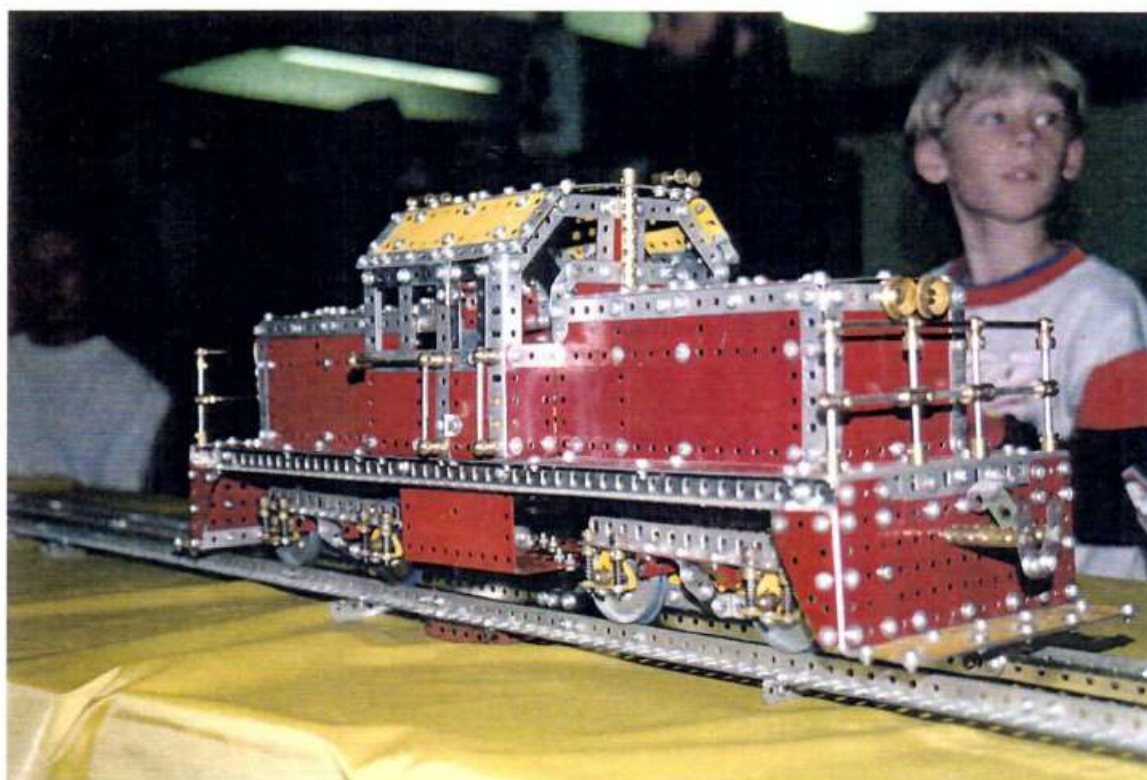




# NZFMM Magazine

Volume 24 Issue 2

MAY 2000



**NZ FEDERATION OF  
MECCANO MODELLERS**

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**COVER:** *A selection of photos*

*supplied by Simon Moody of models at  
various conventions.*

**EDITORIAL**

*Welcome to this issue of your magazine, once more  
I have had to look hard for information to fill the  
pages, it would be great if members would send items  
for publication!!! **PLEASE NOTE** that if you have not  
paid your subs, this is the last issue that you will  
receive*

*Those of you who are on the Internet will have seen on  
spanner that it appears likely that Meccano will be  
closed by the receivers, although at the same time MW  
Models report that spare parts and sets are still  
arriving from France, I have just seen on spanner that  
Meccano has been purchased by a Japanese company  
who make radio control models, perhaps Meccano will  
finally enter the modern world with it's products .  
However there are there a lot of people out there who  
make Meccano parts for us, all of these people that I  
have dealt with make good products and the service is  
excellent.*

*REMEMBER that our 2001 convention in Wellington is  
less than a year away, so we hope that you are all busy  
making that special model to bring here to display. A  
list of motels is printed in this issue for you.*

**CONTENTS**

**N.Z MECCANO CONTACT PERSONS**

|              |                |             |
|--------------|----------------|-------------|
| AUCKLAND     | David Wall     | 09-478-6825 |
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|                                    |           |
|------------------------------------|-----------|
| <b>SOPWITH CAMEL</b>               | <b>3</b>  |
| <b>TOY FAIR</b>                    | <b>6</b>  |
| <b>SINGLE LINE GRAB</b>            | <b>7</b>  |
| <b>KONKOKY INDEX<br/>OF MODELS</b> | <b>13</b> |
| <b>BITS AND PIECES</b>             | <b>15</b> |
| <b>CMC</b>                         | <b>16</b> |
| <b>WMC</b>                         | <b>17</b> |
| <b>AMC</b>                         | <b>19</b> |
| <b>MOTOR SPEED CON-<br/>TROL</b>   | <b>21</b> |

## SOPWITH CAMEL F1 WW1 FIGHTER PLANE

From Lloyd Spackman

I was able to take from the internet Chris Bourne's model plans and instructions for his Sopwith camel F1 model.

His internet address for the plans is:

<http://www.users.zetnet.co.uk/dms/meccano/camel/>

My aim was to build a model as close in looks to the prototype as possible. The scale was approximately 1:12 In this article and the photos I try to describe the model as I built it and the ways in which it differs from Chris's.

**ENGINE:** I must admit right away that I cheated. Chris and others built the engine with 9 cylinders which was the norm in the LeRhône, Clerget and Bently engines in these planes. I didn't like any of the 9 cylinder solutions - -fixing them to the flanged wheel or wheel disc being the problem.

So, I put 8 cylinders; it looked OK and made life a lot easier. I bolted 8 narrow angle brackets by their slotted holes to an 8 hole wheel disc and plastic 1½" gear, boss outward, using 3/8" bolts, then bolted the cylinders to the round holes. Each cylinder was then bolted to the round holes. Each cylinder was made from 9 x 7/16" brass (non Meccano) washers alternating with small washers on a ¾" allen head bolts.

This set - up fitted nicely into the cowling which, in front was a 3½" circular girder (pt 143A) backed by three 5½" x 1½" blue flex plates overlapped to fit snugly around the girder.

**UNDERCARRIDGE:** I followed the plans which worked out well, the driving band suspension giving a bit of bounce when landing.

**PROPELER:** A pair of standard Meccano propellers bolted to a 4½" narrow strip which was bolted centrally to a double arm crank.

**FUSELAGE UNDERNEATH:** A 5½" x 2½" flat plate is it's base. This extends one hole into the lower rear of the cowling which is held to it by a threaded boss. Wing support plates are fixed from the 4<sup>th</sup> and 8<sup>th</sup> holes from the front of the flat plate, overlapping

that by 2 holes. Then 4½" angle girders are bolted each side by their slotted holes and angled back so that at their rear ends they are three holes apart. 3½" strips fill the remainder.

**FUSELAGE TOP AND SIDES:** From just at the rear of the cockpit a 9½" strip down each side runs back three holes above the angle girders, coming down to two holes at the tail. Various 5½" x 1½" and triangular flex plates cover the fuselage frame.

The bolt through (1) the front end hole of the 9½" strip also secures (2) the corner of an outer 5½" x 1½" flex plate, (3) the rear end of the 2½" curved strip edging of the cockpit side (4) the slotted hole of an obtuse angle bracket for the inner rear wing strut and (5) a lug of a 3½" x ½" DAS forming the cockpit back. The same on the other side.

**BATTERY ACCESS:** A pt 200 curved plate is hinged to the fuselage side and comes across at an angle to be bolted at one corner into the threaded hole of a coupling fixed inside the fuselage frame.

**SEAT:** For this I used one from my Marklin set. It fitted nicely.

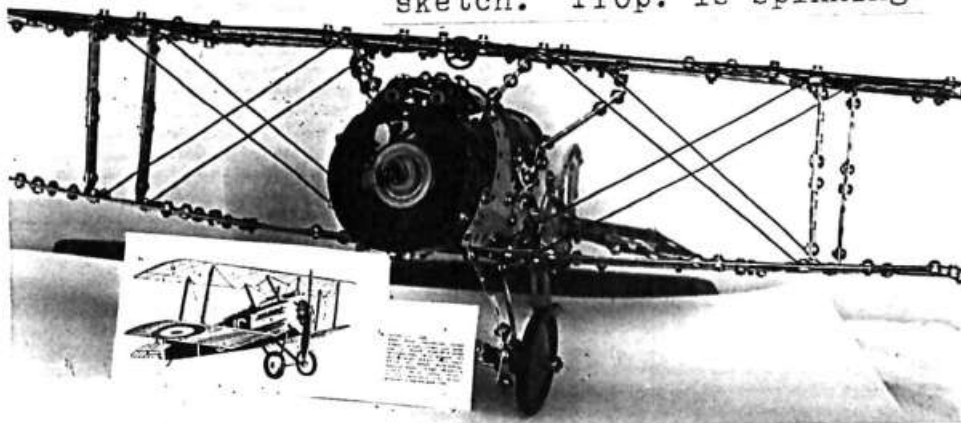
**TAILPLANE:** The surfaces and reinforcing are clear in the photos. 3" curved strips were the best I could do to reproduce the curved edges in the prototype.

**RUDDER:** Like Dennis Caswell, I hinged it. I filled it in with doubled blue flat trunions plus 2½" curved strips.

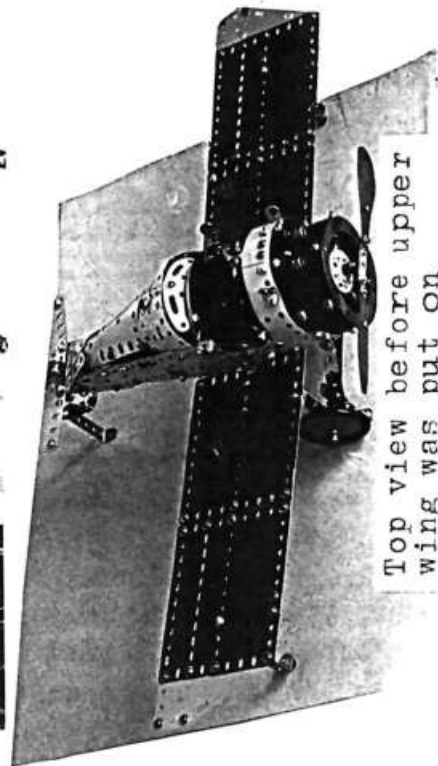
**INSTRUMENT PANEL:** This is one for you to design yourself. It may be necessary to remove the panel for access to the engine so fix the upper 1" triangular plates to threaded bosses. (See Chris, Fig 16)

**MOTOR AND DRIVE:** Like John Stark I set the MO motor further back - just at the rear of the 5½" x 2½" flat plate and under the pilot's seat. On the motor shaft a ½" pinion drives a ¾" pinion (no room for a larger one) on a 2½" rod. This transmission rod was

