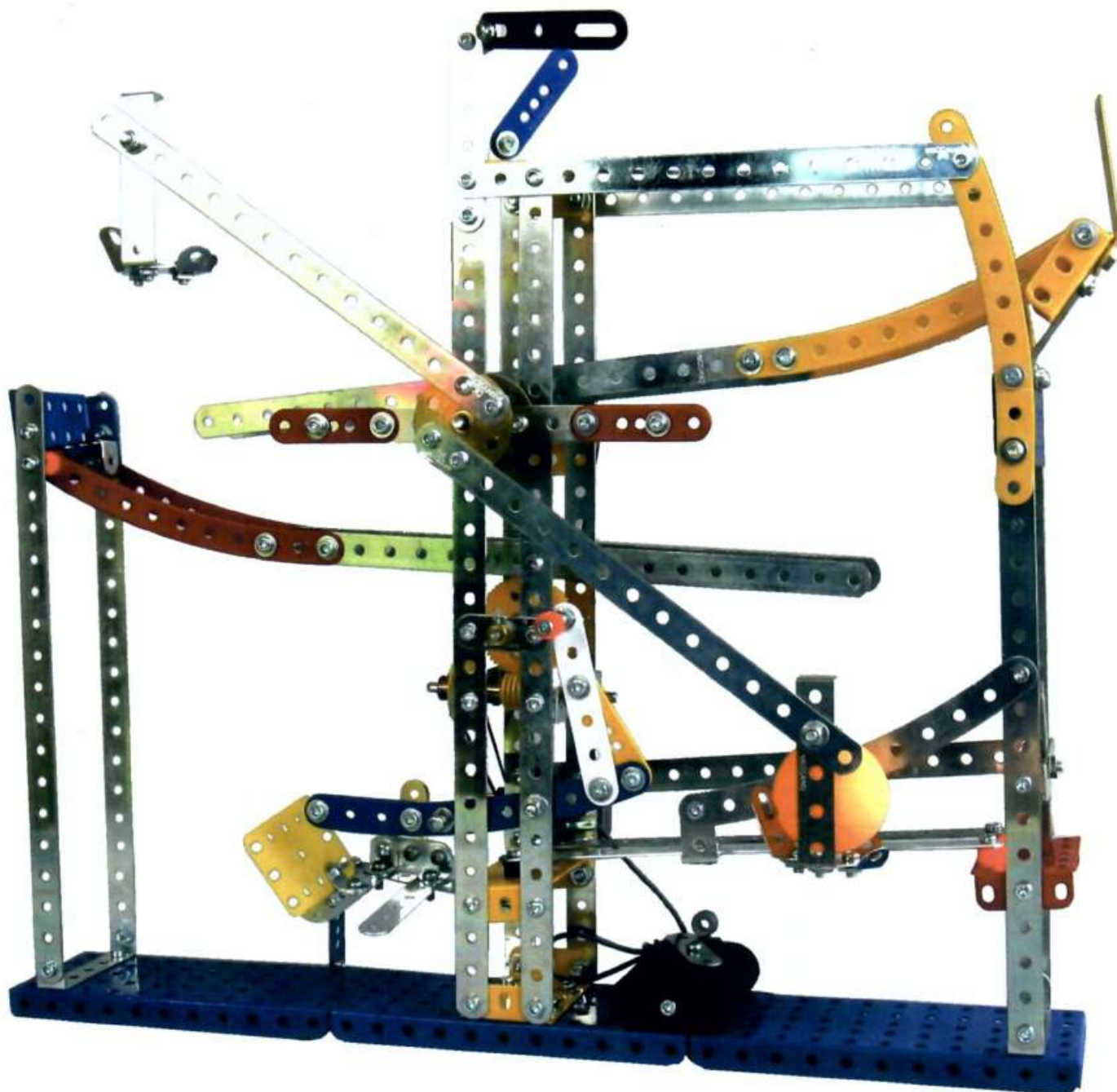




Here is a picture of Bob Prescott's model of a basic ball roller. The design was inspired by Chris Shute's Ball Roller described in a recent issue of CQ but uses some different parts. Building instructions are on page 4.

NZ Federation of Meccano Modellers Magazine

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The NZFMM Magazine is published four times a year in February, May, August, and November. The publisher is the NZ Federation of Meccano Modellers and the magazine is for members of all the New Zealand clubs, as well as for interested subscribers from NZ and overseas. The only meeting is the General Meeting at the biennial New Zealand Federation Convention. The Chairman of the Federation is Peter Hancock and the Treasurer Lloyd Spackman.

The purpose of the magazine is to publish articles and photographs about Meccano and Meccano models, to report the meetings of New Zealand Meccano Clubs, to print letters expressing the views of Meccano modellers, to keep members informed of future events and to print advertisements of Meccano related things. The views expressed in the magazine are not necessarily those of the editor or of the Federation.

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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It's In Your Hands!

Well the New Year is here and I am wondering where the last decade has gone; it seems like yesterday when we were celebrating the start of the new Millennium. I hope you had a restful and fun-filled festive season with your family and friends and that Meccano wasn't too far from your mind. The Meccano 00+ Outfit Challenge on "Spanner" kept many of us busy and amused in the weeks leading up to Christmas. More about that can be found in this issue, if I find time to write it.

Talking of writing articles brings me around to the perennial issue, namely articles for this Magazine. As you will read elsewhere we have decided to reduce the number of Magazines to 4 per year from the 6 published for many years. We will attempt to publish 24 pages in each issue but if there isn't the copy available it will come out smaller. However we desperately need some or most of the quieter members out there to put pen to paper and write an article, be it long or short. **Without your contributions this Magazine could well die in the near future.** I took on the editorship a year ago to edit it, not to write every second article in it! I would much rather be Meccano modelling. This is a common problem worldwide as I often read Meccano related magazine editors begging for copy for upcoming issues. Only Robin Johnson (Editor of Constructor Quarterly) doesn't seem to have this problem because he has contributors from everywhere lining up to have articles published and he has the luxury of working 2 or 3 issues ahead of the current one. That I guess is one of the benefits of editing the best Meccano related magazine, as many people wish to see their models in glossy colour.

I spent the festive season reading many of the past issues of this Mag and the one conclusion I came up with was: Two gentlemen, Bruce Neilson and Bruce Geange, produced many long articles on models and their building instructions in nearly every issue since this decade began. The NZFMM is truly indebted to you both. You did a fantastic job in keeping this Magazine turning over every second month, with original and great models and instructions. Now it is someone else's chance to put their hand up and contribute in a big way. John has produced an interesting table of members who have written articles over the last 8 years and it makes interesting reading. I won't embarrass anyone here but there are quite a few long-standing members who have produced *next to nothing* over that period.

It is up to you. A paragraph or two would be acceptable. You don't need to type it out. I'm pretty good with two fingers on this keyboard! Send me old black and white photos; we can scan them. Some
(continued on next page)

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Changes To Our Magazine

A Message from the NZFMM President

by Peter Hancock

As you are all well aware, the only 'CONSTANT' in life is 'CHANGE'.

Time has now come for changes to be made to our treasured NZFMM MAGAZINE.

For a number of years, we have enjoyed the luxury of receiving six [6] issues of this worthy magazine each year for a very modest subscription rate. Circumstances [explained below] now dictate that the NZFMM Magazine will be produced four [4] times each year and issued during the months of February, May, August, and November. The annual subscription rate has been revised to take into account the reduction of the number of issues, the significant increase in both internal and overseas mailing charges that were imposed on us by New Zealand Post during 2008 and an increase in production costs.

The subscription rate [quoted in NZ\$'s] covering the May 2009 through February 2010 issues has been set at: New Zealand subscribers \$30.00, Australian subscribers \$34.00 and the 'rest of the World' subscribers \$36.00.

The need to reduce the number of issues annually from six to four began to occur with the retirement of our former editor, Bruce Neilson during the second half of 2007 due to health reasons. Bruce, during his term as editor, from time to time advised members of the New Zealand Federation

of Meccano Modellers and subscribers to this magazine of the ever present need for the supply of ongoing reports and copy from members for inclusion within these pages. This need continues and Les Megget, our current editor is actively calling for support in the provision of ongoing copy.

Our thanks go to the relatively small number of those who heeded Bruce's call for copy through the years and continue to do so currently to Les. While Bruce was editing the magazine, he frequently found that he was short of copy and photos and when this occurred he stepped outside the normal role of editor and took on the special challenge of significantly bolstering the level of copy through his own pen and camera. Bruce admitted to me personally that he enjoyed the challenge of researching materials for articles and in stripping down and rebuilding both his own and other modeller's creations which he did regularly to produce model plans and instructions, a service which is not normally the role of an editor but one which he personally enjoyed with some passion and enabled him to produce six issues per year, each containing 24 pages during his term as editor.

Bruce is no longer able to provide this special service and so we must now all look to helping provide materials in a timely manner to our editor Les Megget and our long serving compositor John Ince. Please think on how you can personally help to keep our pages full in the future.

PS: Please complete the subscription form supplied loose leaf with this magazine in full and mail it to the magazine treasurer Lloyd Spackman with your subscription payment as soon as possible. As it is not personalised this year, please make sure that you include your name and postal address.

Contrasts

by Lloyd Spackman

Most Meccano modellers and / or collectors will be familiar with the U.K. magazine "Model Engineer" and many, world-wide, will be subscribers

Mr. Percival Marshall started it in 1898 to support the hobby and the firm of Percival Marshall Limited was still advertising in M.E. in the early 1950s.

I was loaned, recently, eleven M.E. dated between October, 1951, and July, 1952. Reading through them I was struck by the contrasts with today's "Model Engineer".

One word for the look of the 1950s issues is "drab". They are a little longer than A5 in size, have grey and black

(continued from previous page)

suggestions: Tell us about your life and Meccano, models built past and present. Take something out of an old MM and write about it. I plan to rebuild some of my favourite models from my childhood and write about them in forthcoming issues. You could do the same. Most of our members are mature (I'm being careful there) with years of experience of life and Meccano and I'm sure we would all like to read about some of those experiences.

I await your contributions with great expectations and they don't need to be as long as the book of that name.

covers, and the inside pages are printed on brownish paper. They are a complete contrast to the brightness of the 2008 A4 sized magazines which have most of their illustrations in colour and have most attractive front covers.

The biggest change, perhaps, is that in 1950 it was a weekly publication costing 9 pence. Today it is fortnightly and last July it cost NZ\$10.90 per copy.

The initial news page is still called "Smoke Rings" as it was in 1950 and probably earlier than that. In the 1950s there were articles in most issues about model car and model boat building and racing, but today they are hardly mentioned and the emphasis is on locomotives, traction engines and 19th Century engines of all kinds.

The advertising has changed, too. Of 20 advertisers in 1950 only one appeared in 2008, though under a slightly different name. The 2008 advertisements are, of course, more colourful, there are a lot more of them, and many are for supplying models or parts of tanks, locomotives, 19th Century engines and such like, as well as ads for model exhibitions in various parts of the U.K.

In both eras there are the basic model engineering features of "How to Build", (articles often carrying on over several consecutive issues); Workshop Hints; Letters to the Editor and Clubs News.

Incidentally, our NZFMM Magazine has written permission from the Editor of "M.E." to reprint any Meccano related articles it wishes.

A Basic Ball Roller

by Bob Prescott

If you have never built a ball roller here is your chance to do so. I originally built the "Ball Roller in a Box" designed and built by Chris Shute and featured in a recent CQ. Chris limited himself to the parts provided in the "Ferris Wheel" set 8258 – a good assortment of parts including two face plates and a large flanged box lid. I will use more common parts, adapt Chris Shute's design and add a few of my own. I want to ensure that the larger newer 40mm table tennis balls can be used, something which I found difficult on the original Shute model.

For those of you who are not aware of the evolution of the table tennis ball, 38mm balls were used up until the 2000 Olympics when the 40mm was introduced. This caused considerable controversy, the Chinese team accusing the organisers of favouring non-Chinese teams because the larger ball slows the game down and reduces the players' ability to spin it. Later a 44mm was suggested but this did not go ahead – the Chinese would not have been happy with an even larger ball.

The Base and Towers

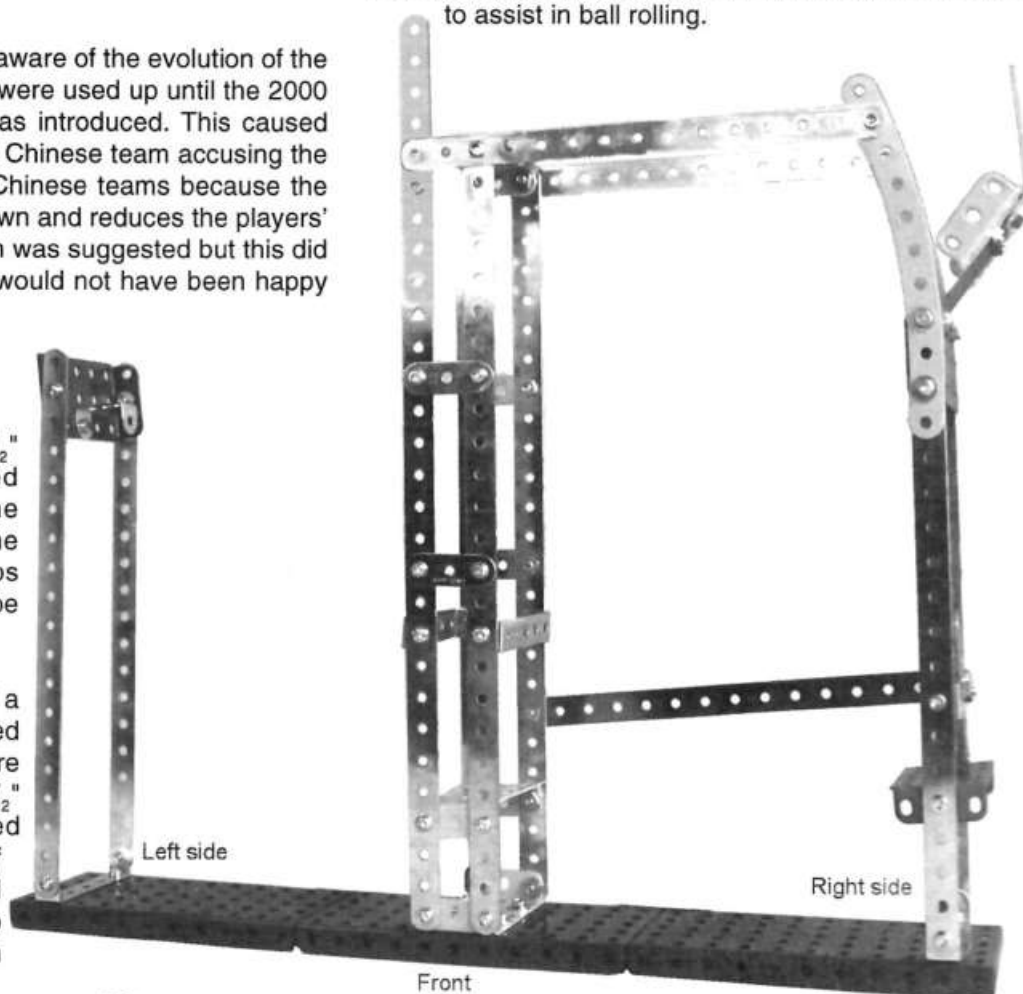
Three P/N 52 - $5\frac{1}{2}$ " x $2\frac{1}{2}$ " Flanged Plates are bolted together lengthwise and the base is strengthened on one side with 2" Perforated Strips across the joins, which will be the back.

The centre tower consists of a P/N 51 - $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flanged Plate secured over the centre holes flange up. Four $12\frac{1}{2}$ " Perforated Strips are joined vertically to the outer holes of the P/N 51 and a further P/N 51 joins these four holes up and sloped down to the left on its elongated holes. The front and back pillars are also joined by two P/N 48a - $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Double Angle Strips 10 holes up from the base. $1\frac{1}{2}$ " Perforated Strips join the left and right pillars 12 and 18 holes up from the base both on the front and back. The front left pillar is lengthened by a 3" Perforated Strip overlapping two holes and at the same time, a further P/N 51 joins the front and back pillars sloping down to the right.

