



NZFMM Magazine

Volume 22 Issue 3

JUNE 1998

Motivation

Enjoyment

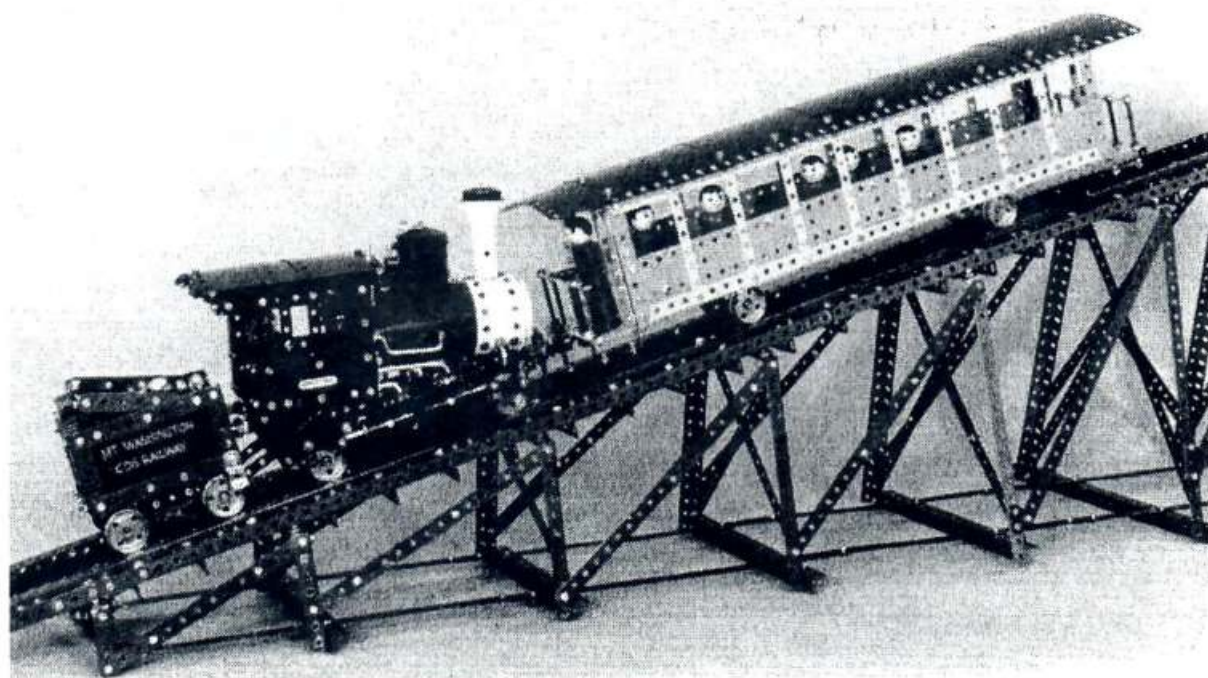
Comradeship

Cooperation

Achievements

New members

Originality



**NZ FEDERATION OF
MECCANO MODELERS**

PRESIDENT:
David Wall

© EDITOR & PUBLISHER
Don Flowers
90 Holborn Drive
Stokes Valley
Lower Hutt
Phone 04-563-8008
Fax 04-563-5522(day only)
e-mail flowers@ihug.co.nz

SUBSCRIPTION:
\$22.00 in New Zealand
\$26.00 overseas-Air mail post.
covers six issues per year
Forward to :
Max George
3A St John's Tce
Tawa
Wellington

COVER:
Mount Washington Cog Railway
built by Keith Cameron

EDITORIAL

Welcome to this issue of the magazine. You will all have recieved an account for subs with the Febuary issue, thanks to those who have paid, if you have not paid this is the last issue that you will recieve - please check your records. I have recieved a lot of material from Graeme O'Neill regarding the history of the Christchurch club. Did you know that they produced a newsletter in 1936? hopefully I can reproduce a copy in the magazine.

With this issue I have used up just about all the material that I have recieved, could you please put pen to paper and send articles of any sort, or else there will not be any newsletters. I am in need of constructional articles, Lloyd has kept us going up till now, but someone else must be able to write up a model for us, I do not want to have to write up a model of my own for each issue, I only make 1 a year, and I do not have a great deal of spare time; the magazine takes up a lot of it anyway..

The answer to the magic box will be in the next issue along with a mechanism that will make you think very hard as to how it works.

N.Z MECCANO CONTACT PERSONS

AUCKLAND	David Wall	09-478-6825
WAIKATO	Don McClelland	07-847-4503
HAWKES BAY	Trevor Adam	06-836-6827
MANAWATU	Bruce Geange	06-357-0566
WANGANUI	Tom Pittims	06-345-6788
TARANAKI	Lindsay Bond	06-765-5665
WELLINGTON	SIMON MOODY	04-528-3032
WELLINGTON	LOU NICHOLS	04-383-6173
CHRISTCHURCH	Graeme O'Neill	03-322-7456

CONTENTS

RACING CYCLIST	3
A PARTS PIRATE	5
FRANK HORNBY	7
CONVENTION 99	9
WMC	10
BITS AND PIECES	11
CMC	12
AMC	14
DR GRAY	17

RACING CYCLIST

From Lloyd Spackman

The inspiration for this model came from a photo of Lou Nichols' cyclist at Fielding, courtesy of David Barnard and Peter Hancock, (thanks chaps)

I found the steel road wheels (P/N 187) running on hard plastic P/N187c rollers were rather noisy so I replaced the 187c with pairs of 1" pulleys, butted, with tyres. The tyres are Marlin which are a little fatter than Meccano ones.

FRAME:

Join two $3\frac{1}{2}$ " x $2\frac{1}{2}$ " flanged plates (flanges down) by a central $5\frac{1}{2}$ " x $2\frac{1}{2}$ " plate, overlapping each end by 3 holes. Bolt 4 flanged brackets at the corners of the flanged plates by their 5 hole sides, the 4 holes sides upward and inward so that they are $1\frac{1}{2}$ " apart.

Bolt a $9\frac{1}{2}$ " strip by its end holes, each side, to the tops of the flanged brackets, plus a $1\frac{1}{2}$ " x $\frac{1}{2}$ " d.a.s. across between them. Make sure the $2\frac{1}{2}$ " rods which are at holes 3, 7, 13, and 17 run freely.

Bolt an MO motor at the centre to the base and to the front strip, output shaft to the rear. Under the flanged brackets, at each end, bolt a $3\frac{1}{2}$ " a.g. slotted holes outward and down.

Each rod has, within the frame, two 1" pulleys with tyres centred and butted together. Numbering the rods from the front and left, outside the frame they carry;

Rod 1; collar, washer, frame, washer, 1" pulley.

Rod 2; 1" pulley, 4 washers, frame, washer, 1" pulley.

Rod 3; two 1" pulleys butted together, washer, frame, washer, 1" pulley.

Rod 4; 1" pulley, washer, frame, washer, collar.

Rubber driving bands go from the motor to the rear No3 pulley; from inner front No3 to No4; from outer front No3 to No2; and from rear No2 to No1.

OUTER BOX:

Bolt a $2\frac{1}{2}$ " a.g. upright at each corner to the $3\frac{1}{2}$ " a.g. then a $3\frac{1}{2}$ " strip across each end at the top and a $9\frac{1}{2}$ " girder along each side top and bottom. Close in with a $9\frac{1}{2}$ " strip plates and a $3\frac{1}{2}$ " x $2\frac{1}{2}$ " flex plate at each end.

Bolt a double arm crank on top of the rear a.g. centred at the 11th hole from the left.

Rubber feet complete the base.



THE CYCLE:

Its frame is all narrow strips. Construction is clear from the photo. The sides are joined at each of 5 points by 4 hole collars (140y). The seat is a

P/N 77 plus a fishplate, held by a nut on a $\frac{1}{2}$ " bolt screwed into the collar.

