

**Midlands
Meccano
Guild
Model Reports
1-100**

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1st Guild Meeting Saturday October 28th, 1967.

Held at: The St. John Ambulance Hall, Western Road, Stratford-on-Avon, on Saturday October 28th from 2pm to 8pm, and proved to be a very successful inaugural meeting.

The turnout, both of models and members was quite excellent and they came from all points of the compass around the Midlands. The programme went according to plan. I am very pleased and absolutely staggered to be able to say this for such an off the cuff venture. Groups of members converged from various centres such as Nottingham, Rugby and Oxford to be greeted with tea and biscuits on arrival. The setting up of the models occupied the first half hour but a reasonably prompt start was made about 2.30 with a short address of welcome from Bert Love and Ernie Chandler. The Secretary announced a surprise item in the form of a Meccano Christening cake which would be 'unveiled' at tea-time and cut in honour of the Guild's first meeting and the rebirth of Meccano Magazine, the editor of which had promised Bert Love that a photograph of the cake and the ceremony would be used in the Editorial of the first issue of the new edition.

Models were then demonstrated and commented on individually by their respective builders and the variety was most interesting.

Ron Fail brought his endless chain clock which worked like a dream and showed a remarkably neat solution to the striking plate mechanism required for the 78 hourly strokes required for a 12 hour day by using hub discs as the cage of an epicyclic gearing, the output being provided by $1\frac{1}{2}$ " angle brackets on the rims of the hub discs.

Pat Briggs brought two nice lantern clocks which ticked away merrily on temporary floor stands and although one of them contained a custom made 30 tooth escape wheel, the purpose being to get a pendulum of 'Royal' length, i.e. one complete cycle in two seconds, the second used a 2 inch sprocket as the escape wheel and kept perfectly good time. The clock cases were most realistic in appearance, great care being taken to use the full range of brass Meccano parts to simulate the ornate decoration of the period.

Ernie Chandler produced a model dragline taken from one of the current manuals for the No. 10 set and the chassis of a veteran car with some particularly interesting 'solid' tyres. These were square section rubber pipe sealing glands pressed on to 3" artillery wheels with a most realistic effect.

Arthur Locke, the veteran member of the group, showed a prize winning traction engine in original nickel parts with the old domed headed bolts used with great effect. **David Goodman** showed a nicely balanced replica of the vertical single cylinder steam engine used in the early 'Comet' paddle steamer and a modern prototype high speed plate clutch mechanism. **Bob Faulkner** showed an impressive multi speed gear box with excellent gear shift locking as the basis of a super designing machine. **Roger Lloyd** produced a No. 8 manual model of a breakdown lorry which was carefully constructed and of pleasing appearance.

Bert Love cheated completely by displaying three demonstration models salvaged from former Meccano dealers. A Ferris wheel with lights and a demonstration car chassis had been restored from broken and rusty conditions but a model of Tower Bridge with lights was virtually in its original crated condition. The dealers mains motor designed for continuous operation and the special 10 volt lighting transformer were included on a separate board in this display.

Alf Hindmarsh put on a fine display of vintage Meccano Aeroplanes built from the Aeroplane Constructor sets covering a period from the early to the late thirties. He illustrated the various differences in design detail and the models were in splendid condition thanks to the care lavished on them by Alf. He also turned up with a working model of the Meccano Supermodel Steam Digger complete with genuine Meccano steam engine and a load of rails on which to run the model. As he lugged this by hand and made the first part of his journey from Lincoln by train, he is to be congratulated both on the excellent working model and his fortitude in facing the trip! Very few of the members attending had actually seen one of the original vertical steam engines made by Meccano Ltd., and they certainly saw Alf's engine working with the greatest of ease.

Esmond Roden stuffed his Mini with two large tramcars of rugged and realistic appearance. One was an open top double decker and the second was the all enclosed version. They were fully detailed with passenger seats, trolley arms, bogies, drum controllers and ratchet check hand brake column on the driving platform. They ran very well on the track provided by Esmond and produced the old tramcar rail clatter in a most realistic manner.

Dennis Perkins, Bill Winter, Dick Hardyman and his lad also attended to add enthusiasm and support to the meeting. **Clive Hine** showed a beautiful fairground model covered in 2 volt bulbs worked in series directly from the mains. Although the superstructure was of painted wood and therefore not strictly a Meccano model, the entire complicated drive system was made from Meccano parts which provided off-set, planetary and tilted motions at will to the main revolving superstructure and showed an excellent understanding of complex motion mechanism.

Nigel Chandler laid on photographic lighting and a stand-by camera and I wish to place on my report a vote of thanks to Nigel who was a great help in dealing with the mass of tripods, leads and general camera

equipment required to get adequate coverage of such a meeting.

The focus of the meeting however, was centred on a magnificent giant level luffing crane designed and built by **Eric Taylor**. It was an absolute masterpiece! Eric claimed that the model was not original as a similar one appeared in a French Meccano Magazine some years ago but as the illustration was about the size of two postage stamps, the credit still goes to Eric for a wonderful model. Standing higher than Eric himself, the jib luffed to full radius as smoothly as a Rolls Royce engine and the slewing, hoisting and travelling motions were just as well carried out and, what is more, all movements were controlled by a remote switch board making the model not only a joy to behold but a great pleasure to operate. The model was voted the most outstanding in the exhibition and what camera film was left in the Secretary's camera after the group photos was completely used up in taking various shots of the model's details. The single suspension bucket grab was particularly well designed and efficient. Well done Eric. Well done all of you,- it was a great show.

The break for afternoon tea started at 4.30 p.m. at which stage, the Meccano Christening cake was 'unveiled'. The cake was decorated with red, green and white icing piped round a red circular strip and four corner motifs comprising green architraves. The bolt holes were filled with silver cake balls and the whole thing looked genuine 'Meccano'. A group photograph was taken of the cake cutting ceremony and then tea was served by Mrs E. Chandler, Mrs E. Taylor and Mrs B. Love. There was plenty to eat for all and an excellent variety of refreshments were served.

The raffle took place at this stage for which members were invited to buy shilling tickets which, in every case, won a prize of value between 1/3 and 4/9,- the proceeds going to the rental of the Hall. Obsolete literature, early Meccano Magazines and a display board of the most rare obsolete Meccano parts were on show. **Jim Gamble** demonstrated a brass finish restoring method and some home spraying of Meccano parts in true Meccano red and green enamels. He would have brought a giant block setting crane but the Secretary didn't get the message properly so we shall no doubt see some of Jim's modelling in the future. Eric Taylor contributed some useful hints on home spraying with car aerosols and his entire crane had been re-sprayed in silver and grey at home by Eric.

Business meeting

This was held after tea, the minutes of which are as follows. The stage was taken by Ernie Chandler and Bert Love and the meeting got down to the business of electing a Chairman and Secretary. It was pointed out that Esmond Roden was the founder member of an earlier group centred on his home in Cheltenham and that the turn up of members was the flowering of seeds planted by him in previous years. Ernie Chandler was elected Chairman,- a worthy tribute to our Stratford 'Contact' who was the prime mover in securing the St. John's Hall for our meeting and for recruiting a large portion of the membership. Bert Love was elected as Secretary and it was then moved that in recognition of the early founder member of the South Midlands Meccano Society, Esmond Roden be appointed: as President of the Guild. This was carried unanimously.

Correspondence

A letter had been received from John Franklin, Editor of the New Meccano Magazine expressing interest in the Guild's activities and asking for photographs of the Christening Cake for inclusion in the first edition of the new issue.

A letter had been received from Mr W. E. Bolland of Rugby wishing the meeting well, regretting his inability to attend and enclosing a postal order for 10/- as a contribution towards costs. A very similar letter also came from Mr Clark of Bath and it was agreed that the Secretary write to them, thanking them for their kindness, enclosing a photograph of the cake. (If there is any left after the meeting, they might even get a piece of that!)

Next meeting

In view of the apparent success of the meeting, the members agreed to hold the next one at the same place, fixing a provisional date as Saturday, March 30th, 1968. The timing of the meeting to remain the same, i.e. 2p.m.- 8 p.m.

Guild's Name

To avoid any suggestion that the Guild would be limited to Warwickshire members, it was agreed that the name of 'Midlands Meccano Guild' be adopted. This was passed unanimously.

Membership

The Guild is open to all adult Meccano constructors but no upper or lower age limits were fixed. It was agreed, that since the Guild was of an adult nature and that exhibits often included rare and valuable literature, the question of admitting young people must be treated with great discretion by the individual member responsible. It was also agreed that models and materials on show were to be of a Meccano nature and that generally speaking, other models of a general engineering nature would not normally be included in the future programmes.

Votes of Thanks

Votes of thanks were proposed to Ernie Chandler for organising the premises and catering facilities. Mrs Chandler, Mrs Love and Mrs Taylor were thanked for their hard work in the kitchen and the President of the

St. John's Brigade was thanked for his generous terms of hire for the hall.

David Goodman proposed a special vote of thanks from the floor for the organisation of the meeting carried out by Bert Love. The Secretary replied by saying that nothing gave him greater pleasure than talking about, writing about and building with Meccano and meeting those who were truly keen and enthusiastic. He undertook to answer all personal correspondence sent to him and promised to publish all useful material in a Guild Newsheet. It had been decided that no fixed annual subscription would be charged but that postage stamps would always be appreciated by the Secretary.

Statement of Costs

Refreshments

£ s d

Early tea and biscuits & Christening Cake(Mrs Love) 1 0 0

Afternoon tea (Mrs Chandler)..... 1 0 0

Postage and Envelopes

E. Chandler..... 5 0

B.N.Love..... 1 0 0

Hire of Hall..... 2 10 0

3 Boxes of chocolates to lady helpers..... 15 0

Cake Photographs for publicity and absent members

Film and photographic paper 10 0

7 0 0

Income

20 teas at 2/6..... 2 10 0

18 admissions at 2/6..... 2 5 0

Raffle income..... 17 0

Donations by postal orders..... 15 0

Sundry fiddles..... 3 0

7 0 0

Balance.. Perfect!

In presenting this first report of the inaugural meeting of our Guild I would like to thank all those members who have said and written kind things to me but honestly, I have enjoyed every minute of the work.

My apologies to **Jack Partridge** of Oxford for leaving his name off the front sheet and my thanks to him for laying on transport for Bob Faulkner. My apologies also to **Bob Faulkner** for the over enthusiasm of a packer upper who shoved Bob's bound edition of the Meccano manuals into my briefcase when collecting up my obsolete literature and magazines. Bob won't know about this until he gets my letter but it's on its way back in a parcel. Very sorry old man!

I have heard to-day, (Wednesday Nov. 1st actually) that the Editor is very pleased with the pictures of the cake and the group, both of which he hopes to print in the first issue of the New Meccano Magazine, on the editorial page. He has passed on the prints of some of your models to Doug McHard, of Meccano Ltd., who also expressed interest and collates material for the feature 'among the Model Builders' so I am expecting to hear from him. I hope this will be a successful establishment of the Guild after such an enthusiastic launching last Saturday.

This report is going out to all who attended the meeting and to those who showed a genuine interest. If you have keen Meccano Constructor friends, show them the report or better still get them to write to me. If the report is of interest to you, please send me a 4d stamp for postage and another 4d stamp if you want the Newsheet at the end of November. Write to me and give me the latest gen on your Meccano activities. For those people who were interested in swops at the meeting, tell me your needs and I will put them into the sheet. Standing charge for each advert will be a 4d. stamp regardless of number of words (please try to keep your advert to less than half a page!)

Finally I append two copies of the Guild membership,-one to keep and one to go with all the other stuff under 'where the Devil did I put that?' heading.

Best wishes to you all, Sincerely, Bert Love

MEMBERSHIP LIST

E.L. Roden
E. Chandler
B.N. Love
P.D. Briggs
R. Fail
J. Gamble
A. Hindmarsh
D. Goodman
C. Hine
R. Lloyd
A.T. Locke
J.E. Partridge
R. Faulkner
E.K. Taylor
W.J. Winter
W.E. Bolland
R.F. Clark

N.B. Any absent friends not included in this list will be listed in the Newsheet at the end of the month.

D.B. Perkins
R.J. Handyman
J. Partridge

2nd Guild Meeting March 30th 1968

Those members who had shown a willingness to speak on their models started the ball rolling after a short address of welcome to Guild members old and new from the Secretary.

Ron Fail demonstrated a designing machine of elegantly simple structure producing faultless spiral designs of constantly increasing amplitude, loop formation being instantly variably phase angle control between eccentrics governed by a hand set differential. **Clive Hine** showed three fairground models comprising showman's engine fully illuminated, steam organ trailer activated by tape recorder with genuine steam organ music, and an angled Ferris wheel with single suspended cupolas, the spider of the wheel being illuminated by over 200 low voltage bulbs wired in series. Clive, being a recent convert from painted wood models to all Meccano construction had achieved excellent results by utilising the Meccano colour ranges to the full.

Ernie Chandler had a more conventional Ferris wheel displayed alongside but driven by the latest Meccano Steam Engine and again the wheel was fully illuminated with great effect. Another steam enthusiast,

Alf Hindmarsh then demonstrated his rugged model of an early Foden steam tractor in which he had incorporated the original vertical boiler Meccano Steam engine which gave realism to the model as a whole. Alf has always gone for substantial models but hitherto had gleaned them from supermodel leaflets or early Meccano Magazines so this was his first freelance job and the proportions he achieved were excellent.

By this time **Eric Taylor** had his model transported from the Leyland, sorry, - carabus, by fork lift truck on to a reinforced paperhanger's pasting up table and was ready to put his crawler tractor through its paces. As a skilled heavy plant engineer, we have come to expect very high standards of design, construction and performance from Eric and we were not disappointed. The realism of the crawler was outstanding, its caterpillar tracks were rugged in design, beautiful in action, tension compensated by simulated hydraulic cylinders, mounted on a compensating axle beam and steerable by track levers operating band brakes on either side of the rear driver differential. Clutch and transmission were highly efficient, gear shift smooth and positive, with miniature thrust bearings in the clutch housing relieving thrust on the transmission to enable tick over running and the whole heavy model was driven by one standard Powerdrive ELECTRIC MOTOR. Clever use of Elektrikit parts gave fully detailed diesel engine simulation, the black fish plates and insulated terminal posts giving realism to exhaust manifold and vertical exhaust vent. Driver's seat and bonnet hinged to give full inspection facilities to the complete transmission. The model was finished in the E.K.T. patent silver/grey spray finish.

Eric also produced a complete contrast in transport by displaying an elegant model of the ancient Chinese South Seeking Chariot. Internal peg teeth were made from threaded rods and standard bolts while those of the outer gears were made from sparking plug terminals screwed over Meccano bolts (threads are standard). These made fatter pegs required for the increased pitch of the larger wheels and while they may be anathema to the purist they made very good sense to the tolerant.

Leslie Dougal came all the way up from Rake, in Hampshire to show us three excellent Meccano clocks of substantial dimensions and all operated from a reliable low voltage source. This was Leslie's first Guild Meeting at Stratford and his clocks were first class. The first two were based on electric clocks which were driven by electro magnetic impulses, the prototypes of which were shown at exhibitions in the early Victorian era. The smaller one had impulses imparted to the pendulum bob from below while the longer bracket clock utilised a free pendulum which received intermittent impulses from a make and break contact mounted on the pendulum rod. Time keeping was good although terrestrial magnetism was a factor which Leslie has to take account when regulating them. The third clock was self winding weight driven clock with adjustable settings for 12, 24 or 48 hour rewind periods. Leslie is aiming to extend the length of the run on his weight driven clock to a week, then a month and perhaps ultimately a year. Another interesting item Leslie brought was a nickel plated 4 volt Meccano motor circa 1923 the quality of finish being so good that it might have been fresh stock instead of being some 45 years old. It ran perfectly and the brush holders were almost identical to those used on the modern Meccano motor, i.e. a simple brass tube with a spring wire lodged in the end of the tube, i.e. no separate coil spring with captive insulated terminal as used on the pre-war motors of the thirties.

George Illingworth, working at Birmingham with B.S.A. tools, is a fire engine fanatic who has recently joined the Guild and brought along what you might call a scale model fire engine but which George rightly insists on calling an A.F.S. pump unit. Basically it is a heavy fire pump unit with a streamlined body containing various lockers holding fire fighting equipment scaled to the large plastic road wheels, something like 1" to the foot, - a favourite scale for George's wide range of vehicles which he has built in Meccano from time to time. The body was quickly removed from the chassis which was fully detailed with clutch, gear box, auxiliary drive to main fire pump, of the Coventry Climax type which ran out on rails ready for hand carrying or running on a pair of jockey wheels. The detachable extending hand ladder was rope operated with safety

locking pawl.

At this stage the time allocated for individual talks on models had expired but less than half of those on display had been covered and Guild Members were free to roam among the model builders to discuss points. Quite a number of the old Supermodels were on show including two Giant Draglines, one by **Jack Partridge** of Oxford used the Servetti Roller bearing and one by **Dick Hardyman** of Malvern used the original 167 geared roller race for the lower portion and a simple steel disc for the upper. This works very well because it is, of course, only necessary to engage the driven pinion with one toothed race.

Wilf Bolland of Rugby also brought a selection of replicas of early supermodels including the Stiff legged derrick and the hydraulic crane.

His fellow enthusiast from that region, **Dennis Perkins**, produced three of the old favourites in which he had incorporated many of the early nickel parts, beautifully restored in the Meccano Motor Chassis, an agricultural version of the Meccano Traction Engine with a really efficient differential and the original tower crane which featured in Meccano Magazines and Instruction Manuals as long ago as 1914. It worked beautifully and must have been the absolute cats' whiskers in those early days. Rumour has it that much of the elbow grease and final polish were provided by Nellie Perkins who deserves fully fledged Guild Membership for her efforts in that case!

Roger Lloyd of Shirley made the S.M.L. Railway Breakdown Crane in immaculate parts on a well turned out base board track. The gearbox of the crane was revolutionary for its day relying on radial pinions meshing by the rotation of double arm cranks to effect slewing, luffing, hoisting and travelling movements.

A special vote of thanks to Roger at this stage who spent all of Saturday morning helping to sort out parts for the spares cabinet at my (**Bert Love's**) home, loaded his car to the axles with the cine projector, leads, lamps, cine camera, tripods, camera hold-all, Guild Literature, his own model and my wife! As my own car had two spares cabinets, a No. 10 set and a Giant Block Setting crane aboard, I just could not have got the gear to the meeting without Roger's help. I must apologise for the Block Setter, for not having its control gear completed. I cannibalised the switch gear to copy Ron Fail's Clock and despite much burning of the Midnight oil and beyond, it is not possible for me to restore all the machinery and reversing switch gear and there is really a fair amount of development work to do on it yet before I shall be satisfied with finish and performance.

Pat Briggs had a complete mini exhibition of his own in the shape of half a dozen or more Meccano clocks, excellent time keepers all and examples of most ingenious combination of Meccano parts in a manner which exploits both their mechanical and decorative applications. Pat's weight driven clocks were fully demonstrated at a previous meeting but his latest series includes three 'clockwork' clocks using the current Meccano motor. Pat did produce a prototype spring driven clock: using a pre-war No.2 reversing Meccano Clockwork Motor and I remarked in the last Newsheet that the principle which Pat employed, in gearing the movement of the clock hands directly to the motor mainspring sprocket, was not applicable to the current clockwork motor because of hole spacing. Apart from thinking that his use of a pre-war motor was cheating a little, Pat took up the other point as a challenge and soon had a standard Meccano 57 tooth gear wheel, meshing with the main spring cog inside the motor. He managed this with flat girders bolted onto the motor frame to facilitate the meshing. The power available by this method allows Pat's clocks to run for 30 hours or more, - a most remarkable achievement with standard and current Meccano parts. The last two of his clocks are so well designed with simplicity and efficiency combined that they have been snapped up by Chris Jelley for the M.M. and the photographs for the article have already been approved.

Bob Faulkner brought two intricate models, one being a well designed loom of very pleasing proportions and the other, a large designing machine with extensive gearing allowing infinite variations of movement and speeds between writing table and drawing arm. Gear shifts were particularly well catered for with positive locking actions. Bob travelled down (or up ?) with Jack Partridge to the meeting in a Mini and as they stowed themselves, one Giant Dragline and Bob's two models inside, it was a masterpiece of packing.

Another expert Mini packer is **Esmond Roden** our President who turned up to the previous meeting with half the Cheltenham Tramways fleet. This time he brought a Meccano Dealer's Demonstration Carousel which he has carefully restored from a state of dust and minor rust and rewired to cure short circuits in the lighting. The carousel did feature in a Meccano Magazine some years back, though with minor modifications, and uses a very simple but effective method for producing the rise and fall of the horses without the use of gearing or eccentrics. Curved strips are arranged in a wave pattern to form a stationary external ring and the radial rods from which the gallopers are suspended by swivel bearings, ride round the wave ring thus producing the galloping effect. Esmond also brought his completed model of the converted Mumbles All enclosed tram with destination boards neatly lettered and all mod cons inboard.

Jim Gamble, who came down with Alf and Pat as the Nottingham trio showed a very neat traction engine and a working model of a kopp winding machine which makes a beautiful wave winding of cord onto

a spinning former. Even quite coarse string , with which the model was threaded, was rapidly wound into a neat and workmanlike kopp . (That word looks quite potty,- I wonder if I have spelled it correctly? ,- just as I thought ,-there's no such word. It should, of course, be cop, I don't know where I got the other word from; I haven't got a German Granny or anything like that.)

Bill Winters, who returned to his boyhood love of Meccano only last year was so inspired by the last Guild Meeting that he invested his life savings in enough new Meccano to rebuild the Queen Mary and although his letters to me gave no hint of the nature of the model he was building he certainly surprised me with his attractive Fairground model of the Whirling Torpedoes, contra-rotation of the cupolas being achieved by well balanced differentials. The model was neatly mounted on a display board complete with control gear.

The whole turn out of models was quite excellent in my view and I am sure that this reflects the general feeling of those members of the Guild who were in attendance. The October meeting was very good and this was even better. **David Goodman, Graham Nalty and Sid Marlow** gave support to the meeting with literature and enthusiasm although they were not able to complete models for this occasion. Sid is in the process of building Herr Gottlob's Giant Dragline and is in the process of contracting for Eric's bus to bring it to the next meeting. At the moment the 12 foot jib hangs out of Sid's bedroom window at Abingdon and he has had the trolley bus people up to complain twice already.

3rd Guild Meeting – 28th September 1968

The third meeting of the Midlands Meccano Guild took place in the St. John Ambulance Brigade Hall at Stratford-On-Avon on Saturday September 28th 1968. Doors were open by 1.30pm and the work of setting up the models proceeded steadily while Mrs Dougal, Mrs Love, Mrs Perkins and Mrs Taylor manned the kitchen to fortify the arriving members with lashings of tea and biscuits.

Two of the guests of honour, Chris Jelley, better known as 'Spanner' and his Chief, Doug McHard, Marketing Manager of Meccano Ltd. arrived at 2pm and after a swift cup of tea they were introduced to the Guild by the Secretary who welcomed all the Members, new and old, ancient and modern and thanked them for their efforts in getting to the meeting on time, despite journeys from far afield as Gateshead and Hull in the North and Bexley and Rake in the South. Some six members were making their first attendance at Stratford and were obviously impressed by the gathering of fellow members and the excellent variety of models on show.

Dennis Perkins of Rugby gave the first ten minute talk and demonstrated his Giant Block-Setting Crane mounted on a purpose built table set up on the stage. The crane was based on the original Meccano Supermodel Leaflet No. 4 but Dennis had made many improvements on the original in the design of the tower platform, the roller bearing, the hoisting crab and the engine house. All movements were very smooth thanks to individual Powerdrive Units and the travelling bogies were pivoted as in the manufacturer's prototype. Additional features included flashing warning lights for travelling, hook rollers inside the turntable and the Marklin 'pastry cutter' ring mounted on a 167b flanged ring for slewing. Generally speaking, Guild members avoid non-standard Meccano parts as far as possible but there are occasions when slight deviations are acceptable.

Alf Hindmarch followed Dennis by showing a first class freelance model of a steam ploughing engine based on the photographs of a 19th century original which appeared in the M.M. a few years ago. The model was some three feet long and very fully detailed in its working mechanisms. These early steam engines had the main driving wheels and flywheel at the smoke box end of the boiler and were steered from the fire-box end. Later in the century this practice was completely reversed as typified by steam traction engines surviving today. Alf had carried out a great deal of painstaking work on the boiler, valve-gear and drives to the ploughing winches. His proportions were realistic and the model does him great credit.

Jim Gamble was ready by this time with his Giant Walking Dragline with a boom sweeping over half of the stage. This was freelance again and the proportions were very well balanced as was the general design. Powerdrive units were employed for the various movements (as in the first two models above) and Jim had had a course of driving lessons on the model before bringing it to the meeting in order to master the technique of 'swinging out the bucket'. He demonstrated this admirably by a near miss on the toe cap of John Franklin's right shoe. John Franklin, Editor of Meccano Magazine, had arrived by this time and was sitting with the other guests in the front row.

Ralph Clark of Bath, associated with the Guild through its earlier format as the South Midlands Meccano society was also paying his first visit to a Stratford Meeting and he now showed us his scale model of a Baltic Tank Loco. As it was close to 1" to 1ft scale, it was quite a big model and very well defined in outline and proportions with good use of flexible plates being made in forming the boiler and smoke box. Working Walschaerts valve gear was fitted and working cab controls were connected to the internal electric motor giving forward and reverse drive to the coupled wheels.

Going from the sublime to the ridiculous at this stage, **Bert Love** introduced a simple single decker seaside tram built from the contents of the Powerdrive Outfit, (largely as an academic exercise in utilising as many as possible of the total parts contained in the outfit,) with authentic overhead pick-up trolley arm. He fiddled the insulation by making use of the new ½" plastic pulley contained in the Powerdrive Set as a swivel for the trolley pole and secured this with a 4B.A. nylon bolt through the roof of the tram. A run of track and overhead live wire were made from girders etc. additional to the Powerdrive Set. 'Spring' tension of the trolley pole was obtained by the shortest rubber driving band running round the groove of the plastic pulley and then twisted over the lower end of the trolley arm and secured with a spring clip. After this bit of nonsense, we went back to the real models.

Esmond Roden demonstrated a very highly detailed motor rail coach of Southern region stock with genuine side pick-up slipper on the third outside rail at ground level. His scale was similar to that of the loco shown by Ralph Clark and the coach was some five feet or more in length. Detail, both external and internal was quite excellent. Baggage and motor compartments were faithfully reproduced as were cab controls, wipers, route number panel, vacuum brake couplings, 'concertina' corridor connectors, centre line corridor, passengers seats complete with arm rests and card tables not to mention 'frosted' glass lavatory window by courtesy of Messrs Bronco Ltd., (paper products!) and vacuum cylinders mounted in the lower framework.

Leslie Dougal (was an expert Meccano constructor when many of us were cutting our first teeth on red & green outfits) then demonstrated his beautiful electric portable Astro clock. This contained a number of vintage Meccano parts including blue/gold flexible plates and original Elektron coils the poles of a synchronous motor. Strike was controlled by a purpose made snail cam and powered by a Powerdrive unit. Half hour strike came from the main movement. G.M.T., moon phase and tide dials were included and accuracy was as good as the synchronised mains in any part of the country would allow. The clock could be set to strike or silent and a night cord when attached would repeat the strike of the nearest hour. Leslie also

demonstrated a cheeky mini replica of the old side plate 6 volt reversing motor E6R. This comprised of a small Japanese motor (1/11 locally!) which was sandwiched between two 3" by 1½" flat plates to which two inch girders were bolted to form flanges. The replica was complete with ½" pinion (adaptor bush required) and reversing panel with lever. A very neat job of surprising realism. Leslie managed to leave this motor behind at Stratford with his Pandora's Box of other treasures including a 'K' type oil can, vintage E6R, spirit level and Guild badge! This has now been entrusted to the tender mercies of G.P.O. parcel post so it will probably reach Leslie (if at all!) by Christmas.