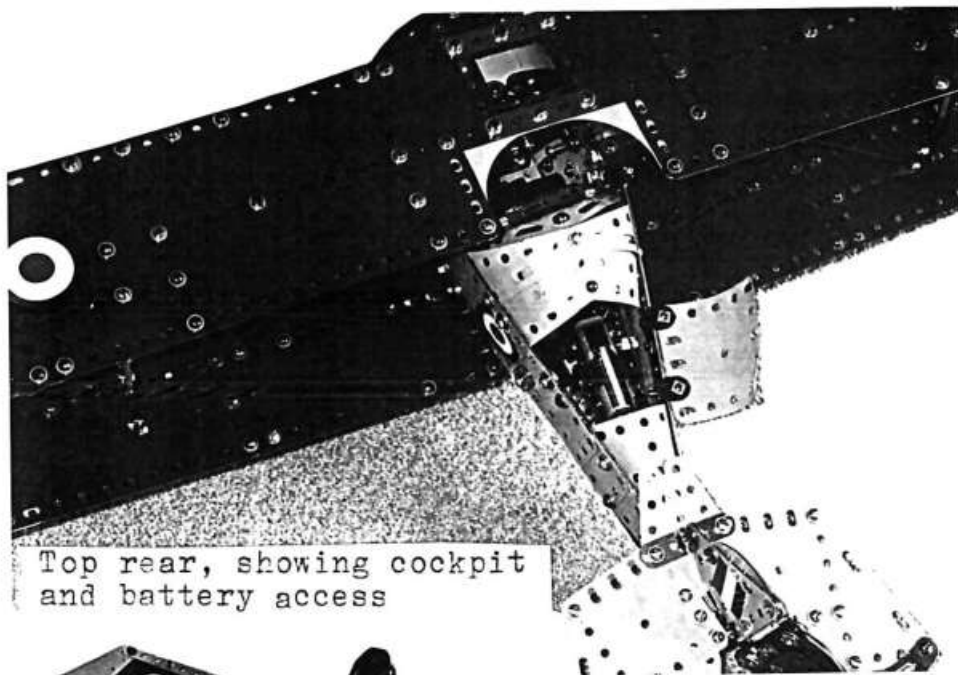
Front view & prototype sketch. Prop. is spinning.



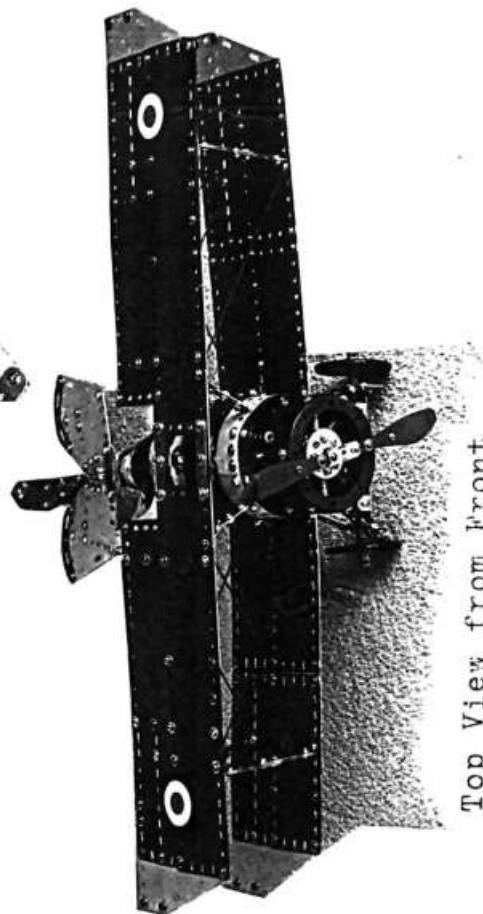
Top view before upper wing was put on



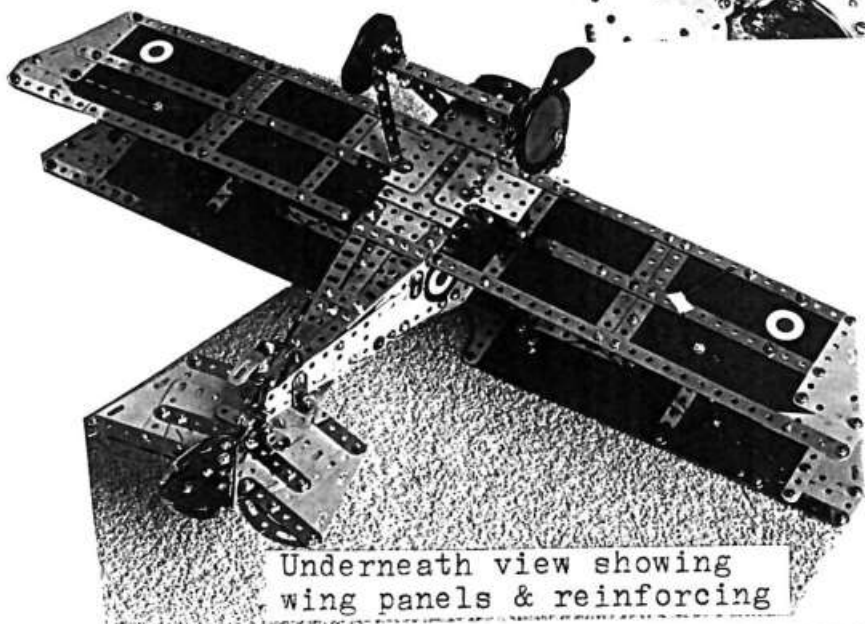
Top rear, showing cockpit and battery access



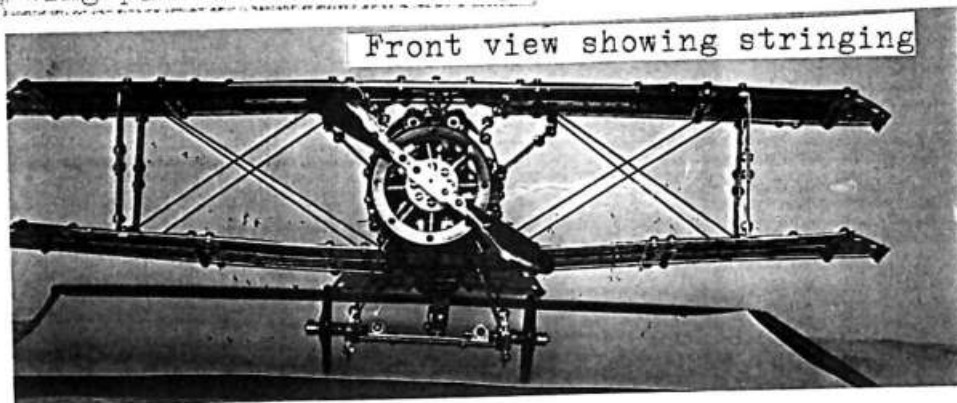
Top View from Front



Underneath view showing wing panels & reinforcing



Front view showing stringing



journalled in the lugs of a 1½" narrow DAS bolted to the floor. At the front end of the engine crankshaft. The crankshaft bearings were two 2½" triangular plates shown in Chris's instructions (Fig 10) There was room for a 2xAA battery pack held in a pair of girder brackets behind the motor.

**SWITCH AND DRIVE:** A simple on/off switch was fixed inside the fuselage just forward of the bolt holding the curved plate. I could push a screwdriver in by the plate and so operate the switch. With my drive train, the two AA battery pack and MO motor were

Adequate to run the propeller. I can only guess at the RPM, but make sure everyone keeps their hand away from the prop.

**WINGS:** My outer wing struts were doubled 2½" narrow strips bolted together and overlapped two holes, thus giving 4½" spacing between wings at the outer ends. The slots on the angle brackets account for the other ½". Front inner struts were doubled 1½" narrow strips. Rear inner struts were doubled 2½" narrow strips.

While the upper wing is flat, the lower ones are tilted

up. Before I fixed the wings I bolted the machine to a base board using 1" x ½" angle brackets fixed to the 1½" flat girder wheel supports. To get the fuselage level I then supported the tail on a 3½"DAS. Next I supported the outer end of each lower wing with a 4½" x ½" DAS thus achieving the required tilt. The upper wing was reinforced to take the strain of the lower ones. Once the struts and stringing cords were in place I took the supports away.

**STRINGING THE WINGS:** I had no trouble locking the cords around the strut bolts between the angle brackets and the wings. The cords running from the lower bolts of the outer struts up to the top of the inner struts, then across and down again on the other side take most of the strain of the lower wing tilting.

**COLOURS:** I didn't feel like an all yellow model so I covered the upper wing surfaces with blue Marklin plates. The fuselage etc, was all yellow and nickel. It is a good looking model and I believe it looks very like the prototype.

I hope many modelers will build it.

---

## MECCANO AT THE TOY FAIR

From Geoff Wright , on the Spanner group.

Elizabeth and I visited the Olympia Toy Fair last Sunday and, visiting the "Meccano Toys" Stand, were given the usual very warm welcome by Richard Macey (Managing Director) and his team. He showed us round with great enthusiasm and told us that all Sets of the erstwhile "Junior" range are now obsolete, and the terms "Junior" or "Plastic" are no longer used.

All sets using the large nuts and bolts and consisting of large plastic parts are now entitled "The Play System" The basic range of these has the sub title "City" and comprises no less than fifteen entirely new sets, aimed at ages 4 to 8. These are further sub-divided into "City Builder" "City Guardian" and "City Rescue" series. The new sets are full of interesting parts to inspire youngsters to "Imitate and Play" and "Create Scenes of Everyday Life" Each includes hinged characters, and, although the sets include

"25% more new parts to produce 4 times more toys" the most astounding aspect is the extremely attractive pricing policy.

Three of the sets retail at 2.99, five others are less than ten pounds, and the most expensive -the "Service Station" is a modest 34.99. The 7101 "Police Coast-guard" features an inflatable hull which actually floats and is propelled by a battery motorized propeller unit, retailing at 29.99. Eleven of the smaller sets should be available this February, and the others in July.

Also under the "Play System" banner, last year's "Action Troopers" range for ages 6 to 9 continues, augmented by four new additional sets, one of which, the 4000 "Motorized Inflatable Boat and Jet Ski" also includes the inflatable hull and battery motorized propeller unit, retailing at only 9.99. The "Motion System" series with the traditional 1/2" hole spacing and a mix of metal and plastic parts continues from last

year, under the sub heading of "Multi-Models". Last year's single model sets have been phased out and replaced by three new sets. each of which makes one model in itself, but if all three are purchased, the parts mixed together will make a "Bonus Model" - in this case a JCB type model. The cunning thing is that the instructions for this bonus model come in three sections, one in each of the three boxes! Each set retails for only 2.99! Also new are three two model sets, which when mixed together also make a bonus model - a Grand Prix Racer.

The two model sets retail for 4.99 The five model (green) set has been repackaged, priced at 6.99 and last year's five model (blue) set has been discontinued.

A new 7 model set "Cyber Vehicles" retails at 8.99

The existing 10, 20, 30, 40 & 50 Model Sets and the 100th Anniversary Crane Set continue as before, but the "Master Connection" series single model sets have been phased out.