Part No 136 is screwed into the front top collar. It has a $1\frac{1}{2}$ " rod crosswise in it, with a 140y at each end.

After a lot of thought about alternatives, I bent a couple of $2\frac{1}{2}$ " screwed rods to form the handlebars. They are covered by plastic tubing, leaving $\frac{3}{8}$ " bare at each end.

The top ends screw into the collars on the $1\frac{1}{2}$ " rod while the lower ends each have another 140y to which the riders "hands" are bolted.

The front axle is a 1" rod and the rear axle is about $1\frac{1}{8}$ ".

Each pedal is a narrow angle bracket bolted into a 140y at each end of the 2" rod. A short threaded pin is locked in the slot of the angle bracket.

Axles should be 5" apart = the distance between the roller centres.

CYCLE SUPPORT:

Bolt a P/N 173a to the rear of the cycles top bar. Join it to a 1" rod by a rod connector. Lock the outer end of the rod in a handrail coupling. In the bottom of the 136a lock a 3" rod. The lower end of this is held in the double arm crank on the top of the box. Adjust so that the cycle is upright.

CHAIN DRIVE:

Later I changed the main sprocket to a $1\frac{1}{2}$ " instead of the 1" which is in the photo.

THE RIDER:

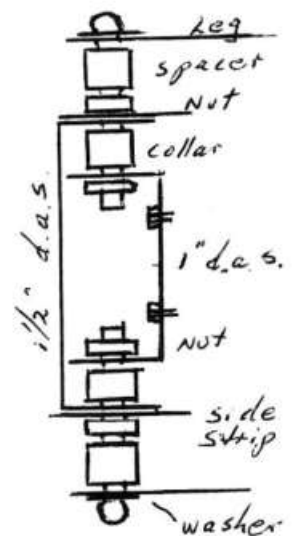
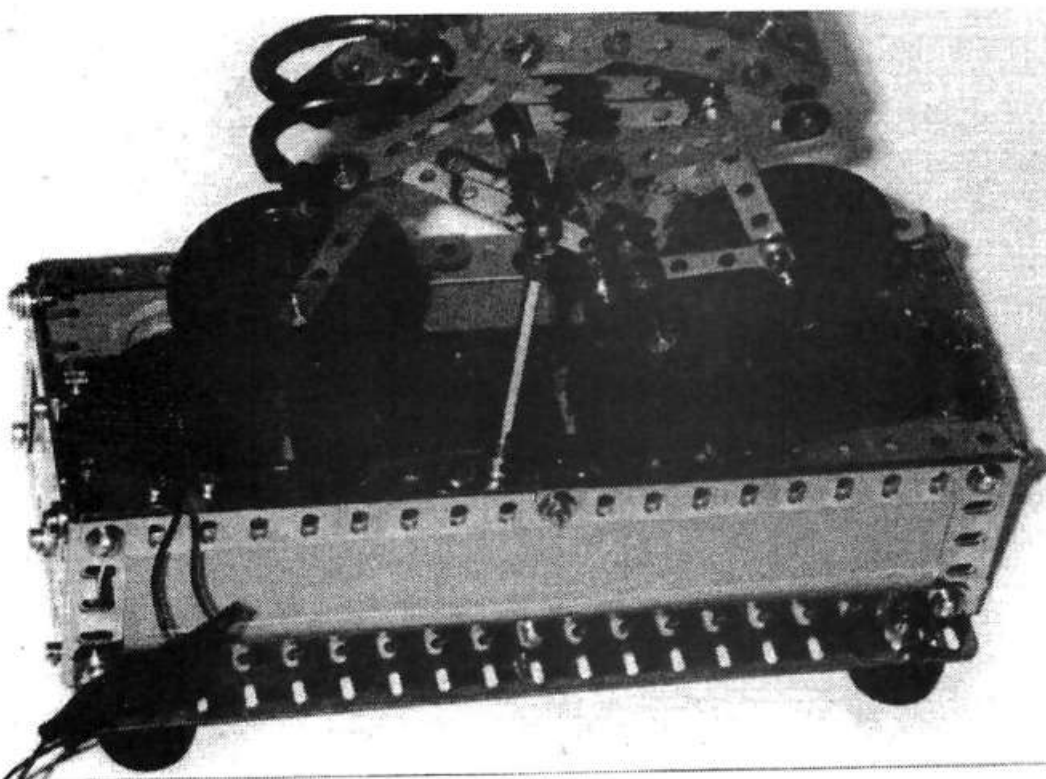
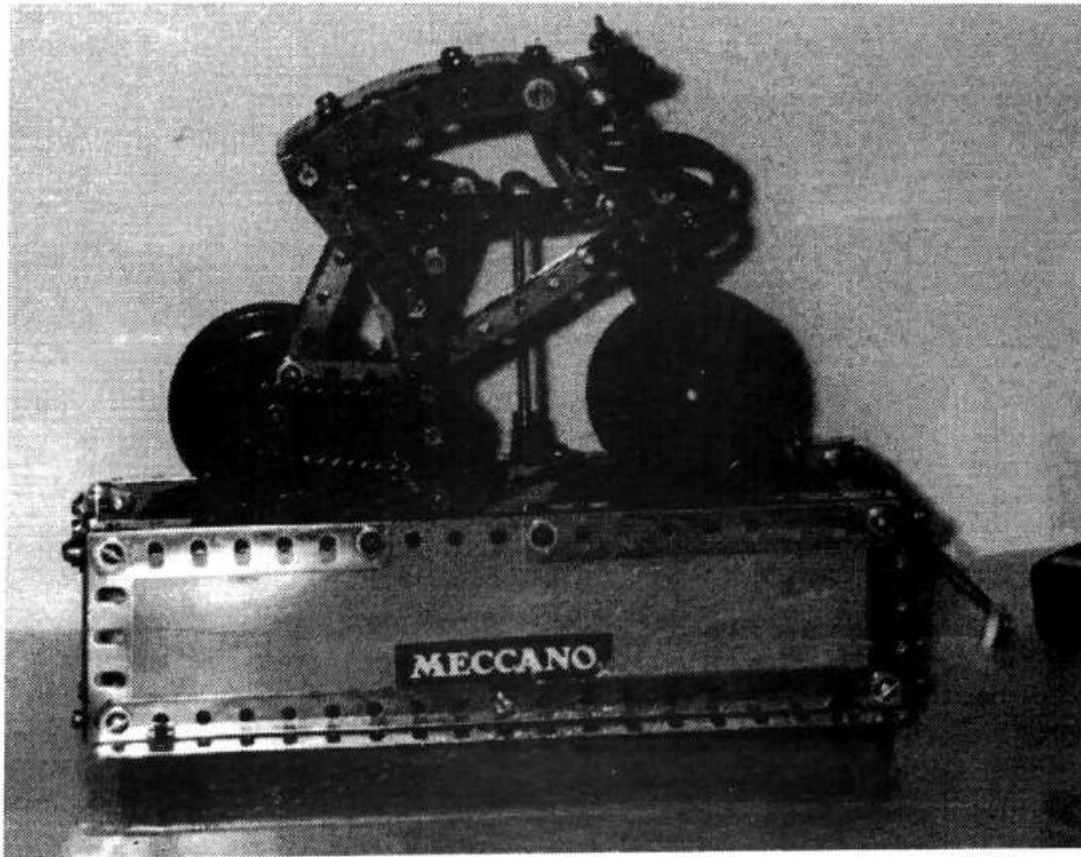
My rider is made from mainly Marklin parts, but there are plenty of Meccano equivalents available. $1\frac{1}{2}$ " d.a. strips join the side curved strips. His back is two $2\frac{1}{2}$ " x $1\frac{1}{2}$ " flex plates overlapped. You

back is two $2\frac{1}{2}$ " x $1\frac{1}{2}$ " flex plates overlapped. You could use yellow plates to represent the winning riders yellow jersey.

