

FEBRUARY 1984

THE SHEFFIELD MECCANO GROUP

NEWS LETTER No 5.

Club Officers

Chairman/Acting Secretary:-Richard Bingham

Treasurer:-Peter Mason

Newsletter Editor:-Ken Ashton

Editorial

At the present time, it is intended to produce a newsletter after each meeting of the group. In addition, two further newsletters published prior to each meeting, would be desirable.

Whilst this edition newsletter has been produced using the available contributions, it can only succeed with your active participation. This means that contributions for publication, sales & wants, etc are required from you. The content of the newsletter therefore, will essentially be your choice. Although my personal preference would be for articles about Meccano, contributions about subjects allied to Meccano and Meccano products are welcomed.

It might be appropriate to debate the above approach at the next meeting and I would like your views as to whether you think four editions per year can be sustained.

Finally, thanks are due to Peter Mason for his excellent work in producing earlier editions of our newsletter. I look forward to seeing you all at the next meeting on April 14th. at Norton Church Hall, Norton Lane, Sheffield, as before.

Ken Ashton.

OPEN THE BOX.

The Meccano had been put away for the night, the box left on the table. Mac Carno went out of the room putting out the light, closing the door, and so to bed. "Has he gone?" whispered the girders, bracing themselves, "Yes", said the eyepieces, peering through the gloom. "Right!" exclaimed the left-hand brackets, "Everybody out". There was the clatter of plates and grease cups as all the parts pushed up the box lid and scrambled onto the table. The caterpillar track crawled a bit too far and fell off the edge. "Help!" he cried, "Get me back up". The others looked over the edge. "Well", said Hank the Cord, "We all know he's a bit of a creep, but we'd better haul him up again". So a little crane was hastily assembled and the hook went down and the caterpillar was retrieved. "What shall we do now?" asked the rods. The pulleys wheeled round on them, "Not another fan dance, please!", "Why not?", said the clock fingers, "Lets get on with it". So a conical disc was set revolving to the music of a driving band. They all cavorted round the table. The chains rattled, the boilers rocked and rolled all over, the gears paired up, the No.43s sprang to attention as they jived until they were exhausted. "Oh dear", gasped the fishplates, "We've had our chips. The No.103s were also flat out. Suddenly, a voice was heard outside the door, "Quick!" cried the worms, "It's the boss! and we all know what an eccentric crank he is". Back into the box.

Bernard Sage.

HORNBY GET-TOGETHER.

Local support was given to this event held at Stockbridge on December 12th despite wheatherconditions at the time. The following models were displayed:-

Richard Bingham brought along his infamous No.2 kit style clock in red/green.

Mike Beadman showed a Hipp clock which was a rebuild of a model purchased from Frank Beadle of NEMS. A model which seemed to cause some head-scratching as to how it worked! Mike also showed his GMM SML Sunbeam car.

Frank Grant showed his fine Garratt steam loco, a nicely proportioned and finished model.

Ian McKenzie had an impressive display; a stationary steam engine in remarkably clean condition blue-gold Meccano; a Windmill with working crane and inside lights; and a Railton saloon car, both these models being made in red/green Meccano.

Bernard Sage showed two very popular display models. His Steam Yachts attract a lot of attention with their automatic operation and lights, and his Duoble Flyboats are also very impressive.

Mike Beadman.

DIARY DATES, 84.

Sheffield Meccano Group Meeting, Norton.	14th April.
North Midlands Meccano Guild Meeting, Thurgarton.	19th May.
North Midlands Meccano Guild Exhibition, Skegness.	23-24th June.
Henley Exhibition.	31st Aug-1st Sept.
Sheffield Meccano Group Meeting, Norton.	13th October.

SHEFFIELD MECCANO GROUP.

A.G.M. MEETING REPORT 15th OCTOBER 1983.

I think we all agreed on the day this was another succesful meeting, with plenty of models on show although more people arrived without models than previous meetings, this has never counted for anything in my view. The main thing was they enjoyed the meeting. Although we did'nt count heads there must have been thirty or so including a couple of new members, so we are still growing.

During the short meeting it was agreed that the Group should carry on with two meetings per year and an attempt should be made to produce some news letters to keep members in touch with meetings and events. Since the meeting I have been in touch with Ken Ashton and he has agreed to take over the editorial of future news letters. This is quite a task so if we all show a bit of patience and a bit of help with contributions, Ken hopes to look after future news for us.