All the new Motion Series Sets should be available this February.

The only new part that I noticed in the Motion Series" sets is a plastic version of the 133C Obtuse Corner Bracket, which although much the same size, has additional holes at 1/4" spacing.

---

## SINGLE SUSPENSION GRAB

Designed by Simon Moody

Drawings by Paul Roberts

Over the last few months some of the overseas clubs have had articles on this type of grab in their magazines, so here is a design by Simon.

The model will require a certain amount of adjustment for a smooth operation. Both sides of the grab have been built using washers under bolt heads for a better appearance. All washers, unless otherwise stated are Pt 38.

The lower pulley block slides up and down on two vertical 5" axles. The pawl without boss should be able to engage and disengage with the large threaded pin. Both sides of the grab are attached at the upper end by a locknut, and at the lower end by a 1" rod with collars on both ends.

### Construction:

The method of construction should be evident from the drawings. Obviously there are several points that cannot be conveyed in the drawing or cannot be clearly shown. The following should be considered when building the model:-

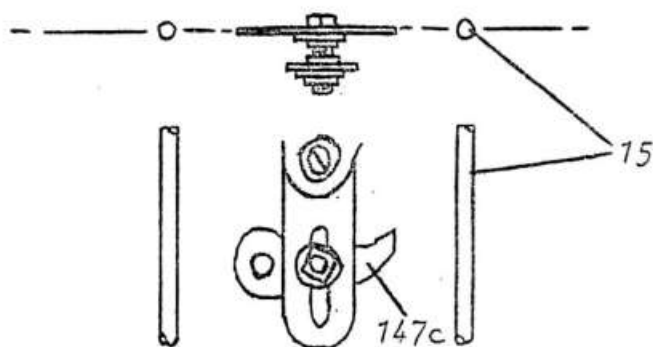
**Fig 1 & 2:** The plan of the lower pulley block (fig 2 0) has had it's length slightly exaggerated in the drawing for better clarity. The 1/2" pulley without boss should be metal. The distance between the 1 1/2" strips

and the 1 1/2" flat girders should be spaced so that the 1/2" pulley is free to revolve, but without any end play. If the distance between the two strips (or the 1 1/2" flat girders) minus the width of the pulley is less than the diameter of the cord, the pulley block will never foul up.

In the fig 2 the 2" axle rod is fixed firmly into the double arm crank. Of the two collars, one of them is pushed up against the 1 1/2" strip. The arm holding the pawl, comprising of two 1" corner brackets and a 2" slotted strip is added next. The other collar is added to the end of the rod so the moveable arm is free to move.

**Fig 3:** All 4 slide pieces should be free to move horizontally along the slotted hole in their respective 1/2" x 1" angle brackets. The upper two slide pieces are fixed to the 5" rods. The lower two slide pieces are fitted to the 5" rods, but without grub screws. A collar is fixed to the end of the rod, under each of the lower 1/2" x 1" angle brackets. The locking arm (containing the pawl), is activated by a dumb-bell shaped arrangement, built out of two collars, a coupling and a 2" axle. This is shown at the top of fig 3. The 2" axle must be free to slide up and down the coupling. The lower collar must be positioned vertically above the two 1" corner brackets.

The pawl (pt 147C) must be directly in line with the two 5" axles. If this is not done the mechanism could jam or refuse to close. The following diagram should show the adjustment more clearly.



**Fig 4:** The  $\frac{1}{2}$ " pulley without boss should be metal. The distance between the two 1" triangular plates is critical. The pulley should be able to revolve freely without any excessive endplay. The distance between the  $\frac{1}{2}$ " strip and the two  $\frac{1}{2}$ " triangular plates should be only marginally larger than the width of the pulley. Figs 4, 5 & 6: The operating cord supporting the grab must be centrally located. This is done by passing through a guide made out of two collars, a fishplate and a 2" strip.

Looking at fig 6, the guide can be centrally located in one direction only (parallel to the  $3\frac{1}{2}$ " strips), by using the half spacing of the 1" triangular plates. In the other direction (horizontally across the drawing), the guides position can be centralised by adjusting it's position on the 2" threaded rod (pt 81) and a  $\frac{3}{4}$ " bolt. When adjusting this guide for the operating cord it should be remembered that the distance between the

1" triangular plates and the  $\frac{1}{2}$ " strip should still be only marginally greater than the width of the pulley.

**Figs 7 & 8:** The  $4 \times 4\frac{1}{2}$ " strips supporting each side of the grab are each attached to the  $\frac{1}{2}$ " DAS by a locknut. The 4 lower  $3\frac{1}{2}$ " strips are secured to the  $\frac{1}{2}$ " flat girders by a 1" axle, two washers and two collars.

**Figs 1, 3, 4, 5 & 8:** The model should now be strung up. Meccano cord or string is not used but braided nylon fishing line with a breaking strain of 70 lb (available from sports shops) is used. This special fishing line will not twist when supporting a weight from a height, unlike Meccano cord or string.

This line is attached to a 1" triangular plate (shown in fig 4) and passes downwards. Of the two  $\frac{1}{2}$ " pulleys shown in fig 3, the cord passes anticlockwise around the pulley positioned between the  $\frac{1}{2}$ " flat girder and the  $\frac{1}{2}$ " strips. The line now passes upwards, clockwise around the upper  $\frac{1}{2}$ " pulley (fig 4), downwards and anticlockwise around the  $\frac{1}{2}$ " pulley positioned between the  $\frac{1}{2}$ " strips (fig 3). Finally it passes upwards through the special guide (shown best in fig 8)

#### Operation:

**To open;** the grab should be lowered until it's weight is fully supported on the ground and the cord shows signs of being obviously slack. The grab should be raised a short distance (about 4cm) and the grab should open automatically.

**To close;** the cord should be lowered again until it shows signs of being slack. At this time the pawl should engage with the long threaded pin. The grab should now be raised and the jaws will close.

### PARTS REQUIRED TO BUILD THE MODEL

|         |           |          |          |
|---------|-----------|----------|----------|
| 4 x 2A  | 1 x 17    | 1 x 55A  | 2 x 111A |
| 10 x 3  | 1 x 18A   | 20 x 59  | 1 x 111C |
| 1 x 6   | 5 x 18B   | 1 x 62B  | 1 x 115A |
| 3 x 6A  | 3 x 23B   | 1 x 63   | 4 x 133A |
| 2 x 10  | 136 x 37A | 4 x 76   | 1 x 147C |
| 2 x 11  | 136 x 37C | 4 x 77   | 8 x 190  |
| 18 x 12 | 107 x 37B | 1 x 81   | 4 x 221  |
| 4 x 12B | 89 x 38   | 8 x 90   | 4 x 235D |
| 2 x 15  | 2 x 48    | 7 x 103H | 8 x 561  |
| 2 x 15A | 2 x 48B   | 3 x 111  |          |
|         | 4 x 50    |          |          |