Ernie Chandler then demonstrated an open top double decker tram called the 'Boneshaker' which featured in two issues of the M.M. earlier this year. Guild members had previously commented on the realism of the model when it was published and we were very pleased to see it in the flesh. Ernie also produced "The Octopus", another M.M. model featured a few years ago and this worked very well indeed. This was one of four fairground models on display at the meeting and the gyrations of the Octopus were well reproduced in the model.

Ron Fail brought along a very neat clock striking mechanism which depended on a simple electro mechanical servo feed-back system to switch the battery supply to the striking motor. A clock dial was fitted to the mechanism purely as a demonstration for one tripping mechanism which set the strike gear in motion at the appropriate time. The correct number of hours is struck according to the hour of the day and the motor, again a powerdrive motor, is automatically switched off at the end of the strike. Because the total number of strikes in a twelve hour day amounts to 78 a gear ratio containing the prime number 13 is unavoidable but Ron overcame this difficulty by use of an epicyclic arrangement, the rotation of which added one to a standard 12:1 ratio, thus producing the necessary 13.

Stephen Lacey, newly joined Guild member showed a Fairlie 0-4-0 0-4-0 double ended loco based on the narrow gauge Welsh Railway prototype and he succeeded in producing the tapered through boiler, cab details and bogies very well. Each bogie was driven by bevel gearing through vertical shafts which in turn were driven from a long through shaft coupled to yet another Powerdrive Unit.

Phil Ashworth (all the way from Hull!) concluded the stage demonstrations with the outlines of his Fairground Big Wheel with contra rotating cupola carriers on the end of a rotating beam. As he had been given three days notice of the meeting it was quite impossible for him to complete the model but he was obviously developing it along the lines required.

The final display of the afternoon was that of **Clive Hine's** centrepiece in the middle of the hall, a beautifully decorated and highly illuminated Fairground model of the "The Spider". Passenger cars mounted in fours at right angles were counter-rotated at the ends of four arms of the central pivot and there were something like two hundred low voltage bulbs painstakingly wired into plastic sheaths for overall insulation, those decorating the surround of the model being strung in series from the mains heavy duty 12 volt transformer. Meccano parts had been used to their best decorative effect in designing the entrance to the platform of the model and flexible plates were used to fill the floor space neatly. As a convert from wooden models to all Meccano models, Clive has made tremendous strides in his modelling to reach his present high standards.

The time was now 4.30pm and the Guild were ready to tuck in to afternoon tea. Items for this were ordered by Vera Chandler and prepared by the team of wives who had arrived earlier. This beautifully prepared and served with enough for everyone to stuff themselves silly. The guests of honour were button holed by various Guild Members and answered a barrage of questions on topics ranging from Meccano products to circulation figures for the Meccano Magazine. Ann Dougal was a great help as Chancellor of the Exchequer in receiving the five shillings from each Guild Member to pay for the afternoon's various issues of tea and other forms of nourishment and for the cost of rental for the hall and kitchen facilities. I am sure that the Guild Members were agreed that they had very good value all round for their five bob!

A little time was available at this stage for free roaming among the model builders and there was plenty of material on display. **Jack Partridge** had made a beautiful long case job of Pat Brigg's Astro clock and was working on the dial pointers right up to the last minute. **David Goodman** showed his portable microscope mounting which he actually demonstrated on the stage during the afternoon. This particular piece of apparatus will be featured in the Meccano Magazine Handbook in the December issue of M.M. **Bob Faulkner** had his complicated design machine working beautifully, making the finest hairline traces with no sign of backlash. **Bill Winter** had his Fairground model of the Whirling Torpedoes in full swing and Esmond Roden was measuring up Guild Members for suits made from great rolls of cloth coming off his four frame hand loom. **Wilf Bolland** had a couple of well-known Supermodel replicas on show, the log saw and fork lift truck. **David Whitmore** another new member had another fork-lift truck with some of his own controls built in. **Pat Briggs** brought his beautifully ornate carriage and mantel clocks and **Bob Hauton**, making his first visit to the Guild Meeting brought a remarkable collection of the early Mechanics Made Easy parts in their original boxes and a simple crane made from the parts. Bob actually demonstrated the parts and model during the afternoon talks and as he is a keen Meccano Historian, he was able to trace the origins and variations of the pieces as he displayed them. Bob expects to complete the writing of a Meccano History very shortly in conjunction with Alf Hindmarsh, a fellow historian, with a view to publication, (the History, - not Alf!) **Tom Masters**, the longest traveller from Gateshead, Co. Durham brought the chassis of a lorry mounted tower crane which he hopes to complete.

4th Guild Meeting Saturday March 22nd, 1969. Held at: The St. John Ambulance Hall, Western Road, Stratford-on-Avon

At ten minutes past two the Meeting began with a series of short discussions on individual models or mechanism. The Secretary opened the Meeting by welcoming new Members and guests and then went on to speak briefly about the self-centring roller-bearing and ladder construction on a Block-setting crane before giving a short demonstration of **Ulysse Bachelard's** Plate Bending Machine which was illustrated in a recent issue of the M.M.

Ron Fail followed this by demonstrating a simple weighing balance employing a linear parallelogram displacement based on the elasticity of four 12 $\frac{1}{2}$ " Perforated Strips, direct scale reading being operated by simple rack and pinion drive. Ron also demonstrated a Spiral Harmonograph which not only produced a Spiral but also made the looping patterns of continuously increasing amplitude similar to the ramshorn or fossil ammonite configuration. A further refinement of the Spiral Harmonograph is that of phase control of the loop formation by a hand operated differential adjusting the phase between the drawing arms at any stage. Backlash on the principal motions (despite modest depreciations by Ron) were well catered for by using a large gear wheel (133 teeth) to drive the designing table which was fitted with a second 'free' gear wheel attached to the table shaft by a counter-acting spring enabling the compound gear wheel to take up the full meshing space of the worm drive. Link arms consisting of Perforated Strips were fitted with Fishplates at each end, secured by the slotted holes so that the circular hole of the Fishplate came over the end hole of the Perforated Strip. When placed over the Threaded Pins of the cam motions, the Fishplates are then adjusted to take up any end slop. Sliding guides for the link arms are provided by Large Fork Pieces set with a slight twist on their securing bolts so that the Perforated Strips running in them had no appreciable side slop. The model was driven by a Powerdrive Unit running from 4 $\frac{1}{2}$ Volt dry batteries and it produces beautiful spiral designs of infinite variety.

Ernie Chandler then showed his model Landrover which was almost big enough to accommodate Ron Fail's model in its spacious dimensions. The general outlines of the prototype had been carefully reproduced and the mechanical complexity of the Landrover had been tackled by Ernie in a very workmanlike manner. Front and rear differentials were included with gear-box, clutch and dis-engage drive to front axle. Special attention had been given to reproducing spring shackles of scale and realism. Ernie intends to carry out further work on his Landrover to improve steering efficiency - not an easy task when front wheel drive is involved.

Phil Bradley demonstrated three simple mechanisms suitable for inclusion in a popular range of Meccano Models. The first showed an improved travelling bogie for a rail-mounted Dragline, developed from the original S.M.L. Flanged wheels were doubled up, gear drives were arranged internally instead of externally, the second axle was given float action to ensure 'tricycle' load distribution and the pivot bearing was "ball and socket" type, being a Handrail Coupling riding in a Socket Coupling. The new design of bogie gives a 50% increase in efficiency. Phil's second mechanism was the gear-box from his Scammell Contractor lorry featured in M.M. last year. This was a good attempt at constant mesh with non-sliding lay-shafts, gear engagement being provided by sliding dogs. This necessitated drilling a 50 tooth gear (quelle sacrilege!) to provide sliding pin connection. His third mechanism was an attempt at a servo brake for a crane winding drum. This was intended to be controlled by the crane load itself spinning the hoist barrel with a grooved pulley being checked by a servo loop of Nylon cord on a following servo brake drum. Phil wasn't satisfied with the control afforded by Nylon and suggested experiments with a wire loop instead.

Jim Gamble then demonstrated a 'period' model of a working digger/shovel. This was a remarkable model built from genuine nickelled parts in first-class condition of the early 1920's, a period when much of the sophisticated Meccano parts and gears were still to come. The model was powered by the rare 3 spindle Clockwork motor of the 1910-20 period and the motions of travelling, slewing, racking and digging were all provided for. Jim had made a careful choice of parts from his wide collection of early items and had achieved an excellent combination of 'period' appearance with optimum use of the simple mechanisms available at the time and he is to be congratulated on the skilful model building and originality of design. Jim also provided two further models for general exhibition in the shape of two Royal Navy Destroyers of first and Second World War fame. One was a 1914 'flush decker' with four vertical smoke-stacks, (making use of the early and obsolete straight Ship's Funnel) together with rudimentary armament of the period. The second model of the Tribal class, showed the radical changes in Destroyer design over a 15 year period with high fo'c'sle, raked stem, raked funnels and increased fire-power. Details included Carley rafts, ship's boats, deck fittings, torpedo tubes, anchors and cables, all of which were very expertly modelled by Jim.

At this stage, the brevity of some talks had left the Meeting with a few minutes in hand which were added to **Phil Ashworth's** time and he continued the talks by demonstrating several models and mechanisms which he explained in detail. As the electrical control systems were somewhat involved, it is hoped that a fuller explanation will be published in the next Gazette.

Phil's principal model was a programmed contra rotating Double Arm Fairground Wheel which he presented in embryo form at the last meeting. The main rotating arm carried a six-cupola wheel at each of its extremities and these were programmed to be loaded in correct order by skilful use of gear ratios and electrically controlled sequencing. Mechanical drives were by Power Drive Unit which in turn was controlled

by a small Japanese motor (tut, tut and tutters!!!) for its switching sequences. Solenoid operating barrier gates allowed access to one cupola at a time and returned to safety state on motion commencing. When all cupolas were loaded in both wheels, the model ran for a pre-determined length of time before going through the 'unloading' sequence.

Phil next demonstrated a 'potted' clock striking mechanism confined to a $3\frac{1}{2}$ " cube. This also included a Japanese motor (more hisses through honourable teeth) replacing a noisy Emebo Motor (what an excuse!) which carried out the function of priming the strike mechanism two minutes before the hour and then operating the bell striker on the hour. Paired commutators were employed to give the time lag between priming and striking and the motor operating switches were ingeniously constructed in a very small space from a Coupling, Centre Fork and Elektrikit parts.

The 'cube' was equipped with clock dial and hands with appropriate reduction drive to the hour shaft. It passed the critical test, - changing over from a strike of 12 o'clock to one o'clock - with no hesitation. Phil finally displayed his compact three speed and reverse gate-change gear box which was featured in April's M.M. It was beautifully compact, as smooth as silk both in running and gear changing and, dare I say it, driven for demonstration purposes only by yet another perishin' Nippon power unit! (Phil was asked to commit Hari-Kari for this but later found that all the drifts had been bought up from the Guild Storage Cabinets.)

The final set demonstration of the afternoon was given by **Clive Hine** who demonstrated another two excellent Fairground models. His 'Cakewalk' oscillated in approved giddy fashion and was fully illuminated by a mass of low voltage coloured lamps and three 12 Volt car headlamp bulbs. The model was complete with green and white striped canopy, carefully prepared by Clive for the Stratford Mop Needlework Competition.

His second model was a first-class replica of the fairground 'Satellite' complete with rotary tilt and planetary motions. Large diameter roller bearings were provided by 167b Flanged Rings and 1/2" Pulleys. The main rotary drive was via a 2" Sprocket Wheel meshing with a ring of Sprocket chain making a tight fit over the flange of the 167b. The planetary drive on the tilting platform was via a rubber friction drive provided by 1" Pulleys fitted with Motor Tyres, bearing against the rim of another 167b. Ram hoist for the tilt was simulated by a rotating screwed rod with additional guides provided by axle rods passing through a boiler acting as the Ram cylinder. Cut out and limit switches were provided and, as usual with Clive's models, everything worked in a remarkably realistic manner.

During this session, Phil Bradley announced that he had visited **Gerald Hutton** at Wandle Valley Hospital, that he was making good progress and was delighted to meet a fellow member and to 'explore' the mechanisms which Phil had so kindly taken along. The Secretary reported a second totally blind Meccano enthusiast close to his own area at Bromsgrove, and would be making further enquiries in that direction.

At this stage the individual talks were concluded and Members were invited to go roaming among the exhibits which were many and various. Quite a few of the previous models were on show, by popular request, for a second time, simply because Members had not had sufficient time to look at them in detail. One of the most novel of the smaller exhibits was provided by **David Whitmore** who made an excellent reproduction of the Grenville Steam Carriage, featured in prototype in the October 1941 Meccano Magazine. The realism of reproduction achieved by David may well have been missed by a number of Members not familiar with the original article but the mechanical aspects of the gearing, springing and differential are so interesting that they are well worthy of an M.M. illustrated article. **Eric Jenkins**, a new member from Kent, brought along the Super Designing Machine originating from Andreas Konkoly of Budapest which produces exquisite tracery in its pattern. Eric also showed a second Designing Machine with his own modifications for producing a cross-slide drawing table to provide patterns with rectilinear axes. **Brian Edwards** from Luton, another new member, produced a beautifully modelled near scale double decker Leyland 'Titan' Omnibus. This was fully fitted, beautifully plated externally, rugged in construction and complete with fully detailed rear-mounted transverse engine in inspection compartment, gear-box with linkage to cab control, steering, differentials, clutch, etc.

Len Wright, another new member, from Brough, Yorkshire, brought two of the 'old faithfuls' in the form of the Twin Cylinder Horizontal Steam Engine and the L.N.E.R. 1,000 Locomotive. **Wilf Bollard** showed a modified S.M.L. 19, Steam Shovel with Weather canopy, and **Dennis Perkins** brought along his own multi power unit version of the Giant Block Setting Crane.

Paul Brecknell, new Member from Shirley, Warwickshire, displayed the M.M. Pontoon Crane and **Pat Briggs** showed his electric clock with Lunar movement driven by a synchronous motor - the first synchronous motor to be made by a Guild Member from current Elektrikit parts. **Ralph Clark** brought his Baltic Tank Loco for a second visit and **Esmond Roden** brought the Southern Region Electric Rail Coach. Apart from his hand loom and M.M. Pontoon Crane he showed a very neat Cable Car Railway built from the contents of the new No. 7 Outfit in yellow, silver and black.

Alf Hindmarsh showed the S.M.L. Steam Excavator built in pre-war blue and gold parts, complete with genuine pre-war Meccano Steam Engine. He also had a plane built from the pre-war Aero Construction outfit.

Roger Lloyd produced an excellent conversion of the original S.M.L.1, Meccano Motor Chassis, by building a sporting/racy bodywork from flexible plates, mounted on the original chassis. This was complete with exhaust system, fuel line, petrol tank, external hand-brake, claxon horn, mirror, lamps, windscreen and radiator mascot. **David Goodman** showed a version of Ron Fail's earlier electric clock and brought a specimen of a mains motor of high power and silent action. **Peter Matthews**, a new member from London, showed the working basis of a fairground galloper working on an undulating platform constructed from plastic plates and driven from below by moving Emebo motors. He also showed some interesting early Meccano products of historical interest.

Free roaming continued among the Members until 4.50 p.m. when tea was served by the volunteer band of wives, Betty Love, Nellie Perkins, Margery Taylor and Barbara Wright. Roger Lloyd set up a stall as Chancellor of the tea Exchequer to collect the dues for the Meeting, 2/6d towards hire of hall and 2/6d for afternoon tea. Before you could say "Ball Thrust Race, toothed disc 4" diameter", every plate of sandwiches and cakes had been cleared and hungry mouths were still waiting to be fed. A quick count of heads showed that some forty people were present against the 32 expected, numbers having been swollen somewhat by last minute arrivals of extra children, Dads, visitors and even Guild Members who had not returned the official reply slip. The S.O.S. was passed to the Chairman who disappeared with his son Nigel and before you could say "Ball Thrust Race, flanged disc, $3\frac{3}{4}$ " diameter" they had returned from the local baker's shop with extra loaves and a large pork pie. The kitchen brigade soon had the food rolling again and the happy process of stuffing and jawing continued. Members took as much advantage as they could of examining the other man's models and exchanging ideas. Even the Secretary had a chance to see some of the models and to speak to some of the Members - a luxury not always possible with the demands of the programme on his attention - and I am sure that Members appreciated the extra allocation of time for general circulation among the models and modellers.

5th Model Report - 27th September 1969

The 5th Meeting of the Midlands Meccano Guild took place at the St. John Ambulance Hall, Western Road, Stratford on Avon, on Saturday Sept. 27th. Doors were opened at 1.30 p.m. and the volunteer teams of Members' Wives were soon engaged on brewing up the first cup of tea to welcome members who once again had travelled from many parts of the U.K. to attend the meeting. By 2 p.m., the models were set up and as soon as final adjustments had been made, the Meeting was opened by the Hon. Secretary, Bert Love. He welcomed the new members who were attending the Meeting for the first time, gave apologies for others who had been unable to make the journey and tendered fraternal greetings sent in the Guild by many of its overseas Associate Members.

The first half of the afternoon was devoted to demonstrations and talks by individual members on their models to the Guild who were seated at the 'stage' end of the hall, surrounded by tables and benches profusely adorned with first-class Meccano models of all sizes.

The Secretary Bert Love 'opened the batting' by demonstrating a synchronous mains driven Grandmother Clock, interesting features of which were extreme simplicity of construction combined with accurate second, minute and hour hand movements, special attention being given to dial detail and neat hands, made from Drifts, Rod Connectors, Pivot Rods, etc., the hands being so designed as to pass over each other with a minimum clearance.

At this stage, Bert Love introduced a new, and totally blind, member, **John Lorimer** of Lickey Grange School for the Blind. John demonstrated a very neat model of an anemometer based on an original centrifugal rise mechanism on the main rotor for operation of the wind scale pointer.

In view of John's incapacity, the model was a really fine achievement. **Leslie Dougal** of Liss then showed a very fine scale model, L.C.C. Double Decker tram with authentic overhead pick-up and sprung trolley arm. The model was very well detailed, with headlamps, destination boards, control gear, etc., and was fully fitted with seats in all compartments. An Emebo motor, mounted in direct contact with the driving bogey, gave adequate speed and realistic motion to the tram which ran on a length of special multi-circuit track prepared by Leslie.

David Whitmore of Bexley then showed a beautifully detailed tractor with four wheel drive to heavy duty tyres. The most novel feature of David's tractor was the use of genuine hydraulic rams, made from surplus plastic medical syringes, which raised the scoop bucket fitted to the front of the tractor. Two hydraulic cylinders were fitted externally and these were fed by internal cylinders compressed by screw rams operated by a Powerdrive Motor. The tractor was also fitted with rear power take-off, screw implement linkage etc., all ready for any job from muck-spreading to road grading.

A model of a similar robust nature was a well-proportioned Fork Lift Truck, ruggedly built by **Eric Jenkins** of Northfleet. Fitted with telescopic ram hoist, heavy duty chain lift, tilt gear, differential drive and gear-box for forward and reverse movement, the model worked with great realism. Contour lines of the body were faithfully moulded by the skilful use of Flexible Plates.

Stephen Lacey of Hinckley then showed an unusual model in the form of a 19th Century steam plough. This was essentially an agricultural traction engine on which the winding drum for the plough was concentrically mounted over the boiler of the traction engine. A feedout sheave was mounted below the boiler to bring down the Centre of Gravity and this was fitted with a lead screw driven by an automatic reversing gear-box to ensure smooth wind-on of the plough cable. The proportions of this model were generous, 167B Ring Frames being used as the end cheeks on the winding drum.

Brian Edwards of Luton showed an excellent model of a Motor Cycle Combination based on a heavy B.M.W. bike with horizontally opposed cylinders. The engine casing enclosed a Powerdrive Unit giving authentic shaft drive to the rear wheel, fully sprung with telescopic cylindrical shock absorbers. Bowden cable brakes and throttle were fitted and great care was taken over the forming of details such as lamps, mudguards, petrol tank, pillion seat and sidecar. The model was an excellent example of patience and skill successfully applied to quite a difficult subject.

Brian also showed two very interesting examples of front wheel drive for vehicles, one designed for parallel elliptical spring mounting and the other for a cross-beam axle suspension. The second example employed novel rack and pinion steering using Worm Gears in unorthodox meshing.

A further example of fine detail work was then shown by **Phil Ashworth**. His model was a small scale Showman's Road Locomotive of excellent proportion and detail. Keyed to the Meccano Boiler for width, both fire-box and motion had to be confined to a 2" wide construction. As a compound motion was called for, two eccentrics and two cranks were squeezed into the limited space available by using great ingenuity and a little 'bending' of the rules. The road wheels of the locomotive were well shod with built-up tyres wound on in layers to simulate the solid tyres of the prototype. Proportions were excellent throughout as were details which included lamps, screw operated brakes, differential, gear-box, axle power winch, fair-leads, steam chest, flywheel, governor, dynamo, canopy and electric lighting, - to mention a few. Colour blending of silver, black, yellow, red and gold was excellent. In direct contrast of size,

Phil Bradley of Epsom demonstrated a magnificent giant Admiralty Floating Crane which weighed no less than 84 lb! This was modelled on one of the largest ocean going floating cranes in the World, its huge dog-leg jib carrying four independent hoists, two of which could be coupled side by side to simulate the

250 ton main hoist. A jib-head hoist and jigger hoist on a running trolley comprised the other two hoists, the whole massive jib rotating on a multi-roller built up bearing. Scale speeds of hoist, luffing and slewing were simulated by the use of seven motors and the huge floating base was detailed with bollards, beat davits, ventilators, steam pipes and decking bridge for the main jib stowage in ocean going trim.

Jack Partridge of Oxford concluded the afternoon demonstration by showing the Servetti rotating pendulum clock. Jack showed the necessary modifications required for using an alternative clockwork motor and explained the mechanism of type of pendulum involved.

Those models which were small enough to be easily handled were passed to John Lorimer during the afternoon session so that he could explore the outlines and mechanisms by touch - a process which he thoroughly enjoyed. This was a red letter day for him.

Members were then free to roam among the other exhibits in the Hall and to discuss the various mechanisms on the models.

Jim Gamble showed three freelance models:- a horizontal steam engine with heavy duty crankshaft, built-up crank webs and eccentrics, a dump lorry with powered tipping and a Block Setting Crane in original nickel parts.

Alf Hindmarsh had an excellent display board covering a wide range of Meccano electric motors from the early 1920's to present date of various sizes, colours, shapes and voltages.

Pat Briggs' Anne Boleyn Chiming Clock was beautifully ornamented by skilful selection and application of standard Meccano parts.

Len Wright brought sections of a heavy marine steam plant including crank webs, big ends, eccentric bearings, etc., all modelled on a grand scale for inclusion in the final assembly.

Bill Winter had a neat fairground model of the Flying Aeroplanes, electrically driven and illuminated, all mounted on a well finished baseboard giving the model a very professional finish.

Tom Masters produced a Dockside Crane and **Allan Grady** (travelling all the way from Dundee to stand proxy for his father - **James Grady**) showed some mini models of brake mechanisms.

David Owst, a new member from Hull brought a huge jib crane on an excavator base, the topping lift of which reached almost to the apex of the Hall.

Ernie Chandler demonstrated the improvements to his Landrover and **Peter Matthews** showed the automatic grabbing hoist of the Servetti automated factory model.

Roger Lloyd brought a Supermodel vertical Marine Engine - a very popular model of pre-war days.

Esmond Roden showed the prototype bodywork of an all enclosed streamlined double decker tram in which the blend of yellow flexible plates and green strips produced a striking realism.

In fact, quite a number of the models on show had combinations of Meccano period colours very neatly combined for optimum results in neatness and reproduction of detail.

Ralph Clark displayed basic chassis and wheel arrangement for his latest shunting loco while **H. J. Halliday (Bert)** showed a monster freight loco some 8 feet long in which valve gear and wheel construction have been achieved to a large extent by the use of standard parts.

Other exhibits ranged from diddy dumpers to half-baked roadmen 'working' with dead slew pneumatic drills. Some early M.M.E. (Mechanics Made Easy) outfits were on display showing some of the very crude castings marketed by Frank Hornby in 1901¹ before he took over the personal production of every part in his unique constructional system which evolved into Meccano. **Peter Matthews** displayed the latter and also, put some rare and interesting Meccano literature on exhibition. **Bert Love** brought along 3 pre-war dealers' cabinets complete with glass fronted show cases containing displays of period parts including the 1921 "Garden Frame" type showcase with a full range of nickel parts of the period. Tickets for the meeting, 5/-, inclusive of rental and super refreshments were on sale shortly after 4 p.m. and tea was served at 4.30 p.m. A variety of sandwich rolls, savouries and cakes were available with lashings of tea or coffee and there was plenty for all to eat.

A press photographer from the Stratford Herald took a group photograph of the Guild during the tea session and on this occasion he was asked to make sure that should anything be published about the Guild that it be written in terms of an adult society rather than a schoolboys' jamboree.

The Annual General Business Meeting took place at 5.15 p.m. and all business was completed by 6 p.m. so that Members were then free to rake the storage cabinets and to roam among the models for the rest of the evening.

As usual, the time went all too quickly and there was so much to see and do that the Meeting was over before it was possible to get round the models. There is no doubt that the quality and finish on the models is improving all the time and the 5th Guild Meeting has produced a whole range of first class models.

Parts which Guild Members at one time considered in good condition have now become classified as 'grotty' and with the popular spread of the use of Guild washers to protect parts, there has been a definite move towards producing models which not only are excellent reproductions of prototype but look as though they are made from newly minted Meccano. This does not necessarily mean that the Guild have been throwing out their old stocks and bringing in the new, but rather that they have very skilfully restored much of the stock by re-spraying, polishing, plating etc. David Whitmore's beautiful tractor was made of re-sprayed parts and put together with the new Guild nickel plated bolts and washers, making the whole

thing look absolutely first class. Taking a few other models at random, Leslie Dougal used old nickel parts (carefully selected) with brand new yellow plates,- result,- first class tram of great realism. Jim Gamble produced another period piece,- a B.S. Crane in nickel but tip top red & green models, again, careful selection of parts, Guild washers and re-sprays, Esmond Roden's yellow/green tram bodywork was quite excellent, Eric Jenkins and Brian Edwards had achieved similar skilful modelling and in fact, all of the models on show did the Guild great credit and was a fine tribute to the Meccano system and the care, ingenuity and skill of the all the Guild Members exhibiting. I don't think anybody produced anything of an outrageous heretic nature and even the $\frac{1}{2}$ " tape used by **George Illingworth** for his excellent fire fighting equipment seemed perfectly in keeping. Quite a number of the models were photographed before the Meeting closed and all shots have turned out very well. Fuller details appear later.

¹ Date amended was written 1961 in original report

6th Guild Meeting - 21st March 1970

The 6th Meeting of the Midlands Meccano Guild took place on March 21st 1970 in the St. John Ambulance Hall, Western Road, Stratford on Avon. Some forty Members, Official guests and canteen volunteer wives travelled long distances from 'up North' and 'down South' or across country to rendezvous at the Guild Meeting.

As usual, the hall was a bustling hive of activity shortly after the doors opened at 1.30 p.m. while Members erected yet another outstanding display of first class models. Since most Members have added considerably to their model building experience, not to mention Meccano parts, since the Guild was formed two and half years ago, the standards of model building seem to get higher at each Meeting. While many exhibits were in the super model plus, category, others were made with a handful of parts showing great skill and ingenuity on the part of the builder concerned.

On this occasion, the Guild was honoured with a visit from Doug McHard, Marketing Manager of Meccano Ltd., Chris Jelley (Spanner of Meccano Magazine) and Dave Rothwell, the Magazine Editor. Bert Love opened the Meeting with a short address of welcome to all those attending and gave a brief outline of one or two additions to the published programme which would be of great interest to the Members.

