOTOCART

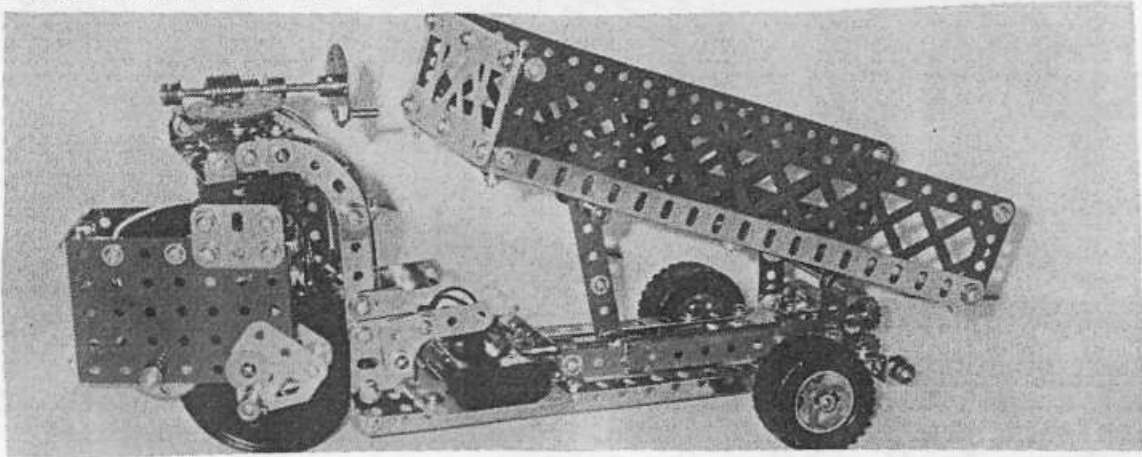
by Lloyd Spackman

INTRODUCTION:

This model is one of Keith Cameron's, described in M.M., April, 1979. Keith built it from the contents of a Set 4, but, using a wider range of parts, I have modified it somewhat. The tipping mechanism is from Keith's 'Tipping Lorry Mk. II' in C.Q., Dec., 1991.

The prototype, I imagine, would be used in a factory where maneuverability would be important for delivery of materials and removal of waste.

I acknowledge my debt to Keith and my instructions follow his form. LEFT and RIGHT are as viewed from the front of the model.



FRONT WHEEL UNIT:

The right side is a $3\frac{1}{2} \times 2\frac{1}{2}$ flanged plate, vertical, flanges pointing inward. Bolt an MO motor, shaft down, by its 2 rear base holes to the top 2nd & 4th holes from the front of the flanged plate. Fix a $\frac{1}{2}$ " pinion, boss down, to the output shaft.

Bolt a $2\frac{1}{2} \times 1\frac{1}{2}$ plate to the front flange and a $1\frac{1}{2}$ " flat girder to the top 2 holes of the rear flange, both pointing left. Connect the top left hole of each by a $3\frac{1}{2}$ " double angle strip. Bolt a $1\frac{1}{2}$ " flat girder by its round holes to the top 1st & 3rd holes from the rear of the flanged plate. Bolt another $1\frac{1}{2}$ " f.g. to the same (opposite) holes in the $3\frac{1}{2}$ " d.a. strip. Bolt a pair of $1\frac{1}{2}$ " angle girders to the upper holes of the 2 f.g. slotted holes pointing inward.

Bolt a $1\frac{1}{2}$ " pulley, boss down, to the centre holes of the 2 a.g. Use washers to ensure the bolt shanks don't protrude beyond the nuts and see that the grub screws are accessible.

Bolt a P/N 11 bracket by its centre hole, pointing to the rear, to the bottom hole of the rear flange, the bolt also holding, inside the flange, the short lug of a $1 \times \frac{1}{2}$ angle bracket.

The bearings for the front wheels are 2 flat trunnions fixed by their rear corner holes to the double bracket. The left one is spaced away by 2 washers. The trunnions are also secured through their formed slots, with $\frac{3}{4}$ " washers under the bolt heads. The right hand trunnion to the bottom, 2nd from rear, hole in the flanged plate. The left one to the 2nd hole of doubled $3\frac{1}{2}$ " narrow strips, then, spaced by a washer, to the long lug of the $1 \times \frac{1}{2}$ angle bracket.

Bolt the other end of the pair of narrow strips, with washer spacing, to the short lug of an angle bracket whose slotted hole is fixed inside the bottom hole of the front flange.

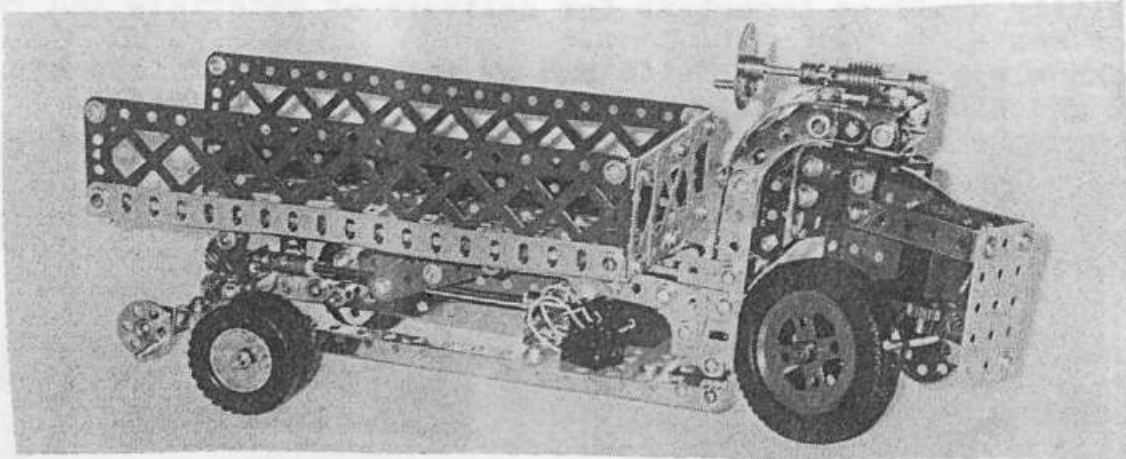
FRONT WHEEL UNIT (Contd.):