The right hand tower consists of a $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Double Angle Strip bolted to the base one line of holes from the end, with two $9\frac{1}{2}$ " Perforated Strips bolted vertically from it. A P/N 51 - $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flanged Plate is bolted centrally between them 5 holes up from the base, sloping down to the left. A

$2\frac{1}{2}$ " x $1\frac{1}{2}$ " Double Angle Strip is also bolted between them 8 holes up from the base with a 5 hole Perforated Strip connected across it. At the top two P/N 89 - $5\frac{1}{2}$ " Curved Strips are joined to the $9\frac{1}{2}$ " Perforated Strips overlapping four holes, together with a $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flanged Plate between the front and rear pillars. To this, an arrangement of two P/N 73a Obtuse Flanged Plates and a P/N 51 are bolted to stop the ball escaping – you could use other parts to complete this.

The left tower is a $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Double Angle Strip bolted to the base one line of holes from the end with two $9\frac{1}{2}$ " Perforated Strips attached vertically to it and a $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flanged Plate joins them at the top three holes and a $1\frac{1}{2}$ " Double Angle Strip is attached to the bottom centre holes to assist in ball rolling.

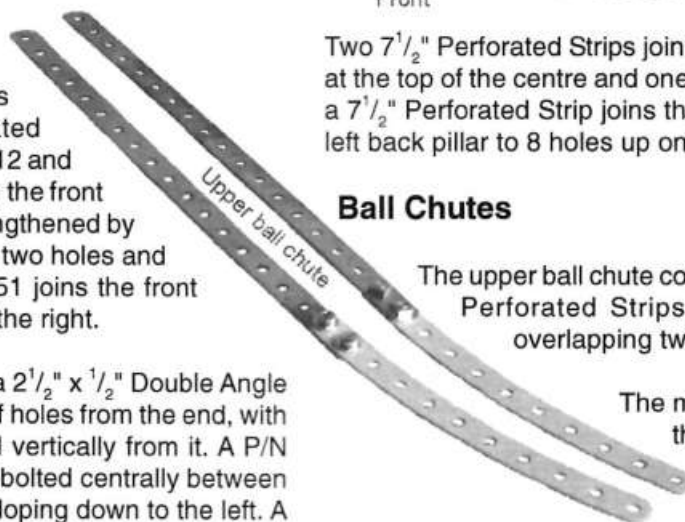


Two $7\frac{1}{2}$ " Perforated Strips join the centre and right towers at the top of the centre and one hole down on the right and a $7\frac{1}{2}$ " Perforated Strip joins the centre, 7 holes up on the left back pillar to 8 holes up on the rear right pillar.

Ball Chutes

The upper ball chute consists of front and back $9\frac{1}{2}$ " Perforated Strips and $5\frac{1}{2}$ " Curved Strips overlapping two holes.

The middle ball chute consists of the same parts overlapping three holes.



The lower ball chute will be described later when completing the assembly.

The Gate Rotor

Bush Wheel bolt Strip centre hole on and spaced by Washers to match the boss. On each end of the $5\frac{1}{2}$ " Perforated Strip bolt a 2" Perforated Strip overlapping four holes.

Middle ball chute

On a P/N 24 - 8 hole $5\frac{1}{2}$ " Perforated the boss



Gate rotor inside

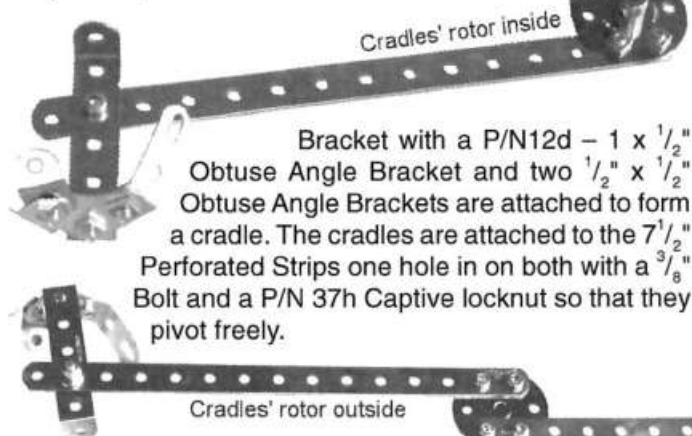


Gate rotor outside

The Cradles' Rotor

On a P/N 24b - 6 hole Bush Wheel bolt two $7\frac{1}{2}$ " Perforated Strips by their end two holes parallel and facing outwards. The two cradles consist of a $2\frac{1}{2}$ " x $\frac{1}{2}$ " Double Angle Strip to which a P/N 133a Corner

Bracket with a P/N12d - $1\frac{1}{2}$ " x $\frac{1}{2}$ " Obtuse Angle Bracket and two $\frac{1}{2}$ " x $\frac{1}{2}$ " Obtuse Angle Brackets are attached to form a cradle. The cradles are attached to the $7\frac{1}{2}$ " Perforated Strips one hole in on both with a $\frac{3}{8}$ " Bolt and a P/N 37h Captive locknut so that they pivot freely.

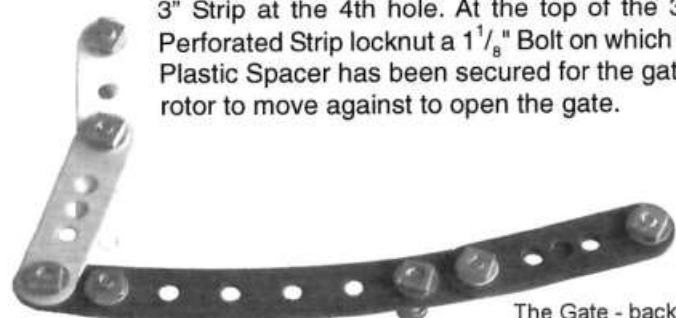


Cradles' rotor inside

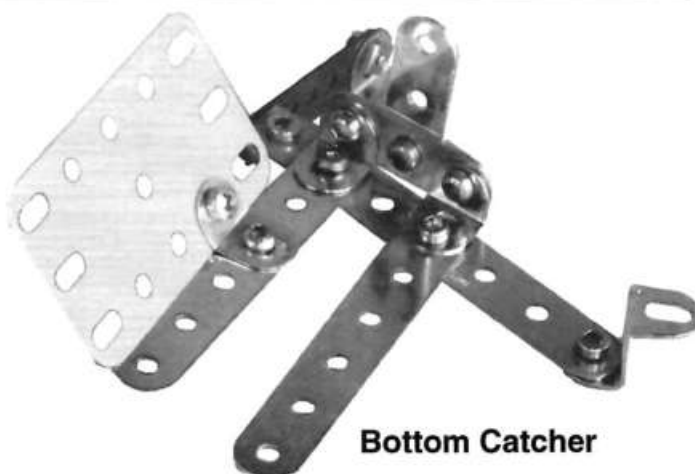
Cradles' rotor outside

The Gate

On one end of a P/N 89 - $5\frac{1}{2}$ " Curved Strip secure a 2" Perforated Strip on its end holes to add weight. On the 5th hole from the left locknut a $\frac{3}{8}$ " Bolt to act as a limiter. Secure a 3" Perforated Strip in the next to last hole on the other end and a 2" Perforated Strip in the last hole, meeting the 3" Strip at the 4th hole. At the top of the 3" Perforated Strip locknut a $1\frac{1}{8}$ " Bolt on which a Plastic Spacer has been secured for the gate rotor to move against to open the gate.



The Gate - back



Bottom Catcher

The back consists of a $3\frac{1}{2}$ " Perforated Strip with two 3" Perforated Strips extending forward from the 2nd and 4th holes from the left. Also attached to these holes are two Angle Brackets joined by a $1\frac{1}{2}$ " Perforated Strip with a further $1\frac{1}{2}$ " Perforated Strip extending vertically from its centre hole. From the 3rd hole forward on the left 3" Perforated Strip, a $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flexible Plate is joined by an Obtuse Angle Bracket. A 2" Perforated Strip is connected to the back of the $3\frac{1}{2}$ " Perforated Strip by an Angle Bracket with a further Angle Bracket connected to the other end which will be connected to the base. A P/N 125 Reverse Angle

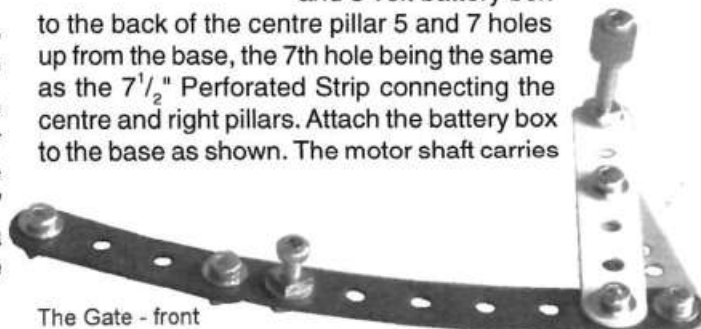
Bracket is attached to the end right hand hole which will be connected to the centre tower.

Main Assembly

Let's start by attaching the bottom catcher to the base and centre tower. The Reverse Angle Bracket is attached to the underside of the $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flanged Plate four holes up from the base. You may find it easier to detach the Flanged Plate. The 2" Perforated Strip on the other end is attached to the rear base plate. The catcher is arranged to be sloping downwards to the front.

Attach a standard Meccano motor and 3 volt battery box

to the back of the centre pillar 5 and 7 holes up from the base, the 7th hole being the same as the $7\frac{1}{2}$ " Perforated Strip connecting the centre and right pillars. Attach the battery box to the base as shown. The motor shaft carries

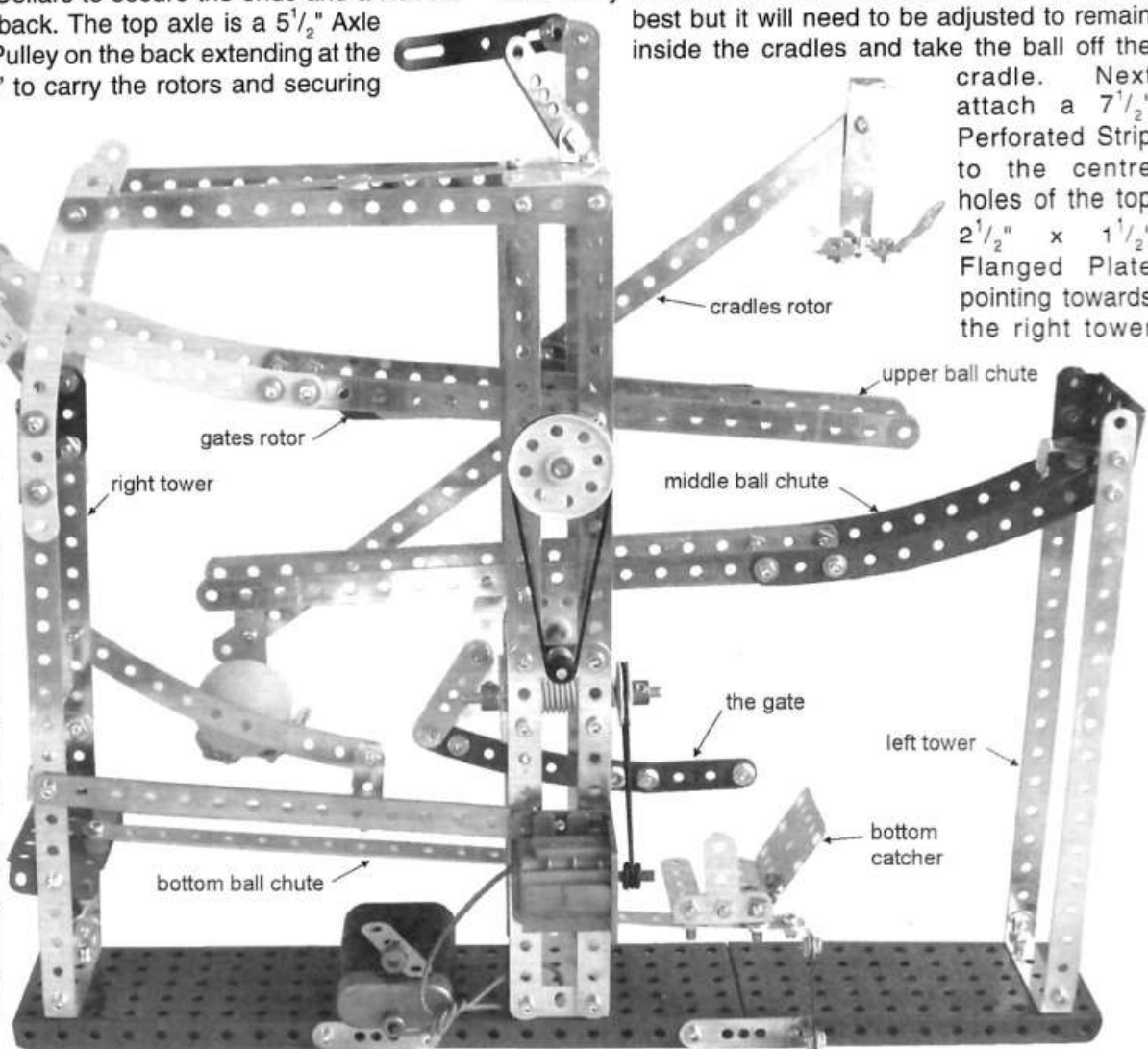


The Gate - front

a P/N 23c Rubber Grommet. The bottom axle is a 3" Axle Rod feeding left to right through the $2\frac{1}{2}$ " x $\frac{1}{2}$ " Double Angle Strips 10 holes up from the base and carries a 1" Pulley on the left side and a Worm in the centre and a Collar to secure the other end.

The middle axle is a $3\frac{1}{2}$ " Axle Rod feeding back to front through the $1\frac{1}{2}$ " Perforated Strips 12 holes up from the base and carries a 57 tooth pinion in the centre (against the Worm) with Collars to secure the ends and a Rubber grommet at the back. The top axle is a $5\frac{1}{2}$ " Axle Rod with a $1\frac{1}{2}$ " Pulley on the back extending at the front by about 2" to carry the rotors and securing Collar.

Connect the motor shaft "pulley" to the 1" Pulley on the bottom axle and the "pulley" on the centre axle to the $1\frac{1}{2}$ " Pulley on the top axle with suitable driving bands—I use "O" rings and ensure that everything turns freely and the top axle turns anticlockwise. It is useful to connect a 2" Perforated Strip on the battery box to ensure the switch cannot be turned in the wrong direction.



The completed Ball Roller from the back.

Now fix the upper ball chute front and back. Using a $\frac{3}{4}$ " Bolt in the top hole of the $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flanged Plate on the right tower, space the chute inwards with two P/N 38a Spacers. The chute is then spaced from the left pillar of the centre tower 11 holes from the top using a $1\frac{1}{8}$ " Bolt and Nuts in the 10th hole from the left end of the chute. The back side is fitted opposite.

The middle ball chute is fitted similarly from the bottom hole of the $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flanged Plate on the left tower and spaced from the right pillar of the centre tower 12 holes from the top.

The bottom ball chute is made with two $7\frac{1}{2}$ " Perforated Strips extending from the inner 2nd and 4th holes of the horizontal $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flanged Plate to the centre aligned holes on the Flanged Plate in the centre tower, spaced by a P/N 38a Spacer. A 1" x 1" Angle Bracket is connected to the 7th hole from the left of the front $7\frac{1}{2}$ " Perforated Strip with a 5" Curved Strip extending from it to the right pillar 11 holes up from the base.

Next we need to attend to the ball take-off at the top of the centre tower. Attach a P/N 215 – Formed slotted Strip to the left pillar extension with an obtuse Angle Bracket. I have tried many different methods here and for me this is the best but it will need to be adjusted to remain inside the cradles and take the ball off the

cradle. Next attach a $7\frac{1}{2}$ " Perforated Strip to the centre holes of the top $2\frac{1}{2}$ " x $1\frac{1}{2}$ " Flanged Plate pointing towards the right tower

together with a 2" Perforated Strip and Angle Bracket to limit the ball's movement.

Now fit the gate 4th hole from the right on the gate to 7th hole up from the base on the right pillar, spaced from it by two Washers using a $\frac{1}{2}$ " Bolt and P/N37h Captive locknut so it pivots freely. Fit the gate rotor on the top Axle Rod with a Grub Screw and adjust to open the gate. Now put the cradles' rotor on the same axle with a Grub Screw and adjust so that the cradle is at the bottom catcher when the gate opens.

Construction is now complete and I suggest you take the top driving band off and manually turn the cradles' rotor. Ensure that the cradle just misses the top catcher and that the cradle is at the bottom catcher when the gate opens. Finally ensure it is far enough out on the top axle to give enough space for the ball to move between cradles' rotor and the model itself.