At this stage, Esmond Roden, the Guild's President, gave a special welcome to the Official guests and said how delighted the Membership was in having Doug McHard as its Vice-President, creating as it did, a strong and valuable mutual link with the Liverpool organisation. It was with great pleasure that he now performed the ceremony of inaugurating the new Vice-President. Doug McHard was then duly invested with a magnificent gold, silver and best quality enamel Chain of Office, made entirely from Meccano Sprocket Chain, brass Wheel Discs and other Meccano 'gems'. As the new Vice-President, Doug made a short speech thanking the Guild for the Honour which they had bestowed on him which he sincerely appreciated. He spoke of the interest which Meccano Ltd., had in the formation, progress and co-operation of the Guild in so many ways which the Company had found very useful and he hoped that the mutual exchange of ideas and help would continue in the future as he felt sure it would. Ernie Chandler, the Guild's Chairman, then replied to the Vice President's speech, thanking him for giving up very valuable time from an engagement schedule which was always very tightly packed with the commitments expected of a Marketing Manager with so much territory to cover. The Guild very much appreciated the effort.

The business Meeting continued with the Treasurer's Statement. Roger Lloyd kept this very brief by simply saying that the Guild had sufficient cash in hand for current expenditure and should break even at the end of the financial year in September. The date of the next Meeting was then arranged provisionally for the last Saturday of September or the first Saturday in October, the Chairman to confirm with Bert Love as soon as possible, according to bookings outstanding for the Hall.

Under Any Other Business, Doug McHard gave a very full account of the new additions to the Meccano system and demonstrated the new electronics Set fitted to a simple self-operating matchbox dispenser controlled by the photo cell and relay components. Packaging for the new Outfits was shown and a set of all coloured Instruction Manuals for the range of outfits were put on display for the Guild's inspection.

The new Large Toothed Quadrants and Plastic Gear wheel were also shown to the Guild. The Vice-President gave an outline of the general work involved in promoting Meccano and reasons for the introduction of new parts and packaging. He then very kindly answered a series of questions from the Members on various Meccano topics and was warmly thanked by the Secretary for his very valuable contribution to the Meeting. This period of the afternoon had proved so interesting and informative that a substantial amount of time had been consumed at this stage so that, although a number of Members had indicated their willingness to speak on their models, the Secretary suggested that the remaining time be allocated to one Member who's model could not justly be described or demonstrated in the short period normally allocated to a speaker. The model referred to was a Meccano Bandit or Fruit Machine built by **Phil Ashworth**. Its performance and construction were of such a sophisticated nature that it merited special attention and time for demonstration.

The model was very close to prototype in size and appearance, being completely enclosed with Flexible and Strip Plates and the whole front panel was removable for servicing the internal mechanisms. The penny slot mechanism was attached inside the front panel, gravity feed giving mechanical linkage by the penny, bridging tripping slots causing a tilt which discharged the penny into the jackpot store and switched on the mechanism. Locking lugs on the front panel provided mechanical/ electro contact points to complete the circuits. Module construction was employed throughout, facilitating immediate withdrawal of mechanical blocks for servicing or demonstrations. The 'fruit' wheels were made from twin Hub Discs, paired off back to back carrying traditional transfer symbols and were driven via differential shafts from linked gear boxes, one leg of which had an eccentric phase altering movement to the 'cage' of one of the combining differentials. This gave semi random operation over 19 operations of the starting handle further enhanced by random freewheeling of the fruit wheels after power drive is shut off. Positive stopping positions of the wheels were provided by spring loaded wheel dogs which engaged spokes of the Hub Discs in sequence. Register pistons, geared to each fruit wheel were mounted in a vertical bank to engage trip brackets in the 'pay-out' ladder mechanism, - the fall of the ladder - and hence the amount paid out, depending on the critical positions of the register pistons, maximum pay out occurring when all three pistons were retracted for a

100% line up of winning fruit.

A further module carried the jackpot reservoir and pay-out slide which was capable of selecting the correct amount according to a list attached to the front of the machine showing various winning combinations. The drawer was spring loaded and was discharged by pinch rollers mounted on Face Plates geared together so that in revolving, the Faceplates carried the pinch rollers through opposing arcs during which the pay-out slide was engaged, drawn across the discharge chute and released to return by its own springs. On the completion of a cycle, a trip lever was returned to the vertical position on the penny slot mechanism to allow a further coin to be inserted. The 'ladder' pay-out mechanism acted as a mechanical information transmitter between the upper module containing the fruit wheels and register pistons and the lower module containing the pay-out slide mechanism. After a 'win', the ladder was automatically recycled to its highest position. Phil illustrated his model with coloured mechanical/flow diagrams and then invited the Members to operate the machine during the afternoon, making sure that the original pile of pennies supplied only were used so that no element of gambling would be introduced into Guild activities. The model was hailed with great enthusiasm by the Members who gave Phil a well-earned round of applause.

Free roaming among the model builders then took place for half an hour or so until tea was served. The Guild tucked in to a variety of rolls, sandwiches, cakes and sausage rolls with lashings of tea and then the members returned to their models to set them in motion. **Phil Bradley** showed an excellent model of an L.N.E.R. railway breakdown crane, driven by live steam and complete with screw operated outrigger beams, match trucks with locking gear and cradle waggon for the crane jib in the stowed position. The model covered more than five feet in overall length and was very well detailed, all movements working very smoothly from the power plant which was the current Meccano Steam Engine. A flush turntable, running in a 6½" ring of Steel Balls carried the superstructure which was ballasted with spare Worm Wheels and other suitable Meccano items. The model was neatly mounted on a six foot section of built up track.

Pat Brigg's improved version of the S.M.L. Grandfather Clock was fitted with a seconds hand movement, anti-friction bearings and built up dial. Running time was three times longer than the original design with a lesser weight,- quite an achievement when the high friction and inertia of Meccano parts and bearings are considered.

An attractive version of the early railway engine "The Lion", was very neatly modelled by **Ernie Chandler** to a substantial scale, the traditional red & green parts putting into very smart livery. The coupled drive wheels were powered by an electric motor which gave great realism to the motion on its demonstration plinth.

Ralph Clark showed his very well proportioned narrow gauge tank loco while **Brian Edwards** had for his model a replica of the unusual monorail steam locomotive with twin boilers of the Listowel and BallyBunion Railways. Detail was excellent throughout and the locomotive ran very realistically over its short length of monorail track.

Ron Fail brought a simple but effective four speed gear-box employing the 4:1, 3:1, 2:1, and 1:1 ratios commonly available from the four standard combinations of gear wheels and Pinions but an 'H' gate gear selector was provided and sliding dog clutches combined with the use of the Keyway rod were well exploited in this simple demonstration gearbox. Only one lay shaft was provided, as in normal practice, this being of the non-sliding type.

Jim Gamble produced a very neat 'economy' Beam Engine driven in a most satisfactory manner by a Magic Motor. Working centrifugal governor and water pump motions were included. Jim also brought an all nickel version of the Supermodel Horizontal Steam Engine, driven by the famous 'Trinity' Meccano Clockwork Motor.

David Goodman built the Standard Mechanisms Epicyclic Gear-Box which ran smoothly in conjunction with a model windpump driven from a dealer's mains motor.

Leslie Dougal's fine travelling clock was a masterpiece of miniaturisation coupled with aesthetic quality of construction which would grace any jeweller's window display. Contained in a 4" cube, the clock was accurately synchronised with perhaps the smallest synchronous motor yet devised from Meccano parts and was fitted with a fine dial and slim hands together with a seconds hand dial. Standard Meccano parts were used throughout, lengths of new bright Spring Cord providing a pair of hands of elegant appearance in conjunction with a card dial from an Elektrikit Outfit suitable inscribed with Indian ink and Letraset figures.

Bert Halliday brought along his prize-winning mini Showman's Road Locomotive scaled between front and rear wheels of paired Wheel Flanges and large Contrate Wheels with an overall length of some six or seven inches. Simple working motions and steering were incorporated in the model. Doug McHard very kindly made the official presentation of the Meccano Cup to Bert as his first duty on being invested as Vice-President.

Clive Hine then showed a really spectacular Fairground model of a roundabout with 24 gallopers comprising horses and ostriches neatly modelled with hemp fibre tails. Galloping motions were authentically reproduced with rise and fall mechanism, correctly phased and driven from a central crown and bevel drive. Overall pivoting was as in the prototype from the central truck mast, no lower turntable mechanism being incorporated. The model was some three feet in diameter and fitted with a mass of low voltage coloured lamps giving excellent and traditional lighting to all the features incorporated in the model. This included

the steam engine drive and steam organ, given most realistic motion from hidden electric motors, all mechanisms being active with Meccano musicians busily banging drums etc. in the pit of the 'steam' organ. As background music was piped into the model from a tape recorder the final illusion of realism was added to the strains of Susa's famous marches beloved of all Fairground organ enthusiasts.

Alf Hindmarsh excelled himself yet again with a striking reproduction on a grand scale of the American Civil War period locomotive 'The General'. Modelling the contours of this early woodburner was a real challenge to the modeller in view of the conical aspects of plate work in shaping the boiler with tapered shoulders and the funnel shape of the huge smoke stack. Alf spent many hours seeking perfection and smooth lines in these details together with brass dome ornamentation, massive headlamp and warning bell mounted on the boiler. The cowcatcher was very well constructed in a low sweeping pyramid form and motion was provided to all wheels with chain drive internally from an electric motor which gave realistic motion to the pistons and valve gear.

Eric Jenkins showed originality and expert modelling in his veteran 1905 Brushmobile Car and the Gironde Dockyard 250 ton Floating Crane of pre-war Meccano Magazine Fame. Working from the photograph of the original, Eric produced a beautiful replica some five feet high with all movements of the prototype faithfully reproduced. These included main and auxiliary hoists adjustable on jib trolley, main jib luffing by twin screw operation; a novel reinforcing being supplied by Socket Couplings with their running grooves guided by vertical $11\frac{1}{2}$ " Axle Rods. The machinery house was neatly enclosed in compact form and the whole superstructure was carried on a short circular lattice tower bolted to a sturdy hexagonal pontoon platform. The Brushmobile car had excellent vintage detail on the bodywork, bonnet, radiator, suspension, wheels and transmission with genuine overall veteran appearance. In addition, Eric brought a complete set of tracked running gear for one side of a model excavator. Track plates were of $2\frac{1}{2}$ " Flat Girders and sprocket drive came from 2" Pulleys sandwiching $2\frac{1}{2}$ " Narrow Strips. Great care had been taken with alignment and tension so that the whole track laying assembly rolled along very smoothly at a touch.

Stephen Lacey completed his unusual 19th Century Ploughing Engine with the external winding drum and peg teeth drive. This was fitted with towing hawser and return winch drum towing a double ended multi share plough. Other unusual features reproduced from the prototype were the open platform for the driver and fly-wheel running at the front of the engine at right angles to the axis of the boiler. This was a difficult model both from the structural and gearing point of view and Stephen's persistence in tackling the various problems involved was well rewarded.

Roger Lloyd showed the No. 10 Set Dump Shovel turned out as usual with a neat finish and carefully selected parts.

Bert Love demonstrated an advanced roller bearing utilising the new Rack Segments, driven by a Powerdrive Unit at various speeds to show the smooth running properties of the new segments when fitted to a self-centring turntable.

Peter Matthews brought his priceless collection of early dealers' literature, Mechanics Made Easy Outfits and some interesting mechanical exhibits. **David Owst** showed a section of his rolling bridge model of the bascule type, beautifully balanced with a rolling motion and very suitable for the new Quadrant or peg teeth gearing samples of which were shown in various other members' models. **Alan Partridge** brought a simple link motion ingeniously contrived from opposing couplings to produce centreless crank drive.

Dennis Perkins brought two excellent models of a Meccano Loom and a freelance-traction engine. A great deal of patience is required both in the construction and threading of a Meccano loom and to produce one which will weave satisfactorily using a built up shuttle is a rare achievement which Dennis accomplished. His freelance Traction Engine or Showman's Road Locomotive was beautifully built with excellent detail and mechanical realism throughout, polished brass work being very well exploited in adding the finishing touches.

Esmond Roden brought a whole battery of models not least of which was a genuine Meccano candlestick, built entirely of standard parts to a simple but elegant design. His principal model was a 1935 double decker tram beautifully turned out in the striking contrast of yellow and green livery. It was complete with the following operating features,- handbrake, warning gong, illuminated destination blinds, safety collision racks and embryo magnetic brakes, and controller. The tram was fitted with seating throughout, strap hanging and spiral stairs. Esmond also showed a neat Dutch bogie inter urban tram complete with passenger carrying 'toast rack' trailer for the same.

David Whitmore also turned out a set of show class models in immaculately matched coloured parts, many of which were home sprayed in traditional Meccano colours to a professional standard. His 'museum' model beam engine, based on a pattern more than 100 years old was a very faithful reproduction of a prototype complete with Stephenson's parallel link motion, enclosed girder beam and parallelogram valve-gear. The base was a built up slope sided plinth with very neat strip work in front and rear of the model. A second engine was a single cylinder vertical steam engine with eccentric valve gear built to the same high standards as the beam engine with excellent detail of form and motion. David also brought his improved version of the four wheeled Tractor in which his patent sliding-dog gear-box was installed.

Paul Brecknell showed his six wheeler lorry chassis with modified Phil Ashworth gearbox and coil

spring front suspension. Particular attention had been given to strong chassis members as in prototype Building.

Gerald Hutton, one of the Guild's totally blind also turned out a neat six wheeler chassis with twin differentials, clutch, gear-box, detailed engine and exhaust system which was a most remarkable effort under the circumstances.

Although not able to attend, Gerald's model had kindly been brought along by Phil Bradley.

At 5.30 p.m, Doug McHard gave a short outline of a 16 m.m. film which he had brought to the Meeting illustrating a remarkable collection of Meccano models showing basic engineering principles and advanced models which were housed Eindhoven in Holland at a museum. The film was projected for the Members and showed a series of modules demonstrating a series of pulley, crank and gear drives of increasing complexity which was followed by a designing machine of infinite scope and random pattern sequencing. The film concluded with a demonstration of a picture facsimile transmitter and receiver, built entirely of Meccano parts which would scan a given photograph and reproduce a black and white image of the original on the Meccano 'receiver'. Photo cells and other electric components were non-standard parts and the principle problem was in synchronising the transmitter and receiver which was done by electronic feedback circuits. The film illustrated very well, the potential of the Meccano system in coping with anything from the elementary to the sophisticated, the use of modern colours and Meccano (in preference to continental construction systems) proving both encouraging and up to date.

Free roaming among the model builders continued and the Secretary set up his camera which was kept fully occupied for the next two hours in recording a large number of the Guild's models. The spare part trays were put out for raking and yet another brew up in the canteen was prepared. The whirring of motors, the puff of steam engines with the delightful smell of steamy Meths permeated the atmosphere and the strains of Susa, and flashing lights continued as the Members steeped themselves in rapt admiration for their fellow enthusiasts' creations. By 8 p.m., the larger of the models were dismantled into manageable sections and stowed into cars ready for the long trek home by many of the Members. Eventually the camera gear was packed away, the extension leads gathered up, the cine projector put in its case, the Meccano trays collected and a sheaf of papers and reminders stuck into the Secretary's brief-case as Ernie Chandler and Clive Hine wielded brooms to put the hall back in order for the morrow. Thus ended another exhausting but thoroughly enjoyable Guild Meeting.

Report of the 7th Guild Meeting on 26th September 1970

The 7th Meeting of the Midlands Meccano Guild took place on Saturday, September 26th, 1970, at the St. John. Ambulance Brigade Hall, Western Road, Stratford on Avon.

Members from all over the country ranging from Dundee in the North to Liss and Chatham in the South converged on the roads to Stratford for their twice yearly meeting of Meccano Constructors and Enthusiasts.

The doors of the Hall were opened for 1.30 p.m. to allow Members with large and complex models to set them up ready for demonstration and discussion. The car park was soon full of various vehicles from which an outstanding range of Meccano models were disgorged, a number of which required two man handling to get them carried into the hall. Greetings were exchanged all round as Members renewed acquaintances among the more distant travellers whom they had not met in the previous six months. Canteen staff in the shape of Members' wives were in action from the word go and by 2 p.m., steaming cups of tea with an assortment of biscuits were handed round to prepare everyone for the enjoyable rigours of the Meeting. By ten minutes past two the Secretary had called the Members to take their places at the stage end of the Hall and when all were seated, Bert Love introduced the long distance travellers attending for their first occasion and the new Members recently recruited. James and Allan Grady had travelled all the way from Dundee by train throughout the previous night and were to be congratulated on their marathon effort to attend their first Guild Meeting from such a distance.

George Kilmister of Hall Green, Birmingham, Hugh Henry of Rochester, Kent, Eric (George) Foard of Chatham and Michael Martin of Ilford, Essex were then introduced and this was followed by a brief address of welcome from the Chairman, Ernie Chandler.

Shortly after 2.20 p.m., the demonstration talks began and these were introduced by the Secretary who asked **Stephen Lacey** to demonstrate his compact or mini 'Big Dipper' fairground switch-back railway. This was a demonstration model built from silver and yellow parts in a cuboid of Angle Girders some $24\frac{1}{2}$ " x 18" square into which Stephen had packed all the essentials of a fairground Dipper. The lifting mechanism for the rail cars was in the form of a chain hoist up an inclined plane, Sprocket Chain and obsolete Dredger Buckets being used to engage and release the rail car. Sharp radius edge on curves were constructed from

Perforated Strips and the run included variations in track level. Return to start and pick-up were automatic. In constructing such a model the essential requirements are as follows;- (1) A positive hoist and discharge (2) Sharp radius curves (3) Perfect 'road' holding by the rail cars (4) Undulating track to give true rise and fall characteristics (5) Positive gravity return to extreme end of track for re-cycling. Stephen was congratulated for having solved all of these requirements after months of experimentation.

One of the 'two man' jobs was next to appear in the shape of an outstanding model of a Foden 12 wheeled Giant Lorry Mounted Crane. This was basically the work of **Eric Taylor** who had handed on the completion of the model to **Dennis Perkins** and the presentation was thus a joint effort. Some five feet long with a chassis 9" wide, the model was most impressive both in appearance and performance, the realisation of almost two year's work. Particular attention had been given to prototype chassis construction to include wheel mounting, tandem steering, suspension, foot brakes to all wheels, hand brakes to rear wheels, authentic transmission through heavy duty clutch, five speed gear box with reverse into a secondary reduction box giving ten speeds overall forward and two in reverse. A non-standard, all enclosed plastic cased 12 volt D.C. motor was used for the transmission but all crane mechanisms were driven by standard Powerdrive Units. The jib was constructed of Angle Girders with Narrow Strip lattice work to give good proportions and was fitted with a jack-knife jib-head which could be folded for easy stowage in transit and was capable of rapid replacement by hinge and pin method on site. The jib 'A' frames were self-erecting via slide bars at the rear of the large control cab, all ropework being rove in heavy weight cod line (from the fishing port of Hull through Len Wright!) . Although a short working jib was fitted for demonstration purposes, if the full scale job had been fitted to the model, plus flying jib, it would have exceeded 20 feet by a substantial margin. The crane revolved on an all ball bearing built up from Circular Strips, Circular Plates and Meccano $\frac{3}{8}$ " Steel Balls. The slewing motor was located under the chassis while the hoist and luffing drums and motors were built into the cab unit. Driver's cab, lights, number plates, outrigger beams etc. were included in this marvellous giant working model.

Bob Faulkner brought his Block Setting Crane for a second showing by request as he had suffered gear box trouble at the last Meeting and his model refused to work. This time it functioned perfectly. The crane is a development of S.M.L. 4 with modifications to tower, boom and gear box construction. Special attention was given to the structure of a rugged tower with additional Angle Girder bracing and slip rings built into Hub Discs gave 360° rotation of the boom with continuous power feed to the travelling bogies. All movements were driven from a pre-war 20 volt Meccano motor which ran continuously, various drives with individual reversing gear being taken off by geared shafts. Fiddlers gear was fitted into an oak block simulating prototype hoisting gear.

David Whitmore showed the stripped down version of his tractor gear box with the special dog slides used in his constant mesh gearing. This was passed round to individual Members for inspection. David also demonstrated an advanced use of the Meccano Photo Cell. This unit is normally considered to be an 'on' or 'off' switch but David showed that the cell was also sensitive to light intensity to a point where it could

differentiate between translucent filters of only minimal density differences. The filters employed comprised glass slides with one and two thicknesses of tissue paper, respectively. David showed that by regulating the voltage supply and setting it to a pre-determined level, one filter would pass sufficient light to hold the cell 'on' while the second filter would shut off the same cell for the same applied voltage but would switch it on again with a slight increase in voltage to the lamp supply. David thus demonstrated, very convincingly by a bell circuit attached to the cell, that the Meccano P.E.C. is capable of quantitative operation and discrimination.

Phil Bradley demonstrated another large crane of unusual design, this being based on a Naval Dockyard Crane supplied to an American fitting-out dock at the beginning of the century. The unique feature of this model was a cantilever gantry fitted with two sets of hoisting crabs, the whole overhang portion of the gantry being capable of luffing. This enabled the crane to mount heavy gun turrets and barbettes at deck level but also permitted it to be elevated like Tower Bridge to give berthing clearance to high masted warships etc. In addition, a light duty hoist was mounted at the extreme end of the cantilever gantry so that high level work like mast topping could be carried out when the gantry was elevated. The two gantry crabs could work independently, one at low power high speed and one at high power, low speed. They could also be coupled together for heavy gun lifts by employing a compensating beam shackled to the two hoists. All movements of the prototype, including quayside travel, were fitted to the model which was driven by three Powerdrive Units. The design of the prototype was an economy in the light of the expense and difficulty of making really heavy duty large diameter roller bearings at the time.

By contrast with the giant models dominating the platform, **Brian Edwards** showed a very neat model of a current Triumph twin cylinder machine measuring something less than 9 inches long and 6 inches high. This fantastically detailed model had a vertically mounted and concealed Powerdrive Unit which is no mean feat when it comes to hiding this motor inside the flexible plate work of the saddle tank and the moulding details of the motor cycle cylinders. Working chain drive to the rear wheel was included together with a full complement of handle-bar controls, hand levers and Bowden cable leads to carburettors and brake drums being provided. The headlamp was neatly moulded into the streamlined forward fairing and the neat appearance was quite striking.

Eric Jenkins showed the undercarriage of a typical crawler excavator, track design being based on earlier work by Eric Taylor. The turntable featured the use of $\frac{1}{2}$ " Plastic Pulleys which give a very smooth revolving table. Steering was applied to either crawler track from the revolving platform. This model should be completed for the March Meeting. **Stephen Sawaryn** displayed an extremely neat high jib mobile crane on crawler tracks, great realism being obtained with simple track plates. The high jib was quite elegantly constructed from a series of $11\frac{1}{2}$ " Axle Rods secured by Couplings, thus avoiding the top heavy construction often found in Meccano cranes with Angle Girder jib construction. Low contour cab details with sloping rear were very neatly modelled.

Phil Ashworth gave a second showing of his Meccano One-armed Bandit or fruit machine with several modifications for improved drum drive and reliable switching to pay-out mechanism. Gear drive to each twin Hub Disc forming the 'fruit' wheels was replaced with friction drive from Rubber Rings on $1\frac{1}{2}$ " Pulleys brought into contact with the rim of the fruit wheels from below and behind by cam operated levers. Random start/finish control was achieved by vari-phase differential drive from the Powerdrive Unit operating the drums. Position sensing pistons engaged a trip ladder and permitted this to fall a certain number of 'rungs' on any of the winning combinations of bells and fruit. The model was coin operate with the usual Bandit side lever making internal contacts after the penny was inserted in the slot. A second Powerdrive Unit with powerful grabbing mechanism was triggered to open the pay-out slide by the ladder mechanism. The Meccano Relay had been wired into this motor circuit to improve contact performance on the 'ladder' gear. Construction and decoration of the casing added much to the general realism of the model.

Ernie Chandler then showed a striking and unusual model, about half life size or more of an 'Atco' 54, Motor Mower for bowling greens and cricket pitches, complete with trailing roller and driver's seat. Ernie is to be congratulated on tackling such an unusual model with such good results in appearance and motion.

Several problems were encountered in building flat faced rollers, knife cylinder and split trailing roller but Ernie had once again tackled the job in a workmanlike manner with excellent results. Ernie's model has since been placed in a shop window in Stratford.

David Owst demonstrated his large model of a Rolling Bascule Bridge which was some 3' 3" long, 2' 1" wide and just over a foot high in the lowered position. The rolling quadrants of the bridge were very smoothly modelled and presented $12\frac{1}{2}$ " Perforated strips in a perfect curve to roll back on flat channels fitted with several protruding shanks of Threaded Pins to guarantee a positive and even grip on both sides of the bridge. The main lifting motor was a Powerdrive unit and the bascule rams were Pinion driven long Rack Strips pivot jointed to the quadrants on either side. The control box was programmed to operate safety devices in order and the 5 lever console was fitted with a 'dead man's handle'. Then followed the warning bell, flashing traffic lights, traffic gates and main lift, - all in correct order and all of them working perfectly. This was a very neat, well constructed model with a most attractive appearance achieved by careful choice of various colours of Meccano Plates, Strips etc.

This concluded the talks and demonstrations and Members were then free to circulate among the

remainder of the models on show in the Hall. Tickets were then on sale for admission and afternoon tea at the inclusive price of 5/-. At 4.30, a delicious assortment of sandwiches, rolls, sausage rolls, cakes etc. was served up by the canteen volunteers with lashings of tea to quench the thirsty work of the afternoon's session. There was plenty to eat for all and the Meccano chat flowed freely as more Members re-made old acquaintances and pored over their fellow enthusiast's work.

Many more excellent models were on display. These included **Clive Hine's** Fairground Gallopers with the improved centre column drive and fully detailed twin cylinder steam engine and fairground organ, all incorporated to a neat scale in the model. The horses were fitted 3 abreast with correctly phased rise and fall and the whole model was fitted with more than 100 low voltage coloured lamps. Traditional fairground music was fed to the model by a record player under the demonstration table.

Undoubtedly the most outstanding of the stationary models was that of a massive three cylinder triple expansion marine engine beautifully built by **Len Wright** of Hull. This was scaled $\frac{3}{4}$ " to 1 foot. Two immense oil fired Scotch drum boilers of 260 lb. per sq. in. were modelled from Flexible Plates, brassware etc. in the minutest detail. Twin steam feed pipes made from Sleeve pieces beautifully 'flanged' in long sections by rubber rings fed directly to the vertical marine engine, the three cylinders scaled to show 27" High, 48" Medium and 72" Low pressure arrangement of the prototype. The High Pressure crosshead was fitted with gear for driving the exhaust air pump and bilge and feed water pumps through suitable linkage. The model was really massive and built on a baseboard some 5' x 3' and required two man handling. Great care had been taken with the construction to obtain striking realism, Fine details such as pressure gauges, control valves; reversing slides, big ends, eccentrics, crank webs and electric generator were all faithfully reproduced. Hand railings were extensively fitted as were catwalks authentically modelled with barwork for foot treads and the entire length of the model was fitted to an authentic section double bottom of a ship's hull, the girder work and plate work of which would grace any shipbuilder's yard. Unfortunately Len was not able to be with us on this occasion and although his model is to go on show in a Hull dealer's window, we sincerely hope that it will not suffer the ravages of too much dust to spoil its pristine appearance so that Len can come back with this beautiful marine engine next March and tell us more about it. The fact that this huge model ran perfectly and continuously throughout the Meeting is a fantastic tribute to the Powerdrive motor which drove every one of its multiple moving parts.

Pat Briggs showed an exquisite pair of Cromwellian clocks built to 17th century lines with his usual extraordinary skill in getting Meccano brassware to simulate the rich period ornamentation. Dial work was beautifully done to simulate a central feature of etched gold. One clock was spring driven,- standard Meccano Clockwork Motor while the other was weight driven.

Tom Masters struggled all the way from Gateshead, Co. Durham by bus}, nursing a huge box containing a large scale Showman's Road Locomotive. This was an improved design of the Meccano Dealers' model and certainly looked far more like a genuine model. Very neatly built in red & green, Foster type dynamo bracket was fitted and the coal bunker had been beautifully modelled to the traditional curved bunker of the period. Tom made good use of the 6" Pulley, suitably masked, to drive the dynamo with a flat belt very successfully. Tom is to be congratulated on his long journey and enthusiasm. .