The trunnions are located so that a 3" pulley on a 2" rod just clears a 2" drive rod journalled through the 3rd bottom holes from the front of the plate and the narrow strips.

Between the plate and the strips fix a large contrate with washers to get a good mesh with the pinion.

The 3" pulley is spaced out by washers and is driven by a 6" driving band in its groove and passed over the drive rod.

Outside the pulley fix a 2" pulley WITH TYRE. This gives traction to the drive as the 3" pulley tends to skid.

STEERING HEAD:

Bolt a 1½" pulley, boss up, to a pair of 2½" d.a. strips, offset 1 hole to the right of centre. Use washers to prevent bolt shanks protruding below the nuts.

Bolt the 2½" d.a.s. to the end flange holes of a 2½ x 1½ flanged plate.

On top of the flgd. plate, one hole in from the left, bolt a 1½" d.a. strip. The rear bolt also holds the slotted hole of a 2½ x 2½ blue plastic plate.

Bolt the two end holes of a 2½" stepped curved strip to the rear two flange holes, each side of the flanged plate. The rear of the two bolts also holds the rear 2½" d.a. strip.

The 1½" d.a. strip holds a 3" rod which has on it collar, washer, front lug, worm, rear lug, washer, collar and bush wheel with a short threaded pin through one hole. The worm meshes with a 57t gear at the top of the vertical 2½" rod.

Bolt the end slots of two formed slotted strips, with the 2½ x 2½ blue plate underneath, to the rear top holes of the flanged plate, all pointing rear and down. To the bottom holes of the 2½" stepped curved strips, each side, bolt a 2½" strip pointing down and an angle brkt. inside.

To the bottom holes of the formed strips, each side, bolt a 2½" narrow strip across, a 2½" strip each side, the top slotted holes of another blue plastic plate, finally to the angle brkts.

To the 4th & 5th holes of each lower 2½" side strip bolt a 2½" flat girder, pointing down, and to the rear, by its slotted holes and a 2½" d.a. strip across at the 5th hole. With the top flanged plate horizontal, the flat girders should be vertical.

Bolt the bottom ends of the other 2½" strips to the 2½" d.a.s. with another horizontal narrow strip to complete the edging.

Bolt a pair of 2½" strips out horizontally from the 2nd from top holes of the flat girders, supported by 1" corner brkts. These support the tray when it is lowered.

THE CHASSIS:

The 9½" angle girders are fixed by their round holes to the bottom 2 holes of the flat girders of the steering head. Slotted holes are uppermost and pointing outward.

Bolt a 5½ x 2½ flat plate across immediately behind the flat gdrs. This takes the battery holder (Calais P/N 720) and a joiner block for the wiring.

At the rear of the flat plate bolt a 2½" angle gdr. by its slotted holes, spaced up by a washer, round holes up and to the rear.

Across the rear holes of the angle girders bolt a 3½" strip. To this bolt a 1½" angle girder by its middle & left round holes, slotted holes up and to the front. Overlay the a.g. slotted holes with a 1½" strip. This is the rear bearing for the tipping mechanism.

Bolt a trunnion under the slotted flange of each 9½" girder, each side, at the 3rd & 5th holes from the rear. The inner hole of the trunnion and the 4th round hole of the girder are the bearings for the 2½" rods which carry the rear wheels.

From the outer side - small collar, washer, wheel, washer, trunnion, girder, washer, collar.

Bolt a 2" strip, pointing upward at the 2nd from rear holes of the girder, each side, and reinforce them with 1" corner brkts.

Bolt a reversed angle brkt. by its slotted hole to the end round hole of each girder, round hole lug pointing outward. These two carry the winding rod for the tipping.

Bolt angle brkts by their round holes, slotted holes up and inward, at the 8th and 16th holes from the front of the right hand 9½" girder. Insert a slide piece over a 4½" strip and bolt this by its end holes, spaced out by a washer, inside the brackets and up as far as possible.

TIPPING MECHANISM:

Connect a 4½" threaded rod to a 1½" rod by a threaded coupling. Lock the threaded rod to the coupling. Journal the 1½" rod in the right hand hole of the rear 1½" angle gdr. and strip. Put a washer each side, a small collar behind that and a ½" helical at the end.