His neck is a couple of P/N 11 one bolted to the shoulders, the other to the head. They are joined through their lugs so that the angle of the head can be altered.

$\frac{3}{4}$ " bolts hold the rider to the seat and also pivot the legs as in the sketch below. From the outside, each side, it is;

Bolt head, washer, leg, spacer, nut, side curved strip, washer if needed, lug of 1" d.a.s. (which is bolted to the seat), nut.



SMALL CONFESSIONS AND RAMBLING THOUGHTS OF A PARTS PIRATE

From Peter King

Oh! woe is me, Mea culpa Mea Culpa, I have used things in models that were not 'Made in Binns Road', bring out the scourges. I am sorry, I confess, I have also made some naughty replica parts; worse still many are not even replicas, they are - Oh the horror of it! - Inventions; new parts that Frank never sanctioned. There is yet more - Oh hang the head in shame! - I have repainted parts in non-traditional colours. Oh have mercy, I have even made commercial use of my real Meccano, heat the tongs, get ready the stake! Is there no limit to this depraved creatures excesses?

Do you know that for a few moments there I actually felt ever so slightly guilty; I almost contemplated joining those poor benighted and blinkered fundamentalist creatures that struggle with 'THE SYSTEM', frozen in time at AD 1936. Good God - that's over SIXTY YEARS AGO! You don't believe they exist? Just look at the current debates on judging at exhibitions. Can it be that these people have missed:-

A world war.

186 major and minor wars.

The invention of Jet engines, Rocket engines, The Atomic Bomb, The Transistor, Modern plastics, The Computer, The Laser, Hovercraft, Digital Electronics - Robots, CNC machining, Laser cutting and machining etc.

Jet airliners, Concorde, Super-tankers, Deep Sea Drilling etc.

Container-isation of goods in transit and all the special handling equipment.

The exploration of space, Space stations, Space telescopes, Satellite relayed television and phones, Cell-phones.

The liquidation of Meccano UK Ltd. (even that's over fifteen years ago)

The Channel Tunnel, The equipment that made it, High Speed Trains, Electric vehicles, Superconductors.

Do they not expect or want any advance in technology? Do they want to do what 'Binns Road' nearly did and fossilize Meccano? Can they not see

that a lack of technical advance and foresight and a poor appreciation of the market in the period from 1960 onwards, were the downfall of 'Binns Road'. Those failings certainly do not seem to be part of the general 'Calais' act. The French do seem however to lack some of Frank Hornby's expertise in one field - that of advertising their greatest asset - the Trade Mark 'MECCANO'. I cannot see Frank Hornby objecting to any magazine promoting his mark whether or not he had such a journal, see "Model Engineer" over the years. A brief look through the 1930's Meccano Magazines will show his attitude to his competitors, he was very happy to take their fees for advertising, in the sure and certain knowledge that his products were as good or better than theirs.

It is a pity Frank Hornby did not live another 20 years to see some of the changes listed above, I doubt he would have thought much of the wars, but he was a Victorian dedicated to advance. I also doubt he would have let Meccano develop the arthritis it showed from the end of the thirties. I would like to have seen the sort of article that Ellison Hawks would have produced from the inspiration of those Inventions, can you imagine the sort of front covers he would have produced for the post war Meccano Magazine?

My feelings on general Meccano modeling are: that an edifice that requires supporting with stays, props, stands etc. because its too heavy for its axles is a joke not a model. Some 'models' in exhibitions seem to be little more than three dimensional pictures. The sort of work that I admire and would aspire to, is models like Bernard Perier's Truck, the 'Napier Railton', the Stratford railway crane (I remember seeing the original) and the 'properly modeled Block-setters', cardboard gears and all! The models of Dr. Cameron and Howard Sie are also truly outstanding examples.

I have been a member of a number of specialist hobby clubs for many years, four wheel drive, motorcycle, Meccano etc. all these clubs have their one or two 'Super Enthusiasts' and 'Purists'. These people however never really do anything much, no

really stunning efforts because they are so busy being 'Politically Correct' in whatever hobby they are a curse in for the time being. They are always so convincing with their spurious knowledge of the subject, then one day you see their Meccano, Landrover, Trials bike or whatever for sale and they are gone, off on some other quest for pure perfection. Poor, silly, unhappy souls, ever seeking for the perfection that will ever elude them as it does not exist.

My most frequent use of Meccano is in making up working models of some of the devices that our clients have invented. These are for the Patent Attorneys in our practice, as many inventions are a bit big to bring into the office! Alas I can never exhibit these models for obvious reasons. One recent model was made to prove that the inventor was right and that his theory worked in practice, I then had a hell of a job to get it back as the inventor was having such fun playing with it. When I build models for my own pleasure it is frequently for similar reasons to the above - i.e. on the lines of "how the hell does that work?"

I am quite happy to buy or make what could be called "After Market Accessories" if they add something to a model or allow it to work like the original - large axles for example. I much prefer to make a pair or so of gears to give a particular ratio, than assemble some ghastly great fumbling, friction ridden monster of epicyclics and differentials, just to stay in the 'System'. These are very clever but are monuments to misdirected endeavor and are surely not real engineering solutions. I am happy to use parts of other systems and Frank Hornby was not averse to adopting any useful ideas he saw in rival systems, but where the notion sprang from that he pirated them I do not know, he had a very good Patent Attorney and it is more probable that on their advice he licensed them. It is also possible that some of these parts were actually bought in from those same rivals, after all many of his motors were, why make an exception for other parts? He had also had first hand and expensive experience of being pirated himself.

I enjoy experimenting with hydraulics, radio control and sundry 'after market' parts, but I certainly do not expect the Calais factory to produce these - too expensive for the general market and too small a demand. The total annual sales of all the various people producing these components (with certain honourable exceptions) is probably about equal to ten minutes of that of Calais.

The Infra-red control is a big advance, more strength to their arm!, but its development cost and cost of dies, would if released probably shock most general enthusiasts to the core. The moans about bulk etc. from enthusiasts are misplaced, these units have got to survive small boys! They will also have been made to a closely considered price, to appeal to a large enough section of the market, to ensure a commercial return on the investment made in development and tooling. I find that few enthusiasts have any idea of the costs of development and production. Quite a simple press die will cost \$10,000-00 (£5,000-00) and plastic injection moulding dies are an appalling price (ten quite simple looking hollow components - one die set - \$1,250,000-00!). The only way to amortise these costs is by very high sales from excellent marketing and closely controlled production and distribution.

I am probably viewed as biased in my views, but I spend my working days as the draftsman and practice manager of a firm of patent attorneys. I am in and around factories and research facilities during my daily work, seeing and drawing the latest, fastest, most efficient and most advanced (for the time) inventions. I am therefore always having the realities of production, costing, potential and actual sales and the cold realities of economic engineering right in front of me. The people I deal with are successful, the mad/professional inventor of cheap fiction does exist but is almost invariably poor and unsuccessful, real inventors know their subject, their market and the need for the invention and are making 'Money'. It rubs off! (the realities, but alas not the money)

FRANK HORNBY

INVENTOR OF THE WORLDS MOST FAMOUS TOY

From Derryck McAdam

Meccano like all other inventions that time has proved to be of real worth, did not emerge complete as the result of a sudden inspiration, but

developed slowly as an idea, at first crude and dimly outlined, grew more and more sharply defined. Frank Hornby was born in Liverpool. From his early boyhood he was interested in mechanical matters, and later, when to his great joy he became the owner of a little workshop of his own, his happiest hours were spent in making devices of his own contrivance. About this time he came across the famous book "Self Help" by Samuel Smiles, in which are described the difficulties

encountered by various inventors, and the way in which these were overcome. These stories appealed to young Hornby's imagination and fired him with the ambition to become an inventor. His first effort in this direction was a bold one - nothing else than the invention of a perpetual motion machine! Not knowing that he was attempting the impossible, he worked away at one scheme after another. Finally, of course, he had to admit defeat, but his time had not been wasted, for he had greatly improved his mechanical knowledge and skill. Turning now to simpler matters he produced various small inventions, all interesting but of no practical value; there was always some flaw in each one that made it useless. For instance he spent a great deal of time on a submarine that was to submerge and rise automatically. When it was tried out it submerged beautifully, but would not rise to the surface of its own accord!

