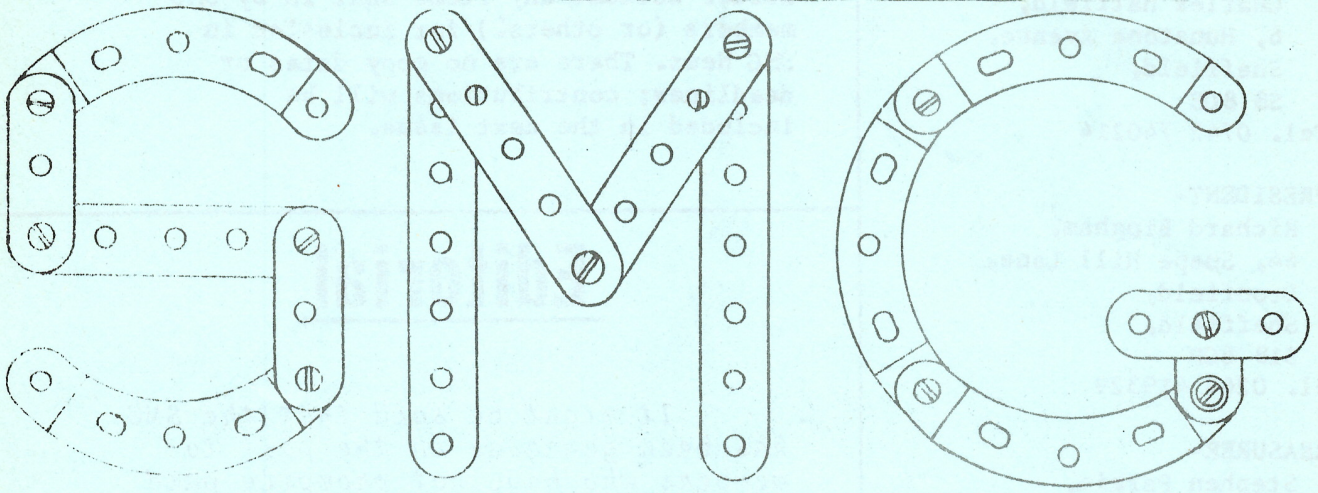
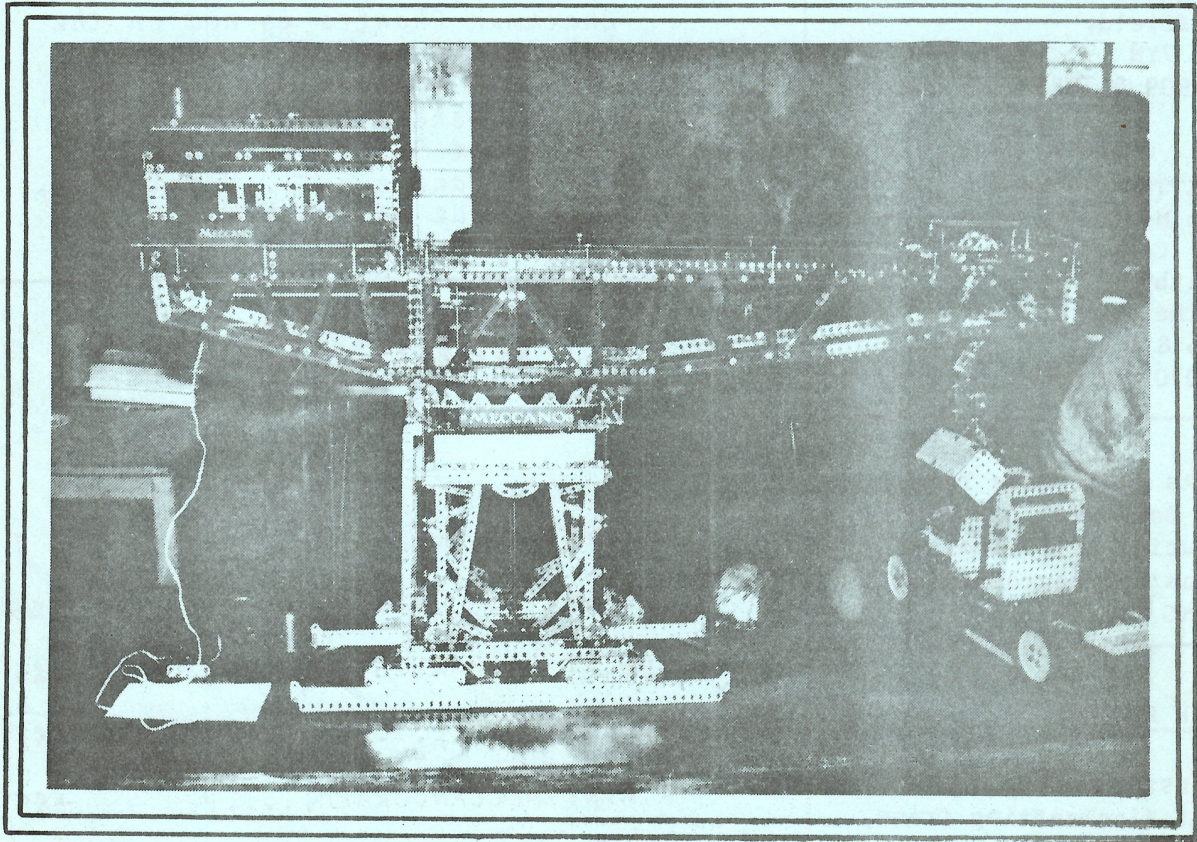


# SHEFFIELD MECCANO GUILD



# - NEWS -





THE SHEFFIELD  
MECCANO GUILD

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Mike Beadman,

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Rob Mitchell,

SMG News is produced quarterly by the Sheffield Meccano Guild in March, June, September, and December of each year.

Both the SMG Secretary and Newsletter Editor welcome any items sent in by SMG members (or others!) for inclusion in SMG News. There are no copy dates or deadlines; contributions will be included in the next issue.

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## Editorial

It might be said that the SMG has been generous in the past to members who have not promptly paid their subscriptions, in that they have received two Newsletters gratis. We cannot continue this policy, because Guild membership has unexpectedly shrunk by about one third; this will leave the SMG with an expected zero surplus by October.