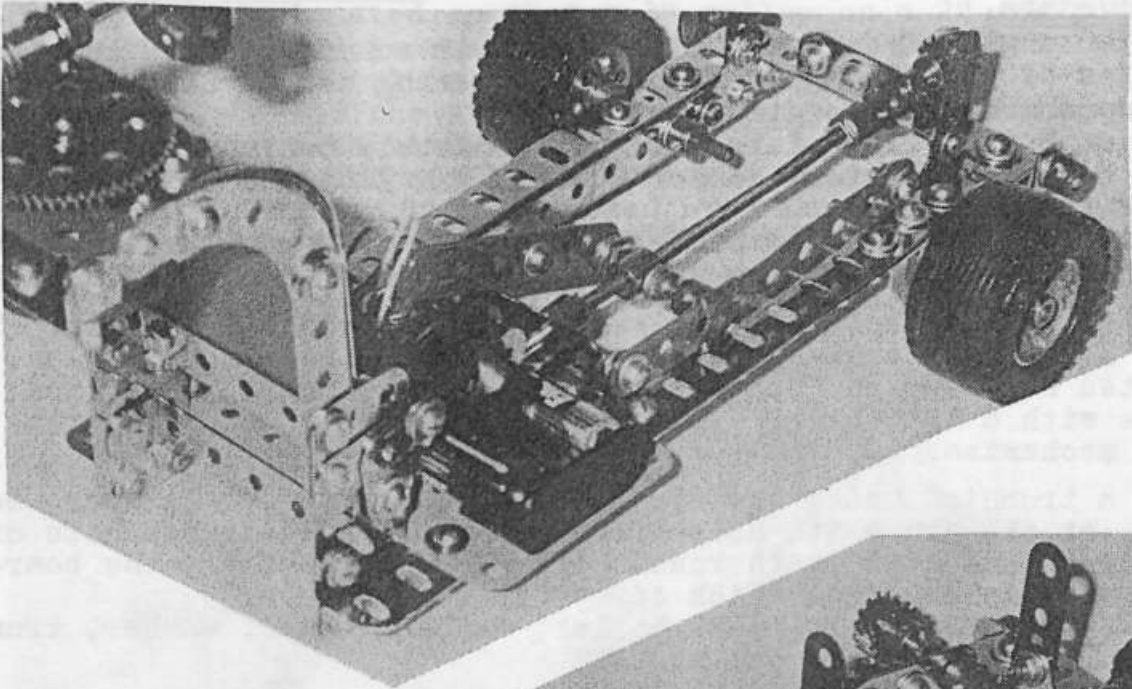
This helical meshes with another one on a 4½" rod journalled in the round holes of the two reversed angle brkts. Fix a collar at each end, plus a small bush wheel (P/N 518) with a short threaded pin in one hole.

At the front end, the threaded rod is locked into an adaptor (P/N 173a). The adaptor is journalled in the second hole in from the right of the 2½" angle girder.

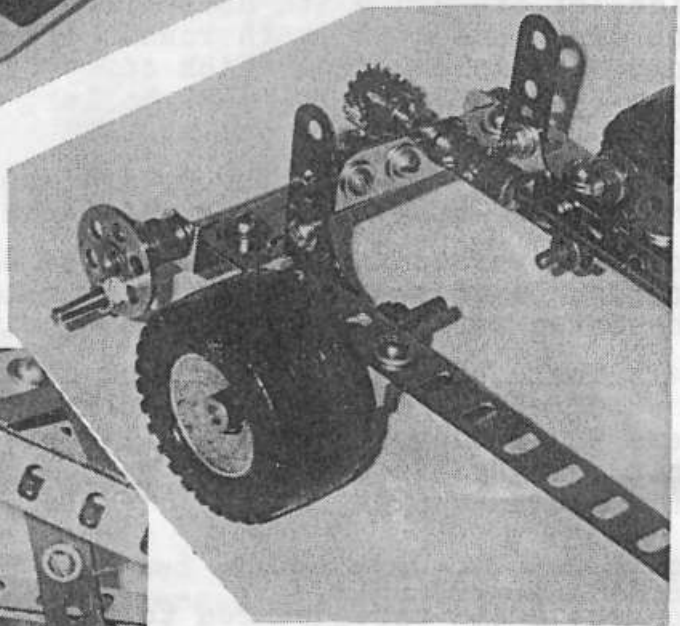
A threaded boss already on the threaded rod has, on its outer side a short threaded pin spaced out by 2 washers, its end loose in the slide piece. This helps counteract downward pressure on the threaded rod.

On the other side of the boss a 3/8" bolt holds loosely the end hole of a pair of 3" strips (bolted together) with a washer each side and a nut locking it to the boss. Make sure the boss runs freely on its rod.

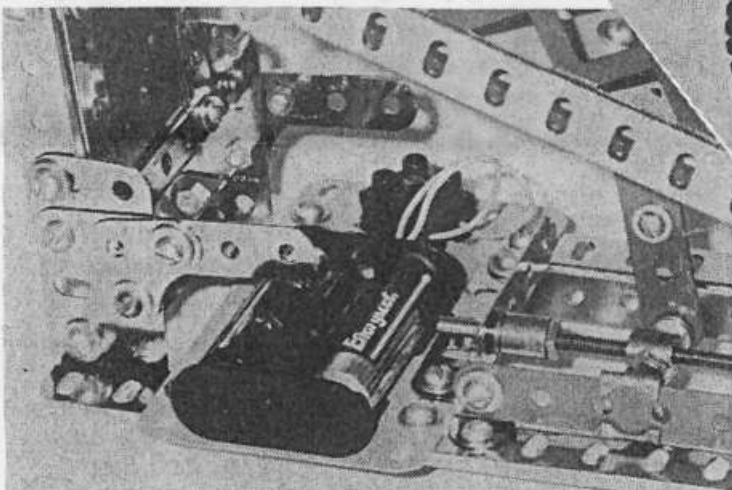
At their top end the 3" strips are held on a 2" rod journalled in a 1½" d.a. strip bolted under the tray; collars and washers each end.



