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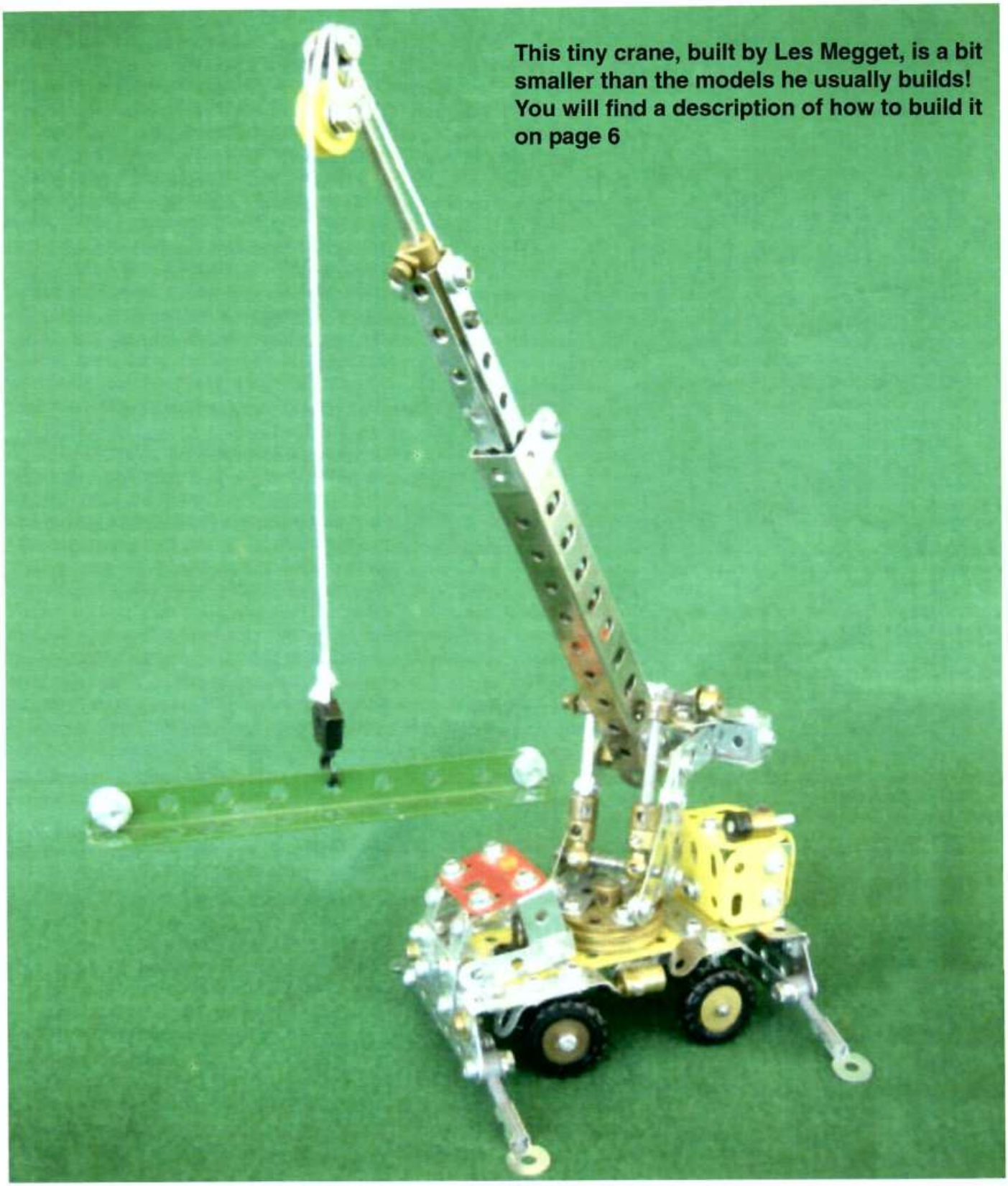

This tiny crane, built by Les Megget, is a bit smaller than the models he usually builds! You will find a description of how to build it on page 6

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NZ Federation of Meccano Modellers Magazine

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

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Some Words from Your New Editor

Well if you had told me a few months ago that I would be sitting in this Editorial chair in January 2008, I wouldn't have believed you. Bruce will be an extremely difficult act to follow, as they say, but someone had to put their hand up and as I've recently retired from full employment it seemed a good time to get more involved.

A little of my history wouldn't go amiss here: I was born in Wellington after WW2 and received my first Meccano set (a new No.6) on my 6th birthday in 1952, lucky me. Several other new sets and accessory sets were received for subsequent birthdays and Christmas, but never larger than 6A. Probably the larger sets weren't available in Wellington during the mid 50s? I remember getting 12 yellow boxes of spare parts on my 12th birthday; my parents must have liked the "symmetry" of that. I had a MM subscription for several years but the 6+ weeks of waiting for issues to arrive (by sea mail) was painful. During 5 years at Wellington College the attraction of Meccano waned and the usual things like girls, cars, sports and academic endeavour took over. However Meccano had certainly pushed me towards engineering and I competed a BE degree at Canterbury University in 1968 in Civil Engineering, which my father said would pay more than mechanical engineering (my real love) and be more varied. I'm still not convinced about that.

I began my professional career with the Ministry of Works (MOW) in their Structural Design division, where I helped design several of the larger government buildings within NZ. I completed an ME degree at Canterbury followed by a UNESCO Fellowship in Tokyo for one year studying the seismic design of buildings. The most exciting building I designed on my return was the William Clayton building, a 4-storey structure in Wellington founded on 80 lead-rubber seismic isolator bearings, the first such office building in the world. This was as close as I got to mechanical engineering while with the MOW but I did learn a lot about the dynamic response of structures.

After another 4 years with the Ministry of Works & Development, as it then was, I became an academic at the new School of Architecture at Victoria University in Wellington teaching structural design to architects (not an easy task!). I completed 9 years there before moving the family to Auckland University where I have lectured in structural design in the Civil Engineering Dept. for the last 21 years. My main research interest has been the seismic design of reinforced concrete joints (no nuts and bolts there). I've always seen myself as a structural design engineer and definitely not an academic in an ivory tower.

(continued on page 3)

Contents

For many years I have been collecting Märklin trains (OO/HO scale), after having the obligatory 0-4-0 Hornby O gauge wind-up set, but one day I was searching for some loco when I spied my old Meccano cabinet buried under a pile of train things in my train room. My son had earlier built ONE Meccano model (a motor bike) but then went back to button pushing, either electronic games or computers.

The older Märklin trains (c1935) had become far too expensive (for me) to collect so the Meccano was dragged downstairs and I first made the Outfit No. 10 Lifting Shovel (model 10.6). I had first constructed this model as a teenager with the parts I had, which was far off a Set 10 but I had enough of the correct parts and the E20R motor to make a good fist of it. Next I tried the small block-setting crane pictured in the November 1960 MM but with a different gearbox and lots of other modifications. During this period I was purchasing new and second hand parts and sets from a variety of worldwide sources. Many of these were parts I couldn't easily obtain new in the 50s and 60s.

About this time, June 2003, I went on my annual pilgrimage to the Model-X show at Waitakere where I got hooked again by the Auckland Guild display and Andrew Wells' display of new parts. I have always been interested in cranes and mobile ones especially. The Tadano truck-crane (2005 Convention) and the Grove rough terrain crane shown at last year's Convention followed. My main modelling interest is vehicular prototypes and the sets I buy are usually for parts to be used in such models. I'm not into mint or restored strung sets; I just can't see the point of having all those lovely parts not being used in models (as Frank designed them for) but I do realise that some of you are "collectors" and covet such sets.

My position of Editor will be fun if you out there continue to send in articles, reviews, comments and anything Meccano related. Without your contributions this wonderful Magazine will not survive.

OBITUARY
Joyce Blakeborough 1936 - 2007

On behalf of all the New Zealand Meccano fraternity I would like to offer our tribute to our friend Joyce who passed away on Sunday 11 November 2007 in her 72nd year. I had the privilege and pleasure of knowing Joyce for many years; she was a true friend to all who met her and was always pleased to welcome us into her home both in Wanganui and Wellington. Besides being a wonderful wife to Don and a mother to Phillip and Marie and a loving grandmother, she still had time to take an active interest in and support for whatever hobby was pursued, not the least our hobby of Meccano. She not only found time to give support and encouragement to family and friends but also to take an active interest in her local Anglican church and community. Joyce did not always enjoy good health, but she was able to somehow put her health problems to one side and have a positive outlook on life.

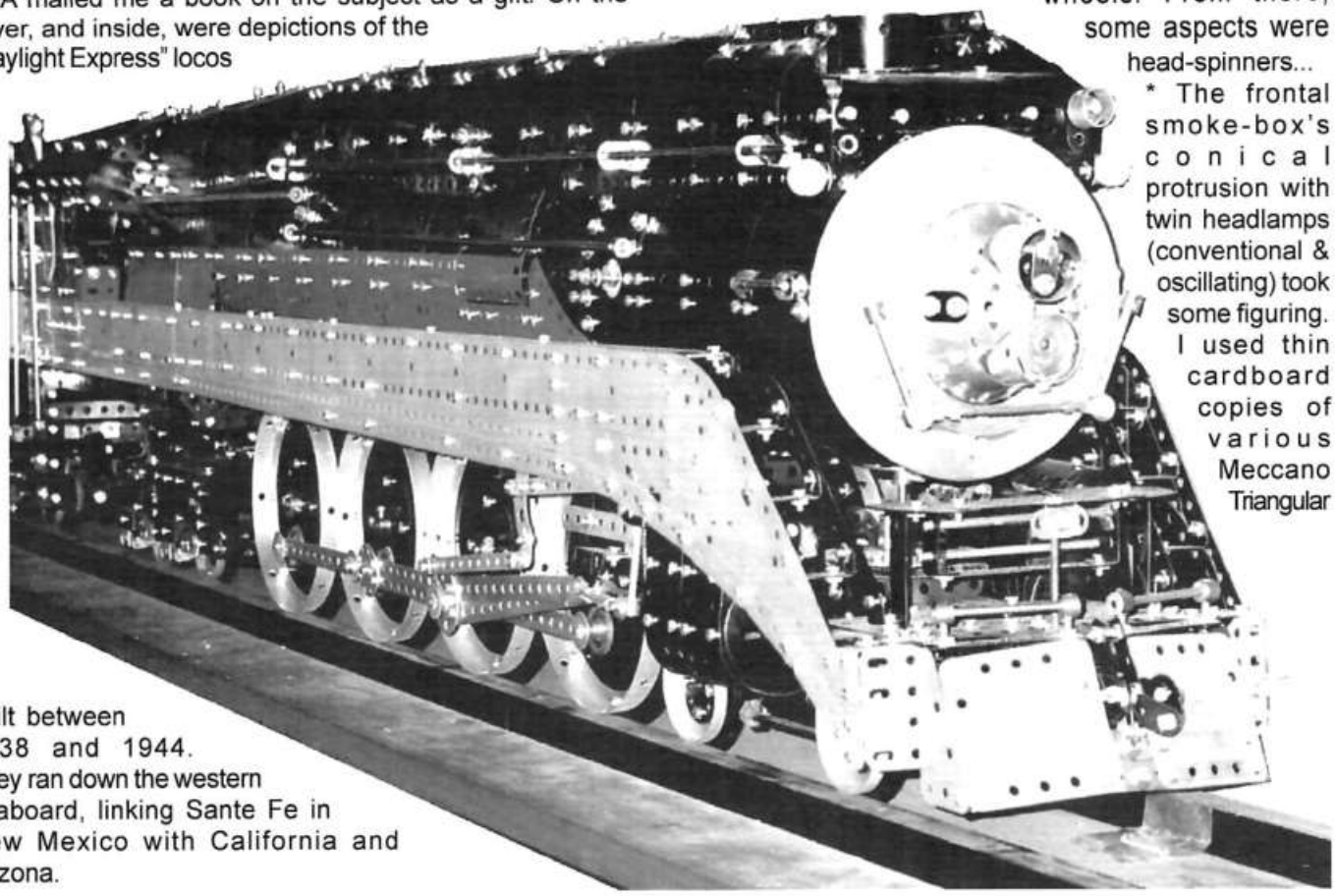
We will all miss you Joyce and it has been our privilege to have known you.

Lou Nichols

USA's Daylight Express Train The Object of Fascination

by Rob Campbell

Being entranced by steam locomotives since early childhood, my eyes lit up four years ago when friends in USA mailed me a book on the subject as a gift. On the cover, and inside, were depictions of the "Daylight Express" locos



built between 1938 and 1944. They ran down the western seaboard, linking Sante Fe in New Mexico with California and Arizona.

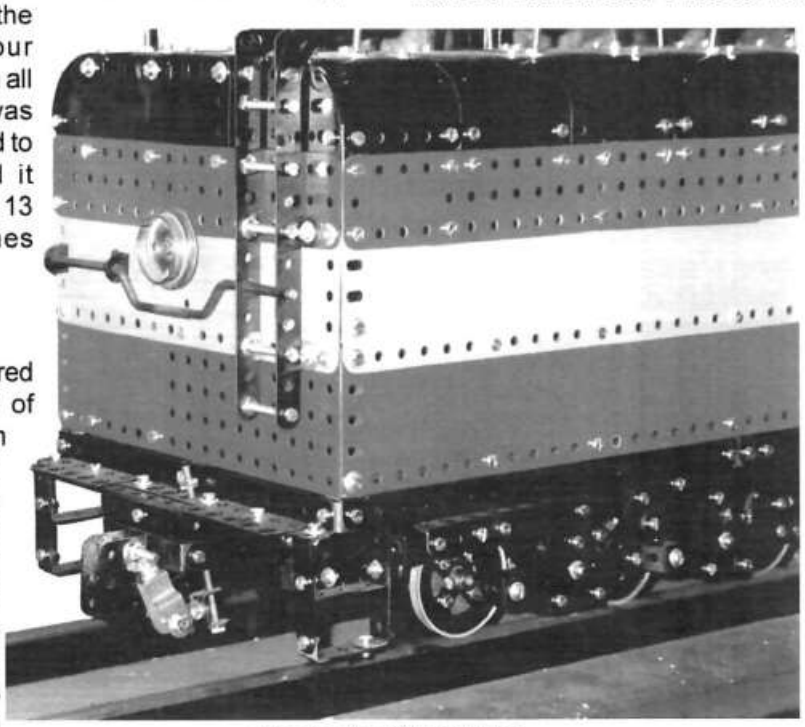
The Daylight Express was hauled by one of the world's most impressive 4-8-4 engines, semi streamlined with upper cowling and side-skirts, the black-orange-red colour scheme was duplicated on all passenger livery. This was one beautiful monster I had to build in Meccano. And it ended being 8+ feet long, 13 inches high and 8 inches wide.

The Building

By chance, I found a coloured side-elevation illustration of the Daylight Express in an American train magazine donated by a friend. This had been done by an art studio, and with USA still being imperial in measurements, its ratio related to feet, not metres. Quite by luck, this transferred easily to 6-inch Circular Plates and 5 1/2" Circular Girders for the driving wheels, and the remainder all carried on to my scale of 1:12.

I drew this in pencil to quarter size of Meccano, i.e. 1/4 inch to 1 inch of the model. It progressed like magic, starting with the loco chassis and linking the driving wheels. From there, some aspects were head-spinners...

* The frontal smoke-box's conical protrusion with twin headlamps (conventional & oscillating) took some figuring. I used thin cardboard copies of various Meccano Triangular Flexible Plates to achieve something reasonably genuine, with a 6-inch Circular Plate as frontal base.