Therefore, please make every effort to pay your sub. in October for '91/'92.

Chairman Charles is now on the 'phone! Note the number, opposite.

Many SMG members are also NMMG members; we therefore expect to see many friends at SKEGEX this year, and other Meccano events. Until then, enjoy this issue of SMG NEWS!

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Thanks go to Dave Yates, from Bolsover, for kindly producing half tones of photos for reproduction in SMG News.

COVER PHOTO.

A classic model, the Giant Blocksetting Crane, modelled in B-Y-Z parts by WAYNE STANCLIFFE.

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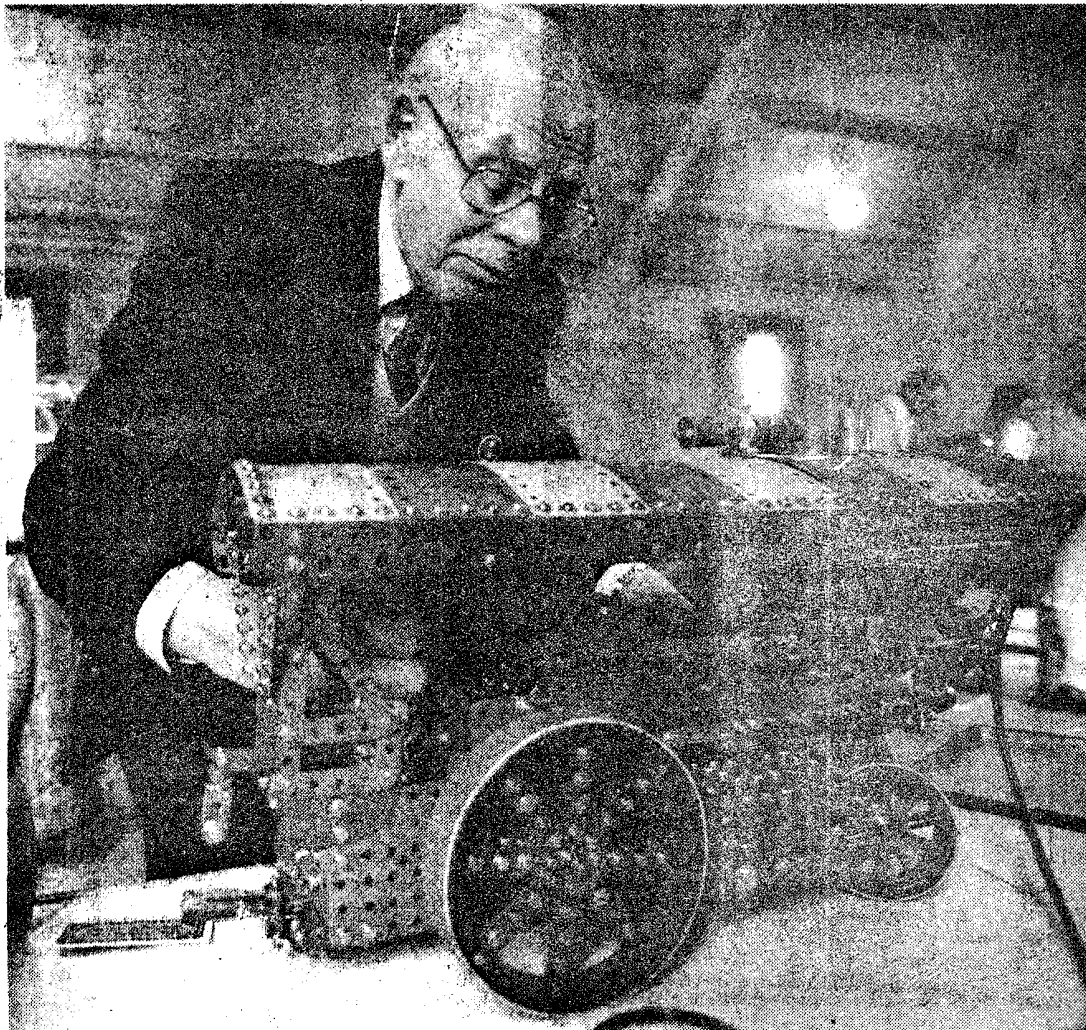
## TELEGRAPH NEWS

Sheffield Telegraph, Friday, May 3, 1991

### Meccano magic

**CHARLES Hatfield** adjusts the mechanism of a traction engine on show last weekend at the Sheffield Meccano Guild's meeting at Norton Church Hall. Mr Hatfield's working model was just one of hundreds on show from enthusiasts who never lost the appeal of what started as a toy. The Sheffield meeting attracted visitors from as far afield as Northampton.

● Anybody interested in the Guild can contact Mike Beadman on Workshop 567015.



CHAIRMAN CHARLES, pictured above in the Sheffield Telegraph for May 3rd., has also been extolling the virtues of Meccano to Radio Sheffield- he was interviewed 'live' on the weekday afternoon show, describing two of his models, and talking about his connections with the hobby.

In these, and other ways, the Guild tries to break through public ignorance about Meccano as an adult hobby. Another media approach was not nearly so effective; local members may have seen the dreadful little piece in the Don Valley Forum's Newsletter- the DVF are a local 'pressure group' whose Newsletter has a claimed circulation of some 22000- said piece being the mangled remains of an article submitted by the SMG Sec. to advertise the Guild.

The Forum have been severely chastised for their lack of editorial skill, not to mention execrable grammar. If you saw the article- far too embarrassing to reproduce here- it was not meant to be like that, honest!

More media notes; GEOFF WRIGHT gave a splendid account of the origins of Meccano on Radio 4 ('The Parts', a technology series) explaining that Frank Hornby first thought of the idea of Meccano when he saw a railway Platform Crane made of bolted together perforated steel strips. Geoff's piece was part of an article about an exhibition of the most popular British patented products of this century- Meccano being one, naturally.

# SMG MEETING, NORTON

On a delightful day, Guild members gathered one by one at Norton to air their wares and their views. While the smell of food and drink attracted members to the kitchen, Guild officers tussled with a reluctant mains supply- there was electricity only to one side of the hall, two of the stage front sockets being unserviceable. Groping in the darkened stage area found two more, however, in working order, and all was well.