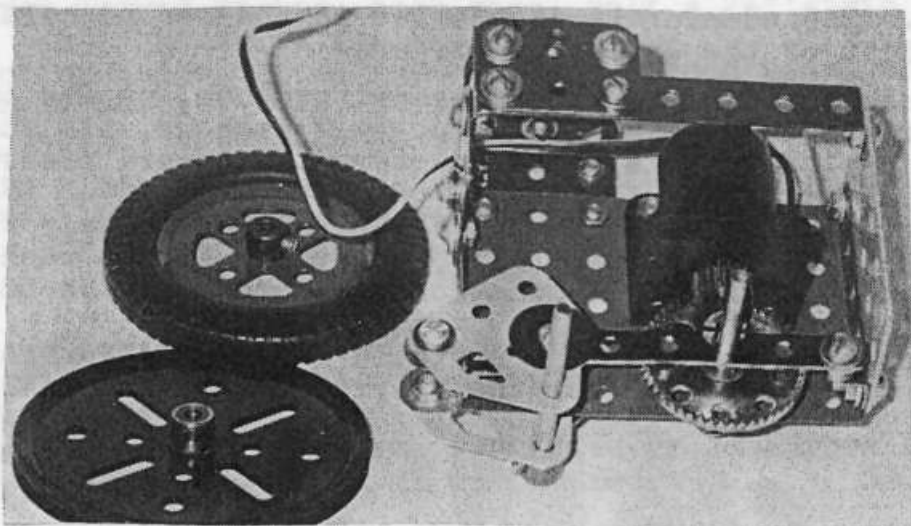
Right side without tray.



Rear from left.



Right side under tray.



Front wheel unit left side.

THE TRAY:

Two 9½" angle girders, one each side, slotted holes up, round holes inward. Join them at the front with a 4½" a.g., slotted holes up, at the rear by a 4½" strip underneath and another one at the centre holes. Bolt two 5½ x 3½ flat plates lengthways, overlapped 3 holes, under the front 4½" a.g. and above the two 4½" strips

At the 6th holes from the front bolt the 1½" d.a. strip in which the lifting strips are journalled.

At the 5th holes from the rear bolt a 2½" d.a. strip. The vertical 2" strips on the chassis are journalled at the lugs of the d.a.s. by a 3½" rod, washers & collars at each end.

I chose 9½" braced girders for the sides of the tray and a pair of 3½" overlapped braced girders for the front. However, the sides are a matter of individual choice.

Assembly involves fixing the tray in the two rods and connecting the steering head to the front wheel unit by the 2½" vertical rod. This is loose in the top 1½" pulley and fixed to the lower one.

PARTS LIST:

P/N 2a - 4	P/N 21 - 2	P/N 74a - 1	P/N 518 - 1
3 - 1	24b - 1	80b - 1	720 - 1
4 - 2	26 - 1	90a - 2	
5 - 6	27a - 1	97 - 2	MO Motor
6 - 6	28 - 1	99a - 2	Joiner Block
6a - 1	32 - 1	103f - 2	Wiring
8a - 4	n, b & w	103h - 3	
9a - 1	as	111o - 13	
9d - 1	required	115 - 3	
9f - 3	38d - 2	126 - 2	
10 - 1	48 - 2	126a - 2	
11 - 1	48a - 5	133a - 4	
12 - 4	48b - 1	125 - 2	
12b - 1	48d - 1	142a - 1	
15a - 1	50 - 1	173a - 1	
16 - 1	51 - 1	186a - 1	
16a - 2	52a - 2	194a - 2	
16b - 1	53 - 1	211a - 2	
17 - 4	59 - 12	215 - 2	
18a - 1	63c - 1	235 - 2	
19b - 1	64 - 1	235b - 2	
20a - 1	70 4 1	425 - 2	

1997 New Zealand Meccano Exhibition

Sponsored by MWT Meccano Club

Place Feilding Civic Centre,
84 Aorangi Street,
Feilding, North Island,
New Zealand.

Date Friday 28 March 1997 to Sunday 30 March 1997, (Easter 1997)
Open to the Public, Saturday and Sunday

Contacts Bruce Geange, 4 Winchester St, Palmerston North, New Zealand
Phone (06) 357 0566

Bruce Neilson, P.O.Box 1009, Palmerston North, New Zealand
Phone (06) 355 0776

A BIG WHEEL.

by BILL WATT, Auckland.

