

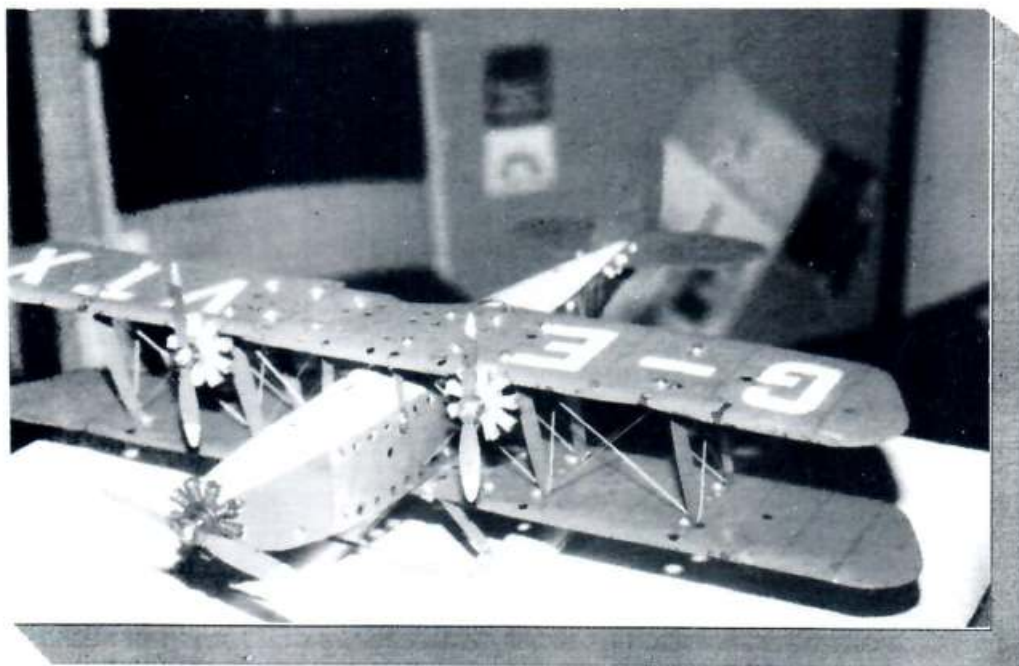


NZFMM Magazine

Volume 22 Issue 5

OCTOBER 1998

Motivation
Enjoyment
Comradeship
Cooperation
Achievements
New members
Originality



**NZ FEDERATION OF
MECCANO MODELERS**

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COVER:
*Meccano aeroplane set, biplane of
Lindsay Bond*

EDITORIAL

Welcome to this issue of the magazine, only one more issue till Christmas and two more until the convention in Auckland next Easter, I hope you are all busy making that "special " model for this.

You will see a letter from John Westwood (the original editor of IM) on page 4, John Ince has offered to do a page on the NZ scene for this. However the WMC feel's that the IM magazine has lost a lot of it's appeal with all the changes, and wondered if this was a way for the editors to reduce their input, or perhaps we will receive a 50 page magazine now.

Regarding the new Meccano sets, due to the lack of interest the WMC will not be ordering any of these, Only 1 person expressed any interest.

If any of you have had someone say that they have not received their copy of the magazine it will be due to the fact that they have not paid their subs.

Ther is an update on the next convention included in this issue.

The address for the NZFMM web site is;<http://www.flinthills.com/~dalefiel/Meccanohome/NZFMM/nzfmm.html>

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DEALERS MODEL MOTOR CAR CHASSIS

From Alistair Tong

Some years ago (early 1950's) there was a Meccano Dealers Model on display at Lester's Bookshop in Hawera New Zealand. When the bookshop was sold around 1970 the Motor Car chassis was left in the rear of the shop on a shelf to gather dust! A builder (John Hall) was busy renovating the shop for the new owners and through some negotiations became the new owner of the dealer's model. John was a Meccano enthusiast at the time and at some stage he pieced the model and added it to his collection. His set contained early 1930's and 1950's parts at the time.

After a few years he and his children lost interest (they having grown up and gone to other things in life) John himself at times regretted taking the model to pieces and did attempt during the early 1990's to find information for it's reconstruction. However his interest in retirement was woodwork. During 1996 I offered to purchase his Meccano collection which contained the original parts out of the dealers model. At about the same time I was discussing this collection with another "old timer" Meccano enthusiast in Hawera Frank Parkinson. I made a remark that there must be a photograph somewhere around of the dealer's model, surprise, surprise he produced the accompanying photo taken

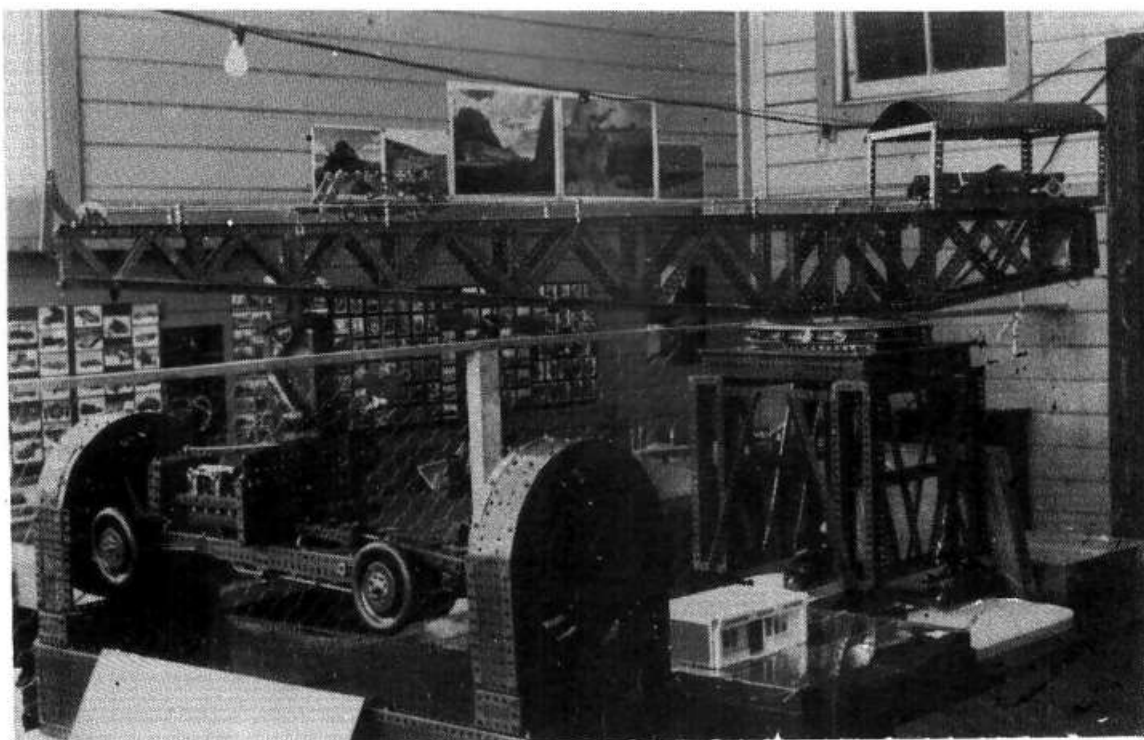
at a Hobbies Exhibition at the Hawera Primary School about 1953. The collection that I eventually purchased clearly contained all of the original parts of the Motor Car Chassis except the baseboard and whatever motor turned the chassis and mechanism. Many of the parts are faded and or oil/grease marked so are original in that respect. So far I have rebuilt the base using red and green pieces from the collection. I have also rebuilt what I believe is the original gearbox, which is a sequential 3 forward and reverse configuration, and it works ok.