Figure 1 - Details of lower pulley block

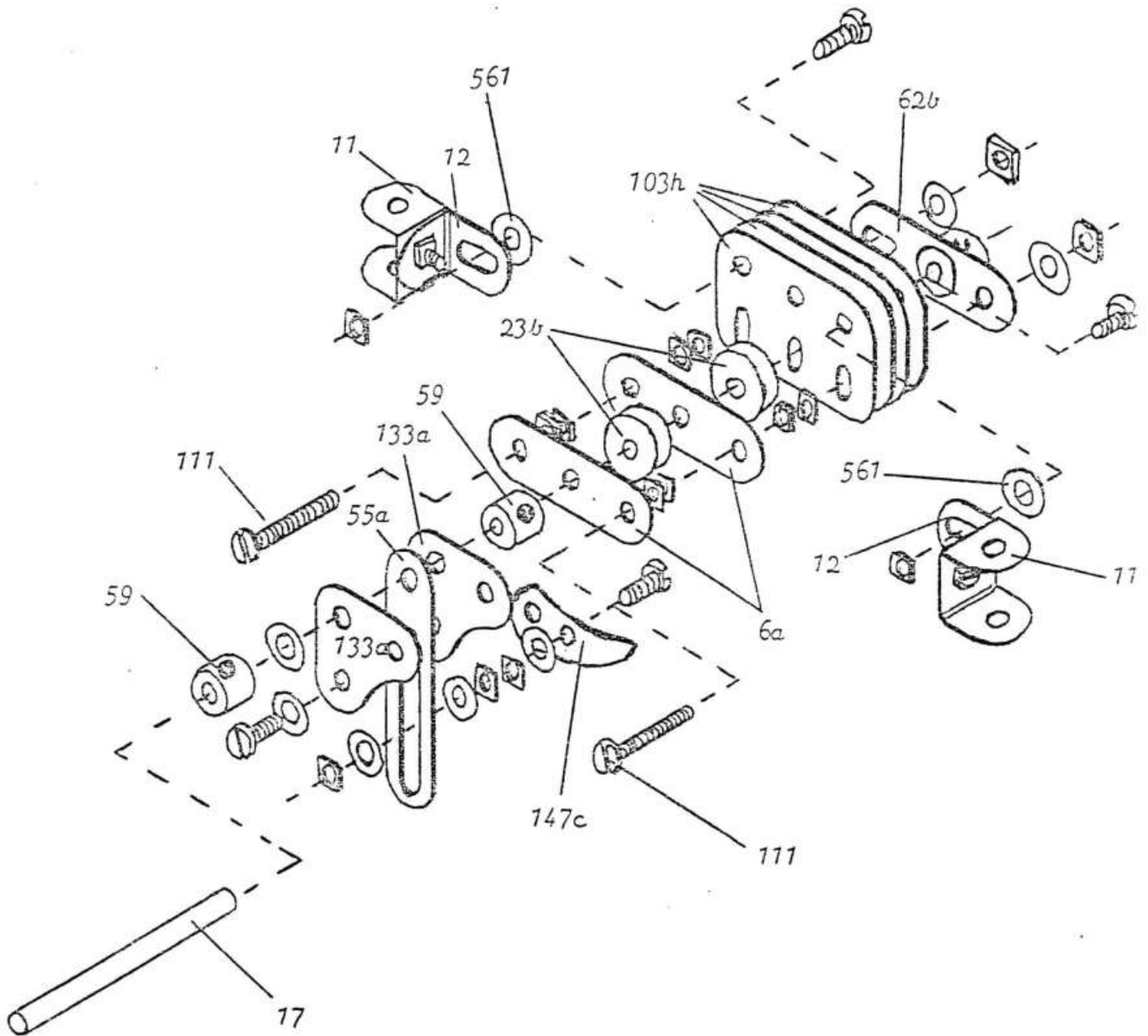


Figure 2 - Plan of lower pulley block

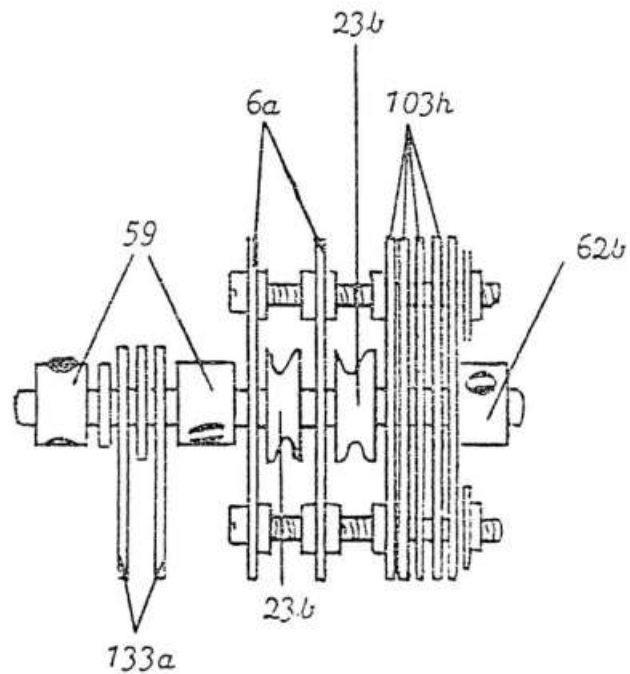
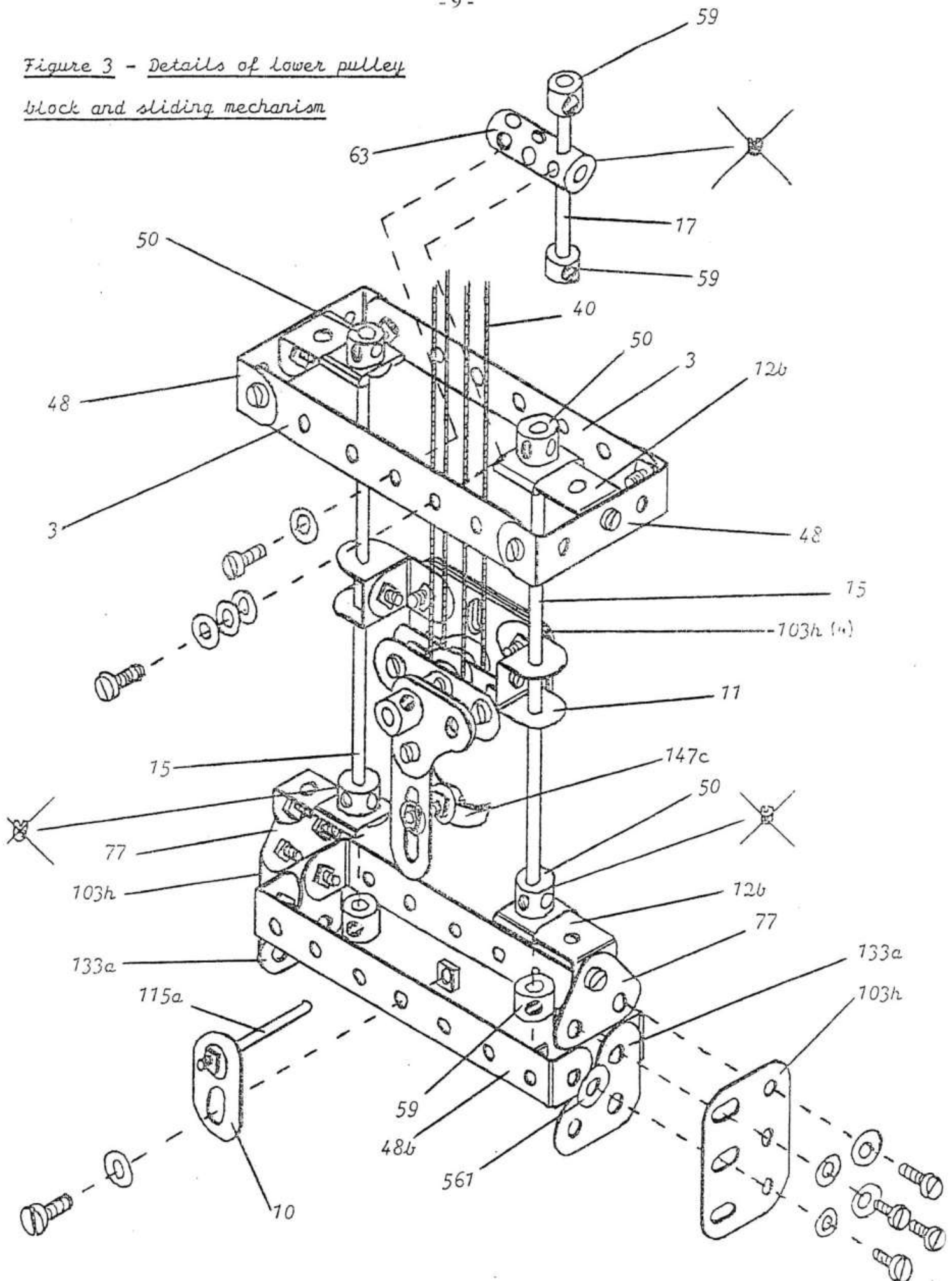


Figure 3 - Details of lower pulley  
block and sliding mechanism



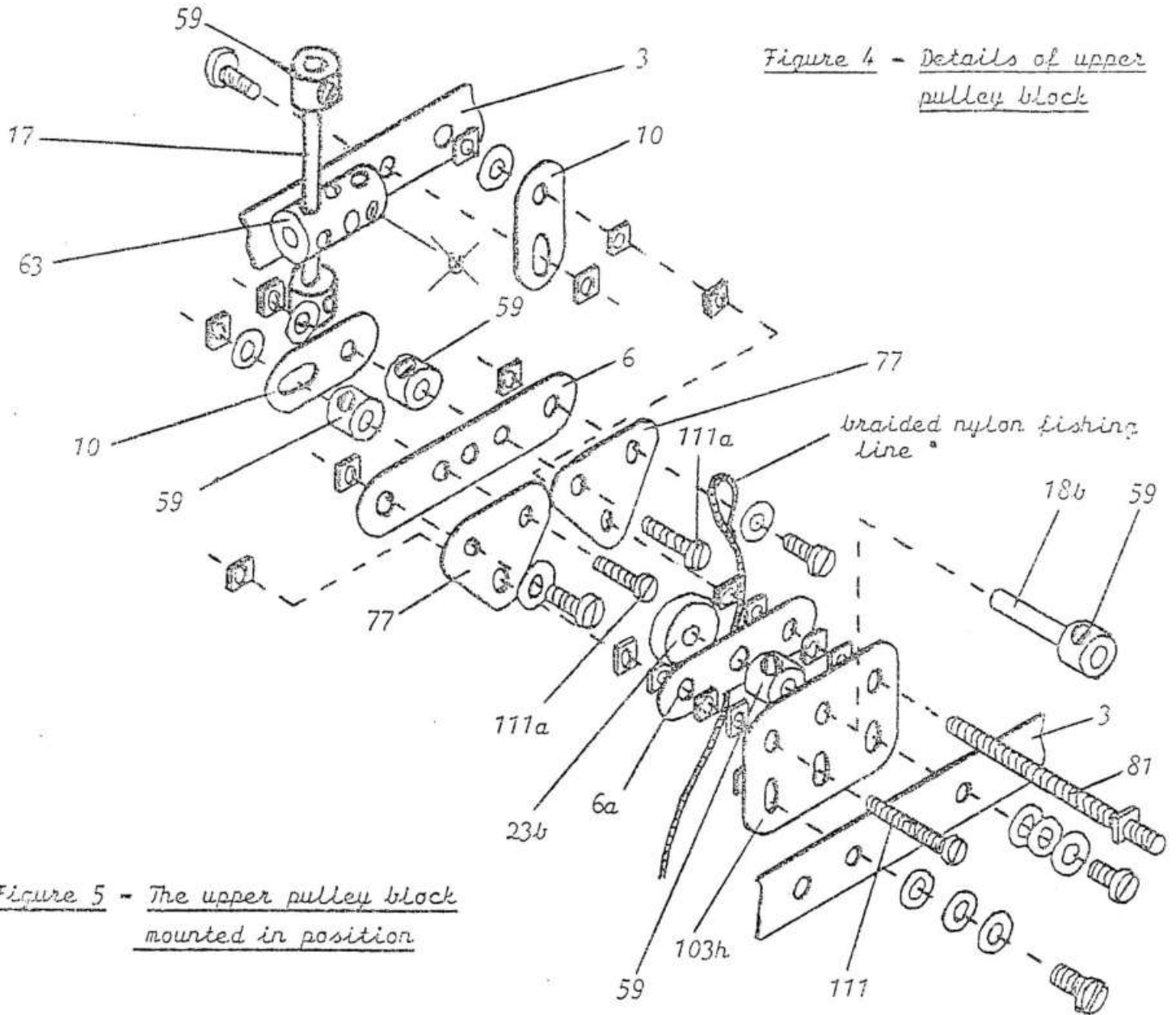
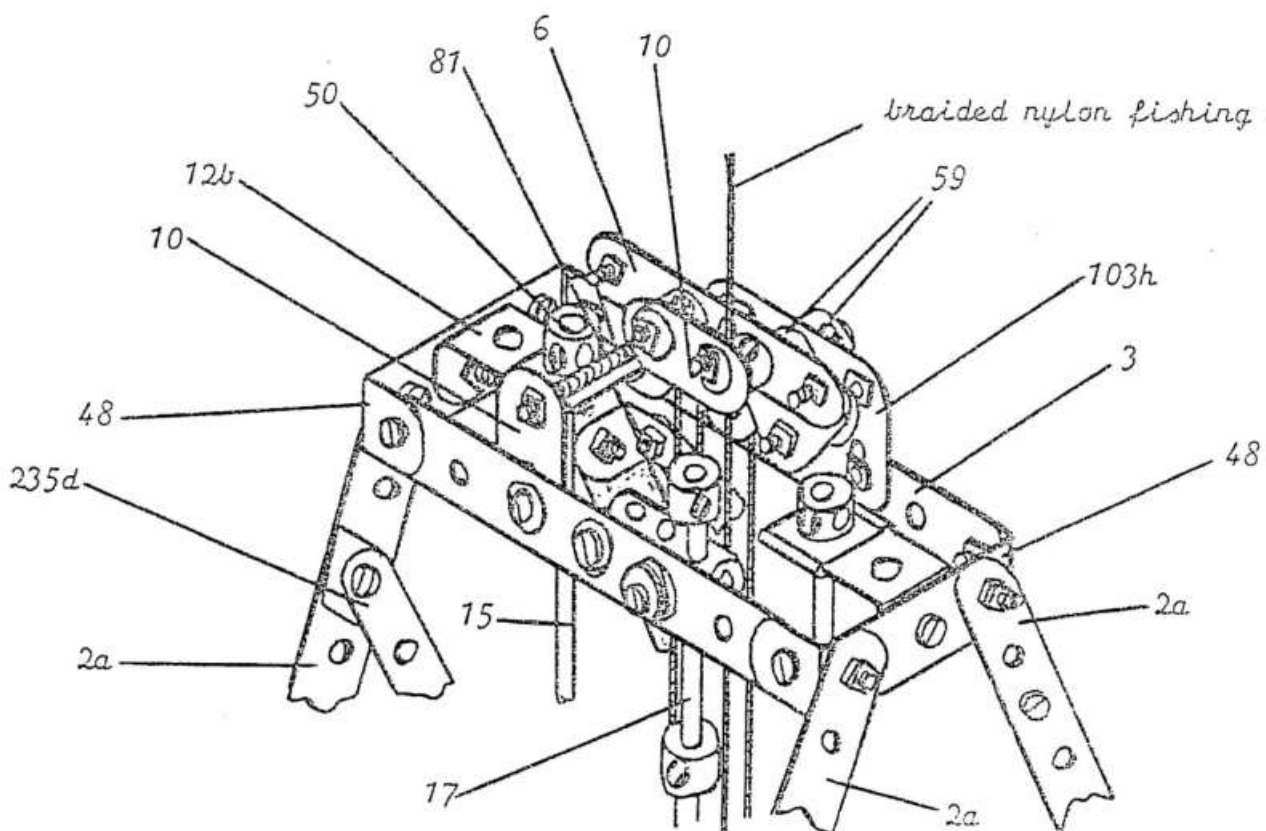