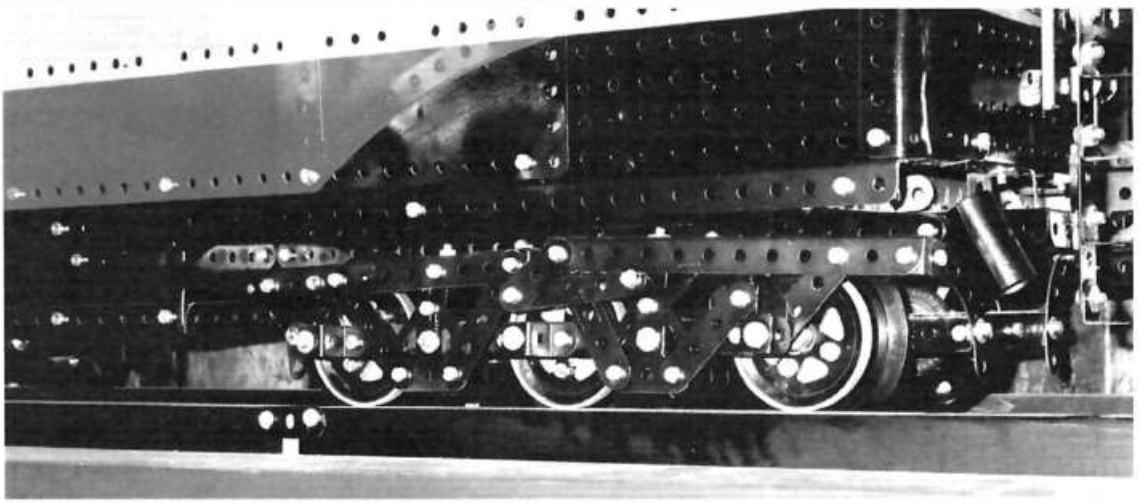
The back of the tender

* The tender's 6-wheel bogies with exterior hinged 'chassis' were a challenge, but I managed to mock them up, initially by experimenting with various Strips and Flat Trunnions, along the way discovering some weird geometrical link-ups which worked! This is one of the joys of entering unchartered territory with Meccano; the more you deviate, the more you discover.

* After the lower edge of the loco's orange side-skirts reached their forward/ downward slope was

difficult; the only solution was a string of short Strips and filling that frontal area needed an odd assortment of Flexible Triangular Plates.

* This loco was a pioneer of super-heated steam, and I can only guess that the bulge midway between rear firebox and front smoke-box is a hint of this with 'vortex effect. At that point of the boiler, I spread the two curving sides of the boiler at top outwards by a half-inch. At that point, the upper cowl covering rises at its lower edge where it meets the boiler sides. There are so many ways with this craft tool (not 'toy') to emulate authenticity. Another joy to explore.



The bogie at the front of the tender

Incidentals:

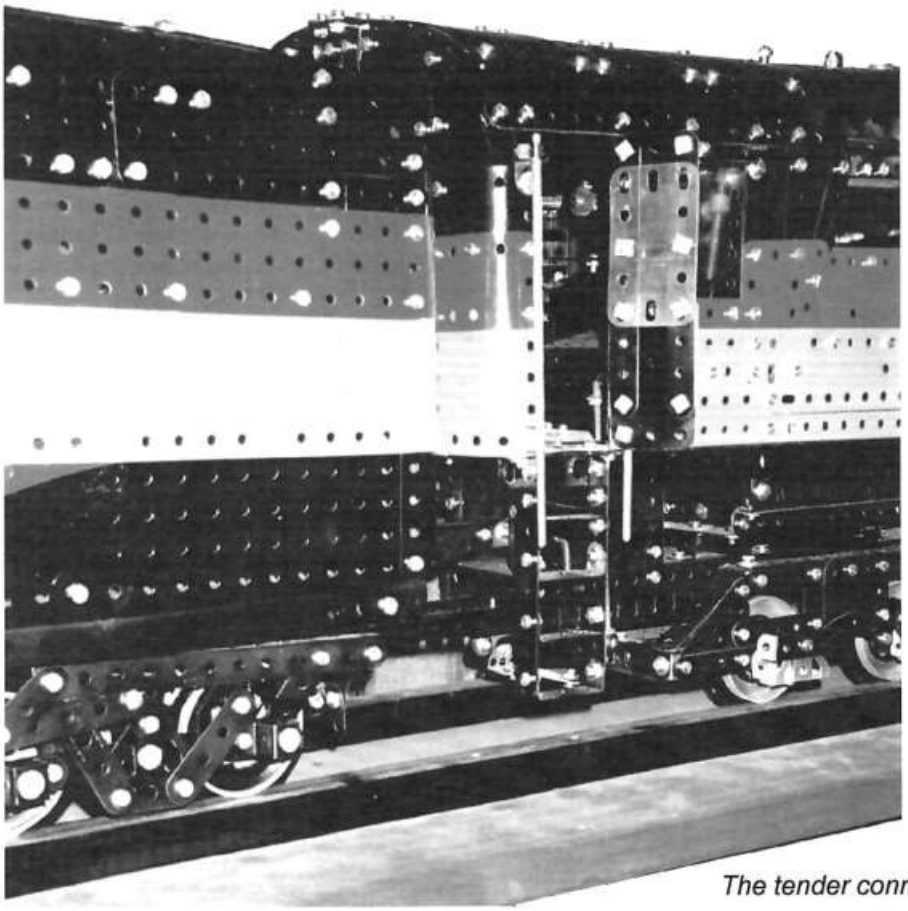
The 6-inch Circular Plates for driving wheels were expertly crafted by a hot rodder friend's dad, an engineer. The $5^{1}/_{2}$" Circular Girders attached to them for rims were from Australia via Wayne Blakely, an excellent product but they needed minuscule filing outwards of holes for bolts to fit.

I needed 20 bogie wheels in total, hence the only non-Meccano parts in this model. For correct scaling I needed $2^{1}/_{8}$" cups (P/N 137 Wheel Flange $2^{3}/_{16}$" diam.) which are not common. Through a friend in auto spares I purchased 20 engine-block 'frost plugs' which can burst out to avoid an engine-block fracturing in freezing conditions. These were drilled by the engineer mentioned above. Inner flanges were no problem.

No matter where you view or photograph this model from, most of its panels are wrinkly. It was crafted mostly from old and over-worn "Flexible" Plates which had lost their tensile ability and were impossible to panel beat. That only makes them swell or distort more. But what the hell! Its a loco, not a supersonic airplane model.

Everyone who enters my den for whatever occasion - young or old - either gender - is entranced by this early piece which represents Raymond Loewy's industrial art of American streamliner trains and stylish Studebakers. Yet that man didn't design this beauty; maybe it was what inspired him?

So, anyone can be entranced by this model. That's fitting, as I became entranced by both steam locos and Meccano as a small child. All power to the craft!



The tender connects to the locomotive cab

The Builder

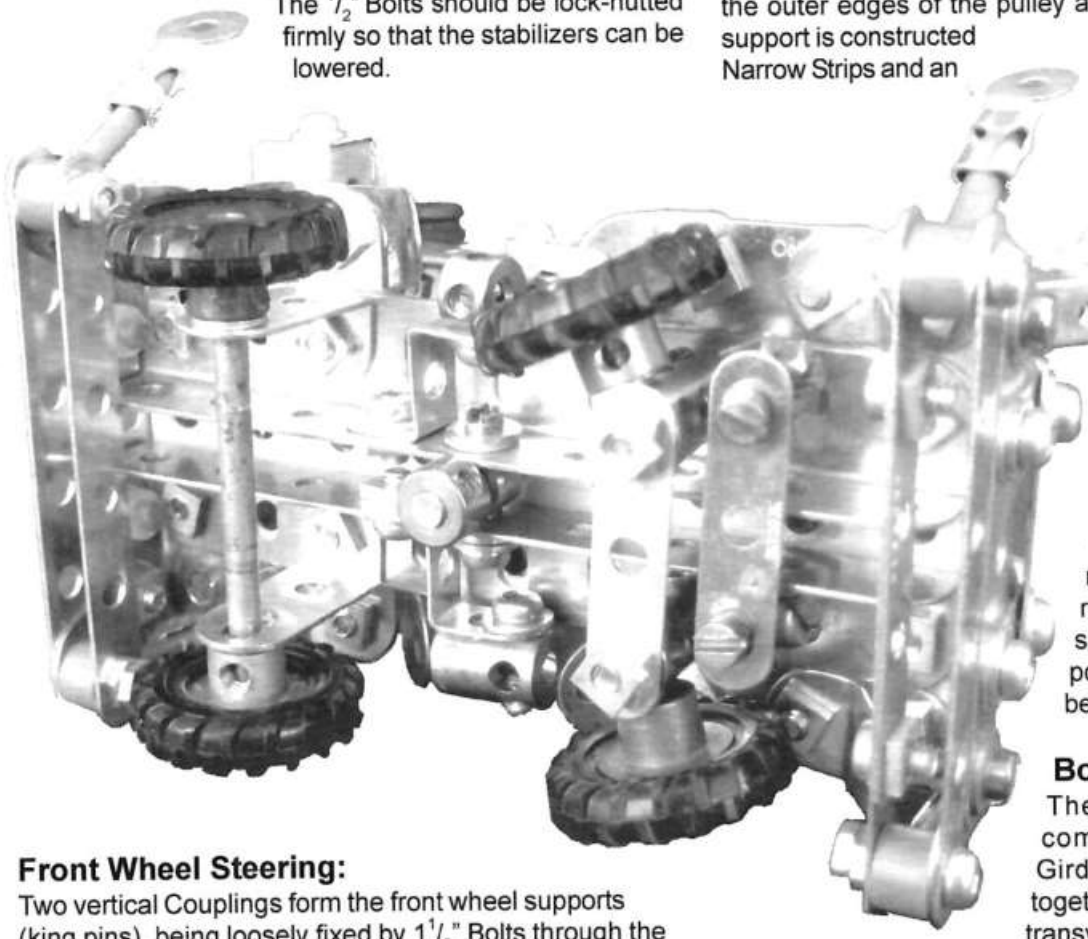
Lives in Red Beach, Hibiscus Coast, north of North Shore City, Auckland. Managing editor of NZ Hot Rod magazine for 37 years from inception in 1967 to 2004, since then semi retired as assistant editor to the publication. The photos of the model were taken by Rob.

Mini Grove Rough Terrain Crane

by Les Megget

I made this mini model prior to the 2007 Convention as a distraction (light relief) from the 1:8 scale model described in some detail in previous issues. It is not motorised but has plenty of play value and goes down well with the younger generation.

Construction is fairly simple and much should be obvious from the Figures. The chassis comprises two $4^1/_2$" Angle Girders, P/N 9a, bolted by their slotted holes to the floor pan, a 9 by 3-hole Flat Plate P/N 74d, and the front and rear bumpers, each being 5-hole Angle Girders. The front one is bolted by its slotted holes while the rear one is by its round holes. The front and rear stabilizers pivot on $^1/_2$" Bolts attached to angled Fish Plates fixed in their upper holes to the outer holes of the bumpers. Brass cheese-head bolts are used at the front to simulate the headlights. Also on the $^1/_2$" Bolts are 6-hole Narrow Strips forming the lower face of the bumpers. The stabilizers are plastic grey Mini Shock Absorber Pins (P/N 120e) with a slightly bent Rod & Strip Connector forming the loading pad. 6-hole Narrow Strips are positioned on the inner end of the $^1/_2$" Bolts to stabilize the stabilizer supports, see underside of crane, Figure 1. The $^1/_2$" Bolts should be lock-nutted firmly so that the stabilizers can be lowered.



Front Wheel Steering:

Two vertical Couplings form the front wheel supports (king pins), being loosely fixed by $1^1/_8$" Bolts through the outer third holes from the front. A 3-hole Narrow Strip joins the Couplings at the bottom. The long bolts are lock-nutted so that the Couplings can turn. A $^1/_2$" Bolt is screwed into the middle threaded cross-bore of each Coupling with a Collar on each. The steering cross-rod is another 3-hole Narrow Strip bolted to the Collars. The Stub Axles are $^1/_2$" Bolts carrying $^1/_2$" tyred Pulleys with Boss (P/N 23a), which are screwed tightly into the Coupling's lower cross-threaded bore.

Rear Wheels:

The similar rear rims and tyres are supported by 1" by $^1/_2$" Angle Brackets bolted to the chassis Angle Girders through the 3rd hole from the rear. The rear axle is a $2^1/_2$" Axle Rod. 4-wheel steering could be incorporated, like the prototype, but why complicate it?

Crane Slewing:

The slewing pivot axle is a $1^1/_2$" Axle Rod through the central hole of the 9 by 3 hole Plate. The lower bearing is an Aero Collar held by 2 Bolts through the vertical legs of the chassis rails. These bolts should have 2 Washers positioned outside the Angle Girders so that the crane pivot axle can rotate freely. A Collar on the bottom of the pivot axle stops the crane falling off the chassis. The top bearing is a Wheel Disc below a $1^1/_2$" Pulley without boss with a normal $1^1/_2$" Pulley (P/N 21) fixed to the pivot axle above that.

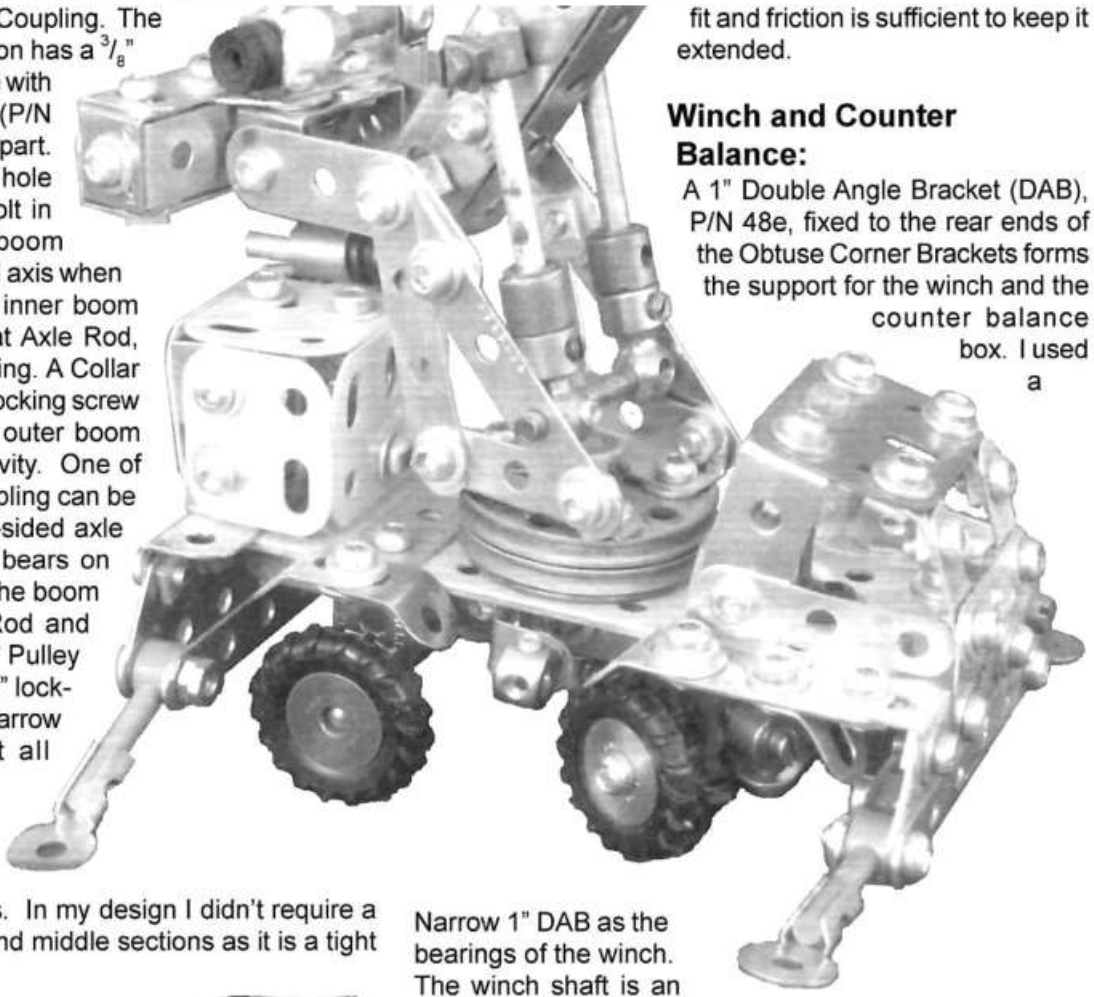
Boom Support:

The triangulated boom support has 3-hole Narrow Angle Girders bolted to the top $1^1/_2$" Pulley of the bearing with washers between these angle girders and the pulley so that the outer edges of the pulley aren't flattened. The boom support is constructed from a couple of 4-hole Narrow Strips and an 3 by 2-hole Obtuse Corner Bracket, P/N 133c on each side, see Figure 2 (and cover photo). The outer boom section pivots at the apex of the supporting triangles using a $1^1/_8$" Bolt screwed into 1 side of a Collar outside the boom while the right hand pivot is a normal Bolt (P/N 37b) screwed into the outer side of the Collar. A screwed rod with double nuts could replace this slightly messy set up but the Collar does position the boom centrally between its supports.