Now comes the really hard part.

From the photograph I am unable to proceed much further with assembling the dashboard.

So, does anyone remember such a dealer's model? Does anyone have a photograph of the same model. Does anyone have any construction details.

Daryl Anderson and I have discussed this project many times and we are grateful for "other" information that has come to light through the spanner group on the internet. But nothing about my particular car. My objective is to restore the parts (contained in the car) to their former historic place and have an operating Dealers Model from a former era.



HEAVY DUTY STEERING AXLE

From Chris Thompson

To make a simple heavy duty steering system

- 1) Take 2 11 hole strips and join each end to a trunion so that the trunion is above the strips and the apex's of the trunions point outwards. Join the center holes with a 15 hole strip, the ends of which should reinforce the outer apex holes of the trunions
- 2) Repeat above
- 3) To the 3rd inboard holes of the 11-hole strip attach 3-hole girder narrow edge to the strip, flange edge facing outward.
- 4) Repeat above 3 times
- 5) Take 2 flat trunions and join to make a square flat plate 3 holes by 3 holes
- 6) Repeat above once.
- 7) Join these flat plates to long flanges of 3 hole angle girders, bolt down firmly, taking care to line up all holes
- 8) Kingpins are 4" rods secured by collars on outer ends of trunions.

Wheel Mounts.

Each side comprises of a 3 hole double bent strip journaled in the kingpin. Attached to this is a 3 hole corner bracket and vertically outside this is a crank with it's boss corresponding to the lowest hole in the 3 hole double bent strip as is the apex of the corner bracket, with nuts vertical and away from the axle.

The lower 2 horizontal holes of the corner bracket are bolted to the flanged holes of a 3-hole angle girder. This is inboard from the boss of the crank; the narrow part of the 3-hole angle girder is horizontal and the flange's vertical narrow part above lower axle. Outer end joined by the 15-hole strip as follows.

Left hand side;

A threaded pin is secured to the end hole of the 3-hole angle girder; the shaft carries a 15-hole strip secured by a collar.

Right hand side;

This is secured by a threaded bolt carrying in order, 6 hole strip, collar, 2 washers, other end of 15 hole strip, end hole of RHS 3 hole angle girder and 2 lock nuts.

End 6-hole strip carries threaded pin from the top carrier collar 4 hole strip and 2 washers.

Steering column;

A rod of suitable length journaled in 4th hole of back 11-hole strip secured by collars on bottom axle above and below, and below top axle carries crank and 4-hole strip referred to above. 2 free holes in crank joined on, nuts up.

Works well.

INTERNATIONAL MECCANOMAN

From JohnWestwood

The NZFMM magazine may like to know that I took Margret to Skegness for Skegex in early July. The vast show included a big party of Dutch Meccanomen whose models were so big that they hired a van to transport them across the North Sea! Howard Sie's radio controlled low loader was unforgettable. And while there I had the opportunity to explain the new system for producing International Meccanoman magazine to all the worldwide clubs represented there. The new system is that each club or country will produce a page for IM magazine 3 times a year, summarizing their activities and perhaps including a

small Iso Mec drawing of a good meccano idea. The page sent to us will be all ready for the litho printer, needing only the page number to be added at the bottom. We will print this A4 page exactly as received, hopefully, in IM mag. Editors of club magazines will grumble "I'm too busy already" True so we suggest he makes one page in his magazine a summary of recent events etc, worded for all the world, and to send us a copy for us also. Good publicity for the clubs or New Zealand Federation. (Preaching to the converted - won't get many or any new members will it?)

BITS AND PIECES

From Lloyd Spackman

Quotation; "Mind you, it's not only the supplies" jean said. "We can't get the help so easily now. The Meccano and Crawfords - places like that - they're all on war work, paying good money. You can't blame the women going there". From A Wise Child by Elizabeth Murphy. The Meccano is of course the Binns Road factory and Crawfords is the biscuit factory referred to by Robert McKibbin in NZFMM Magazine Feb 1998 page 14. (Thanks to George Ovenden for this item)

A Dismantling Tip; Available from hardware stores are small clear plastic boxes 150mm long x 80mm wide x 25mm high, divided into 5 compartments. When dismantling a model, drop your nuts, bolts and washers into separate compartments. Saves a lot of space on your table. When finally putting away the parts pluck the nuts, bolts and washers out with a small magnet.

The First Ball Bearings; near Selby in Yorkshire, England, a 150 year old wooden bridge had a toll gate which was the last (in 1950) on an English road. The swing portion of the gate rested on cannon balls and this is the earliest known use of ball bearings. Now, where did the cannon balls come from? Perhaps the builders of the gate obtained enough from collectors. Or were they still in store at the Woolwich Arsenal - left overs from the English civil War of the 1640's.

Wrong Gauge, Wrong Attrib; In my report on Model X98 I said David Wall's locos ran on Hornby OO track. That should have read "O" gauge. And the tugboat attributed to George Ovenden was built by his grandson, Jonathan, from a French Set 5. Sorry chaps.

Bruce Geange says he is looking forward to seeing all Meccanopersons next Easter.

A Big Small Model; Only 9" long, my version of Philip Webb's Harley Davidson motor cycle was a small model. But when I came to dismantle it, I realized it was a big model in respect of quantity. Of small parts needed to build it. For instance - 48 narrow strips in various lengths, 38 angle brackets,

24 fishplates, 260 nuts, 230 bolts, 310 washers.

Giant Lorry With trailer; Johannesburg Meccano Hobbyists Club produced a special edition of their newsletter last November. It was a reprint of the Giant Meccano Lorry with Trailer which appeared in MM in 1932. Three giant girders for construction of a hotel at Marble Arch, London, were transported from Marylebone on a special giant trailer. An accurate model of the lorry, trailer and load was built in Meccano and used to plot a route, on a scale plan, through the narrow streets of central London. All the relevant articles, plus some on other similar lorries over the years, was neatly compiled into the JMH publication.

A Handy Screwdriver; 3.2mm blade x150mm shaft Kinchchrome Torquemaster screwdrivers are available at Hammer Hardware stores at \$7.95. Excellent when you need a long reach screwdriver which will go easily through Meccano holes. My older one is a British Stanley which I bought in Wales in 1982, and it has had a lot of use.

Mike Stuart; Mike was a very active member of AMC as many members will recall - until he went to work in Hong Kong in 1992. He was back in NZ for a few weeks recently and I had the pleasure of a chat with him one evening. Although he is not actively Meccanoing at present, Mike is still a member of NZFMM and is still interested. He sends his best wishes to all NZ Meccano people. In Hong Kong, Mike teaches English to private clients on a 1:1 basis. His wife, Swallow, is a fully qualified nurse; their daughter, Naomi, is nearly 3 years old. They have moved from their previous address and are now at:

17H, Block 10, Kenswood Court

Tin Shui Wai

Hong Kong.

Mike would be pleased to hear from any NZFMM member.

AUCKLAND CLUB NEWS

From Lloyd Spackman

We welcomed four new members to our August club meeting; Colin McLean (already a NZFMM member), William Irwin, recently from South Africa who is settling in Auckland, Tony Caldwell who bought along two interesting models, and David Muggeridge. We hope to see a lot more of these chaps (and models) in future. There was an excellent attendance – nearly 20 including the ladies – and interesting models.