Bert Shaw, who was also introduced as a new Member at the beginning of the afternoon, showed a neat tower crane in silver and yellow based on photographs of the prototype in the Belfast yard of H. & M. Very neat modelling of double splayed tower legs was achieved with a use of Flexible and Triangular Plates. Movement to travelling bogies and all crane mechanisms was by several P.D. Units.

Esmond Roden showed a study in contrast of Windmill pumps made from contemporary Meccano and Marklin Outfits which showed the basic identical roots of the two systems and the modifications in details over the years. Outfit numbers, contents and price were comparable.

Paul Brecknell showed a flawless model of a Rolls Royce veteran Silver Cloud (or Silver Ghost?) in unblemished red & green parts. Paul very kindly brought our local blind member, **John Lorimer**, to the Meeting and John brought his own work in the form of an industrial planing machine in a near complete state. This was nicely modelled and fitted with quick return motion. Tool slides and control gear are in the process of being fitted.

Jim Gamble showed his own S.M.L. 19a in red & green with original Meccano Steam Engine together with various other historical Meccano Exhibits including a mid 30's version of the No. 2 Motor Car Constructor Outfit.

Bert Love showed an earlier version of the same car in different colour schemes and he also showed the 'Dive Bomber' fairground machine with unique 'square' bearing.

Roger Lloyd showed yet a third version of the same Meccano Motor Car yet all three had differences in details, colour schemes etc., illustrating yet again just a few of the hundreds of anomalies and modifications introduced by Liverpool over the years.

Alf Hindmarsh, whom the Guild were delighted to welcome back after so much illness was in very good form and brought a collection of early motors and other relics of great interest. **David Goodman** demonstrated a very neat 'jackshaft' drive to a simple 'O' gauge locomotive which was little more than the Meccano Clockwork Motor fitted with flange wheels and connecting rods. The Jackshaft drive came down vertically, however, on either side, rather in the manner of the old 'Puffing Billies' of early railway fame.

David showed how by careful adjustment, four wheel drive was possible.

James and Allan Grady showed a remarkable collection of small mechanisms based on 1" wheels and tyres, many of which have been published by them in M.M.

Bert Halliday showed two reliable and neat Meccano designers which ran continuously throughout the Meeting. These were neatly scaled down and improved versions of the early S.M.L. Meccanograph. Bert also showed two very neat Circus waggons complete with 'iron bars' and plastic animals.

George Kilmister showed a planetary gear box for an astronomical clock. This was up Pat Brigg's street and the two of them were able to compare notes.

Michael Martin, recruited only in the previous week had been able to knock up a gantry tower with heavy duty roller race as the basis of a large revolving crane.

Peter Matthews brought a substantial slice of Meccano literature with him, much of which is unique together with some of the very earliest parts and manuals in the system. He also showed some mini models which had been prepared for his recent exhibition.

David Whitmore demonstrated a beautiful period steam engine in a range of Meccano parts which exploited red, green, silver, yellow, black and brass pieces in an eye catching assembly. This was a large, baseplate model, with twin horizontal cylinders and valve pumps reminiscent of the early Industrial Revolution period. It ran beautifully and would grace the Science Museum Engineering stand any day. The model was driven by a concealed P.D.U.

Some Member (possibly **Bill Winter**) built a neat gantry crane with electromagnetic grab but this was just one of many exhibits which were distributed round the hall to give a splendid panorama to the viewer. Once again, the standard of building all round was outstanding to a point in some cases of staggering and the comments passed by the Members showed how delighted they were with the Meeting.

8th Guild Meeting held at Stratford on Avon 27th March 1971

Once again the weather Gods were very kind to the Guild in providing a rain free day for their 8th Meeting in the St. John Ambulance hall, Stratford-on-Avon.

Vehicles were already unloading by 1.30 p.m. and the table space in the Hall was soon taken up with the models. By 2 p.m. the tea and biscuits were being served from the hatch and members renewed acquaintances before the formalities began. At 2 p.m. the full quota of expected members had not arrived but a start was made at ten minutes past the hour when the Secretary introduced two new members to the Guild. Ian Perrins, who joined the Guild last October, was making his first visit, with his wife Dorothy all the way from Ramsbottom. Lancs, David Guillaume of Alcester, who had been newly recruited from the Midlands was one of the early arrivals with an improved version of the M.M. Showman's Road Locomotive. Esmond Roden then reported on the breakdown of Ralph Clark, "somewhere in the Cotswolds" and Dolly Faulkner? who had arrived with friends to be on time for canteen duty reported that her husband Bob, was still trying to get his own car started back in Abingdon!

However, the meeting proceeded by the Hon. Sec. bringing a number of articles of interest out of his 'pandora's box' and explaining them to the members. The first was something by way of a shock in the shape of the new Meccano Price Lists for February 1971. Bert read out one or two items as follows.

Assuming a payment of £1 for delivery, the No. 10 Outfit now costs a cool ninety quid! (£90 Sterling for the benefit of overseas' readers although the price of this set in their own countries will vary somewhat from U.K. prices,) The 24 $\frac{1}{2}$ " Angle Girder now costs 4/5 or 22p while a pair of matching Bevel Gears? 30a and 30c costs 13/- or 65p. These prices are still cheaper than some overseas rates but this is no comfort to U.K. consumers. A Mechanisms Outfit is £3 9s or £3.45 and the E15R Motor is almost £5! (99/- or £4.95) having passed on this depressing news, the Hon. Sec. went on to show various other items. Of particular interest were a set of replica obsolete Meccano parts manufactured by Bill Inglis of Blackburn, Australia. These parts just arrived by Airmail in the last post before the meeting and they were very much admired for quality of manufacture. A complete ring of 119's (Channel Segments) plus the Pointer and the grease cup were shown. This latter was quite indistinguishable from an original and the Pointer was completely authentic with its undersized boss, eccentrically mounted and fitted with a cheese headed 6BA Set Screw. The purpose of the eccentrically mounted boss is not easily explained, - the suggestion that this would off-set the pointer so that it will return to an upright position after a reading shows no respect for the high friction bearings typical of Meccano modelling of yesteryear! However, all agreed that the replicas - are excellent and further comment will appear later in the Report under Market Corner.

Bert continued to empty his Pandora's Box showing the galley proofs of his two Meccano books in the process. (Actually I should be getting on with the proof reading instead of this Report but it is as well that I do this present writing while memories are still fresh in the mind,) A sample of the latest litho copy of the Meccano publication for 1938 - 1939, "MECCANO Quality Gifts for Boys" by Acorn Models of Swansea was then shown and voted to be a first class reproduction even better than the 1937 equivalent by the same firm. A few brand new Meccano Sets in red and green concluded the box ceremony and then the Hon. Sec. called upon the Guild members who had volunteered to speak on their models to come forward in the batting order set out in the Bulletin for the meeting.

Ron Fail was first up with a clock escape mechanism in which he had reproduced the hair spring motion of a pocket watch in 100% Meccano Standard parts in sufficiently large scale to illustrate all movements very clearly. The balance wheel was a Hub Disc mounted on an Electrical Pivot Rod between a pair of special Recessed Pivot Bolts and, just as in the balance wheel of a fine watch, the rim of the balance was fitted with adjusting screws to regulate the movement. The lever escapement was incorporated with a Faceplate and Fishplate escape-wheel, motion to the escape wheel being delivered by three Tension Springs in cascade, rewound at frequent intervals by a Powerdrive Motor triggered by trip over switches as the Springs contracted. Power was supplied by dry cells in the Battery-Box and a clock dial with hands was fitted, the whole piece keeping good time.

Esmond Roden followed next with an hilarious exhibit of a penny in the slot "Haunted House Theatre". A neat and substantial proscenium, surrounded by decorated Strip Plating set the scene in which the unsuspecting Meccanoman 'victim' lies dormant in a brass bedstead under a multi-colour quilted bedspread neatly modelled in flat and curved 2 $\frac{1}{2}$ " square Flexible plates. On inserting the penny, the horrified Meccanoman was subjected to a nightmare or swinging electric lights, giant spiders and snakes descending from the ceiling and the emergence of skeletons, puppet heads and other horrors from walls, floor and wardrobes. This was an excellent example of novel and entertaining Meccano modelling which nevertheless employed sound mechanical principles and module building of gear-boxes etc.

Phil Ashworth followed this with yet another electro/mechanical marvel in the shape of a photocell shooting gallery in which the marksman, on payment of one new penny had ten shots at the target lamps. These were scattered in a frontal pattern at a range of about five feet from the photocell pistol which was universally mounted in swinging gimbals. The target lights, cheap pre-focus bulbs from a chain store, were set to switch on at random by a programme which had more than 300 combinations before repetition making it virtually impossible for the marksman to know exactly which bulb would light up next. Two seconds were given before one lamp extinguished and the next one lit up and the pistol barrel had to be

accurately aligned before a hit was registered on an indicator drum mounted to the right of the target wall. A second drum on the left hand side indicated the number of shots remaining, The control gear, as usual with Phil, was elegant and fairly comprehensive, good use being made of Bob Hutton's multi Spring Clip trigger mechanisms on rods between large Contrates and rods outside 1" Gear wheels to give the correct triggering.

The next member coming in to 'bat' was **David Whitmore** who showed a mechanical version of his previous colorimeter using the Meccano photo-cell as a sensitive indicator for light densities, On this occasion the light for operating the cell was motorised to approach the cell until sufficient light was transmitted through the sample filter to reverse the contacts on the relay which in turn reversed the motor carrying the lamp drive by means of a 'centre-leg' reversing circuit using twin or centre tapped batteries. By varying the light filter (various densities of tissue paper layers) the lamp could be controlled to halt or reverse at a critical point on its track. Calibration of this track would then make the instrument into a light measuring or filter measuring device. David's model was neatly assembled in a pleasing combination of colours, a fuller exposition of which appears later in the Report.

Clive Hine, our famous Fairground modeller, then showed his excellent Paratrooper machine. Fitted with eight gay parachutes on universal suspension mounts and over a hundred miniature coloured lamps, the giant arms rotated in a plane set at 45° to the vertical pillar supporting the pivot head, This was made from a 3½" Ball-Race unit set on a 45° Girder frame assembly. The whole model was mounted on a substantial base of Angle girders and plating and was driven by a Fracmo motor.

Phil Bradley, famous for large scale models, left his latest giant crane at home but brought an excellent model of an A.E.C, six wheeled "Mammoth Minor" tractor which was approx. one tenth scale size, The features included a double reduction rear axle, enabling the gear-box to run at a sensible speed and double reduction steering gear to give a realistic wheels turn for change of steering lock. The tilt cab of the prototype was included and in addition, the gear-box of Phil Ashworth design, was able to tilt with the cab after the simple removal of the propeller shaft,

Transport featured again with the next member when **Eric Jenkins** demonstrated his version of a Scammell tractor and Tank Transporter, This model was based on a design by Phil Bradley a couple of years ago but Phil was very pleased to see Eric's modifications, particularly in respect of the trailer construction, wheel arrangement and winching gear. Eric was able to make his modifications with the aid of original Scammell drawings which are, of course, a tremendous help with any scale modelling. The transporter was to similar dimensions or scale as that of Phil's A.E.C. Tractor,

At this stage **Bert Love** brought in a quickie by showing a pair of Guided Missile Frigates made with the current No. 6 and No. 5 Outfits . Each was fitted with a twin gun turret forward, radar gear, helicopter landing deck, secondary armament and a Seaslug or Seacat Guided Missile (take your own choice!) The No. 6 (last year's No. 5 } Outfit produced the Flotilla Leader while the No. 5 (last year's No. 4) had just enough parts in it to scrape up a fair copy of the Flotilla Leader but with rather less sophistication of weapon control, (typical of naval discrepancies!)

Ernie Chandler was next up with a huge model of a fairground "Waltzer", This was something of a magnum opus for Ernie, as on the advice of local expert he had taken the model to bits about 48 times. However, after a little adjustment to a wayward Grub Screw, the Waltzer waltzed merrily around, its passenger cars being given intermittent and frightening spins at various stages round the hill and dale course of the undulating track.

David Goodman then showed a commercial compressed air cylinder sufficiently compact to include in model equipment and spoke of its general applications. This topic arose out of correspondence and previous demonstrations on the use of surplus medical plastic syringes for hydraulic movements in Meccano modeller

Bert Shaw showed a very neat version of the Meccano Pontoon Crane suitably modified to take the new Large-toothed Rack Quadrant and also altered so that slewing and luffing ran at something like scale speed.

Alan Partridge then showed an intriguing Meccano Safe which was approximately a six inch cube with the staggering feature that the thing had no sign of any Nuts & Bolts showing on the outside, the whole thing being assembled from within. Alan challenged the membership to open the safe which was fitted with authentic looking combination dials.

Len Wright concluded the demonstrations for the afternoon by giving a masterly exposition on the motions of his Triple Expansion Marine Engine, which despite travelling to and from Hull a couple of times was in perfect balanced working condition. Len had not been able to attend the previous Guild meeting and we were very pleased to have the chance to learn what the fabulous levers, dials, pumps and valves were all about.

Many other excellent models were on display and these were set out on the side tables kindly erected by Ernie and Nigel Chandler. **Jim Gamble** brought a number of items including two vintage models. One was a Meccano Flyboats model in genuine original nickel finish parts driven very satisfactorily by the large Trinity Motor. His second model was a much modified Field Gun capable of firing Collars or Couplings by stacked Compression Springs, the mounting being fitted with ground plate and training mechanism with

elevation controls for the barrel.

Pat Briggs, the Guild clock specialist, had a musical box in a decorated case which played the Whittington chimes on eight bells. Although these were salvaged from former time pieces, all the mechanism, case and ornamentation were executed in standard parts in the usual elegant Briggs style.

Bill Winters showed a neat model of a Radar Tower with 360° sweep, rotation to the scanner being by Powerdrive motor.

Brian Edward's model of a short wheel-based Foden petrol tanker was very well proportioned and detailed. It was complete with tandem steering, twin diffs with overhead drive, four speed and reverse gear-box, full cab details, catwalks on the tanks and linked internal expanding brakes to the rear wheels. Vehicles were well represented at this meeting and **Paul Brecknell** gave a second showing of his vintage Rolls Silver Ghost.

John Lorimer showed his planing machine and thoroughly enjoyed running his fingers over the models to explore the mechanisms and to store many ideas in his mind for future model building. As John has to do all of his modelling 'in the dark', it is a great joy for him to be able to handle the work of his sighted friends. John is a most independent chap at exhibitions, - a veteran of many a conference who only needs pointing in the right direction, liberally fed and watered, to keep himself entertained and informed. He does, of course, look absolutely gorgeous in the Guild Photograph!

Wilf Bolland brought an improved version of the early Supermodel Gantry Crane and **David Whitmore's** beautiful Mill Engine was on show again by request. Various other models were brought along as extras by some members and there was a great variety of talent displayed in the models as a whole, as usual. New features, often of a staggering nature, continue to appear at each meeting, merely underlying the fact that there is no end to the versatility of our great hobby.

B.N.L.

Tickets were on sale for afternoon tea and entrance by 4.15 p.m. and by this time, Bob Faulkner's contingent had arrived from Abingdon. The canteen staff was in full swing with Dolly Faulkner, Vera Chandler, Elizabeth Goodman, Dorothy Perrins and Betty Love. The tables were groaning with food as usual, a variety of filled rolls, sausage rolls, cakes and biscuits to taste were laid out by the ladies for the lads to tuck in, George Illingworth kindly acted as Treasurer in the absence of Roger and he made a first class job of the cash and tally!

Members were free to roam among the models for half an hour and then it was time for a short business meeting.

The President opened the Meeting with a welcome to new members but as he had been well briefed by a good spouse to keep it short and sweet he did so and after a few well-chosen words he handed over the agenda to the Hon. Sec, Bert Love gave apologies from Roger Lloyd, Jack Partridge, Ralph Clark, Peter Matthews, Leslie Dougal, Bert Halliday, Alf Hindmarsh, Bob Hauton, James Grady, Tom Masters, David Owst, Michael Martin, Leslie Godley, Michael Martin and Stuart Wilson. The meeting asked that their best wishes be passed on to Roger and Alf and any others unable to attend through illness. The Sec, also gave apologies from Liverpool. He had been in touch with Doug McHard and Chris Jelley but they were attending a Company Guild Dinner in Liverpool and hope to be with us at the next Meeting,

In the absence of the Treasurer, Bert Love gave the Treasurer's statement, indicating that a balance of £30 was in hand (about normal for the half year).

The question of postal rates was discussed and a formal proposal from Ernie Chandler, the Chairman, that Second Class postage be used for Guild publications was unanimously accepted.

In deciding the date for the next meeting, Ernie pointed out that the Stratford Races would be held on the last Saturday in September when St. John Ambulance Crews would need a full muster, It was then agreed that the first Saturday in October would be the date for the next Guild Meeting.

Under Any Other Business Bert Love explained the system for collecting Meccano Parts from the Guild trays indicating additional supplies of Bolts, Washers, motors etc., and Ernie Chandler gave notice that the local Meccano dealer would look in.

9th Guild Meeting at Stratford upon Avon on 2nd October 1971

The 9th Meeting of the Midlands Meccano Guild took place in the St. John Ambulance Hall, Western Road, Stratford upon Avon on Saturday October 2nd 1971.

It was a glorious sunny day despite weather forecasts to the contrary and the hall was prepared in readiness for the great occasion by the Chairman and his aid so that when the members arrived, some of them well before 'opening time', they were able to get straight in to set up their models. Guild questionnaires, which had been returned quite promptly on this occasion ('much appreciated by the Hon. Sec;) promised yet another display of first class models and the promise was certainly upheld in the light of the work on display by Guild Members.

By 1.30p.m. the canteen was already manned by some of the long distance volunteer wives and a brew of tea was soon dispensed from the hatch. By 2.10 p.m. the Hon. Sec. called the members to assemble chairs at the stage end of the hall and the Meeting began with an address of welcome from the platform.

New members, including John Palmer of Droitwich Spa, Tony Homden of London and Peter Dixon (not Cook) of Halesowen were introduced to the membership, all three maintaining the Guild-tradition by bringing first class models to their first Guild meeting; well done!

Bert Love gave a brief assurance to the membership that Meccano were still in business, promising to enlarge on this at the A.G.M. later in the afternoon and also gave the meeting a lightning glimpse of his book, model Building in MECCANO and Allied Constructional Sets before calling up some of the members to display and operate their models. No special order was specified, those nearest to the platform, who had indicated on their questionnaires that they would be quite willing to talk for not more than 10 minutes, being asked to show their models first.

David Guillaume of Alcester demonstrated a neat and compact industrial processing plant in the form of a model of the "Barreflow", an automatic machine which tumbles metal parts for processing through a multi-barrel process, oscillating for a fixed period before discharging the first barrel load into the second and so on until the final polished or plated product comes out of the delivery chute. The model was about 3 ft. long and about 18 in. high, in yellow, silver and blue, and the controlling gear was entirely mechanical, no electrical sequencing being used. The hollow nature of the feed tunnel between barrels was accommodated by using Gear Rings fitted round flexible plate tubes, driven by Sprocket chain, which, as advanced constructors know, will fit quite well over Meccano flat Gear wheels, each link taking up two teeth or the normal Meccano pitch. David is in the engineering line, but this was his first advanced and sophisticated model which was beautifully designed and constructed.

The next model nearly did not get a hearing as, although it was the most outstanding agricultural traction engine which any of the Guild members had ever seen in Meccano parts, its builder, **Dennis Perkins**, had not actually opted to speak on it. However, this would have been a dreadful omission and Dennis was persuaded to bring his model up to the platform amidst gasps of admiration. Some of you may have seen a colour picture used as the cover for Model Engineer a couple of years ago showing a scale model of a Burrell agricultural engine in its full colour livery. Dennis's engine would have graced any engineering publication. In fact Dennis had got pretty close to a 1½ in. scale version of a Clayton, and Shuttleworth single cylinder engine. Great care and thought had been given to the proportions of boiler, firebox, front and rear road wheels and the fly-wheel, the usual 'bad scale' proportions of 'popular'

Meccano traction engines and showman's locomotives as appearing in M.M. from time to time, being studiously avoided. Contrary to popular belief, the 5½ in Circular 'Girder' does not lend itself to making front wheels, flywheel and boiler diameter in the same model, - as a glance at any working engine will clearly show and Dennis has produced a design which must inevitably form the basis of the first Meccano Supermodel Instructions for building a very popular but realistic working model agricultural traction engine. It goes without saying that all of the motions worked realistically and like silk, travelling on a piece of green carpeting with the authenticity of the prototype going over a meadow.

Attention was then drawn to **Phil Bradley's** giant crane modelled on the 1950 Southampton Docks 50 ton travelling Crane. Phil's model was parked half way down the hall so that chairs were turned in his direction for the demonstration. The crane, complete with authentic motions was put through its paces, main and auxiliary hoists working as in prototype. Heavy screw rams were used for the luffing movement (a heinous departure from Standard Parts being perpetrated by the use of heavy steel screwed studding with a Whitworth thread) which, paradoxically, gave the right scale and realism to the model. (Purists groan here!.....) An outstanding feature was the fitting of the 32 travelling wheels, all of which were equalised (a sad default for many published models being their rigid travelling frames) and one half of these were driven, by means of the E20R Motor. The main features of the prototype complicated superstructure features were reproduced with great care.

Eric Jenkins of Northfleet then showed his compact crane trolley beautifully modelled on the small scale with elegant proportions and with mechanical features in fully operative condition. Using the small and rather poor reproduction on page 9 of the Jan. 1948 M.M., Eric had used this snapshot of the original Ransomes Crane Truck to produce a first class model in the space of three or four evenings. Two electric motors were incorporated in this model which was little more than 8 in. long, one of them giving motive power via a gear-box and differential to the back axle while a second, Emebo motor, rotated on the crane

pillar to provided luffing and hoist via a compact sliding gear-box. Solid wheels were provided by Wheel Flanges bolted back-to-back and shod with a few layers of adhesive insulation tape to simulate solid tyres. Another excellent model for performance and finish by Eric.

At this stage, **Ron Fail** was asked to give a short intermission talk on 'scale thinking' in the design of Meccano models. Members were reminded that when you 'halve' the size of a model by reducing its length breadth and height by a half in each case, the model is not really half size but only one eighth of the size in reality. Keeping the mathematics dead simple, if an original machine is 10 ft. long, 10 ft. wide and 10 ft. high, its volume is $10 \times 10 \times 10 = 1,000$ cu. ft. Now halving each dimension, i.e. $5 \times 5 \times 5 = 125$ cu.ft. so it is plain that your 'half' size model is only one eighth of the original. Similarly, if a dockyard crane could lift 80 tons and a replica of this model was made throughout to half dimensions, its working load would be reduced to 10 tons, not 40 tons.

Scale speed was also discussed and while it was commonly accepted that a rotating model such as a roundabout should turn a full circle in the same time as a full sized machine, we were reminded that gravitational forces on the lighter machine were also scaled down by the one eighth factor. If a film were taken of a full size fairground machine such as a Chairplane and this was then thrown on to a screen and reduced to the size of a Meccano model running alongside it, the angle of outward swing of the genuine chairs would be different from that of the model. Following this argument to a logical conclusion, a 'scaled down' clock, say from a one second pendulum standard model to a 'half' scale in all diameters of gears etc and length of pendulum, but with the same number of teeth on each gear as per prototype would mean that the clock would keep its own time dependent upon the gravitational effect on the pendulum. Interesting food for thought to remind us that a great deal of thought is involved before one can make claims that this or that is a true 'scale' model or that it moves at 'scale' speed!

By this time **Stephen Lacey** had his Snowdon Mountain Rack Railway model in action. The most novel feature was a really rugged rack system employing double in-line cogs making use of the heavy 167c Special Pinion between the rails to grip a central rack of $\frac{3}{4}$ " Meccano Washers suitably spaced with standard 'guild' washers. The locomotive was fitted with prototype valve-gear, inclined boiler and bogey trailing truck and was powered by a 12 volt D.C. motor picking up power from an outside insulated rail via an Electrical Wiper arm. Rolling stock was supplied in the form of a 'caboose' waggon with inclined compartment and water tank. The loco climbed the 1 in 5 gradient with no difficulty. An interesting feature of the prototype, learned from the Railway Company Engineer is that braking in reverse was effected by making the steam chests act as air compressors on the 'run-back' down the mountain, a relief valve controlling the speed of the pistons.

Ralph Clark and **Jack Partridge** showed contrasting styles of main line locomotives, Ralph's being a 1" scale model of L.N.E.R. "B-1" class with working Walshaert's valve gear, using part no. 168a Ball Race Flange for exact proportions on the tender wheels. Jack's model was an excellent reproduction of the pre-war Meccano Supermodel L.N.E.R. 10,000 in red and green as illustrated in the Jan., Feb., and March issues of Meccano Magazine for 1935.

John Lorimer demonstrated an industrial metal planing machine model which was equipped with quick return motion to the travelling work bed, ingeniously operated by a cam operated shift gear which put the return motion into fast return speed at the end of the forward stroke. Back drive was used, Gear wheels and Rack Strips being doubled up for a positive drive. John has never seen such a model either full size or in model form and as a sightless person he is to be congratulated on converting a mental exercise in imagination into a fascinating working machine. Tool posts and travellers are being fitted to complete the model for automatic tool traverse.

Phil Ashworth, normally a 'star' performer, put on a bit of nonsense in the form of a horse race with two of 'Konkoly's' racing horse chariots fitted with pre-war and post-war motors. The pre-war motor model won easily but Phil swears there was no fiddling of the gear ratios.

Among the larger models on show in the hall were two large cranes, one a freelance blocksetter by **Ian Perrins** and the other an excellent reproduction of the Guild Supermodel Level Luffing Crane (by E.K.T.), built on this occasion by **David Owst**, entirely from the printed instructions and photographs. One innovation was the use of diode semi-conductors as limit switches for the luffing mechanism.

David Goodman showed a silent rewind Grandfather Clock with 3" Sprocket escapement and an embryo strike mechanism.

Pat Briggs clocks were also displayed, - beautiful time-pieces with striking and chiming mechanisms in ornate cases and some with historical escapements. A special feature was one with verge, crown wheel and foliot balance eased on a 16th century Nuremberg clock. Spring Clips formed the pallets and the clock was driven by the current No.1 Clockwork motor.

Another 'Konkoly' model was shown by **Roger Lloyd**, the fascinating pattern designer with eccentric table motion. **George Kilmister** brought his fairground model with rotating passenger cars and **Ernie Chandler** showed his Mississippi River Boat. **John Palmer** had a Satellite in orbit, or more correctly, the Lunar Module and control craft, plus other Apollo features. He also showed a model 2-4-0 Broad Gauge 1890 locomotive.

Peter Dixon (wrongly heralded as Peter Cook on page 1) new member from Stourbridge, brought

along a beautiful model of a formula 1 Grand Prix racing car which was superbly detailed. Apart from a six speed gear-box, contained in something like a 2 in. cube, a plate clutch, working accelerator, disc brakes, rack steering and authentic suspension were included, front and rear. The body lines were beautifully modelled in Flexible Plates complete with aerofoils and fully detailed cylinder heads on the Vee-8 engine. This was a 'low budget' model, much early and well used Meccano being lovingly modelled into a first class reproduction. Well done Peter!

Tom Masters who had made the long journey by bus from Geordieland brought-the 1962.M.M. Walking Dragline (tucked under his arm for most of the long bus ride down!). **Wilf Bolland** showed the old Supermodel Bucket Travelling Conveyor in action and **Brian Edwards** had his version of Foden Steam Waggon. He would have been showing an Alvis Stalwart but as a family addition arrived just before the Meeting, Brian had his hands full in more senses than one. Congratulations to him and his wife!