As this was our A.G.M. the matter of Group Offices was settled Richard Bingham to carry on as chairman and acting Secretary and Peter Mason as Tresurer. The meeting thanked David Penny for being our past Tresurer, and a special thanks to Patricia for looking after the refreshments. I would also like to thank Julian Coles for his help with the following Model Report.

Richard Bingham.

Models on show.

Roy Everitt displayed a small-scale North American Electric Heavy Fright Locomotive freely based on a 1930's design. The loco featured electric overhead pickup and pulled a nicely modelled box-car of the period.

Frank Grant brought two locomotives. Firstly, the popular rack and pinion loco modelled in yellow, red and green based on the GMM SML. Secondly, an articulated Garrett 2-4-0, 0-4-2 to his own design. A nice touch here were the internal cylinders which are rarely modelled.

Bernard Sage demonstrated his "Shamrock" steam yachts with thier electrically sequenced operation including flashing lights. And yet another Bernard novelty "Percy the Penguin" (although I confused it with a tortoise!). This had to be seen it waddled and shook it's head. Marvellous stuff Bernard, keep them coming.

Ken Ashton brought along an automated ships coaler based on the GMM SML in outline only, the automatic motion was produced using only standard parts and worked throughout most of the afternoon.

Alan Partridge showed two superb horological exhibits. His Lord Grimethorpe's Double Three-Legged Gravity Escapement Clock was a real treat. Emitting a most satisfactory "tick", the escapement was based on John Howe's design and is apparently the same as that used in Big Ben. The clock featured a silent automatic electric rewind which operated every half-minute. His second exhibit was a spur-gear orrery which had a remarkable degree of accuracy. Based on the Mercury/Venus/Earth/Moon system, a nice touch was provision for the slightly tilted moon orbit by a swashplate arrangement.

John Beaumont demonstrated a 16 seater "Whirlwind" roundabout with free wheel ratchet drive. A nice touch was the contra-rotating "Meccano" sign on top. John also showed a mechanical rocking chair using the latest M1 outfit, three-spindle drive based around a 1" bush wheel using clockwork motor pinions, and a 19:1 epicyclic reduction gearbox using 19 and 20-tooth pinions.

Chris Thompson brought along a magnificent block-setter built in mint condition blue and yellow parts. Based on Bert Love's design, the movements were superbly controlled from a central control unit. Features included the machine-house overhead crane, the winding drum formed by conical disc's, and the use of re-inforced bearings throughout.

Vernon Taylor displayed his No 10 outfit Railway Breakdown Crane nicely constructed in yellow and blue. Additionally, he brought two small 1950's models in red and green, a small sports car and a tank.

Richard Bingham brought his clock, presumably for the benefit of new members only!

John Howe showed a demonstration model of a Schmidt Coupling. This device allows offset parallel drive transmission at 1:1 ratio with constant velocity characteristics. The coupling had been featured in a technical journal. All we need now is for John to build a model around the use of this interesting device.

Tom McCallum brought his one-man exhibition with him. It included two models from the mechanised Army Kit, a Tanker lorry and a quick-firing Gun; a biplane from the No 1 Aeroplane Outfit; a saloon coupe from the Motor Car Construction Outfit featuring clockwork motor and exhaust brake(!); and an open fronted tram-car built in 1938 blue/gold. I suspect however, that pride of place went to a very early Meccano rarity, a butterchurner in beautiful condition.

John McDonald's Cascavelle Armoured Car is now complete and what a superb model it is. Features include six-wheel drive, four speed forward and reverse gearbox, disc brakes, swivelling turret and a firing and recoiling gun. Also shown was a dragster built around a fearsome representation of a V-8 engine. This model had a transverse leaf spring front suspension and a two speed gearbox. It's standing quarter-mile speed was not specified!

Julian Coles displayed his six wheel tipper lorry unusually scaled around 1" wheels and tyres. It's two motors, one for drive through worm back axles, the other for tipping by screwed rod, located in the fuel tank. Julian also brought a pre-war No2 Car Kit model of an open top two-seater sports roadster. This model had rubber tyres, drum brakes and working steering.

Peter Mason demonstrated two models with a transport theme. Firstly a walking machine based on Brett Gooden's design. After suitable physiotherapy on the ankle joints, it walked with no apparent limps! His second exhibit was a helicopter fixed to a counterbalanced arm around a central pivot. Two PDU's provided independent lift and forward/reverse flight. The propeller and rotor were constructed from small plastic plates and worked very effectively.