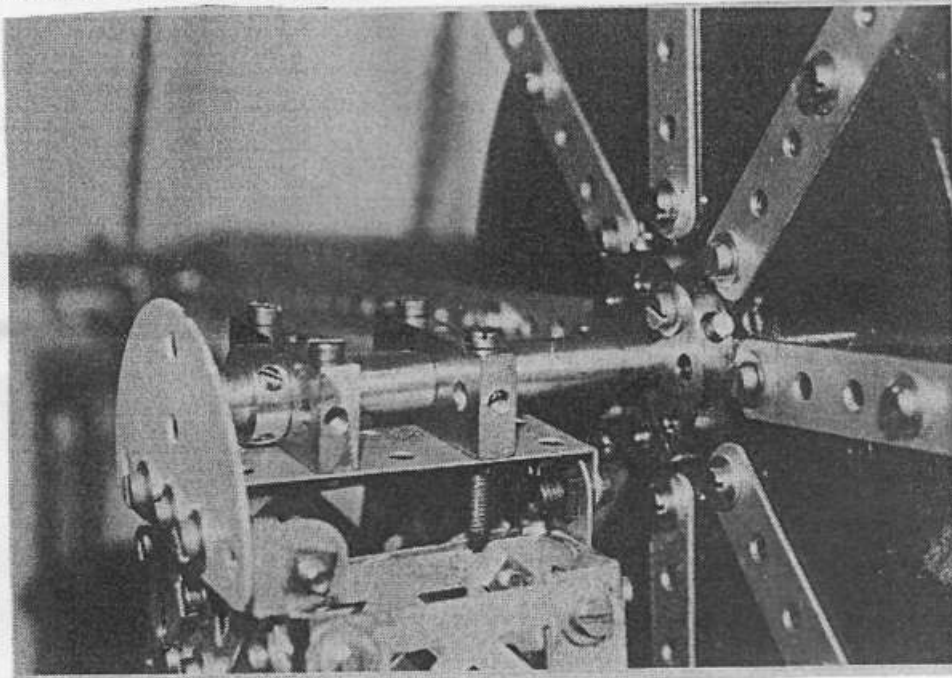
In C.Q.30 a 'Very Big Wheel' by Dave Taylor looked an interesting Fairground model and essentially simple in construction. I have built a rather smaller version differing a good deal in detail but also using the simple method of self-rotation of the cars. Dave's wheel was 4ft 3½" in diameter, but as I decided to limit the legs of the A-frames to 24½" girders, my wheel is 35½" diameter, to allow clearance of the cars in dependence. As Dave suggested, I used Large Toothed Quadrants for the drive instead of Exacto toothed rings.

Construction is quite simple. I used three of part 236 (large flanged plate) for the top of the base, covering the gaps with flexible plates.

Each A-frame is four 24½" angle girders held together by braced girders on the outside and by Ken Gordon 1"x½" angle girders inside. As Dave did, I used a large axle (3/8") with two bearing blocks on each frame and round bushes to hold the wheel on the shaft. I doubt if standard Meccano axles would have taken the very heavy wheel.

I altered the set up for entry and exit, with only one turnstile, on the Entry side. The drive is from a business machine motor (6vDC) suitably geared to a 3/4" sprocket connected by chain to a 3" sprocket on the shaft, fitted with an overrun ratchet. I also slightly modified the cars, providing a hinged flat plate as door, with a self-latching device for closure.

This must be about the simplest type of Fairground model to build.