Tony Homden, another new Guild member had a really giant model in the form of a fully equipped cargo vessel about 9 feet long! Rigging and fittings were as authentic as Meccano parts will allow and the overall effect was breath taking. All holds were fitted with power operated derricks and the anchors, fitted with chain running in hawse pipes, were hauled in by fo'c'sle capstans. A 'jumbo' derrick (heaviest crane aboard) was realistically operated with luffing, slewing and hoisting gear, off-loading heavy cargo to a gauge O line on the 'dock' section alongside. Automatic boat lowering gear on channel davits was fitted and every working part was controlled from easily accessible mast-head switches. Bollards, cleats, ventilators, gangways and other such fittings were included together with concertina hitch-covers, all constructed under Tony's own critical ex Merchant Navy eye. A truly Super model!.

Leslie Dougal had his beautiful Granddaughter clock on show, elegantly constructed and cased in pre-war blue plates with original nickel strip embellishments. Electrically driven by a synchronous motor made from Standard Parts, A striking mechanism was also included. The dial was particularly neat being made from a bright nickel plated $5\frac{1}{2}$ in. Circular Girder fitted with polished Threaded Pins to indicate hour divisions. Leslie also showed a neat horizontal steam engine driving a bracket mounted 'dynamo', cunningly concealed as an electric motor which was actually back-driving the flywheel! This was time-sequenced for repetition running by one of Leslie's famous electro/mechanical Meccano time switches.

Jim Gamble showed his version of the Steam Excavator and **Bob Faulkner** showed a mechanical 'Horse and Cart', and **Bert Halliday** gave further showings of his previous models. Other models were shown by **Michael Martin**, **Bill Winters** and **Sid Marlow**.

The demonstrations of the 'set' models had been completed by 4 p.m. when there was a break for the sale of tea/admission tickets before sumptuous varieties of savouries and cakes were served out and gratefully devoured by the multitude. The volunteers in the canteen had worked well behind the scenes

And everybody had sufficient to sustain him well for the impending Annual General Meeting.

10th Guild Meeting - 25th March 1972 (Taken from M.M. July 1972)

Despite a casualty list of 14 members, absent through sickness or because of previous commitments, the 10th Meeting of the Midlands Meccano Guild was once again a successful turnout. A warm, dry day greeted the members as they approached Shakespeare country on Saturday, March 25, in a wide variety of transport ranging from light vans to mini-buses. By 2 p.m., the models they carried were set up in the St. John's Ambulance Hall in Stratford-upon-Avon and, in no time at all, the gallant band of volunteer wives had the first brew of tea handed round.

Shortly after this welcome refreshment the Meeting proper began with a short address from the Secretary, **Bert Love** who demonstrated a recent genuine Chinese "Meccano" set- a remarkable copy in silver, yellow and blue - and then went on to show some further small items of recent manufacture for the enthusiast. This was followed by a series of demonstration talks by individual members who described their models from the platform, each member being limited to ten minutes talk.

David Guillaume, of Alcester, started the ball rolling by showing part of an automated industrial processing plant which went through a sequence of dipping parts by a vertical and horizontal conveyor mechanism. The section displayed was of module construction so that sub-sections could be easily serviced and demonstrated, Motors with Gearbox being used for the sequencing and operational movements.

Transport models were again a prominent feature of the meeting and **Peter Dixon** of Stourbridge showed his excellent Formula 1 Grand Prix racing car. Almost 2 feet long, Peter's car was a prototype incorporating the main features of a modern car including a well moulded body form and cockpit, wishbone suspension and flexible steering geometry, as well as aerofoils front and rear, fully operative foot pedals on clutch, accelerator and disc brakes, and a very neat compact six-speed gearbox of all-Pinion design. This was the first advanced model which Peter had ever designed and he made a first-class job of it.

Peter was followed by a veteran in vehicle modelling, **Brian Edwards** of Bedford, who demonstrated a very neat vintage Morgan three-wheeler car complete with outboard twin-cylinder motor-cycle engine and transmission. Prototype two-speed gearbox, clutch and parallel bar steering geometry were included.

Front mudguards and headlamps swivelled authentically with the steering and the suspension-coil spring at the front, twin cantilever leaf springs at the rear-performed in a realistic manner. As usual, detail was excellent in Brian's model.

A novelty item was provided by **Mike Nicholls** (a brand new Guild member and self-confessed novice!) in the form of a "Sawing a Woman in Half" sideshow. The fiendish magician, with remarkable likeness to Alf Garnett, rolled his head and politely raised his hat as he cut through his victim who also rolled her head and both feet at the same time! Mike also showed a modernised version of a pre-war Watts Beam Engine and explained how he had overcome some of the early imperfections common to such models.

Jim Gamble then brought his first-class freelance railway excavator up to the platform. This model was beautifully detailed with a fully "riveted" boiler (concealing a Motor-with-Gearbox which supplied all movements!), steam motion with valve gear, flywheel etc. and a four-movement gearbox supplying drive to travelling, slewing, bucket racking and jib luffing. A fully-sprung railway truck base was provided and a novel turntable to Jim's design incorporated a "spider" made from a Circular Girder carrying $\frac{1}{2}$ " Pulleys which ran between roller races comprising 6 in. diam. Pulleys. The excavator was beautifully built in the advanced manner of the modern supermodel.

Clive Hine had two excellent models on show, one being a six-car fairground ride on undulating tracks which ran throughout the meeting accompanied by piped fairground organ music. His second model was an automated Coles self-propelled crane where steering, road travelling, hoist, slew and luffing were controlled by a drum - switch operating relays made from Meccano Electrical Coils and Brass Strips.

By contrast, the next model, exhibited by **Len Wright** of E. Brough, Yorkshire, was one of the two "King-size" models on display. Len had made a replica of the giant Lorry-Mounted Crane, designed by Eric Taylor for a previous Guild Meeting. Len had managed to improve the wheel arrangement by using a heavier gauge of large diameter tyre (available on certain ash-trays), but otherwise this was an exact copy of Eric's original model in a slightly different colour-scheme.

Last of the platform demonstrations was given by **Phil Ashworth** of Hull. Phil is noted for his sophisticated models, modular construction and total surprises! This time he astonished the Guild once again by showing a French Knitting machine in answer to the President's prize challenge made some two years previously. The machine was completely automatic and had mechanical linkages throughout. The "cotton reel" and four "panel pins", common to childhood days when French knitting was done on such homely items with the aid of a pin, were replaced in the Meccano model by a hollow drum based on spaced

Gear Rings with four Keyway rods mounted vertically in the centre. The drum is indexed through 90 deg. for each stitch by a gear train and a dipping mechanism, fitted with the tip of a crochet hook (the only non-Meccano part permitted within the rules for the President's prize), picked up a loop at each oscillation, synchronised with the 90 deg. Turn of the knitting drum. A high speed spinner, also synchronised, fed the wool yarn from a storage reel via a tensioning device, the business end of the spinner being a Cord Anchoring Spring, the tiny loop of which proved ideal as a feed for looping after the stitch was completed. The machine was hand-operated with a motorised alternative and, in either model, the machine knitted

faultlessly to give Phil the prize which his brilliant analysis of the motions richly deserved. On receiving his prize later in the meeting, in the best spirit of the Guild, Phil handed over his cheque to the St. John Ambulance Brigade Chairman.

At this stage the assembly moved down to the far end of the hall to see the last of the demonstrations.

This was the other King-size model of giant proportions in the shape of a 16 in. gun turret of the Queen Elizabeth Battleship type, dating back to 1914. **Tony Homden** had built this amazing model which was complete through several decks from the magazines and cordite rooms to the actual turret itself.

A dozen electric motors were required to operate the multiple movements which included shell hoisting, shell and cordite ramming, breech locking, elevation, recoil and turret slewing on a massive 24-roller turntable. This latter item had taxed Tony's skill extensively in producing a perfectly smooth, circular path for the heavy turret to revolve on when powered by standard motors. Any model which can survive a 100 mile van journey on its side and still perform is a credit to any enthusiast! The model was complete with dummy cordite bags and a magazine filled with wooden shells to scale size, turned, says Tony, on a Meccano lathe, specially built for the job. His model, together with the other excellent demonstrations from other members, earned well-deserved applause.

Tea break was taken at 4.30 p.m. when the Guild tucked in to a delicious spread put out by the kitchen "staff". They were thanked by the President on behalf of the Guild. A short business meeting took place at 5.15 p.m. when new members were enrolled, the prize for the French Knitting Machine was presented and the date of the next meeting fixed. Members were then free to roam among the many other models on display round the side of the hall and to discuss points with other enthusiasts. This is a most valuable opportunity for exchanging ideas. Meccano parts were on sale at attractive prices and the camera was set up to record the models on show. The meeting closed at 8 p.m. and was voted another success.

Footnote

Peter Matthews, Secretary of the Holy Trinity Club, is going to South Africa and will be handing over leadership to Tony Homden. A statement will be issued after their next meeting.

11th Guild Meeting at St. John Ambulance Hall on Sat. 30th September 1972

Almost traditional as Shakespeare himself is the lovely weather which has graced the past 11 meetings of the Midlands Meccano Guild and September 30th last was no exception. Long before the meeting was due to start, the hall was packed with members and their models so that those arriving closer to 2 o'clock found some difficulty in squeezing their models into a suitable space. The air was alive with the buzz of conversation and the feverish activities of last minute assembly and adjustment to working models due to show their paces within a short space of time.

Canteen manning was well under way and the first brew of tea was served from the hatch at 2 p.m. There should have been biscuits served at the same time but owing to an unusual breakdown in communications these were not forthcoming at the time and the caterers present their profound apologies with the assurance that it won't happen again!

At 2.15 pm., the Hon. Sec asked the members to bring their chair to the front of the hall so that the meeting proper could begin. There were many new faces at this 11th meeting and after a brief introduction welcoming the assembled modellers **Bert Love** started the ball rolling with a demonstration of electric motor control on his block-setting crane.

Bert explained the problems of feeding 12 volts to five separate Powerdrive units and a lighting system where 360° rotation of the super structure was involved and pointed out the shortcomings of the standard

Electrical Part Commutator in having no central perforations for the upward passage of multiple connections. This problem was overcome by the use of a built up stack of commutators made from 8 hole

Discs separated by Electrical Insulating Bushes, two or four bushes per "sandwich". Between each pair of Wheel Discs was a pair of $\frac{3}{4}$ in. Washers allowing the platinum point of an Electrical Wiper Arm to ride between the rims of the paired Wheel Discs for good contact. Wipers were arranged in pairs to embrace the commutators for positive contact, each pair being carried on $1\frac{1}{2}$ in. Double Angle Strips bolted to $1\frac{1}{2}$ in Insulated Flat Girders spaced by Nuts and Washers on vertical Threaded Rods. The whole commutator was rigidly attached to the crane tower through a large hole at the centre of the roller bearing so that the wiper arms ran round the stationery stack, thus supplying power to the D.C. units for all slewing positions of the main beam. Reversing was obtained by use of a centre tapped pair of car batteries using "chassis" as centre potential allowing a "one wire" system to each motor, switched to a 'positive' or 'negative' leg of the battery.- Six 'live' rails were provided as well as the twin rails for the travelling bogies and Electrical,

Wiper arms, stood off from Insulating Bushes on $1\frac{1}{2}$ in. Angle Girders picked up the currents required. This centre tapped 'one wire' system was not easily explained in the limited time allocated but Bert premised to give more details if a subsequent Guild Gazette appeared. He then, demonstrated all movements of the crane in both directions from the remote switch central unit.

Paul Blythe then came forward to demonstrate his turntable mounted model of the Saracen Armoured Car. This was built to a large scale dictated by the ash-tray tyres with which the six independently driven wheels were fitted. The glass centres had been retained and Paul had drilled these to take Bolts and the Flanged Discs from the 4 in. Ball Race. This resulted in a neat appearance. The Saracen requires not only differential drives to all six wheels but also a 'differential' steering system since the centre pair of wheels are also steered but must turn through a lesser-angle than the front wheels to conform to the necessary turning circles dictated by the steering geometry. Paul had made provision for this by arranging a lower gearing to the front wheel steering than that provided for the centre axle. Neatly finished in new Meccano colours and driven by two motors for demonstration purposes, Paul's Saracen earned a well-deserved round of applause.

A further example of military vehicle modelling was then shown by **Eric Jenkins** of Northfleet. Being "in the business" so to speak, Eric keeps an eye open and a ready camera to record pictures of the various vehicles which he encounters in his travels. Eric's model was that of a Second World War U.S.A. half-track troop carrier with high velocity anti-tank gun. The half-tracks were made from Plastic Meccano caterpillar tracks fitted with 2 in. Plastic Sprocket Wheels which were drilled to be attached to standard Bush Wheels. Prototype track running gear was simulated by 1 in. Pulleys shod with Rubber Rings and mounted in rocking pivots at ground level. A four-speed and reverse gear box gave transmission to the leading track axle via a conventional differential and the carrier was powered by a Powerdrive unit. As usual, Eric had achieved excellent detail with an armoured cab and anti-ditching roller at the bottom of the armoured radiator grill. The anti-tank gun was fitted with recoil cylinder made from Plastic Meccano Axle Rod which scaled nicely with the high Velocity barrel made from a standard Axle Rod spiral wound with Meccano Cord and fitted with a Worm at the end to act as a flash arrestor and a working breech block behind the gun shield. A splayed gun-trail with spade ends and elevating and limited angle training mechanism completed the realism.

At this stage, the Guild welcomed its first female modeller in the shape of **Heather Burton**, now living in London. She showed her fine narrow gauge tank locomotive based on a Welsh prototype and fitted with the usual items that give realism to a 'steam' model. Particular care had been taken with boiler and steam dome construction to reproduce some of the conical brass features of the original, Brass Electrical strips being used very successfully. Vacuum pipes, head and tail lamps and even a coal shovel were provided, not to mention a "Budgie" bell over the driver's cab to warn pedestrians when the loco takes to the streets!

Her model was driven by the Powerdrive unit buried inside together with the Battery Box.

Ron Fail then gave a brief demonstration of a simple but effective device for measuring the torque output from a model electric motor. Basically, his model provided a cradle in which the motor under test was allowed to swing axially so that it tended to turn the cradle in opposition to a balanced beam. By placing a known weight on the beam and measuring its distance from the fulcrum, a balance point could be found which would indicate the motor's torque. A load for the motor was provided in the form of an air brake driven via a contrate gear, the air brake comprising four vanes of Plastic Plates. Although the device was a handful of parts and the essence, of simplicity, it nevertheless provided all the parameters necessary to test a range of motors normally met with by model makers. Once again, by applying the analysis of the problem to the parts available, Ron was able to provide the solution elegantly in standard parts.

Phil Bradley of Epsom can usually be relied upon to show something novel in the crane line and this time he brought along two sections of a telpher hoist which one would find in a factory where bulk material had to be shifted over devious paths. This was a true monorail design in which the whole telpher moved along a curved upper rail from which it was suspended by a pair of articulated bogies, one of which was power driven. Amid cries of "shame", Phil admitted to the use of an aluminium extruded rail for demonstration purposes so that he could get some really sharp 'S' bends in the rail system which would really put the travelling hoist through its paces. He showed an overhang box-girder unit permitting the rail to be wall hung or bridge supported, explaining the cantilever construction essential for a top rail system. The telpher was fitted with remote cable control and a single hoist self-tripping bucket grab. This was lever operated and culled from a previous edition of M.M. It certainly worked well, provided the difficulty of finding dead straight Meccano Rods was over-come (not an easy task! Ed.) and the telpher itself negotiated the 'S' bend sections with great ease.

One of the problems set the Guild members by Phil in a recent Guild Gazette concerned the construction of an all spur differential having no Screwed Rods in its construction or at least having no gears running on screwed stock. **Paul Brecknell** produced such a spur differential and he demonstrated this from the platform. Such parts as Right Angle Rod and Strip Connectors were pressed into shape and Paul passed round a large scale drawing showing and 'exploded' view of the internal construction. Further details of this can be made available in a future edition of the Gazette.

David Guillaume was the next to demonstrate his models,- quite an impressive range including a supermodel pontoon crane, a horizontal mill engine and a demonstration model of a motor chassis which would have made Bob Moy, Chief model designer at Binns Road, quite proud. Mounted in an impressive 'glass' case of Perspex (which cost David his entire Meccano allowance for the next twelve months!), the model demonstrated the basic car mechanics. David claimed that the model was fairly conventional but he had certainly put a great deal of original thought into the construction and presentation of the model. Built on a chassis form, the mechanisms were visible for examination and this was exploited by the use of a large cradle in which the chassis was mounted at either end by means of 4 in. Ball Races. This meant that the whole model was rotated along its axis by a continuously rated mains motor geared down to turn the chassis very slowly while by use of Electrical Part Commutator, a 12 volt D.C.gear-box unit was switched to give transmission drive at 45 deg intervals for a pre-determined period,

While the next model was being prepared for demonstration, Bert Love called attention to an excellent display of Meccano clocks laid on by **Pat Briggs**, Pat is one of those devoted clock designers who prefers to remain in the shadows but his work is always a pleasure to see on display at a Guild meeting. As usual, he had several interesting developments on striking, chiming and drive mechanisms.

Tony Homden came to the stage as next exhibitor and he showed us his ship's block mortising machine. The solid wood tackle block, used by mariners for centuries is cut from a block of elm or beech and admiralty yards had such overwhelming, demands for these blocks for more than a century that they put out tenders for an automatic mortiser and the successful design was modelled by Tony from drawings which were more than a hundred years old, Fortunately the flywheel scaled nicely by using the 167b Flanged Ring for an approximate 1 in, to the foot model. The mortising chisel was supplied by the cut-off shank of a Meccano screwdriver and the model was driven through a slipping clutch mechanism. Off-cuts of expanded polystyrene proved to be excellent material for block-making. These were clamped in the model's vice and driven under the mortising chisel, which oscillated vertically at high speed, until the correct length of slot was cut in the block and the clutch unit disengaged at this point for withdrawal of the cut block, A very ingenious piece of modelling by Tony.

A second Meccano machine tool was then showed by **Michael Martin** of Ilford, This was a working gear-cutting machine from the recent design in M.M. and with one or two modifications it proved to be a striking example of how Meccano parts can really be used to make Meccano parts! Michael found that by substituting an N.C. (American National Coarse) 9/16 in. tap for the Whitworth tap used in the original M.M. article, the tooth form achieved on either plastic or brass blanks was identical with that of the standard Meccano product. Michael paid tribute to the design of the model by its originator which proved very robust and vibration-free. Both of the machine tools just mentioned were driven by Meccano E15R Electric Motors and they stood up to the cutting strains very well, Michael then showed what the machine could do by putting it through its paces on some brass blanks which were promptly turned into gears on the spot.

A new and young member joining the Guild on the 30th was **John Nuttall** of Leyland, Lancs. Only a couple of weeks before the meeting he had contacted the Secretary and sent snaps of a first class travelling bucket excavator of giant proportions. The chance of seeing this was too good to miss and John was persuaded to bring his model (packed in three suitcases!) all the way from the North and he would have been prepared to make three train connections to get to Stratford. Fortunately he was fixed up with transport by Ian Perrins from Bolton region and all the Guild agreed that John's excavator was great. Built in well-kept red & green Meccano blended with silver angle girders for the jib, John's model had travel to four 'tracked' bogies, swivelling on replica 167b Geared Roller Bearing, jib luffing, bucket-hoist and bucket-racking all driven from one E15R motor through a neat gear-box fitted inside a streamlined all enclosed giant cab structure. Hoist brakes were fitted, with slip brakes for bucket-hoist and control cab bucket-trip with gravity return. John put his model through its paces and despite its re-assembly out of suitcases on the spot, it worked very well indeed. John was congratulated by the Secretary and received a well-deserved round of applause.

This completed the listed "batting order" but **Ralph Clark**, who specialises in loco building to scale showed his American Civil War 4-4-0 wood burner with balloon funnel. A scale of 1 in to the foot had been achieved - a standard which Ralph always tries to achieve, or at least comparable scaling between various parts of the loco with particular reference to wheels and fittings. He had achieved remarkable realism and had coped with the difficult aspects of boiler and steam dome construction with great realism. Lines of the tender were well defined with bevelled rims to the wood stack and neat bogie suspension. Cab controls were also featured together with the track clearing grid-mistakenly called a "cow-catcher" in the U.K. and this was built from Narrow Strips on edge, spaced by Nuts on Screwed rods to give the typical grid-iron appearance on the forward buffer beam.

Stephen Lacey was then asked to bring his fairground model of steam-yachts up to the platform and he showed us a remarkable gear arrangement for making progressive and balanced swings of the paired yachts through a range of increasing and then decreasing amplitude. The gears involved were not easily explained as they involved Gear Rings and bevel drives giving Screwed Rod drive to an eccentric arrangement of bevels which in turn altered the amplitude of swing drive to the yacht cranks overcoming via Sprocket Chain. Stephen spoke of the difficulty in overcoming the inertia of all-steel yachts (passenger cupolas) arising from Meccano parts and how he had overcome this by using Plastic Plates for one yacht which demonstrated the appreciable difference in swing on one yacht achieved by the weight reduction.

That concluded the platform demonstrations but did not exhaust the range of excellent models on show. **Dennis Perkins, Bert Halliday and Ernie Chandler**, all had excellent large scale traction or showman's engines and Dennis had two other models with him., One was a rebuild of the original Giant Ship's Coaler and the Crazy Motorcyclist featured in a recent M.M. Bert Halliday has since written to say that valuable advice on modifications to his engine details were received at the meeting and these have now been incorporated with a modified canopy lining for display at the Holy Trinity Club Meeting, Hildenborough, on November 11th,

A battered but very neat model of a steam roller was shown by new member **Alf Reeve**. A difficult subject to model in scale with Meccano parts, the steering crown bracket was very skilfully built by Alf as was the front roller and general detail. **Ted Brooker**, another new member, showed a beautiful model of a French Pacific Loco built in all red flexible plates with new zinc Nuts & Bolts and new washers; The result was sheer poetry and was given a final (an almost forgivable) touch with a home-made copper banding round the smokestack or funnel, or chimney ? Cranes were shown by two more new members, **Ian Mitchell** and **Barry Clay**, who with his father, forms the first father and son membership of the Midlands Meccano Guild, **Leslie Clay** (senior) showed a steam driven vertical engine.

Many other interesting models and Meccano pieces were on show with **Jim Gamble** and **Alf Hindmarsh** putting on their own mini historical displays of old Hornby and Meccano items.

Alan Partridge had an excellent fairground ride in the form of a whip with seven point "daisy petal" motion provided from a central tower. Motion delay was incorporated by spring tension in the pick-up drive to relieve start and stopping torque requirements. **Ian Perrins** had a whole selection of Meccano replicas made at home with simple tools including a replica 167b.

Bill Barker of Clitheroe, another new member showed his version of Eric Taylor's Crawler Tractor with slight adjustments in transmission enabling the tractor to pull his youngster along. **Mike Nicholls** had a well-built planetarium showing simple relative motion of the Earth, Moon and Sun, care being taken in the choice of globes, spheres and plastic balls to create an attractive appearance. Various other mechanisms, striking clock mechanisms, motor chassis, outrigger stays for heavy duty vehicles and dozens of other smaller interesting items, were shown, a second model by - **Michael Martin** of a Tower Crane viewed from his Ilford home being very neatly modelled and most of the Guild members there had some model to show and several more pages of this report would be required to do all of the models justice. If you did exhibit and have not been mentioned, your model was still appreciated but I have tried to include as many as possible in the space available.

12th Guild Meeting Saturday 31st March 1973

held in the Susan Hannah Greig Memorial Youth Hall at Alcester, Warwickshire

The fair weather which has blessed every Guild Meeting held so far did not desert us on the first occasion of our move to Alcester. Once again the members pointed their cars from all directions in the U.K. and made their happy pilgrimage to the clan gathering.

The first impression on sighting the entrance to the Greig Hall grounds was one of adequate parking space and first class unloading facilities. These had been fully exploited by early arrivals, some of whom had reached Alcester in the forenoon with their models where they were received by the volunteer room stewards, David Guillaume and Alan Partridge. Members and models were allocated spaces and tables as they arrived by 1.30 p.m., the Hall was well laid out, Tables had been imported from local premises to augment those on the spot and these had been set up by members who had been available locally. The premises had been in use on the previous when Ernie Chandler had arranged to go over to Alcester to assist David with preparations but nevertheless this first obstacle had been overcome by the time the first arrivals appeared.

We met a minor disaster at the beginning of the afternoon our catering volunteer force found the kitchen facilities requisitioned by the local Police forces who were making an intensive joint effort on a local investigation. However, all of the provisions were safely to hand and the first brew-up of tea and biscuits was organised inside the serving hatch area to meet the scheduled serving time on the published programme.

By ten minutes past two the majority of intending arrivals were refreshed and ready for the short business meeting which followed. Bert Love introduced the new Guild member, Roger Wallis from Solihull, who had contacted the Hon. Sec. and the Treasurer before Christmas and Roger was then welcomed by Esmond Roden, our President who extended the welcome to all members and commented on the Greig Hall facilities which offered so much more space than that available at Stratford. Esmond went on to comment on the happy relationship which we had enjoyed formerly at the St. John Ambulance Brigade Hall and that a donation of £5 be sent to the Stratford St. John Division as a token of our appreciation. This was carried unanimously.

The Secretary then gave a brief report to include late apologies, including one from Pat Briggs whose lad John had been knocked down and sustained head injuries and a fracture of the femur. (at this moment of the report, April 25th, John is reported well and making a good recovery in Nottingham General Hospital). Bert then went on to give details of the Henley Meeting submitted by Geoff Wright and gave an undertaking to publish these in a subsequent item of Guild literature.

Ernie Chandler then gave details of the Stoneleigh Carnival arrangements and distributed entry forms and the details referred to will also be published.

The date of the next meeting was then confirmed for the last Saturday in September 1973, the 29th.

Esmond Roden then concluded the short business meeting by proposing the usual vote of thanks to the canteen ladies and added his own personal thanks to David Guillaume for his original efforts in securing the Greig Hall and for taking the responsibility of supplying the catering list and for organising the lay-out and additional table supply. The main business of the afternoon then commenced with the usual demonstration talks by members.

Geoff Wright was first up with a set of differential axles which he offered towards a solution of a problem as follows, "How does one construct an all bevel differential axle, with all gears enclosed within the confines of a pair of Boiler Ends?" Geoff showed the difficulties when attempting to use the original SML1 format (Meccano Motor Chassis) but achieved some degree of success by using Angle Brackets bolted to the crown wheel bevel with stand-off bolts to rotate the differential carrier. A second attempt utilised bent portions of Narrow Strips with the objection that mutilation of standard parts was required. A third attempt shown by Geoff placed the Boiler Ends at right-angles to the input or propeller shaft so that they were mounted fore and aft of the half-shafts. This gave more lateral lee-way for the arrangement of the crown wheel and carrier and actually simulated commercial practice, of having the bulbous casings of a differential box fore and aft, rather more closely than the conventional 'Meccano' arrangement. While Geoff did not claim the ultimate solution in his trial assemblies he certainly opened up further avenues of thought with some valuable suggestions towards the solutions.

Michael Martin of Ilford then showed us his model of the "Meccano Manual Cover Dragline". Members will know that the range of instruction manuals in the latter half of the 1950's carried a coloured illustration of a large Dragline built in red and green parts. No instructions were ever issued for this - it was a display model built in the Model Room at Liverpool and its designer, who has since died, left Meccano Ltd. shortly after building it. However, simply by using the cover illustration and a great deal of ingenuity, Michael recreated the model and brought along working on all motions and looking exactly like the illustrated prototype. It is probably true to say that the biggest difficulty in getting draglines to work properly is that of making them walk. Michael explained how early attempts to use chain and worm drive had resulted in so much loss of power and slow operation that he abandoned this in favour of heavy duty built-up axles for the walking cams with direct gear drive. The result was a walking motion of approximately scale speed which was quite positive in action. All controls were lever operated from the cab rear and it is hoped that Michael

will be able to retain this model for a second showing so that we can have a look at its 'insides'.