Starting with Tony who contributed a Steeltec Harley Davidson which has been mentioned in other club's news. It had several plastic parts already moulded to shape such as the tank, fairing and panniers. Nevertheless, said Tony it wasn't easy to put together. He also had a neat Blue/yellow/zinc low loader from the French set 6.

Peter Hancock had two up to date French models. They were the Master Connection 0030 Roto Truck and the Meta Crusier. Peter folded the latter into a robot much in the style of the "transformers" which were all the rage about ten years ago.

Geoff Martin showed us the motorized rider for his mid air cyclist model.

Lloyd Spackman bought his mini steam engine which has been described in Newsmag and a new Snowcat model (but not for use in the Antarctic)

David Wall brought an impressive model of a Wyvern horizontal gas-petrol engine. The prototype was in Model Engineer of May 1963. It is a most attractive model, well up to David's usual high stan-

dard.

George Ovenden had built a revolving crane adapted from the one in SML18 and sitting on a 2" high base. It had an MO motor for hoisting, another for luffing and a PDU under the jib for slewing. All were controlled through a cable from a 3 switch unit. On the PDU output shaft, the worm had a 1/2" pinion each side. One, on a vertical rod was the drive to the P/N 168 below. The other free running pinion held the worm steady and in mesh.

Neil Carey's chassis for his 1929 tramcar is complete up to the platform which, plated in shining red, looked like the deck of an aircraft carrier. Actually, we used it on which to display some smaller models.

Fresh from South Africa, William Irwin was still unpacking some of his "goodies" at our meeting and from various boxes he produced a South Seeking Chariot, a Meccano Aeroplane set Biplane, a 1970's small tractor, a mini space ship and the motor cyclist and sidecar from the 1928 SML 3 (code 628/5). Noteworthy on this model were his authentic narrow white tyres on 3" wheels.

Our next meeting will be held at George Ovenden's home 19 Richards Ave, Milford on Saturday November 21st from 2pm.

Please note this is a week latter than our normal scheduled date.

Finally many thanks to Eileen and Neil Carey for their hospitality.

NZFMM WEB SITE

From Wes Dalefield

I'm in the process of registering my own domain name: www.rainbowmaker.com

Once I have got it up and running I will transfer everything to there. So the site will be found at something like:

www.rainbowmaker.com/meccano/nzfmm/ I'll post to you all once it is established. This costs me \$US35 a year but has the advantage that wherever I live in the world the address will not keep moving.

This is important in listing yourself with search engines. Unless any one has a better site let me know.

I'm planning at this stage of posting photos from the 1997, 1995 & 1991 Convention. I have photos from these. Could anyone snail mail me photos from the 1993 Convention. I'll return them after I have scanned them. Also I do not have a photograph of Don Wilsons submarine.

MWT

From Bruce Neilson

MWT MECCANO CLUB

President - John Hansen, 131 Camp Rd, RD 4, Linton, Palmerston North. (06) 325.8211

Treasurer - Tom Pittams, 77 Maria Place Ext., Wanganui. (06) 345 6788

Meetings - First Saturday in each quarter i.e., 7/11/98, 6/2/99??, 1/5/99, 7/8/99

Meeting report 1 August 1998

Members gathered at Wanganui and presented the following:

Bob Prescott - From the 1970 No 9 Manual a Container Carrier. The plan uses a No 2 Meccano clockwork motor to power this model. Bob's comments were that this is not a good model and the motor was unable to drive the model.

Tony Ercolano - An impressive power supply console to drive 4 motors with amp meters, speed control, selection of voltages and on/off switches

Donald Malcolm - A selection of blue gold plates, blue spoked wheel, chain grab, windmill sails, propeller blades. The yellow plates coming from Meccano France have changed the shade of yellow slightly.

Don Blakeborough - Presented a "Onado" other systems UK set from early 1950's. His model was a train and three tipping wagons in Plastic Meccano. A collection of photos from Don's recent visit to the UK were on display with shots of Frank Hornby's headstones and his old house.

David Glenday - A Nickel model of a motor car mounted on a stand, Concrete mixer on trailer (1950 manual), tip lorry (1970s manual), Racing car and Buggy, and Internet downloads.

Robin Rye - Scalextric Pamphlets, two railway wagons with genuine Meccano tarpaulin covers, * spoke wheels built up from 3" pulleys and a selection of non-Meccano gear wheels.

Lindsay Bond - A series of restored Meccano sets. 1929 6 red and green in cardboard box with digger bucket etc; 1938 2A accessory set in green, blue

and gold parts; 1936 G set in blue and gold; 1937 Aa in red/green and blue/gold; 1937 Ba in red/green and blue/gold; 1938 2a blue gold French set with label in English; 1937 2 in red/green and blue/gold; 1938 2 in red/green and blue/gold; and a 19383A set blue gold French set with label in English.

Viv Alexander - Six large Hornby railway turntables as follows. 1925-27 red green; 1927-29 red green; small 1927; Electric 1933-41; 1935-41 in blue and 1949-69 in black.

Alistair Tong - 1970 dealers models pamphlet and 1922 Meccano magazine radio article.

John Ince - Gyroscope similar to CQ 6/98

Bruce Geange - Latest Space ship in black and orange. A boxed Gears outfit A recently acquired.

Next Meeting 3pm 7 November 1998 at St. Lukes Church Hall, Cornfoot St, Wanganui. Approx. across the road from Don Blakeborough's place. Tea will be at 5pm. Check meeting notice

Bruce N and Bruce G



WELLINGTON MECCANO CLUB

From Bryan Jones

The winter has seen a down turn in numbers attending meetings and the work commitments of some have made it difficult to fit in progress in the model building department. Our August meeting was attended by six members, and Mike Highley brought his guest Guszti Bartfai, from Hungary.

Don Flowers brought along the Cybercycle from the latest collection series. It is a very nice design, capturing the essence of a powerful racing motor-bike with a careful choice of parts, although this is spoilt slightly by the addition of a pair of ungainly rocket tubes on the back. The metallic blue finish of some of the parts is unusual and very attractive.

Mike Highley brought a model of a Canadian steam locomotive built from a No 6 Set.

Bryan Jones showed the beginnings of a bogie for a shunting locomotive. This is another of his design projects which seem to chew up lots of hours and many brass parts at an alarming rate, with very little to show in return!

Lou Nichols brought the chassis of a Swiss electric locomotive, which he is building from an article in an issue of "Constructor Quarterly". He requested some help with the design of the trackside-operated automatic reversing switch, as only the basic details were provided in the article. A close examination of the photos resulted in some sketch plans of a possible solution.

Brian Peterson had acquired a second-hand No 2 Set (red/green) complete with manual, and this was available for sale, together with a small selection of gears.

A letter had been received from the Lower Hutt City Council Recreation Programmes section, thanking us for our attendance at their Models and Hobbies Expo. We enjoyed a busy day there, with about 2500 people attending over six hours. A survey was included, which we discussed and provided comments for reply.

Don Flowers had a further selection of the Space Sets available for a raffle and for sale. Members

have had a chance to see the contents of several of these sets and have noted the inclusion of some quite useful bits.

The September meeting attracted 10 members, with two apologies recorded. An informal meeting was held, with the centre of attention being

Simon Moody's dockside crane. Parts of this have been seen at previous meetings, and this time we saw the base legs up to turntable height, with the beginnings of the cab superstructure. The turntable uses the pintle tube form of construction, where a central tube or column supports the rotating mass on a thrust bearing low down in the base structure, and the turntable at the top of the structure takes only the sideways thrust of the tube.

