### SHEFFIELD MECCANO GUILD



No. 35

# September 1991

#### THE SHEFFIELD MECCANO GUILD

GUILD OFFICERS-

CHAIRMAN. Charles Hatfield,

PRESIDENT-Richard Bingham,

TREASURER-Stephen Parkin,

SECRETARY-Mike Beadman,

NEWSLETTER EDITOR-Rob Mitchell,

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

#### COVER PHOTO

A model of a Norton motor cycle constucted by Bob Brooker, and awarded a prize in the 1991 Henley Scale Modelling Competition. 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.

### Editorial

Mike and myself have the pleasure of continuing the series 'Introducing the members' that used to appear in the SMGM in this issue, with the blessing of Robin Johnson. This time, it is the turn of our President, Richard Bingham; you could be 'nobbled' next!

We have our ACM on the 19th. October, where the committee will propose a few minor changes, so your views will be gladly received.

As an aside, it is good to see the 'Thunderbirds' enjoying a revival- some superb potential Meccano models every Friday' Finally, apologies for this SMG News being a little late; see you at Norton on 19th October.

### Contents

SECRETARY'S SCRIBBLINGS 1
DIARY DATES 1
MODIFICATIONS TO THE
SCARBOROUGH CLIFF LIFT 2,3&4
A CRAWLER TRACKED CRANE 5
ACTION PACKS 6&7
THE DEVELOPMENT OF A
SMALL MODEL 8&9
A NEW LARGE AXLE SYSTEM 9
INTRODUCING THE MEMBERS no.8-
RICHARD BINGHAM 10
BITS AND PIECES 11
MOULDED MENACES

### Secretary's Scribblings

It's a hard life being a Sheffield Meccano Guild Officer. Meeting to discuss the AGM, drinking beer, scoffing choccy biccies and talking about the Perforated Wonder. Life, don't talk to me about Life....

Seriously, it's a priviledge and a pleasure to work with the folks who make it all so easy. Stephen Parkin, our Treasurer, not only keeps tabs on the money, but does the membership records and address labels, AND does the refreshments at meetings! Charles, ever the perfect gentleman, books the hall and is the 'man in charge of everything else'. Richard is the Brains behind us all, the man with the experience and the influence, or so he says.... seriously, he is the bloke to turn to for advice. Rob, our risingest young executive, produces a splendid Newsletter on a shoestring budget.

But for all that we do the job gladly, if the Guild could run itself we would all resign en bloc without a moment's hesitation. Speaking for myself, I'm on the committee simply because I LIKE MECCANO, and to be honest when we get embroiled in deciding, say, what the minimum sub level heeds to be for next year, this simple fact is oft forgotten.

This is what brings us together; an enjoyment of a great modelling system, it's past, it's present, and it's future potential. We should enjoy what we have in common, rather than let inter-faction squabbles spoil the hobby.

#### MIKE BEADMAN

#### DIARY DATES

October 19th	SHEFFIELD MECCANO GUILD, GUILD MEETING AND AGM NORTON CHURCH HALL
October 21-26th	Telford Exhibition- John Linder (0952) 583345 (evening)596310
November 16th	North Eastern Meccano Society Exhibition Arts Centre, Darlington
January 18th	North Midlands Meccano Guild, Club Meeting, Oxton Village Hall
April 25th	Sheffield_Meccano_Guild, meeting, Norton.
May 16th	North Midlands Meccano Guild, meeting, Oxton.
September 19th	NMMG, meeting, Oxton.
October 17th	SMG, meeting, Norton.

PAGE 2

### Scarborough Cliff Lift

#### -MODIFICATIONS by Alan Grimshaw.

Alan writes: "Recently I built a version of Peter Mason's Cliff Lift with a programmer and wipers to control movements. To make room for wipers etc. I had to make some alterations to the original design as follows.

The door operating gearboxes have to be moved towards the centre of the long side of the floor, one hole being between fixing angle girders. The 25T pinion on the motor shaft meshes with a 50T gearwheel on Shaft A. Also on Shaft A is a 25T pinion in mesh with a 50T gearwheel on Shaft B. Shaft B also has a 25T pinion on it in mesh with a 50T gearwheel on Shaft C. Shaft C is in the top hole of the flanged plate vertically above Shaft B.

hole of the flanged plate vertically above Shaft B. On the end of Shaft C outside the Flanged plate is a 19T pinion in mesh with the 95T gearwheel on Shaft D.