Boom:

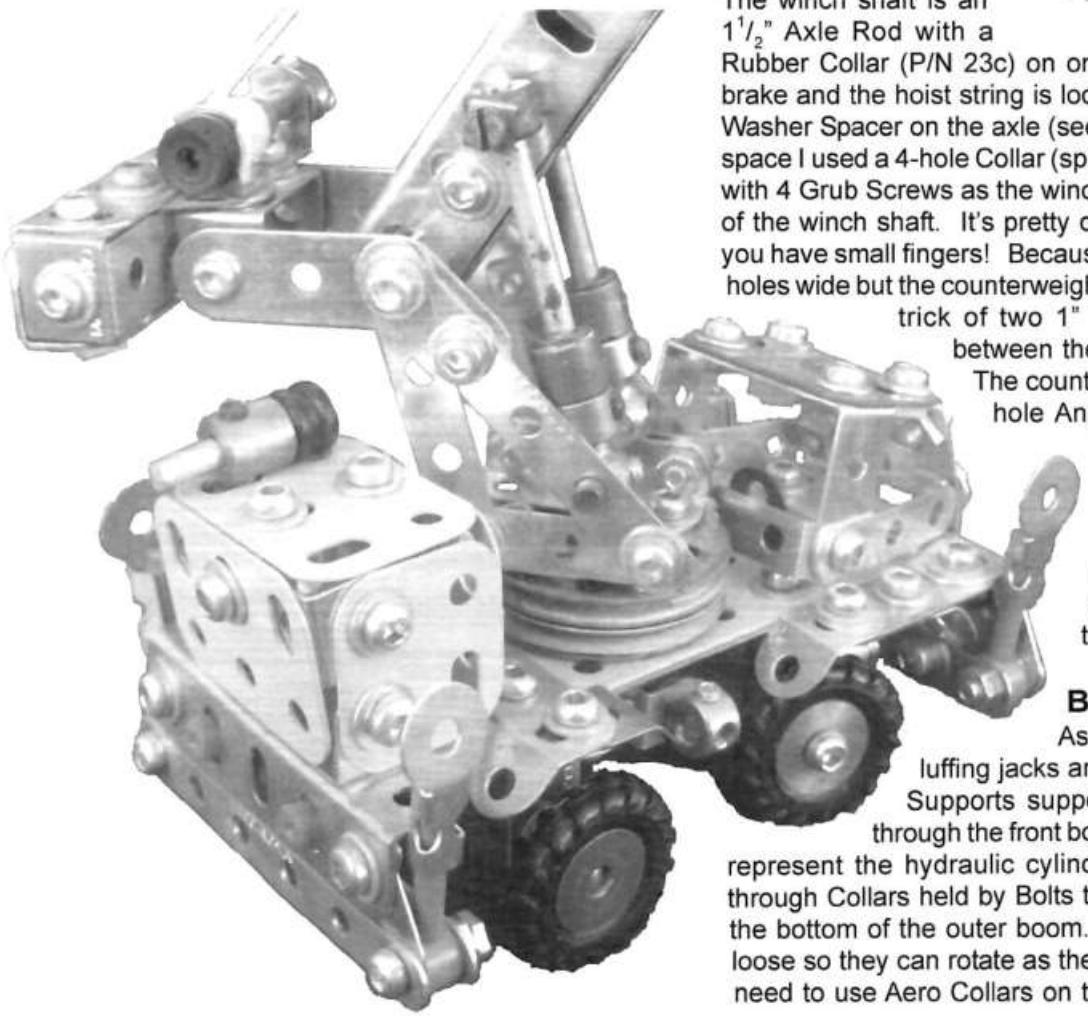
The outer boom section comprises two $5^1/_2$" Angle Girders in a box shape held together at the second to bottom transverse hole by a $^3/_4$" Bolt with Nuts on the inner faces. The outer end is clamped together with a Double Bracket (P/N 11a) with a $^3/_4$" Bolt to clamp the girders together (see cover photo). The second section is made from two $5^1/_2$" Narrow Angle Girders held together as a square section only at the top by a Coupling with 2 Bolts with 3 outer thin Washers, allowing the inner boom section

to slide freely through the Coupling. The inner end of the 2nd section has a $^3/_8$" Bolt (no nut) in the last hole with a Plastic Washer Spacer (P/N 38a) to keep the angles apart. The second from bottom hole has a normal Nut and Bolt in the top to prevent the boom rotating about a horizontal axis when it is fully extended. The inner boom section is a 5" Three Flat Axle Rod, which slides in the Coupling. A Collar near the outer end with a locking screw can be used to stop the outer boom from retracting under gravity. One of the Bolts holding the Coupling can be positioned so that the tri-sided axle doesn't revolve (loosely bears on one of the axle's flats). The boom head is a Right Angle Rod and Strip Connector with a $^1/_2$" Pulley without Boss through a $^1/_2$" lock-nutted Bolt and with two Narrow Fishplates clamping it all together. The hoist cable runs over a Small Plastic Washer Spacer (P/N 38b) in the slotted holes of the Narrow Fish Plates. In my design I didn't require a stop between the outer and middle sections as it is a tight fit and friction is sufficient to keep it extended.



Winch and Counter Balance:

A 1" Double Angle Bracket (DAB), P/N 48e, fixed to the rear ends of the Obtuse Corner Brackets forms the support for the winch and the counter balance box. I used a Narrow 1" DAB as the bearings of the winch. The winch shaft is an $1^1/_2$" Axle Rod with a Rubber Collar (P/N 23c) on one end to act as a friction brake and the hoist string is locked under a Small Plastic Washer Spacer on the axle (see Figure 3). Due to lack of space I used a 4-hole Collar (spider from a Universal Joint) with 4 Grub Screws as the winch handle on the other end of the winch shaft. It's pretty crude but works well when you have small fingers! Because the boom supports are 2 holes wide but the counterweight is 5 holes wide I used the trick of two 1" Triangular Plates bolted between the 1" and Narrow 1" DABs. The counterweight comprises two 5-hole Angle Girders as a channel bolted to the outer holes of the triangular plates. The ends of the box are Double Brackets with $^3/_4$" Bolts running through them vertically. The front face of the box is a $2^1/_2$" by $^1/_2$" DAB.



Boom Luffing:

As can be seen in Fig. 2 the luffing jacks are represented by Handrail Supports supported by a $1^1/_2$" Axle Rod through the front boom supports. 2" Axle Rods represent the hydraulic cylinder pistons running freely through Collars held by Bolts through the 3rd holes from the bottom of the outer boom. These Collars should be loose so they can rotate as the boom is raised. You may need to use Aero Collars on the boom sides as there is

minimal space for the piston rods to lie vertically. A locking Bolt in the outer thread of one Collar should stop the boom dropping inadvertently. I used a couple of old tinplate wheel bosses to lengthen the appearance of the hydraulic cylinders.

Cab and Engine Cover:

The cab is made from 3-hole Narrow Perforated Strips as shown with a 3-hole by 2-hole DAB connecting the 3-hole Flat Girder (red or yellow) roof to the windscreen frame. A Narrow $1^1/_2$" DAB forms the rear of the cab. With subtle fabrication the crane can be made to slew, just missing the lower cab back. The engine cover is made from yellow 3-hole and 2-hole Flat Girders connected together by two $1^1/_2$" DABs and two P/N 12 Angle Brackets. The exhaust is just a Collar bolted to the engine cover roof with a 1" Axle Rod exhaust pipe and a rubber Collar on the front end.

Mud guards are pairs of Obtuse Angle Brackets, the rear ones fixed to a 5-hole Strip across the floor pan while the front ones each connect to the front bumper Angle Girder by a 3-hole Strip. The petrol and oil tanks are represented by a Threaded Boss and a Collar, respectively. They were bolted to Narrow Reversed Angle Brackets which are bolted to the chassis angles (4th hole from the back). Tail-lights (red P/N 184g) and a cab hazard light can be added to suit. The driver's seat is a black $^1/_2$" Angle Bracket using a black Bolt from one of the later sets.

This is my first attempt to write detailed construction notes, so I hope anyone wishing to build this crane can follow my instructions, but when in doubt refer to the Figures! You will note that I have used a lot of more "modern" parts particularly Narrow Strips and Angle Girders. Many of these could be substituted with normal "wide" parts, except for the middle boom section of course.

Model Expo at Napier Boys High School - September 2007

by David Glenday

The language classes at the local Boys High School were fund-raising for their trip to Noumea to enhance their skills. In 2006 they held a "Model Expo." and a similar Expo was planned for 2007.

Trevor Adam was keen to contribute a Meccano display, and as usual ably assisted by his wife Sue and grandsons, put on an excellent display of static and mobile models, together with Kinnex, Super blocks, and other items.

David Glenday brought along his collection of completed models, and they were joined by Tony Wilson as willing helper.

Trevor's display included his impressive Ferris wheel, the late Jim Crarer's steam engine, along with other ship engines that spun, whirred, pumped, and generally entertained the public. Some of David's vehicles were motorised also so the viewers good see a good range of models and applications of our hobby.

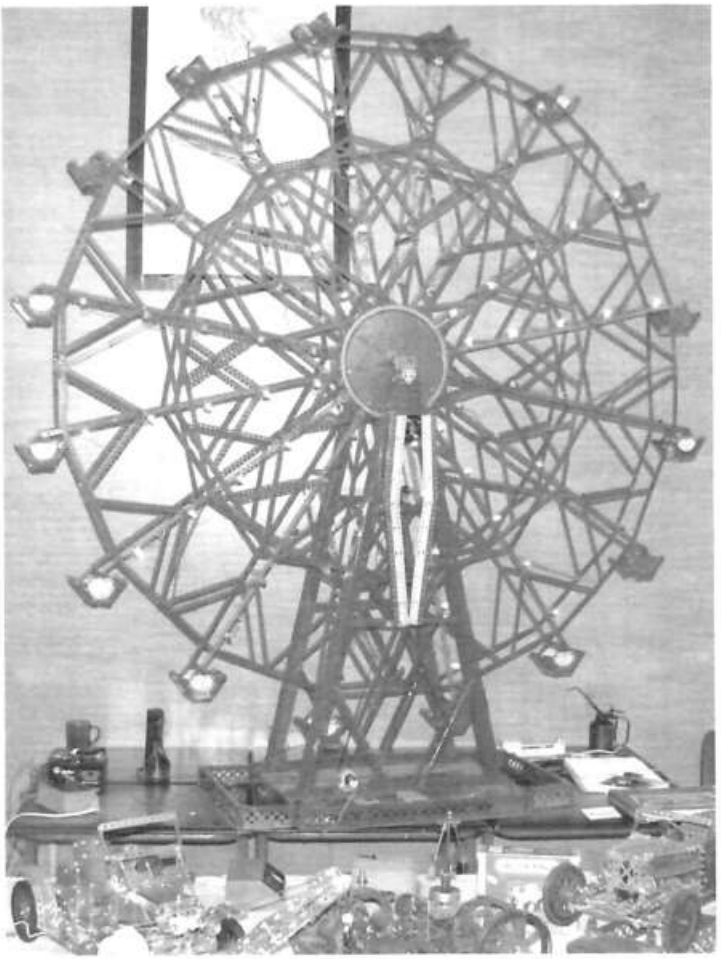
Again it is reassuring to see faces old and young delight at simple things as turning a crank handle, to fascination at how combustion engines work.

Our display earned good marks from the public, and to some extent we stole the show compared to the static displays of model villages, cars, and military gear, despite the care and attention those enthusiasts put into their models. Model trains and slot cars were popular of course but they are relatively limited as such Expos.

As expected many people are surprised that Meccano is still made, and hopefully our efforts show we are alive and well into the 21st Century, and some young boy or girl in the crowd was inspired.

As club members know, these events are time consuming and people give up their weekends to support our hobby. Trevor Adam deserves special mention for his enthusiasm and commitment in taking his collection to various events around the North Island.

David took some photographs and short films with his digital camera. He hopes to bring those to a MWT meeting in 2008.



Meccano Design 3 Set

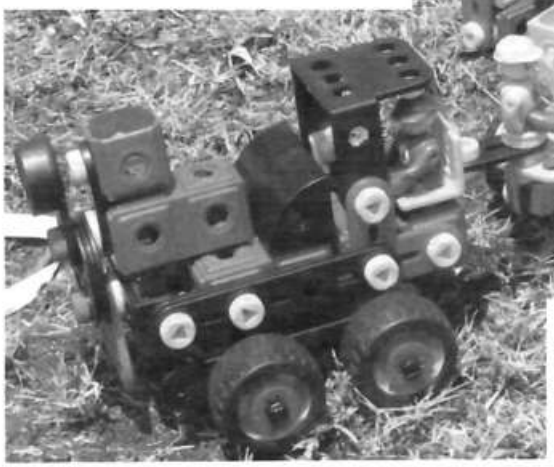
by Vern Ellis.

One of the Meccano presents I got off "Santa" was the above set. It contains 300 parts and like Gary Higgens report in Dec. 07 issue page 13, I was surprised also that this set has a zip top. It can be folded back and the parts stored inside. There are instructions for 10 models, which is good, because a lot of the modern sets only have instructions for a few models and then ideas for several others. I have built the Quad bike and the Helicopter, both going together well & both worked good with the 3volt motor supplied. Other models are a Plane, Robot & 6 other types of road vehicles. The colour of the metal parts is gold metallic and they do look good, but like Gary I have trouble with the paint finish. I found that the paint also peels off very easily, especially when curved. Gary found parts missing in his set. My set was the opposite. I have 2 extra B844 flexible strips and 2 extra B484 triangular plates, along with an extra bag of nuts and bolts. Did I get the extra parts because of the bad paint job? I do not think so, it was just luck that "Santa" picked up this particular set.

Plastic Meccano

by Vern Ellis.

After reading the article on Plastic Meccano, page 18, Dec. 07 Issue of NZFMM , I thought some readers may be interested in one of the Meccano Junior Set that I have. It is Set 5793 and makes 25 models. They range from a train and crane to cars, trucks, planes and a helicopter. If you press the headlight on the train, it actually makes a puffing sound like a steam engine. Adults and kids alike love it. The train and its ore truck both run on wheels with tyres. Is this because it is an Australian "Road Train"? I have built it without the tyres, but I must admit it does not look as good though. Most vehicles and aircraft have a clear windshield and the "driver" can be seen inside. There are no gears in the set, but the cranes and other models are operated by the pulley system. All work well and there is a crank handle supplied. All the models look good and I always have one or two made up for our exhibit. We get a lot of comments from both young and old on how good they look. The Plastic Meccano models also provide the viewers with another product made by Meccano other than the Metal sets. All the models are large and this also makes a good talking point.



Keeps Good Time When Adjusted

by Lindsay Carroll

I originally penned these notes as a response to Rex Swensen's extremely interesting article on clock making in the May-June 2006 issue of Australian Model Engineering. My purpose in doing so was twofold. To provide a comparison of Meccano practice with that outlined in the earlier article that AME's Editor thought would interest his readers and, secondly, I hoped to draw the attention of the Model engineering fraternity to the Melbourne Meccano Club's annual exhibition.

Clock building in Meccano is a challenge. Other Meccano subjects are seen as models and their peccadilloes may be forgiven, a clock is expected to be accurate and to run for a reasonable time. There is quite a sense of achievement in doing this with parts of a system regarded by many as a child's toy.

I first became involved with building Meccano clocks a little less than fifty years ago when I read an article in the Meccano Magazine that described the construction of a clock. (For the record, it was the 'Model of the Month" in the December, 1959 issue.) Prominent in the description were the words "Keeps Good Time When Adjusted". The instructions, however, did not say how to adjust the mechanism to enable it to run reliably.

One of my first projects on my return to the hobby as an adult was to rebuild that clock so it would perform as it ought. It was a red-letter day when the mechanism finally came to life with a regular tick from escapement. To achieve this happy state of affairs I had researched "real" clock making and repair as well as the substantial Meccano literature. I have been building clocks ever since.