John MacDonald, being as often the case first to arrive at the hall, receives first mention for his models. His breathless short Model Report on his Lanchester Armoured Car, FH70 Field Howitzer and M26 Pacific Wrecker states simply 'All Khaki...all working', and it must be said that words are inadequate to properly describe these fine models, crafted with an exceptional grasp of proportion and function. It is a pleasure to hear John talk about the prototypes, too. A man who knows his subject.

Another member known for his scale approach to modelling, John Martin this time brought two historical models; a 5 set Lorry from the '30's in Blue and Gold, and an early Nickel Crane, the old Nickel parts having a special timeless appeal compared with some of the more gaudy modern finishes.

Brian Harper was not asleep, but his model was described as a 'Sleeping Meccanoman', who was constantly disturbed by gongs and bells. Press the handle on the front of this Colin Cohens designed model, and bedlam breaks loose from the bells etc inside the stout box.....languidly a fully articulated hand pushes up the lid and pushes the handle back into place, silencing the racket. The hand returns inside and the Meccanoman can sleep once more.

Perhaps when no-one is looking, the Sleeping Meccanoman's hand twirls the handle of Les Gines's Chair'o'Planes, 'hand operated for children to operate' says Les, but no Meccanoman can resist the temptation.

Wayne Stancliffe may be one of our newer members, but he is clearly not new to Meccano modelling, having designed his own Block Setting Crane, a substantial model with an interesting built up roller bearing. Wayne's Model T Ford pick up is also a good 'un, based on designs from a 69 MM.

Howard Bottom had a stab at the Ten Set Snowloader, and to judge by his comments on his model report, was less than well pleased with it's performance. 'An inefficient model when it comes to load on the E20R' he said. Nevertheless, an interesting and seldom seen model. Howard also brought a Push-me-pull-you vehicle.

Russell Carr's model of a Car Transporter Lorry is now taking shape; we look forward to seeing the completed vehicle. His Skaters model, with small figures guided around a rink by magnets, is most appealing, and interesting to just sit and watch the skaters join and leave their partners.

Tom McCallum showed a Display Motor Chassis, looking well in light Red and Green, with fully working gearbox, clutch, footbrake and differential.

Rob Mitchell described his model on his Report as 'That \*\*\*\*\* RM800 again'.....considering the sheer size of this Ballast Cleaning Machine (about eighteen feet, measured by aerial survey) it is no surprise that it has taken a little while to make and been to several meetings and exhibitions while incomplete. One truly remarkable feature of this model is that the whole thing moves along the track powered by one M0 Motor running on Nicad batteries. The largest battery powered model ever?

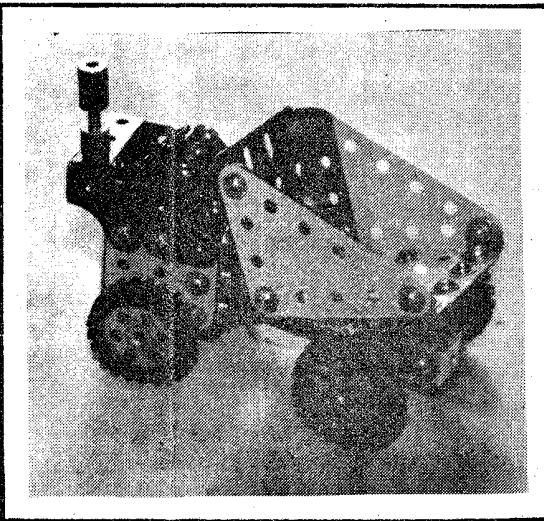
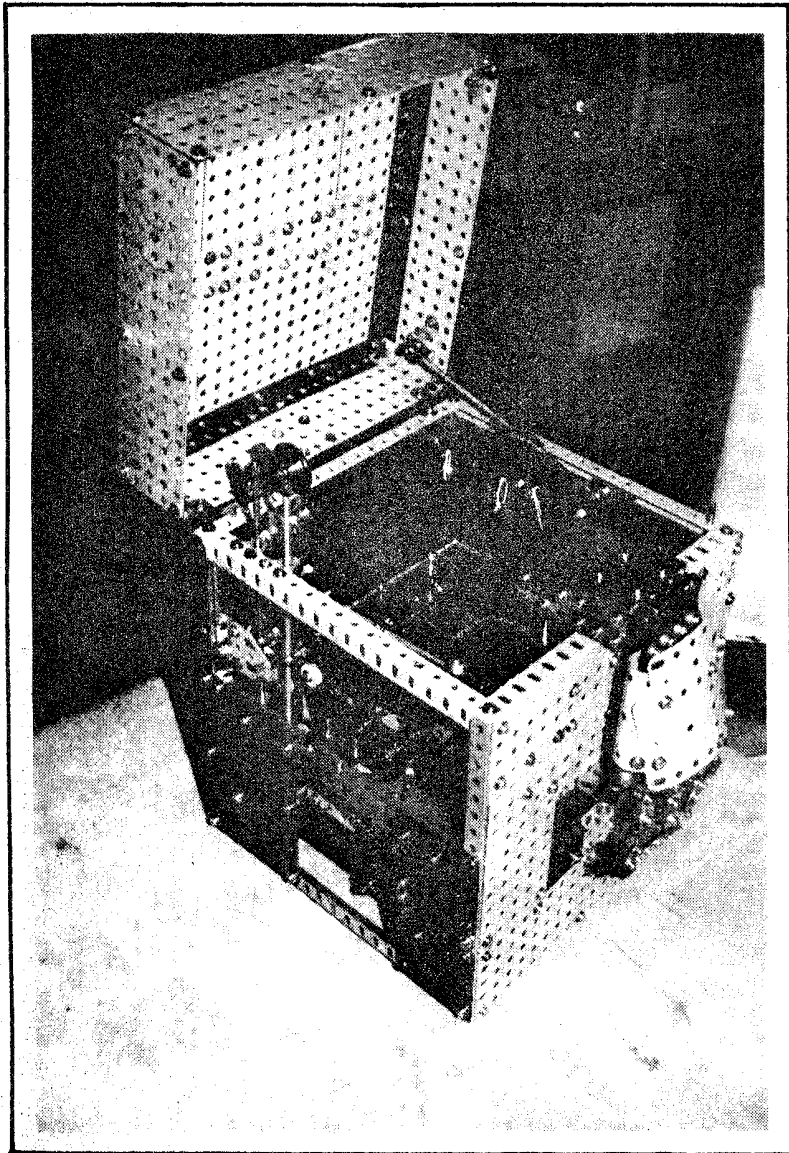
Media-Star Charles Hatfield brought quite a collection of models; a freelance Carousel, Brian Rowe design Traction Engine and Beam Engine, an MM design Rolls Royce, and a Magic Windmill, now immortalised by being heard whirling in stereo on Radio Sheffield!