Mike Highley had two models this month; a submarine and a tractor.

Bryan Jones brought a selection of photos taken during the NZ Power Crane Conference held in Nelson. There were mobile cranes set up in the car-park of the hotel where the conference took place, and a site visit was made to see the Liebherr Harbour Mobile Crane at the Port of Nelson, an unusually shaped crane which could be quite an interesting challenge to model.

The club had received an invitation from the organizers of the Karori Festival to provide a display for the weekend immediately following the meeting. At short notice Bryan Jones and Brian Peterson provided a stand with a selection of Brian's collection of vehicles and Bryan's tower crane. The attendance was quite busy with quite a bit of interest being shown in the models and several enquiries were made about the club.

Coming Events:

Meeting: Friday 2 October, St. Lukes Wadestown (to be confirmed)-theme: shipping.

Meeting: Friday 6 November, St. Lukes Wadestown -theme: aircraft.

Easter 1999: "Convention 99", Howick, Auckland

CONVENTION 1999

From Peter Hancock

We have received some thirty (30) responses so far to the questionnaire that we enclosed in the June edition of this magazine. We thank those of you who have replied, for your keen interest and look forward to hearing from those of you who have not yet had time to complete this questionnaire.

We are thrilled with the early response to the event, as it indicates that we will be able to mount a great display and convention which will not only excite and be a joy to those members attending, but will enable us here in Auckland to promote a model display which we are certain will be of great interest to the public and will help to lift the level of general interest in Meccano both locally and nationally.

Having a great display at the 1999 convention will help to set the stage for the various activities, including the 2001 New Zealand Meccano Federation Convention being planned for Wellington, to celebrate the Centenary of "Frank Hornby" inventing and patenting (in January 1901) the educational construction toy first known as "Mechanics Made Easy" the fore runner of "Meccano" through the years.

It is gratifying to see that many modellers have well and truly decided what they are going to produce for the convention display. We note from your replies and from various comments coming from the "grapevine", that a number of you are well into building these model(s), (all master pieces) and in some cases have already completed some of the items you plan to show.

From the preliminary information received, we now have a rough understanding of the amount of display space that those who have responded will require. While the main display area available is reducing, we hasten to advise that we can not really have too many models as we have access to further adjacent quality display area, so please keep building.

We believe that there are several larger models being built or are built and that there is possibly some concern as to how they may be transported safely to the venue and then returned home. If you have a concern or are considering not bringing a particular model because of its size or weight, please call us before you make the decision not to bring it, so that

we can at least discuss whether or not there is a way that the committee can help you to present the model concerned.

We note that many of you are planning to stay with friends or relatives during the convention period. Those indicating that they will be requiring motel or other forms of accommodation will receive a detailed list of the local accommodation along with brochures prior to Christmas 1998 for due consideration.

If you are considering attending the convention and have not yet completed the questionnaire, it would be of assistance to the organising committee to receive these details at your earliest convenience. Please remember that this is a preliminary request for information to be used by the committee for planning purposes.

If you require another copy, or any other information what so ever about the event, then please contact the organising committee secretary in the first instance by calling:-

☎ 09) 535 5355, Fax 09) 537 3989, Postal address- Peter Hancock, PO Box 39 085, Howick Auckland, or e-mail to augustus.prop@xtra.co.nz

M.M. 'Fireside Fun'
Jan. 1952.

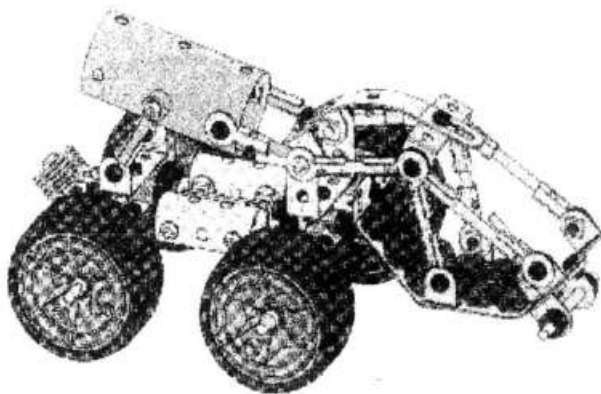


"Mum, we've knocked the ladder down."
"Well, run and tell your father."
"He knows already."

MASTER CONNECTION SET Number 0030 ROTO TRUCK

From Peter Hancock

I Recently purchased this set from England to see what this 1998 model series might have to offer. I have not purchased any more in the series but plan to do so as they contain some very interesting new parts.



I had not had time for much hobby work recently, so in early August when the Auckland meeting suddenly became a reality, I looked around for something that I could achieve in a short time span that would possibly have an interest to the meeting and produced this model in a limited time frame over two nights.

The only tricky part I found, was trying to set the front and rear wheels to track in a straight line. I later realised that this is not important as this model is designed to steer around its centre line any way, being done by the driver using a joy stick to vary the body pitch to the left or right.

Assembly meant getting to grips with the new racks, part #110, gears part # 25D with three "triangular" type flats within the standard circular bore, and the new matching axle shaft with three matching flats within its circular section. These new gears slide easily on the axle but, matching these with the new rack strips was a little fiddly for my sized fingers.

The drivers steering movement, rotates the two constantly meshed gears on the

longitudinal common steering axle shaft which, in turn drives the two axle racks in the same direction together, either to the right or left of the vehicle centre line. This action causes the front and rear axles to rotate towards each other depending on the direction of turn required.

The new plastic steering arms in this set are interesting and may lead to some real flexibility of controls in other models in the future. These were attached to the racks by plastic push type pins part # 260D called "track rod end pins" and the wheels are mounted on axles made from part # 115C, named "long threaded pin with base".

The set includes yet another type of wheel and tyre arrangement and a special "rubberised" seat part # 177A which looks a lot like three segments of a "track link" that could possibly be used in making up tracks for earth moving models?

All in all, a rather unusual model with cylinder part # 216A in bright fluorescent green as are the part # 120E which are seen in earlier models as part of a shock absorber assembly in black. The set contains various other new parts and further information can be found in "**The International Meccanoman**", Edition #25 dated September 1998 on page 9 in an article introducing these and other new parts and there potential uses.

In summary, an interesting little model with some short term appeal as once made then what? However the new parts used will definitely be of interest for other purposes when they are released for individual sale.

Peter Hancock

AN ENHANCED TRACTION 4WD VEHICLE

From Paolo Caravani, Italy

When a 4WD vehicle meets an obstacle the first wheel to slip is the one with minimal traction, ie. the one experiencing lowest friction coefficient with the ground. Thanks to the differential, only one wheel tends to slip (as it is unlikely that two or more wheels will meet the same traction at the same time) while the others tend to get locked: the vehicle is at stall. To overcome the stall, many four-wheel drives have a control of the differential, whose "slip" can be limited or blocked entirely.

Although a good remedy, this is far from "optimal". a wheel's traction capacity increases with the weight, so the ideal or maximal traction would be obtained by distributing the vehicle weight in proportion to each wheel traction coefficient. As this changes with different operating conditions, a system of moving weights should be devised so as to shift (continuously) the vehicle gravity center towards the wheel with least traction. In what follows a prototypical meccano realization of such a mechanism is described.