Frank Hornby commenced work in an office, and in due course rose to be chief managing clerk of

a Liverpool firm of importers. He never abandoned his mechanical pursuits, however, and as the years passed by he gradually acquired a useful equipment of tools and a good all round knowledge of engi-

neering principles and methods. As his sons grew up he delighted in making toys for them, but found it difficult to meet their continual demands for new ones. The trouble was that for every new toy new parts had to be made, because most of the parts of previous toys were useless for any but their original purpose. While casting about for some way of reducing this waste of time and material he happened to notice a large crane in operation. As he watched it he was struck by the



essential simplicity of its

construction, and the idea occurred to him that a model could be built with a comparatively small number of parts. Eagerly following up this idea, he gradually thought out a scheme of perforated parts that could be bolted together in any required positions, and afterwards could be unbolted and re-assembled in different arrangements.

Full of enthusiasm for his new idea, Frank Hornby

It was a long and weary time before all the parts were ready for trying out, but he was encouraged by the growing certainty that he was working along right lines. At last came the great day when he built up the first Meccano model, a crane, which ran on wheels and luffed and jibbed in the same manner as a real crane. It may be imagined what delight Frank Hornby and his sons took in building the crane, taking it to pieces, and building it up again!

Before they attached the jib, the base of the crane looked so much like a truck that they added a few more strips and made it into a real truck that it could run on rails formed of strips. Then it was found that the parts could be used to construct a whole range of other models.

The next step was to consult a patent agent and to obtain the necessary protection for the great idea. An English patent was granted in January 1901, and foreign patents followed in due course. In later years Frank Hornby often said that he wondered if he would have tackled the task of developing his invention if he had foreseen the trouble and difficulties he was destined to encounter. At first matters seemed hopeless. He approached one firm after another with a view to their manufacturing and marketing the toy, but without success. He then had the idea of submitting photographs to Professor Hele-Shaw, who at the time was Professor of Engineering at the Walker Engineering Laboratories, University College, Liverpool. In his reply Professor Hele-Shaw expressed the opinion that the scheme was based on sound engineering principles, and that it should have great success as a constructional toy. This letter was of great assistance to the inventor in enabling him to obtain financial assistance necessary to have the parts manufactured for him.

The toy, to which he gave the name "Mechanics Made Easy" was now in actual being, but troubles came thick and fast. The parts were made by different manufacturers, and it was impossible to ensure uniformity of finish, or to rely on all of them being ready at the same time. Soon it became clear that the only satisfactory course was to produce the parts in one factory, and so Frank Hornby took the step of transforming himself from an inventor into a manufacturer.

The first factory was so crude that it seems marvelous that anything was ever produced in it at all. It consisted of a single room, equipped with a few hand presses, a lathe or two, and a small gas engine which, as a result of a vast amount of humoring, was persuaded to produce the necessary power. The actual making of parts with this crude machinery provided plenty of excitement, but this was nothing to the thrills of cleaning the finished wheels and other brass parts. When these came from the presses they were dirty and tarnished, and in order to give them a bright finish they were first dipped in strong acid to clean them, and afterwards lacquered to prevent further tarnishing. Frank Hornby and his chief assistant used to stay behind in the one room

factory after the other employees had gone home, and bring out the acid vats to dip the wheels. There was no proper system of ventilation, with the result that the fumes from the acid often became choking. When matters got too bad, both men had to dash out into the open air to recover!

It was about this time that the name "Mechanics Made Easy" was changed to the handier and shorter one of "Meccano". This name was registered in England on 14th September 1907, and ever since has been the mark of the genuine Hornby system.

This first factory soon proved utterly inadequate, and a move was made to larger premises. Frank Hornby has told us that the size of these premises terrified him, and that he never thought that he would fill them. As he put it, the building seemed more suitable for building locomotives than for making the small Meccano parts! In spite of these forebodings, however, the demand for Meccano increased so rapidly that not only was the building crammed with machinery, but also it became evident that in a very short time still larger premises would be required. Then Frank Hornby, looking to the future and now confident of success took the bold step of buying a plot of land and building a factory for himself. So there came into being the great Meccano factory in Binns Road, which is familiar by name to hundreds of thousands of boys all over the world. To the end of his life the factory was Frank Hornby's great pride, and he was delighted to welcome to it the thousands Meccano boys who visit it every year.

The addition of Hornby trains to the range of products of the Meccano factory is another romance of the toy trade. The idea originated in a little Meccano locomotive, and from this developed first the clockwork trains and latter the electric trains which, with their accompanying range of track, rolling stock and accessories, have reached world wide fame.

Most men would have been satisfied with these two phenomenal successes, but Frank Hornby's active brain was always searching for new ideas. The result was the rapid development of the many other Hornby products - constructional motor car and aeroplane outfits, chemical and electrical outfits, and the most fascinating of all miniatures, the famous "Dinky Toys". He never lost his enthusiasm and up to the time of his death was full of schemes for new products.

One of the greatest achievements of Frank

Hornby's career was his success in welding together Meccano boys of all nationalities into the worldwide fellowship of the Meccano Guild. A few years later he founded the Hornby Railway Company, the purpose of which is to guide young railway enthusiasts along the right lines in developing their miniature railways, and thus enable them to obtain the

greatest enjoyment from their hobby. There can be no doubt that these two organizations have brought a vast amount of joy into the lives of thousands of boys. Frank Hornby used to say that he believed he had a million friends, and one cannot help feeling that he was right.

"Convention 99"

From Peter Hancock

Organisation of this very important event has begun in earnest now.

A list of the items requiring action are being assembled into an action and progress check list which will no doubt have many additions as we move along.

Members of the Auckland Club have produced records from previous events and the secretary is assembling these into an activity manual.

Bruce Neilson has completed the file he and his committee amassed after organising the 1997 convention at Fielding and has forwarded a copy to Auckland Club for our use.

Included with this edition of the NZFMM Magazine, you will find a loose leaf flyer/questionnaire that the Auckland Club would really appreciate all of you wherever you are based who have an interest in definitely, probably, possibly or are just thinking about participating in the 1999 Convention and Exhibition completing and returning by mail, fax or e-mail as soon as possible to the Auckland Club secretary.

The Club would appreciate you taking the time to complete this questionnaire and returning it to the secretary as it will give us some idea of possible numbers, an indication of the number of models that may be available for the Exhibition etc.

"Please note that completion of this questionnaire in no way commits you to attending or participating".

Of course, we hope that what ever happens that you will be able to attend this important function.

All the information gained will be used as a guide only to assist us in our planning.

Please note, and detail as you see fit, any

comments, ideas, possible obstacles, things that you think that should be avoided or added etc, that we as organisers can take note of to enable us to ensure that, as hosts to this 1999 event that we can look after you and those attending the event with you in a manner that will leave you with grfeat memories.

We also want to make the most of this opportunity (after ensuring our own member needs are met) to attract a large Public visitor stream to ensure that we show the Auckland public at least, how important Meccano is and that the product and its many modellers are still going from strength to strength.

If you have any queries, ideas or suggestions relating to the event. please contact the secretary:-

Peter Hancock

PO Box 39 085

Howick

AUCKLAND

Telephone 09 535 5355

Mobile 025) 488 366

Fax 09) 537 3989

e-mail:- augustus.prop@xtra.co.nz

Note: The questionnaire is inserted inside the back cover of this issue.