Iain McKenzie had an impressive display of Binns Road display models, the most striking of which was a large Suspension Bridge on which Dinky Toys vehicles were moved by an endless drive. Iain also showed a Showman's Engine, a Windmill, a Ferris Wheel, an Excavator, and a 'low relief' if that is the right model railway term, American Loco- in effect half a model, a loco cut in half length ways.

An auction was held during the afternoon, one item offered being the Guild's Hydro Action hydraulic set. Just before the auction, a short business meeting was called to discuss the offer made by the Curator of Kelham Island Museum of free use of the exhibition room at the museum for a Guild meeting. It was understood that this meeting would be open to the public as an added attraction for the museum, and as such would be of mutual benefit to the SMG and the museum.

However, no date could be agreed on for any such meeting! Two reasons for this being that many members have a fairly full calendar of events, and that there was some feeling a third meeting would be superfluous.

So, business conducted, auctioneering finished (and thanks, Tom for being such a capable Auctioneer), the chinwagging continued for a while before we poured forth into the bright May sunshine, another enjoyable meeting concluded.



Above: Frank Singleton's Mini-model Dump Truck inspired by the Construction Series model.

Left; Brian Harper's Sleeping Meccanoman pictured switching itself off.....

# SMG AT KELHAM ISLAND

16th. & 17th. MARCH 1991

A good number of visitors turned up at our annual exhibition this year, despite the fact that much anticipated publicity with local papers and radio stations failed to materialise. The 'Star' carried a small mention of our exhibition prior to the weekend and had a photo after it of four youngsters looming over a standard manual model, which hardly promotes Meccano as an adult pastime at all! Two local papers accepted letters giving the exhibition details for their 'Whats On' columns, but nothing appeared; another paper would not accept it without the payment of a £28 trade advertisement fee! Yorkshire TV was sent a fax, but they did not give us a mention! As usual at Kelham Island, the Sunday was much busier than the Saturday, and those visitors who came in through the doors could view the following models and bombard their creators with all manner of questions. In no particular order, there was.....

MIKE WHITING- 6 models in total, including a skeleton clock and his rotating visual illusion machine. Mike's four famous orreries sported multicoloured Meccano parts for maximum effect. Two of them used only sprocket wheels and chains, and yet still managed a less than 1% error. Even more accurate was the mechanical Solar System, with four asteroids, to 0.1% accuracy, and the Mars-Phobos-Dimos machine managed an incredible 0.01% accuracy!

ERIC SCHOOLAR-Eric's model was a superb scale model of a Bobcat Shovel Loader. It featured full radio control and a complete hydraulic system using the Action Engineering components. The rams for moving the bucket arm were painted in Meccano colours to blend in better with the model. Two pumps, one for raising and one for lowering the arm were used to do away with the oversized reversing levers provided with the hydraulics, and a smaller home-made reservoir was installed for compactness. Meccano points of interest included a set of four obsolete 4½" plastic road wheels- presumably their axles were rivetted over!

JOYCE SCHOOLAR- Formed curved strips in abundance adorned Joyce's original Meccano diorama, 'A Summer Theme'. Chunky plastic Meccano parts were employed for various furnishings, as well as several suspiciously foreign-looking cuddly toys.

ROBIN SCHOOLAR- Robin brought his Army Green Half-Track, shorn of its radio control. The use of black parts in this model is particularly pleasing, especially in the idler wheels in the rear tracks.

IAIN MCKENZIE- took up one end of the exhibition room with a collection of Binns Road shop window display models; a windmill, a ferris wheel, an excavator, an American loco, and an enormous Suspension Bridge. The bridge forms a moving roadway for 16 Dinky Toys, and has been reconstructed after being found in a derelict condition.

RUSSELL CARR- Russell's enormously complex car transporter continues to grow, and now sports beefy non-Meccano screwed rod hydraulics for raising the upper deck. Other models were the skaters from CQ, using door catch magnets instead of the rare genuine articles, in B-Y-Z, a set one scooter, an Elektrikit asynchronous motor, and a set 3 gantry crane- the model that achieved 'STARdom'!

CHARLES HATFIELD- his main model was a new freelance Carousel, utilising his homebrewed GRB on a 24½" square base. It was driven by a Decaperm motor with a belt drive to the rotating structure. Smaller models were a 1904 Rolls Royce, a guillotine and the Magic Windmill.

JOHN MARTIN- brought his superb prize winning GNR Steam Railmotor, and an early no.5 set flat bed lorry constructed from mint parts.

MICHAEL MARTIN- came with John, and he brought 4 original vehicles made from plastic and real Meccano.

HELLMUTH KOHLER- Hellmuth's model was a superb DeWinton vertical boilered narrow gauge steam loco built from pristine red & green Meccano on gauge 1 track. Various nicities included a built-up 3 throw crankshaft within the confines of the restricted gauge.

RICHARD BINGHAM- another day out for his entertaining Climbing Man built from various colour schemes, powered by a 1920's E20B. RB is convinced that this model will scoop all of the prizes at Skegness this year, so be warned!

JOHN BADER- brought his own mini exhibition as usual. His latest multitude of models included a pair of electric clocks. One was recently described in CQ and is constructed from zinc and yellow parts; the other is built from nickel and 1970's plastic(!), using Electronic Control components for the rewind mechanism. John adds that this model was originally described in the 9/66 MM.

ROB MITCHELL- the latest effort, the Plasser & Theurer RM800 Ballast Cleaning Machine continues to grow, although at a painfully slow pace. Other models included the froth floatation cells from SMG News no.33 and a Meccanosaurus Mk.III.