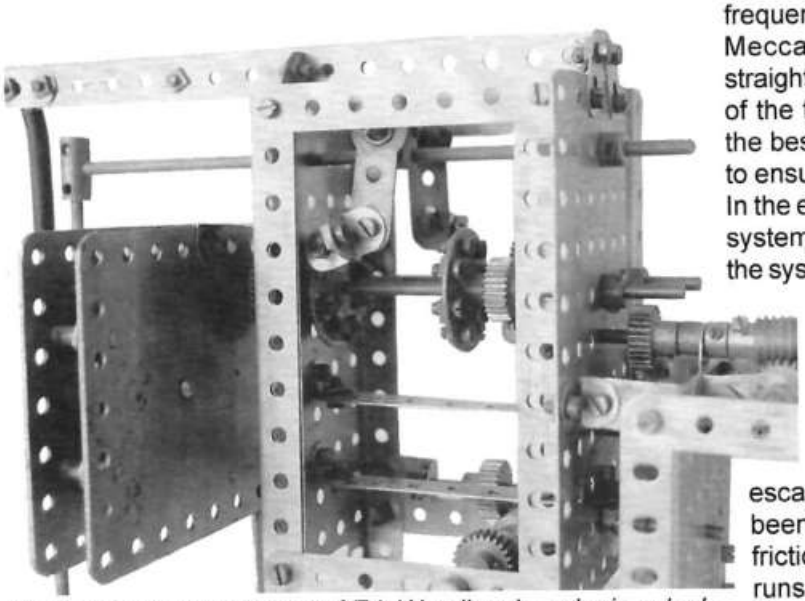


Photo 1: *A reconstruction of E L Wood's prize winning clock of 1914. This view is from the left side of the clock head and shows the paired scape wheels and pallet arrangements.*

There is a long and rich tradition of constructing timepieces from Meccano parts that stretches from the first documented clock published in 1915 (Photo 1). Many designs have been published during the last ninety years and to catalogue them is far beyond the scope of a short article. I hope to give some idea of the range and scope of this activity by general discussion of Meccano practice in this area.

Some issues

As a general rule, the use of materials other than Meccano parts should be kept to a minimum. In my own work, I generally avoid compatible parts unless they are of reasonably long standing and have been produced in commercial quantities. Nevertheless some concessions are needed to allow the limited use of non Meccano parts such as dials and chapter rings, dc electric motors, hook-up wire, relays as well as micro and mercury switches from electronic parts suppliers.

There are other issues that result from the nature of Meccano parts themselves when pressed into a demanding application such as a clock. It has often been said in a jocular manner that if you are concerned about the contents of a parts list for a Meccano model, you do not have enough Meccano. This translates into a need to select the very best quality parts from the stock on hand, as manufacturing variations in the parts can make the difference between something that will run and something that will become a persistent source of annoyance.

At the heart of the system is the Meccano hole. It has to be capable of journalling axle rods made of 8 S.W.G. wire (4.05 mm diameter) and accepting fasteners in the form of $^{5}/_{32}$" Whitworth bolts and other threaded parts. In practice, the hole size varies considerably. While one that is oversize can be helpful in some cases, the excess play can make setting up an escapement something of a chore. Many recent parts have been powder coated, which frequently reduces the hole diameter to such an extent that a rod cannot be journalled in it. In my experience, this results in frequent recourse to a rat-tailed jeweller's file.

Meccano rods are spun or sheared to length from straightened coil stock, and truly straight rods are rare. One of the first tasks in a clock project will often be selecting the best quality rods from one's stock and polishing them to ensure true and easy running.

In the early 1960s, Meccano introduced a low-friction pivot system in a range of electrical parts. Two parts make up the system; the first is a 12.5 mm bolt with a cone machined into the end face of its shank while the other is a length of rod with each end machined to a needle point. When properly set up, they provide a good low friction bearing. Clock builders seized on them as an ideal means of reducing frictional losses. These parts find their major application at the escapement end of the gear train where the power has been significantly reduced and further losses due to friction may make the difference between a clock that runs and one that doesn't.

Most wheels in the Meccano system are peened to a boss that is bored longitudinally to fit a Meccano rod and cross tapped to accept a set screw for fixing to the arbor. This manufacturing process results in wheels with varying degrees of eccentricity. The method of fixing the wheel by set screw also contributes to eccentricity.

I now know that my boyhood clock building endeavours were doomed to failure by the combination of crooked rods bearing eccentric wheels in indifferent bearings. I had no

idea how to set up and adjust an anchor escapement and the plan in the magazine offered me no enlightenment.

The Movement

In this next part, I will cover some of the details relating to the construction of the major clock components.

Plate work

Frames and plate work to support a clock's mechanism are readily constructed from the girders, strips, perforated plates and brackets that form the main structural components of the Meccano system. The illustrations reveal typical practice. It is a good idea to closely examine all parts used to support the motion to ensure that they are straight and true and show no evidence of 'creep' in the punching and that holes centred in strips.

The Escapement

Many escapement designs have been published over the years, some better than others.

I have included in Photo 2 a reproduction of Harrison's grasshopper escapement realised in Meccano to the design of Michael Adler of Israel. The accompanying scape wheel is the most fully developed version of a design originated by Patrick Briggs some forty years ago. Also shown is his sprocket wheel and anchor escapement

Leaving aside the MW 30 teeth ratchet wheel, the Meccano system does not contain a wheel designed for duty as a scape wheel. This leaves a builder with two courses of action. The first is to press into service wheels that are near enough. Those usually so employed are sprocket wheels having 28, 36 and, less usually, 56 teeth.

These wheels have tooth counts that are near misses for the ideals of 30 and 60 teeth. Thus, it is not possible to achieve an accurate jump seconds display. In practice clocks using these parts as scape wheels can be brought to keep quite good time by adjusting the rating nut to alter the effective length of the pendulum.

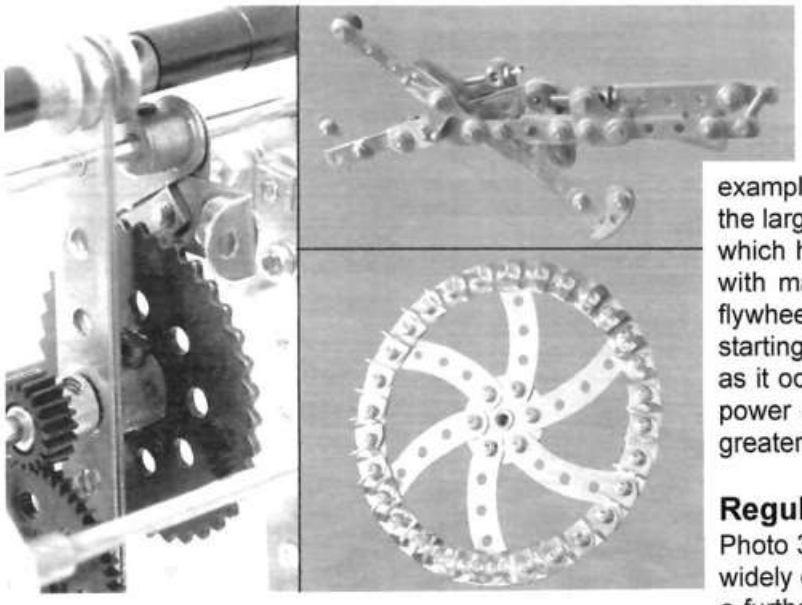


***Photo 2: On the left** - A Sprocket Wheel doing duty as a scape wheel.*
***Upper right** - Harrison's grasshopper escapement.*
***Lower right** - A built up 30 teeth scape wheel.*

A more serious difficulty is that the tooth form of these parts is less than ideal for this application as they were originally designed for transmitting chain drive. However, it is possible to construct an anchor escapement from standard parts that works quite well with these wheels. The anchor escapement shown in Photo 2 was the first design to resolve the problem posed by the tooth form in getting a satisfactory impulse to the pendulum.

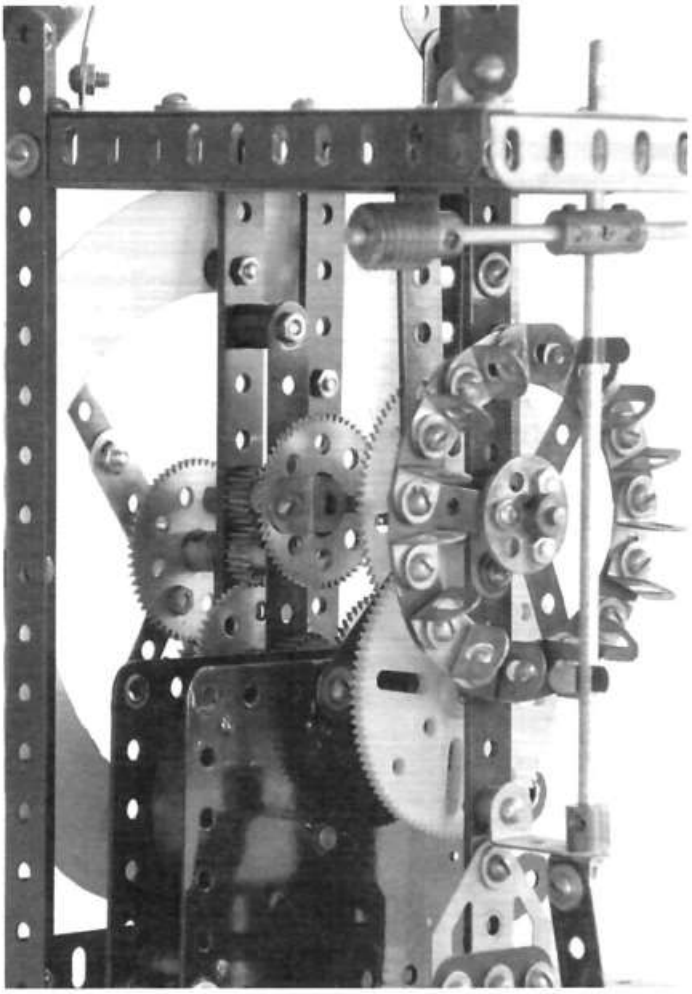


***Photo 3:** A Foliot and verge escapement having a built up 15 teeth scape wheel.*

The alternative course is to construct a wheel to meet the purpose at hand. The illustrations show several examples of this approach. The earliest example is the eight teeth pin wheel in Photo 1. Perhaps the largest to date is the 30-tooth wheel shown in Photo 2 which has a diameter of $5^{1}/_{4}$". Large wheels of this type, with many parts bolted to the rim, tend to behave like flywheels. This is at odds with the need for the repeated starting and stopping required in a scape wheel especially as it occupies a the point in the train where there is little power available. The consequence is a requirement for greater power to be applied to the train.

Regulators

Photo 3 shows an example of a Foliot Verge escapement widely employed in clocks in medieval Europe. It contains a further example of a built-up wheel, this time providing the odd number of teeth, fifteen, required for the escapement to function. This last requirement arises from the fact that the axes of rotation of the scape wheel arbor and the verge

are coplanar. A scape wheel with an even number of teeth would result in the escapement locking up as there would be no drop off the top pallet nib to allow the scape wheel to turn.

Pendulum

The longer rods and strips in the Meccano system make it an easy task to construct a simple pendulum to any required length. There is also a good choice of weighty circular parts from which to construct a bob that is both functional and aesthetically pleasing. Suspension and crutch arrangements that follow traditional practice are generally easily constructed as well.

Fine adjustment of the pendulum's effective length is relatively easy to implement by means of an appropriate length of threaded rod and a knurled rating nut. One complete turn of the nut adjusts by $^{1}/_{32}$", upwards to advance and down to retard the clock. An adjustment of a minute per day in a pendulum of royal length (i.e. beating seconds) is approximately $^{1}/_{18}$". The required number of turns of the rating nut can be found by simple arithmetic.

Power

Power to drive a Meccano clock is usually obtained from falling weights, spring drive, or electricity.

Weight

Driving weights are often formed by ballasting one or more of the cylindrical parts, quite frequently the Boiler, Part 162, with loose but dense material until sufficiently heavy to drive the mechanism. A notable exception to this was the pre WWII Meccano "Super Model" Grandfather clock that required a specially cast 18-pound (8.2 Kg) weight to drive the going train.

The earliest weight-driven designs were manually rewound and a maintaining gear was required to keep power on the train so the clock would continue to keep time during the process.

Recent designs incorporate an electric motor to rewind the driving weight, as required. Typically, the motor is switched on and off by the operation of a low voltage tilt switch. The better designs also include limit switching to prevent damage due to overwinding in the event that the primary switch fails to return to its "off" position.

The most recent development has seen the application of the rewind motor, itself, as the driving weight. In this arrangement, a pinion on the motor output shaft directly drives the great wheel. The motor is mounted on a radial arm that is free to pivot about the arbor. Here too, limit switches are employed to provide power dependent on the position of the motor and to limit motor movement within a predefined quadrant.

Spring

Spring drive to the clock going train has long been possible. A standard clockwork motor powered the earliest Meccano clock. While these motors were designed to deliver their power from an output shaft at the end of an internal gear train, there are several designs that take their power from the mainspring gear on the winding shaft.

Another interesting procedure is to extract the mainspring from the housing of a clockwork motor and incorporate it in a built up winding barrel that incorporates its own click work. Photo 4 illustrates an example of this practice.

The power curve of a spring drive dictates that the clocks they power will run slightly fast early in their run and slightly slow towards the end. In better quality spring driven clocks, fitting a fusee counteracts this by applying a relatively constant driving torque to the clockwork. A fusee is well within the capabilities of the Meccano system as shown by Michael Adler and Mike Edkins.

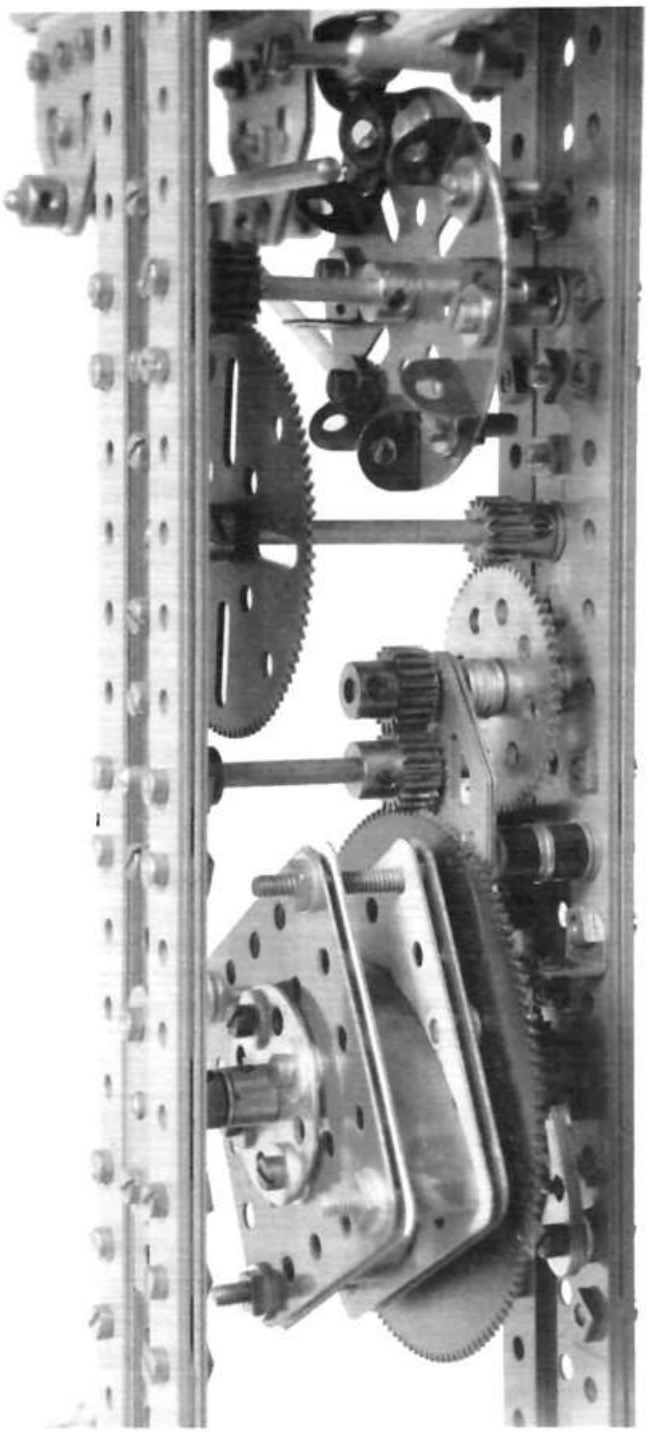


***Photo 4**: Galileo's escapement showing built up winding drum and a further scape wheel design.*

Electricity

Elektrikit parts can be employed to construct a synchronous motor that is perfectly capable of driving a clock mechanism.