An E20R motor is mounted on flanged wheels, which let it slide freely longitudinally along the chassis. The chassis is mounted on 4 wheels, 2 front on a front axle, two on a rear axle (no steering on this model) and with no differential between left and right wheels.

Front and rear axles, however, are connected to each other by two differentials (via contrate and pinion pairs) call them drive differential (DD) and feedback differential (FD)

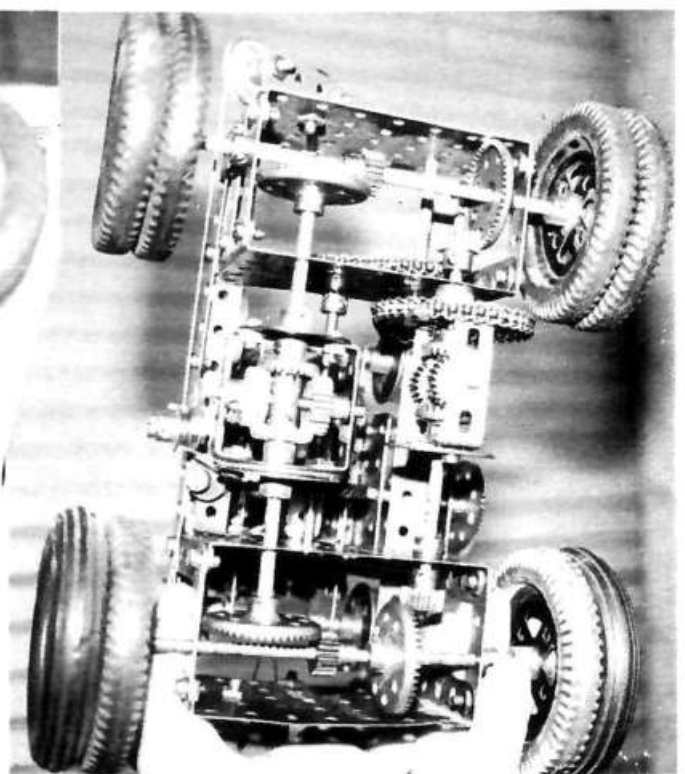
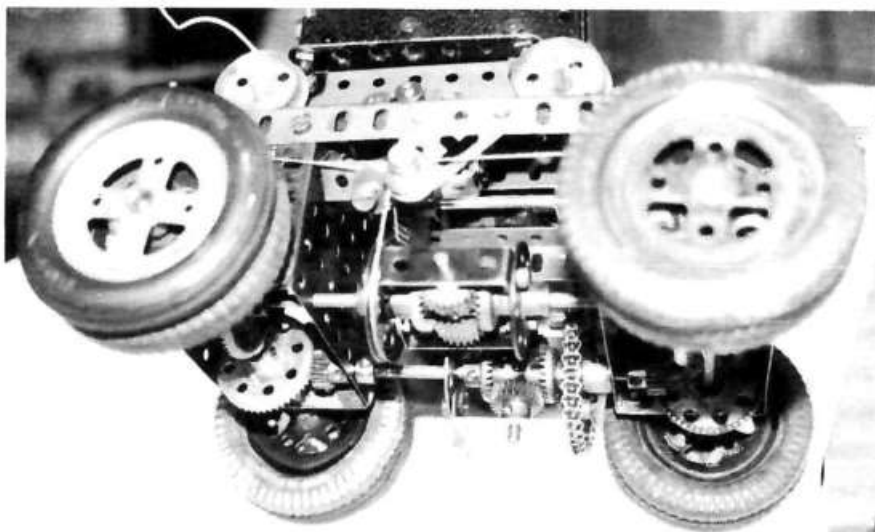
DD is DIRECTLY connected to the front and rear axles, meaning that if one axle turns clockwise and the other c-clockwise at the same speed, its carrier stays still (as is conventional)

FD is INVERSLY connected to the front and rear axles, meaning that if both axles turn clockwise at the same speed its carrier stays still. Thus its carrier rotates proportionally to the speed difference between front and rear axles.

Motor shaft is connected (with gears) to the DD carrier, so as to transmit motion in all positions of the motor along the chassis (this is accomplished with keyed rod, part No 230).

The FD carrier is connected (with cord and pulleys) to either end of the motor, so as to transform rotational motion of the carrier into linear motion of the motor along the chassis.

In this way, a speed difference between front and rear axles signals slippage. The FD "senses" slippage and with its carrier "pulls" the motor towards the slipping axle, re-balancing weights in a self-regulating manner.



CHRISTCHURCH MECCANO CLUB

From Ian Torrens

August Meeting Report.

Fourteen members were present for our meeting; there was a dearth of models for the evening, being only two on display.

Chris Thomson showed us a bus shelter built to the correct proportions. This was 14" x 9" x 12" and was done in red, green and silver parts. Looked very good, an unusual model.

Mike Hamilton, our youngest member, bought along a helicopter in modern colours. This model was 13" long and 5" high with a rotor span of 16", a good model.

Cameron McFarlane had some video recorder chassis, which contained good motors etc. These were passed onto various members for their use. I was amazed at the precision of the manufacture, especially the coils done I assume by robots.

John Hamlyn had a book called "Earth Movers" by Barbara Thrasher. This shows Trucks, Excavators, Tunnel borers, Bulldozers etc., all great prototypes. Peter King showed two books, one titled Heavy Equipment by Erik Bruun and Buzzy Keith. Similar contents as Earthmovers. The second book was "World Encyclopedia of Best Items Born in Farm Workshops" these items are taken from the Farm Show magazine USA. It contains many interesting articles and great ideas for models.

Doug King is now making replica collars Pt No 59, which he is selling for 50c ea., without grubscrew.

Mr and Mrs Pluck are still absent and Mrs Pluck still unwell, so a get well card signed by members was sent. Kingsley Burrell prepared supper, many thanks after which the evening finished.

September Meeting reports

A cold rainy evening for our September meeting, but even so 12 members came along bringing four models and two plastic sets with them

Mike Hamilton showed us his Steel Tec X wing Fighter from the Star Wars Movies. This model has 3 guns and 4 rocket motors and is 12" long x 6" high with a wingspan of 12" it is very presentable silver coloured model.

Doug King bought along the chassis of the SML15, the 4-6-4 Baltic Tank Locomotive, this is 44" long x 9" wide and 6" high. It is fitted with the Walschaerts valve gear which looked great when put in motion being lifted $\frac{1}{2}$ " above the table, the valve gear can be studied with ease. This is one of the better SMLs and a fine job was done by Doug.

Ian Torrens has been unable to continue with his SML15, but came along with a Steel Tec Harley Davidson 1960 style racing motorbike. This was mounted on two large flanged plates Pt No236, which set the model off very well. This is the third and final model of the Steel Tec Motorcycle set.

Peter King has been working on a 1912 AGPrice sixteen wheel Railway Engine for quite a while and bought along the chassis, this is 44" long and each wheel is a driving wheel. I suppose it would be a 0-16-0 engine. I understand the original could climb a 1 in 10 grade, which is remarkable for a Railway engine. This is an excellent chassis and will obviously be a great model when completed.

Graeme O'Neill presented us with a large collection of his Meccano literature for our perusal as well as some of his Meccano library items such as gearing general construction etc., a lot of this will be published in NZFMM. Graeme also had two plastic Meccano sets which showed the change over about three years, these sets were No1540 and 6856, some changes were noted.

It was good to see Mrs Pluck back with us again and we wish her well.