On the other end of Shaft D is a bush wheel with an insulating spacer bolted on one hole. Two 1"x1" angle brackets, horizontal leg outward and five holes between verticals are bolted to the floor plates. Two more angle brackets are then bolted to the  $12\frac{1}{2}"$  angle girder that holds the cord guides directly over the lower bracket. The  $12\frac{1}{2}"$  angle girder should be lowered one hole.

A 1" wiper is bolted to one angle bracket and a 2" wiper to the other inpairs. See detail C.

Insulating spacers and washers where needed are between angle brackets and wipers so the spacer on the bush wheel breaks the contact each half turn.

The wipers that control the cars are at the outer side of the top doors and are activated by insulating spacers fixed on the top end of the cars by an angle bracket so as to catch the 2" sloping wipers.

To make room for the drum operating motor I replaced the centre rod support with two  $2\frac{1}{2}"x2\frac{1}{2}"$  flat plates  $2\frac{1}{2}"$  apart. The motor then is bolted to the floor as in Detail B. A  $\frac{3}{4}"$  contrate meshés with a  $\frac{1}{2}"$  pinion on Ród D and a second  $\frac{1}{2}"$  pinion on the same rod meshes with a  $1\frac{1}{2}"$  gear on Rod E above D. Another  $\frac{1}{2}"$  pinion on each end of rod E meshes with the  $2\frac{1}{2}"$  gear of the winding drum.

An extra floor is now formed on the lower angle girders to support the programmer. This is a double rotary switch connected by sprocket chain and 1" sprockets. One switch is connected to -supply and the other to +

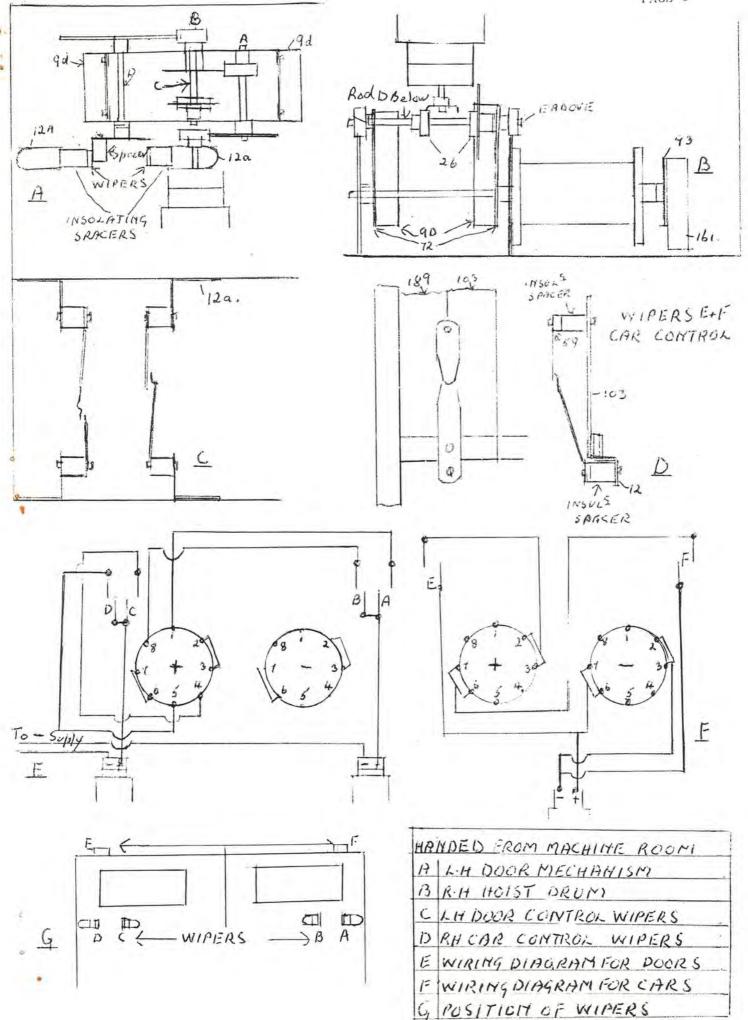
One switch is connected to -supply and the other to + supply. The programmer is almost the same as used on the Magician.