Re-attach the top driving band and try it. If it works first time it's a fluke! Adjust, adjust, and adjust. I sometimes think that it takes as long to 'tune' a ball roller as it does to build it! Enjoy!

Meccano Gears – A (Fairly) Brief History

by Les Megget

The first mention of gears in the *Mechanics Made Easy* (MME) system (the precursor of Meccano) was in the October 8th 1903 edition of "Model Engineer" in the 'The News of the Trade' section. Gears had not been mentioned in the official company advertising of early 1903. These initial gears were a $\frac{1}{2}$ " diameter Pinion Wheel with 20 teeth, a $\frac{3}{4}$ " diam. Pinion Wheel with 25t (both with $\frac{1}{4}$ " faces) and one Gear Wheel with 50t. Surprisingly there was no fourth gear to mesh with the 20t Pinion at 1" centres.

Someone, Frank Hornby probably, decided that a pitch of 40 be used, equivalent to 40 teeth per inch of diameter. It is reported in Vol. 6 "The Meccano System" by Bert Love & Jim Gamble, that the early gears were manufactured by a local clockmaker. Clockmaking practise was followed by incorporating wide faced pinions and narrow faced gears (this not being the engineering norm). The Pinion Wheels were boss-less and all the gears were held on the axles by a crude featherlike 'key' into a longitudinal slot cut along the axle (known as a Grooved Rod). These gears were made available in the first separate accessory outfit, not in the main outfits. In 1904 the smallest Outfit A contained only one $\frac{1}{2}$ " Pinion Wheel to act as a ratchet wheel.

The 1904 contents list includes two Contrite Wheels (sic), a $\frac{3}{4}$ " and a $1\frac{1}{2}$ " diam. version, along with a boss-less Worm Wheel. The non-technical term "contrite" was only replaced with the familiar contrate terminology several years later. To hold the Worm Wheel effectively required 2 keys, one at each end, making the worm and fixings over $1\frac{1}{2}$ " long overall (excessive in confined spaces).

The now familiar part numbering system first appeared in the 1906-7 Instruction Manual, namely P/N 27, 50t Pinion Wheel; P/N 28 and 29, large and small Contrite Wheels; P/N 25, 25t Pinion Wheel; P/N 26, 20t Pinion Wheel and P/N 32, Worm Wheel.

MME officially became Meccano on 14 September 1907 and early sets used old style MME tin boxes with small "Meccano" stickers. The gears now had a tunnel shaped keyway using an improved key design known as "Special Keys" using an axle rod with no slot. There is no evidence to show that the gears were made 'in-house' in Hornby's new factory at Duke Street, Liverpool. Some gears have been found with both forms of keyway but it is thought that early gears were later modified, by the factory, to include the tunnel keyway. Fig.1 shows a 1911 50t gear with the tunnel keyway (from www.NZMeccano.com).

The early "contrites" and gears were turned from solid brass stock to form the boss. However in



Fig.2 - Range of 57t gears from c1924 on left to modern plastic versions to right.



Fig.1 - c1911 50 tooth gear with tunnel keyway

1911 Hornby patented his 'press and squeeze' method of punching the wheels from sheet brass and then pressing them onto a $\frac{3}{8}$ " diam. boss with a circumferential groove, under pressure, thus securing the toothed disk to the boss. A tunnel keyway was still employed through the boss.

The Worm Wheel was the first gear to receive a singly tapped boss (along with the new Collar) in 1912. The other gears required longer bosses on one side only before they could be tapped, this replacing the keyway method of fixing. This occurred during 1913. Grub screws ($\frac{5}{32}$ " long) were supplied for fixing the gears to Axle Rods in 1912 but were not numbered till c1916 as P/N 69a (see Charles Steadman's NZMeccano site for much more detail).

A 56t Gear Wheel, P/N 27a (with no radial holes) was at last introduced in 1915 to mesh at 1" centres with the existing 20t Pinion Wheel. The more useful, for clockmakers anyway, 3:1 ratio of course needed a 60t gear but it seems this was not possible with the gear blank, if good meshing was to be achieved.

Towards the middle years of WW1 brass was in very short supply and gear wheels were pressed from thin steel plate. Brass bosses were still used with these mild steel gear disks.

1" Gear Wheels with 40t (P/N 31) and the first Bevel Gears (P/N 30) were introduced in 1919. The other gears and contrates reverted to brass blanks with the bosses still attached by the 1911 patent method. Newly introduced was the $3\frac{1}{2}$ " long Rack Strip (P/N 110) with the same tooth pitch as the gears.

Towards the end of 1921 the 56t gear received an additional tooth, while the $\frac{1}{2}$ " Pinion lost a tooth to 19. At last this pair produced a 3:1 ratio, very necessary if you wished to construct a clock. I should add that the old

20/56 = 1:2.8 ratio can be useful for gearbox fanatics, like myself, because $2.8 \sim 2\frac{5}{8}$, where $\frac{5}{8} = 1.414$ is a common amplification factor used in truck gearboxes. This is the ratio between a gear ratio and the one above. In fact 20t Pinions and 56t Gears are now being reproduced by Ashok and Erecta for such a use. Fig. 2 shows a range of 57t Gears from the 1911 patent bossed example (c1925) on the left, 1927 single, standard bossed to yellow and black plastic varieties from the last 2 decades on the right.

In 1924 the $3\frac{1}{2}$ " diam. 133t Gear Wheel (P/N 27b) was introduced and it was immediately used in the popular Steam Shovel model (SML 19).

The first spur gear differential appeared in the April 1927 Meccano Magazine, (see next page). This was a huge mechanism using two $2\frac{1}{2}$ " Face Plates as the diff. casing and incorporating 57t Gears and 19t Pinions. This differential was only useable in vehicles due to the release of Dunlop Tyres to fit 3" Pulleys the same year. The now familiar small spur gear diff., using only 19t Pinions, was only possible when the 6-hole Bush Wheel and Wheel Disk were introduced in 1954.

Half inch faced $\frac{3}{4}$ " and $\frac{1}{2}$ " Pinions, P/N 25a and 26a respectively, were added to the range in 1927. $\frac{3}{4}$ " faced equivalent gears became available in 1929. Also that year Meccano introduced, for a short time, 45-degree Bevel Gears (P/N 30a $\frac{1}{2}$ " diam. 30t and P/N 30c, $1\frac{1}{2}$ " diam. 48t). However the $\frac{3}{4}$ " diam. P/N 30b 24t gear was withdrawn and P/N 30a and 30c "were recut to correct cone-angles", while P/N 30c had 8 radial holes added for use in differentials, etc.

I won't go on in detail about the Geared Roller Bearing introduced in 1928, because it used a different tooth pitch on the bearing ring and Pinion.

Not until 1931 was the 95t, $2\frac{1}{2}$ " diam. Gear Wheel (P/N 27c) released, thus providing a 5:1 ratio with the 19t Pinion at $1\frac{1}{2}$ " centres. Although there had been many suggestions made by readers in the MM that a gear with internal teeth (gear ring) was needed, it wasn't till November 1933 that the 133t external, 95t internal Gear Ring (P/N 180) became a reality. Simple(?) epicyclic gearboxes at last were able to be constructed!

The final addition to the traditional pre-war Meccano range of gears, the Helical gear set (P/Ns 211a and 211b) were first mentioned in trade leaflets of May 1935. MM readers

had again been requesting a set of "skew gears" for well over a decade but the Company (via the MM Editor) had always fobbed them off. The only problem with the large gear (211b) was its lack of radial holes required for differential crown wheel use.

Constructors had to wait till the 1980s for such a drilled gear to be available from M.W. Models with 6 radial holes, 35t. (see CQ No.78, December 2007). The Helical gear-set has a reduction ratio of 2.5:1, a good choice for vehicle differentials.

The useful 4:1 gear ratio at 1" centres arrived in 1954 with the introduction of P/N 26c the 15t Pinion and P/N 27d the 60t Gear. This completed the range of spur gear ratios of 1:1, 1:2, 1:3, 1:4, 1:5 and 1:7. Gears weren't included in the smaller outfits but from 1949 the Meccano Gear outfit 'A' (blue boxed) made up for that deficiency. However there were no Bevel or Helical Gears included in the outfit. I remember in the late 1950s that these

specialised gears were almost impossible to obtain in NZ as spare parts. Gear Outfit 'B' (red boxed) was introduced in the September 1956 MM. This improved set also contained the new Rod with Keyway and Key Bolts. Fig. 3 shows a Gear Outfit B in a red box labelled Outfit A. I am told by William Irwin that this red box and label is correct but it would have had a "B" sticker over the "A" when it left Binns Road in 1956. Using up the old stock of A labels it appears.

Today just about every gear with any number of teeth you would ever need is available from the compatible part producers, you just need the financial ability to pay for them!

Please note that there are many slightly different versions of each gear manufactured since their first release. In the case of the 50t gear, P/N 27, Charles' website lists 13 versions between 1902 and 1946. Very early versions had 2 radial holes but I have never seen this version "in the flesh".

In this resume I've mainly used Vol. 6 of the "The Hornby Companion Series" as my reference and some of the introduction dates may be at slight variance with other more modern sources.

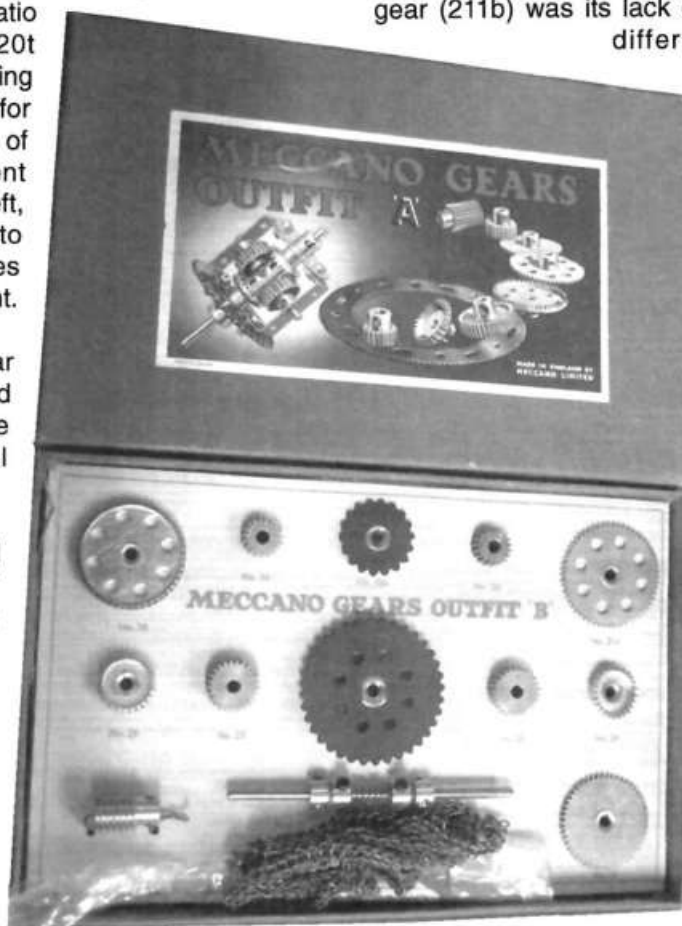


Fig.3 - 1956 Gear Outfit B with A label on box. Should have "B" sticker over the "A"! (Note: 4 of the gears shown on the label don't appear in the outfit).

Motor Car Differential Gear

The Principles of Back-Axle Transmission Demonstrated by a New Meccano Model

By Edgar Wright

In the February "M.M." our contributor explained the mechanical principles involved in steering a motor car, and described a Meccano model of Ackermann steering gear. Below he deals with rear axle transmission, and describes a Meccano "spur-gear" differential that may be used as an alternative to the differential gear at present fitted to the Meccano motor chassis (Model No. 701). The type of differential represented in the latter model is more common in actual practice, but a good deal of useful information will be obtained from the construction of the gear shown in the accompanying article, and many readers may prefer to use this new form in their Meccano motor cars.

IN the article entitled "Steering a Motor Car/" which appeared in the February issue of the "M.M." it was explained that when a car travels in a curved or circular path, the two front road wheels must each describe an arc struck from the centre of the circle or portion of a circle in which the car moves, and the outer wheel must naturally follow an arc of greater radius than the wheel that is nearer to the centre. This will be clear on reference to Fig. 3, which is reproduced from the February issue for the benefit of those readers who are unable to refer back to that number.

The drawing is intended to represent a car turning a corner and in doing so the wheels must describe an arc or portion of a circle whose centre point is shown at A. It is obvious that the radius AC of the outer wheel (that is its distance from the centre A) is greater than the radius AB of the inner wheel. Since this is the case, it will be clear that the outer or farthestmost road wheel must traverse a greater distance or revolve a greater number of times than the inner wheel.

The difference in speed thus set up between the two wheels is not important in the case of the front wheels, for they are both free to turn on their individual axles; but it is obvious that since the rear or driving wheels are similarly placed in regard to the central point A, the same rule must apply to them. To state this more plainly, the rear wheels should rotate at different speeds when the car moves in a curve, otherwise slip will take place between the tyres and the road surface, which would result, at least in the heavier types of cars, in damage to the tyres and in more or less serious inconvenience to the steering. But both these wheels must be driven constantly from the engine, and each must receive an equal amount of driving power. Therefore it is necessary to incorporate in the back axle, or in a supplementary shaft connected at each end to one of the rear wheels by means of chain or belt drive, some device that will transmit the power evenly to the wheels and at the same time allow for the difference in speed that arises immediately the car deviates to any extent from the straight.

Principle of Differential Gear

The mechanism that fulfils these functions is known as a "differential" or balance gear. Its operation may be followed from studying Fig. 1, which is intended to illustrate the principle of the apparatus only.

The back axle of the car is composed of two separate sections 1 and 2, each of which carries at its outer end one of the road wheels. The shaft 1 is rigid with the gear wheel 3 and shaft 2 is secured in a similar wheel 4. The small pinions 5 and 6 are mounted so as to be in constant engagement with each other. Pinion 5 also engages with the gearwheel 3 and pinion 6 with the wheel 4. The spindles on which the pinions are mounted are journaled in a frame or cage 7 rigidly fastened to a large crown bevel 8, which is free on the shaft 1. The crown wheel 8 receives the driving power imparted by the engine via the propeller shaft and small bevel pinion 9, and the frame 7 and pinions 5 and 6 rotate as one unit with the crown wheel. The small pinions are sometimes termed "planetary" wheels, for the reason that they revolve round the gear wheels 3 and 4 in much the same manner as the planets rotate round the sun.

Turning in a Small Circle

Now suppose that for some reason the road wheel on shaft 2 is immovable and that the frame 7 and the bevel 8 are rotated by the engine. Since the wheel 4 is stationary the pinion 6 must turn upon its spindle as it rolls round 4. But this pinion 6 is in engagement with 5, which, in turn, meshes with the gear wheel 3. Therefore the wheel 3 must be rotated from the action of the pinion 6 as it rolls round 4, thereby driving the other road wheel on shaft 1. The whole power of the engine is now absorbed in the rotation of this road wheel, which, if resting upon the ground, will cause the car to turn in a small circle.

It must be understood that rotation of the pinions about their own spindles can only take place when the resistance on the wheels 3 and 4 differs, for when the pinions rotate one of the gear wheels must turn faster than the other. If the shafts 1 and 2 are equally difficult to turn there is no inducement for the pinions to commence to rotate, so the road wheels are driven at equal speeds and the car travels in a straight line.

When the car turns a corner the speed of the inner road wheel tends to fall off, the resistance increases on the gear wheel connected to it, and the pinions commence to rotate, thereby driving the outer wheel at a greater speed. The difference in the speed of the two wheels varies of course, with the degree of the curve described by the car.