Wellington Meccano Club

Meeting Notes for April and May 199

From Brian Jones

The April meeting, held at St. Lukes, was attended by 11 members. The only model present was a Loading Shovel from a No 5 Manual, brought by Mike Highley. A bagged selection of parts was available for sale, recently acquired from the MWT Club, and these were eagerly snapped up.

The meeting began with general business including notices of a sale of Meccanoids and Space 2501 Sets in Australia, an invitation to be involved in the Scout Jamboree in Masterton next January, and initial notice of a Models and Hobbies Expo to be held in July in Lower Hutt. No support was forthcoming for the Jamboree, due mainly to the time commitment required, but four members showed interest in the exhibition. There was also some discussion on the possibility of a joint subscription by several members to "Constructor Quarterly", and some thoughts on the 2001 Convention.

The meeting moved onto the business of the AGM. The president gave a verbal report, noting the year's highlights of the Club's 21st birthday in April, the visits by William Irwin of Capetown and John Jenkins of America, the Expo Exhibition, the Christmas Dinner and the February Model competition. Three members were thanked for hosting meetings at their homes. There had been 52 showings of models during the year, and an average of 9.5 members had attended each meeting (the president was probably the one who was only half there!)

The treasurer reported the healthy state of the Club finances, with the main income being from our participation in the Models and Hobbies Expo. The expenditure was the donation for hall hire and the prizes for the model competition. It was intended that the sale of parts would continue to add to the bank account to build it up towards the 2001 event.

The election of officers resulted in the

following:

President:	Simon Moody
Vice President:	Lou Nichols
Treasurer:	Don Flowers
Newsletter:	Bryan Jones
Tea Person:	Mike Highley
Model Judging Cttee:	Simon Moody, Tim Moody, Brian Peterson, Lou Nichols

The May meeting was attended by ten members, with two apologies. Simon Moody displayed the laminated poster showing the prototype for his present crane project, and two members brought models.

Brian Peterson brought a miniature model which he described as an "A30" motor. It had been "souped up" somewhat by the addition of twin SU carburetors and a set of extractors on the exhaust manifold. Other details modelled were the rotating fan, a set of spark plugs, generator, starter motor and oil filler.

Mike Highley brought a model of an Army Vehicle (as described in the No 4 Manual from which it came). The design resembled the distinctive shape of a Landrover body.

Members were encouraged to get started on models to be ready for exhibitions planned and possible later in the year. The date for the June meeting was brought forward one week to the 29th May to accommodate a visit by Paul Dale from Australia.

The remainder of the meeting was devoted to discussion on the 2001 Convention. Lou Nichols had created a summary of ideas which had been presented over the last two years, and time was spent expanding on these and further suggestions. Simon reported that the booking for the proposed venue had been updated and confirmed, although final prices were not yet available. Members were asked to consider the various jobs to be done and to take responsibility for one each.

BITS AND PIECES

From LLoyd Spackman

SOME QUOTATIONS:

1. Those who cannot remember the past are condemned to repeat it.
(Anonymous)
2. The problem with being unemployed is that you NEVER get a day off. (Alan Cameron in the Chartered Accountants Journal of NZ)
3. Meccano is, and always has been, about building.
(Geoff Brown in Newsmag77)

ROBBIE COLTRANE SAYS:

It would be difficult to make a film about engineering without mentioning Meccano and Robbie Coultrane was no exception. In the first of his series "Coultranes Planes and Automobiles" he described re-assembling the pistons and wheels of a steam locomotive in Zambia as being like putting together a huge Meccano model.

TWEAK, TWEAK

Keith Cameron has added a new phrase to our meccano vocabulary. Take a model by another designer and insert, inject or input your own modifications which will, you believe, improve it visually or mechanically. That is "tweaking". Like Mike Stuart and I did to the drive on Keith's famous Penguin Staircase. Mike tweaked Keith's drive, and I tweaked Mike's. Rarely do we build a model exactly as it is in Newsmag or CQ or the manual, or whatever.

Thanks Keith for your inspiration. And while on the subject, the good news, in Canadian Meccanotes, is that Keith is recovering well from his operation.

Dr ECN GRAY

I was sorry to read in our last issue of the death of Dr Gray.

Bill Watt and he were good friends and corresponded regularly. I remember how pleased Bill was

whenever he heard from "Gin" Gray. Our issue of August 1994 included an article and photos by him on Derick Strickland's oversize parts. Judging by that story, Dr Gray (although he was apparently one of our "Lone Wolf" members) was an extremely competent Meccano modeler. It is pertinent to quote here something Anne Coles (editor of Newsmag) said to me once;

"It is interesting how many doctors are involved with Meccano. I suppose because it is a hobby which can promote healing and relaxation - except when a model just doesn't fit together by midnight before a major exhibition! Or the contributions for the next newsletter don't arrive in time".

FROM KEITH CAMERON;

I entirely agree with Lloyd's adverse reaction to the latest Meccano sets from France. The only excuse for these one model sets is the hope that these modern, up to date models will attract new customers. But as Lloyd rightly points out, this will backfire when the younger builder soon tires of the model and wonders what to do next. In the old system, he had a manual that presented him with many choices, and even enticed him to buy auxiliary sets so that he could have enough parts to build larger and more interesting models. That policy certainly hooked me, as it did many others.

I greatly enjoyed the coverage of the magazine articles and the very amusing billboards on the cover of the April issue and on page 16. I took the liberty of sending copies of these to Robin Johnson thinking he might want to reproduce them in CQ,

It is with regret that we announce the death of Charlie Roth of the Johannesburg Meccano Hobbyists.

We extend our condolences to Charlie's family.

CHRISTCHURCH MECCANO CLUB

From Ian Torrens

APRIL MEETING REPORT

There were 14 members present and 10 models on display.

DAVID LANG,

brought a motor chassis about 12" wide, 15" long and 6" high. This had two electric motors to drive it, a forward and reverse gearbox and ran on 3" pulleys with tyres. Steering and forward and reverse was controlled by a model airplane type of remote control box. This functioned extremely well and the model was maneuvered around the floor in great style. Good work by David.

CAMERON McFARLANE,

showed us his clockwork Whirligig. This has 4 posts, vertical to man angle girder square frame, and a weighted cord wraps itself around each post in turn. When it unwraps itself from one post it moves on to the next. It will continue thus for about 1½ hours on one winding of the motor. Quite an interesting model which can hold your interest for quite a while.

CHRIS THOMPSON,

arrived with a gearless steering system which was very solidly built, worked very smoothly and is designed for a heavy duty truck. We hope the truck comes along latter. (as a builder of heavy trucks I would be interested in this design myself - any chance of details to publish in the magazine ed)

PETER KING,

had some red and green Meccano parts for sale which all went very quickly. He also had a very unusual Airplane / Rocketship set which he thought was a Dan Dare set and was possibly dated 1950's. The colourfull manual with it was missing the front page so it could not be precisely Titled or Dated. A prominent part was a white fuselage, about 3" diameter and 12" long. Red plating formed the wing, tail and other sections for various models. A very interesting set.

MURRY and RICHARD COTTIER,

tabled 3 small models from the pocket Meccano series. These were, a tractor, a 4 wheel motorcycle and a speedway racing car. These looked very good and presented a nice display

PETER GIBSON,

showed us his Steeltec Harley Davidson Motorcycle, similar to Graham's model of the March meeting. These look very well with the windscreen, saddle bags and luggage case. The Harley Davidson transfer on the petrol tank made a nice finishing touch. These are a tricky model to build but look great when finished.