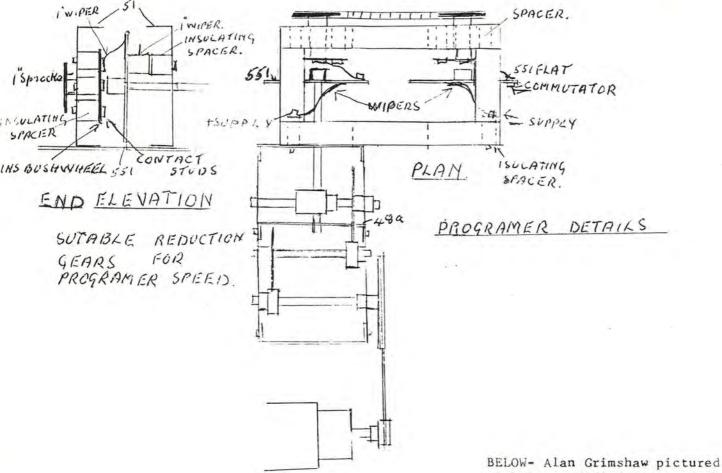
Both bushwheels have contact studs in all eight holes, studs 2&3 and 6&7 being connected in both cases. on the +unit, all studs are active, but on the -unit, only 2&3 and 6&7 are live.

If both program wipers are on stud 1 with the car on the right hand ramp at the top, and wipers at A and C in contact, and the right hand top door open, when switched on, the door will close and the car will descend, together with revers movements on the left hand side. When the left hand car reaches the top, the insulated spacer on the car hits the lower 2" wiper and breaks contact.

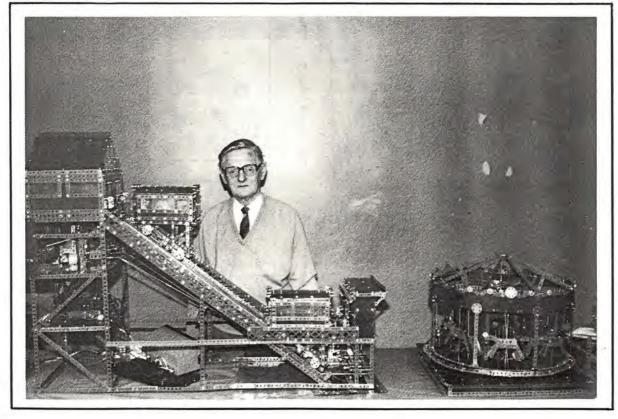
The speed of the motor that drives the programmer must be set so that the movements are complete before the wiper leaves the appropriate stud.

PAGE 3





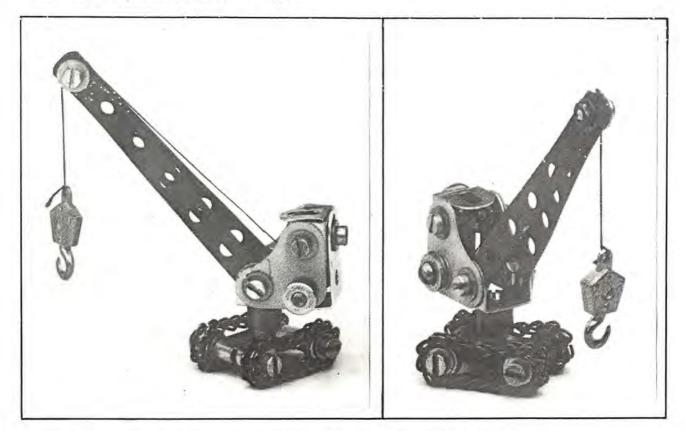
#### with his modified Scarborough Cliff Lift and Gallopers at The Ilkley Show in June.



## A Crawler Tracked Crane -

-A SIMPLICITY SUPERMODEL, by John Bader.

Some credit must be given to Lyn Holman, of Cornwall, for the original idea which was featured in an early 1950's Meccano Magazine, which was 'glanced at' at a recent meeting. His model was of an excavator. I was unable to memorise the full details, so finished up with a crane superstructure, but with the benefit of working tracks. Lyn's model used sprocket chain wrapped around collars (as sprockets) so it is possible that the tracks did not actually run. The hook can be raised and lowered by turning the terminal nut locknutted to a long bolt. Better results could be obtained if cotton was used in place of Meccano cord.