Figure 5 - The upper pulley block mounted in position



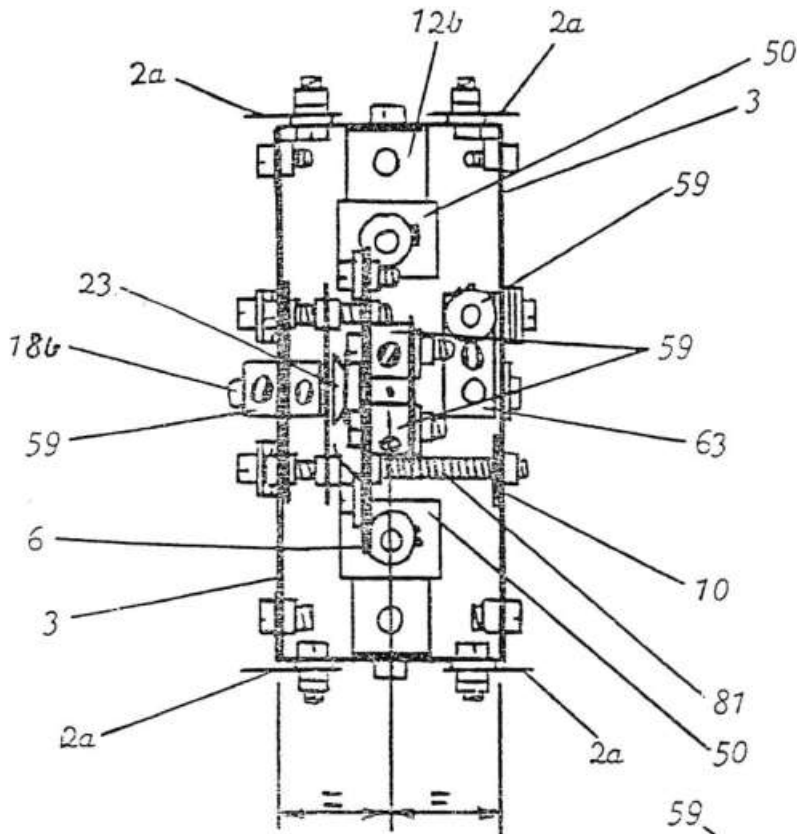


Fig 6 - Plan of upper pulley block

\* For notes see pages 2 & 3

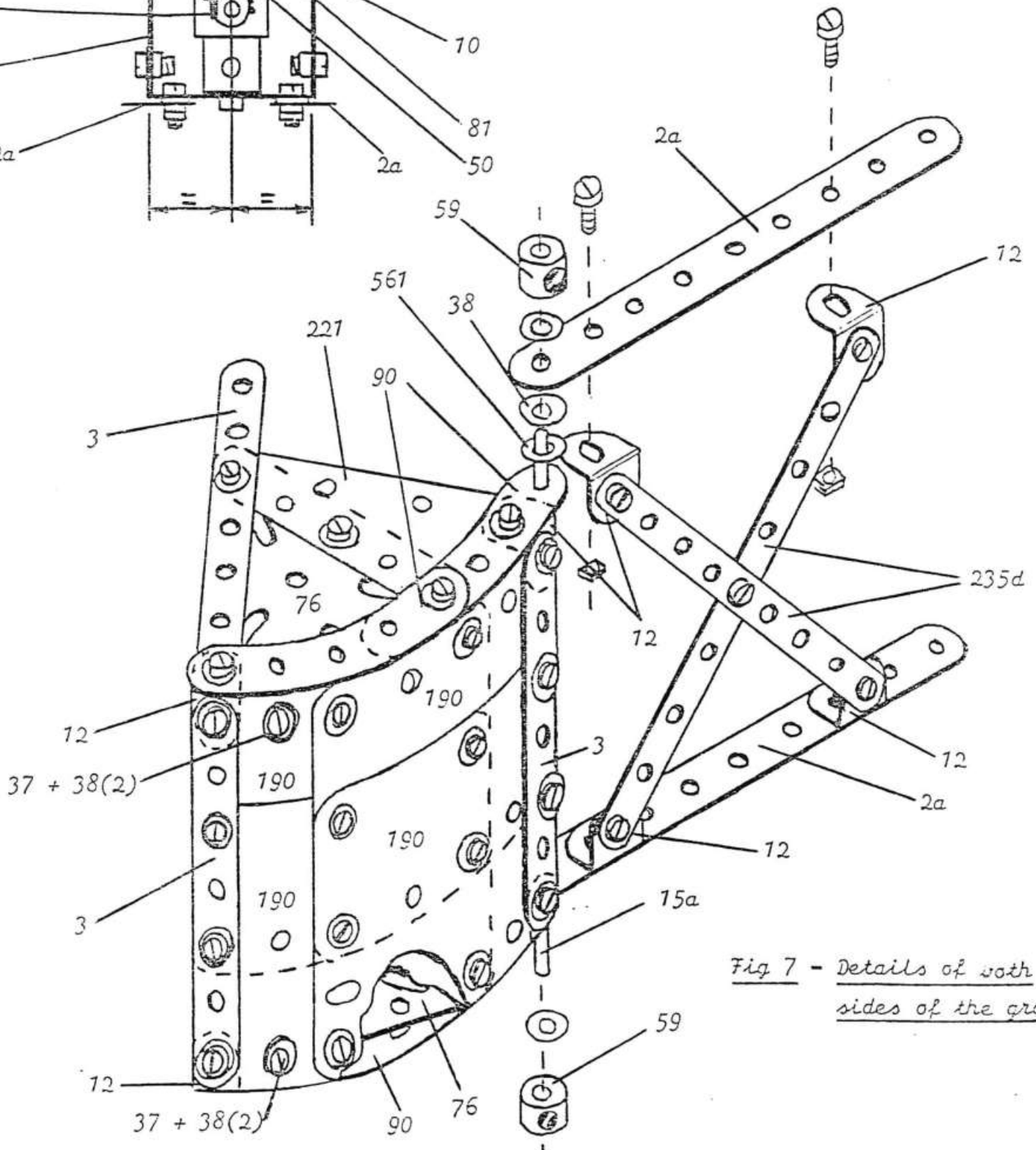
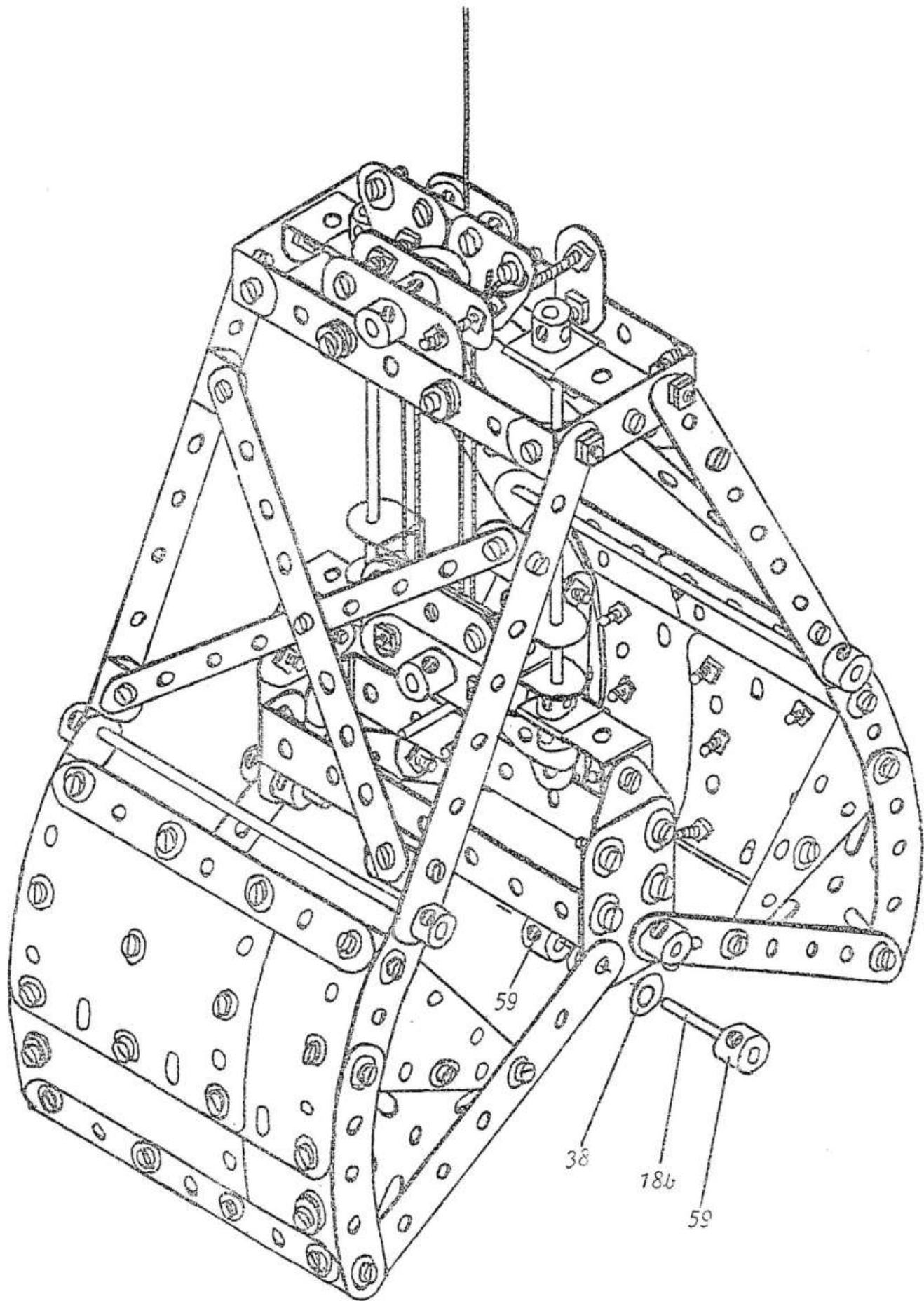