Kingsley Burrell prepared supper many thanks, after which the evening concluded.

GMW - or - Geoff's Millennium Woes!

There was stirring of the Spanners as the
word was flashed around here
That a new Meccano set was on the way.
Was it larger? - was it smaller? - than the fa-
bled Number Ten set?
'twas a question none could answer, right
away.

So Geoff set up a plebiscite so that all could
put their vote in,
And true democracy be seen to shine.
The suggestions, rather slowly, dribbled in
and Geoff began to
Wonder whether, all in all, he'd change his
mind.

So little happened, rather oddly, for a rather
longish time when
Suddenly the French announced their own set
without warning.
"We'll introduce our own withal to celebrate
our Frank -
a truly magnifique set" . (some found that truly
galling!)

"We'll have a giant setter-bloquer - just to get
the juices running -
It's 70 years since that one came about!
But it will be rather costly, so let's see now -
can we fiddle?
Why, of course! The 10 set model: Trot that
out!

Do it up in princely packaging, with monogram
on top there.
Red and green of course - for authenticity.
A snip at just eleven hundred US dollars - all
up.
Why, they'll all come running for it - just you
see!"

Well, that really got to Spanners - chatter
fairly flowed unending;
Correspondence ne'er let up for weeks.
Nothing else could get a look in - we all won-
dered what had started.
Just what was it that had really been un-
leashed?

The "M" set really moved along post all this

Gallic action.

It caused a wondrous clarity of mind.
The Chrisses 1 and 2, and many more did let
their hair down.
Ne'er had the Spanner Group been so in-
spired.

But now, things hadn't clarified when troubles
re-emerged:
Seems the changes early sorted weren't
agreed.
One said this, and one said that - it really was
uncertain:
A clear impression formed - of being peeved!

And Geoff said "Look here, chaps, now this
has all gone far enough.
If we don't all soon agree, then this is dead!
The Frogs have stolen our idea - that much is
plain to see.
I suggest we put theirs solemnly to bed.

"Return to ours - we know it is the only way
ahead now.
Since it is, then let us push it forward apace".
This had a wonderful effect - it stilled the
tongues - well almost,
Then we started up again - with yet more
space!

Yet more suggestions, bumpff and models,
changes, new bits, and the older,
Colours, boxes in all detail. Up again came
Binns Road "Ten"
Plus current French - my goodness, just how
long can this go on for?
I really wonder - can it - will it - never, ever
end?

I believe so, dare I hope so? - Geoff, our pa-
tient UK agent,
He must feel sometimes that things are getting
tough.
But if we keep on going as we have, in recent
weeks, been
Then he might decide that he has had
enough!

This was taken from the spanner group, unfor-
tunately I cannot credit the author as I have
deleted the message it came with— my apolo-
gies

FOR THE CENTENARY OF MECCANO, A VERY SPECIAL LIMITED EDITION SET



Designation	100th Anniversary Wooden Box
Reference	030100
Weight	20,3 kg
Volume	615 x 383 x 232 mm
Crane's dimensions	1 385 x 436 x 835 mm
Number of parts	2009

Contents may vary from description. Motor not included.
It is a collector's set : it does not meet toys' nor games' normative requirements.

Meccano starts to celebrate its 100th anniversary.

For the occasion, MECCANO SA gives you the opportunity to own an original edition of the Block-setting Crane, the crane with mechanical functions, issued from the famous No 10 Meccano Outfit.

This luxury wooden box, with the Meccano logo on a brass plate is a limited and numbered edition. There will be only 3,000 boxes available worldwide. Order now your exclusive replica of the original green and red parts crane from 1929.

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Deadline for orders : NOVEMBER, 30th 1998 !

Delivery : from February, 1st 1999

Price : 670£ (Delivery Duties Paid)



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First name Birth date

Address

Zip code Country

Phone Fax

E-mail

Send coupon to :

Limited Anniversary Edition - Meccano - F-62100 Calais - France
or by fax if payment is to be made by credit card : 33.3.21.46.37.49

Payment terms :

- By Credit Card (Amex, Visa)

Card number

Expiring date

- By money order to MECCANO SA • Cheques accepted for EEC orders only
- No cash.

Commitment :

YES, SEND ME MY NUMBERED BOX OF THE ORIGINAL EDITION CRANE No 7
FROM SET No 10, SPECIALLY MADE FOR THE MECCANO 100TH ANNIVERSARY.

Date :

Signature

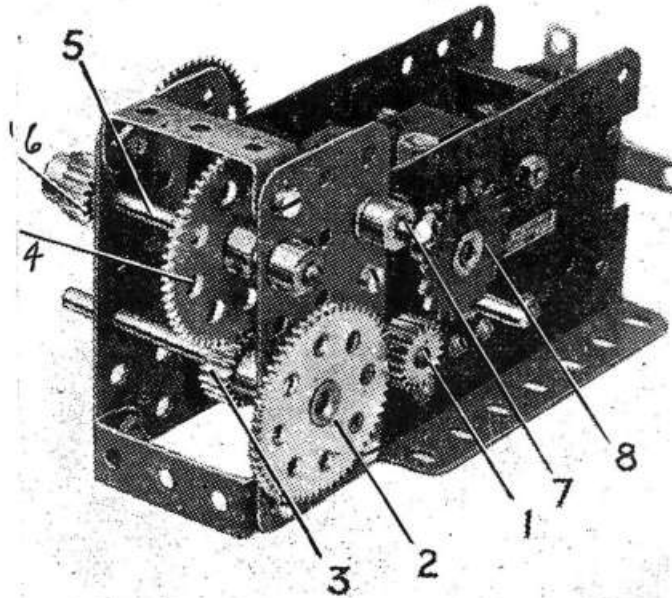
The signing of the above purchase order holds as a financial commitment.

From MM January 1952

Reduction gearing 81: 1 for an E20R motor.

A $3\frac{1}{2}$ " x $1\frac{1}{2}$ " flat plate is bolted to each side plate and these are joined by $1\frac{1}{2}$ " x $\frac{1}{2}$ " d.a. strips.

A $\frac{1}{2}$ " pinion on the motor shaft drives a 57 tooth gear on a rod which is fitted also with a $\frac{1}{2}$ " pinion (1). Pinion (1) drives a 57 tooth gear (2), and a $\frac{1}{2}$ " pinion (3) on the same shaft as gear 92) drives a further 57 tooth gear (4). Gear (4) is fixed on a rod (5) which engages a 57 tooth gear on shaft (7). The final drive is taken from sprocket (8)



Fireside Fun

"Goodbye dear" said the stout lady to her friend as she prepared to get on the bus. "I hope I'll see you again soon". "Don't worry, mum, you will" interrupted the bus conductor. "This bus is full".