ROGER BURTON- brought 8-year old enthusiast James with both of their creations. Roger's models, all in red & green, were a no.10 set Combine Harvester and a 'It rolls uphill' from CQ no.8. The CQ model has been altered slightly, with modified reverse switching and anti-cone-scuffing stops at each end. James had an original model of a lift powered by a 12v motor, with a L\*\*o (ouch!!)lift car.

BRIAN HARPER- trotted out (quote) his famed 7 foot high Grandfather Clock built from B-Y-Z Meccano, as his latest creation is not quite ready yet. It sported rack striking, a 30-tooth built-up escapement wheel, and an automatic overnight date change. An unwelcome surprise for Brian was when he found out that 'Kelham', the museum's resident mousecatcher, had left something obnoxious in his clock's travelling box!

Sunday afternoon- the SMG Trophy votes were counted, and the outcome was.....

THIRD- Richard Bingham for his Climbing Man

SECOND- Charles Hatfield for his model display

FIRST- Rob Mitchell for his Plasser & Theurer RM800

Somewhat embarrassingly, all of the top three were unintentionally SMG committee members-oops! It was'nt arranged like that, honestly! In these enlightened days of course, nobody believes a word of it.



# MORE CRANKS

-sent in by FRANK SINGLETON (Grimsby)

This is another variant solution to the problem of turning one shaft from another by means of a single crank (see SMG News no.29 March 1990): except that this one uses three cranks! I brought this along to Norton last October, and foolishly promised Rob a write-up - unfortunately, it's taken me so long to get round to it, that that upstart publication CQ has beaten me to it. This mechanism is essentially the same as the one shown in Fig.5 of Dr. Boerdijk's fascinating article about 'Evoluon' in CQ11. Curses- Johnson strikes again!

The basic concept is to arrange three bush wheels such that their centres are equidistant from each other and then join corresponding holes in each wheel by three cranks of equal length -see Figure 1. (As usual, apologies for the artwork.) Driving any one bush wheel, say by a pair of bevels, will then drive the other two at the same speed, and in the same direction - this is an improvement on the previous version!

I used 3½" strips for my cranks, and the only tricky bit was fixing the bossed parts, to support the axles carrying the bush wheels, at the vertices of an equilateral triangle.

No doubt there are easier ways, but the way that I did it is as follows: using a large yellow flanged plate as a base, mount two 5½" slotted strips on collars, in parallel, spaced five clear holes apart (see Fig.2 for a plan view). Across the strips, place two 4½" flat girders such that three holes form the requisite equilateral triangle. Place two cranks and one double arm crank such that their bosses align with your chosen three holes, and insert 1½" axle rods. On the southern (double arm) crank mount a large bevel, teeth down, and on the axles in the other two cranks mount collars. Mount bush wheels on all axles, fix a threaded pin topped with a collar on each, and join the threaded pins with three 3½" strips. Fix up a small bevel to drive the large bevel and there you are.

It's amazing how many collars such a simple mechanism uses up. 'Though I have'nt tried it, I surmise that this mechanism could be extended as many times as required. I am sure I have seen something similar, mounted vertically on the side of a machine to drive parallel spindles - on a printing press or a loom perhaps?

Two of Frank's crank mechanisms, pictured at Norton in April. The left model is as described in this article.