The fork piece is locknutted to the two rod & strip connectors. Each 1 1/8" bolt carries: 1x4B.A.; 2x38; 3x4 B.A.; a 212a; 3x4B.A.; 2x38; 1x4B.A.; two locknuts. These are the axles. 19 links of sprocket chain are wrapped around the Meccano washers to represent the tracks. The jib sides are inside the fork piece, the bolts also holding the cab sides. The cab rear and roof are a double bracket, an angle bracket and a  $1"x_2"$  angle bracket. The winding drum is a  $\frac{1}{2}$ " bolt with a locknutted terminal nut as a grip.

#### PARTS REQUIRED: -

1x11; 1x12; 1x12b; 6x37b; 13x37c; 8x38; 6"x40; 1x57d; 1x111; 1x111a; 2x111d; 38 links of 94; 1x116; 2x133a; 2x212a; 2x235b; 1x542; 18x4B.A. washers.

### Action Packs

-REVIEWED BY FRANK SINGLETON.

Last Christmas, largely out of curiosity, I bought a couple of the mini-sets, the Tractor (No.201), from the Agricultural Series, and the Dump Truck (No.101), from the Construction Series.

Here are my hands on impressions. In a word-favourable! The Tractor in particular is a delightfully attractive little model.

There is a total of nine models currently available; though some of the earlier Agricultural Series have been discontinued, they can probably still be found hiding on the shelves of the bigger stores. They retail at between £7.75 and £8.25; they seem to be available at the places that carry the larger sets. Provided, that is, you have a JCB to excavate your way through all that LEGO!

Both the designs (one model to each set, of course), and the quality of parts are good. The parts are in the current colour schemes, and include some 'new' variants- one inch flat and angle girders, one inch double angle strips with three holes, and some very nice soft rubber, rugged profile tyres; also half inch pulleys with very useful collar size black plastic spacers.

The nuts (square) and bolts (allen key) are in Zinc- I'm not enamoured of either flavour, but this is purely subjective, and I would agree with comments I have heard regarding ease of application for youngsters, at whom the sets are really targeted.

On the subject of the age of potential users, the boxes say 'from six years old' - a shade optimistic considering the 'expletives deleted' I uttered when trying to fix some of the more awkward bolts.

Generally the models go together fairly easily, helped by the (textless) first class exploded drawings used in the instruction leaflets.

In general, then, the sets can be recommended. They are a commendable venture on Calais' part in to the 'Pocket Money' market given that they can obtain enough 'facings' in the shops.

I wish them well.

Current sets as listed by Geoff Wright:-

#### Construction Series

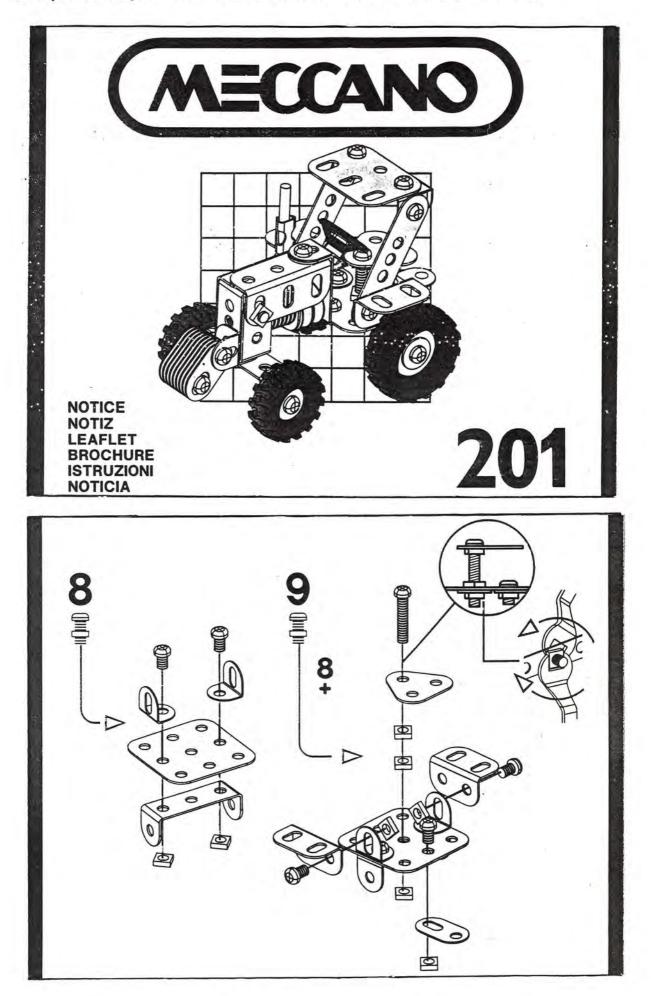
101 Dump Truck 102 Mechanical Digger 103 Bulldozer 105 Lorry Mounted Crane 106 Road Leveller