Bert Love then showed a new style Meccano Grandfather Clock which he had quite misleadingly announced as the "Meccano Clock Kit No. 3". After confusing the membership thus far, Bert went on to explain that his clock was built from the contents of a brand new silver, yellow and blue, No. 10 Meccano Outfit. He had set his own challenge by making the following stipulations. First of all the finished clock had to be acceptable as a recognisable Grandfather clock with a reliable movement operating a seconds hand dial as well as the hour and minute hands, be weight driven, have a covered in case, an attractive dial and pendulum, 'carved' ornamentation and to use up the maximum number of items in the No. 10 set but on no account to use any item which was not packed into the original four drawer cabinet as supplied by Binns Road. Standing nearly eight feet tall, the clock ticked away steadily through the meeting and Bert explained some of the unique features in his clock which included a fully epicyclic maintaining winding drum, ensuring continued operation of the clock during re-wind and pendulum suspension via Plastic Transparent Plates. The clock aroused a great deal of interest if not surprise that such a model could actually be made with an existing Meccano Outfit.

Footnote: since the meeting, this clock has been fitted with a 24 hour dial, a moon motion dial accurate to 29.55 days (as against 29.53 accurate moon orbit), modified pendulum suspension and chain/weight-driven hour/half-hour single strike with air-brake governor – all additional to existing structure but still inside that original limitation of the No. 10 set! It now also winds by detachable heavy duty crank key from the front instead of the side/rear with a clockwise turn. (Still within the No. 10 parts.) Key stows in bracket at rear.

Although most of the models which followed were quite large and complex, **Ron Fail** showed us one of his small but uniquely excellent models in the form of a spiral designer. A sort of a Mark II R.F. designer, Ron had reduced some of the complexities of his original spiral machine to make a more compact box of tricks in which the accurate pen linkages were retained with the crank and eccentric motions and his elegant differential phase control enabled the pattern form to be changed while the machine continued drawing while keeping the overall pen amplitude and spiral eccentricity constant. (That sounds quite diabolical on re-reading but then how does one describe a Ron Fail mind-bender in lay terms?)

The next two or three models were really too large to be brought to the stage area conveniently so the members moved their chairs to focus on **David Guillaume's** version of the 'Servetti Magician'. This is now a standard demonstration model made in limited quantities in the Model Room at Liverpool for large department stores and exhibitions. However, David was working from Servetti's original descriptions of the prototype and he found, like Bob Moy at Binns Road, that Guiseppi's original designs often need modifications to make them work over a long period. David replaced some rubber band drives for the internal timing mechanisms with gears and he strengthened the arm linkages. The 'Magician' is almost life-size as a robot from the hips up and his mechanised body provides a turning head with mobile jaw while his arms rise and fall alternatively revealing a different set of motor cars (Dinky Toys ?) from below the screening boxes held in the robot's hands between each 'pass' of the hands. Very ingenious and very well re-created by David who brought real professional skill into wiring up and building his model into an elegant display piece.

Standing on the next table was a model similar in general size and appearance which had been made by **Paul Blythe** of Aylesbury. His contribution was a Meccano Bubble Blowing Magician but everything was just pure Paul Blythe genius. Air pressure was provided by an impeller type pump made from Flanged Rings spaced by Double Angle Strips which formed the air vanes and this supplied a stream of air via a rubber pipe to the robot's mouth. A continuously running motor drives the impeller while a Gearbox motor operates the right hand which carries the bubble wand and at the same time drives the eye mechanism as designed by Servetti. As the bubble arm is lowered, a detergent trough is raised by Rack and Pinion to allow the bubble wand to be loaded. The trough is made from latex impregnated Meccano Triangular Flexible Plates. The loaded wand is then raised by the arm to the mouth orifice where the air stream blows a long string of perfect bubbles into the audience (among claps of delight and congratulations). Operation is continuous, a fourth motor being responsible for sequencing and pause control.

Still in the same section of the hall, the members were able to observe **Bert Shaw's** Oil Rig – another giant model. At previous Guild meetings, Bert had been somewhat overawed by models which had caught the limelight and he had determined to get something along which members had not tried before and his oil rig was a wonderful choice for achieving his objective very successfully. His model was a well-kept secret before the meeting and Bert had made a first class job of a difficult and unwieldy model. Massive tapering sea legs at three corners of the rig were made from Circular Girders and Flexible Plates, with a tapered section just below platform level. A high drilling derrick was mounted above the drilling deck and was fitted with hoist block and turntable joints. A mass of $24\frac{1}{2}$ " and $18\frac{1}{2}$ " Angle Girders formed the spider web bracing below the rig and the main platform was fully detailed with accommodation quarters, guard rails, sea-leg winches, oil and water storage tanks and auxiliary motors and generators. Heavy duty sheerlegs with lifting tackle and two revolving cab-type power driven cranes completed the model.

Switching to the other side of the Hall, the Guild had a look at **Leslie Dougal's** clocks which were excellent examples of glass cased Hipp Clocks. On the grounds that "A clock is just a clock", Leslie did not expound on their construction but concentrated on a verbal description of a Meccano 'flying' model in the

form of a Lysander type aircraft (built in pre-war Blue Plates and nickel Strips) which could be suspended by fine black wires from a rotating boom. The wires both supplied current for motor speed (revving the prop for take-off) and navigation lights and at the same time acted as control lines for diving, climbing, banking and even for making a three point landing. Leslie went on to describe the type of rotating boom (and the house room!) required for such a model and the simplicity of Contrate and Pinion control gear at the boom pivot by which all movements could be linked to a mock cockpit with joystick so that the operator could carry out all of the normal aircraft manoeuvres by remote control.

At this stage the focus of attention was centred on **Phil Ashworth's** model which was yet another of his famous line of sideshows from the amusement arcade! This time Phil produced a Driving Game of Skill machine operated by coins to the value money Slot). The machine is table top mounting and measures $24\frac{1}{2}" \times 18\frac{1}{2}" \times 18\frac{1}{2}"$ and is fitted with a steering wheel and a driver's 'view' of the road he has to traverse. The path does wind of course so that the 'driver' must keep his 'spot of light' pointer between the narrow confines of the moving roadway. A broad continuous paper band some 56 in. long is driven slowly by internal rollers and takes about $\frac{3}{4}$ of a minute for a full cycle. Off-set to the left, behind the front panel where the 'driver' cannot see, a second and parallel roadway is used to trigger a photo-cell in such a way, that if the 'driver' makes a false turn and leaves the marked out roadway, a second light, five inches to the left of his own pointer light moves off its own duplicate Indian ink roadway and energise the photo-cell which in turn makes a relay close. This operates warning lights and a bell but also trips a counter mechanism which indicates penalty points on a rotary indicator at the front of the machine. This will indicate the degree of skill of the 'driver' ranging from "excellent" to "menace!". As usual, Phil had the mechanics and electrics in module form and these were shown in duplicate on a display table so that members could examine the trip and relay mechanisms at close hand.

Finally **Esmond Roden** showed us his rail stock in the shape of continental trams and particularly, an early G.W.R. railcar which was a model of a steam driven prototype. Esmond sketched in some historic details explaining how the enclosed boiler and firebox filled the railcar with smoke and soot in the early days giving rise eventually to an articulated form where the loco section could be detached for cleaning and service. The model had fallen foul of Esmond's staircase on route to Alcester so the drive mechanism via an E15R motor was out of action. However, the model had been inspected by the Hon. Sec at Esmond's home only a week or two before the meeting when it ran beautifully. The Railcar was fully detailed with passenger seats and electric lamps - nice 'old fashioned' round bulbs which simulated the gas lamps of the period.

The hour of 4.15 p.m. having arrived, the meeting broke for tea break. During this spell, Paul Brecknell kindly stood in as deputy Treasurer in the absence of Roger Lloyd, to sell the tickets at 25p each for the refreshments and hire of the hall. By 4.30 p.m., the serving hatch was at full pressure dispensing tea, sandwiches, rolls, pork-pie and cakes which were consumed with great pleasure by the members. There was plenty to eat as usual and the goodies were delightfully displayed and served by the voluntary canteen 'staff'.

Old friends were re-united in ardent conversation on all manner of topics and once refreshed, members moved round the tables to see the other models on display, which were profusely placed around the hall with plenty of space to spare.

Leslie and Barry Clay - the father and son Guild team - had a mini exhibition of their own with some excellent freelance models. These included a Bascule bridge, an American wood burning locomotive and a neat traction engine driving a windmill type model. Care had been taken in the selection of parts to make very pleasing combinations of old and new colours and some good detail work was shown.

Bert Halliday showed additions to his Showman's Road Locomotive with further detail modelling but specifically so in the form of the Burrell derrick crane fitted to the rear of the engine and holding a realistic fairground rail car from a scenic ride in a chain sling.

Clocks and clock mechanisms were also in evidence, **Jack Partridge** supplying some novel constructions. One of these was a general clock motion powered by Meccano Electrical Coils operating a simple synchronous motor made from Rod and Strip Connectors bolted to a pair of Bush Wheels to form a rotor. Low voltage was the key, only 3 volts A.C. across each coil and the start spin was very easily achieved. Bearings for the rotor spindle comprised double thicknesses of Perforated Strips but Jack found that by spacing the Strips with a Washer, a stable bearing was still retained but with an oil gap providing capillary traps for long term lubrication. Four coils were used in series at 90 deg intervals round the rotor. The Meccano Clock Kit No. 2 turned up in various guises and two solutions were provided by Guild members for placing the strike dogs around the Circular Girders or Hub Discs forming the strike wheel.

Alan Partridge supplied photo-copies of a full size geometric division while Jack Partridge used a paper tape suitably marked off with peripheral divisions. **Mike Nicholls** built his No.2 Clock kit into the pre-war Meccano Grandfather Clock case with full complement of Braced Girders in bright red. Mike also had his rewind mechanisms self-acting by using Power-drive motors attached to their own battery boxes as weights. This system was to have been used for the No. 2 Clock Kit owing to the short run available by a single weight fall but costs escalated at Liverpool and these additions were dispensed with. As a result, many constructors have been disappointed with the short run of the No. 2 Kit and it has given Binns Road

some concern. A further modification to this Kit was also shown by **Jack Partridge** in the shape of an all-gear epicyclic train for the strike wheel. This dispenses with the published chain drive with little or no difference in cost and takes up even less room.

Jim Gamble had a number of historic Meccano Items on show as usual but also brought along a pre-war model of H.M.S. Revenge. This is the sort of shop window model which was a real eye-catcher in my boyhood days and as Jim had made it in well-chosen vintage nickel parts it was a striking model, some six feet in length.

Motor vehicles were also strongly featured, **John Palmer** and **Brian Edwards** showing double decker omnibuses of two different eras. John's bus was a model of a current Midland Red job and was very neatly covered in flexible plates to give an authentic outline. Full seating was provided on both decks and the usual steering and transmission mechanisms were incorporated. Brian's bus was a vintage 1914 London General Omnibus with solid rubber tyres fitted to artillery wheels, twin units being mounted on the rear differential axis. Chassis and bodywork were detachable so that details of the heavy gearbox of the day, with the auxiliary step-down shafts were displayed. Leaf springs and a steering column were parts of the details while the body work, with its open top and spiral staircase, was modelled up to the usual Brian Edwards standard – a class in vintage model work which Brian has established all on his own.

Purists should note that Brian's bus was actually modelled on a 1922 'S' Type A.E.C.

Peter Dixon and **David Whitmore** also brought vehicle models in chassis form to show special features of mechanisms. David, back to Guild meetings after prolonged illness, had lost nothing of his ingenuity in getting Meccano parts to do surprising things. Using small component for a little sports car chassis, David had made use of Wheel Flanges and the internal recess of Plastic Road Wheels to produce a very satisfactory calliper operated drum brake at the front and had tamed a high speed low voltage D.C. motor by a compact epicyclic reduction box to give a usable 'engine' speed which employed a very neat and compact clutch mechanism in the usual transmission. This, of course, included an all Pinion gearbox in a very limited pace and a stumpy 'sports car' type gear lever. **Peter Dixon** had gone a long way with his British Leyland saloon chassis to simulate hydrolastic suspension. In the absence of the fluidics required, Peter had substituted Axle Rod beam linkages from front to back which did give compensation between the independent suspension units of the axles. Both of these chassis are being developed for a second showing in finished form next September.

Other vehicles for the road included, of course, **Ernie Chandler's** highly decorated Showman's Road Locomotive - one of the best models that Ernie has ever turned out and, like Bert Halliday's, it has been well admired at various exhibitions. This time Ernie-provided a trailer caravan for the road engine, but a truly rugged one typical of travelling showmen, a four wheeled vehicle with forward steering tow-bar. Detail in the van was quite extensive with stove, fridge, lockers, stew-away tables and benches, not to mention windows, stable door type side openings and retractable access steps. Very neatly modelled in bright red and green parts, Ernie's van was a first class compliment to his Road Locomotive.

Both **James** and **Allan Grady** made the long pilgrimage from Dundee by train and brought some interesting items in their haversacks. James had a full collection of mini motor vehicle mechanisms, especially front wheel drives and differentials suitable for 1 in. tyred models. He also showed an early 4 volt Meccano Accumulator - which he bought himself as a lad!, so I would hesitate to date it? It was an added pleasure to study this item at length when James and Allan joined the Hon. Sec for lunch in Hall Green on the day after the meeting.

Complementing Esmond's Meccano locomotives were these of **Stephen Lacey** and **Ralph Clark**. Stephen showed a scaled down 0-4-2 saddle tank loco. based on No. 1 of the Talylyn Light Railway. The remarkable thing about Stephen's Meccano loco was that it was steam powered and was on display with a good head of steam in the Meccano Steam Engine powering it, during the early part of the evening. Ralph is also very keen on scale and this time he showed the chassis and wheel arrangement with valve gear for his American 2-8-4 1920 - 1930 locomotive. These long wheel-base jobs were developed to handle the increasing traffic of the period. Scaled to a fairly close 1/2 in. to the foot, Ralph's model was mounted clear of its tracks so that the motions could be shown in operation.

Cranes were also in evidence, a gantry by **John Palmer** and three Block-setting cranes. Two of these were shown by **Leslie Clay** (Senior) and **Ian Perrins**; Ian's crane being based on the old SML 4 with modifications and weighing in at some 70 lb. The third block-setter was by **John Nuttall** who staggered us all at the last meeting with his giant 'suitcase' dragline. This time John chose a scale less than that of the common block-setters by making his boom only 4 ft. long and 5 1/2 in. wide.

However, everything else on the model was similarly scaled so that the tower was 10 1/2 in. square. Three Powerdrive units and one Emebo Motor formed the power units for the main motions and these could be observed with their associated mechanisms by the simple process of raising the main machinery cab roof. Slewing was driven via a Gear Ring, the hollow centre of which supplied the necessary path for power leads to slip rings in the super-structure. An original friction grip block-setting gear was included for vertical setting and this could be adjusted for various size of blocks. John's model was well admired and he is to be congratulated upon his very neat scaled down version.

Showing his first model at a Guild Meeting, **Terry Pettitt** of Northampton had a very neat chassis of a

Saladin Armoured Car. This was somewhat smaller than a previous model shown by Paul Blythe but was nevertheless very neatly modelled and provided with the four wheel steering and multi diff drives required by this particular six wheeled vehicle.

Old favourites were there in the form of early supermodels. **Wilf Bolland** specialises in this and showed the Revolving Crane but this time Wilf had a modification on the hoist barrel to effect a reversing motion. **Dennis Perkins** also turned up with a pre-war supermodel, SML 22, Traction Engine but being the fine modeller he is, Dennis had taken the usual pains not only to match up his parts but also to make sure that all motions ran like clockwork (which is a bit of a contradiction when one remembers that the model is powered by the old 6 volt Electric Motor!)

Various other models, mechanisms, historical Meccano items literature and replicas of obsolete parts were also on display and one just cannot do justice to the excellent all round display at our first Alcester meeting. I know that I did not have half enough time to get round to see all of the models, let alone to make mental notes of their features and ingenious mechanisms. The whole thing just gets better all the time and this is what makes it all so interesting and challenging. If you didn't get a mention in this Report it is probably because I have no record of your model on the original questionnaire. However, if you did bring along a model you can be sure that it was appreciated by the membership and there was certainly more room for people to display their wares.

Round about 5.30 p.m., the stage was set for a coloured film slide show kindly projected by **Nigel Chandler** who laid on his automatic 35 m.m. slide projector for the occasion. The entire membership were comfortably accommodated on the stage, behind the curtains where a white wall at one side of the stage served admirably as a large screen. The slides were loaned by **Noel Ta Bois** of the Holy Trinity Meccano Club who had photographed a

13th Guild Meeting - 29th September 1973

It transpired that there was only one new member, Michael Walker from Blackburn, Lancs, who was duly welcomed.

Talks on the Smaller Models

David Guillaume opened the batting with his Meccano "Trundle", an amusing toy so-called because it trundles along. This was basically a cylindrical shaped "vehicle" (cylinder axis vertical) with one driven and two free wheels. The drive to the driven wheel was by a contrate and pinion such that it could castor, thus the Trundle moved away from any obstruction large or small that it encountered. The two free wheels were coupled by a differential whose carrier was unconstrained.

Mike Nicholls then showed four models built by junior members of the Henley club including a fork-lift truck built from the Highway Multi-kit and an extended half track carrier built from the Army Multi-kit. Mike also showed his Garratt locomotive taken from the 1929 book of models with modern motor and made to run on O-gauge track. The pleasing colour scheme was silver and blue, using new plastic plates.

The next model was **Alf Reeve's** Cornish Beam Engine of the triple expansion variety. Alf explained how he had found out the hard way that each cylinder and valve rod required its own Watt's parallel linkage, and the majesty of it all, gleaming red and nickel, oscillating slowly, was a wonderful sight.

Phil Ashworth followed Alf with what he alliteratively described as Much Modified Motorised Meccano Multi-kit Model. This was basically an open truck with motorised drive and steering enabling it to be remote controlled by a hand-held controller and inter connecting multi-core cabling. Phil explained the electrical circuitry used to limit the steering lock and provide self-centring, and then proceeded to play with his toy on the floor.

New member **Michael Walker** then staggered up to the table with his model - a long, low free-lance American car which was recently described in MMQ2. The model sported four Power Drive Units under the hood (bonnet) and four batteries in the trunk (boot). Mike explained that under normal circumstances only two of the PDU's were required, but a further two could be activated by a torque switch in the transmission when necessary.

Stephen Lacey then showed his delightful Talylyn 0-4-2 Saddle Tank locomotive which was powered by the Meccano Steam Engine, hidden in the Saddle. The model was unchanged from that shown by Stephen at the last meeting but he did not have the opportunity then to point out some of the finer detail.

About this time, concern for the Hon. Sec.'s well-being increased and so a posse led by Roger Lloyd was organised to scour the Birmingham Road.

Meanwhile the remainder moved back into the larger hall to see and hear about the larger models.

Organised Roaming I

The first 10' of the first table was taken up by a mini exhibition of **Alan Partridge** showing the development of Planetariums or Orreries. First came the very simple one ex MM6/27, then an improved version which Alan developed in 1959. Next came the version described in MMQ1 and finally Alan's latest design first shown at Henley. All the members were treated to a simple lesson on Astronomy and thus readily appreciated the various limitations of the earlier devices and were able to admire the mechanical ingenuity of the Mark 4 which correctly depicted all the relative movements of earth, sun and moon, an 18 year cycle being completed in about as many minutes.

Next in line was **Paul Blythe's** Emmett-like Bolt Sorting Machine which successfully differentiates between $\frac{7}{32}$ " and $\frac{1}{2}$ " bolts and deposits them in appropriate containers. Assorted bolts were loaded, into a hopper at the top from whence they were faced up in a chute. An electro magnet then picked them up one at a time, rotated, and deposited the bolt on the anvil of a measuring device. This latter was trip operated and appropriately biased the direction in which the bolt was tipped off the anvil. Paul had experienced some difficulty with spillage of bolts during the development phase and made the most of this by arranging for their collection at the bottom and automatic return to the hopper via an elevator.

At about this time we were all very relieved to note the arrival of Bert. The group then moved on to view **Clive Hine's** Side Loading Fork Lift Truck of the type used in many wood yards and stores, since it requires a minimum gangway. All the main motions - i.e. the forks on the telescopic mast, movement of the mast in and out and traction - were derived from one motor whilst a second motor provided power steering.

Round the corner was **Roger Wallis** with his Level Luffing Crane, a modified version of SML 35. By completely re-designing the base into a $12\frac{1}{2}$ " cube, with three $1\frac{1}{8}$ " flanged wheels on each tower bogie, and employing a built-up turntable as per the Meccano Constructors Guide, Roger succeeded in creating an impression of majesty and strength, whilst retaining the original design for cab and jib. A neat point was the use of doubler strips spaced from the 4-movement gearbox side-plates by washers, in order to provide 'Oil ways'.

Adjacent was **Mike Martin's** Block Setting Crane, a freelance model about three quarters the size of SML4 but looking just as rugged. All the motions were powered by the modern Meccano Steam Engine with individual forward-reverse selections in a Martin special gearbox. Mike had also gone to considerable trouble to add insulation around the fire box, ducted the exhaust steam up the chimney via a brazed-on pipe, and mounted the engine on an aluminium drip tray. A good representation of Fidler's Gear was

incorporated.

The next model was also a crane but this time mounted on an 8-wheel (3") chassis and designed and built by **John Nuttall**. Transmission was via a 6-forward and 2-reverse gearbox with gated change and seven differentials, the three inter axle diffs being mounted solidly between the side frames of the chassis. Each axle was carefully suspended by compensation beams such that even when running over rough ground all the wheels maintained contact. The crane rotated on a built-up ball-bearing made from 4" diam. plates and 5 1/2" circular girders, and was provided with a three-movement gearbox with independent reversing facilities. (Co-incidentally, Mike Martin's model also had a very similar built-up ball-bearing).

Moving on, the group arrived at a second mini exhibition, this time a variety show staged by **Leslie Dougal**. First he showed how he had solved the problem of tuning and adjusting synchronous motors for clocks etc., always a very fiddly job, by designing a plug-in motor module some 3 1/2" x 1 1/2" x 1 1/2". When required it could be un-plugged from the model and set up on the bench in a jig fixture. Leslie had also made a model of a classical Chinese South Seeking Chariot complete with appropriately dressed Chinaman with his pointer. In case you have never come across one of these before it consists basically of two wheels coupled by a differential whose third shaft is brought up vertically and to it is attached the pointer. By a suitable ratio of wheel diameter, track and differential gearing it can be organised such that the pointer remains fixed in space while the chariot is pulled in any direction. The Chinese never went to war without one. To complete his display Leslie had brought along a novelty Mantle Clock.

By this time we had wended our way back towards the door just in time to hear the call of "tea's up" from the ladies in the next block a few yards away, so the Hon. Treas. positioned himself strategically in the doorway and collected his 50p's as we all tramped through.

Returning to the main room, all gathered around **Tony Homden's** manipulator or mechanical hand. This was a fully articulate, artificial forearm, wrist and fingers with nine separate motions all remotely controlled. Two of the traversing motions were controlled by a joy stick and Tony explained the construction and use of back earthing contacts to short circuit the motor in order to minimise its over-run. An idea of its dexterity can be gauged from the fact that with it Tony was able to pick up a bottle, fill a glass and then drink from it.

By burning a lot of midnight oil, **Ralph Clark** was able to show a completed version of his 2-8-4 American freight locomotive with 12-wheel tender. Ralph explained that because of the size of the prototype he had had to model in a 1/2" (1/24th) scale compared with his usual 1", in order that the end product could fit within the confines of his car and Meccano set. Nevertheless, Ralph successfully included a host of detail and had mounted the driving motor up in the boiler in order to reserve "daylight" above the frames.

Paul Brecknell showed a modified version of the No. 10 outfit twin cylinder Motor Cycle Engine and outlined some of the difficulties he had experienced in producing what he considered to be a satisfactorily functioning model (for example there are no pistons in the original).

Bert Love had brought two live steam Derrick Cranes in contrasting period, one being a simulated 'mystery' SML 6a – an unpublished Supermodel of the 1930's powered by the Meccano Steam Engine of the period - while the second model used the current Meccano Steam Engine and was built from parts included in the No. 10 outfit. The second model showed how striking improvements both in appearance and operation could be made by exploiting modern parts to provide efficient servo braking, positive 'locked-in' drives and better scale speeds of hoist, luff and slew. A novel feature of Bert's second model was the provision of splash guards and a working vertical funnel, made from standard parts included in the No. 10 outfit, to deflect the water vapour from the new Meccano Steam Engine in a realistic manner. Erinoid handles on all control levers were an admitted 'fiddle' (their presence being purely decorative), these being filched from surplus Crank Handles usually found rotting by the ton in dealers' drawers, said Bert.

Free Roaming

The above concluded the talks given by members on their specific models, but there was still plenty more to see, inspect and admire during the free roaming period. The 'horological sub-section' was led by **Pat Briggs** with a weight driven verge and foliot Gothic style clock and a flying pendulum type powered by clockwork. Pat had also brought along a Binary Counter made by his son, John, who, we were glad to hear, is now well on the road to complete recovery after his accident in March. In support were **Roger Lloyd** with a model of Pat's Mantle Clock and **Bill Winter** and **John Palmer** with versions of the No. 1 Clock Kit, the latter being disguised as a miniature grandfather.

Motor vehicles included **David Whitmore's** very neat small Sports Car, finished in red and silver, with all the usual works, a Saladin Armoured Car chassis on a demonstration stand from **Terry Pettitt**, **Peter Dixon's** BLMC Mini and an MG model TA by **Brian Edwards**, the last two being in semi-completed state. **William Barker** showed his scale model of a Ransomes MG 6 Crawler Tractor, and **Dennis Perkins** a Priestman Tiger V Face Shovel Excavator, both very impressive.

Traction Engines, or rather Showmen's, were also well in evidence, **Ian Perrins** having his small scale Burrell with crane derrick, whilst **Ernie Chandler** and **Bert Halliday** had their larger scale models (9 1/2" drivers) which the Guild has had the joy of seeing before. Ernie also had his model Gypsy Caravan, whilst

Bert showed a development of the 2 1/2 million to 1 gearbox, he having attained nearly 40 million to 1 still nearly within a 2 1/2" cube. A further reminiscence of bygone fairs was provided by **Sidney Whiteside's**

model of Showman's Swing Boats, which could be driven by hand or power, and gradually gained momentum, thanks to being driven via spring loaded connecting rods.

Report on the 14th Guild Meeting held in the Grieg Memorial Hall, Alcester. 30th March 1974

The clans started gathering in Alcester from mid-morning, yours truly arriving about 11-45 to be heartily greeted by Esmond, Ernie, Alan, David (Guillaume) and I think one or two others. A quick unpacking and check of my model, and four of us were off to the 'local' for a generous helping of S & K pie washed down with a welcome pint.

More Members rolled up during and after lunch, so by the advertised starting time there were about 30 present, 80% of whom had one or more models with them, which just nicely filled the 5 long rows of tables set up in the building adjacent to the main Hall, i.e. the place we occupied last September. Referring back to the programme, I see that we started as planned with a quick cuppa, but then, in eagerness to see the models demonstrated, we did not give the President an opportunity to formally welcome everyone, which was item 2 on the plan. Sorry Esmond.

Demonstration of Models.

First to bat was **Mike Nicholls** who drew our attention to two models of Magicians sawing a Lady in half. The smaller of these was a copy by Geoff Wright's 12 year old daughter of his larger one. Both models were "grinding" away merrily to the amusement of all. Mike then turned to a model of his own, a Beam Engine constructed entirely of current Meccano parts, though using some Multikit parts in special colours for effect. The model was based on the Airfix plastic construction kit, and powered by a dealer's display motor. Particular features included a built up eccentric with a 3" Pulley and strap built up of Curved Strips, and a long connecting rod of substantial appearance consisting of a Screwed Rod on to which had been screwed a number of Electrikit 1" Cores.