The example shown in Photo 5 drives both the going train and a strike train that gives a count of the hours as well as a single strike on the half hour.

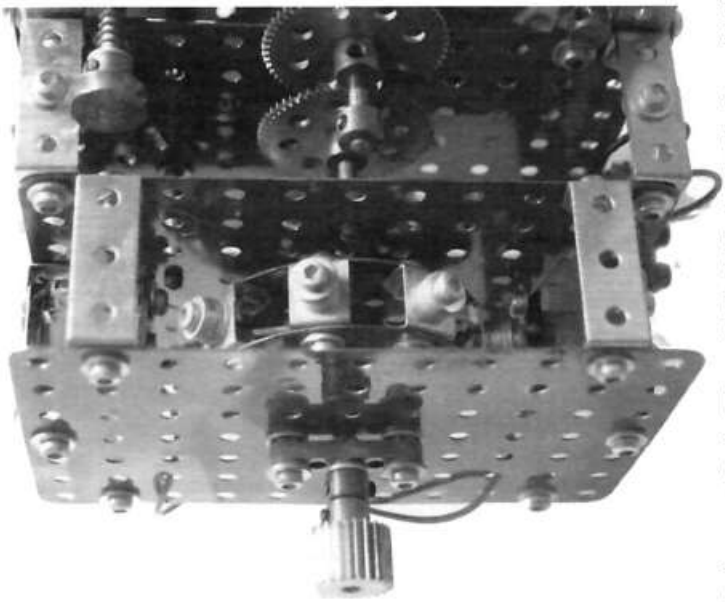


Photo 5: *A synchronous motor from Meccano parts. The two wheels at the top centre are part of the strike train; the black wheel to the left is the first step down stage of the going train.*

Driven pendulums

The Bulle, Synchronome and Hipp mechanisms have been successfully reproduced using Meccano and have proven effective time keepers. Photo 6 shows a detail view of the switch gear, including the "dimple" plate, of a Hipp clock.

Motion work

The arrangement of the motion work in a Meccano clock cannot follow general practice, as the necessary concentric tubes are not available to the builder. As a rule, a second arbor, laterally displaced from the centre arbor, is used to gain the necessary 12:1 reduction. Since the mid 1950s, it has been possible to achieve this using two pairs of wheels having the ratios of 3:1 and 4:1. Before this introduction, two 2:1 stages were used in conjunction with the 3:1 stage. The extra stage required the inclusion of an idler pinion so that both hands moved in the same direction. These arrangements usually lead to the hour hand being mounted on the final gear wheel, which is loose on the centre shaft while the minute hand is secured at the end of that shaft.

Conclusion

While clock building is no more difficult than any other non-trivial subject in Meccano, it is attended by its own particular range of concerns. I hope that this brief summary of the main issues will encourage you to try one.

For those who would like more detailed information about the clocks used to illustrate this article, I have listed the source material in a short bibliography.

Bibliography

- EL Wood's prize winning clock was published on page eight of the book of Meccano Prize Models following the 1914-15 model building competition.

- Grasshopper escapement and 5.25 inch scape wheel are described in Model Plan 78, Grasshopper Clock, by Michael Adler. The wheel was originally designed by Patrick Briggs for his Astronomical Clock. It is described in GMM SM 6.

- The foliot and verge escapement is from Pat Briggs's Nuremburg Clock, published in Meccano Magazine, April 1972, page 170 ff.

- Galileo's Pendulum Escapement is from a design by Mike Edkins, published in NMMG Newsmag 99, July 2004, page 2 ff.

- The synchronous motor in Photo 5 forms part of a movement built from an unpublished French SML found at Binns Road by Jim Gamble. Jack Partridge modified the motor by substituting Elektrikit parts for the pre WW II Electron parts. His building instructions were published in NMMG Newsmag 49, November 1987, page 15 ff. The clock is also described in a leaflet available from MWMO as ModelPlan 112, Meccano Electric Chiming Clock.

- The Hipp clock was designed by Leslie Dougal and first published in Meccano Magazine for January 1969, page 36 ff. It was redescribed by Bert Love in his book, Model building in Meccano and Allied Constructional Sets, 1971, C. Combridge Ltd., Birmingham, England, page 124 ff.

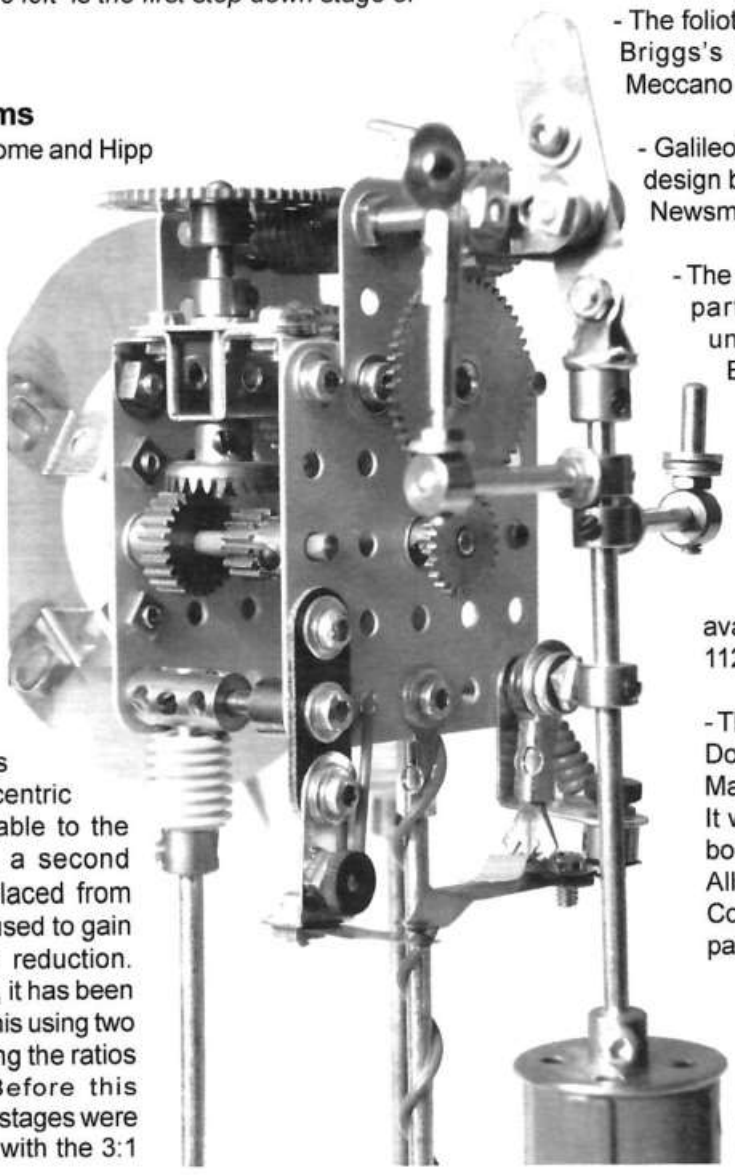
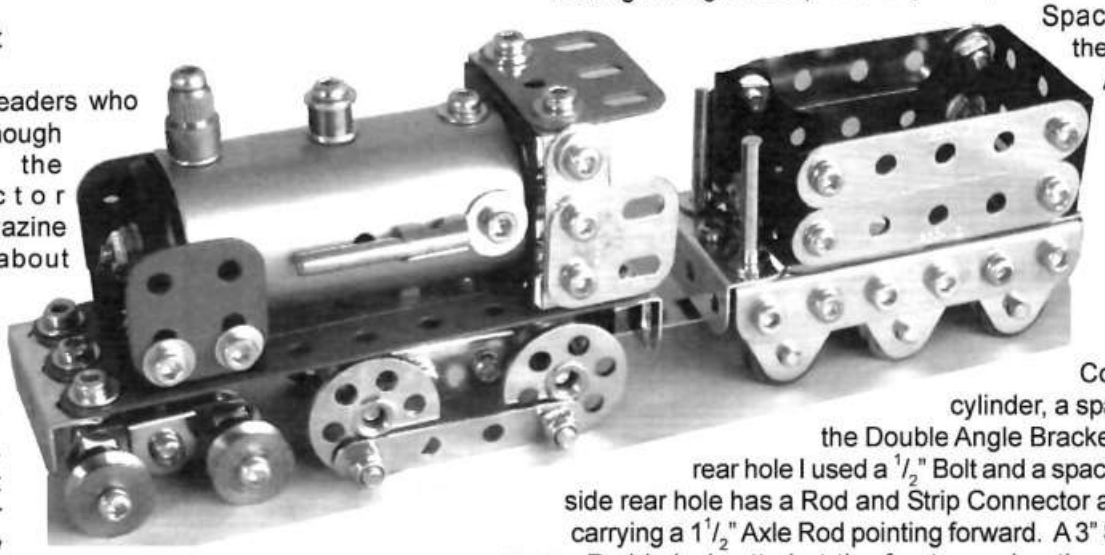


Photo 6: *A Hipp clock, showing pendulum suspension and switching arrangements.*

4-4-0 Locomotive

by Bob Prescott

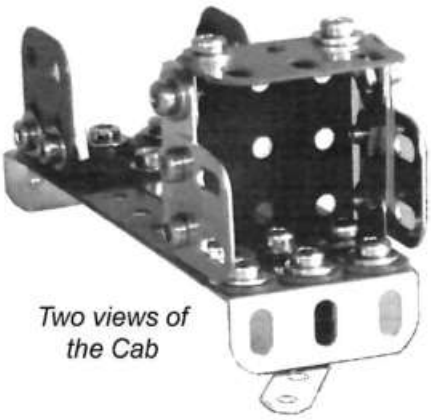


Those of our readers who are fortunate enough to receive the "Constructor Quarterly" magazine will know about Bernard Périer's great little models in just about every edition. They are always colourful using it would appear brand new modern parts and Allen Bolts and I often build my version of his models.

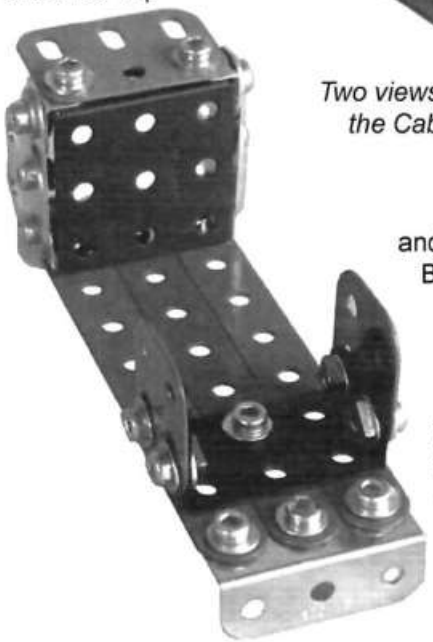
Recently the 4-4-0 locomotive and tender featured in red and black livery built for table top or floor use rather than on rails and here is how I built my loco.

Locomotive

The footplate is formed from two $1^1/_2$" Angle Girders elongated holes upward, joined by three $4^1/_2$" Perforated Strips. I used red ones but obviously all colours will depend on your stock. The smoke deflectors are 1" Flat Girders which are connected to a P/N 51d Flanged Corner Plate which in turn is connected to the footplate by the rear hole, three holes from the front. The cab front is a $1^1/_2$" x $1^1/_2$" Flanged Plate joined through the centre hole, two holes from the rear. The side panels are $1^1/_2$" Perforated Strips and 1" Flat Girders attached top

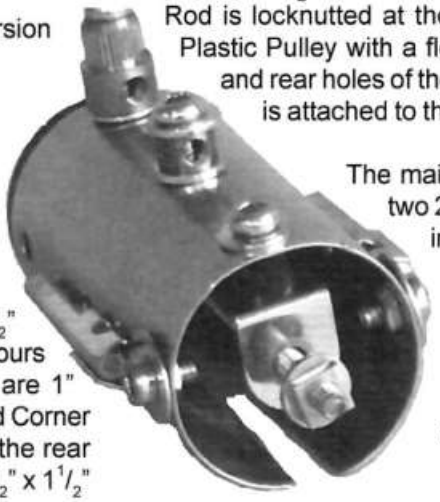


Two views of the Cab

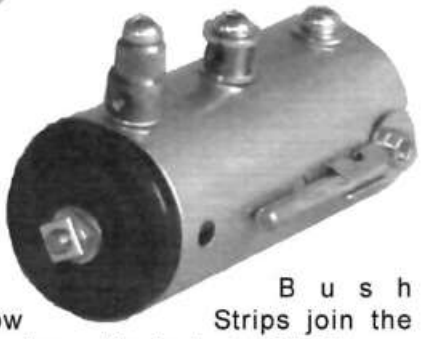


and bottom by $^1/_2$" Angle Brackets. The roof is a $1^1/_2$" Flat Girder.

The boiler is a P/N 216 Cylinder and a $2^1/_2$" Double Angle Bracket is attached inside, spaced away from the top so as the end holes are in the centre of the cylinder. At the front hole I used a $1^1/_8$" Bolt through an old boss representing the smoke stack then feeding through the top of the cylinder, a P/N 38a Plastic Spacer and the Double Angle Bracket. In the centre hole I used a 1" Bolt through an Aero Collar, the cylinder, a spacer and the Double Angle Bracket. In the rear hole I used a $^1/_2$" Bolt and a spacer. Each side rear hole has a Rod and Strip Connector attached, carrying a $1^1/_2$" Axle Rod pointing forward. A 3" Screwed Rod is locknutted at the front, passing through a 1" Plastic Pulley with a flexible ring then through front and rear holes of the Double Angle Bracket which is attached to the centre hole of the cab front.



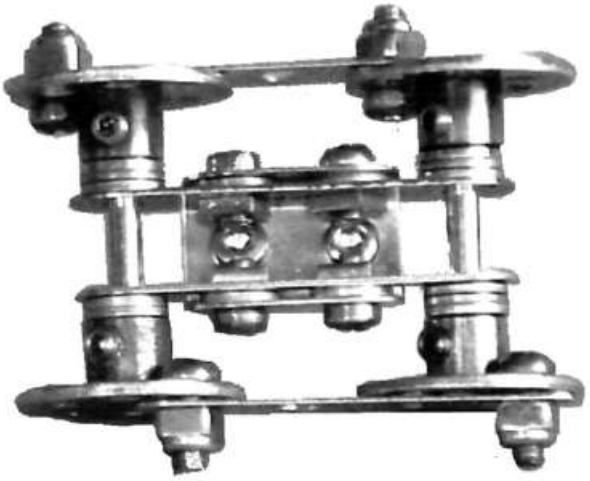
The main wheels frame is made with two 2" Perforated Strips positioned inside a P/N 51c Flanged Plate and spaced from it by a Washer. $1^1/_2$" Axle Rods are fed through the end holes of the Perforated Strips and 1" Bush Wheels are placed on them, spaced

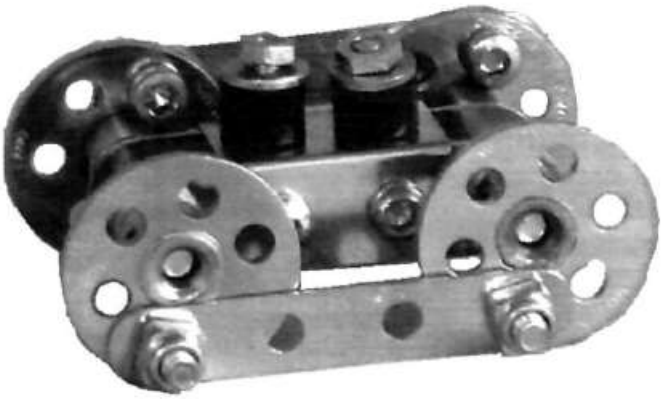


Two views of the Boiler

by two Washers inside each wheel. 1" Plastic Pulleys can be used if you don't own any 1" Wheels. 2" Narrow Bush Strips join the wheels on each side using captive lock nuts. The Narrow Strips are connected to the top of the wheels on one side and the bottom of the wheels on the other. This module is connected underneath the footplate in the third and fourth holes from the rear using $^1/_2$" Bolts and spaced from it with a Plastic Spacer and Washer.