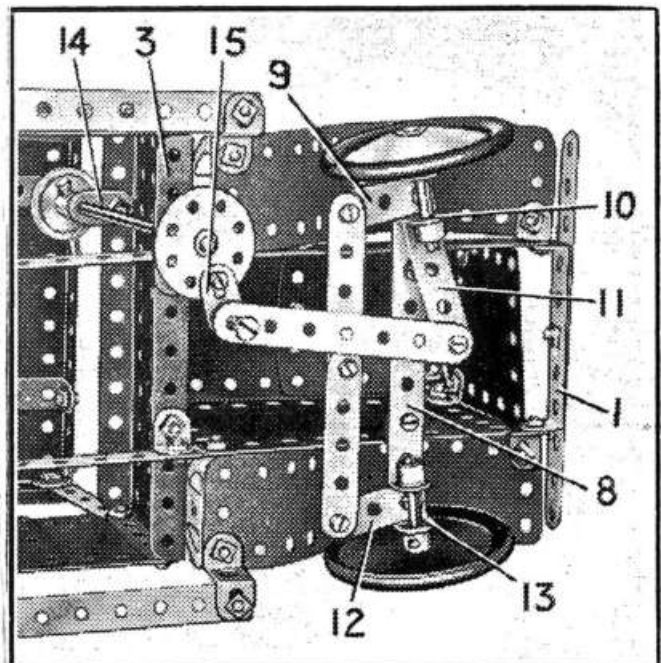
From MM January 1952

Simple steering for small model vehicles

Front axle beam (8) is a $4\frac{1}{2}$ " strip attached to the chassis by angle brackets. A $\frac{3}{8}$ " bolt is passed through a $1\frac{1}{2}$ " strip (9) and a double bracket (10). Then a $2\frac{1}{2}$ " strip (11) is fixed in position by a nut and the bolt is passed through the end hole of the beam (8) and locknuted, so that the assembly is free to pivot.

A $\frac{3}{8}$ " bolt is passed through the $1\frac{1}{2}$ " strip (12) and a double bracket (13) and is held in the end of beam (8) by two nuts. The strips (9) and (12) are connected to a $4\frac{1}{2}$ " strip, as shown.

A 4" rod fitted with a 1" pulley and a bush wheel forms the steering column. This is passed through the flanged plate (3) and through a fishplate (14). A $3\frac{1}{2}$ " strip is now bolted loosely to the strip (11) and is connected by a pivot bolt to a fishplate (15) bolted to the bush wheel. The bolt holding the $3\frac{1}{2}$ " strip to strip (11) is locknuted. The road wheels are fixed on $1\frac{1}{2}$ " rods held in the double brackets (10) and (13).



MECCANO AUTOMOTIVE GEARBOXES AND THE DESIGN THEREOF

From Peter King

The first question to ask one's self is: what is this collection of mangle wheels intended to do? Are we trying to produce a replica of the original, or any sort of multi-ratio gear arrangement, or do we just want to make this unsightly edifice move along?

The answer to the replica is; in Meccano forget it!, a simulation can be built but really the limit is to build a casing closely representing the original to hide the non-representative contents. A sort of multi-ratio box of mangle wheels is possible, as is just making the edifice move. I will leave the 'just make it move', we can all (I hope) do that. I will concentrate on ordinary non-automatic wheeled vehicle gearboxes, tracked vehicle gearboxes having been well covered in previous editions of CQ.

First some terms, the bits of metal that bring the power into the gear box and all the other similar bits are referred to as 'shafts', most of the terms are those of the old millwrights, so a long wooden beam, 'a shaft' - in French an 'Arbre' - tree, (or for small ones a spindle - arbor, again the wooden origins show) rotated in load carriers - 'bearings'. Incidentally old French for a crankshaft was an 'Arbre de virages' - a tree of bends - not a bad description. The general layout of a gear box has a 'first motion or input shaft', a 'second motion or lay-shaft' and a 'third motion or output shaft' (see fig.1.). This type of 'box usually has a pinion on the first motion shaft to permanently drive the second motion shaft. All the gears on the second motion or lay-shaft are fixed to it and all the gear engagement bits are on the third motion shaft.

There is a distinct tendency on the part of the average Meccano modeller to built 'ye-bog-standard-four-speed-and-reverse-crash-engagement-with-only-three-shafts'. There are other types of gearbox, this may come as a surprise to some. Many vehicles, particularly heavy prime movers have gearboxes with more than one lay-shaft, this is often adopted in order to shorten and therefore stiffen the shafts. These sometimes have to be studied for quite a long time in order to detect exactly where the drive line goes in any particular gear. I

think one of this type was illustrated some time ago in CQ or its predecessor. It is not uncommon for a high/low gearbox to be either attached to the rear or incorporated into the normal gearbox. The variant of this is the two speed rear axle, which is preferred by some manufacturers. Another point to remember is that not all gearboxes are attached to engines by means of 'bell-housings', most are, but in the heavy vehicles there is often a short universally jointed drive shaft between the engine/clutch assembly and the gearbox. It is much more rare to find this as an engine with a shaft driving a clutch/gearbox assembly, but these are quite easy to build as Meccano lends itself to these forms more readily than to gearboxes with bell-housings.

The range that I have driven and worked on goes from a very heavy prime mover tractor with 32 gears!, to a three speed (and reverse) on a car. For those who like complexity the 32 speed job had it all in one box, with the following: 4 Forward, 1 Reverse x 3 intermediate ratios x 6 wheel drive/4 wheel drive (with a reduction when in 6 wheel drive) x 2 speed normal/crawler. Not all the theoretical ratios were available as internal blocks prevented higher gears being used in crawler mode. The box also had an internally controlled power take off for a massive winch, its own internal oil pump, external oil radiators and a parking brake. The drivers position looked like a railway signal box, with: Hand-brake, Ratchet parking hand brake, Winch clutch lever, Winch brake lever, 4 speed and reverse change lever, Three speed transfer lever, 4/6 wheel drive change lever, Normal/crawler change lever, Winch engagement lever and Winch forward/reverse lever.

The easiest of the non-crash gearboxes to build is the type having more than one lay-shaft, with these it is possible to construct a reasonable gearbox while using dog-clutches and socket couplings with the key-way type of rod. This when carefully constructed will give reliable, if slow gear changes and will not damage the teeth on your gears. It is however difficult to fit into any small representative gear-case. I do not think any of us actually intend to change gear on the move, our use is more like

that on the older type of farm tractor, the gear wanted is engaged from stationary and the clutch then engaged. The main need therefore is to arrange the ratios and the overall ratio so that the vehicle will move away in any gear. The most important point is to ensure that all the gearbox axles are parallel, with adequate bearing area where necessary, use of a number of strips or the boss on double arm cranks will vastly improve any box. Make sure that all axles will be really free, check with the use of multiple drifts. Another cause of heartbreak for the unwary is grub-screws, if building an all pinion gear box, invest in a box of 7/64" grub screws and avoid lock-ups when normal screws jamb against each

other or gear teeth. Always make sure you are using straight axles, few are really straight. It may seem obvious but make sure that you mount the gearbox properly, it is transmitting torque and the reaction can twist the case and make the shafts bind inside.

The subject is an interesting one, perhaps some of our more ingenious gearbox constructors could write some more articles on their particular favourites, perhaps someone could also write an article on all the different form of differentials designed for Meccano, including 'limited slip' and controlled types.