Roger Wallis then showed a Free-lance clock which he had made, limiting himself to the contents of a No. 9 Outfit, a No. 2 Clock Kit and a No. 1 Clockwork Motor. Roger was justifiably proud of the fact that the clock would run for 24 hours on one winding, even though it had no pivot bearings. Roger's secret leaked out at tea-time - he had diligently polished each axle in the going train and escapement to minimise friction.

A cry of "Steam up!" caused a temporary diversion to **Tony Homden** and his giant model of H.M.S. Dreadnought. Tony started by telling us a little of the history of the prototype, which made Naval architectural history when built in 1905. This history and the general lines of the ship were obtained from a Profile Publication. The model itself being to a scale of $\frac{5}{32}$ to 1 ft. was about 8ft. long and weighed 60 pounds. Probably the most impressive feature of the model was the shapely hull - no water-line models for Tony. The steam engine in the bowels of the hull was used to drive the four propellers, and Tony had arranged for the fire-box to be moved in and out by remote control. His modelling of the superstructure was full of fine detail and automation, with 5 independently rotating twin gun turrets, a powered derrick, boats complete with davits and beams to support anti-torpedo netting all around the hull.

Back to **Roger Wallis**, this time to visit his 'Transport Museum'. He showed three vehicles - a tram, a trolley bus and a Diesel bus. All three were built to a similar size based on 2" wheels with tyres, consequently the mechanical detail was limited though each was powered. The styling and colour of the bodywork were very pleasing, all three being finished in a different combination of colours, each combination consisting of old and current ones, e.g. red, green and yellow. .

The crowd moved on to the corner of the room occupied by **Alan Partridge's** display which had two distinct themes. Firstly Orreries - his Mk. 4 has been slightly modified and as well as this Alan showed some useful mechanisms used in orreries. The second theme was on mazes. Having built a 3-D maze out of perspex some time ago, he had recently set about making it in Meccano, ending up with a cube of side 4 x $2\frac{1}{2}$ " using primarily $2\frac{1}{2}$ " x $2\frac{1}{2}$ " transparent plates. Certain walls or floors of the individual cubes within the whole were missing, such that a table tennis ball could pass from one end to the other if it did not get stuck in one of the many blind alleys. Alan also showed what he described as a "design rig" for mazes which by extension was capable of transplanting ones thoughts into the 4th dimension.

Ron Fail then demonstrated an amusing device which purported to be a "frictionless" bearing. A wheel on axle rod was supported transversely in a coupling at each end, the couplings being rotated in opposite directions by an electric drive. When the wheel was set in motion it continued indefinitely. An even more impressive demonstration was effected by slightly unbalancing the wheel, whereupon it would oscillate as a pendulum indefinitely. Ron assured us that there was no magic in this device. It relies upon the fact that the co-efficient of sliding friction is almost independent of velocity.

Stephen Lacey showed a partly-built model of a 0-8-0 shunting locomotive which was scaled such that he could use artillery wheels as main drivers. Stephen explained that it then required a certain amount of ingenuity to produce a working Walschaerts mechanism to scale. His model was powered by a powerdrive unit coupled to the drivers via a differential. The diff's other shaft was normally free but could be braked when it was required to run the model. This form of motor connection has the advantages that the model can be simply pushed along the track and the power take-up is smooth.

Next to Stephen was **Phil Ashworth** who had another "Motorised Multikit" with him, this time of a tank. Each track was separately powered and a joystick hand controller allowed simultaneous forwards on both, backwards on both or forwards on one and backwards on the other for turning.

Esmond Roden then demonstrated his giant Block-Setting Crane based on S.M.L. 4 but with a grab bucket and both manually and remotely controlled separate motors for the usual movements. Esmond

amused us by relating how he had acquired the limit switches used on the model from a telephone engineer. A novel feature was the use of a number of $4\frac{1}{2}$ " x $2\frac{1}{2}$ " hinged plates in concertina fashion as covers on the cab sides. On the railway track beside the crane there were two locomotives, a 4-6-2 tank powered by a No. 2 clockwork motor and a Diesel powered by a No. 1 clockwork motor resplendent in modern livery, thanks to the use of blue plates.

Still on 'O' gauge was **Jim Gamble's** tram which he demonstrated on an oval of Hornby track. Powered by a power drive motor with collection from an overhead single rail it made about two circuits of the oval, then a bell rang, the tram stopped, the bell rang twice and the tram started off again - all done by clever mechanical sequencing. Jim also showed two items from his Meccano collection, an 'O' gauge loco in immaculate condition and a vertical steam engine, and Servetti's "Money Grabber".

Clive Hine was persuaded to talk about his Fairground Satellite, a model some 3 ft. in diameter, and decorated with over 200 coloured lamps. The model had three motors all separately controlled - one to rotate the whole structure, one to rotate the passenger module and the third to elevate the whole structure by simulated hydraulic rams. Next to this "tummy testing machine" was Clive's model of a Fairground Organ mounted on the back of a 6-wheel lorry. The organ both looked and sounded realistic since the conductor and drums moved, and recorded music came through a hidden loud speaker.

Bill Barker then demonstrated his version of a remotely controlled tank, which was similar to Phil Ashworth's, but employed only one motor for drive, which was via a diff to each track. A second motor operated a brake on either track to allow the tank to be steered. Bill and Phil promised to have a War of the Roses after tea, but we never got around to it.

Nearby was **David Guillaume** with his 'Automatic Tram' in a nearly completed condition. David explained that his prime objective was to make a display model, and to ensure long trouble-free running he had combined a number of simple devices into an impressive whole. A foot long car was hauled up and down a 6 ft. straight track by chain, which was driven via a simple automatic reversing gearbox and slipping clutch. (This slipped during the over-run or waiting period at each end.) On nearing and leaving each end a contact was momentarily made, causing an electric bell to ring. A further feature was automatic changeover of the car's red and white lights at each end, effected by a switch actuated by a long rod projecting beyond the car's buffers at each end.

Last to bat came young **Martyn and Graham Brown**, newcomers from Leyland. Martyn showed a neat model, 20" long, of a Saladin armoured car, with 4-wheel drive, 4-wheel steering, swivelling turret, etc., everything controlled from the driver's seat. There were 3 diffs in the transmission, and the primary (inter-axle) one could be locked to assist extrication of a bogged down vehicle. Graham's model, also about 20" long, was of a Vale of Rheidol 2-6-2 Tank Loco, powered by a PDU with remote reversing lever and a rheostat for speed control. All the drivers were independently sprung, the bogies pivoted, and when in motion the loco looked very realistic.

Free Roaming

The keen free roamer was well rewarded by searching out some of the other models and their 'non-batting' owners. Here is a quick run-down in the order I came across them whilst on a zig-zag course up and down the trestles with my Tape Recorder as an aide memoire.

Michael Walker had 2 more American Cars from his production line, a Fastback and a Convertible, each about a yard long, each driven by 2 PDU's. The Fastback featured a special clutch for gradual acceleration from rest, and an impact absorbing front end (in accordance with the latest U.S. legislation), whilst the Convertible had power assisted bonnet and boot lids and 'solid' silver trim by use of silver Cellotape on standard Strips.

John Briggs showed he is following in his Father's footsteps with a very neat copy of Bert Love's Grandfather Clock built from a nearly new No. 10 Outfit. Pat had also brought along a friend of John's, **Matthew Guest**, who showed two small, neat models of aircraft radial engines. I'm hoping he will build the rest of the plane for the next meeting!

Since he had been very busy with other things, **Peter Dixon's** BLMC Mini appeared again in its semi-completed form, but still drew considerable attention. **Paul Brecknell** was another who hadn't been able to complete his model, so he left it at home, but did bring a crawler track and track frame of massive proportions, each track link being a $3\frac{1}{2}$ " Flat Girder.

Pat Briggs produced another clock from his seemingly endless collection, this time an electric, synchronous, Mantle Clock very decoratively finished. Nearby was Brian Edwards' very neat scale model of a Brough Superior Motor Cycle combination, with a detailed representation of its water-cooled Austin 7 engine and shaft drive to twin rear wheels.

There was a version of the No. 10 model Snow Loader, slightly modified, by **Wilf Bolland**, and near this were two clockwork powered Swing-Boats whose owner I couldn't trace. "

Two Meccanographs were on display, one being by **John Nuttall** which he describes as "simple", and the other a version of Konkoly's Guilloche Machine by **Ernie Chandler**. Both machines were seen to be capable of producing neat patterns. John, who had only just recovered from a bout of sickness, had also brought his development of the $2\frac{1}{2}$ million to one gearbox - some development, since it had a reduction of 6 million million to one, and was still contained within a $2\frac{1}{2}$ " cube. Ernie had also brought a second model;

the remains of his Showman's Road Loco, partially stripped "because he needed the parts", but also to show to best effect its transmission.

And that covers all the models, I think. Also on view were a new Super Highway Multikit which Geoff Wright obtained at the Brighton Toy Fair, and I showed copies of 'the three Multikit Instruction Books, various Meccano Leaflets and some reprints of Ruston and Hornsby sales literature of the early 30's.

Special General Meeting

This was held in the smaller back room, 28 Members being in attendance. Ernie Chandler took the Chair, and was joined at the top end of the room by the President and the two Acting Officers.

Apologies for absence had been received from Phil Bradley, Eddie Brooker, Ralph Clark, Bert Halliday, Roger Lloyd, Bert Love, Michael Martin, Bert Shaw, Eric Taylor and David Whitmore.

The President then gave a belated welcome to all (not his fault it was belated), and thanked all those who had helped with the preparations for the Meeting, particularly the ladies who kept us all stoked up - Nellie Perkins, Dolly Faulkner, Mrs Barker and Yvonne sorry, I never was good at remembering names. (Possibly Hine?)

Attention was then drawn to Resolution 1 on the Agenda - That the Midlands Meccano Guild be wound up. There being no proposer for this Resolution it was rejected.

Resolution 2 - That the Guild affairs would be more properly ordered if a formal Constitution were adopted - was proposed by Stephen Lacey, seconded by Tony Homden and carried unanimously.

The Meeting continued by considering the draft Constitution as previously circulated, and there was considerable discussion on many of the clauses, and some were amended. A version of the Constitution believed to reflect the wishes of the Members is appended. Each clause in this was considered separately, and proposed, seconded and voted upon. There were no objectors to any of the clauses as finally agreed, and the Constitution was duly adopted.

It will be noted that the Constitution no longer carries a reference to the origins of the Guild. However, all the Members present wished it to be placed on record that the Guild owed its existence to the founding in October, 1965 by Esmond Roden of the South Midlands Meccano Society, out of which some two years later was formed the Warwickshire and District Meccano Constructors Guild which soon changed its name to the Midlands Meccano Guild.

During the discussion on Rule II Tony Homden suggested that it may be desirable for the Guild to seek proper indemnity cover for itself and its Members during Guild Meetings. This was agreed, and the Chairman and David Goodman undertook to investigate possibilities and, if the terms seemed suitable, to purchase such cover, using the Guild funds, before the next meeting.

Stephen Lacey then proposed that Phil Ashworth and David Goodman be confirmed in their positions as Hon. Sec. and Hon. Treas. respectively. This was seconded by Geoff Wright and carried unanimously.

It was decided that the next meeting of the Guild would be held at Alcester on Saturday, 21st September this year.

Report on the 15th Guild Meeting held in the Greig Memorial Hall, Alcester. 21st Sept. 1974.

Yours truly coasted into Alcester just before noon, after another wet run down the M1, to be greeted by our usual stalwart reception party of David Guillaume and Alan Partridge. Another early arrival was fellow Yorkshire man Mike Pashley, and we were closely followed by the contingent from Lancashire who travelled down with Martyn and Graham's father, Mr Brown. It seems to be true that the further away one lives, the earlier one arrives.

Soon after noon my fellow Officers arrived and we nipped off in Ernie's car for a semi-liquid lunch and a quick committee meeting when we returned to the Greig Memorial Hall we were surprised to see a 40-seater coach just disgorging its load of Meccanomen and models. It transpired that this was the Henley brigade, the coach being organised by Geoff Wright, (If interest continues he will be making the same arrangements for future Guild meetings).

The Hall was soon filling up nicely with men and machines, and buzzing with activity. So were the kitchen, and our four lady helpers soon had the first cups of tea available for us all. A little after quarter past two things were ready for the off, so the President, Esmond Roden, "dropped the flag" by welcoming all, making particular reference to new members Eric Baldwin from Pontypridd, Mike Pashley from Sheffield and Paul Smith from Henley.

Demonstration of Models

The batting was opened by **Stephen Lacey** who demonstrated his now completed model of a 0-8-0 Ex S.R. Shunting Tank Locomotive. The chassis was seen in March so interest now centred around the well-proportioned body, Stephen having succeeded in bending flexible plates with no mutilation.

He was followed by **Clive Hine** who produced a pre-programmed Land Rover that is a Meccano version of a popular toy "the Computer Car". The model slowly ate a strip of stiff cardboard with cut-outs on both sides which were followed by internal tracer arms. One side controlled the gearbox, giving forward, neutral or reverse and the other side the steering, left, straight ahead or right. Since the model would require a large space for proper demonstration, Clive had mounted it on a small plinth so it could be more easily seen.

Next came **Jack Partridge** with his Grandfather clock which not only kept accurate time and struck the hour, but also boasted a complete Westminster chime mechanism, all except the actual chiming brass tubes being standard Meccano. The heart of the mechanism was five $5\frac{1}{2}$ " Hub Discs with electrical contacts at strategic points around the periphery. This assembly was caused to start rotating each quarter hour, and the amount it turned was governed by the location of a "stopping contact" on one Hub Disc.

Rotation was approx. 1, 2, 3 and 4 tenths of a rev. for the four quarters. The remaining 4 Hub Discs also had contact studs whose mating wipers were connected to (4) electro-magnetic hammers. Hence by appropriate positioning of contact studs the unique sound of the Westminster chime (4 chimes at $\frac{1}{4}$ past, 8 at $\frac{1}{2}$ past, 12 at $\frac{3}{4}$ to and 16 on the hour) was obtained. Jack's clock was powered via his home-made electronically regulated power supply, capable of supplying up to 4 amps at a preselected voltage, but incorporating protection such that it cut out with an overload of 5 amps. (It is hoped to provide a detailed description of this in the next Gazette) At the very second that Jack had finished his chat his clock obligingly struck a quarter to - splendid timing!

Alan Partridge followed with a mini-exhibition of mechanisms, starting with 6 different differentials, some all spur, some contrite and bevel. Describing various uses of each in turn, he culminated with one which was particularly designed for use in long gear trains but could be used in vehicles. Particular care had been exercised in its design to ensure that friction was kept down to the minimum, bearing loads being balanced out where possible and each contrate mounted such that its teeth did not overhang its journals. Alan also showed two "inside-out" universal couplings, with the "spider" round the outside, and a useful thrust bearing using Wheel Flanges which he had developed from an idea of Bert Halliday. (Again, it is hoped to feature some of these mechanisms in the Gazette.)

A quick about-turn and we were looking at **David Guillaume's** display. He had brought his automatic train again, but concentrated on describing a little tram on track with unique control mechanism. David explained his intention of eventually producing a programmed crane, or similar, for display purposes. This would require various sequencing switches for control. Since the Meccano Relay is expensive (and only has one pole) and relay switches built up as per the Elektrikit manual consume a lot of power in the "on" state, David had produced a latching relay, that is an electrical switch, with up to 8 change-over contacts, the contacts being set one way and then changing over by the application of a short pulse to one of two coils. In other words, when one coil was energised it changed over the contacts which then remained latched over when the coil was de-energised. Release of the latch was affected by energisation of a separate coil. The afore-mentioned little tram was set up to demonstrate the latching relay, since the tram's motor was fed via the relay's contacts, and when it hit buffers at either end of the track it completed the circuit to the setting and release coils respectively.

Roger Wallis was next with his "No. 29" clock and decimalised version of the Meccano Bandit. Roger explained that the clock was slightly improved compared with last time, incorporating a $1\frac{1}{2}$ " sprocket as escape wheel and pendulum of proportional length. He had needed an anchor escapement a la Pat Briggs, but the original used a $1\frac{1}{2}$ " Corner Bracket and a Double Arm Crank. Roger's "copy" was achieved by

slipping a 1" x 1/2" Angle Bracket into the sleeve of a Slide Piece, and using a 5 hole 2" Strip as the pallet carrier. The one-armed Bandit was described as a virtual copy of guess whose, but was modified to operate on the new 2p. pieces, not good old-fashioned pennies, and had strengthened and additional bearings to improve running and reliability. Their effectiveness was obvious, since the machine still worked perfectly after long hours of running at Stoneleigh, Henley and chez Wallis.

Mike Nicholls then told us a little about the history, and demonstrated his model, of Henson's Aerial Steam Carriage, which for the uninitiated was a form of pre-historic flying machine. Henson had conceived a quite advanced aeroplane for his time, and built a model of it, but unfortunately it never flew since the only prime mover available in 1850 was a steam engine, of hopelessly low power to weight ratio. Henson's model in other respects was most advanced, incorporating a tricycle undercarriage, twin pusher props and moving tailplane. Mike's model was also quite a masterpiece, being of 4ft. 8ins. wingspan and 3ft. 8ins. long, it captured the lines of its prototype perfectly. Perhaps the most amazing thing was that Mike had built it all in less than 2 weeks, taking only 36 hours modelling time. True to type it was powered by a Meccano steam engine, and Mike had brazed a short length of pipe to the exhaust port, and then ducted the exhaust overboard by use of plastic tubing. Most sensible use of non-Meccano parts.

Martyn Brown had brought his 6ft. long model of an American Fire Truck of the elevating platform (Snorkel) type, scaled from a minute photo in the Observer Book of Commercial Vehicles. Resplendent in red and silver, it had a fully detailed chassis - steering, 6-speed and reverse gearbox, diffs, and 4 power drives ganged together which enable it to go at quite a pace. Prime interest centred on the elevating platform, which was operated by cords and linkages rather than screwed rods, but nevertheless went up smoothly and quickly until it almost touched the ceiling. (Martyn had entered this vehicle in a contest at Henley the other week, but had not at the time completed the elevating mechanism. Certain judges admitted they had doubted it could be mechanised at all, and were truly impressed.)

Graham Brown's model was a 3ft. long Beam Engine, of conventional appearance but nevertheless a very neat, freelance effort. It was powered by a mains motor ex a dealer's model which was noted as being remarkably quiet.

New member **Eric Baldwin** was then leant upon, and told how his interest in Meccano had been revived, and went on to describe a neat pair of steam vehicles, a showman's road loco and a traction engine, both with 5 1/2" drivers. Eric had based his models on photos of Burrell engines taken at rallies, and incorporated some ideas culled from Bert Love's book on Meccano and Allied Constructional Outfits.

Next **Tony Homden** outlined his ideas for a "Meccano model manufacturing model", and if you want to know more about this, come along to the next meeting when, all being well, it should be working. All considered it was very sporting of Tony to talk about and show a model in such an embryo state.

New member **Mike Pashley's** model was also incomplete, being just the hull of a bit of earth-moving machinery (a scuffing shovel?) To say "just the hull" is really quite an understatement, since it measured over 18" each way, had four separate tracks driven from a central pair of motors, and each steered by yet another motor. Hence it was quite a maze of brassware, universal joints, etc.

Ernie Chandler usually saves his words for when he is in the Chair, but this time was persuaded to tell us a little about his beautifully detailed, 7ft. long, Canal Boat. The engine compartment seemed to have had a complete refit since Stoneleigh, and Ernie had also devoted some care and attention to adding a few creature comforts to the living accommodation, hence making the model even more eye-catching. He also showed his version of SML 15 - Baltic Tank Loco, which has just had a re-spray, bolts and all! Anybody know the part number of green headed bolts?

Finally **Paul Smith**, new to the Guild but well known in the Henley Club, showed several articles, the first being a self-starting induction motor, driven from AC volts. To achieve self-starting (for the first time in Meccano) Paul used a bank of capacitors to shift the phase of the mains supply by 90 deg, thus effectively making a 2-phase supply for the motor's 4-pole stator. The armature was cunningly made of a mixture of steel and brass in order to have the correct electromagnetic properties. Paul also showed a remote-controlled steam driven tractor (under construction) and a cute clockwork powered dog.

Free Roaming

Starting in the far corner where the Hon. Sec. **Phil Ashworth** had set up his office and taking a zigzag course one would come upon the following models which were not individually demonstrated. Both the Hon. Sec. and Treas. had brought clocks, the former a very simple clockwork powered skeleton clock into which had been put more elbow grease than modelling ingenuity and hence it appeared quite decorative. **David Goodman's** clock was mounted in a long case and had a strike mechanism as a separate module being connected only by wires. The mechanism was of the conventional locking plate variety using two hub discs each released in turn by a solenoid. The Hon. Sec. had arranged a display of photographs which he had received from Jose Ferretti in Argentina. Two letters from Jose were also available for perusal.

Wilf Bolland showed Super Model No. 25 - "hydraulic" crane in which the ram was worked by a screw mechanism.

Next were two neat models by **Dennis Perkins**, one of a Priestman Tiger Excavator and the other a Chaseside Tractor Loader, the latter being an improvement of the current No. 10 leaflet. Dennis had also brought a neat model of a horizontally opposed 6-cylinder engine as might be used to power a tank which

Terry Pettitt had sent along.

Tony Homden's battleship HMS Dreadnought made a welcome second appearance and next to it was another beam engine from **Alf Reeve**. It was a version of Boulton & Watts type C.1800 demonstrating the operation of the valves by the plug-rod. Alf had also brought a model 2-6-4 tank loco on which he had success- fully emulated the subtle lines of a taper boiler, firebox, etc. Obviously following in father's footsteps is **Chris Reeve** since he had made a very impressive model of a 0-6-0 J39 loco + tender which Alf proudly showed.

Bert Halliday showed once more his large Showman's Road Loco this time with its scenic jib extended ready for action. He also had a mechanism giving a variable throw crankshaft and another Meccanograph in the making.

Steven Sawaryn had made the motor chassis as featured in the March/April '68 MM and mounted it on a wooden plinth. He also brought a No. 10 leaflet Combine Harvester which had been built by his 12-year-old brother Nicholas. Judging by the quality we have another potential Guild member here. Sandwiched between some larger models was a neat little dealer's type model of a windmill beautifully restored by **Mike Nicholls**.

More motor vehicles, this time, as you may have guessed, from **Brian Edwards**. A Brough Superior motor cycle with commercial box side car and an unfinished MG sports car chassis.

John Nuttall had a very unusual form of Meccanograph which almost defies description. It was some 3' square with adjustable throw crankshafts near each corner all connected by devious linkages to the pen-arm. As usual, the variety of designs seemed infinite and the most minor adjustment sometimes made a vast difference to the end product.

Ian Perrins brought his fully working model Showman's Road Loco (5 $\frac{1}{2}$ " drivers) modelled primarily in blue and gold, and **Bob Faulkner** showed Servetti's Money Grabber.

President **Esmond Roden** has been very busy recently having a dismantling session in preparation for making a large model for next March. However, he had managed to find time to make a minute model of an Artillery Gun using a Pocket Meccano + one, the extra part being a screwed rod around which he had wrapped the cord to produce a substantial barrel.

Geoff Wright brought two pre-production Mogul trucks of the type with perforations so that they could be integrated with standard Meccano. The pressed steel cabs seemed, if anything, more substantial than those of the Multikit lorries, and the general finish was very good; the one disturbing feature is the likely high price of these.

The Annual General Meeting.

The Chairman, Ernie Chandler, opened the meeting by echoing the President's earlier words of welcome, and also made special mention of the return of the 'prodigal son' Eric Taylor. He went on to say how pleased he was that the Guild had overcome its troubles of earlier on the year, and now seemed to be back on an even keel with a substantial number of good keen modellers who made a very happy crowd. .

Apologies for absence from Ron Fail, Paul Brecknell, Paul Blythe, Phil Bradley, Peter Dixon, John Lorimer, John Palmer, David Whitmore, Terry Pettitt and Doug McHard, Marketing Director of Meccano Ltd., were tabled.

The Hon. Sec. was then called upon to give his report. He noted that this year's active membership was almost as high as in 1972/73, and hoped that next year's would surpass it. The customary Guild meetings were held twice in the year, with average attendance over 30, and the variety and quality of the models was as high as ever. Major Guild publications consisted of two Meeting Reports, and two issues of the Gazette, with the occasional Newsletter in between. Once again the Guild mounted and manned a large and varied display at the 3-day Stoneleigh Festival. We were also well represented at the recent Henley Exhibition. Meccano displays were arranged in office windows in Evesham and Cheltenham, and several individual promotional efforts were made in shops, schools, etc. Guild member Michael Martin won the Meccano Cup at the 1974 M.E. Exhibition with his steam powered Blocksetting Crane.

The Hon. Treas. was then called upon to give his report. David drew attention to the accounts, some copies being available for perusal, (a copy appears later in this report) with special reference to the current deficit of £22-71, and pointed out that, since expenditure amounting to £16-74, which had been incurred the year before but not then taken into account, had now been accounted for, our effective excess of expenditure over income was only about £6. It should also be noted that in 1972/73 we started with a surplus of £18, so the effective overspend for that year was nearly £35. As instructed at the last meeting, the Hon. Treas. advised that he had taken out insurance cover for our meetings at an annual premium of £3, which covered just about all foreseeable risks except exploding boilers!

Next the Hon. Treas. remarked that we were fortunate to have the use of the Greig Memorial Hall for our meetings at a most reasonable charge. This was readily appreciated by the membership, and a proposal was made from the floor that the Hon. Sec. write to the Trustees of the Hall conveying our thanks. This proposal was warmly supported and carried unanimously. (Hon. Sec.'s note – a suitable letter was sent on 24th September.)

The Hon. Treas. drew attention to the fact that the accounts were unaudited, and was empowered to

seek the services of an Hon. Auditor of his choice. Stephen Lacey then proposed, and David Guillaume seconded, that the accounts be accepted, subject to audit. This was carried unanimously.

The Hon. Sec. then accepted full responsibility for incurring the deficit, explaining in mitigation that it was almost entirely due to increase in the cost of publications thanks to inflation, those for the second half of the year costing some £20 more than for the first half. Since the bills for printing were only received at the end of each half year, his conscientious and, he thought, accurate budgeting had gone to pot.

The President then took over the Chair for the election of Officers. Two nominations for Chairman were tabled - Ernie Chandler and Stephen Lacey, who both left the room while a vote was taken which re-elected Ernie. There being no nominations other than the current holders of the hot seats of Hon. Sec. and Treas., and those holders indicating a willingness to continue in office, they were duly returned unopposed.

Whilst in the Chair Esmond expressed thanks to Ernie, David and Phil for their efforts during the past year. He also expressed thanks to David Guillaume for making all the local arrangements at Alcester, to Mike Nicholls for his help with Guild Publications, and to Geoff Wright of M.W. Models for his encouragement and support. Finally most sincere thanks were expressed to the lady helpers in the canteen. (They were presented with boxes of chocolates later.)

A serious debate on finance followed. First the meeting ratified the increased of meeting contribution to 70p, to cover the expected increase in the cost of food. Then ways of relieving the deficit were explored, including a once-and-for-all levy of 50p, an auction of surplus parts, becoming a Registered Charity, and seeking support from the Trustees of the Greig Memorial Hall and from the National Council for Social Service. The meeting concluded we did not wish to impose on anybody, and wanted to retain complete independence and autonomy, whatever the cost. Circumstances were then eased by the Chairman passing over to the Hon. Treas. £10 which he had received from the Stoneleigh Festival organisers, and Eric

Taylor made a generous donation to mark his return. The Hon. Treas. then offered his opinion that the remainder of the deficit could be covered by an increased subscription. After further discussion the annual subscription was set at £2 for Full Members (UK), £1 for Junior Members (UK) and £2-50 for Overseas Members.

The possibility of economising on Guild publications was explored, with the conclusion that the quality and also the quantity of the main publications should not be reduced, but that the Hon. Sec. could explore the possibility of cheaper (and hence poorer) reproduction of Bulletins, Questionnaires, etc. It was agreed that any who wished could bring their surplus materiel to Guild meetings for general sale, the proceeds going to Guild funds.