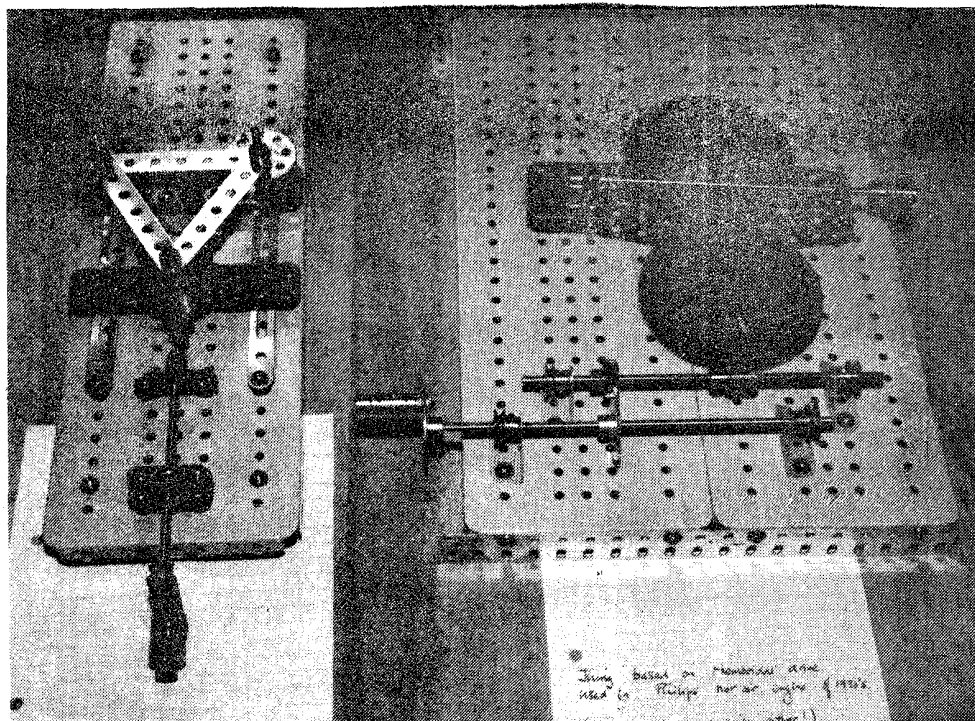




Fig. 1

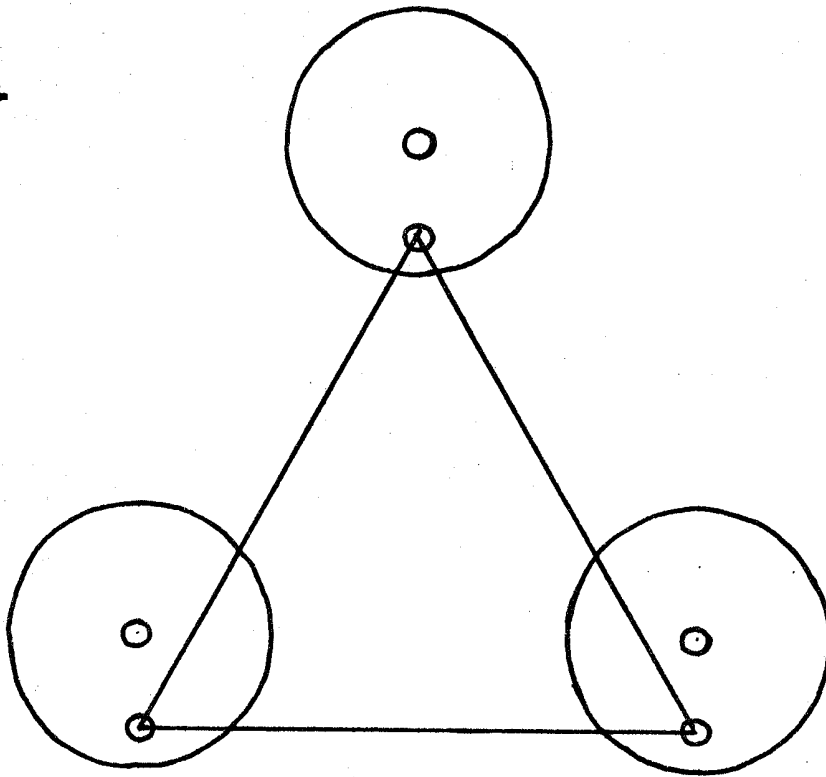
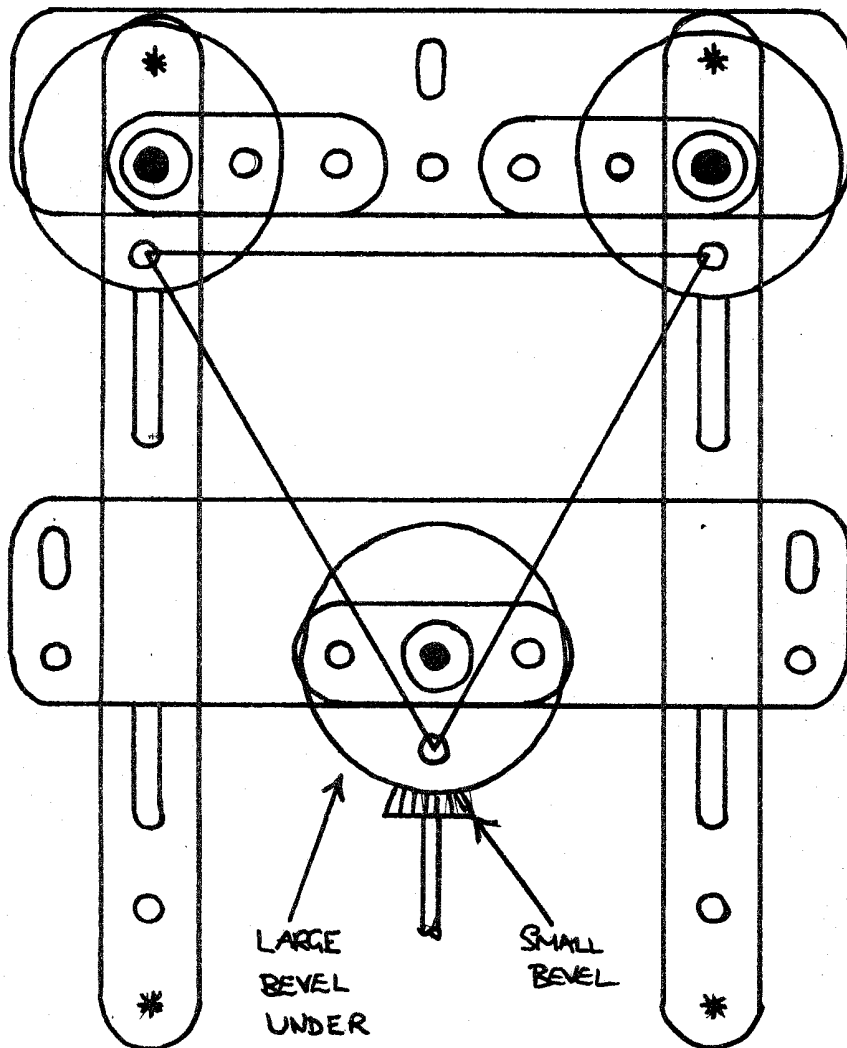


Fig. 2



\* = COLLARS  
UNDER

NOT (QUITE) TO SCALE (IT WAS MEANT TO BE!)

# A MINI MECCANOGRAPH

-designed and described by ALAN GRIMSHAW

This is a design for a small Meccanograph that I made for a Christmas Grotto. It is more or less a scaled down version of the old standard Supermodel, but is easier on paper and simpler for the children to use.

The framework should be clear but the gear train is as follows:-

The 3½" drive rod has on its outer end a 2" pulley and on the inside of the plate a ¾" pinion that meshes with an adjacent 1½" gear wheel on the centre rod. This rod has on the outside of the plate a ½" pinion in mesh with a 1½" gear on the end of a 13½" compound axle rod that goes the full length of the model into the other plate at the table end, and has on it a worm in mesh with a 1½" gear on the vertical table axle.

The sliding table slides on two longitudinal 8" rods. The table is made up from a 2½"x3½" flanged plate and a pair of 1"x2½" double angle strips. It has on the top a bush wheel bolted one hole off centre which holds a 1½" axle rod to support the pen arm. The pen arm is a 16" compound strip with a pair of vertical 2½" triangular plates at the table end. Two large fork pieces between the plates have axles in their bosses, the ends of which enter small fork pieces. The pen is held in the forks and clamped by 6BA bolts. The table is a piece of wood, 4"x4"x½", screwed centrally to a bush wheel, and is stood off the flanged plate by a double bent strip over the axle.

The pen crank is mounted on a vertical axle. Below the plate, a 50 tooth contrate meshes with a ½" pinion on the second driving axle, which also enters into a coupling on the vertical axle. Above the plate, there is a 1½" gear and two bush wheels, with a loose axle mounted in their holes. Another vertical axle also carries a 1½" gear and one bush wheel, which meshes with the other. A threaded pin on the bush wheel oscillates the sliding table with a 5½" strip over another threaded pin on the table. The pen arm is held back onto its crank by a rubber band looped around an axle mounted in one corner of the frame.