Fig 7 - Details of both sides of the grab

Fig 8 - The completed model showing the jaws of the grab in the opened position



## Andreas Konkoly Index of Meccano Models & Literature

Compiled by William Irwin (with help from Bruce Neilson)

Update: 2 February 2000

The numbered modelplan's below can be obtained by writing directly to:

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**Katona J.u. 28, III.em 17**  
**HUNGARY**

### Publishing Key:

CMN The Canadian Meccanoman's Newsletter (Canadian Meccanotes)  
CMP Canadian Model Plans  
CQ Constructor Quarterly  
FMM French Meccano Magazine  
GSM GMM series of Modern Supermodels  
ISM The International Meccanoman  
ME Meccano Engineer  
MJ The Meccanoman's Journal  
MM Meccano Magazine  
MNM The Meccanoman's Newsmag (The Meccano Newsmag)  
MMQ Meccano Magazine Quarterly  
ModM Model Mechanics  
NZ New Zealand Federation of Meccano Modellers Newsletter  
RMGRunnymede Meccano Guild Newsletter  
SCME Southern California Meccano & Erector Club Newsletter  
SMG Sheffield Meccano Guild Magazine  
TMG The Transvaal Meccano Guild Newsletter

### KONKOLY'S SET 10 SUPERMODELS

#### No. Title Ref. Published

- |    |                                                                             |        |                        |
|----|-----------------------------------------------------------------------------|--------|------------------------|
| 1  | Ultrasuper Variograph (3 models)                                            | Joy 3  |                        |
| 2  | Clockwork Motor No. 1                                                       |        | cf 37 RMG 1988/8/220   |
| 3  | Clock Packet I : Pierrot & Harlequin Clock (7 different models)             |        | MNM 1982/32/9          |
| 4  | 24-speed and 9 diff. Reverse Gearbox                                        |        | RMG 1991/15/529(photo) |
| 5  | Single and Double Rolling Cavalcade (2 different models)                    |        |                        |
| 6  | Walking Nurse                                                               | cf 107 |                        |
| 7  | Jimmy and Johnny, the Two Acrobats                                          |        |                        |
| 8  | Running Coolie with Rickshaw & Mandarin                                     | cf 107 |                        |
| 9  | NORTON-type Motor Cycle and Sidecar                                         |        | SMG 1988/22/8          |
| 10 | Goliath El. Motor for 110V A.C. or D.C.                                     |        | RMG 1994/24/996        |
| 11 | All Knows Designing Machine                                                 | Joy 2  |                        |
| 12 | Clock Packet II : Bonzo Dog wall and standing clock<br>(3 different models) |        | MNM 1985/43(photo)     |
| 13 | L-form Meccanograph                                                         | Joy 2  |                        |

|    |                                                           |               |                                                     |
|----|-----------------------------------------------------------|---------------|-----------------------------------------------------|
| 14 | Scientific Packet, Gyroscope set (5 different models)     |               | MNM 1983/37/9                                       |
| 15 | Meccano Tortoise                                          |               |                                                     |
| 16 | Meccano Ticker (small pendulum clock)                     |               | MM 1965.3/42                                        |
| 17 | Horse and Chariot                                         |               | RMG 1998/37/                                        |
| 18 | Clock Packet III : Chess Clock (5 models) (Chess Clock)   |               | CMP 8 (old series)                                  |
| 19 | Super Universal Design Maker (3 models)                   | Joy 2&7       | MM 1972.11/546                                      |
| 20 | Meccano GUILLOCHE Designing Machine                       | Joy 4         |                                                     |
| 21 | 24-hour Clock                                             | cf M18        |                                                     |
| 22 | New Pendulum Clock                                        |               |                                                     |
| 23 | Meccano GUILLOCHE Vario Designing Machine                 | Joy 4&8       |                                                     |
| 24 | Non-stop Cylinder Press Machine (Cylinder Printing Press) |               | GSM 47                                              |
| 25 | Rotating Pendulum Clock cf 54&59                          |               | CMP 2 (old series)                                  |
| 26 | LOOPING Amusement Park Model                              |               |                                                     |
| 27 | Mr FOX, The Bell Virtuoso                                 |               |                                                     |
| 28 | Meccano GUILLOCHE Longitudinal Designing Machine          | Joy 4         |                                                     |
| 29 | The DAXLIES on the Trapeze                                |               | RMG 1992/19/720                                     |
| 30 | Clock Packet IV : (11 different models)                   |               |                                                     |
| 31 | Valiant Cat, The Cavalier                                 |               |                                                     |
| 32 | Meccano GUILLOCHE Circuit Designing machine               | Joy 4         |                                                     |
| 33 | ACROSSA Amusement Park Model                              |               |                                                     |
| 34 | Portable Synchronous Clock                                | cf 175        |                                                     |
| 35 | Embroidery-graph I & II (2 models)                        | Joy 4         |                                                     |
| 36 | Meccano GUILLOCHE Elliptical Designing Machine (2 models) |               |                                                     |
| 37 | Clockwork Motor No. 2                                     | cf 2          |                                                     |
| 38 | Locomobile                                                |               |                                                     |
| 39 | Threshing Machine                                         |               | RMG 1994/27/1143                                    |
| 40 | Meccano GUILLOCHE Eggs Designing Machine                  |               | MMQ 1975/2/44                                       |
| 41 | Meccano Musical Box cf M20                                |               |                                                     |
| 42 | "Come back" Self Rolling Wheel                            | NZ 1988.2/10, | RMG 1990/13/418                                     |
| 43 | Ship Steam Engine                                         |               |                                                     |
| 44 | The Living Visage /Face/ (Head)                           | cf 135        | CQ 1989/5/28 (photo)                                |
| 45 | Meccano Lacegraph                                         |               |                                                     |
| 46 | Factory Locomobile                                        |               |                                                     |
| 47 | CORVAIR-type Tricycle                                     |               |                                                     |
| 48 | Potato Seeding Machine                                    |               |                                                     |
| 49 | WILESCO Steam Engine (Steam Power Plant)                  | cf 181        | MM 1978.1/6                                         |
| 50 | Op-art Graphic Picture Maker                              | Joy 5&8       |                                                     |
| 51 | Meccano Weight Motor                                      | cf 93         |                                                     |
| 52 | Advertising Railway                                       | V             | MM 1977.1/19 (photo)                                |
| 53 | SHO-LEN Linegraph Joy 4                                   |               |                                                     |
| 54 | Moving Room Decoration (Big Rotating Pendulum)            | cf 25         |                                                     |
| 55 | Meccano Scale motor                                       |               | RMG 1992/20/777                                     |
| 56 | Meccano Beam Engine                                       |               |                                                     |
| 57 | Family Walking Robot No. 1, The Son (Mr Clockwork Motor)  |               | MNM 1987/47/12,<br>RMG 1999/40/23<br>RMG 1999/41/23 |
| 58 | Family Walking Robot No. 2, The Mother                    |               |                                                     |
| 59 | Simplified Rotating pendulum Clock                        | cf 25         |                                                     |
| 60 | T-form Meccanograph                                       | Joy 5         |                                                     |
| 61 | Meccano Stopper Clock                                     |               |                                                     |

## BITS AND PIECES

From Lloyd Spackman

**THE LONDON EYE FERRIS WHEEL:** Meccano modellers everywhere will be waiting to see who first builds a successful model of the giant Ferris Wheel which has been erected on the bank of the River Thames. The wheel itself should not be too difficult for modellers who have already built such a model but bracing the support frame and spindle may be a problem. The real test would be to construct a Meccano model which replicates the construction sequence of lifting the wheel from its horizontal platform (on barges in the River) to lock on to its spindle and hub. (L.S.)

**NO G. R. B. AT THE CANAL:** In 'Life' books photographic publication, "The Way We Were", covering the 20th Century, a 1906 photo of an excavator working on the Panama Canal shows the slewing of the jib was controlled by a wire rope wound around the circular bearing plate with one end locked into the plate.

**CHURN WOOD:** The Meccano butter churn and the circular saw actually made butter and sawed wood, *respectively*.

**G.R.B.:** When it was introduced into the Meccano system in 1928 the Geared Roller Bearing was priced at 20 shillings. The P/N 168 Ball Race Bearing was 3/- and the rare P/N 169 Digger Bucket was 2/-.

### SOME USEFUL INSTRUCTIONS:

On an American Airlines packet of nuts --  
Open packet, eat nuts.

On a Korean knife --Keep out of children.

On a Sears hairdryer -- Do not use while  
asleep.

On a Marks & Spencer pudding --Product  
will be hot after heating.

**MARKLIN NEWS:** In International Meccanoman Jan., 2000, Paul Joachim advises that Marklin has ceased production of its Metallbaukasten sets and parts. In 1914 Marklin took over German Meccano production in Berlin. So, after 85 years Marklin Metall may be no more. It has been an extremely useful compatible adjunct for many Meccano modellers. In the same article was news that Meccano

France was financially unwell. Lego, too, had sales problems last year. By the time this appears, in May, the position should be more clear as regards both Meccano and Marklin.

**GONE TO OZ:** Tony Ercolana and Don Malcolm have both moved to Australia after they were both made redundant in their jobs here. At the 1999 Convention, Don displayed his outstanding model of a P51D Mustang fighter plane while Tony, a comparative newcomer to Meccano, showed his crawler mounted crane. We will miss them and hope they will be able to join up with one of the Australian Meccano Clubs.

**SOME SYDNEY (OZ) NEWS:** From HobbyCo in George St., George Ovenden reports that their Meccano factory display model is an all-metal Ferris Wheel using as the final drive take up a pulley made from a 7 1/2 inch circular strip with obtuse angle brackets bolted all around it to form the groove for the driving band.. My query would be whether the driving band could get jammed where the P/N. 12c meets the P/N 145.

**NEW BATTERY HOLDER:** Dick Smith Electronics is selling a totally enclosed holder for two AA batteries. It has a built in on/off switch. This holder measures 68mm long by 33mm wide by 18mm thick. The only problem is a tiny and fiddly hex screw holding the cover; though that screw isn't really necessary.

**FRANK HORNBY, INVENTOR:** He worked in a shipping office in Victorian Liverpool but his overriding interest was his workshop. As a young man he had patented many ideas. Fired with enthusiasm after reading of other inventors' struggles he even tried to devise a machine to solve the problem of perpetual motion." (From 'The Products of Binns Road by Peter Randall, New Cavendish Books, 1977).

## CHRISTCHURCH MECCANO CLUB

From Ian Torrens

Our first meeting for the year 2000 held on the 4<sup>th</sup> Feb was attended by eleven members, bringing six models with them.

**Cameron McFarlane** had two K Nex models, a car with a rear propeller and a bulldozer. Both very good models.

**Ian Torrens** produced the 2½ million to one reduction gearbox from MM Sept 1941. If the input shaft is turned 60 rpm for 28 days 15 hours 45 minutes the output shaft will make one revolution.

**Doug King** showed us a roller bearing using Pt 167B and capable of standing quite a lot of vertical and lateral thrust. This had no centre axle and so that position can be used for a drive to a crane cab etc.