IAN TORRENS,

had 2 models with him. He brought the articulated lorry once again, and a grasshopper oil pump. This is the Canadian Meccanomans Modelplan No 13 June 1989 by Norm LaCroix. This model is 30" long, 12" wide and 24" high and is driven by a powerdrive motor and further gears to give a reduction of 576 to 1, driving the pump shaft at 11 strokes a minute. This model has large rotating counterweights at the engine housing and drives the nodding gooseneck arm thus powering the pump shaft which goes several hundred feet down the well to the actual pump. This delivers about 2 to 4 gallons per stroke to the fuel line. Later I will send a photo for the magazine.

The evening finished with supper prepared by Mr and Mrs Pluck whose effort is appreciated by all.

Our May 1998 meeting was a small one, with only 9 members present but a good selection of models were on display, a total of 18.

JOHN HAMLYN,

has been busy with a cargo ship which he bought along. This is 4'6" long and sits on a Meccano stand 15" in length and 12" high. It is a full hull model (most ship models are waterline depth only) and has a keel bulge which will take the propeller shaft later on. The hull is about 8" wide and 12" deep. About 80, 2½" x 2½" flexible plates are used to shape the hull, as well as many flexible plates of other sizes. It is a fine looking hull and John intends to have working hatches and cranes, I am sure it will be a great model when finished.

DAVID LITTLEFAR,

showed us his large articulated van. This was MW Modelplan No99, a 10 set model, and is about 5' long, 15" high and 8" wide. It is a 12 wheel model with 6 on the power unit and 6 on the van section. The power unit has a tilting cab

giving access to the engine and gearbox (not yet finished) which is only two speed at present. There are 6 hinged doors on the model, two on the power unit, two on the right side and two at the rear of the van unit. A most impressive model.

GRAHAM O'NEIL,

arrived with the models he showed at the Sefton display on 12/4/98 (report next page-ed) including his Meccanograph and horizontal steam engine. He had 16 models in all.

A discussion on ships and shipping followed, bought on by John Hamlyn's cargo ship, followed by some thoughts on the NZFMM, with abbreviations and acronyms being mentioned. This discussion continued till Mr and Mrs Pluck presented us with supper. This was enjoyed by all. After which the meeting finished.

Ian has sent me a list of abbreviations and acronyms that will be published in the next issue - ed.

ASHLEY MECCANO DISPLAY

From Ian Torrens

This display, mentioned in our Club report for 6/4/98, was held at the Sefton Domain and is correctly titled "The Kowai Sports and Gala Day" and is held under the auspices of the Kowai Athletic Sports Club. This is their 90th Annual Show. Sefton is a very pleasant village, 26 miles North of Christchurch, near Ashley and not far from Rangoria.

Doug King, Graham O'Neil and Ian Torrens manned the three large trestle tables that made up the display. We had 23 models between us including 3 plastic junior Meccano models. A steady stream of people came to the Meccano stand and a great deal of interest was shown by all. Most of the day we had 10 - 12 people at the stand and as one group left, another took their place, this continued for most of the day.

Doug Kings piledriver / drophammer was

most attractive to the public. It was driven by a Meccano live steam engine and operated very well.

Graham O'Neil took 16 models which made a very good display. He had airplanes, motorcycles a ship etc. His rotating unit using circular Meccano parts looked good. Graham had the three plastic models which parents found interesting for the children, along with a good deal of literature for perusal by all.

Ian Torrens took six models which were, the oil well pump and articulated lorry as per our April meeting along with motorcycles and airplanes. Ian also had the control cabin of the SML10 Gantry Crane, and the south facing chariot which generated a lot of interest. Altogether we were quite pleased with the way our display was received. It was an overcast but warm day and it

was very pleasant to be at the gala. Other activities included, helicopter rides, horse riding, a display of farm machinery including a full size live steam engine which looked great as it steamed along. There was cycle racing, sheep

shearing with blades, wood chopping and much more. Packing up time was at 1530hrs and then on the way home after a very good day enjoyed by all.

AUCKLAND MECCANO CLUB

From Peter Hancock

Meeting held at Peter and Jan's home at Howick on Saturday 9th May

Models shown:

David Wall:

displayed and demonstrated the power of his "Tractor" built using a blue No2 clockwork motor as the main chassis. This model was complete with a traditional differential, a two speed transmission, well designed steering and power takeoff. As always David had completed the model with intricate detail. He proudly calls it the "Ovenden Thrasher".

This name was coined from the friendly competition that exists between David and George as to who has the most powerful model.

Unfortunately the eagerly awaited "power pull" could not take place as George has re-powered his Truck Tractor unit with an electric motor since the last meeting.

George Ovenden:

displayed a race car built using yellow and silver parts. The car was modeled using a Bert Love design from 1978.

George's second model was his electrically powered Truck Tractor unit completed in yellow and black livery and this was based on a model displayed in the 1990 No6 manual but extensively modified.

Neil Carey:

displayed and demonstrated a powered "Bogey Unit" from his new creation which, when completed will be a large scale model of an "N" and 1929 type Auckland Transport Board Tram Car.

Neil says this model will be completed in time for the 1999 Auckland Convention

The model is being built using green and red

parts and is based on a "Stoker" model plan drawn some years ago by Bob Stevens of Auckland.

Bruce Haines:

showed off his latest creation which is a model bus, largely built from parts that Bruce has made himself.

Bruce had borrowed some very old Meccano Magazines of the 1920 era with the youngest being a January 1930 edition. The magazines are well used and care was taken as members reviewed their contents.

Peter Hancock: showed his latest model which was a fighter aircraft built based on the model plan displayed in the 1990 No6 set.

He had on display a number of articles which had been downloaded from the Internet from the Meccano home page (Meccano net) Canada the previous evening.

(<http://www.freenet.edmonton.ab.ca/meccano/>)

It was noted that there is now a large amount of information available from this source. During the meeting the International members e-mail address list came in for a good deal of scrutiny along with the "Hints and Suggestions" and "Geoff's Jottings"

Finally the meeting spent some time discussing and planning the Auckland Clubs stand at the forthcoming "ModelX" hobby show which will be held over Queens Birthday weekend in Henderson and then, discussing the arrangements as they currently stand for the 1999 Meccano Convention to be held in Pakuranga Auckland.

An excellent afternoon tea had been assembled and was enjoyed by all, with sincere thanks to Peter and Jan for their hospitality.

FROM THE PRESIDENT'S DESK

Just a brief note to thank the MWT members for hosting such a happy Meccano occasion. It was great to meet up with old and valued friends. I refer of course to "our" 20th birthday celebration held in Wanganui on the 28th March. George Ovenden and I and our two girls thoroughly enjoyed ourselves.

The absence of formal competition between members made a very relaxed atmosphere. I also wish to remind members that I will be stepping down from the Federation Presidency during the Auckland Convention next year. Now is the time to think of a replacement.

Finally Mr Editor thanks for another enjoyable issue of "our" magazine.

Kindest regards to all
David Wall

PS.

No we will not need long extension leads to run models at our Auckland Convention, the power crisis is now over. However better pack a few batteries just to be on the safe side.

THE SPACE SETS

From Keith Cameron

I recently bought the X-PLODER with the intention of using it to show how limit switches work. This is for a series of articles for CQ on the subject "Meccano and Electricity" directed at those who are "afraid of volts and amps" I fitted two microswitches along with two diodes so that the motor automatically shuts off at either end of the travel of the long screwed rod. Critical though one is of the series, one has to admit that the models are well designed and have an appeal. New parts are introduced, such as the 2½" gear with threaded boss.

And an assortment of parts come out in

new colours such as fluorescent orange.

This multiplying of colour finishes, however, could be a problem when one takes apart the model and tries to incorporate the parts into an entirely different model, possibly producing a patchwork effect.

Pity the poor designer at Meccano headquarters trying to design models that will appeal to a wide range of potential buyers, and yet be financially viable. None of these new sets listed on page 9 of the April issue have yet appeared in our area.