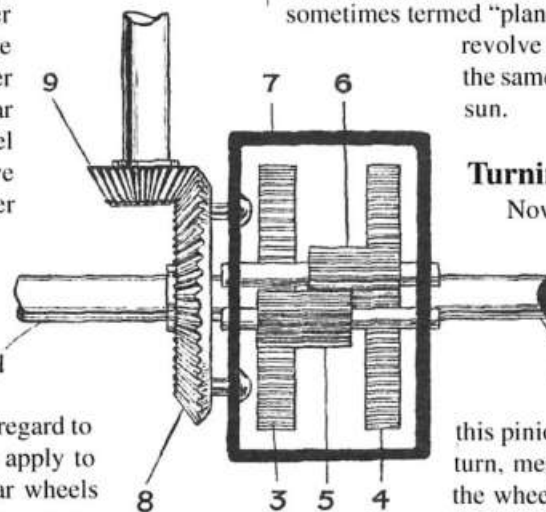


Fig. 1

The New Meccano Differential Gear

The type of differential shown in Fig. 1 makes use of ordinary spur gearing, but in actual practice bevel gearing is more often employed, the gear wheels 3 and 4 being replaced by two large bevels and the pair of pinions 5 and 6 by a small bevel pinion

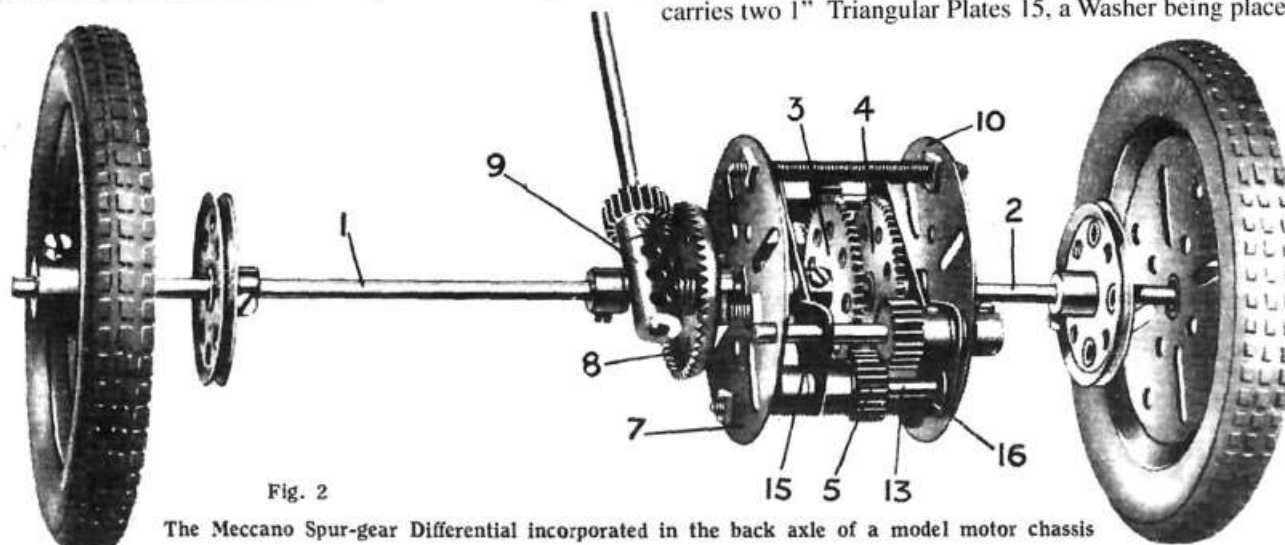


Fig. 2

The Meccano Spur-gear Differential incorporated in the back axle of a model motor chassis

which meshes with the two larger bevels. In both types the planetary pinions are reproduced several times to obtain added strength and smoothness of operation. Two, three or even four pairs of spur pinions are used in the one case and two, three, or four bevel pinions in the other. The bevel type of differential is well represented in Meccano by the gear used in the back axle of the existing model motor chassis (see Standard Mechanism No. 251). The model differential about to be described is based on the straight-toothed or spur gear type, which has not hitherto been reproduced in Meccano.

Fig. 2 is a general view of the Meccano "spur" differential, and the diagrams in Figs. 4 and 5 (see next page) show respectively the side and end elevations of the mechanism. The following details should help to make the construction of the model quite clear:-

The Axle Rods 1 and 2 (Fig. 2) form the shafts carrying the road wheels of the vehicle and are separate one from the other, as in Fig. 1. The Rod 1 is secured in the boss of a 57-teeth Gear Wheel 3 and a similar wheel 4 is fixed to the Rod 2. The extreme end of the latter Rod is inserted in the centre of the Gear Wheel 3, which thus serves as an additional support, but it should be noted that the Rod is free to turn independently of this wheel

The rear end of the propeller shaft is journaled in the Coupling 9, which is free on the Rod 1, and a 19-teeth Pinion on the propeller shaft drives the $1\frac{1}{2}$ " Contrate Wheel 8. The latter is secured by two $\frac{1}{2}$ " Bolts to a Face Plate 7 which, together with another Face Plate 10, forms a revolving frame corresponding to 7 in Fig. 1. The Face Plates are bolted together by two 2" Screwed Rods, the positions of which are indicated at 11 and 12 in Fig. 5. A portion of one of these Rods is also shown at 11 in Fig. 4, the remainder of the rod having been omitted for the sake of clearness. The Face Plates are free to turn about the axles 1 and 2.

The Planetary Pinions

The revolving frame carries two pairs of planetary wheels, each pair consisting of $\frac{1}{2}$ " Pinions 5 and 6 secured respectively to a $1\frac{1}{2}$ " Rod 13 and a 2" Rod 14 (see Fig. 4). The Rods 14 are journaled in opposite holes in the Face Plates and each Rod carries two 1" Triangular Plates 15, a Washer being placed on

each side of the Plate 15 that adjoins the Pinion 6. The Rods 13 also pass through holes in these Triangular Plates and in addition each Rod 13 passes through the end holes in two Strips 16, the centre holes of which engage the axles 1 and 2. Each Strip 16 is spaced away from its adjoining Face Plate by means of two Washers.

The Rods 13 do not engage in any way with the Face Plates, but the arrangement of the $2\frac{1}{2}$ " Strips and Triangular Plates provides ample bearings in which they may turn; the Triangular Plates ensure proper alignment between the Rods 13 and 14, while the $2\frac{1}{2}$ " Strips maintain the Rods 13 at the correct distance from the axles 1 and 2. The arrangement of the Rods 13 and 14 and their bearings will be followed more easily perhaps on reference to Fig. 5, which is an end elevation of the Face Plate 10 and adjacent parts.

It may be noted that the differential movement may be obtained with only one pair of Pinions 5 and 6, but the second pair has been added with the object of increasing the strength and reliability of the device as well as to balance the stresses set up by the various elements revolving about the back axle.

Now it will be seen that the Pinions 5 and 6 are in constant engagement with the Gear Wheels 3 and 4 and also with each other. In addition, they are secured to spindles journaled in a frame that revolves with the driven wheel 8. Therefore all the conditions shown in Fig. 1 have been reproduced and the model will be found to work in exactly the same way as the spur-gear type of differential used in actual practice.

The model can be fitted quite easily to any Meccano motor car or similar vehicle, and Meccano boys can decide for themselves whether they prefer this type of differential or the ordinary bevel type with which they are already familiar.

Disadvantages of the Differential

It has already been indicated that the differential is not always embodied in the back axle. In the heavier types of motor lorry, for

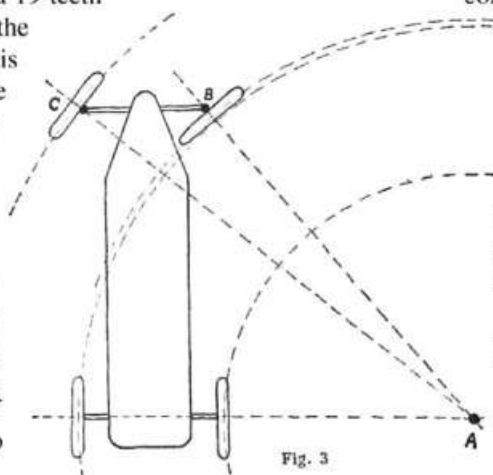


Fig. 3

example, it is carried usually in the chassis frame, in which case each of the driving shafts is fitted at its outer end with a small sprocket by means of which the drive is led to the rear wheels through chain gearing. In a layout of this kind the rear axle is described as "dead," because the road wheels run freely on its ends without the axle itself rotating; the axle serves merely as a distance piece and to support the weight of the vehicle. A "live" axle is one that embodies the differential and actually transmits the drive to the wheels.

The chief advantage of the "dead" axle method lies in the fact that it reduces the unsprung weight (i.e. that of the back axle) to a minimum, but the objections to its application to ordinary touring cars are, principally, the noise created by the chain drive and the excessive wear and tear to which the chains are subjected. Moreover, the weight of the back axle in this class of car does not constitute such an important factor, since its construction is not nearly so massive, of course, as in the big commercial vehicles.

The differential is a comparatively simple and extremely ingenious piece of mechanism, but it does not by any means represent the ideal method by which to effect smooth transmission of the drive to the rear road wheels, for it is found to possess several disadvantages when put into practice.

For example, it makes no provision for the application of increased power to the particular driving wheel that requires it most. Suppose one rear wheel of a motor car becomes firmly stuck in mud while the other rests on a smooth or greasy surface over which the tyre slips easily. The power of the engine is wasted in turning the free wheel at great speed, and the car will remain fast unless steps are taken to prevent or retard the rotation of this wheel and so equalise the resistance between the two sections of the back axle. This disadvantage is considered so important that certain heavy commercial vehicles, such as steam wagons and the larger type of motor lorries, have been fitted with some device with which the differential gear can be put out of action altogether as and when required. This enables such difficulties as steep or greasy hills to be overcome more easily, for the rear axle is driven as though it is a solid unit, and it is then impossible for one wheel to slip round without the other.

Again, if the brake on one of the rear wheels is more efficient or acts slightly in advance of that on the other wheel, the entire power of the engine is directed momentarily on that wheel which receives the least braking effect.

A Remarkable Spectacle

A very curious result for which the differential is responsible may often be seen in any busy street. This is the spectacle presented by a car that, having been braked suddenly, skids along for a few feet with one rear wheel revolving very rapidly backward, or in the opposite direction to that in which the car is moving. This

strange effect is produced in cars that are equipped with a brake on the propeller shaft behind the gear box, and is caused by violent application of this brake, as understood from the following :-

The sudden stoppage of the propeller shaft and its pinion (corresponding to 9 in Fig. 1) arrests the rotation of the crown bevel 8 and its subsidiary frame 7 carrying the planetary wheels. If a motor car is braked very suddenly, as may happen when the driver attempts to avoid a collision, etc., the wheels, though securely locked, are usually dragged for some little distance along the road before the car is brought finally to rest. But suppose in this case one of the wheels grips the road more securely than the other (this may easily happen on account of a greasy portion of the road surface or a badly worn tyre); then the wheel that offers most resistance will revolve instead of sliding forcibly over the road surface, for no braking effect has been applied to the rear axle itself.

The gear wheel secured to the shaft of this road wheel will turn in the direction in which the car is moving, and this sets in motion the pinions 5 and 6, because the latter must rotate about their own axes since they cannot revolve round the gear wheel (it will be remembered that the frame 7 is locked in position by the brake). The pinions, in turn, rotate the gear wheel secured to the shaft of the slipping road wheel, but it will be found by following

the direction of rotation of the various wheels that this gear wheel revolves in the opposite direction to that in which the car moves.

It should be noted that if both the driving wheels grip the road equally, the resistance on the shafts 1 and 2 is also equal and there is no reason why the pinions should commence to turn. Both wheels will therefore remain immovable and the car will be brought quickly to a standstill.

Deleting the Differential

In view of these defects in the operation of the differential, the designers of certain light cars decided to leave it out altogether, and to fit a simple non-variable bevel drive between the propeller shaft and the back axle. When a car built in this way describes a curve or takes a corner one of the back tyres must slip on the road to allow for the differences in speed between the two wheels, and some surprise was caused in motoring

circles when it was discovered that the cost of tyre renewals in such cars was not greater than in the more conventional differential-fitted vehicles.

Many patent devices have been produced within the last few years in connection with the differential, but none appear to show any really important improvement or advancement upon existing types. A fortune still awaits the man who invents a form of balance gear that will transmit the power of the engine to the driving wheels in an efficient manner, without the disadvantages mentioned above.

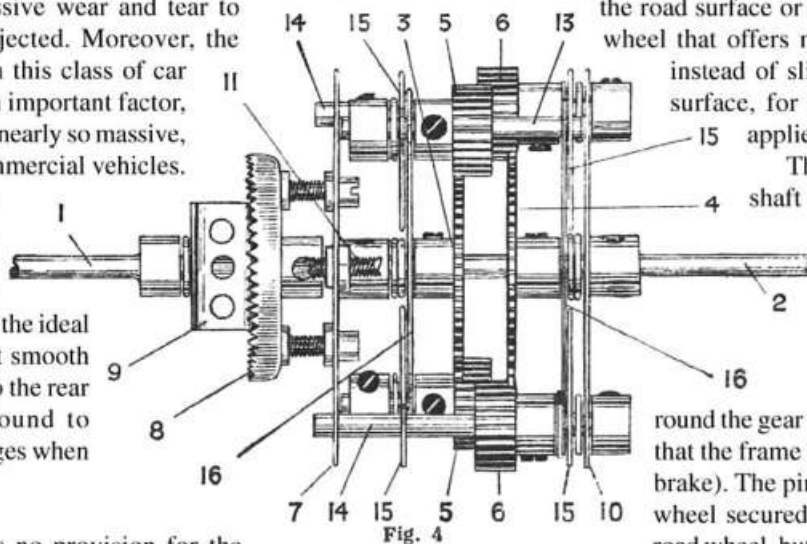


Fig. 4

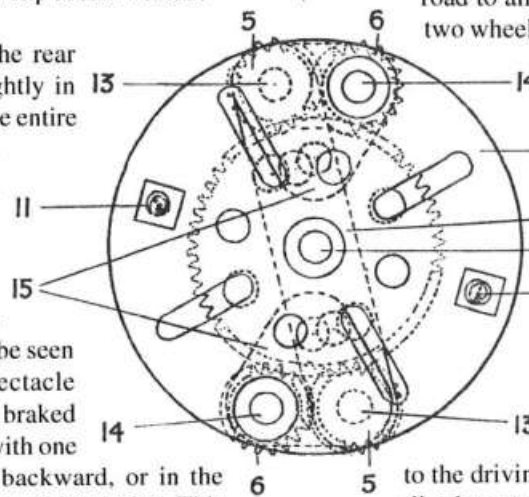


Fig. 5

The Web "Spanner" Christmas Challenge

by Les Megget

It all started on the 7th December 2008 with Brian Willis suggesting on "Spanner" that we have a small model competition, similar to the previous Xmas where a lot of us built versions of the kiddie car (model 1.1 for No. 1 outfit) seen in 1940-60s instruction manuals and then showed images of them on Spanner.

Peter Harwood (UK) then put up a small outfit list of parts (00+) which he has been working on as the basis for a model building challenge. Quoting from his email: "Here is one idea that you might like to consider as the basis for a competition. Many of you will be aware of the small Meccano set that I have been promoting for use by Meccano enthusiasts interested in getting youngsters going with this wonderful hobby. This started at the West London Meccano Society Exhibition in 2007 and since then quite a few people have made use of the parts list for the set together with the modernised plans for 22 good models that can be made with it. It would be good to include more models. If anyone is interested in coming up with a suitable model as part of a Christmas competition I would be happy to create the model plan and circulate it. Christchurch (NZ) Meccano Club ran a competition along these lines in November 2007 that produced some creative models.

Here is the parts list for the small set should you wish to consider this idea. The set came into existence close to the centenary of the registration of the name 'Meccano', hence the name. It is based on a 1928 Set 00 plus some useful parts not available then.

It is quite a challenge to produce an interesting model that works well and is not too difficult to put together. No bending of parts!"

Fig. 1 shows the list of parts.

Greg Webb (UK Meccano photographer) was the first to respond the same day with an auto gyro (Fig. 2) just beating me with my first effort, a tow truck (Fig. 3). This was followed next day by Ralph & Sue Laughton's station electric luggage cart (Fig. 4). The biggest problem

with this small set was the lack of nuts and bolts and I found I was continually counting up the number used to make sure I hadn't exceeded the 25 nuts specified. As you can see there were four $\frac{3}{8}$ " bolts allowed but no extra nuts to go with them! Double lock-nutting for flexible joints used up the nuts very quickly.

Well from then on the rush of models displayed became a feast of Meccanomen's imagination and skill, right up to Christmas Day. On about day 2 Charles Steadman suggested that all models should be inserted on his website in a special album named "Christmas Challenge Models", allowing us to each vote on each model with a ranking of 1 to 5 stars.