THIS PHOTO SHOWS CLEARLY BILL'S LARGE AXLE AND BEARING BLOCKS

CLEANING BRASS PARTS

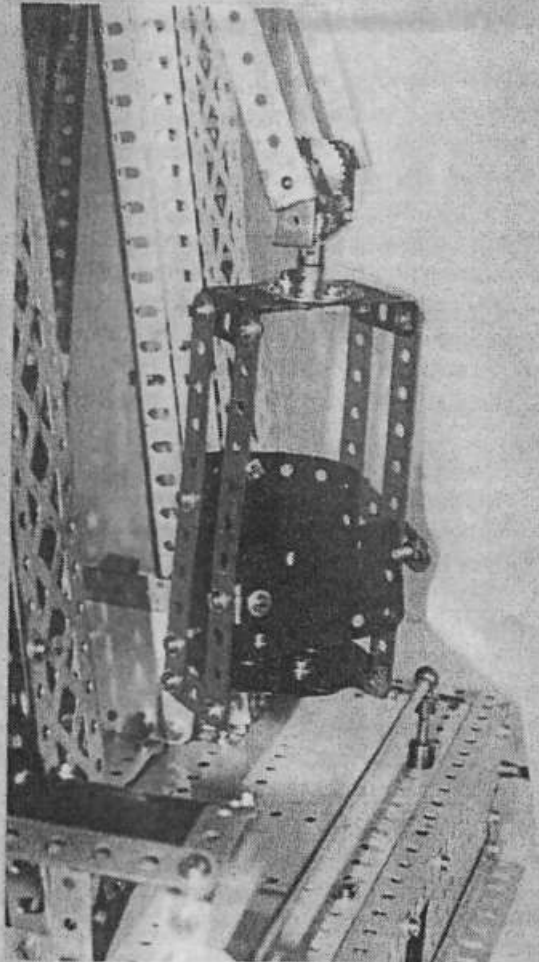
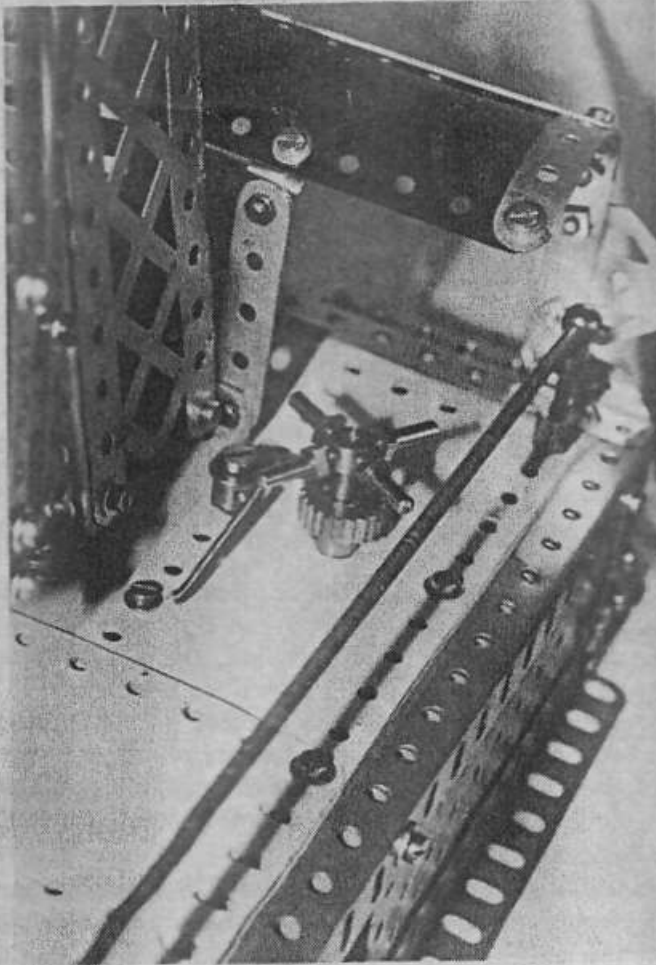
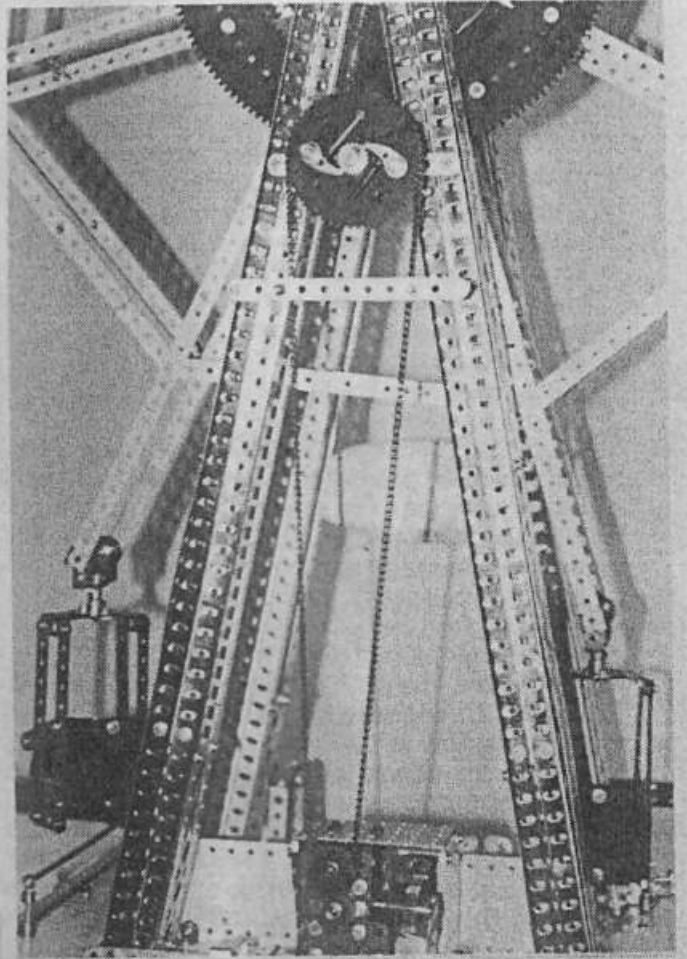
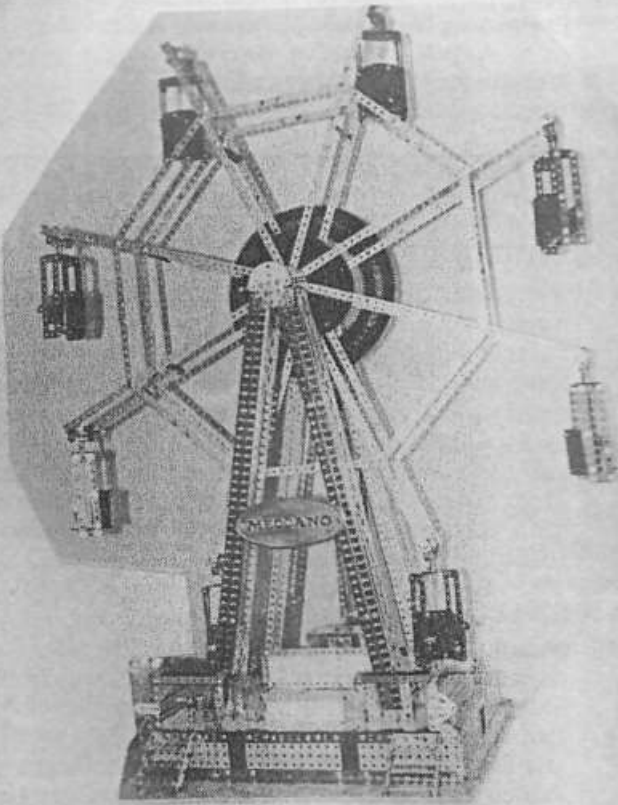
We have had enquiries on how to restore brass parts to their original lustre and brightness. Can anyone help with a simple, safe method? If so, please write to The Editor.

INTERNATIONAL SOCIETY OF MECCANOMEN

Simon Moody can supply application forms for membership of the Society. Annual subscription of £10 includes the I.M. magazine. SIMON's address is Blue Mountains Rd., R.D. 1, Upper Hutt

SUBSCRIPTIONS to this magazine are due shortly from 75% of our members and sub. notices are enclosed for those persons.

17.
THE BIG WHEEL



Christchurch Meccano Club Meeting
June 1996
Reported by John Ince

Our June meeting was well attended with 22 present. Included were two juniors and two guests.

David Lang has been busy again. Some time ago he built a top station for a gondola system but did not complete the project. This meeting he produced a substantially complete set-up with both top and bottom stations connected by a cable made from plastic covered curtain wire. A simple manually operated screw mechanism controls the cable tension. The single car automatically detaches from the cable on reaching the top station and is then conveyed on by a series of rubber tyres pulleys rotating at different speeds. In the prototype the wheel system carries the car round the circle for passenger loading until it is picked up by the speed up wheels and reconnected to the cable but for reasons of economy David has devised a swinging arm to move the car through the middle part of its cycle. The model has an overall length of about 2 1/2 metres and is most impressive. We will look forward to its completion.