MECCANO PART MODIFICATION

From Donald Redmond, Canada.

As one of my own specialties appears in CMN as the "Mutilators Corner", I was interested in George Ovenden's suggestion (page 17 April issue) of extra holes in a semicircular plate (pNo214). I had a somewhat similar suggestion in my "Mutilators Corner" some time ago, and this is a nice addition to those ideas. However, it might be noticed that a SLIGHTLY similar

end can be obtained by using two pNo77 1" triangular plates. The problem involved with that, is that the 4 hole parts are not quite at full 1 hole spacing from the 5 hole parts. To ensure that spacing when using a semicircular plate, the 4 hole part used as a jig should be butted carefully against the end of the 5 hole part, or a strip bolted to the straight edge of the pNo214.

IN THE PURSUIT OF EXCELLENCE.

The passing of Dr. E.C.N. Gray of New Plymouth, (Gin Gray) to most who knew him, will be sadly missed by the older members of the W.M.T. Meccano Club of which he was a member for some years.

He purchased sets for his family and the interest in Meccano seems to have grown from this contact with the families sets. In 1981 he joined the N.Z. Federation of Meccano Model Builders and has remained a member ever since, right up until the time of



his death. In passing, he achieved what Frank Hornby, the inventor of Meccano, spent a life-time trying to master, Perpetual Motion, where the output is greater than the input, or where something continues to increase in velocity with no increase in power input. Dr. Gray spent 15 years perfecting a mechanism known as a TORQUE AMPLIFIER, we have all heard of Torque Converters Torque Inverters but seldom Torque Amplifiers. The C.Q. Magazine June 1993, page 53 gives Dr. Gray the recognition that we have failed to do in this country. Only one other

Inventor has ever achieved the success of being able to obtain more output energy than what was passed or fed into machine of any type. Dr. Gray removed the Gearbox common to most forms of propulsion and has given us the most amazing speed control system for a wheeled machine together with a most sig-

nificant steering and speed or traction control system that overseas design engineers have ever seen. The principle of the Mechanism is

clearly illustrated in the diagram supplied and we as a Club had it demonstrated to us at one of Club meetings.

Over the last year during failing health he spent much of his time building a Radio Controlled Army Tank, very detailed and incorporating many special design features.

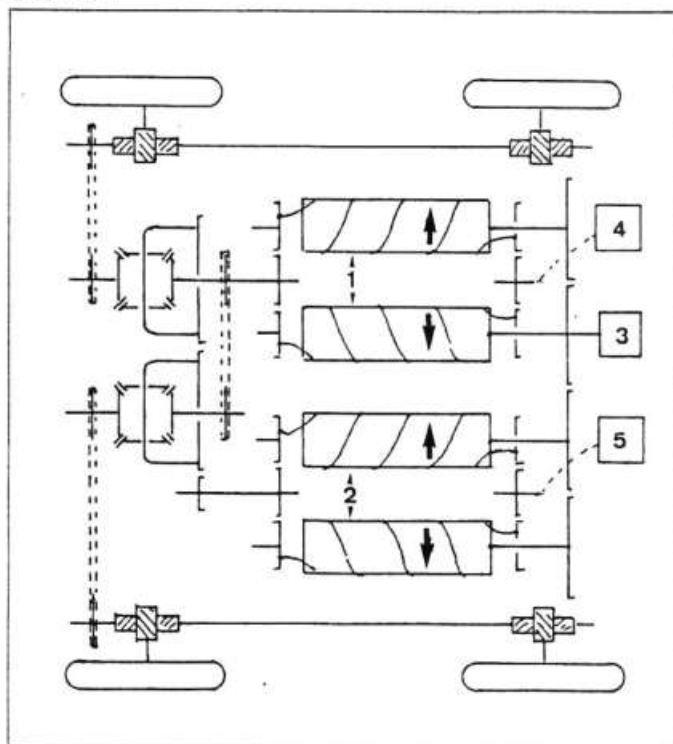
To some Dr. Gray was a very shy man, a Lt.Colonel in the Army, always interested in Military Vehicals, particularly Tanks and Armoured Cars and their propulsion.

Some thought him a little unusual in his ideas but we now know that he was not speaking on our wavelenght but was trying to present to us at M.W.T. a concept that was entirely new to the world at large.

We have certainly lost a very special Engineer, Army Officer and Medical Doctor and our thoughts are with his family at this time and perhaps one of our Federation members would like to carry on the developement of Dr. Gray's famous TORQUE AMPLIFIER to the production stage.

See the Special note in the current MECCANO AUCTION.

Lindsay Bond STRATFORD.



Torque Amplifiers in a skid-turned vehicle

WALTER ASHBURN

320 Napier Street, Bendigo

TELEPHONE ~~XXXXXX~~ 03 544 32579

VICTORIA, 3550

PRICE LIST OF REPLICA MECCANO PARTS MADE BY WALTER ASHBURN

Meccano Part No.	Description	Colour	Price per each
1	Perforated Strip 12 1/2"	Green/Red/Ylow	\$1.00
1a	9 1/2"		.90
1b	7 1/2"		.70
2	5 1/2"		.50
2a	4 1/2"		.50
3	3 1/2"		.40
4	3 "		.40
5	2 1/2"		.35
6	2 "		.35
6a	1 1/2"		.35
7	Angle Girder 24 1/2"	Green/Yellow	\$5.00
7a	18 1/2"		3.75
8	12 1/2"		2.20
8a	9 1/2"		1.60
8b	7 1/2"		1.40
9	5 1/2"		1.00
9a	4 1/2"		.90
9b	3 1/2"		.90
9c	3 "		.80
9d	2 1/2"		.70
9e	2 "		.60
9f	1 1/2"		.50
103l	Flat Girder 24 1/2"	Green/Yellow	\$4.00
103m	18 1/2"		3.00
103	5 1/2"		.90
103a	9 1/2"		1.40
103b	12 1/2"		1.70
103c	4 1/2"		.80
103d	3 1/2"		.70
103e	3 "		.60
103f	2 1/2"		.60
103g	2 "		.50
103h	1 1/2"		.50
103k	7 1/2"		1.20

FLAT PLATES

52a	5 1/2 x 3 1/2	Red/Yellow	\$2.20
53a	4 1/2 x 2 1/2		1.50
70	5 1/2 x 2 1/2		1.90
72	2 1/2 x 2 1/2		1.30
73	3 x 1 1/2		.75
74	1 1/2 x 1 1/2		.70

STRIP PLATES

195	7 1/2 x 2 1/2	Red/Yellow	\$2.00
196	9 1/2 x 2 1/2		2.00
197	12 1/2 x 2 1/2		2.50
197b	12 1/2 x 1 1/2		2.00

This Price List was compiled and printed on 20th January 1997.
E.& O.E.

MECCANO AND ASSOCIATED PARTS AUCTION , NO. 2.
THE LATE DR. GRAY,S COLLECTION.

LOT NO.1.... RADIO CONTROLLED ARMY TANK.

- (a) FUTABA Digital Proportional RaDIO Control System.
5 Channel Transmitter, never been used, with Servo,s
The best system made . Est. \$300..
- (b) Partly completed Tank with servo,s ,motor drives,
Turret turning mechanism and other parts, home-
built track, phoyo available. Est. \$300.
- (c) 7 x 1700 scr Racing Pack Rechargeable , 7.2 volt
1700 ma/h. Batteries , new. Est. \$280.
- (d) Special Battery Charger for the above batteries with
Fast Charge etc. Est. \$60.
- (e) 9 x Motors new Off - roader type , to operate with
above batteries, very powerful, and expensive,
Est. \$270.

A real Bonus start into the Radio Control of Meccano Models.

Estimate of total \$1000.