Agricultural Series

201 Tractor

Utility Series

301 Breakdown Truck 302 Rescue Helicopter 303 Water Cannon



6

PAGE 8

## <u>The Development</u> Of A Small Model

-Designed and constructed by ERNEST PALMER.

This model started out as a test case to see what could be achieved with a low voltage motor and a small battery.

From childhood memory came the construction of a horizontal engine from the early 1930's no. 00 to 3 Meccano manual. This model and a nonreversing S.E.L. electric motor were placed on a cover-plate from a 1982 French 'B' Meccano set; the model worked perfectly.

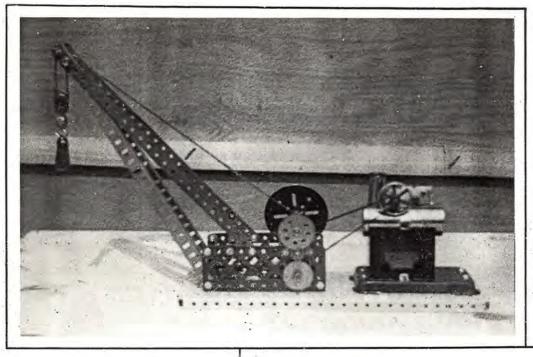
Then I decided to invert the engine to an undertype, and put a crane structure on top. Now the shaft, driven by a driving band from the motor, has two pinion gears. A 25 tooth pinion drives a 50 tooth gear below it to drive the inverted horizontal engine; and a 15 tooth pinion drives a 60 tooth gear above it on the winding shaft of the crane. To reverse the raising and lowering of the load on the crane hook, one has only to cross or uncross the motor driving band. Naturally, most Meccano constructors will use the small Meccano reversible motors.

#### CONSTRUCTION DETAILS

A 52"x22" flanged plate is supported inverted on two 52" braced girders (or four double angle strips if you want a better view of the horizontal engine). Asleeve piece bolted to a double bent strip is bolted to the underside of the flanged plate on the centre line at one end of the plate. A chimney adaptor is pushed into each end of the sleeve piece. At the other end of the flanged plate, one hole in from the end, two flat trunnions are bolted , base to base, on each side of the flanged plate. The lower trunnions carry the crankshaft (a 134) with a 2" strip held in the centre of the crank with a washer and a spring clip on each side of it. The other end of the 2" strip has a rod & strip connector locknutted for free movement. A 3" axle rod is pushed through the chimney adaptors in the cylinder into yhe connector. A couple of 22"x2" double angle strips are bolted across the lower corners of the braced girders; also a pair of 122" angle girders to form the jib of the crane. At the top end of the angle girders is bolted a pair of 122" strips and a 12"x2" double angle strip. The lower ends of the 122" strips are bolted to the sides of the flanged plate, in the fourth hole from the end of the flanged plate.