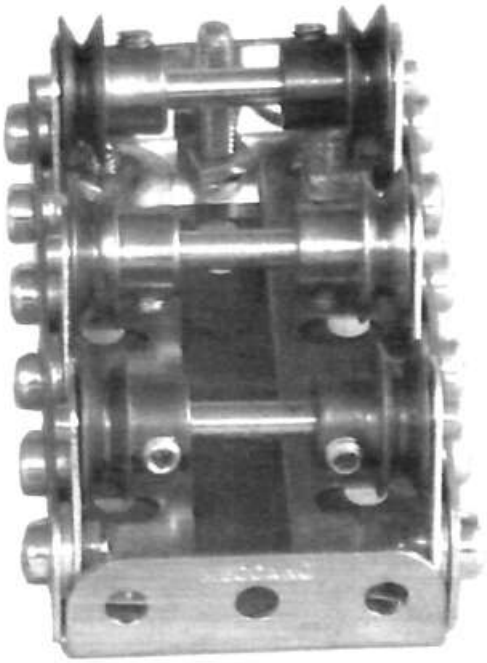
The bogie consists of two $1^1/_2$" Perforated Strips attached inside a $^1/_2$" x $^1/_2$" Double Bracket and spaced from it by a Washer. The wheels are $^1/_2$" Pulleys attached to the end holes of the Perforated Strips using $^3/_4$" Bolts, a Plastic Spacer and a Washer and locknutted to the Perforated Strips. This module is attached underneath the footplate using a $^3/_4$" Bolt, a Plastic Spacer, a Mini Plastic Spacer and a captive lock nut above, two holes from the front. The footplate front Angle Girder may need adjustment to allow room for the front wheels.





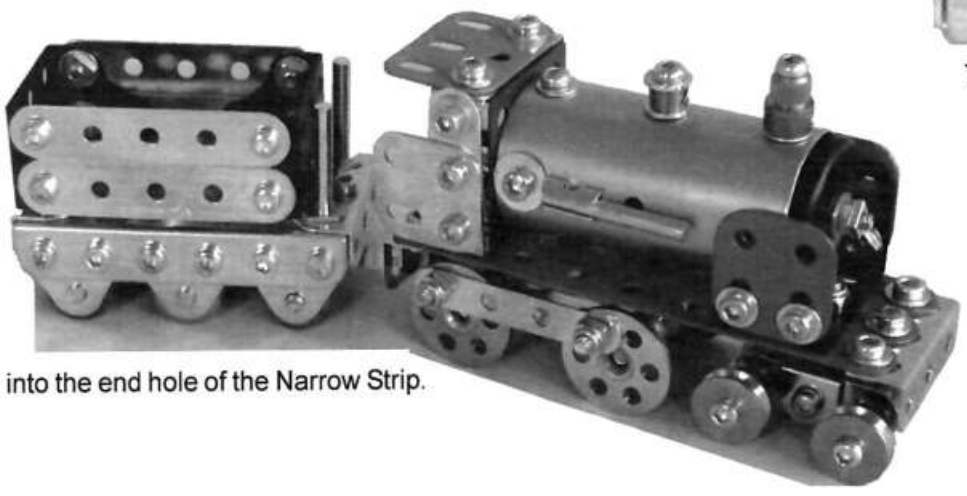
Main wheel photos

Bogie photos

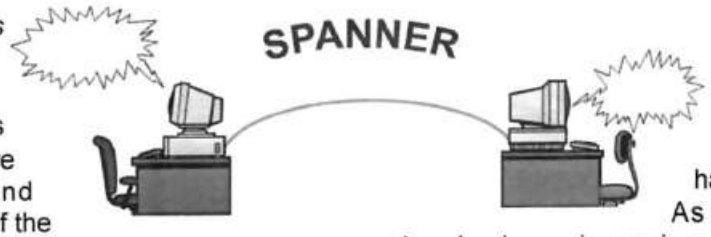


The Underside of the Tender

The base of the tender is 3" Angle Girders and the front and back are $1^1/_2$" Angle Girders and these lock in the floor which is a $2^1/_2$" x $1^1/_2$" Flexible Plate. Two long Threaded Pins secure the front corners. Two Flanged Corner Plates form the front and rear walls and these are joined by two $2^1/_2$" Perforated Strips on each side. The walls are attached to the base by an Angle Bracket front and rear. Three Triangular Plates are attached to the inside of the 3" Angle Girders on each side spaced from it by a Washer. $1^1/_2$" Axle Rods are placed in the lower holes of the Triangular Plates carrying $^1/_2$" bossed Pulleys. A $1^1/_2$" Narrow Strip forms the link between the loco and the tender. A 1" Bolt through the centre hole at the rear of the loco holds two Plastic Spacers and the Strip under the footplate, secured by a captive locknut. A $^3/_4$" Bolt in the front of the tender fits into the end hole of the Narrow Strip.



The use of Spanner emails is acknowledged



Black Hummer - As many of you may be aware of, there is a Marks and Spencer all black version of the 6 Wheeler RC Truck Set, 8701. Meccano version comes in maroon colour, with some parts in glossy black and a few in beige. In M & S version, all maroon parts are replaced by metal black. Glossy black and beige parts remain unchanged. The Hummer set, 8702, is available only to the US. Except for an added set of magnetic stickers, it has exactly same contents as the 6 Wheeler set. Meaning that, if you have the 6 Wheeler set, you can build the Hummer from its contents, albeit without the stickers, provided that you have respective instructions. Or, if you have the M & S version, you can build both the Hummer and the 6 Wheeler in all black guise. (Oscar Felgueiras, Porto, Portugal)

New Parts 1998 to 2006 Illustrated - I have been developing a project to document the Meccano new parts introduced after the demise of Binns Road, and have just completed work on the period 1998-2006. Two documents are now available for download from my website, at: http://meccano.planetaclix.pt/index_meccano_new_parts.html First document has 9 pages. It is an Index, consisting of a collection of thumbnail size pictures of all the 245 new parts of the period. It can be downloaded as a single Adobe Acrobat .pdf file (10.8 Mb), or page by page, as .jpg files (approx. 160 Kb each). Second document has 14 pages and is an illustrated Parts List. A description, year of introduction, picture and sets where it has been included are provided for each part. It can be downloaded as a single Adobe Acrobat .pdf file (1.6 Mb). Both documents can be easily printed. All feedback you can give me will be most appreciated. I would particularly welcome your comments on the following points: - Did you have any problem downloading the files? Displaying them? Printing? - How useful do you find the documents? - How do you think they can be improved? (Oscar Felgueiras, Porto, Portugal).

Just a brief note to announce that my Sets Parts Lists have been updated. New versions can be downloaded from Timothy's Edwards website at: <http://edwards.web.users.btopenworld.com/partslist.htm>There are several important changes to the Lists, as follows:

Earlier period UK 1979-1981 has been extended to 1970-1981. This is something I had in mind to do ever since I released the original list. And it is as far back as my lists will go.

Earlier period France 1979-1988 has been extended to 1970-1988. Same reasoning as above.

Period 1989-2000 remains as before. A good number of corrections have however been done in the updated spreadsheet.

Period 1998-2006 has been extended to 1998-2007, with the inclusion of 5 of the new 2007 sets. List now includes ALL sets of the 1998-2006 period. A good number of corrections and enhancements have also been implemented.

As before, files available for download are zip versions of Excel spreadsheets. If you have any problems downloading or unzipping them, contact me privately and I'll be glad to send the Excel .xls files. As for previous versions, if you spot any errors on the lists, please drop me a line, so as I can correct them for future updates. Finally, I wish to convey my warmest thanks to Timothy Edwards, for kindly hosting my Lists on his website. If you haven't done it yet, I recommend you to download also Timothy's own Parts Lists which can be found on same page. They are excellent!. (Oscar Felgueiras, Porto, Portugal).

Titan Crane - The 100 year old Titan crane at Clydebank, Glasgow (John Brown's shipyard) has now been refurbished and is open to the public. Link to the official web site as follows:- <http://www.titanclydebank.com> click on WHO WE ARE, RESTORING THE CRANE at bottom of the page

for a description of the refurbishment, complete with photographs.(Eric Watson).

The Dutch Meccano Guild (MGN) - is celebrating its 25th anniversary this month. All club members received a CD with scans of our magazine "MeccanoNieuws" for the period 1982-2002 as a "birthday present", this CD was produced by me with assistance/advice from some other Meccanomen. Being Dutch we have the habit of writing in a rather intelligible language, so a good part of the 1300 pages will be somewhat hard to read for most Spanners. (but the CD contains a "Users Manual" in English also). The CD consists of 26 pdf-files, the index is a pdf-file with links to the contents of the magazines. Comments on the way the CD is organized are greatly appreciated. The CD is free, a minor contribution covering the postage costs would be appreciated. (J.J.Jager, email: <j.j.jager@hetnet.nl> website: www.nautomac.nl

REMEMBERING SIR ED.: Don Blakeborough tells us on Spanner that when he was a schoolboy he used to deliver milk to the Hillary family home in Tuakau. He would often say 'Hello' to Ed or his parents. "He was a huge man, both in his size and his deeds", said Don.

'FACTORY OF DREAMS": Capital Books in Wellington, N.Z., has new stocks of "Factory of Dreams", both hardback and paper back editions. Their address is 110 Featherston Street., P.O. Box 5534, Wellington. Phone 04-4739358. E-mail = info@capitalbooks.co.nz.

BIRD FEEDER PROTOTYPE ? My son in New Jersey, U.S.A., has trouble with squirrels eating the food put out for the birds. Someone gave him feeder that has a circular platform hooked to a nicad-powered motor positioned up the centre of the unit. When a squirrel stands on the platform its weight trips a micro switch, the platform spins really fast and hurls the squirrel off into the neighbour's bushes.
That is the theory of it, anyway. It is advertised as "America's most sophisticated and entertaining bird feeder".
The company marketing it is called 'Droll Yankee' ! *(L.S.)*

MECHANICAL WORKSHOP SET: I didn't really intend to buy one. When it was mentioned on Spanner that Dick Smith stores in New Zealand were selling them again at half price, I still didn't bother. I guessed they would all be quickly sold, anyway. A few days later I happened to be passing their store in Wellington City so (as usual) I went in to see whether they had any Meccano in stock.
There, sitting forlornly on the floor at the back of the shop was a Set 0532 !
It cost me $NZ59-50, but there are hundreds of $ worth of parts in its plastic storage box.
I chose the page 34 aeroplane to build first, thinking it would be easy. It wasn't and, like Les Megget, I would be surprised if an 8 year-old could build it. Nevertheless, it is a good set and a bargain at that price. In Toyworld, Johnsonville, last week, there were two 0532 sets in stock priced at $NZ149.99 each. *(L.S.)*

2008 FIRESIDE FUN: A thief in Paris planned to steal some paintings from the Louvre. After careful planning he got past security, stole the paintings, and made it safely to his van. However he was captured only two blocks away when his van ran out of gas. When asked how he could mastermind such a crime and then make such an obvious error, he replied, "Monsieur, that is the reason I stole the paintings. I had no Monet to buy Degas to make the Van Gogh."

(from Tony Press on Spanner)

TECHNOLOGICAL GADGETS; Charlie Pack in California sent on Spanner this extract from the 'Wall Street Journal':
"The lowly Erector set (a collection of nuts, bolts, pulleys and wires) now comes with a little electronic brain. At the January Consumer Electronics Show, Meccano, the French company that owns the Erector set brand, plans to begin selling a U.S. version of SpyKee, a kit assembled into spy robots controlled by a home's Wi-Fi network or via a Bluetooth connection."

QUOTATION: "Every year our main present was always a Cadbury's Selection Box which we (my two brothers and I) joyously received as if it was a surprise, but this year the real surprise was a present we could all share. It was a Meccano set which we pounced upon eagerly because, according to the blurb, with Meccano we could build anything".
(from Eric Sykes' Autobiography, "If I don't Write it, Nobody else will"). *(Thanks to Bob Prescott for this item)*

F.H. AT A MECCANO EXHIBITION; "The highlight of the exhibition at Newcastle Upon Tyne in 1932 was a visit from Mr Frank Hornby, and I was delighted to be included in a picture of him taken during his visit. This was purely to promote the hobby of Meccano building amongst the young people in the City which would, in turn, benefit the company of which he was the founder." By Mr. Walter F. Tinley.
Mr. Tinley was present at a meeting of Transvaal Meccano Guild in October, 2000, and members were able to shake the hand that had shaken the hand of Frank Hornby. *(from Transvaal Mecano Guild Newsletter, Oct., 2000.)*

SUCH IS FAME; Neil Browan from Palmerston North had to go through the photography ordeal again when he got back home because his "dear" sister squealed to their local newspaper. The cause — his massive Boeing 747 aircraft model which won first place and senior trophy at the 1985 Auckland Convention. "I felt such a twit, posing exactly to their instructions," he said.

(from NZFMMM, April, 1986)

M4 WASHERS are slightly thinner than standard Meccano ones and have a smaller o/d (8.5mm). They are flat on one side, dished on the other and are zinc plated. I use them mostly on my smaller models. (L.S.)

BOSSLESS PINIONS; Simon Moody can convert ordinary pinions into pinions without bosses. He cuts the centre out of one tooth and drills a threaded hole for the grub screw in that gap. Then he cuts off the boss, leaving a slight shoulder. They are especially useful in tight situations such as gear boxes. *(L.S.)*

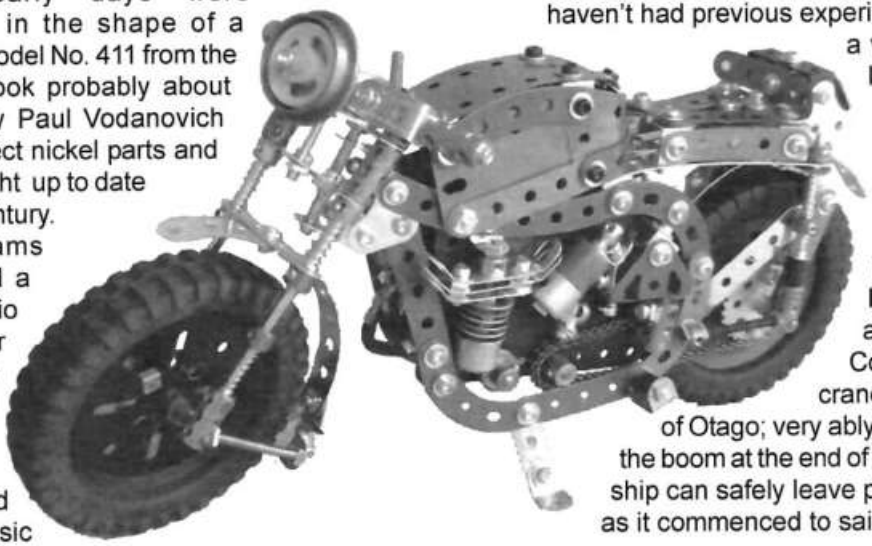
MWT MECCANO CLUB

Meeting February 2008

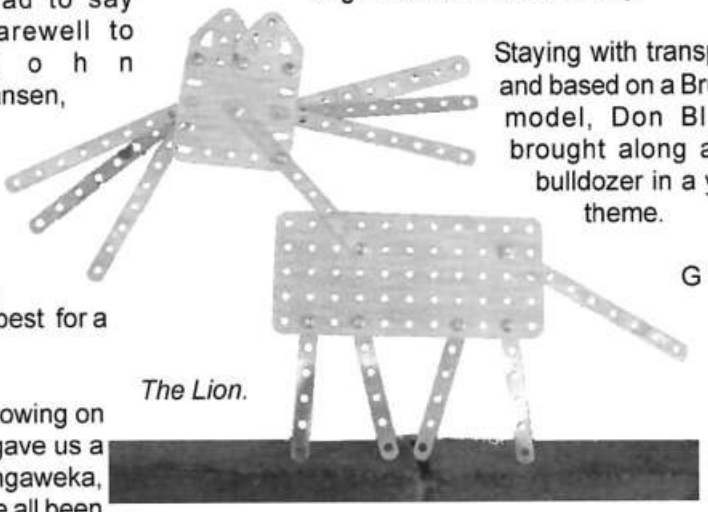
Today we had to say farewell to John Hansen, a very good friend and member of the MWT Meccano Club. Our cousins in Australia have tempted John and his family to try life in Cairns. It could well be that when John has settled down a new Meccano Club could emerge. John, we wish you and your family all the very best for a very happy life in Australia.