As I write this today (14 January) there are 115 models displayed! These just about cover every subject known to man (well nearly). If

you have the Internet just take a peek at www.nzmeccano.com and feast your eyes. The top-ranking model was Joe Attard's (Malta) warship (Fig. 5), followed by John Nuttall's biplane (Fig. 6) and Richard Payn's (UK) lorry mounted crane (Fig. 7). Models include vehicles, animals, Xmas trees, humans doing things (fencing, weight-lifting, etc), cranes, a chocolate dispensing machine, Meccanographs, small giant blocksetting cranes, aeroplanes, fire engines, even a 2-speed gearbox (without gears). There were no cylindrical parts (except tyres and 1" Pulleys) included but I tried to model a steam engine using the 1" Tyres and Rubber Rings as the boiler. My effort is shown in Fig. 8. You will be pleased to see that not all my models are motor vehicles or cranes!

Even before Xmas Spanners were discussing what extra parts the set needed and what slightly larger set we could use for the challenge next Xmas. More nuts and bolts seemed to be the most wanted additions.

The response to this simple idea was indeed fantastic. A lot of "lurkers" on Spanner were inspired to submit a model. Charles, Peter and others are working on a set of instruction manual plans using IsoMecc and these will be available on the www. There were suggestions also that the manual and set of parts be sent to Nikko or Meccano (France) promoting a possible new set to get the younger generation into Meccano.

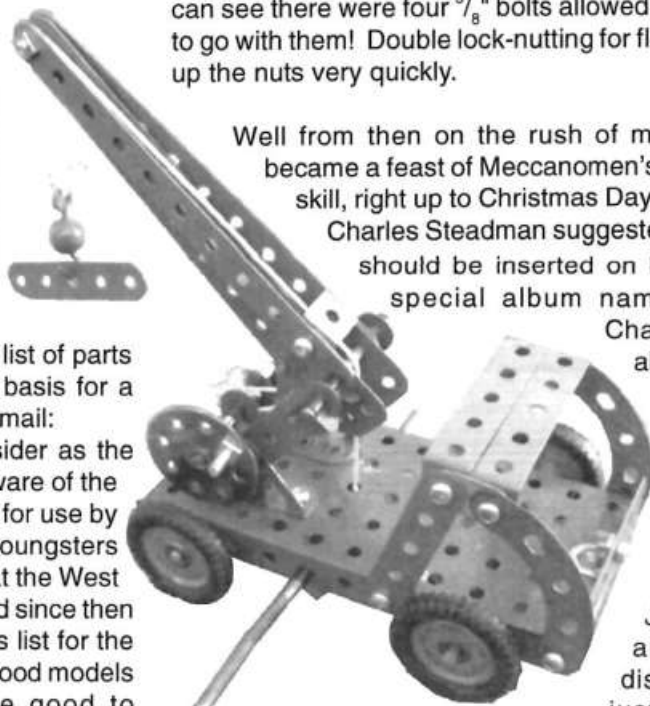


Fig. 3 - Les Megget's tow-truck.

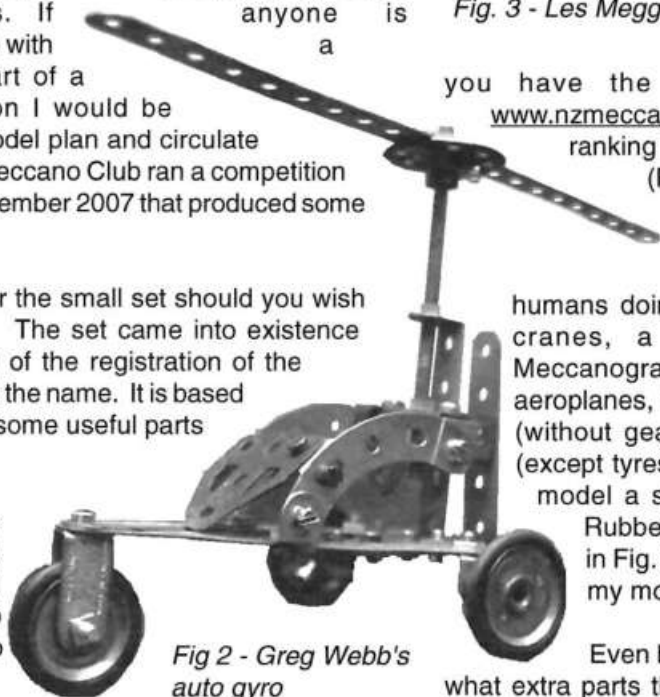


Fig 2 - Greg Webb's auto gyro

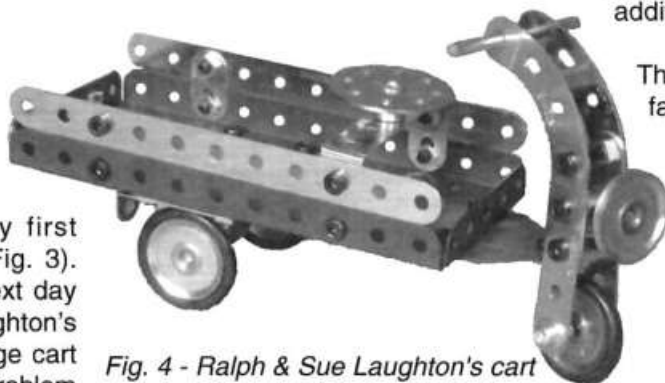


Fig. 4 - Ralph & Sue Laughton's cart

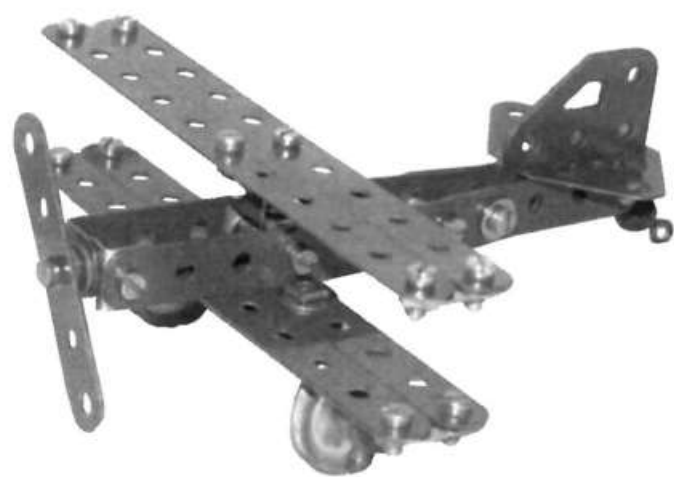


Fig 6 - John Nuttall's bi-plane.

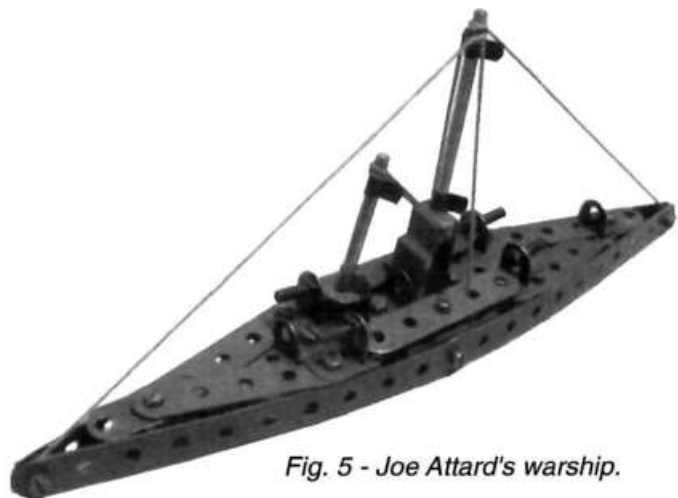


Fig. 5 - Joe Attard's warship.

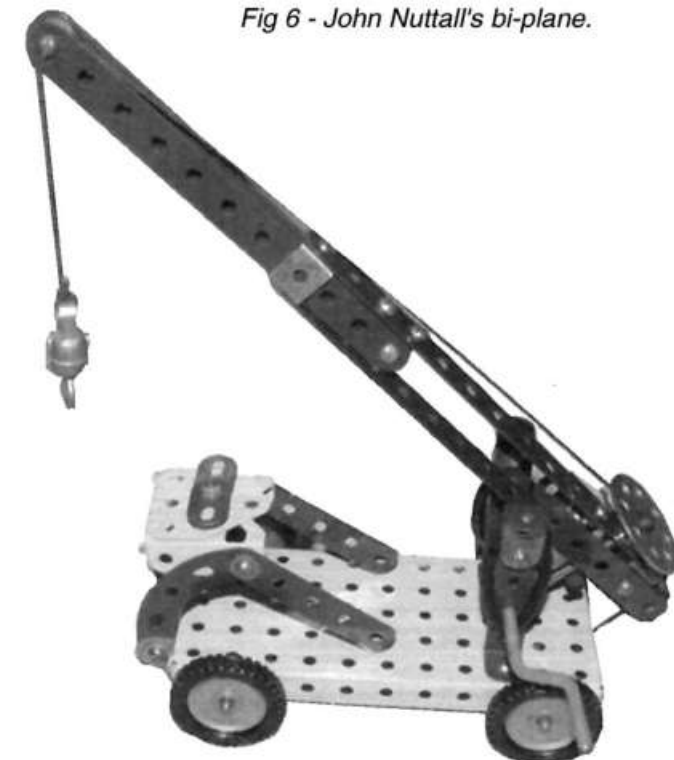


Fig. 7 - Richard Payn's lorry mounted crane (what else from him?)

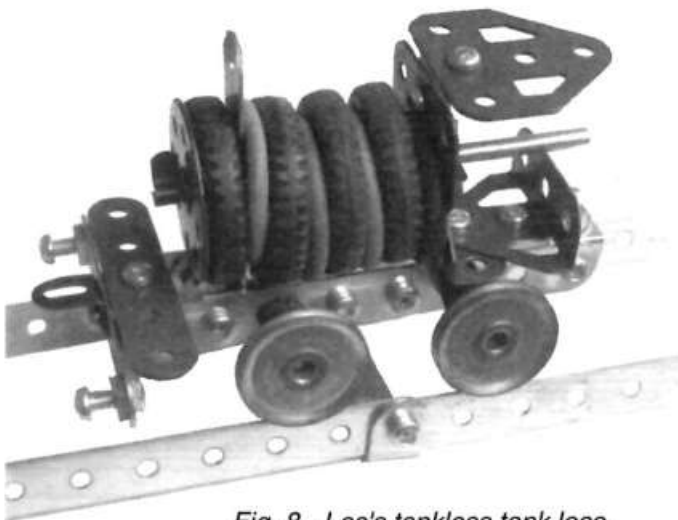


Fig. 8 - Les's tankless tank loco.

Turn to page 24 for another interesting model.

Fig 1 - Parts List

P/N	Description	Size	Qty	P/N	Description	Size	Qty
2	Perforated Strip	5 1/2"	4	38	Washer	3/8"	8
5	Perforated Strip	2 1/2"	6	40	Hank of cord		1
10	Fish Plate		4	44	Bent Strip, Stepped		1
11	Double Bracket	1/2" x 1/2"	1	48a	Double Angle Strip	2 1/2" x 1 1/2"	2
12	Angle Bracket	1/2" x 1/2"	6	52	Flanged Plate	5 1/2" x 2 1/2"	1
16	Axle Rod	3 1/2"	2	57	Hook		1
17	Axle Rod	2"	2	90a	Curved Stepped Strip	2 1/2"	2
19a	Crank Handle		1	111c	Bolt	3/8"	4
22	Pulley	1"	4	125	Reversed Angle Bracket	1/2"	1
24	Bush Wheel	1 3/8"	1	126	Trunnion		2
34	Spanner		2	126a	Flat Trunnion		2
35	Spring Clip		8	142c	Motor Tyre	1"	4
37a	Nut		25	155	Rubber Ring	1"	4
37b	Bolt		25				

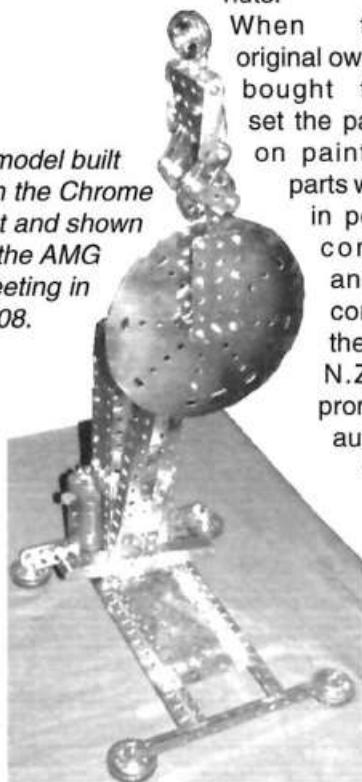
Chromium Plated Set 10

by Lloyd Spackman

In re-visiting the story of this unique Meccano Set I am indebted to William Irwin for his article in the NZFMM Magazine of August, 2000.

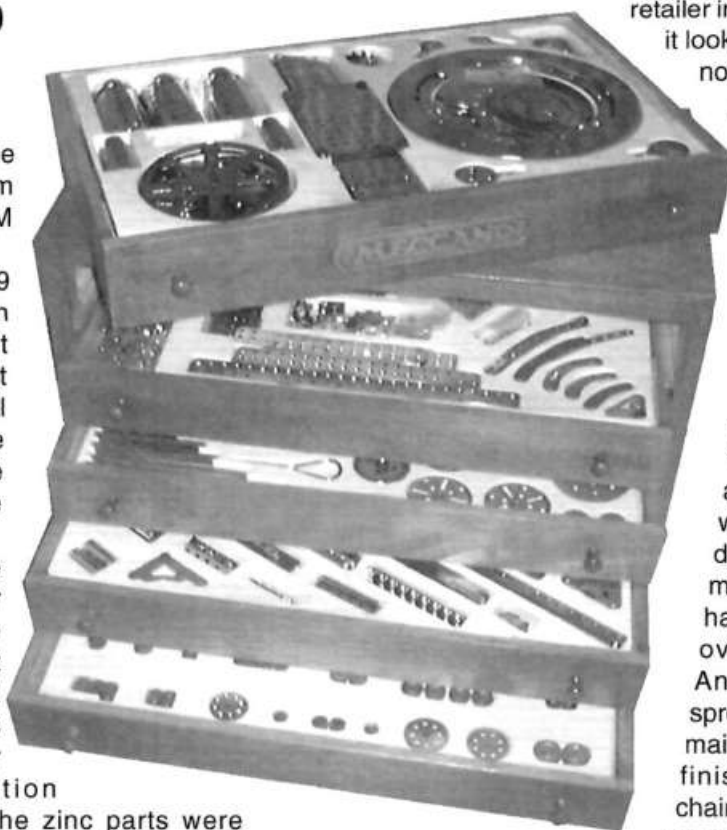
This Set 10 started life as a 1988/89 French set in a 5-drawer wooden cabinet. Its earlier history and how it came to New Zealand is not known. It has dome headed bolts and hexagonal nuts which means it precedes the general change by Meccano France in 1989 to allen head bolts and square nuts.

A model built with the Chrome Set and shown at the AMG meeting in 2008.



When the original owner bought the set the paint on painted parts was in poor condition and the zinc parts were corroding. Complaints to the retailer and to the local N.Z. Meccano agents prompted Meccano S.A. to authorise and to pay for the set to be stripped and replated. This was arranged by the (at the time) N.Z. agents, and done (I assume) by Rigg Electroplating Ltd. of Glenfield, Auckland. We don't know why they settled for a chromium finish.

The present owner, Andrew Cathie, a member of Auckland Meccano Guild, bought the set from a second-hand toy



retailer in Auckland. He says it looked as if the set had not been used at all for model building before he acquired it.

The parts are chromium plated except for gears and other brass items such as collars and couplings. The nuts, bolts and washers were apparently coated with palladium and deserve special mention for their hardness, finish and overall condition. Andrew says the sprocket chain has also maintained its excellent finish. Whether the chain's finish is chrome or palladium, he is not

sure

On the whole, Andrew says, the parts have held up well. There are a few which he thinks were not sufficiently prepared for plating and which show some cracking or flaking. Most of the thicker steel parts still look superb. One of the more spectacular models Andrew has built with his C.P. set was Murrays Hypocycloid Straight-line Engine from instructions in C.Q. 23. He has had a C.P. model at many of the Guild's meetings.

[My own Set 10 has had all its original zinc parts stripped and replated with nickel plus palladium. It has a nice, bright finish but doesn't compare with Andrew's set for good looks. He and I agree the parts won't stand more than minor flexing or bending which causes the finish to crack. The new Nikko-Meccano flexible strips and other parts are a boon to modellers in that respect.