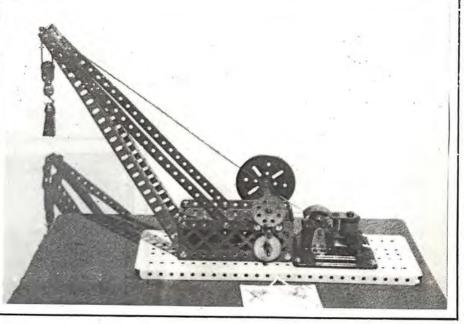
In the second hole from the top of the  $12\frac{1}{2}$ " angle girders, is a 2" axle rod carrying a  $\frac{1}{2}$ " free pulley with a washer and a compression spring on each side between the angle girders, and a collar on each end of the axle rod. In the centre holes of the overlapping flat side of the trunnions is journalled a  $4\frac{1}{2}$ " axle rod which has a  $1\frac{1}{2}$ " pulley (boss outwards) with a few spacing washers to clear the adjacent bolt heads. This pulley is driven by driving bands from the motor. At its other end it carries a  $\frac{3}{4}$ " 25 tooth pinion and a 15 tooth pinion. In the topmost hole of the trunnions is journalled a 4" axle rod with a cord anchoring spring and a collar between the trunnions, and a 3" pulley with spacing collar at one end, and a spacing collar and 60 tooth gear wheel at the other end.

On the pulley side of the model, the crankshaft has a washer and a collar, and on the gear side a couple of washers and a 50 tooth gear with the boss outwards. The pulley block consists of two fishplates on each side of a loaded hook with a  $\frac{1}{2}$ " pulley on the other of two pivot bolts.



ABOVE- The Mamod powered equivalent of the test rig.

RIGHT- The electrically driven model as described opposite.



# A New Large Axle System

News from Derek Strickland, Aberdeenshire, of a 'large axle system which is to be reviewed in the next edition of CONSTRUCTOR QUARTERLY..... I chose an established diameter from the Meccano system, namely 3/8".

'EXACTO have announced their intention to market a system with a 5/16" dia. This diameter seems to have no useful relationship to other dimensions, and, naturally, I consider my design superior.' Further details from Derek- Boatley's Cottage, Kemnay, Inverurie, Aberdeenshire AB51 9NA.

### INTRODUCING THE MEMBERS No.8-RICHARD BINGHAM

#### -INTERROGATED BY MIKE BEADMAN.

RICHARD has been involved with the Guild since its inception in 1981. Earlier this year, the Newsletter Duo sat this tough, industrious, hard-working and above all modest man down with a cup of tea and extracted the following interview.

Q. When did you start Meccano modelling? A. When I was about eleven years old, with a red and green No.3 set.

Q. What are your favourite modelling subjects? A. I like clocks, mechanisms, automation, and novelty models.

Q. How did you get into serious modelling? A. I was offered a red and green No.10 set for thirty quid, and when I contacted MW Models (in 1979) to obtain a few missing bits, they put me in touch with the Pennine Meccano Guild, which folded in 1982.

Q. When did you start the SMG? A. The SMG was started to accomodate a local core of ex PMG members in 1981 and held its first meeting in the Sheffield YMCA.

Q. What model would you really like to build? A. The Supermodel Steam Shovel, with automatic operation and lights.

Q. What other interests do you have? A. The Hornby Railway Collectors' Association, and I like a spot of Gilbert and Sullivan.

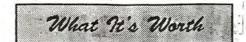
Q. What do you do for a living? A. By trade I'm a stainless steel sheet metalworker, but there's nothing doing in the trade and conditions are bad. I was treated like a slave.

I'm currently working as a bus driver for SYT.

Q. Owt else? A. Yes- I'm chuffed to have been made President of the SMG!!!



## **Bits And Pieces**



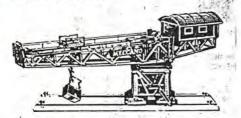
### In the toy shop window

WHEN I was a lad it was my—and every boy's—dream to have a superduper Meccano set. Trouble was, what you could construct with the basic sets which arrived in your Christmas stocking or on a birthday, just couldn't hold a candle to dealers' display models which had you drooling at the toy shop window.

These display models are now expensive collectors' items.

For example, one of Blackpool Tower, dating from the early 1950s and with lifts and lights operated by an electric motor could go as high as £700.

Moving on ten years to a traction engine, also powered by an electric motor, you'd probably find bids rolling on through £400.



The display model dockyard crane I've drawn is newer than either of the above as it dates from only 20 years ago. Yet it would fetch a lot more. I'd put a value of at least £1500 on this monster display model—over six feet across and powered by no fewer than four electric motors.

PS Sorry, I can't value items for readers.