LOT NO.2...., REMOTE CONTROL, SPEED AND DIRECTION.

- (a) 4 x COMO - DRIVE Motors complete with spare gear-box
UNITS (stacked gear boxes).
- (b) JOY - STICK UNIT, 4 POSITION and speed cotrol.
- (c) Electronic Unit , Direction and Speed Control,
to increase current supplied to motors, 12v.D.C. Max.

Expensive to make and a joy to operate,perfect control.
Cost over \$600 to manufacture , plus motors, Est. \$400.

LOT NO. 3.... THE GREAT TORQUE AMPLIFIER.

WRITTEN DETAILS OF RESEACH DONE BY DR. Gray over 15 years.
Acknowledged overseas , C.Q. Magazine, June 1993, Page 53.
Package contains allthe Mechanisms that remain, years of research.
Needs someone to continue the invention, could have a very bright
rewarding future. Includes Gearboxes, Amplifiers, a good selec-
tion of parts. I want this to go to a good home and will be
selective.. My estimate \$300.

LOT NO. 4.... LARGE SHAFT PARTS.

Includes. Large shaft rods of all different lengths, note, some
are bushed to take standard Meccano Axles through the centre.
A very selection of Brassware to suit the same ,Couplings ,Bearings,
with Ball Races , Sprocket Gears, Screwed Rods & fittings,
Very expensive collection ex Frizinghall,s U.K. Low Estimte \$400.

LOT NO.5.... STOKYS SWISS MECCANO LOOK A LIKE.

Compatible with Meccano, Parts in Aluminium about 500 separate
parts,hardly used, some still wrapped, strips , girders, plates,
gears, no nuts and bolts. Cost price about \$1000. Est. \$500.

Above are ESTIMATES only, I have been told to sell, so forward
your bids in writing to Lindsay Bond, C/- Lindsay Bond
Electronics, Regan Street, Straford, Phone 06 765 5008 Bus.

Bids Close on the last day of June 1998. Thank you.

SEE FURTHER AUCTION LOTS LAST PAGE.

COMMING EVENTS

MEETING ADDRESS:

WMC:
ST LUKES CHURCH HALL
55 PITT STREET
WADESTOWN

MWT:
ST LUKES CHURCH HALL
CORNFOOT ST
WANGANUI

CMC:
ST JOHNS HALL
FERRY ROAD
WOOLSTON

JUNE 1998

NO WMC MEETING IN JUNE

5th ST CMC - ST JOHNS HALL

JULY 1998

3rd WMC - ST LUKES HALL

3rd CMC - ST JOHNS HALL

AUGUST 1998

7th WMC - ST LUKES HALL

7th CMC - ST JOHNS HALL

8th AMC - Neil Carey's
23 Eaton Rd
Hillsborough
Auckland

20th CLOSING DATE FOR AUGUST ISSUE

REPLICA PARTS SUPPLIERS

SIMON MOODY
BLUE MOUNTAINS ROAD
UPPER HUTT

BRASS PARTS

BRUCE GEANGE
4 WINCHESTER ST
PALMERSTON NORTH

NARROW STRIPS
STRIP PLATES

PETER KING
P.O. BOX 2753
CHRISTCHURCH

HELICAL GEARS

WANTED:

6 ashtray type tyres as made in Christchurch
some years ago.

Marked "GOODYEAR" SUPER ROAD LUG

FOR SALE:

Infered control system from construction
vehicle set

Contact; Don FLOWERS
90 Holborn Drive
Stokes Valley

Phone (04)5638 - 008

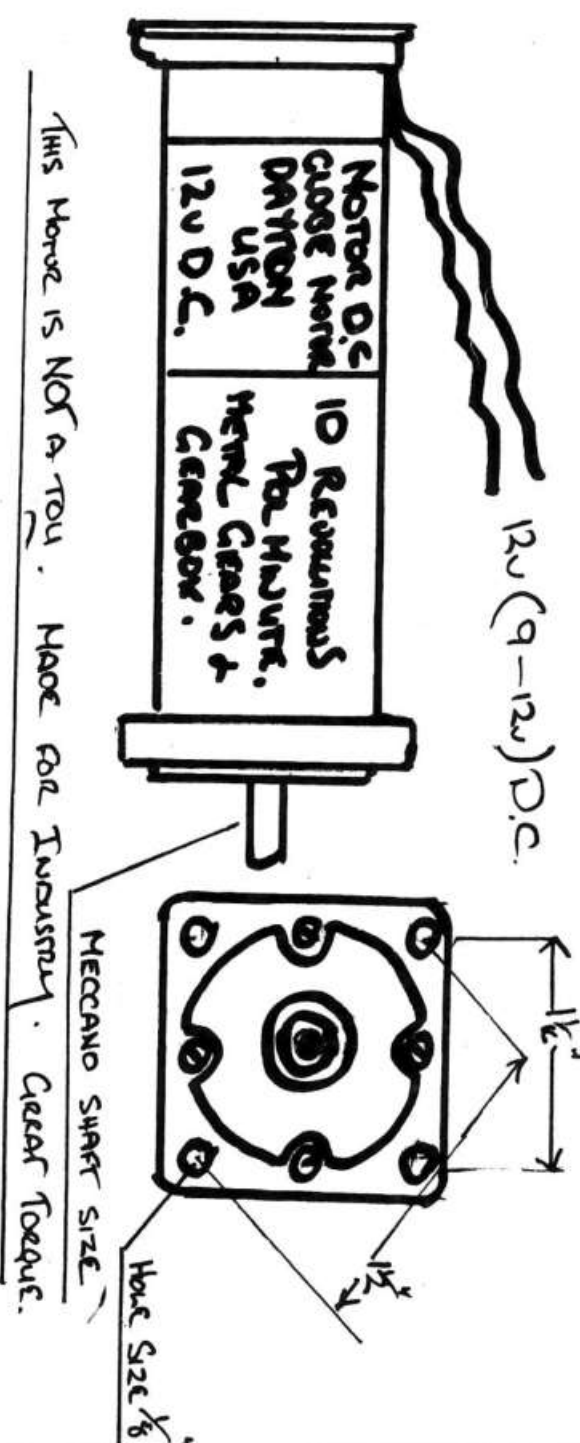
**if you have anything Meccano,
Dinky or Hornby that you wish
to sell or buy, this space can be
your's for no charge!!!
Send your advert to the editor**

MECCANO

MECCANO NEWS AND THINGS NEW FOR THIS MONTH.

REMEMBER THE AUCKLAND MECCANO EXHIBITION, EASTER 1999. Make that SUPER SUPER MODEL, but short of reliable motors, we now have the answer..... 12volt low current, reversing, and very powerful, we have turned down the shaft to Meccano size and all for only \$25 each, buy the four you will need to make any crane and we will forward freight free, N.Z..

EXACT SIZE OF THE MOTOR.



... Also this month I have re-produced the very rare Meccano Cardboard Part No. 135 or the Model No. K25 Theodolite, Protractor and Divided Circle. Both types included for \$6 Postage Paid.

Good Meccano Stocks Still Available from our shop also parts for those that call.

Continuation of Meccano Auction No.2.

LOT NO. 6...

Power Supply ZURICH Regulated Protected, 13.8 volt, 7-9 amp New Price \$200+ Estimate \$150.

LOT NO. 7...

Power Supply VICOM Regulated Protected, 13.8 volt, 6 amp. The best of the best. New Price \$200+ Est. \$150.

LOT. NO. 8...

Box of old painted Nickel Parts Wants stripping and replating or painting, Strips, Girders, Braced Girders, No Brass or Nuts and bolts, very heavy. Should be viewed first. Cost \$100 15 years ago. Est. Surely still worth \$100.

Lindsay Bond Electronics,
Regan Street,
STRATFORD.

Phone. / Fax 06 765 5008.
Home 06 765 5665.

MECCANO