News from John Westwood.

John Westwood sends Christmas and new year greetings to all New Zealand Meccanomen, having been inspired by Lou and Shirley Nichols, and John and Edna Ince, and David and Elizabeth Wall. Being now less active and more elderly, he regrets that he is no longer sending out Christmas cards. But he remembers his friends, and still plies the screwdriver and spanner! (Going on Phamies, 2 December 2005.)

John Westwood who is now 89 will be remembered as the founding editor of the International Meccanoman, a task which he did from 1988 to 1999. John visited New Zealand several years ago and attended meetings of four clubs.

Despite the advancing years he still uses his Meccano and has recently built a model of a new hydro electric scheme on the Thames. It is propelled by Archimedian screws.

Meccano Lives – The Toy That Built The Future

by Dave Thom

This was the theme of a special exhibition held in the Willoughby Museum on 6th September last. The city of Willoughby has a cottage museum at 58 Johnson Street, Chatswood owned by the Willoughby Historical Society and staffed by volunteers. Although the day was raining and dismal a record attendance came and the raffle prize donated by Hobbyco was won by a grandfather who still had kept his Meccano, and he had two lucky grandsons.

'Buz' Meccano was manufactured in the 1950-1970s at 80 Hotham Parade, Artarmon, a suburb of Willoughby City. A complete Buz set No. 9 is still on display at the Museum, which specializes in the early industries of the area

Visitors to Sydney are invited to ring Dave or Mary Thom on 02 9419 5851 who will be happy to show you around.

I enjoy your magazine. Keep up the good work.



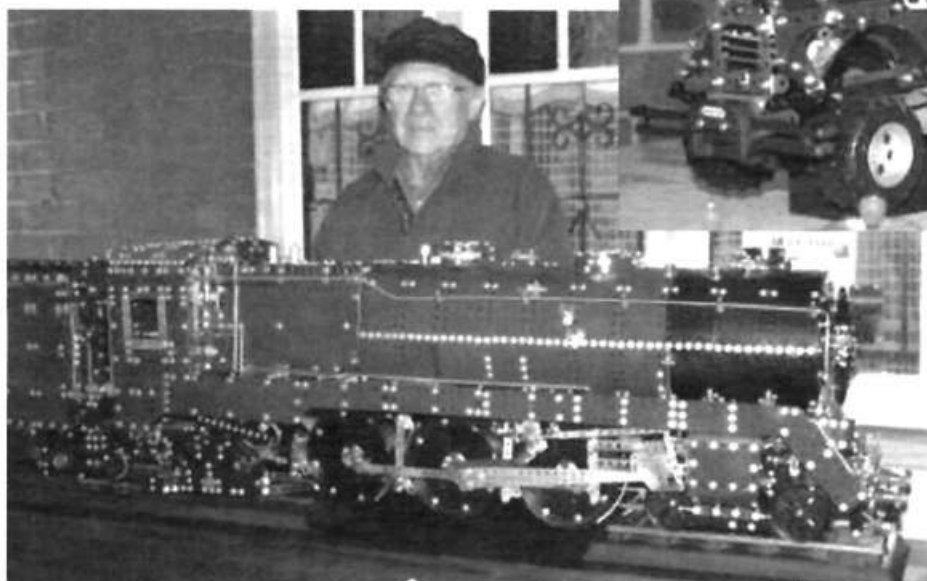
Boys with Toys

Ivon Rock (L) had manufactured a replica Meccano horizontal reversing steam engine. Lee Squires had made an E7 four-bladed motor with E16 Swing behind, a tetrahedron frame with Plate roller adapted from <http://www.my-meccano.co.uk>, an E21 permanent Magnet Motor (PMM) with reducing pulley, and an E15 8-pole Synchronous motor (750 rpm). The ferris wheel with alternating lights was driven by a PMM. Enthusiastic young visitors were able to handle the models and a pair of magnets.

Lee, Ivon, John and Dave are all members of the Sydney Meccano Modeller's Association which helped on that day. Max Crago our secretary, treasurer and editor also helped, but could not be present. We chose to display at the Willoughby Museum for publicity for it and Meccano. "Meccano did live" that day despite the weather.



Having Fun



John Thompson's magnificent C38 locomotive is always a crowd pleaser especially with the wheels cranking.



Dave Thom's Semi trailer

The semi was kit 8701, radio-controlled, with a trailer 'Meccano Express' in yellow and nickel to suit. It had clearance and taillights and was on blocks so the wheels could turn. It was made by Dave Thom who also showed a number of mainly current models, including Eiffel Tower, Big Ben (with digital clocks and new faces), Empire State Building, Spitfire, and 3 r/c musical cars which are very good Meccano models of current autos.



What Our Readers (and other People) Think.



Bob Prescott spotted this article in a recent issue of The Christchurch Press:-

Quality Uncontrolled

Meccano Starter Kits

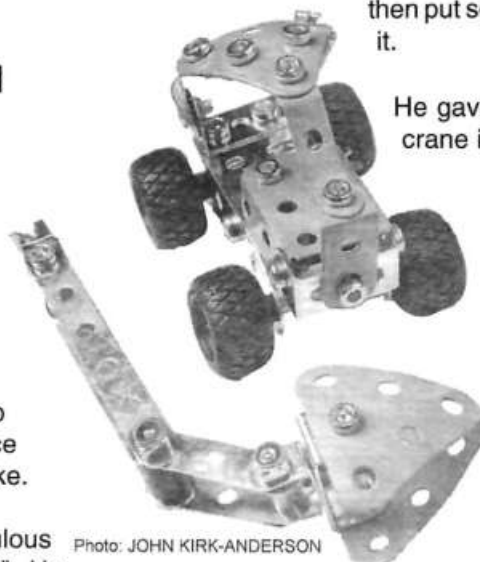
\$16.99 at major retailers.

My son got two Meccano Starter Kits for a recent birthday and we both were thrilled. He knew the toy would be fun to play with and I knew Meccano had a proud tradition for quality.

Alas, the current generation of Meccano toys is suspect. I managed to break a piece when assembling the first toy - a quad bike.

I returned it to the store, where an incredulous manager said, "Meccano doesn't break". He

Photo: JOHN KIRK-ANDERSON



then put some pressure on a piece and snapped it.

He gave me an exchange and I opted for a crane instead of the obviously weak quad.

I managed to assemble the crane without breaking it, but my son got about 20 minutes play before snapping off the crane arm.

If you've already bought Meccano for Christmas, keep the receipt handy. And if you're giving Meccano for Christmas, be sure to include the receipt.

WILL HARVIE

The Editor.

Sir,

Congratulations on another great edition of NZFMM Magazine.

I read with great interest the article "The Heath Robinson Steam Lantern (Patent pending)", page 15.

I am sure I have the answer to Mr Walls Esq's problems.

1) The lantern has a rather long lead - time.

To rectify this, all we need to do is build a smaller version of the main lantern, and have this one "fired up" at all times so as we have a light to work by on the main lantern at any time of day or night. I am sure that wives/family will be only too pleased to work shifts so as this can happen.

2) Light output from the spirit burner exceeds that provided by the light bulb.

To rectify this one, all we need to do is bolt 2 or 3 units together.

Now that Mr Walls Esq. has published the article on his lamp, I am sure that he will be "swamped" with orders. To help Mr Walls Esq. out, I am quite prepared to take on the job of treasurer, so could all monies now be sent to me in Alice Springs, Australia. I am also sure that Mr Walls Esq. will agree that it is a good idea to also have an overseas distributor, and I am also prepared to take on this position at a rather hefty commission/salary.

Yours In Business,

Mr Vern Ellis Esq.

Entrepreneur of Meccano Inventions (and anything else that may make me a dollar or two).

Our Motto — "You take the risk, we take the money".

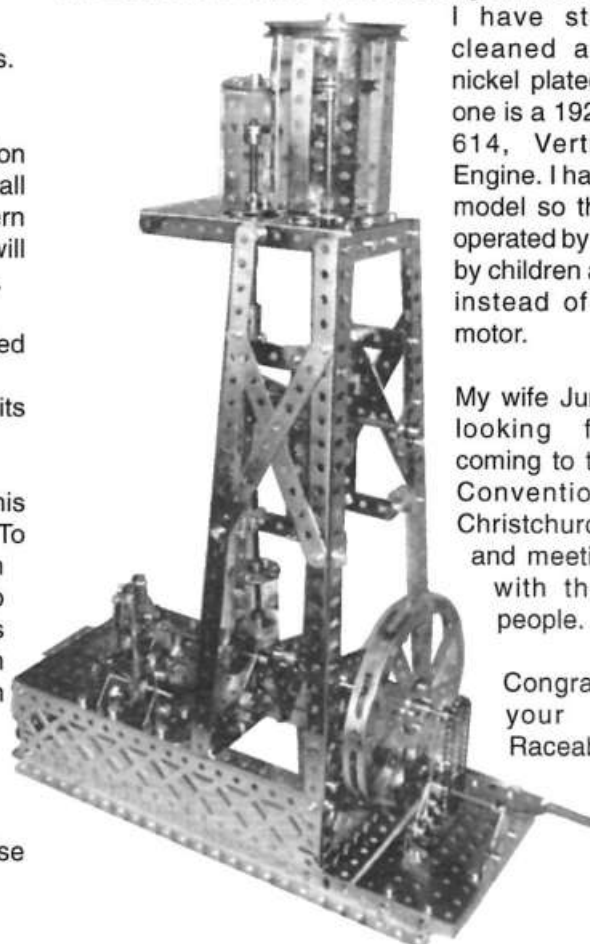
from Malcolm Booker (ISM41), Killarney height, NSW, Australia.

I have taken an interest in the old nickel instruction manual models. I have built 7 of them using old nickel parts which

I have straightened, cleaned and had re-nickel plated. The latest one is a 1925 model No. 614, Vertical Steam Engine. I have varied the model so that it can be operated by crank handle by children at exhibitions instead of an electric motor.

My wife June and I are looking forward to coming to the Meccano Convention in Christchurch at Easter and meeting up again with the Meccano people.

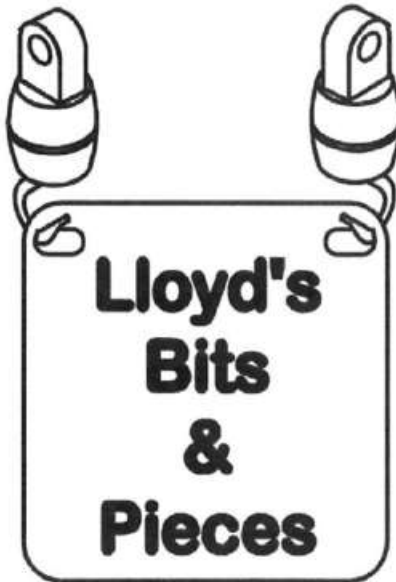
Congratulations on your Mercer Raceabout.



Meccano in 'M.E. Australia':

Speaking of Model Engineering magazines, the Australians have a good one, issued each second month. At 76 pages, it has a similar mix of advertisements, articles, photographs, Club News, etc. as the U.K. one. It includes news and photographs from New Zealand Clubs.

From the 9th Model Engineering Exhibition held at Monash University, Melbourne, in October, 2008, two well-known Meccano modellers achieved photographs of their models on the pages of 'A.M.E.' Jack Parsisson displayed a red/green Meccano dockside crane while Lindsay Carroll had neat Congreve and Harrison clocks on display.



2008 Catalogue:

What happened to the 2008 Meccano catalogue from Calais ? It used to arrive in the shops here about August each year but none have arrived in our local retailers in 2008. Was one not printed this time ?

Does Meccano Break ?

Neil Pluck reports an item in the Christchurch "Press" issue of 23rd December in which a Mr. Will Harvie wrote to the newspaper about his son receiving two Meccano Starter sets for his birthday.

Bob Prescott also saw this item and it is reproduced in full on page 8.

[We would like to know which part it was that broke !]

M.M. Sale:

In December, Wes Dalefield in Ohio, U.S.A., was selling his complete (bound) collection of Meccano Magazines dated from 1927 to 1981.

Erector/Meccano:

From 1928 to 1938, A.C. Gilbert sold parts under the Meccano name. Some were re-marketed Liverpool parts. Some were Meccano parts made by Gilbert but with a different finish or a different boss. Some were unique parts (such as the ship parts) made by Gilbert himself.

(Charlie Pack on 'Spanner')

Meccano Grows:

Dick Watson on Spanner reported that "The Guardian" of 20th December ran an item saying Meccano is the fastest growing toy brand in the U.K.

Here Is The Milkman:

Submitting a model of an electric milk float for a Christmas competition reminded Paul McMahon in Cambridge, U.K., that he still receives his milk delivered to his door by milk float. It is proper milk, too, he says — not homogenised, in glass bottles, and with cream on the top just like it should be. Other U.K. Meccanomen chimed in to say they, too, had their milk delivered to the door in bottles. Generally

they lived away from the cities.

In Tawa, where I live, there is a twice a week - to your door - milk delivery, but (alas) by an ordinary truck — not an electric float. (L.S.)

Some U.K. Prices:

The new dual-motor Meccano mobile crane set was on sale at Maplins for £39.99. This was also a 3 for 2 offer which brought the price for each of 3 sets down to £26.66 each.

"Doing" New Zealand:

Roger and Mrs Fearnside from Buckinghamshire, England, "did" New Zealand on a 3½ weeks coach tour last year. They said on 'Spanner', "3500 miles of it and no time to catch our breaths. What we did find was a beautiful country, friendly

people, outstanding scenery, oversalted food and (most of all) a reason to come back and do it again at a more leisurely pace".

Christchurch Meccano Club has a web site at <nzmeccano.com/CMC0812php>. Regrettably, I, for one, can't log in to it. (L.S.)

Fate Of Factory Models:

Guy Kind, on Spanner, reminds us that factory display models which are no longer up to the Company's standards due to dents or missing parts caused by transportation are put in the scrap bins. Dismantling them is too expensive. This seems to be common practice in the toy industry.

A Long Meccano Journey:

Greg Rahn in Connecticut, U.S.A., bought a large Meccano collection from e-bay. It was found in an attic during a house clearing. Judging by the literature with it, he reckons it had first been in New Zealand before moving to North America. Greg says price lists and catalogues are from 1938/40, with the Agents specified as being Models (N Z) Ltd. in Auckland and W.C.T. Gay & Co. in Christchurch. The parts are pre-war export medium red/green and there is a 1930 Book of New Models whose red cover is marked 2/230/1 (New Zealand).

John Stark says Mr. Gay in Colombo Street was an optician who stocked Meccano parts for sale and Neil Pluck also remembers buying Meccano parts from Mr. Gay.

Models (N.Z.) Ltd.:

Many of our older members remember dealing with Models (N.Z.) Ltd. when (from 1929 to the mid 1980s) they were the N.Z. agents for Meccano Ltd. Don Blakeborough remembers visiting them at Fort Street in the early 1960s. Even then they had no actual stock of parts though Don was able to acquire a few returned (damaged) parts. I seem to remember that their letterhead had at the top a picture of their Fort Street building. Doug Harris writes that the Fort Street building has been demolished and replaced by a featureless 12 storey office block. (L.S.)



February Meeting.

by Gary Higgins

The February meeting of the Auckland Meccano Guild took place at the Home of Neil Carey in Hillsborough, Auckland on February the 14th. A large

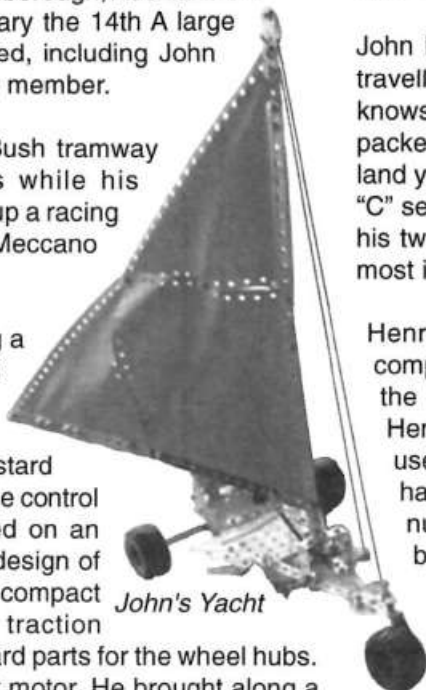
number of enthusiasts attended, including John Pond from the U.K. and a new member.