John Hamlyn presented a Hercules aircraft with 1 1/2 metre wing span. The model was inspired by the August 1957 Meccano Magazine which had a cover picture of what was then quite a new aircraft and a two page article inside. John used details from a library book to help him with the model design. It does not fly but does have a motor driving all four propellers to give a good degree of realism. Realism of a different kind was evident in **John Ince's** model of Caledonian locomotive No 15. The model has progressed a lot since last meeting but has yet to get its tender and motive power. Once again the design

is based on detailed drawings contained in Tredgolds book on railways available in the School of Engineering library at the University of Canterbury.

Anjuli & Stefan Burrell brought plastic Meccano models of a buggy and a racing car.

Christchurch Meccano Club Meeting
July 1996
Reported by Ian Torrens

Only fifteen members turned up for the meeting but perhaps this was quite good considering the cold wintry night. There were not many models being shown with the three on display from our junior members thus putting the senior members to shame.

Anjuli Burrell brought along a windmill and a small truck both made from plastic Meccano. These were both quite good efforts. **Stefan Burrell** had a small crane which looked quite good in modern yellow and silver Meccano.

Peter King boosted the evening by bringing a box of red and green parts for sale; many fingers probed around selecting wanted items. Peter also had his brass gears for sale and showed us his book *Giant Earthmoving Equipment* which has many marvellous machines well illustrated. This is an excellent book to give advanced modellers some great ideas. Peter also showed the meeting some old cardboard flexible plates produced in the early thirties and finished in blue and gold. These items are believed to be quite rare.

There was some discussion on the new remote control outfits being released by Meccano France this year and the problems facing Leggo. Altogether this was a quiet but pleasant evening.

WELLINGTON MECCANO CLUB
Notes for June and July 1996

-reported by Bryan Jones and Mike Highley.

Our June meeting was held in Wadestown with 12 members attending and two apologies. During the business of the evening **Lou Nichols** pointed out that the first edition of the Wellington Meccano Club Rag (the forerunner of the Federation Magazine) had been produced on 4th June 1976 and therefore the publication has now covered 20 years. The Wellington Club will have its 21st birthday next April. Other business covered were some thoughts about convention planning and also the organising for the July meeting.

There was a small turnout of Meccano and related items on display. **Max Beauchamp** had two display cards from an English coin collection series. Each card had a colour copy of a 1941 Meccano Magazine cover with some text explaining a theme, and a coin attached at the bottom. **Joe Bell** brought the chassis of his Loading Shovel, from the No 10 Set leaflet. He has started it recently and has been painting the parts as he goes, so it is already looking very smart in red and green. **Colin Croft** brought his computer along to demonstrate the ISOMEC drawing software, and members had a chance to "build a model". **Mike Highley** showed a 2 ton Mobile Crane from a No 6 Manual and a Floating Crane from a No 2 Outfit. **Lou Nichols** had located the Club trophies for model building and had them on display. **Brian Peterson** had an Ack-Ack Gun which is part of a series of army-related models he is presently building. Brian also had an assortment of gears and sprockets for sale, which were eagerly acquired by members. **Max George** pointed out a mistake made in the last month's notes- his Dragon was named Derek, not George, and was the model designed by Guy McColl in 1979.

The July meeting was held at the Sun Valley Primary School, Wainuiomata, during the afternoon of Saturday 6th, with members of the MWT Club braving the cold and showery weather and yielding not unto the temptation of the Bledisloe Cup rugby match to join us. A total of 19 gathered for afternoon tea, followed by a walk around the models on display.

Lou Nichols showed his three cars from the 1930's- a Bugatti type 35, an MG, and the Thunderbolt. These have been built for permanent display in a diorama, using parts resprayed gold and blue with gold cross-hatching (work very nicely done by John Ince).

WELLINGTON MECCANO CLUB NOTES - JULY

Simon Moody demonstrated a hoisting column mechanism for a container crane. This used a MW Models rack strip driven by a six speed Richards motor through a 500:1 gearbox, which gave great lifting power.

Brian Peterson had his army collection: the Ack-Ack Gun, a Landrover, an Armoured Car and a Dynamic Set motorbike. The first three models featured many parts which Brian has had repainted black recently, which is more in keeping with their use on the models.

Bryan Jones showed his Lifting Shovel, finally rebuilt with some modifications to get everything to fit and work as Meccano Ltd had intended in their No 10 Leaflet.

Frank Abbott showed the superstructure for his Great Dragline Excavator, being built from a Meccano Collection Model plan. He has spent about five months on it so far, and has had to alter some details, such as the eccentrics for the walking mechanism. It is a very nice looking model, with freshly painted parts.

Don Blakeborough also brought parts of a Walking Dragline model he is building based on some photos of other models. He brought a winch and a walking eccentric drive shaft, and described the turntable, decking, cab and A-frame he has completed so far.

Colin Croft had a novel model in the form of Marvin the Magician, a model which appeared in a 1931 Meccano Magazine. It makes a candlestick disappear while covering it with a cloth, showing the empty table, then making it reappear! Colin modified the model somewhat, changing crank throws and using pivot bolts instead of plain bolts to reduce friction in the mechanism, and was able to improve its operation and efficiency.