ABBREVIATIONS and ACRONYMS

From Ian Torrens

CMGN clubbad Meccano Guild Nedderland

CMN Canadian Meccanomans Newsletter

CQ Constructor Quarterly

DMS Development of Meccano System

EMP Encyclopedia of Meccano Parts
By Don Blakeborough

GBSC Giant Blocksetting Crane

IM International Meccanoman

IMJ International Meccanomans Journal

ISM International Society of Meccanomen

ISOMECS Computer Program for Drawing Meccano parts

JME Journal of Meccano Engineering

JME Junior Meccano Engineer

MAP Model and Allied Publications

ME Meccano Engineer

MM Meccano Magazine

MMA Meccano Modellers Association

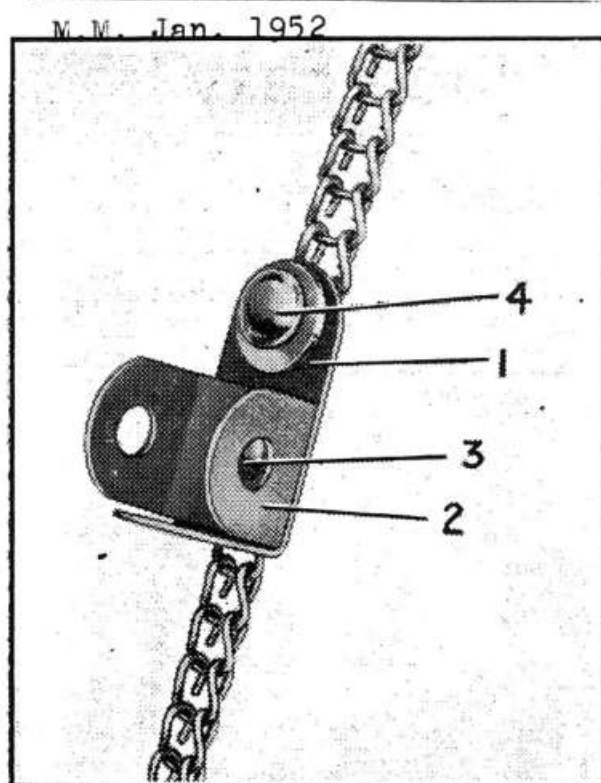


Fig. 2. A simple method of assembling a small dredger bucket.

Each bucket consists of a $1 \times \frac{1}{2}$ " Angle Bracket 1 and a Double Bracket 2. These two parts are fastened to a length of Sprocket Chain by means of two paper clips 3 and 4. The lugs of the clips are cut short, and after passing through the Chain are flattened out so as to allow the Chain to pass smoothly over the driving Sprockets. Provided that care is taken in this operation, a chain of buckets assembled in this way will work quite satisfactorily.

WALTER ASHBURN

320 Napier Street, Bendigo

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VICTORIA, 3550

CIRCULAR STRIPS		Red/Yellow	
145			\$4.50
CIRCULAR PLATES		Red/Yellow	
146	6"		\$4.00
145a	4"		2.25
ARGENTINE BALL BEARINGS		Red/Yellow	\$40.00
BRASS PARTS COUPLINGS ETC.			
59	Collar	All brass parts include grubs	.70
140y	Collar	4 holes	1.00
63	Coupling	3 Holes	1.60
63d	Coupling	2 Holes Short	1.20
63b	Coupling	Strip	2.00
63c	Coupling	Threaded	1.60
63e	Coupling	4 Holes	2.20
63f	Coupling	5 Holes	2.70
64	Threaded	Boss	1.00
136	Handrail	Support	1.80
136a	Handrail	Coupling	1.80
173a	Adapter	for Screwed Rod	1.20
179	Rod	Socket	1.60
PINIONS			
11	Teeth	1/4" Face	1 60
		1/2" Face	2 20
13	Teeth	1/4" Face	1 60
		1/2" Face	2 20
15	Teeth	1/4" Face	2 00
		1/2" Face	2 50
NUTS AND BOLTS			
5/32" Whitworth by 1/4" long			
		Per 100	6 00
		per 1000	50 00
5/32" Whitworth by 3/8" long			
	Bolts only	per 100	3 00
		per 1000	25 00
	Nuts (Hexagon only)	per 100	3 00
AEROPLANE COLLARS			1 00
Have short Allen head grub screw			

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OVAL 'MECCANO' Plates		in Red or Green	
		Aluminium	15 00
		Bronze	18 00
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	280mm x 40mm	per 4	10 00
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55 PITT STREET
WADESTOWN

MWT:
ST LUKES CHURCH HALL
CORNFOOT ST
WANGANUI

CMC:
ST JOHNS HALL
FERRY ROAD
WOOLSTON

OCTOBER 1998

2nd - WMC - St LUKES HALL

2nd - CMC - St JOHNS HALL

NOVEMBER 1998

6th - WMC - St LUKES HALL

6th - CMC - St JOHNS HALL

7th - MWT - St LUKES HALL

21st AMC - George Ovenden's
19 Richards Ave
Milford
2pm.

DECEMBER 1998

4th - WMC - St LUKES HALL

4th - CMC - St JOHN'S HALL

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CHRISTCHURCH HELICAL GEARS

J. Stassart, Belgium has sent me a letter with a list of Meccano magazines for sale.

Anyone interested let me know and I will send a copy of the list.

Newton Engineering Parts.

Angle girders	18 ¹ / ₂ " - \$3.50 ; 24 ¹ / ₂ " - \$3.80 ;
Flat Girders	18 ¹ / ₂ " - \$3.20; 24 ¹ / ₂ " - \$3.60 ;
Girder bracket	24 ¹ / ₂ " - \$4.10 (same as Pt No 161);
Flat Plate	1 ¹ / ₂ " x 1 ¹ / ₂ " - \$1.10; 2 ¹ / ₂ " x 2 ¹ / ₂ " - \$1.60; 5 ¹ / ₂ " x 2 ¹ / ₂ " - \$3.10; 5 ¹ / ₂ " x 3 ¹ / ₂ " - \$3.50;

All made from 1mm electrogalv sheet. Unpainted with square cut ends. Freight extra. Available from John Ince, 5 Lennox Place, Feilding. Phone: (06) 323 7075.

MECCANO

MECCANO NEWS.....

According to the New Zealand Agents, there will be NO immediate increase in Meccano prices due to the poor state of the New Zealand dollar.

While prices hold.....SPACE SETS...

4810	Defender Unit	\$39. 95	Freight free.
4820	Meta- Cruiser	39. 95	" "
4830	Defender Detector	59. 95	" "
4840	Space X-plorer	129. 95	" "
4850	Space Base	169. 95	" "

The Space Base Outfit contains a vast collection of White Painted parts and our customers all remark that this set is real value for money. Its my choice for this month.

Meccano News from the New Zealand Importers, there is none As I have asked and asked for a current price list but to no avail.

The next snippet of news , our New Zealand agents have appointed a Toy Firm to market their Meccano for them, and I have been assured they have a travelling representative on the road, so might at last see a current price.

Because my name is not K - Market, Toy World , Deka or even the Warehouse I now have to deal with this new firm.

But prices will remain the same.

There has been NO advertising in my area and very little nationwide, no representatives, and almost NO product information.

How we miss the days of Frank and Peter of F.W.Cave Ltd. The Meccano fraternity are the poorer for the change of importers, we might have criticised F.W. Cave Ltd., but they always stood behind most of what we organized and the Meccano Federation and the conventions that we sought to run in conjunction with one another.

Most of the information I supply to the Magazine comes from Geoff Wright of M.W. Models and not from any New Zealand source. I only hope Meccano France receives a copy of our Magazine and realises the mistake they made in the choice of the New Zealand Importer, their choice is not backed up by the number of past Meccano Dealers who no longer stock the Great Product because there has been no service and the Clubs and Members who have known as much as I do.

We require an Agent in this Country who has Meccano at Heart , can work with the local Clubs and has the local Dealers interest foremost in front of him , in this way and this way alone can Meccano survive in New Zealand beyond YEAR 2001 our CENTENARY .

Lindsay Bond Electronics , STRATFORD, Pn / Fax 06 765 5008.

MECCANO