Neil Carey had modelled a Bush tramway using a mixture of colours while his grandson Matthew had made up a racing boat and trailer using the new Meccano vintage set.

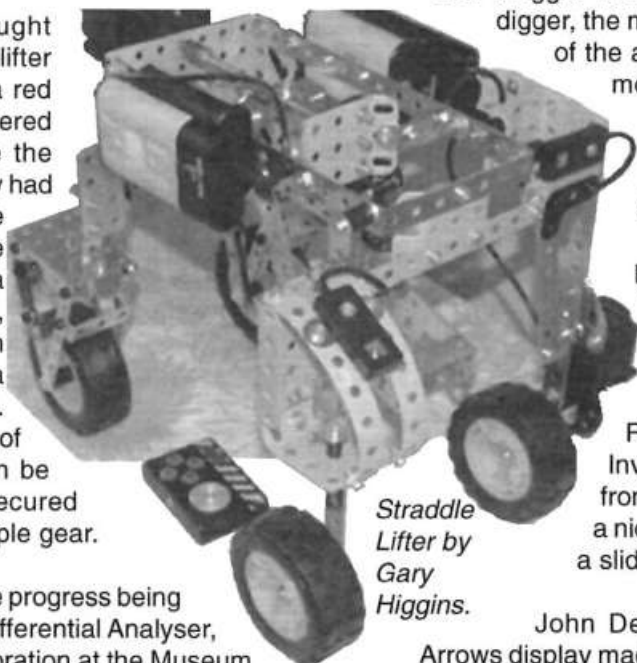
Gerald Hart had brought along a nice selection of models including an early type of biplane in mainly red and green Meccano with some mustard yellow flexible plates used on the control surfaces. The design is based on an early Wright Brothers aircraft design of about 1910. Gerald also had a compact model of a steam-powered traction engine using some non-standard parts for the wheel hubs. It ran well powered by a 6-volt motor. He brought along a well designed model racing bike in various colours and a steam beam engine which performed well.

Gary Higgins had brought along a model straddle lifter made from the new Infra red sets available, he had altered the construction to give the model more stability. Gary had discovered that tri-axle plastic parts can be reamed out using a standard screwed rod, which makes them then available for fitting onto a screwed rod or a tri-axle. In this manner a number of the flat tri-axle gears can be stacked together and secured with a nut to form a multiple gear.

William Irwin spoke on the progress being made on the Meccano Differential Analyser, which is undergoing restoration at the Museum of Transport and Technology in Auckland. He thanked the many people who had contributed time and effort towards the restoration with special thanks to John Denton for the many hours he had put in on the project. William will try and organise a day when club members can visit and view the machine in operation. William has also said there is some interest from the Auckland University who have students studying the history of computers and



John's Yacht



Straddle Lifter by Gary Higgins.

this would be an excellent chance to get the machine more public awareness. Currently the work is being undertaken by William and Gary Higgins, the restoration has progressed to the point where part of the machine is now in operating condition and tests are under way to find the best settings for running it. Gary brought along a video of the machine in operation, which is also available on the Guild web site or on U-tube.

John Pond is in NZ for a number of months and will be travelling around the country. As every good Meccanoman knows a small travelling model is essential and John had packed in a model of a sail cart (I guess we might call it a land yacht) using the specialised vinyl parts of an English "C" set to construct the sail. John also brought pictures of his two ploughing engines and harrow, these really were most impressive, modelled in blue gold.

Henry Porter always surprises me with the size and complexity of the models that he builds, usually without the benefit of any model plan. He did not disappoint. Henry brought along a large model of a gravel dredge, used on the rivers in the 1930s. (picture page 24) He had built the model up using a plethora of parts from a number of systems and had built the small dredge buckets by hand. The model was a mass of detail and spanned almost the length of the table. Henry also had a Bucket wheel trench digger and a Schools class Southern Rail 4-4-0 locomotive, these were not on display at the meeting but pictures can be seen on the Meccano web site for those who missed them.

Les Megget had made up a model of a small bucket digger, the model was used by Meccano Ltd as one of the activated display models operated by a motor under the stand. Les is going to recreate a number of the models he made up in his Meccano boy days, we look forward to seeing more of his creations.

Mike Stuart had brought along a rather impressive locomotive in silver and red Meccano powered by two Meccano 1970s electric motors..

Rick Vine brought along a Crazy Inventors clock which he had resurrected from a set which had some damaged parts, a nice mini traction engine and a magic box, a sliding Meccano box on a string.

John Denton brought along a stunning Red Arrows display made up of three of the aircraft mounted on stainless steel rods with a cloud background... wow it looked great.

Our newest member Michael Holderness was welcomed to the club and was involved in Meccano in the 1970s when he received a 3M set as a gift. Since then he built up the set using accessory boxes to a set 8 and along with gear sets and other parts and recently he decided to get back
(continued next page)

MWT MECCANO CLUB

February 2009

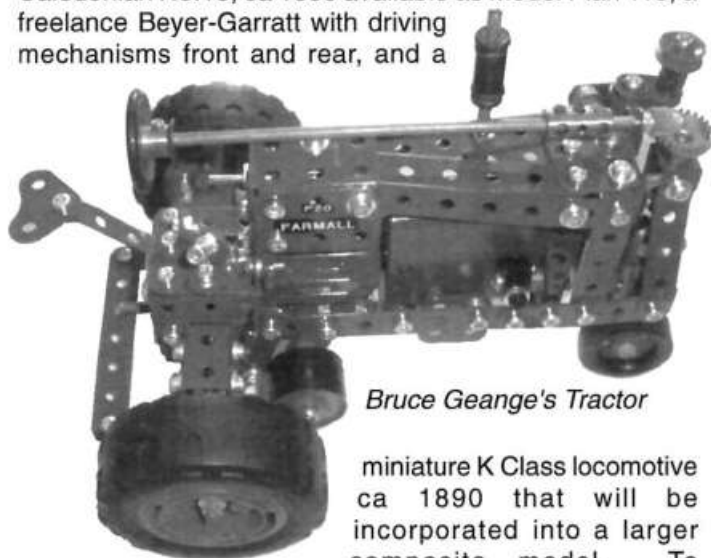
by Lou Nichols

Twenty members gathered on a lovely sunny day in Wanganui for the first meeting of 2009. Once

again a good selection of models was presented including three boxed sets of Meccano brought along by Viv Alexander. These were a 1929 000 set from the UK, compared with a French set 0005 from 1942 in blue/gold and contrasted with a UK set 0 from 1946.

Hugh Ramage didn't disappoint us – he brought along a mechanism he copied from a sewing machine, which drives a parallel shaft in a secondary parallel shaft in a contrary motion by use of a single connecting rod – poetry in motion!

Because MWT are joining in an exhibition on the 14/15 March organised by the Wanganui Railway Modellers, locomotives were brought along by John Ince, John Freer and Lou Nichols. These were a Caledonian No.15, ca 1850 available as Model Plan 118, a freelance Beyer-Garratt with driving mechanisms front and rear, and a



Bruce Geange's Tractor

miniature K Class locomotive ca 1890 that will be incorporated into a larger composite model. To

complete the railway models Bob Prescott had made his interpretation of the smallest Meccano railway in the world. Originally built by Roger Le Rolland in the UK, its features are the steam train running round the circular circuit, a station, windmill, tree, signal, water tower, two footbridges and a bi-plane.

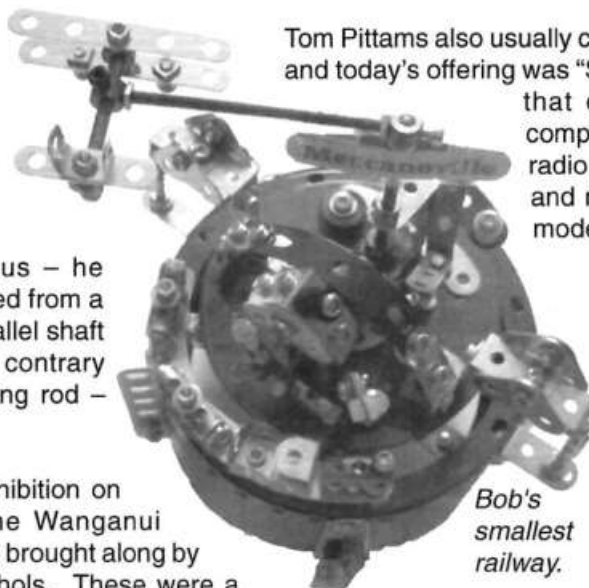
Tracks are always popular and modern Meccano kits (maroon) were brought along by Paul Vodanovich and Don Blakeborough. Paul demonstrated the truck's radio control

(AMG report continued)

into modelling. He had many questions for club members re availability of parts and where to buy them and I'm sure he gained a lot from attending the meeting. We look forward to seeing him at future meetings.

capability and also his very neat orange sports car. Don's truck was complete with trailer and bulldozer with the rear of the trailer lowering to enable the bulldozer to be driven off the truck. Keeping with the transport theme, Mel Plows brought along his red/green No. 9 Set petrol tanker from the 1970s and evidently modelled on a Scammel. Bruce Geange had modelled the Mk.II version of his International Harvester F20 Farmall tractor with mower resplendent in bright red.

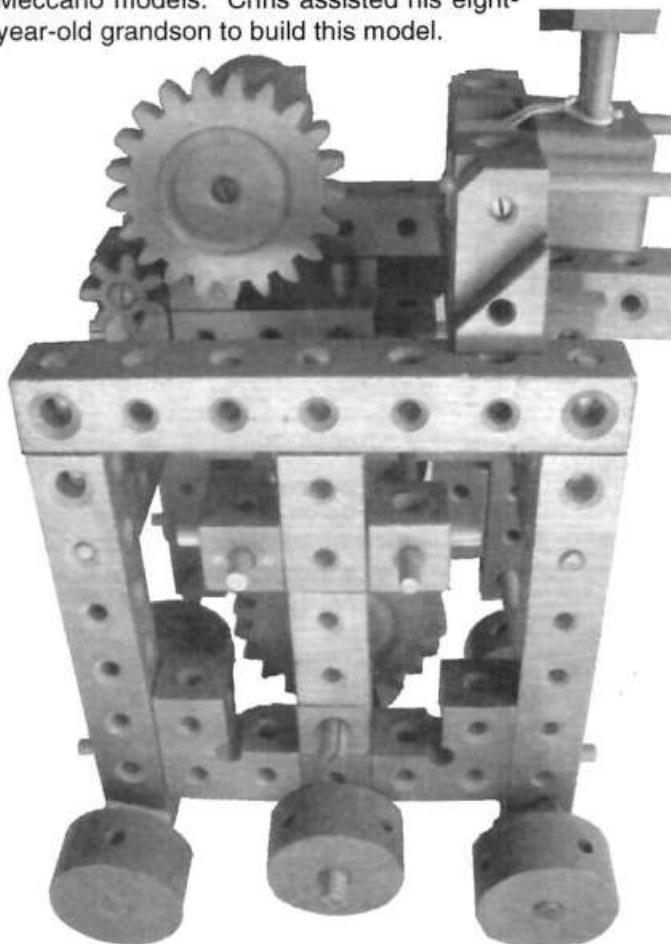
Tom Pittams also usually comes up with something original and today's offering was "Spykee Micro", a Meccano robot that only requires four screws to complete a fully made up model. It is radio controlled and has sound, lights and movement. A very nice novelty model.



*Bob's
smallest
railway.*

The Meccano models concluded with Lloyd Spackman's Flywheel with eight spokes and built up with sixteen WR1 replica segments. Then by way of complete contrast, Chris Rickards brought along his Martian Gem Explorer built from large wooden parts made by the

now defunct Texas Toys who were based in Eltham. The factory was run by Gunnar Berger, a Swedish chemical engineer whose whole family had had experience with Meccano models. Chris assisted his eight-year-old grandson to build this model.



Martian Gem Explorer displayed by Chris Rickard

Wellington Meccano Club

December Meeting

by Lloyd Spackman
Instead of a more formal dinner our summer meeting was an evening meal at Simon and Susan Moody's home in Whitemans Valley, Upper Hutt.

There was an

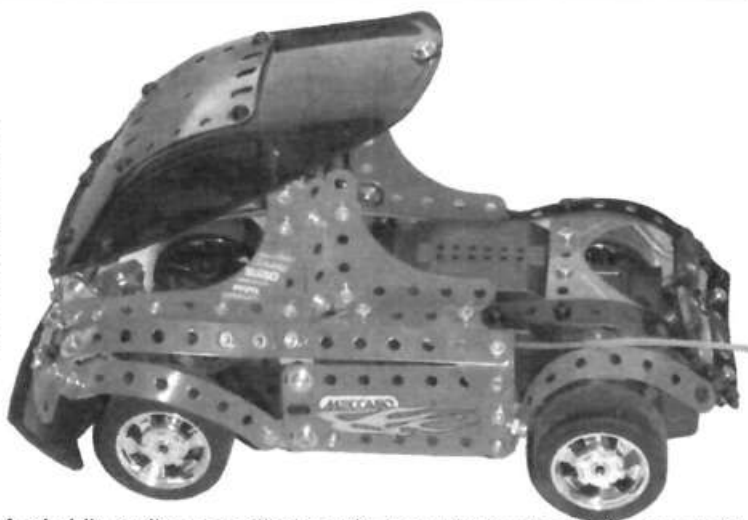
excellent attendance of members and their wives/partners and everyone enjoyed the outing, in good weather, among the tree-clad hills.

A few models appeared, including Brian Peterson's "Concorde" and a couple of neat nose cones made for him by Eldon Porter. Andy Li was busy running a new R/C car around the house. Lou Nichols brought along two shields and a cup from the Club's archives. He suggested they should be re-instated as awards for competition within the Club. President, Campbell Morrison, thanked Simon and Susan for their continuing hospitality.

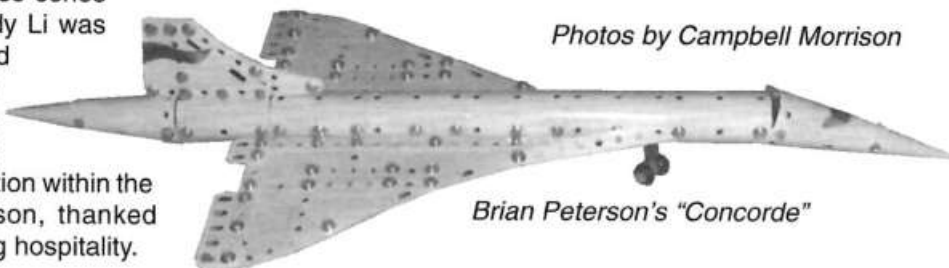
W.M.C. members have been invited to take part in a models display by the Wanganui Railway Society to be held at the Wanganui Racecourse on 13-15 March, 2009.

The WMC shields were made by Bob Jardine and modelled on the Henley Society shield and first awarded in 1976. Bob's son, Andrew Jardine, has kept up his interest in Meccano and was last seen at the Skegness exhibition in 2008 when he was visiting the UK from his home in the USA. He is a professor of commerce. The WMC is considering resuming the awarding of the shields but, as there is no space left for more mini shields to commemorate the recipient, they will need to be mounted on wooden bases to provide the extra space.

The shield in the picture on the right is the "Meccano Engineer" Trophy, which was presented by that magazine to the Henley Society of Junior Meccano Engineers. In recognition of the fact that their precursor, the 'JME', grew out of that club's newsletters. The Trophy was presented to an HSJME club member at each main meeting. A competition decided which club member would hold the Trophy until the next main meeting, when it had to be returned and exchanged for a certificate.



Andy Li's radio controlled car (is the wire for the radio signals?)



Photos by Campbell Morrison

Brian Peterson's "Concorde"



Wellington Meccano Club trophies from the club archives. The Senior shield on the left and the Junior shield on the right were awarded from 1976 to 1987.

The Original Henley Shield as illustrated in the Meccano Engineer, March 1975.



Wellington Meccano Club

February Meeting

by Lloyd Spackman

The first thing we saw as we entered the staff room at Konini Primary School was the slender jib of Simon Moody's lorry

mounted crane. The 2 meter long jib vanished into a dim top corner of the ceiling. Built almost entirely from narrow strips and narrow angle girders it was an impressive dark green construction. Simon still has work to do on the rigging and the lorry part of the model.