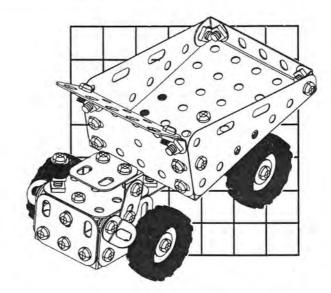
10000

The cutting reproduced here, from the Sunday Post, is typical of the type of column where some attempt is made to estimate the value of collectibles- here the eagle eye turns to dealer display models.

The illustration seemed familiar, and indeed it's source also supplies fair reasons for the suggested values. The pic is straight from the Christie's catalogue for the auction of the South African Meccano Museum in September '89.

For the record, here is how the article's figures compare with how much these items actually raised at the auction;-

Blackpool Tower- £715 Traction Engine- £704 Dockyard Crane- £1430



BOTTOM LEFT- 'Graf Spee' constructed by John Macdonald. BOTTOM RIGHT- A miniature oil platform, built by Frank Singleton.



# Moulded Menaces!

The accompanying article from the Daily Telegraph was kindly passed on by Robin Schoolar, of which lines 9-11 in the second column are particularly drawn to your attention. If this is actually a quote from a LETGO Company Director, he shows an odd lack of knowledge of his chosen field of endeavour....

knowledge of his chosen field of endeavour.... Meanwhile, competition time; can you fit an appropriate caption to the photo of the lad with his Pirate Island? Here's one I prepared earlier- "Yes, very nice, but what does it do?" The best caption received wins a LOGEY train set, the second best wins two sets....

### LEGO's secret of success

DANISH toy manufacturers LEGO are in the middle of a building boom. Thousands of small children making towers, houses, aeroplanes and boats out of plastic multicoloured blocks have increased sales by dramatic leaps in new markets in eastern Europe.

The LEGO brand name was recently ranked as the fifth best known in Europe after Porsche, Mercedes, BMW and Rolls-Royce and the company has seen turnover rise by an average 80 p.c. in eastern Europe and four-fold in Poland last year.

The company, started by one man in the depth of the 1930s recession, has grown into a multinational with 36 companies in 21 countries, but remains both privately owned and secretively run.

Group turnover has been estimated at £910m in 1990. The annual report discloses a fall in net profits for 13 of its companies in Denmark, Belgium, Sweden, Germany, France, Australia and Korea to £27m in 1990 (£31m in 1989) despite an increased sales turnover of £347m (£322m 1989).

The company has invested £180m in the last five years in new plants around the world, and boasts of not having so far to lay off a single worker, such is demand.

The company trics at all costs to avoid wholesalers.

Director Torsten Rasmussen, 46, says dealing directly with retailers means they know fiercely competitive market conditions well. he says painstaking market research and a constant updating of products and machinery has kept LEGO afloat and growing, while old competitors such as Corgi and Meccano have long since disappeared. LEGO, whose name is a compound from the Danish words LEge GOdt meaning "play well", attributes its success to "sticking with what we are best at," says managing director and co-owner Kjeld Kirk Kristiansen, 43.

That is churning out creative toys, based on the simple plastic building block, to satisfy children's imaginations everywhere. Now the company is toying with stepping up its secondary business, theme parks. Since 1968, it has operated LEGOLAND next door to its Dilued fortem this - 100 000

Since 1968, it has operated LEGOLAND next door to its Billund factory. It is a 120,000 sq.m amusement park, with among other things a mini-Amsterdam, the Mount Rushmore Monument, trains and castles and this year's top attraction, Pirateland—mostly built out of LEGO bricks. Last year it received 1m visitors, but is an enterprise which because it is off the beaten tourist track, only just breaks even.

"Billund is where LEGO comes from, and it's incon-

LEGO keeps the interest of children the world over

ceivable LEGOLAND could be anywhere else," said Kirk Kristiansen.

A new LEGO dream is to create a family fun park, perhaps as early as 1992. It will be quite unlike LEGOLAND, which concentrates on built models, but will promote LEGO products more actively. Kirk Kristiansen says there will definitely be one in America, maybe five. He regects London as a site because of overcongestion, but does not rule out a site elsewhere in the United Kingdom.

Another caption- "DDDADDDD: !! It's fallen apart!!"