LEGO: A CONSTRUCTIVE CRITICISM

Most Meccano modellers will be familiar at least with the basic idea of Lego: a system based on simple interlocking plastic bricks, which has vied, successfully, with Meccano for much of the younger end of the market.

Much of its appeal must be in the ease and speed of construction, since there are no nuts and bolts. This however has literally resulted in Lego's undoing, for structural strength of the models depends on the locating pegs on the parts remaining a tight fit, and with the passage of time and frequent use some sloppiness is inevitable.

A second major disadvantage has been the small range of moving parts. I recall my total frustration when as a seven year old I found it was impossible to make anything but the most elementary mechanisms, a frustration that soon led me to the tender mercies of my local Meccano dealer.

In recent years, however, there have been attempts at solving the problems of part location and lack of moving bits. A range of 'technical' sets includes an extensive range of gears, axles, bearing parts and couplings which seem, on the face of it, very promising.

First of all then, the gears. There are four sizes: an 8mm dia pinion, gearwheels of 25mm and 50 mm dias., and a peculiar contrate of approx 25mm dia. My immediate impression was of their relative crudity and sloppiness, in particular the contrate, which has very flimsy pointed teeth. These problems are compounded by the way they are located on the axles. They are simply a push fit onto the 'cross cross-section' axles, and while the fit is adequate for some tasks, accurate location for use in, say, a gearbox is simply out of the question. Worse still, the axles are made of a fairly soft plastic and bend at a touch, although there is the rather dubious advantage that with a flexible axle, bearing alignment is not critical.

There are other moving parts. One very interesting item is a rack piece, about 4cms in length and 8mm in width which can be used in multiples to great effect. Another useful item is the combined steering wheel/pulley, 4cm dia., which although elegant as a steering wheel has too small a slot as a pulley. There is also a smaller pulley, about 10mm dia., and a sprocket chain very similar to the Plastic Meccano item.

The large road wheels are superb. The hub is a one piece item of 43mm dia. and 25mm wide, and the tyre is a good fit and accurately moulded compared with the frequently oval Meccano efforts. Of interest to Meccano modellers is that the wheel could be very easily modified to fit Meccano axles, but as a wheel for use with Lego it is somewhat too large for those pathetic bendy axles.

For some unknown reason, Lego have gone to the trouble of producing a 'piston piece' which features prominently in the dummy engines of the manual models. The part has no other use and looks quite absurd.

As far as structural parts are concerned, there is a very interesting departure from the standard 'brick' in the form of narrow strip pieces which can be either used in the normal push-together way or fastened side-to-side with tubular clips passing through another set of holes. The result is neat and strong and very quick to use.

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There are also other useful parts; such as bricks with female connections only, with a smooth top surface to provide a smooth bearing surface for sliding mechanisms. There are nice little adaptor pieces for fastening axles to bricks or whatever.

Perhaps the most significant change has been in the increased use of the 2mm thick bricks, as opposed to the traditional 'blocky' piece. Use of the thinner pieces in quantity can improve the look of models greatly, giving improved proportions.

So what can you make with the 'Technical' Lego? Compared with the range of Meccano sets, quite a lot. Although there is not the range of moving parts in Lego that there is available in Meccano (no worm gear, for example), it is easy to make an acceptable Ackermann steering system, which, with a little ingenuity could have all the correct angles of toe-in etc. Where the Technical sets score is in the large quantity of gears, collars and such supplied. Compared with equally priced Meccano sets, Lego models can have an impressive amount of moving details - even adjustable seats in the car chassis!

For, say, a ten year old, this may be fine. But being made of plastic, the parts cannot take any strain. As model size increases above the offerings in the set manuals, models have to be reinforced to take bending strains. Bricks tend to come undone. Accidental pressure on a delicate part can wreck a model, when a Meccano equivalent would not have been harmed in the slightest.

The key problem is that Lego is strong only in compression, with the exception of the new strip pieces, which are useful, but cannot be used everywhere. Meccano, if used properly, is strong in both compression and tension, and of course is held together positively with nuts and bolts.

On the whole, then, my verdict is that 'Technical' Lego is of superficial interest only. The sets are in many ways superior to equally priced Meccano sets, but when the time comes to develop those sets, that's the time to sell the Lego.

MIKE BEADMAN