John Ince was our speaker for the day and following on from Lloyd Spackman the other month, John gave us a most interesting talk on his Meccano life. Mangaweka, Feilding, Christchurch and back to Feilding have all been part of a fruitful and enjoyable participation in our hobby.

The members of MWT club always manage to bring forth a wide selection of models and interesting Meccano related items to our meetings and today was no exception. The relatively early days were represented in the shape of a Submarine, model No. 411 from the No. 0 to 7 book probably about 1926, built by Paul Vodanovich from the correct nickel parts and bringing us right up to date in the 21st century. Tom Pittams demonstrated a very nice radio controlled car resplendent in a green and silver colour theme with built in sound effects of music (supplied by a grandson) with plenty of Boom Boom. Maybe Tom has dreams of being a boy racer!! Staying right up to date, Lloyd Spackman brought along a very nice aeroplane in a silver colour theme sourced from the Mechanical Workshop book and Tom likewise was able to demonstrate a car built from the same book that has working valve tappets as part of the engine features.



Bob Prescott had two models from the Bernard Périer stable as featured in CQ, both small models, but with plenty of detail, a very neat TR3 sports car and a miniature locomotive. Plus from Bob a motorcycle built around a No. 1 clockwork motor, heaps of detail and built in the red/green scheme. A sidecar is part of the model as a whole, but Bob says this will be a wait and see situation. The original builder was Konkoly.



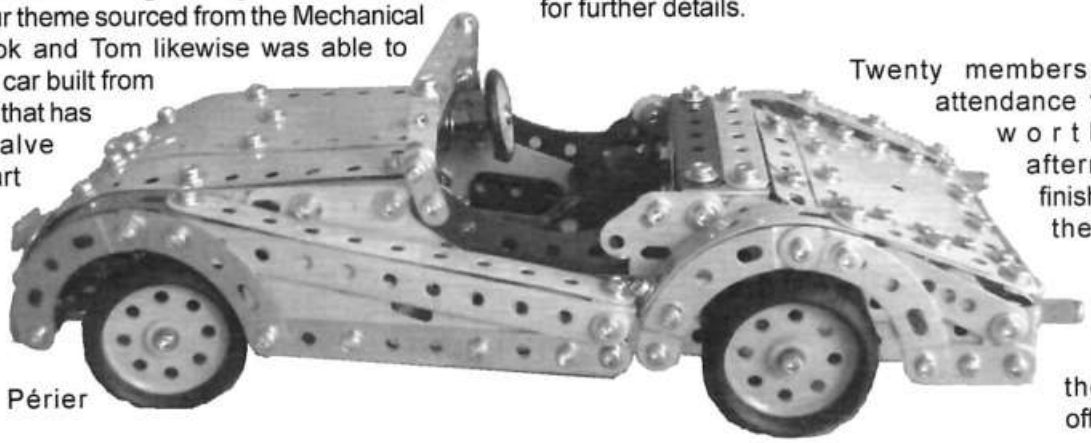
The Lion.

Staying with transport themes and based on a Bruce Geange model, Don Blakborough brought along a very neat bulldozer in a yellow/black theme.

Graham Hawtree has recently purchased a red/green No. 10 set in a four drawer cabinet which he believes to be of 1954 vintage. The cabinet caused much discussion as to the actual date, however with no firm conclusion. A very nice find and purchase for Graham. Alastair Tong is happy to share his Meccano with his grand nieces and nephews and at a recent family gathering two young members of the family who haven't had previous experience of Meccano put together a very good representation of a lion and in contrast a flower in a vase. Photos page 24.

Cranes, of course, are always a favourite Meccano subject. From correspondence with Ross Mitchell of Oamaru, John Ince has been inspired to build a very nice example of a Container Crane, based on some cranes recently supplied to the Port of Otago; very ably demonstrated, including lifting the boom at the end of operations so that the container ship can safely leave port and not wipe out the crane as it commenced to sail.

Darryl Anderson and Lou Nichols both had works in progress of locomotives to run on '0' gauge track. Watch this space for further details.



Twenty members were in attendance for a very worthwhile afternoon that finished off with the usual auction and happy bidders for the items offered.

Meeting Saturday 9th November 2007

Jan and Peter Hancock hosted fifteen members, wives and partners for our spring meeting at their home at 1 Orangewood Drive, Howick, Auckland. Apologies received from Andrew Wells and Andrew Cathie who were both overseas.

For the second Guild meeting in a row, we were able to celebrate and share an 80th birthday complete with a sumptuous spread and birthday cake. The man of the day was George Ovenden. The cutting of the cake was accompanied by a rousing (if not very tuneful) rendition of happy birthday sung by most of those in attendance. George's cake was topped with a (Meccano) part number 80 in honour of the occasion.

Various matters were discussed including where to from here for the NZFMM Magazine, why the March Madness event had had to be cancelled and verbal advice that ***MODEL X*** hobby show would be held in Henderson on Queens Birthday Weekend 2008 after a forced absence this year.

The Auckland Meccano Guild unanimously acknowledge publicly their sincere thanks to Bruce Neilson for his dedication and tireless effort that he has lovingly invested into the magazine that we all look to receive eagerly every second month during his tenure as editor. Our members wish him well and hope that his health improves quickly.

Discussion revealed that several members 'had meant' to notify Simon Moody of their interest in attending the March Madness event but had not yet got around to doing it. It was agreed that there was definitely interest amongst our members in holding such an event, so the secretary was requested to contact Simon and other clubs around the country to gauge general interest in the practicality of raising a similar event which could possibly be mounted in New Plymouth in late April early May.

The following notes detail some of the models displayed and discussed during the meeting.

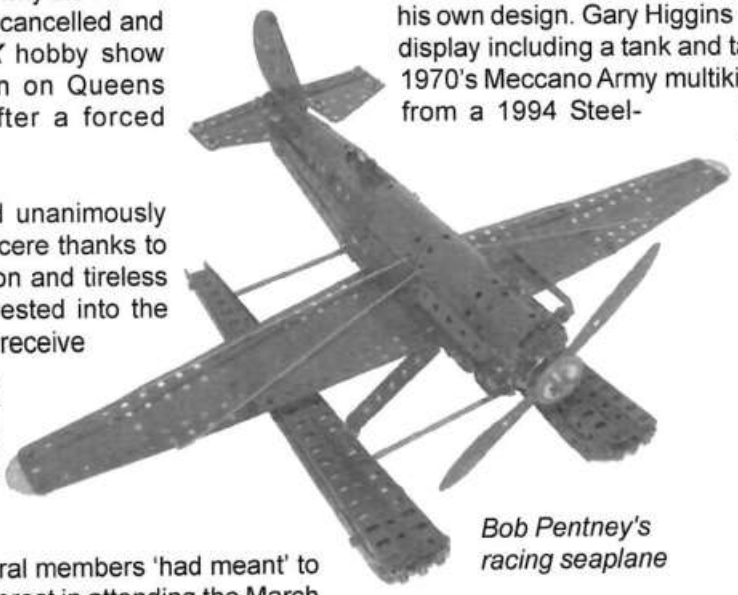
David Wall's offering was a quick reverse mechanism inspired by a 60 year old 'Triang Minic Steam Roller' (one of a range of small clockwork toys manufactured by Lines Bothers). He noted that he had sacrificed one well worn part # 28 in making the model.

Les Megget displayed a Mercedes-Benz 8x4 truck chassis (1:12 scale) with clutch and six speed and reverse all-pinion gearbox (ex Tony Bolton, CQ37), all pinion differentials with interaxle differential locking mechanism. Model equipped with 4-wheel steering through bevel gear and 3:1 reduction gearing, coil-spring suspension front axles, leaf springs + mini–shock absorbers for the rear axles. His second model was a 'Sports' coupe from the recently released Mechanical Workshop outfit with some subtle changes.

William Irwin displayed a Torque Amplifier. The mechanical torque amplifier operates on the capstan principle using cords wrapped around contra-rotating drums. Two stage amplifiers are used in the historic Cambridge differential analyser. The demonstration unit on display at the meeting was a single stage torque amplifier. The lightest touch on the input shaft handle causes the output shaft to rotate, even if it is heavily loaded.

Bob Pentney showed his racing seaplane. Rick Vine showed his F1 car built from the Mechanical Workshop set along with miniature models of a meccanograph, block-setter crane, 'Falkirk' wheel, Sentinel steam engine and a pocket Meccano tractor with shovel.

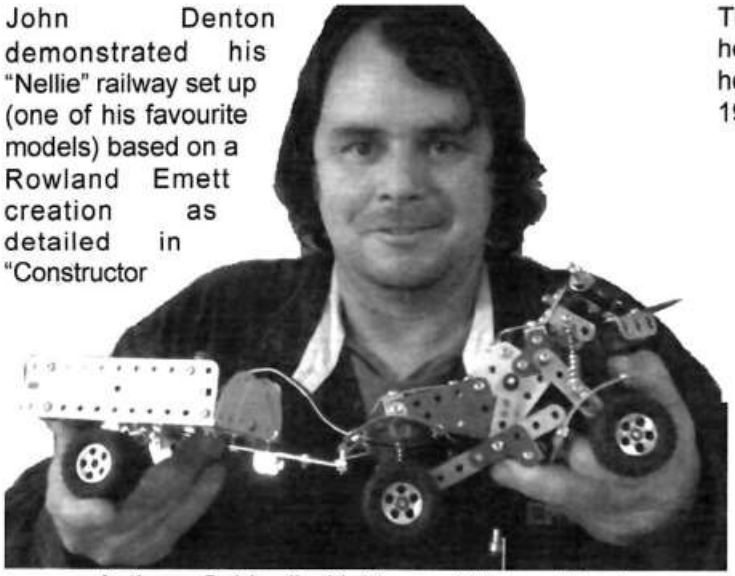
Anthony Caldwell displayed a quad bike and truck of his own design. Gary Higgins had a range of models on display including a tank and tank transporter built from 1970's Meccano Army multikit sets, a Harley Davidson from a 1994 Steel-Tec set, a H2 Hummer from a USA Erector set using the original erector plans and decals and a Big Truck (NZ) set painted black, a Sopworth Camel based on the Marks and Spencer model kit displayed on the internet from his own meccano stock along with several additional items including various historic literature.



Bob Pentney's racing seaplane

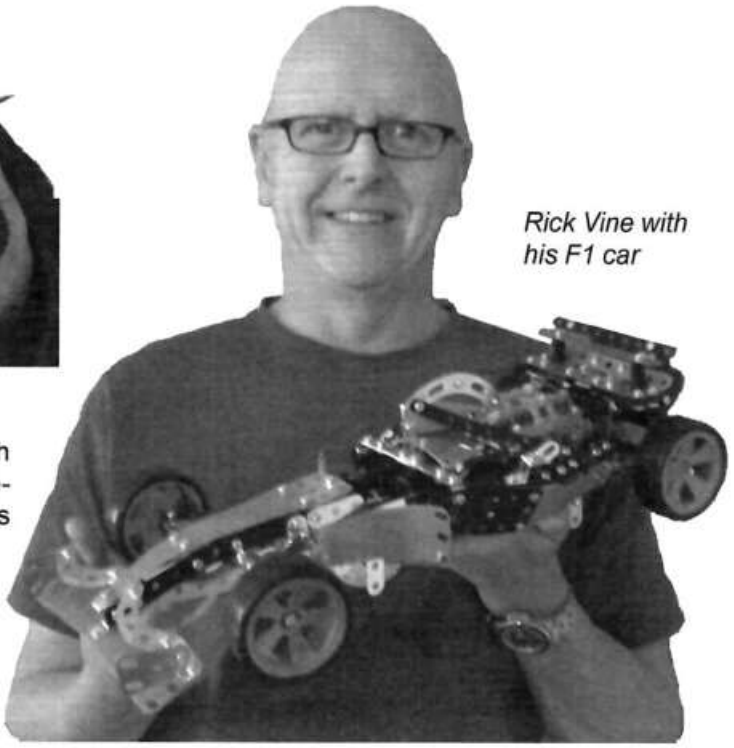
(continued next page)

John Denton demonstrated his "Nellie" railway set up (one of his favourite models) based on a Rowland Emett creation as detailed in "Constructor Quarterly" (with many of his own additions to scenery) which has been on display previously. John has recently re-powered this unit with a Mechanisms geared unit which has substantially reduced its operating noise levels.



Anthony Caldwell with his quad bike and truck

The next meeting of the Auckland Meccano Guild will be held on Saturday the 9th of February 2008 at the Wall's home at 45 Kath Hopper Drive, Maygrove, Orewa (09-426 1965) and all are welcome.



Rick Vine with his F1 car

The Auckland Meccano Guild wishes all Meccano modellers in New Zealand and around the world all the best for the upcoming Christmas season and wishes all happiness and prosperity to each one in the New Year of 2008.

Here is John Freer looking after a Meccano display at a Vintage Hay Weekend near Hawera on the 2nd & 3rd February 2008 (Photo by Bruce Geange)

The Auction Page

by Charles Steadman

Welcome to a new eBay auction page. First of all, a short note about prices. Meccano lots bought from the UK (where most Meccano is sold) are often heavy and have high costs of shipping, GST, and duty. Many people use an exchange rate of about 4:1 to give a representative price for it to arrive at your door in NZ$. For the auctions on this page, I've shown the actual purchase price in the original currency (including commission where relevant), and this equivalent landed cost in NZ$. It s interesting to note that most of these prices are very similar to those achieved at a major UK Meccano auction in 1989, showing that over the last 20 years or so Meccano 10-sets have been quite steady in price. Not as good a return as putting your money in the bank but better than investing in Meccano shares, let s say. You would have done about as well by keeping the money under your bed, but it wouldn't be anywhere near as much fun to play with or even just to look at!

Complete 10 sets

I am often asked whether it's possible to buy complete Meccano 10-sets nowadays. Of course it is! In the last month or two there have been a good number sold, and what looks like a slight firming of prices since the middle of last year. Let's see what we could have bought:

1950 mid red/green parts. No box, but parts excellent and manuals good. Advertised as buyer collect only. A great deal for builders here at £990 ($4000)

Well used 1950s mid red/green outfit with tired parts but in a surprisingly good original box, with a healthy number of extra parts. £1020 ($4100).

Very good late blue/yellow/zinc outfit, probably about 1977 in the later 3-drawer cabinet. Auction said one part repainted which seemed odd as the rest looked almost unused. With plastic inserts, small parts boxes, and perfect manuals. Good value at £1131 ($4500).

Good condition parts making up a 1970s outfit in reproduction cabinet, bought from a dealer with some oddities visible: a thin screwdriver, red-handled cranks, some colour lour-matching issues with 60s and 70s yellow, no small parts boxes but all manuals good. Parts excellent but are they all the real thing? Collect only, but still managed to reach what auctioneers like to call all its money at a surprising £1308 ($5200)

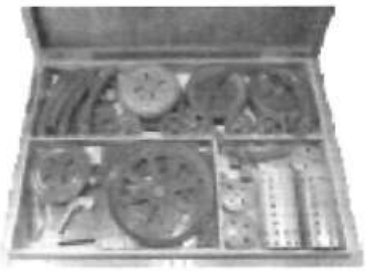
Late 70s blue/yellow/zinc outfit, 3-drawer, absolutely untouched with cardboard outer carton and parts still in tissue. About as near mint as it's possible to get, slight zinc rot apparently. A very good deal at £1348 ($5400).

Very near mint mid-70s four-drawer blue/yellow/zinc outfit, some parts still strung, looks like many of the parts have been just removed from the cards and left as is. Perhaps more parts too. Sold for £1470 ($5900)

Excellent silver/yellow/black (64-66) outfit only slightly used, with box, all original with some matching extra parts but no stringing cards or small parts boxes. An uncommon colour scheme in surprisingly good condition from a reliable seller for £1651 ($6600). A similar one restrung with excellent parts and zinc strips in a replica cabinet sold on buy buy-it it-now for £1750 ($7000).