The next impressive model we saw was Brian Peterson's two foot long model of the "Queen Mary" ocean liner. In dark red and nickel it looked great. Brian had made the three funnels himself, cutting the steel tube at a slight angle to give a tilt to them on the ship. They were painted red and black. The lifeboats were very much to scale, being made from narrow strips of tin cans, flattened, cut and punched. The model was complete with anchors, searchlight, ventilators, hatch covers and other fittings.

Brian also showed us two small helicopters, one from modern parts and the other from older standard Meccano parts.

Then there was Don Flowers' chassis for a six-wheel truck. All the six large wheels were driven and the drive gearing was in place. It was a typical partly built Don F. model, solid looking and working well. Club members who missed this meeting missed seeing



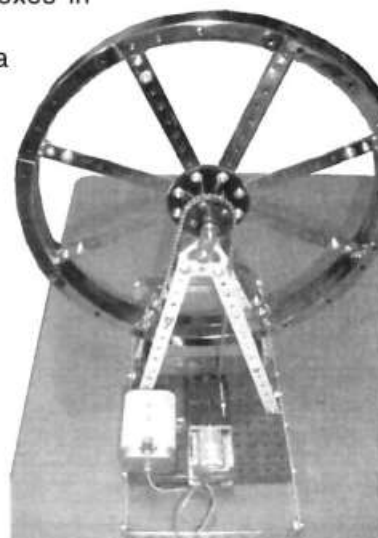
Brian Peterson's Queen Mary

three outstanding Meccano models.

Other models on display were Lloyd Spackman's flywheel built from "W.R.I." segments. It was built into an A frame and driven by an M.O. motor with a gear reduction of 361::1 using two 19::1 gear boxes in tandem.

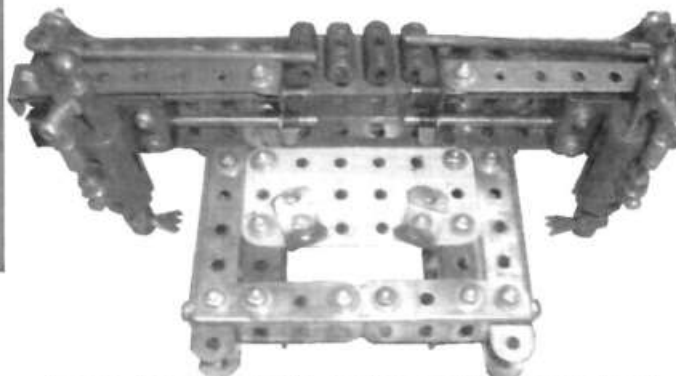
Bryan Jones showed us a section of the Plasser railroad tamping machines he and Laurie Webb are building. This small but very heavy piece assists in lifting the rails (and sleepers) enough for ballast to be inserted underneath.

Lou Nichols had a tiny locomotive all in bright nickel except for two collars and the boiler which was a 2 inch coupling. Also a lot of literature.

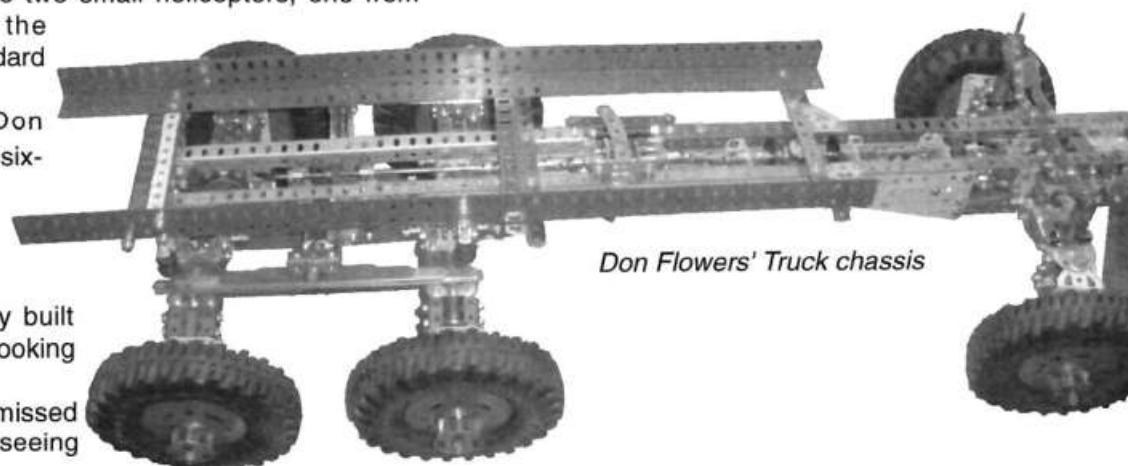


Lloyd Spackman's flywheel.

Our next meeting will be held on April 3rd at Konini School, Wainuiomata.

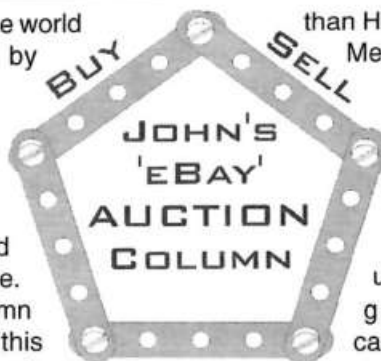


Bryan Jones' railroad tamping machine component.



Don Flowers' Truck chassis

A warm welcome to what is going on in the world of on line auctions. I have been asked by your editor to write a page about Meccano and other interesting toys you can find on the Internet. You may recall that I used to write this column for many years but since the beginning of 2008 I have been based in Australia (Cairns) and I am enjoying our new lifestyle and climate. What I intend to convey through this column is a little of what is going on over here - this will not involve Meccano at this stage as the nearest Meccano Club must be many thousands of kilometers away but more about what is happening in the Cairns and Far North Queensland area as well as goings on in the world of eBay and to a much lesser extent other on-line auctions.



We are in the "wet" season at present - usually runs through the summer months. This is when we get all our rainfall for the year, this January we had over 750mm and February is usually our wettest month!! It is also the Cyclone season and these can develop any time.

eBay has been fairly quiet lately regarding the finding of more "exotic" Meccano items. The usual array of parts, manuals and modern sets are there but some of the rarer items from the 1930s and back have been missing. I have been watching some good Meccano parts sell on eBay Australia; the parts are in nice condition and the seller looks like he has divided a No 10 plus set up into more manageable lots for collectors to buy. He has for instance had lots of strips only plates, etc. Prices realised have been pleasing for the seller and few bargains have arisen. This is a trend I have seen develop over the past few years. Lets look at some other sales:

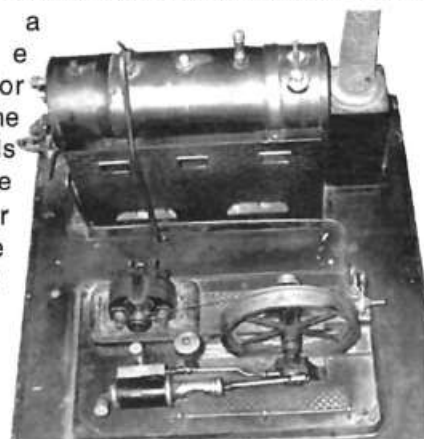
- **Meccano Channel Segments** Part No 119 Original colour, Plum red - 7 in total with lugs in good condition for age NZ\$240.
- **Meccano Mechanics Made Easy.** The very first pieces of Meccano made around the 1901-1905 era including Angle Girders, Strips, Spanner and Screwdriver! Approx. 25 pieces sold for approx. NZ\$310.
- **Five Meccano Elektrikit Coils.** In good nick, sold for NZ\$60 each or £111 for the five.
- Meccano Digger bucket. Lovely example, red - no change out of NZ\$170.
- A more modern set which has always intrigued me, the **Meccano B set** from the 1970s. The set has some large bases, the most interesting fabric(Plastic!) parts and very little else. They sell well and this one was in nice condition. NZ\$150.
- **Meccano Part No 153**, the triple Pulley. This is the Grey model with no lug, great condition and sold for NZ\$150. These are good prices for these rarer Meccano parts.

Märklin was associated with Meccano in the early days and Märklin quality was second to none. The Märklin Company in Germany and Frank Hornby's Meccano Company in the U.K were two of the great names in the Toy industry. I like Märklin toys, apart from their great quality (you could argue their model trains were of a better quality

than Hornby), their range of toys was greater than the Meccano factory put out.

•Märklin Steam Boiler and Electric Plant.

Quite a large model for its size, the seller tells us that the generator can produce enough power to run a train set. Not sure how big a set. Looks in good nick with no rust but missing tray for boiler. Includes



original funnel. A very nice item and please check photo for quality and size. Sold for NZ\$1750.

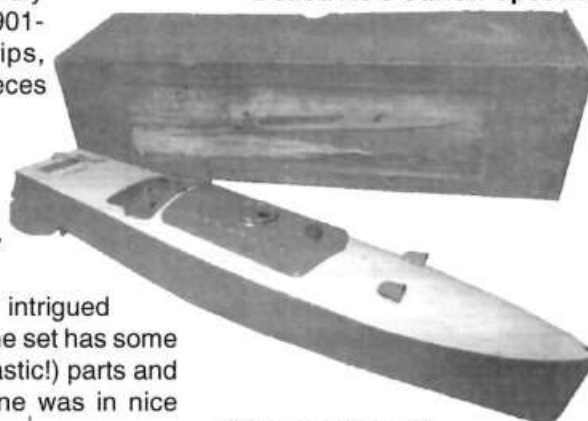
•**Märklin Solar Car Construction Set.** Unusual set from 1980-1990s. Set has about 6 flexible plates, base with 4 wheels, a number of Perforated Strips, nuts and bolts and of course the solar panel to drive it. Builds a small go-cart style car with the solar panel on the bonnet. Bidding reached NZ\$100.

Now lets have a quick look at a couple of items on Trade Me.

- **Meccano Clock Kit No 2.** Seller believed all parts were there - looks fairly complete. Could not see a box but manual present. Parts in good order. These sets always sell well and this one brought NZ\$245.
- **Meccano Gears Outfit** - 1963. Lovely set, virtually mint. Guarantee dated May 1963, the light red and green period. Complete with manual - nice buy at NZ\$75.

To end with another couple of Meccano items from eBay.

- **Boxed No 3 Curlew Speed Boat.** In the apparently rare green paint. All original condition (which is always important), housed in a nice box. Missing windscreen and sold for NZ\$870 using a Buy Now.



nickel so the set 1920s. Most of us would not give this set a second glance but if you took the time to look through what was in the box you would have changed your mind. There are three paper items in the box:

- Clockwork motor Instructions.
 - Hornby Train listings and
 - Meccano Receiving Set Pamphlet. *Picture page 23 >>*
- This last item is a rare beast and it helped to bring quite an ordinary set up to a value of NZ\$700.

New Zealand Club Diary 2009 - 2010

Auckland Meccano Guild.

President - David Wall - Ph 09 426 1965.
Secretary - Peter Hancock - Ph 09 535 5355
Meetings at 2 pm on second Saturday every third month.
Next meeting Saturday 9th May at Peter & Jan Hancock's,
1 Orangewood Drive, Northpark, Howick at 2pm

MWT Meccano Club.

President - John Freer - Ph 06 272 8467
Secretary - Graham Hawtree - Ph 06 344 7601
Meetings at 2 pm as listed. Wanganui meetings at St. Luke's
Church Hall, cnr. Cornfoot and Manuka Streets, Wanganui.
Next meeting Saturday 18th April.

Wellington Meccano Club.

President - Campbell Morrison
Secretary - Simon Moody
Contact - Lou Nichols - Ph 04 297 1515
Meetings at 7.30 pm on first Friday every second month at
Konini School, Wainuiomata. Next meeting 3rd April.

Christchurch Meccano Club.

President - Charles Steadman - Ph 021 378 897
Secretary - Peter Satterthwaite - Ph 027 275 5691
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.

Other Important Dates:

14 - 15 March — Model Exhibition in Wanganui.
10 - 12 April 2009 – Convention, Christchurch.

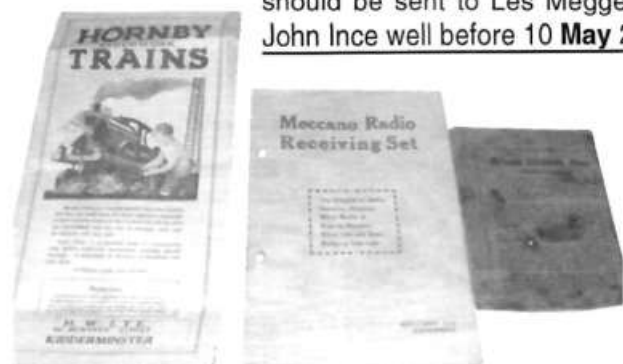
Additional Meccano Contacts

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 May 2009 issue of NZFMM Magazine
should be sent to Les Megget and
John Ince well before **10 May 2009**



2009 New Zealand Meccano Exhibition

Goodness me! Where did the last two years go?

The 2009 New Zealand Meccano Exhibition is just two months away, and will be upon us even before the next copy of the NZFMM. A big "thank you" to everyone who has registered.

The first "Exhibitor Pack" was sent out to all exhibitors on the 20th January, and you should have received yours by now. If you haven't, please contact us urgently on 021 378897 or email <cmc@nzmeccano.com>

If you have waited until the last minute to register, that minute is now here! The registration form is available on www.meccano2009.co.nz and you can fax or post us this form when you've filled it in. There are very few places left, so please don't leave it any longer!

Highlights of the Exhibition include our overseas visitors, most notably Jim Gamble from the UK (co-author of the Meccano Bible), and Tim Robinson from California (Babbage engine builder extraordinaire). It looks like there's going to be quite some display. Representatives from three Australian Meccano clubs will be there, along with the four major New Zealand clubs.

There will also be a raffle, with the top prize a restored 1948 outfit 9 in its original wooden box, and beautiful 1950s outfits 8 and 7 as runner-up prizes.

The "Meccano delivery driver" will be picking up Meccano models for display, starting in New Plymouth, travelling through Hawera, Wanganui, Bulls, and down to Wellington. If you can arrange for your model to be near this route, and would like it carefully delivered to the Exhibition for you (so that you can travel by air), please call Neil Pluck on 027 668 4168 or email him at oelduck@xtra.co.nz

We look forward to meeting everyone on the 10th of April!

International Society of Meccanomen News

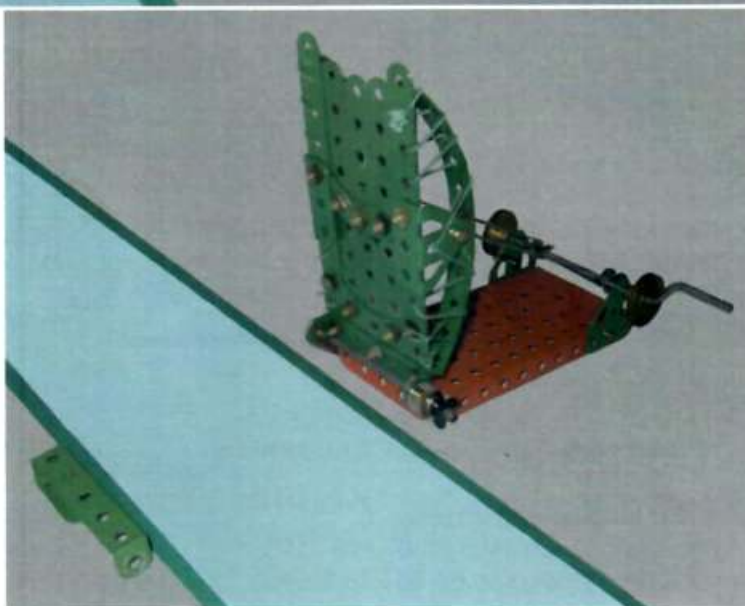
by Bob Prescott

ISM members will by now received their January 2009 "International Meccanoman" which in my opinion is up to its usual high standard. They will also have received the 2009 "Yearbook". Unfortunately in the "Meccano Clubs, Guilds and Societies" section there are several errors in the New Zealand entry despite our best efforts. A complete new entry was sent for insertion in the yearbook but this has not been done because of a communications breakdown. We will try again and succeed next year.

Back Numbers - NZFMM Magazines from April 2001 are available. Please contact John Ince.



Here is Rolland Jaggard's lifting bridge from the Spanner Christmas Challenge. I especially like the use of authentic Meccano Cord for the web members in the bridge trusses but am concerned that a vehicle crossing the bridge will run into the crank handle shaft!



This is Henry Porter's large model of a 1930s gravel dredge. Also in the picture at the RH end is Gerald Hart's beam engine.