The pen arm guide is a pair of 4½" strips, spaced by two washers, bolted to two upright 4½" angle girders by a pair of 1"x½" angle brackets.

## PARTS REQUIRED-

1 of no. 1	1 of no. 15a	1 of no. 27	4 of no. 52
4 " " 2	3 " " 16	4 " " 27a	1 " " 53
1 " " 5	1 " " 16a	1 " " 28	8 " " 59
4 " " 8	2 " " 17	1 " " 32	1 " " 63
2 " " 9a	2 " " 18a	6 " " 35	2 " " 70
2 " " 11	1 " " 18b	58 " " 37	2 " " 76
2 " " 12b	1 " " 20a	5 " " 37a/c	2 " " 111c
1 " " 13	5 " " 24	21 " " 38	3 " " 115
2 " " 13a	1 " " 25	1 " " 45	2 " " 116
1 " " 15	2 " " 26	2 " " 46	2 " " 116a

4"x4"x½" wood table; 1 rubber band; 2x6BA nut and bolt.



PHOTO 1  
General  
arrangement-  
left hand side.

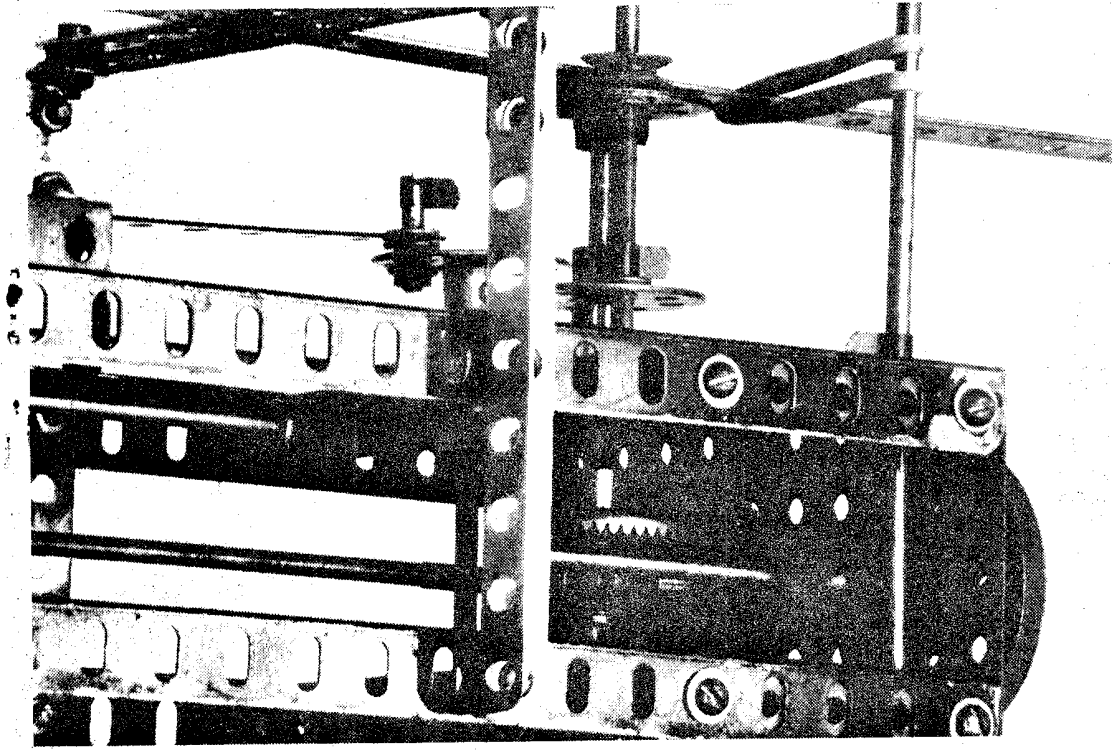
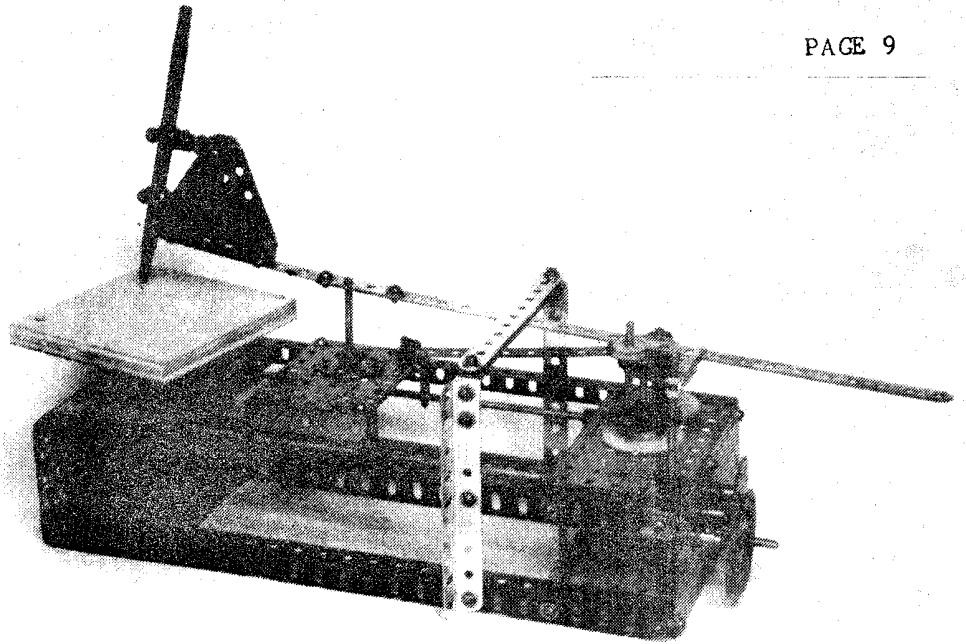
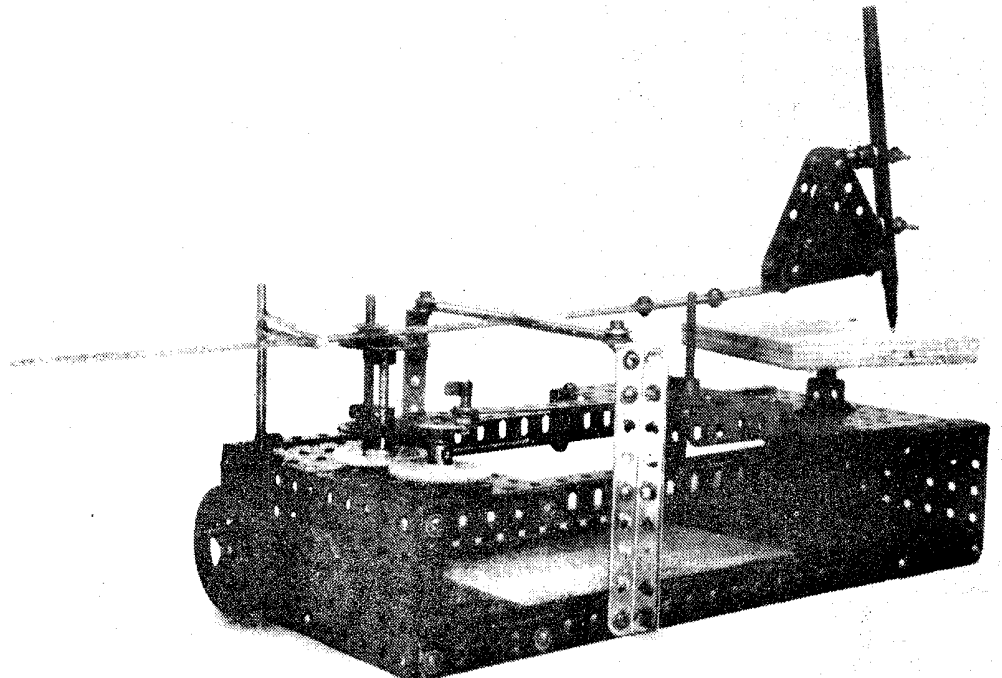