Bruce Geange brought a very nice tip truck, built from a photo in a Meccano History book. It was built with parts restored to the nickel and brass finish of 1908 - 1926 and featured working steering, tipping mechanism and a tarpaulin for protecting the load. He also showed a Hornby tank locomotive that he is rebuilding. Its original clockwork mechanism was too badly damaged for restoration, so that had been replaced by an electric motor ex hairdryer and a gear train sourced from gas meter parts. The loco is being detailed with NZR style fittings and will be painted black.

Wayne Blakely showed two clockwork motors; a red 1930's vintage one and a bright steel 1960's vintage one. He also had a manual for a Ezybilt set, which he had just acquired during the trip to the meeting.

Lindsay Bond had an interesting selection of items, the centrepiece being a twin rotor Helicopter based on a recent No 6 manual model. This was built following a request from Auckland shops for window display models, and had been modified by some structural changes and a redesign of the mechanism to use rubber belt drives from a tape recorder motor so that it would run silently and continuously with a minimum of attention. He showed a collection of manuals from various other construction sets, a copy of the 3rd Edition of "Meccano Collecting", edited by John Westwood, (a book not well heard of in this part of the world), and photos of Blake Huffam's Giant Dredge model in the Hokitika museum. He also had three of the "dealer's giveaway" series- small collections of parts making up a basic model, and a selection of very useful forceps for placing nuts in restricted places.

Timothy Moody followed the animal theme with Ferrous Diplodocus, a dinosaur skeleton from the 1925 manual. He had changed the head to make it more realistic, added details and strengthened the joints to reduce droop.

Don Flowers brought along a construction which had most of us guessing until he explained that it was the hind end of a dog! The section completed so far showed a mechanism for making the legs walk.

Robin Rye displayed 18 models from the Collector Series. He commented that he felt they were generally well designed, apart from the motor bike, and that several of the models were quite tricky to build. Many new parts had been introduced through the Series, and he noted that in the 18 sets there were a total of 1406 parts, with some 136 parts (mainly washers and bolts) left over after building all the models. Robin also had his articulated tractor model, which won a commendation in the 1995 ISM International Modelling Competition.

Daryl Anderson showed an almost completed model of a Roundabout with Gallopers, built from a 1988 Midlands Meccano Guild newsletter (original by Dr Keith Cameron). He built it in current French colours as far as possible, and it ran very smoothly and quietly thanks to sturdy construction and careful alignment. It only requires canopy edging, lighting and remaining horses to be complete.

After a break for tea an auction was held, which saw some spirited bidding for 71 lots of second hand parts. A short time for business followed, where Bruce Geange reported on planning progress for the 1997 Convention and showed photos of the hall in Fielding booked for the event. Bryan Jones updated the news on the Great Models and Hobbies Expo, which is now to be held in the Lower Hutt Horticultural Hall on September 7th and 8th. A catalogue from Toys Past and Present in South Africa had been received recently and this was circulated. Supper brought a very pleasant and successful evening to a close.

20.
BITS AND PIECES

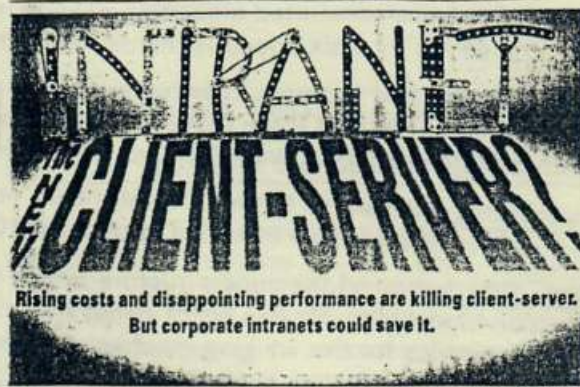
from Lloyd Spackman

INTRANET - not INTERNET:

This illustration was copied from the U.S.A.'s Information Technology newspaper 'Information Week' for the front page of New Zealand's 'Infotech Weekly'.

The top background is obviously made from Meccano/Erector parts and is not C.A.D. The original is twice this size and the colours are true for red, yellow, blue and nickel Meccano.

It is another example of the versatility of Meccano and the unusual uses it is put to. The article it illustrated was about Intranet - not the Internet.



LATEST LIMERICK:

The wife of a man from Milano
Said "He's all tied up in Meccano".
Sadly she said
"Even in bed
He wears it instead of pyjamo".

L.S.

FROM AL STERNAGLE, Pennsylvania, U.S.A.

"I enjoyed your comments on useless Meccano parts. As far as I am concerned, there are no useless parts. Just some you don't use as often as others.

The past year there have been very few old Meccano sets for sale here but I have found some good parts mixed in with Erector sets."

"COLLECTION" Sets: a new supply is available at North Shore Hobby World in Takapuna at \$14.95 each.

MODEL 'FEET': Four of the 'Humbug' wheels (P/N 187f) -- so called because they look like humbug sweets -- make good support feet for models such as meccanographs. They are much neater than the usual pulley + tyre and are non-scratching as well. There are six of them in the Calais 'Starter' Set No. 102 (the digger)/.
(Dennis Higginson in Newsmag 26)

1/4" gear spacing: To achieve this in a gear train bolt a coupling through two of its threaded holes to the gearbox frame and journal the rod end in the coupling's centre hole.

(Alan Partridge)

SPROCKET CHAIN - HORIZONTAL: Preferably chain should be used on a vertical plane but when it has to be used horizontally derailment can be prevented by putting a larger flat disc (a bush wheel or a face plate) just below each sprocket.

(Oscar Fontan - Argentina)



NO COMMENT