Our new member, **Philip Bean**, displayed his plate roller unit which will handle plates about 6" wide. A good example of lathe and metalwork.

Supper was put on by David Lang, many thanks, and the meeting concluded at 2115 hrs.

Ian was absent from the December meeting and on that occasion 20 members were present and ten models were on display.

As a summary of 1999, we averaged eleven members at each meeting, with 5 models per meeting. For 1999 our largest attendance was 20 members and 4 members present was our lowest. During 1999 there were two public displays, one at Sefton over Easter, at which 4 members attended and 34 models were displayed. Our second display was at Ferrymead where 54 models were shown to the public and 5 members attended.

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On Friday 3<sup>rd</sup> March 2000, ten members turned out with seven models for our second meeting of the year.

**David Lang** demonstrated his "FURLYMOBILE" which was quite a large model. The size was 18" square on a base and 12" high. At the top of this were two arms totalling 36" wide, at the ends of which were seats. These rotated horizontally as well as moving to and fro in the vertical plane. In each a Furlie was seated, these being a small furry animal,

6" high x 4" wide and 4" deep. Both of them had a good vocabulary even to singing a nice little song. A very interesting and amusing model. Dave also had a Dune Buggy modelled in K Nex which was 14" x 10" x 14" and looked very neat.

**Cameron McFarlane** once again showed us his four wheel Dune Buggy with a rear propeller and this was 10" long x 6" wide and 5" high. This had earlier been displayed but is well worth a second viewing.

**Daniel Ferguson** had a K Nex Windmill 26" high x 8" square on the base, a fine looking model. Daniel also showed a large helicopter, again in K Nex which measured 28" long x 11" high with the rotor blades being 20" wide. The fuselage was 6" wide, altogether quite an impressive model.

**Graeme O'Neill** did some recording with his video camera and gave the meeting some general news and reminded us of future displays including at Sefton on 23<sup>rd</sup> April next.

**Ian Torrens** bought along a small fork hoist being 5" long, 2½" high and 2½" wide. This is from the single model pack 8315.

Supper was put on at 2145hrs after which the meeting dispersed, a pleasant evening for all

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The meeting held on 7<sup>th</sup> April had 12 members present and four models on show.

**David Lang** displayed a Schmidt offset coupling unit which measured 12½" long, 5½" wide and 5" high. This worked very smoothly and the horizontal movement could be displaced by about 5", with the action still working well.

The large plastic helicopter was shown once again, as was the K Nex dune buggy.

**Alex Julius** had a Rocket sledge, 7" long, 4" wide and 3" high, quite a neat model.

**Graham O'Neill** produced a very neat Ferrari type

limited slip differential from CQ March 2000, page 24.

A meccano powered screwdriver was on show and looked very good but operated very slowly.

John Hamlyn has new storage for his Meccano and brought along his old seven drawer unit for sale which is a well constructed and partitioned cabinet. As our usual rooms were occupied, we had to go to

the upstairs lounge which made things a bit awkward, having to lug everything up a narrow flight of stairs. Still with much huffing and puffing, all models were got into place. In spite of this an interesting and enjoyable evening was had by all.

Supper was served at about 2100 hrs and the evening concluded after this.

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## WELLINGTON MECCANO CLUB

From Bryan Jones

The February meeting was attended by ten members, who had been busy over the Christmas break, with a large number of small models on show.

**Mike Highley** brought a tractor, another variation of his favorite general purpose towing vehicles.

**Bryan Jones** showed the progress on a container rail wagon, complete with containers by Simon Moody and Lou Nichols. The basic design was complete, but still required finishing details and a second bogie to be built.

**Lou Nichols** also brought a model of the clipper ship "Wennington" which was sailing in the 1870's. He built it from photographs to feature in a family reunion, as early members of his family had a connection with the vessel.

**Brian Peterson** showed the latest in his collection of railway models built to run on O Gauge track. His train now includes loco, flat wagon with container, log wagon, open high-sider wagon, and a platform crane.

**Lloyd Spackman** also had a collection of models. The largest was a Sopwith Camel F1, a model originally by Chris Bourne which was published on the Internet in a Model Library. Its radial engine was particularly neatly modelled, using a Marklin 3 1/2 inch girder ring. Bruce Geange's crawler tractor moved around the table slowly. Lloyd had extended its engine bay forward by half an inch to make it easier to fit in the batteries, and this had, in the opinion of some, improved its looks. The mini hammerhead crane designed by Chris Warrell and featured in the "International Meccanoman" had an in-

teresting ball bearing turntable design. Finally, the Motion System whirligig provided some colourful diversions, and a very graceful Glider from the Collection Series was admired.

**Laurie Webb** brought along his copy of the railway "Type 14" bogie, to fit under the container wagon.

Further discussions had been held with the Hornby Club, to determine the space that they would require for their display at the Convention. They have a website, and have offered to place advertising on it in due course.

After a false start on the first Friday, the April meeting was held on Friday 14th, with 12 present. We welcomed a new member, Campbell Morrison, who had also brought his son the previous week. A collection of Meccano, Buz and Ezy-bilt parts were available for sale, and a good selection of models were again on display:

**Bryan Jones** showed the container rail wagon again; completed this time, and with a container from Brian Peterson on board.

**Simon Moody** had one of his trams, presently undergoing a rebuild, plus a tram bogie from the second tram.

**Brian Peterson's** O Gauge train now has a station and platform, which accommodates the platform crane previously built. The station model is based on the Hornby Dublo design which appeared in the catalogues of the 50's and 60's.

**Lloyd Spackman** had enough models for an exhibition of his own this month! The main feature was a Penguin Walk, designed by Keith Cameron, which had a mechanical "stairway" to lift plastic penguins up to the top of a long ramp, where they slid down and around to the bottom of the stairway to start the trip again. He showed a collection of simplicity models: lorry, helicopter, tractor, tugboat, steam loco, and two traction engines. A propeller driven car from the Motion System, and a motorbike with sidecar from the Collection Series featured, as did a Plastic Meccano Construction Set bulldozer.

We usually hold the AGM in April, and this year it was decided that the office bearers would remain unchanged, to keep continuity with the Convention planning. Members were reminded that there were only 12 months remaining to the Convention, and further planning ideas were raised.

The next meeting is set for Saturday June 10th at 2pm, to be held at the Sun Valley School, 67 Meremere St., Wainuiomata. The change of time and venue allows us to invite members of the MWT club (and any others) to attend.

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## GOLDEN DEEDS

By Cathrine Chidgey

From Lloyd Spackman

It is rare that Meccano is an important theme in fiction. It is rarer still that Meccano appears on the front and back covers of a novel. That is what happens in Catherine Chidgey's second novel, "Golden Deeds".

Reading it the first time, I had difficulty keeping track of the several characters and which family each belonged to. But they are all bolted into place by the end of the book, just as a Meccano model can be built in modules, then assembled into one. Meccano, however, is only one of the pegs the story is hung on -- others are ancient illuminated manuscripts and the disappearance of the girl, Laura.

In a Radio N.Z. 'Bookmark' interview, Miss Chidgey described her novel as being like a Meccano model constructed of small sections and pieces, indirectly dependent on each other, even if not touching. She used Meccano to illustrate how

the characters' lives became joined together to eventually make up an interconnected whole.

Another theme is the effect on Patrick, a central character, of his father's attitude to Meccano. He buys many sets but won't open them for Patrick to play with. It is aptly summed up in this quotation: "These are not toys," he said, holding a No. 5 set as if it were made of glass. "They are an investment. We have to think of the future".

The cover design by Sarah Maxey of hatched blue/gold models and happy Meccano boys is taken from a 1939 catalogue. Miss Chidgey had access to old Meccano Magazines loaned by Mr. Stewart Gardiner so her description of parts and sets is authentic. Except that a 'No. 115 Shipbuilding Outfit' featured in the novel may be fictional. Has anyone come across it? Her novel is published by Victoria University Press and, as they say these days, 'it is a good read'.

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## ACCOMMODATION IN HUTT VALLEY FOR EASTER 2001

Wallaceville House, Wallaceville Road, Phone 04-527-7785

Trentham Motel, Fergusson Drive, Phone 04-528-8635

Brentwood Manor Phone 04-528-6727

Totara Lodge, Phone 04-528-4152

Rifleman (b&b), Camp Street, phone 04-527-8835

## AMC

From David Wall

My previous secretarial efforts must have so impressed Peter Hancock (our proper secretary 0 that he has once again passed the mantle over to me.

Let's start with a brief description of the models:-

**Frank Price;** an attractive tower crane remotely controlled by the action pack infra red system.

**William Irwin;** Andreas Konkoly's "sailor descending a ship's rigging" (frenetic) and two little vehicles from the collectors series.

**John Denton;** A traction engine based on a prize winning design published some years ago in the Meccano Magazine.

**George Ovenden;** The now completed Goods Warehouse with electric elevators (SML 31) and a cunningly contrived intermittent motion.

**Michael Geary;** A fully operational movie camera boom. (Mike I'm still concerned that the two boom operators could be catapulted into eternity by a disgruntled stage hand)

**George Mitchell;** A new member from Devonport who brought along a robot figure, an armoured car and a truck/trailer unit skilfully crafted from Steeltec.

**David Wall;** A steam driven flyboat filled with furry little Aussies.

Also present were Graeme Wrightson, Neil Carey and Bruce Haines. An apology was received from Peter Hancock who was called away to Melbourne on business.

At the behest of Lou Nichols, our revered president, members were reminded of the 2001 Convention and his suggestions of constructing a favourite first model and a combined club single theme model for the aforementioned Convention were also conveyed to members. Members were also advised that Lou would be in Auckland on 9<sup>th</sup> April.

Finally may I remind you all that the next Auckland meeting will be held at Peter and Jan Hancocks home on Saturday 13<sup>th</sup> May at 2.00 pm.

73

### *ALLEGRO APPASSIONATA*

Poignant words from a bride at Te Anau:  
'John, I'm not just a piece of Meccano;  
I'd come very much sooner  
If you were the tuner  
And I were the concert piano.'

## THE WISDOM OF KEITH CAMERON

From Lloyd Spackman

Edited by Lloyd Spackman from letters written to him between 1984 and 1998. This one is from a single long letter written in April, 1989.

"Your modifications to my Penguin Staircase drive is an excellent example of a common situation: the original builder of a model may not have enough time to examine all the alternative methods of construction and operation in order to eliminate all the bugs that might show up. Time is short, the editor presses for a new model, or the exhibition is this week, so let's get it running, photographed and described. Usually I run a model at intervals over a period of a couple of weeks and put it through the sternest test of all, I SHOW IT TO A NEIGHBOUR. If it is going to malfunction it will then. Perhaps I should also let some small children loose on it as an extra ordeal !