PHOTO 2  
Internal gear  
arrangements  
and driving  
cams.

PHOTO 3  
Right hand side



## MECCANO AT ILKLEY- 1st of June

THE LIONEL MODEL RAILWAY Exhibition is a regular venue for a Meccano show, held upstairs from the main railway display, in the Winter Gardens at Ilkley. A fine exhibition of Lionel railways, with some Hornby as an added attraction, and the company of like-minded enthusiasts; what more could one want?

### Meccano on show

John Bader brought his Self Winding Pendulum Clock, based on a design from a 60's MM; a Road Train with 16 axles and PDU drive; an 0-4-0 Loco (details in CQ) using Argentine parts to good effect, and Caterpillar Track links for coal-very effective, but hide the Duplo shovel, John! John also showed a mains-driven clock based on a CQ article, a Lorry and Drawbar Trailer using Highway Multikit parts, and a Woodpecker on a Pole.

Wayne Stancliffe showed a Stuart Turner stationery engine based on a Brian Rowe design; his own design well-proportioned Model T Ford pick-up, and also his own design was his Blocksetter with a novel and effective Roller Bearing.

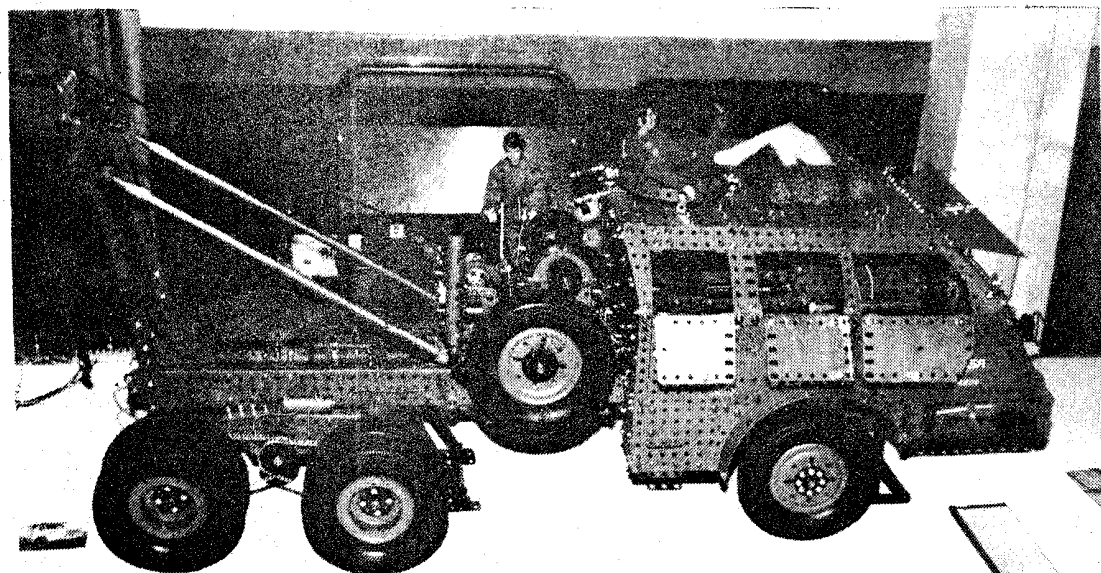
Alan Grimshaw displayed a model of the last surviving Neilson 0-4-0 Steam Crane Engine, 'Snipey'; a Newsmag design Beam Engine; a Scarborough Cliff Lift based on Peter Mason's CQ design, but using Elektrikit parts rather than electronics; a Designing Machine (building instructions in this Newsletter); and a charming freelance Carousel with sixteen galloping horses.

Richard Bingham being the true enthusiast came to Ilkley and displayed his Climbing Monkey until the early afternoon, then had to return to Sheffield to do his afternoon shift!

Mike Beadman showed his Julian Coles design Steam Bus, and a Hydraulic Engine using Hydro Action components.

Jack Partridge's Servetti-design Fantasy Factory looked good and worked well, the automatic crane in particular being a delight to see and study. Jack uses Allen-headed bolts in some of this model, and says they're great.

Rob Mitchell as usual outplethoras the lot of us! Too many models to mention really, but the main item was his magnificent Plasser and Theurer RM800 Ballast Cleaning Machine, around eighteen feet long and bristling with detail. A recent addition to this not yet complete factory on rails includes a neat and satisfying drive to the chain which digs the ballast from the track bed.



John McDonald's  
superb M26  
Pacific Wrecker  
as seen at  
Norton, 17th May