Near mint 1979 dark blue / dark yellow outfit, everything is there, some parts still in plastic wrapping, excellent 3- drawer cabinet. So near mint you'd not notice. Strong bidding made it reach £1837 ($7300), a tremendous price for this era, but there aren't many around. For the pre-war junkies, there was also a nice used but well well-cared cared-for circa 1930 outfit 7 (the largest set of that period), including good plain wood box and hardback manual, mostly very good parts. There were possibly some issues with the box date and contents, but it came with almost everything. Listed as UK only, but sold to Spain. Probably bang on the money at £3259 ($13k).

Deal of the month



A great collection of late 20s dark red and green in good condition (about an old 6 outfit's worth) in a super Meccano storage box number 3 of the period. Highlights included ten dredger buckets, shuttle, special metal screwdriver, banjo oil can, eight pulley blocks, set of channel segments, two pointers, pair of rail adaptors, four signals, crane grab, pair of train buffers and couplings, two ball thrust bearings, loom healds and wood roller, pair of circular saws and some electrical parts. Advertised as buyer collect and no Paypal, so it didn't attract many bids. The standard Meccano parts and the box were effectively free in a total of £440 ($1760). While we re talking about some of the obsolete components in that lot, let s see how some 1920s rare parts sold recently on their own:

Shuttle, unstamped brass (potentially not original) with what looked like modifications, US$122

Pair of **rail adaptors** £13.07

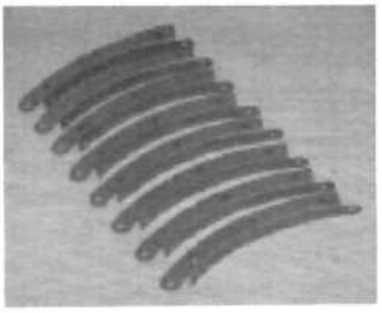
Signals home and distant for sale at £11-12 each.

Pair of **train couplings** £15

Circular saw £7-10

A pair of late 20s bobbins, the green one with a tiny amount of original wire and red one without any original wire. Sold for an incredibly high £112.

Eight **channel segments**: a choice of a UK-only auction in average condition for £56, well used from a good seller for £64, or slightly better ones from the same good seller for £76 ($300).



Pre-war accessory outfits

Meccano M251 Motor Car Lighting Set. This is one of those odd 1930s accessory sets that comes up surprisingly often, adding lighting to the Motor Car Constructor outfits. All original with instructions and strung this was a good example, selling for £208 ($830).

Meccano 1920s vertical steam engine. These come up quite often and fetch reliable prices. This particular one was quite tatty, advertised as complete but appeared to be missing its unique large gear wheel, making it not particularly useful. With box but no instructions, it reached £515 ($2060). In the same auction was a copy of the July 1929 **instruction manual** for this same steam engine. A rare manual to find in good condition, this so sold for £110 ($440).

Meccano on a budget

Not every Meccanoman (or indeed woman) has the budget or desire to spend hundreds or thousands of dollars on these kinds of valuable collector s outfits. And even the most determined of builders might struggle to dismantle a mint Binns Road outfit 10. Let's have a look at some good value auctions that you could have bought to add useful components to your building stock:

Three complete outfits: a Highway Multikit, a 1970s 3M outfit, a French motorised outfit 3, and an MO motor set. These were in fact unused or almost unused outfits, three perfectly reasonable ones, and a motor to boot. But terrific value for builders and collectors alike at £31 ($120) for the lot.

More 1970s BYZ was seen in another lot, consisting of two outfit 2's, two outfit 3's, a Mechanisms outfit, and a set 5. A big stack of near-mint parts all ready to open up and use, for £74 ($290).

Two very nice boxed **1950s outfits in red/green**: an outfit 3 and an outfit 5, with a boxed No. 1 clockwork mot motor. Again, this auction promised good condition (although not mint) parts for the builder at distinctly non- collector prices only £43 the lot ($170). Not quite as budget-level, but excellent value was a **large boxed collection of medium red/green** (probably 1951/52 as it had the black Korean parts in it), which appeared to be pretty much all of a set 10 and some extras like helical gears and motors. Even the wooden screwdriver was there, although the longest girders were missing as were the large flanged rings. Manuals for 7/8, 9, and 10 included, as were a couple of the small parts boxes. Unfortunately (for him) the seller insisted on pickup only and cash payment so this near-10-set went for a song at only £300 ($1200).

Common building parts you might want There are certain Meccano parts that are often bought and sold as extra parts, whatever the size of Meccano outfit you have. Let s see how the prices are going compared with the same time a couple of years ago:

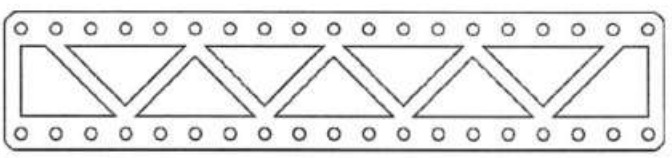
Helical gear pairs: Two nice pairs went in the UK for £17 ($68) each, another from the US went for US$22 (about $44). There is often less competition for building parts in the US and deals can be found. Another US seller had a pair but insists on refusing Paypal, so his auctions never reach good prices and this pair went for US$17 ($34), provided you could find a way to pay him. In January 2006 the average price for helical pairs was just short of £15 ($60), ranging from £12 to £18, so you can see that these are quite stable in price.

24 1/2 angle girders (part 7): There weren't many of these on offer this month. Six zinc ones went for £23 ($90) although they weren't confirmed genuine, and four green ones (three mid green and one light green) in fairly good condition went for £25 ($100). January 2006 saw genuine Meccano part 7's selling for around £6-8 each ($24-32), although you have to ensure that the seller is happy to post these very long parts abroad, and you also need to be ready for them to be bent during shipping it happens occasionally.

Ball thrust bearing (part 168): A fairly battered medium red/green example sold for £17 ($67) and a mongrel version with one side red and the other grey (both looked repainted) for £11 ($45). An unused blue/black version (with the flanged disc in French blue, as supplied from Calais in the 80s) sold for £26 ($104). The average price of these two years ago was around £13 ($52), and so we can see that they are rising in price. None of the usual eBay stores had any in stock at the time of writing. It appears that these parts are getting more difficult to find, like the large flanged rings.

Large flanged rings (part 168b) are now very hard to find at almost any price. A couple of years ago these would sell for around £12-£15 each ($48-60), but recently most UK dealers have been out of stock of genuine ones, and the prices for good ones have leapt up as a result. The only ones for sale recently on eBay were a very tatty red one for £10 ($40), and a pair of mint blue ones for a quite reasonable £27 ($ 108). Some reproduction large flanged rings recently sold on Trademe; a pair for $48 and another pair for $39 (plus $5 postage). The paintwork was worn, but this is still a good price. Another option is to buy new reproduction parts from Ashok, (around $33 each delivered), but you need to buy five to reach the minimum order level.

Seller's deal of the month was shared between two quite bewildering auctions of very grotty 1970s Super Tool Sets. In the first, the tools were ok but the tray was dirty and the box had lost its window. You might expect around £20-25; it sold to a very keen French bidder for an amazing £112. The second (to another Frenchman) was much worse with the wrong screwdriver and the nut dispenser slide missing: an incredible £118 ($470).



New Zealand Club Diary 2008-2009

Auckland Meccano Guild.
Contact-David Wall-Ph 09 426 1965.
Meetings at 2 pm on second Saturday every third month.
10 May 2008, 2.00pm at Neil Carey's home, 23 Eaton Road, Hillsborough.

MWT Meccano Club.
Contact-Tom Pittams-Ph 06 345 9099.
Meetings at 2 pm as listed. Wanganui meetings at St. Luke's Church Hall, cnr. Cornfoot and Manuka Streets, Wanganui.
12 April, 12 July, 9 August, 11 October, 13 December.

Wellington Meccano Club.
Contact-Lou Nicholls-Ph 04 973 6177.
Meetings at 7.30 pm on first Friday every second month at Konini School, Wainuiomata,.4 April, 6 June, 1 Aug, 3 October, 5 December

Christchurch Meccano Club.
Contact- Charles Steadman. Ph 021 378897
Meetings at 7.30 pm on first Friday every month(except January) at St. John's Hall, cnr St. John's Street and Ferry Road, Woolston, Christchurch, 7 March 2008

Other Important Dates
Sat 26 and Sunday 27 April – April Antics New Plymouth
10 -12 April 2009 – Convention, Christchurch.

Additional Meccano Contacts
Hamilton - Don McClelland Ph 07 843 4198.
Hawera – Daryl Anderson Ph 06 278 7666.
Kapiti Coast – Bob Prescott Ph 04 905 2963.
Napier - Trevor Adam Ph 06 843 4837.
Palmerston Nth - Bruce Geange Ph 06 357 0566.

Internet sites
International Society of Meccanomen (ISM) <www.internationalmeccanomen.org.uk>.
Meccano Webring <www.meccanoweb.com/meccring>.
Category Indexes to articles in Meccano related Magazines <www.dalefield.com/nzfmm/constructorq/bneilson.html>

Articles etc. for the April 2008 issue of NZFMM Magazine should be sent to the Editor well before 10 **April** 2008

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

Consolidated Index for NZFMMM 1976 to 2006 Vols. 1 to 30
28 pages in .rtf format can be sent by email only on email request to the Bruce Neilson, <rbneilson@infogen.net.nz>

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First insertion will be printed in full.
Subsequent identical insertions (max. one) may be abbreviated to fit space available.

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NEW SERVICE: MeccParts is now offering an "Indent Order Service" for those wanting larger quantities of a part for a specific model. Whilst we endeavour to have large enough stocks of all our 1000+ parts, it is just not possible to cover every demand of our modelling customers. So if you are planning a large model, send us a list of your requirements and if we can't fulfill from stock we will offer you a discount on those parts that we have to order in, which you will then receive when our next stock order arrives. So if you plan ahead, you'll make significant savings.
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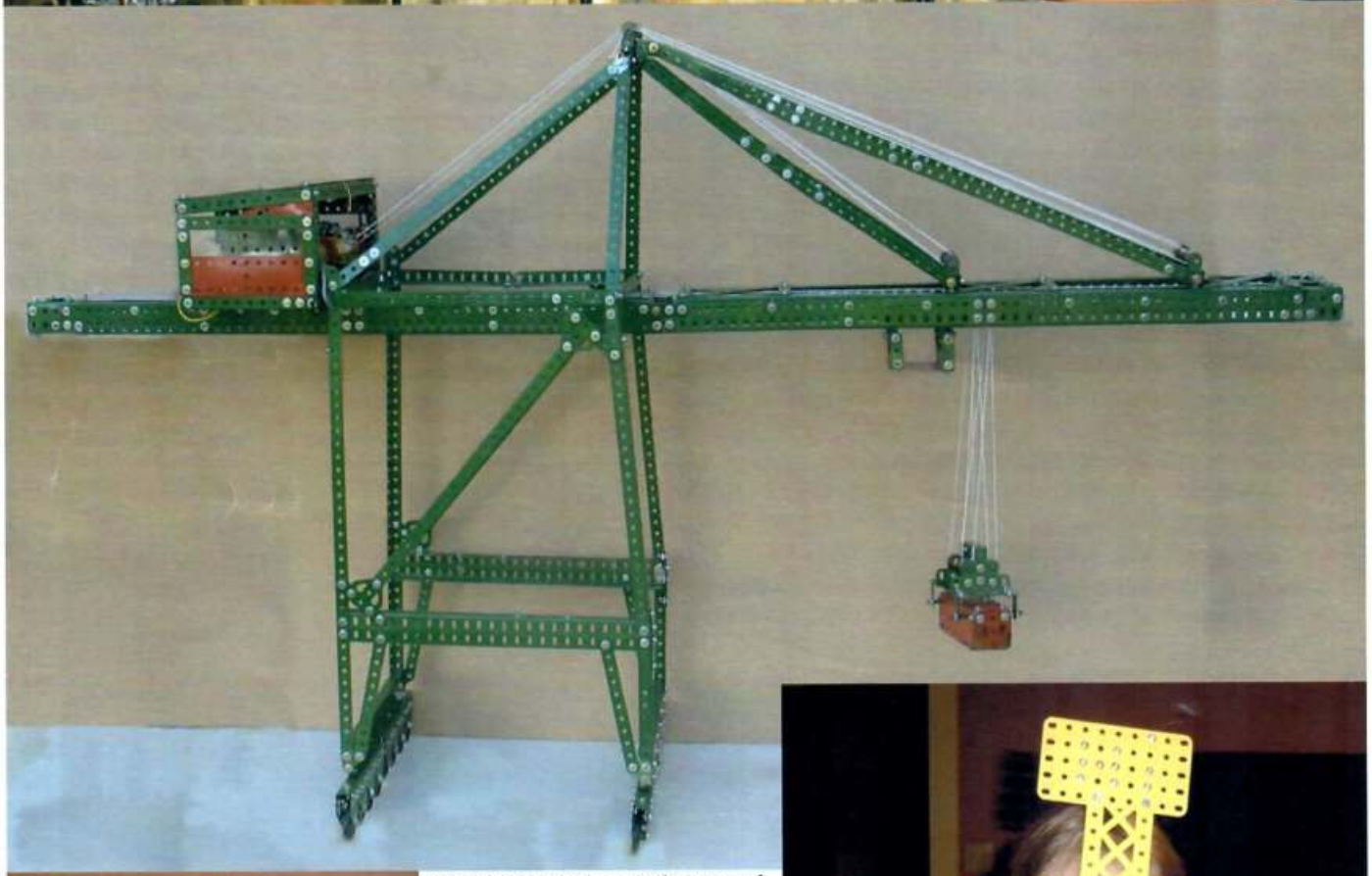
email andrew@meccparts.com
www.meccparts.com

William Irwin with his Torque Amplifier (see page 19)

Note for Contributors:
All copy provided for the magazine should be submitted with text and photos separate.
By email: Text may either be attached as a file in WORD or .rtf format, or included in the body of the email. Photos should be attached as jpg files. A size between 350 and 500 KB is adequate.
By letter: Text may be either typed or handwritten although the former is preferred. 6 x 4 photos are acceptable and will be scanned.

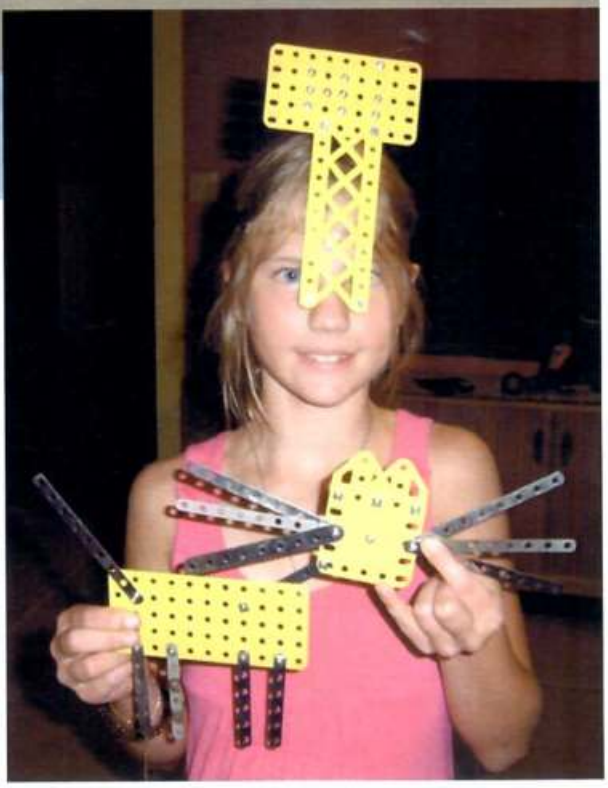


The Locomotive at the top of the page is Rob Campbell's. See page 4 for details.

Centre page is John Ince's new container crane which was on show at the MWT meeting. (Photo by Bruce Geange)

On the right is Monica Strong with her lion and a peculiar headpiece! The flower pot on the left is by Andrea Armitage.

The girls are Alistair Tong's relations. See page 18.



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