It seems to be a rule of Meccano model building that the more experienced builder of someone else's model will usually be able to make some worthwhile and valuable modifications and additions. THIS FACILITY IS DEVELOPED EARLY in one's Meccano career and usually first shows itself in improving and updating the models in the manuals, teaching the useful lesson of never being satisfied but trying to improve performance and reliability. That the original designer didn't incorporate the improved idea in the model is explained by the fact that the builder, by the time he has planned and worked on his model, cannot view it with that objectivity that another builder can bring to bear on it. He, as it were, can't get far enough away from his model to review it dispassionately and critically. It's his baby, after all ! And he has got so accustomed to looking at certain errors in his model that he doesn't see them, although they are obvious to others. Furthermore, DIFFERENT MODELLERS DISPLAY DIFFERENT TECHNIQUES. We all get into a rut with our methods and it takes a real strong mind to rise above the rut and introduce new ideas. And failing that, someone else needs to come along and say, "Why didn't you think of doing it this way ?"

I have written many articles on MY MODIFICATIONS OF OTHER PEOPLES' MODELS. I have enjoyed building the models, have appreciated

the thought and skill that has been used in their design and construction and want others to enjoy the models, too. With this in mind I have noted certain areas (as you did) that could be improved with a RELATIVELY SIMPLE CHANGE that could make the construction easier and the final result more reliable. Magazines have been good enough to publish these articles of mine such as my alterations to the No. 10 Motor Cycle engine which appeared in the Sheffield magazine, September, 1986. I think a N.Z. Meccanoman has built the original No. 10 model recently and I don't know how he got on with it, but I found when I tried to build it as originally described that it was impossible to make it work the way it was supposed to without extensive alterations -- specifically a great deal of counterbalancing. There was no mention of this in the folder and I cannot think what the builders have done who tried to build it during the years that the leaflet has been available.

A somewhat different counterbalance problem existed with the excellent GMM.SML.26 Fairground Dive bombers, and this I was easily able to fix and describe. This month in the Canadian Newsletter, Ed Barclay published my modified automation for Phil Ashworth's remarkable and classic model, the Rotawheels.

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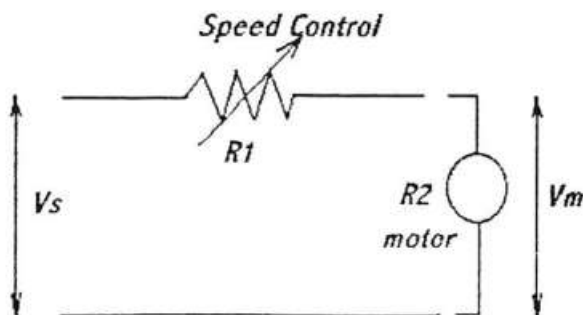
## GHOST STORY

A chap was going through an old overgrown cemetery in midwinter ---the trees bare, reaching at him, the moon like bad cheese, the wind lamenting. Suddenly he heard 'tap, tap, tap'. The hair stood up on the back of his neck. He was about to bolt when, greatly to his relief, he saw in the shadows a dim figure at work with a hammer and chisel, 'tap, tap, tap' on a tombstone. "Thank heavens", cried the bloke. I thought it was a blasted spook -- that 'tap, tap, tap' of your's. You're at work mighty early. What're you doing, pal ?" The figure never looked up but continued working with hammer and chisel. Then it replied in deep tones, "They spelled me name wrong".  
(From Jim Henderson's New Zealand, Grantham House. 1989).

## MOTOR SPEED CONTROL

From TMG Feb 200

At the meeting of the TMG in February it was asked why a model cyclist powered by a train controller did not speed up significantly when the controller was cranked up. Yet when using the same controller for model trains and some Meccano motors a great variation in speed was possible. Here's the answer:-



Most train controller's use a variable resistor as a means of controlling the train speed. Generally the variable resistor has a low value to match the low resistance train motors. In this model a motor was

used with indeterminate specifications. If the motor has a high internal resistance then the effect of the speed control knob on the train controller power supply will be ineffective. This can be seen as follows:-

If the speed resistance ( $R1$ ) is 5 Ohms and the motor resistance is 1 Ohm and the motor is subject to  $V_s$ . If at minimum speed (but not quite off) then the motor will only be subject to  $R2/(R1+R2) \times V_s$ , ie  $V_s = 6$ .

If the motor is a high resistance (say 20 Ohm) then things are a little different.

At full speed the same conditions apply and the motor is subject to  $V_s$ . However at minimum speed (not quite off) then the formula applies but  $R2$  is much larger so the minimum voltage will be  $20/(5+20) \times 12 = 9.6V$ . therefore this motor can be controlled between 12V and 9.6V (100% and 80%). Interestingly this was almost the opposite of a problem experienced by Tony Gain and his flying helicopter. The problem that Tony had was that his motor speed could not be varied between full on and full off. The reason in this case was that the speed control resistor ( $R1$ ) was a very high value compared to the motor resistance. By selecting a lower resistance the problem was solved.

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## THIS ONE'S FOR MY THREE FRIENDS WHO CHECK EVERY WORD FOR SPELLING MISTAKES

Eye halve a spelling chequer  
It came with my pea sea  
It plainly marques four my revue  
Miss takes eye kin knot sea

Eye strike a quay and type a word  
And weight four it to say  
Weather eye am wrong or write  
It shows me strait a weigh

As soon as a miss take is maid

It nose bee fore two long  
And eye can put the error rite  
It's rare lea ever wrong

Eye halve run his poem threw it  
Eye am shore your pleased two no  
It's letter perfect awl the weigh  
My chequer tolled me sew

Try it in your spell check – it doesn't pick up any miss takes

# HELPFUL INFORMATION

From Graeme O'Neill

## MAKING SQUARE CORNERS

### PYTHAGORUS

## EPICYCLIC GEARBOX

### DESIGNS

| MAKING SQUARE CORNERS |                |                   | GEAR RINGS INTERNAL TEETH                        |        |     |        |         |
|-----------------------|----------------|-------------------|--------------------------------------------------|--------|-----|--------|---------|
| holes side one        | holes side two | holes in diagonal | ratio equation = (ring "internal" teeth+sun)/sun |        |     |        |         |
| 4                     | 5              | 6                 | ---Meccano-part-180-----                         |        |     |        |         |
| 6                     | 13             | 14                | internal                                         | planet | sun | ratio  | or      |
| 7                     | 9              | 11                | 95                                               | 19     | 57  | 152/57 | 2.667:1 |
| 8                     | 25             | 26                |                                                  | 22     | 50  | 145/50 | 2.90:1  |
| 9                     | 16             | 18                |                                                  | 25     | 45  | 140/45 | 3.11:1  |
| 10                    | 13             | 16                |                                                  | 38     | 19  | 114/19 | 6.00:1  |
| 10                    | 41             | 42                | ---M.W.Models-part-180a-----                     |        |     |        |         |
| 11                    | 25             | 27                | internal                                         | planet | sun | ratio  | or      |
| 13                    | 17             | 21                | 57                                               | 19     | 19  | 76/19  | 4.00:1  |
| 13                    | 36             | 38                |                                                  | 15     | 25  | 82/25  | 3.28:1  |
| 16                    | 21             | 26                | ---M.W.Models-part-180b-----                     |        |     |        |         |
| 16                    | 37             | 40                | internal                                         | planet | sun | ratio  | or      |
| 17                    | 31             | 35                | 133                                              | 19     | 95  | 228/95 | 2.40:1  |
| 19                    | 25             | 31                |                                                  |        |     |        |         |
| 21                    | 22             | 30                |                                                  |        |     |        |         |
| 22                    | 29             | 36                |                                                  |        |     |        |         |
| 25                    | 33             | 41                |                                                  |        |     |        |         |
| 28                    | 37             | 46                |                                                  |        |     |        |         |

## NEW CAVENDISH SERIES: VOLUMNS 2, 6 & 8 BOX LAYOUTS & LABLES and MANUALS

## QUICK REFERENCE INDEX OF

| YEAR      | INFO ON.. | SET NAME                            | SOURCE | PAGE    |
|-----------|-----------|-------------------------------------|--------|---------|
| 1973-1974 | GENERAL   | HIGHWAY & SUPER HIGHWAY MULTIKITS   | NCS-6  | 282-284 |
| 1974      | GENERAL   | MOGUL TOYS                          | NCS-6  | 286-287 |
| 1974      | GENERAL   | POCKET MECCANO Mk2                  | NCS-6  | 285     |
| 1975      | GENERAL   | COMBAT MULTIKITS                    | NCS-6  | 289     |
| 1975      | GENERAL   | COMPLETE RANGE OF SETS              | NCS-6  | 291*    |
| 1976      | GENERAL   | CRANE BUILDING SET & MOTOR          | NCS-6  | 292-293 |
| 1977      | GENERAL   | PLASTIC MECCANO                     | NCS-6  | 295     |
| 1977      | BOXLID    | SET 4                               | NCS-6  | 297     |
| 1978      | BOXLID    | SETS 2 - 5, MANUAL SET 4            | NCS-6  | 300-301 |
| 1978      | GENERAL   | SPACE 2501                          | NCS-6  | 302-303 |
| 1978      | BOXLID    | SETS 2 - 5                          | NCS-6  | 417     |
| 1979      | GENERAL   | MECCANOIDS                          | NCS-6  | 304-305 |
| 1979      | GENERAL   | ACTION PACKS                        | NCS-6  | 307     |
| 1979      | LAYOUT    | SETS SPACE 2501, MECCANOIDS, CRANE. | NCS-6  | 424     |

## **COMMING EVENTS**

### **MEETING ADDRESS:**

WMC:

ST LUKES CHURCH HALL  
55 PITT STREET  
WADESTOWN

MWT:

ST LUKES CHURCH HALL  
CORNFOOT ST  
WANGANUI

CMC:

ST JOHNS HALL  
FERRY ROAD  
WOOLSTON

### **MAY 2000**

5th – CMC – St Johns Hall

6th – MWT – St Lukes Hall

13th – AMC – Peter Hancock's

### **JUNE 2000**

10 th– WMC – Sun Valley School,  
Wianoumata

2nd CMC – St Johns Hall

### **JULY 2000**

7th – CMC – St Johns Hall

### **AUGUST 2000**

4th – WMC – St Lukes Hall

4th – CMC St Johns Hall

### **SEPTEMBER 2000**

1ST – CMC – St Johns hall

## **REPLICA PARTS SUPPLIERS**

SIMON MOODY

BLUE MOUNTAINS ROAD  
UPPER HUTT

BRASS PARTS

BRUCE GEANGE

4 WINCHESTER ST  
PALMERSTON NORTH

NARROW STRIPS

STRIP PLATES

PETER KING

P.O. BOX 2753  
CHRISTCHURCH

HELICAL GEARS

ASHOK BANERJEE

P O BOX 4149  
NAVRANGPURA  
AHMEDABAD – 380 009  
INDIA

GEARS

BRASS PARTS

PLATES

STRIPS AND GIRDERS

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### **WANTED**

Copies of NZFMM magazine as follows;

Vol 1 to 6 (Ed D Blakeborough)

Vol 9 & 10

Vol 11 No 1, 2, 3, 4, 5 (Ed B Watt)

Vol 15 No 4

Vol 16 No 2

Vol 17 No 2, 6

Vol 18 No 3

Vol 19 No 4

J Stassart

Rue Sylvain Gouverneur 15

4430 ANS

BELGIUM