The date of the next meeting was set as SATURDAY 22nd MARCH 1975 at ALCESTER.

Under any other business the Chairman raised the point of the date of our Autumn meeting, suggesting it may be beneficial to have it later than the end of September, due to its proximity with the summer exhibitions, etc. Members were asked to consider this suggestion, which will be taken up again at our next meeting.

David Goodman enquired if the membership wished to continue to support the Stoneleigh Festival - answer a resounding 'yes', with a proviso that improved arrangements for complimentary passes be made.

Phil Ashworth drew attention to a recent letter he had received from Doug McHard, and a sample of the latest type of black nuts and bolts. A count was taken of members' requirements for small Guild Washers - it is hoped to go into production soon. (17000 wanted.)

Alan Partridge made a plea for all or part of a Meccano Circular Jig-saw. He had no luck - can any member not at the meeting help?

Steven Sarawyn proposed, and Stephen Lacey seconded, that 14-year old Chris Reeve be admitted a Junior Member. Since all had seen and admired Chris' model of a J39 loco there were no dissenters, and we look forward to seeing Chris at the next meeting.

Report on the 16th Guild Meeting held in the Grieg Memorial Hall, Alcester, on 22nd March 1975

Running down the hill into Alcester at about a quarter to two on a sunny Saturday, I slowed down when approaching the pub we usually patronise and, as half expected, there was the Chairman's Chariot in the car park. So my eldest son, Robin, and I made a quick left turn and joined Ernie, his son Nigel, David Goodman and Mike Pashley in a quick half, and a friendly chat.

From there we went on to the Grieg Memorial Hall in convoy, and arrived to find that just about all the other Members who were expected, and one or two unexpected ones (naughty!), had arrived and were busy setting out their stalls. I managed to find a bit of space in the far corner of the room, primarily for the Hon. Sec. type paraphernalia, my model being small by comparison.

There was just time for a few welcoming handshakes, and the essential cup of tea for starters. Then the President welcomed new Members Chris Reeve, John Levers, Keith Orpin, Ian Henwood, Mike Cotterill and Norman Mason, following which we got down to the main "business" of the day.

Demonstration of Models

Ernie Chandler opened the batting with his model of the Laxey Waterwheel. Ernie explained that he had used GMM Publication No. 48 as a guide for his model but had had to do a number of modifications, partly to tailor it to the size of his collection and partly in order to improve the appearance. He found that a much reduced gearing to the wheel gave more realism which was heightened by the appearance of the wheel itself which had a double rim using different radius curved strips.

Alan Partridge followed with the mini Exhibition we have come to expect of him. His main model was of Telford's Saltash Bridge, the prototype of which takes the Great Western Railway from Devon into Cornwall. Alan's model was three-quarters complete with one 10ft. long span finished whilst the other was still under construction. Alan pointed out the designer's ingenuity in using a combination of arch and catenary so that the net load on each supporting tower was vertical. The finished structure was very impressive particularly the main arch which was elliptical in section ($2\frac{1}{2}" \times 3\frac{1}{2}"$) and built up from hundreds of flexible plates. Continuing the theme of his article in the last Gazette, Alan had five demonstration rigs to indicate the properties of universal joints. In each case he had arranged for the rotations of the input and output shafts which were coupled by UJ's to be summed by a differential so that the resulting error in the transmission was indicated by movement of the differential carrier.

The Ultimate Stratobird Mark 2 is the name given by **Michael Walker** to his latest Detroit-type vehicle. Its many features included full front and rear suspension, double power drive motors, energy absorbing front and rear bumpers, opening doors, hood and trunk and tilting reclining front-seat backs. It also had fully automatic electronic headlights, the electronic control being powered by separate P70 batteries reclaimed from used Polaroid SX70 film packs. As well as all these interesting features the model had pleasing lines as befits its title and was a splendid advertisement of the latest WRI fat tyres which added the final touch.

Next came **Martyn Brown** who had a neatly modelled mobile crane whose jib was about 4ft. long; The model included five motors; hook, jib, slew, right track and left track, the tracks being imitation with small driving wheels underneath. Martyn put the crane through its paces with the aid of a hand-held remote controller. Martyn's brother **Graham** then showed an automatic model controller which he had developed consisting basically of a length of perforated paper tape running between two spools. Sensing fingers detected holes in the paper and completed the electrical circuit to built-up latching relays (these relays were rather similar to the ones demonstrated by David Guillaume last time, only requiring a short pulse of current whilst changing state.) with a quick one two Graham disconnected the remote hand controller from the crane and connected the crane up to his automatic controller which proceeded to give us a further demonstration. Clever brotherly collaboration don't you think?

New Member **Keith Orpin** displayed with justifiable pride the results of his labours during the last 18 months. These were a superb detailed model of a Fowler Showmans Engine accompanied by an 89 key Marengi organ. The engine was a resplendent mixture of red, gold, black, silver and yellow, about 1/8th scale and the organ had an integral cassette tape recorder producing appropriate music. Your Hon. Sec. queried the authenticity of the yellow spokes on the driving wheels and was gently reminded of the existence now of Highway Multikits. I also asked what was intended to be a facetious question, namely - how did Keith ensure that the bandmaster on the organ kept time with the music - in answer I was shown the hidden potentiometer which afforded fine control of the main motor for the organ for just that purpose.

Tony Homden showed the engine room section of his current nautical project which is hoped one day will be a complete model of the "Great Eastern", Brunel's final masterpiece. It comprised a section of the hull with paddle wheels and engines, the latter of the oscillating cylinder type with working valve gear, the paddles being driven through strap clutches as per the original. Each paddle wheel is 10" in diameter and contains over 200 nuts and bolts, 64 $2\frac{1}{2}" \times \frac{1}{2}"$ double angle strips, 32 $2\frac{1}{2}"$ curved strips and 32 $2\frac{1}{2}"$ strips. The model as a whole is being built to a scale of $\frac{3}{16}"$ to the foot and will be nearly 11ft. long when complete (roll on the next meeting!)

Roger Wallis had 2 models - a Harbour Building Crane (ex MM Mar./Apr. 53) and a Teleprinter or facsimile transmitting system of his own design. He demonstrated the latter which consisted of transmitting and receiving machines connected by four wires. The transmitter consisted of a revolving wooden drum

(looking suspiciously like a rolling pin!) covered with aluminium foil on which a design was stuck. An electric stylus was mounted on a moving carriage and thus could scan the design, the circuit through the stylus being interrupted by the design. The receiver consisted of another revolving wooden drum and this time covered with paper and a moving carriage on which was mounted a pen which could be lifted from the paper by solenoids which were of course connected to the transmission stylus. Synchronisation of the drums is obviously essential. Roger achieved this by causing the receiver to run slightly faster and then causing it to stop at the end of each revolution until a synchronising pulse from the transmission drum is received.

Phil Ashworth was next with a small demonstration of an electrical servo mechanism for proportional remote control built entirely from standard and Elektrikit parts. Two ways of improving the response were demonstrated, one by use of an auxiliary contact which boosted the volts to the servo motor when the error was large and the other by use of a further pair of contacts which short-circuited the motor when the error approached zero. The electromagnetic braking limited the amount of over swing and hence prevented hunting.

Another new Member followed, **Ian Henwood** with his block-setting crane. Nothing new in that you might say and wonder why Ernie had included Ian in the batting order. It soon transpired that this was no ordinary block setting crane but it was radio controlled since Ian had integrated with it a model aircraft-type 10 channel radio control set using 8 channels to control four motors in either direction. The entire system worked very well apart from the time when Roger Wallis's machine was running, incidentally emitting a lot of radio interference.

Finally **Mike Pashley** showed his enormous model of a Marion type 5323 stripping shovel. Mike had spent most of the morning assembling this, it being too large to travel from Sheffield in one piece. Members who were at the last meeting will remember seeing the hull and tracks of this model and the present company were able to see the finished article with massively impressive cab, jib and bucket. The three independent movements of the superstructure were all controlled from switches in the cab making the model delightful to play with.

Free Roaming

Since time had permitted only a fraction of the models to be demonstrated, there was plenty to interest the free roamer for the remainder of the afternoon and evening. Here they are, presented in the order which your Hon. Sec. came upon them whilst roaming with his tape recorder.

Brian Edwards showed a model of an LCC type E1 tramcar of 1922 vintage. He said this had been 'knocked up in a hurry', but this was not obvious from close inspection, the model being fully detailed with motorised bogey, seats, curved staircases, twin collection arms, etc.

Alf Reeve had a nice red and silver steam roller, approx. $\frac{1}{8}$ th scale, and I need say no more but refer you to the frontispiece. His son, **Chris**, showed an instantly recognisable Midland Compound Locomotive with 6" pulleys faced with $5\frac{1}{2}$ " hub discs as drivers. Both models were claimed to be incomplete though this was not immediately obvious.

Paul Brecknell had a neat model of a steam derrick crane and succeeded in capturing the general outlines of the steam era by hiding the power drive unit inside the boiler. Hoist, luff and slew motions were provided with reverse on each individual drive.

Eric Baldwin showed again his Burrell traction and showman's engines with minor improvements compared with last time, and also an automatic ship coaler based on the No. 10 leaflet of 1940 vintage, but modified for long-period running. All three models were on display in a Cardiff dealer's window before Christmas.

Bob Faulkner's block-setting crane made a further welcome appearance, as did **Stephen Lacey's** 0-8-0 loco, and **David Guillaume** showed his motor chassis in display case once more.

Our President, **Esmond Roden**, having recently dis-mantled all his trams and track has now started again, and showed a model of a Berne tram on track complete with a full-size controller so that all could "drive" the vehicle. A delightful toy! He also produced a draughts board complete with a set of chessmen, and a small harmonium, all modelled entirely with you-know-what.

New member **Mike Cotterill** brought a neat freelance crane powered by an E20 motor driving through a 5-movement selection box (2 hoists) with ingenious automatic locking devices on the hoist and luff drives. Mike also brought a simple Meccanograph.

Terry Pettitt had a substantial model of a tank some 32" long and $13\frac{1}{2}$ " wide. Two things were particularly innovative – the tracks which were built from a vast number of $2\frac{1}{2}$ " flat girders each of which was clamped by fishplates to a plastic track link, each track link being separated from the next by two plastic chain links. This construction minimises the distance between the track hinge points and the outside of the track thus minimising the gaps between track plates which one gets at the ends. The other novelty was in the transmission system where Terry had included infinitely variable gearing controlled from the steering levers such that an infinitely variable turning radius could be obtained.

Dennis Perkins produced an unusual looking balanced jib crane which was based upon a model described in the French MM some years ago. However, a considerable portion of the model was Dennis's

design since not only was the French one incomplete as regards detail, but the photocopy he had was somewhat tatty and the instructions being in French were difficult to follow.

Another mini-exhibition, this time by **John Lavers** - what a prolific builder this lad is including a one-armed bandit operating on 2p. coins, a Hipp clock, Meccanograph, another drawing machine with fixed pen and table-mounted on top of a double gimballed pendulum which produced spiral patterns as the pendulums oscillations decayed.

Bill Barker had another model tank similar to the one he produced last time but this time worked from a joystick - I wonder where he got that idea from !

A Foliot Verge Clock was **Mike Nicholls'** offering this time, built to GMM.SML.53. This type of clock was remarkably accurate for its period and the Meccano version is probably just as accurate and makes a fascinating model to watch.

New member **Norman Mason** brought a Meccanograph based on Konkoly's version shown in MM 11/72 and also a very realistic model of Trevithick's Loco which he scaled up from an Airfix kit.

In addition to the models they demonstrated, **Ernie Chandler** had a freelance model of a fairground machine entitled "The Red Arrows" since it had an aeroplane at the end of each of six arms, their elevation varied by the eccentric in a similar manner to the octopus machine, and **Martyn Brown** had a model of a Jaguar aircraft the prototype of which is, of course, also made in Lancashire.

Some of you will recall that **Geoff Wright** showed a collection of diffs some time ago, including compact ones with all bevel gears, albeit with a certain amount of mutilation of supporting parts. This time Geoff was pleased to draw my attention to a further variant, designed and built by **John Nuttall**, which was equally compact but used only standard parts. Hopefully John will let me have a sketch of it one day.

Stephen Sawaryn had no model, but did the next best thing by displaying a large advertisement for a Land Rover which depicted a model of that vehicle in Meccano. In fact Stephen built this model at the request of British Leyland, which thus became a splendid advertisement for two products.

17th Guild Meeting – 4th October 1975

Held at the Greig Memorial Hall, Alcester

Report by P.V. Ashworth

Once more the occasion of our Guild meeting was blessed with better than average English autumn weather, and I and my 13-year old son Blair had little difficulty in getting off to an early start at 8 a.m. Some four hours and five pounds worth of petrol later (perish the thought) we arrived safely at the Greig Hall, to be welcomed as usual by the trio of stalwarts - David Guillaume, Alan Partridge and Ernie Chandler - who had arrived mid-morning to get everything ship shape and welcome all arrivals,

Several other Members and a couple of prospective ones, had already arrived, so the unpacking was preceded by introductions all round. There was just time to check everything, and then Blair, Ernie, Mike Pashley and I set off for a Ploughman's Lunch at one of the downtown locals.

Returning just before 2 o'clock, we were delighted to find the Hall filling up with men and machines. Delight did change to apprehension for a brief while when it was realised that there was at least one known-to-be-large model still to come, and no obvious space for it. However, with a little friendly persuasion....

Proceedings started in the now traditional way with a cup of tea, brewed up-by our lady helpers who, incidentally (before I forget) deserve a special word of thanks this time since there were only three of them, and more modellers' mouths than ever before. Many thanks to Nellie Perkins, Dolly Faulkner and Yvonne Hine. Then the President, Esmond Roden, welcomed and introduced prospective Members Frank Palin, Peter Wilson, Kenneth and Nicholas Wright (father and son), and the visitors who had come along with "the Henley crowd".

Demonstration of Models

Phil Ashworth was called upon to "bat" first, and introduced the latest in his line of amusement arcade machines. This one, named "Colourama" was modelled, externally at least, on a 1940/50 vintage gaming machine, though it accepted new pennies. An the top were 5 slots, each a different colour, whilst on the front face was a pointer which was randomly spun and indexed at one of 16 positions. These were also of one of five colours, and if the pointer stopped at a colour which had been backed previously a dividend of from 2 to 12 pence was paid, depending on the colour. With the aid of 3 coloured sketches Phil explained how the random spin, coin handling and pay-out were achieved.

Whilst at the fair, **Clive Hine** demonstrated his latest machinery - the Skydiver, consisting of 8 gondolas suspended from a large ring which not only rotated but was tilted to about 45 deg by simulated hydraulic rams. True to prototype, the machine was pre-fabricated in sections, and it took about an hour to assemble on site in the morning. Clive had built the model with exhibitions in mind, but said he had no intention of being trapped demonstrating it all the time. Consequently, a sequential programmer was housed in the control cabin, giving progressive increase of rotor speed, raising and lowering of the rams, stopping etc., all accompanied by flashing lights and authentic music from a tape recorder.

Next came **Ian Henwood** with a partly finished model of a Coles Hydra truck. The cab and chassis, 35 in. long, were complete, and Ian outlined his ideas for the turntable and jib, and showed the space reserved for radio control equipment which he intends to fit. Bags I be first to play with it next meeting!

Roger Wallis showed a very realistic model of a 1947 AEC Regal Single deck bus, and explained how he had tackled the challenge of the half-width cab, at a scale to suit 2" wheels and tyres. A particular novelty of this was a 1½" wide differential using "spiders" from universal couplings for the diff gears. Roger also had a model of a giant blocksetting crane based on the one which adorned the cover of the early 1950 manuals, though modelled in mint silver and yellow. Weighing in at over 80 lb. it had separate power drive units for each of the 4 functions, control being via 3 position centre off switches with the wiring kept simple thanks to +ve and -ve power supplies for forward and reverse with a common return. Pick-up was via sliding contacts on strips insulated from the rushing rails, and the superstructure could rotate continuously thanks to further contacts bearing on a central stack of insulated Wheel Flanges.

Then **Graham Brown** demonstrated his 1/12th scale model of Aveling - Barford's latest dump truck of 50 ton capacity. Graham said he had written to the makers for details of the vehicle, and received such a comprehensive set of literature that he just had to build it. His 27" long model fully captured the stark lines of its prototype. It was powered by two PDU's, and to ease the lot of its diff there were 5:1 reductions in each hub. Tipping was via a power take-off controlled from the cab.

Jim Gamble was next on stage with a beautifully modelled Gantry Crane, based on the illustration shown on the back cover of early post-war MM's. Jim reminded us of several inspiring models of this period for which, like his crane, no instructions were ever produced. The four movements of the crane were derived from one motor via "a conventional Gamble crash gearbox", the main traverse being by rack and pinion, and everything moved as sweetly as it looked. Jim also brought a blue/gold model weighing machine {SML?} and a few items from his Meccano Collection, to which all Members are invited if they happen to be near Nottingham with an hour or two to spare (please ring first).

Following Jim was **Eric Baldwin**, with two models, both adaptations of historical ones. His Mantle Clock was based on that featured in the No. 7 Manual of 1929, modified to use current parts {in particular the 7 ½" Circular Strips}. His Automatic Ship Coaler was based on the No. 10 Manual of 1940, modified to give added realism and to ensure long, trouble-free, running, which was proved whilst it was in a local dealer's

window for several weeks.

Stephen Lacey had chosen a unique subject for his latest model - the Foxton canal lock lifts. These connected two parallel canals, separated both laterally and vertically, by means of locks (or tanks) which rode up and down inclined tracks at right angles to the line of the canals. In his model, which was mounted on a 4 ft. square baseboard, Stephen had built one of the lock lifts, and contrived to automate everything to give the following sequence:

1. Barge enters lock (tank)
2. Lock gates shut
3. Lock lifted up track.
4. Other lock gates open
5. Barge leaves lock, etc.

Stephen reckoned he needed 7 automatically reversing gear-boxes to mechanise everything completely - as shown he had only installed 3, and a fraction of the necessary complicated switching, but there was enough to indicate here was a fine action model in embryo.

Turning round we were able to see **Mike Cotterill's** "patch", on which were a clock and a Meccanograph, both freelance. The clock, a table model, stood some 3 ft. high and was powered by a pair of No. 1 clockwork motors. Running time is currently only 14 hours, but Mike "is working on this". The Meccanograph was 3 ft. long, with both crown head and carriage traverse driven through 9-speed gearboxes, whilst the table was driven through a 4-speed one. Hence an enormous variety of designs were possible, as evidenced by the samples Mike displayed. The machine was powered by a car windscreen wiper motor, of all things! This was quite successful, if a little noisy and hot.

When visiting a local process machinery manufacturer recently **David Guillaume** had been fascinated by an enormous treatment plant which was destined for the Japanese motor-cycle industry. So he has set about modelling it, and showed it in a part complete state. It must have been at least 6 ft. long, and consisted of a gantry which travelled across 14 treatment baths. At each one it automatically stopped and dipped its work pieces into the bath. Almost half the model appeared to be Elektrikit parts, since the entire sequencing was electro-mechanical, and the presence of the gantry over each bath was detected by a magnetically operated proximity switch, most ingeniously constructed from standard and electrical parts.

At this point **John Lavers** gave us a song! It's OK, don't panic, he didn't actually exercise his vocal chords other than to describe his Meccanophone, which played 7" gramophone records, the turntable being manually operated. (If anyone has any brand new Drifts with really sharp points John would like he hear from them, since he is rapidly running out of "needles").

After a bit of persuasion, **John Nuttall** described his immaculate scale model of the Talylyn Railway 0-4-0 well tank loco "Douglas", modelled from a microscopic photograph. It's very short wheelbase gave it a curious appearance, and one could easily imagine it bobbing along country tracks. The model was full of detail - one novelty was the use of hundreds of washers on bent rods to fabricate pipework of authentic appearance. Each 4" diam. Wheel was built up from curved strips and spoked with 12 short rods. The cab was fully fitted, including fire-box door, and the valve gear was operable from the cab. Amazingly, this was John's first attempt at a loco - let's hope it will not be his last.

Final set-piece of the afternoon was **Tony Homden's** 12 ft. long model of I.K. Brunel's nautical masterpiece the S.S. "Great Eastern". You will recall that Tony showed the engine of this model at our last meeting - perhaps as well, since it is now buried in the depths of the hull. Even though it came in the Henley bus, the model had to be split in two for transportation, and as well as uniting it Tony rigged all 6 masts before the meeting. Not only were we treated to a description of his model; Tony also told us a lot of the history of this great ship and emphasised the heroic feats necessary to rig the sails, etc., and the manpower (up to 32) required to turn the steering gear. The model was built up on a very strong I section keel, the web of which usefully used a lot of otherwise redundant 4 1/2" X 2 1/2" hinged plates. The remainder of the hull was also built on proper shipbuilding lines, with strong frames and stringers all plated to give superb lines.

Free Roaming

In spite of having no less than 15 models demonstrated there was still a vast number of models which commanded attention during the free roaming periods, and there were many little huddled groups discussing their varied merits and intricacies. Last time I reported on these models in the order I came across them as I tacked up and down the hall. This time I will cover them by first just mentioning those models we have seen before, and then leading up to a climax with models which were, at least to me, wholly novel.

In addition to his Saltash Bridge (now complete), **Alan Partridge** brought his Mk. 4 Orrery once more, and also a mini-orrery. **Ernie Chandler** showed his Railway Breakdown Crane, an old-fashioned car and a car chassis. **Chris Reeve's** Midland Compound Loco made a welcome re-appearance, and we were also pleased to see his father's Steam Roller, now complete in every minute detail. Another loco making a re-appearance was **Stephen Lacey's** 0-8-0 Tank, and also present were **Mike Pashley's** Marion Stripping Shovel, **Peter Dixon's** BLMC Mini (still unfinished) and **Terry Pettitt's** Army Tank whose turret has been modified.

Quite a number of SML models were on show, (though I would not have known they were without reference to the Questionnaires, since I am no great historian of Meccano), **Norman Mason** had SML 32, the Twin Cylinder Steam Engine, **Dennis Perkins** brought SML 2, Motor Cycle and Sidecar - very neat all in immaculate green parts - and he also had a vertical steam engine (1926 No. 6 manual). New Member **Frank Palin** brought SML 28, the Pontoon Crane, modified as described in MM 1968 but using a 167.

David Goodman and his son Matthew brought a Wiggly Wire Skill Tester, Articulated Lorry with electric steering and single "cylinder" reciprocating electric engine, the latter 2 models all Matthew's work. In spite of most of his tramway having emigrated, the President **Esmond Roden** did manage to knock up a very neat, realistic, model of a 1972 type P.A.Y.E. (Pay as you enter, not earn) Blackpool tram. He also showed a Windmill built from Marklin parts (Oh, sorry - shouldn't have mentioned that!)

In addition to his Meccanophone, **John Lavers** exhibited a Meccanograph, a Meccano Bandit, an Orrery and a No. 6 $\frac{1}{2}$ Erector outfit - quite a mixture; he's a prolific builder is John.

"Riot Machine Mk. 4" is what **Michael Walker** calls his latest American car, which had a host of working detail including steering column gear-shift, full suspension, automatic headlights, impact absorbing bumpers etc. It was called the Mk. 4 not so much because it may be the 4th attempt, but because it had 4 opening doors - another Meccano "first", claims Michael. However, he must beware! There is a rival on the scene in the shape of **Martyn Brown**. He also had modelled an American car which seemed wider, longer and lower than Michael's. Its features included I.F.S. with cantilever leaf springs, opening doors, bonnet and boot, drive from a pair of PDU's which could be connected in series, or parallel for added boost, end automatic cut-out of the motors in the event of the crash bumpers collapsing.

The Henley duo of **Mike Nicholls** and **Paul Smith** showed an assortment including a demonstration board with 3 different loco valve mechanisms, a 16-pole self-starting motor from many pounds worth of Elektrikit components, a motorised Bulldozer built otherwise entirely from Plastic Meccano, and a display of parts. **Geoff Wright** had quite a novelty - a Swing Boat powered by a take-off from the (oscillating) cylinder of a Meccano Steam Engine. Another novelty was "The Henley Follies", a stage set with shapely dancing girls brought to life by the flick of a switch. This model was by **Bill Roberts**.

Keith Orpin chose a GMC 2 $\frac{1}{2}$ ton (American) Army Truck of 1939-45 vintage as a suitable subject to copy at $\frac{1}{10}$ th scale, and made a very good job of it too. It looked a truly rugged, go anywhere, vehicle, and had all the usual transmission, working lights and a winch under the front bumper. Use of Army green plates and transfers added the final touch of realism. Keith introduced a friend to the Guild - 18 year old **David Bedwell** - who brought his models of a Showman's Loco (5 $\frac{1}{2}$ " drivers) and an olde Cake Walk. Both these models were very neatly finished and worked well all day.

New Members **Kenneth and Nicholas Wright** brought their "Bandit out of Wallis by Ashworth", a Meccanograph and an ornamental novelty in the form of a 4-posted swinging pendulum escapement. (Thought would defy description, didn't you?) **Paul Blythe** showed that he has at last got a bit of spare time and had a part-finished French Knitting Machine and a German Tiger Tank. The latter, some 2ft. x 1ft., was powered by a single motor and steered by its tracks, the steering being controlled either by a hand-held switch or a Photocell and relay, the former arranged so that it could scan a white line on the ground and lead the tank to follow that.

And talking of "following that", the next and final model really was outstanding and quite capable of following anything. New member **Peter Wilson** was its creator, and describes it modestly as "based on the No. 10 Shovel, but with drive and steering from the cab". In fact the entire cab was a maze of mechanism, which could be inspected since roof and sides were detachable. There were 5 forward/off/reverse selectors, providing traverse, steer, slew, "luff" and "haul", and these selectors could be operated manually. However, the really clever thing was the control of all movements by 5 cams. These came (made of brass) were carefully profiled such that the mechanical shovel went through a complete digging cycle - forward, dig, dig a bit more, lift up, reverse, slew, unload, slew back etc. If we hadn't feared being chucked out of the Hall we would have made it shift a pile of sand into Graham Brown's Dumper! A further feature of the gearbox was automatic disengagement of the drive when each travel limit was reached - this enabled the machine to find its normal operating positions even when it had been over-ridden manually. Finally, the entire gearbox, a 7 $\frac{1}{2}$ " cube approx., could be removed from the model by undoing one screw.

Your Hon Sec pinned up recent correspondence from Overseas Members Bob Weis, 'Pepe' Ferretti and Bill Inglis, including advertising literature and price lists supplied by the latter two. Members found this an interesting addition,

And that's it - I hope I have mentioned everybody and everything. If you count up I think you will reach upward of 60 models the biggest and best Guild Show yet.

18th Guild Meeting – 20th March 1976

The Chairman welcomed all members and introduced the three new members, John Beardsmore from Nottingham, Norman Scargill from Skegness and Bill Roberts from Godalming, Bill had visited the Guild with the Henley Club members on a previous occasion.

The Meeting Generally

Mr Ralph Bartlett, the midland area representative of Meccano Limited was also present, as a very welcome guest.

Apologies for absence were received from, Alan Partridge, Phil Ashworth, Paul Blythe, Phil Bradley, Mike Pashley, Bill Winter, Sid Whiteside, Steve Sarawyn, Gerald Hutton, and a last minute phone call from Jack Partridge.

Demonstrations

Seventeen members had offered to speak briefly about their model; a decision to do this in alphabetical order and to allow 5 minutes per speaker was agreed. This timing was very close followed so that demonstrations would finish by 4pm.

Graham Brown was first, Graham had chosen the car used in the film "Death Race 2000" as his model of a futuristic car. The car being 25" long $9\frac{1}{2}$ " wide and 6" high, is powered by pdus through a speed and reverse gearbox to a differential on the rear axle. A variable resistor is used as the accelerator, the Ackerman steering gives the car a turning circle of twice its length, it is fully sprung, with sprung seats, a detailed engine, lights, sliding roof, interior lights operated by the doors. Bonnet and boot lids do open, also a neat black line from front to rear is achieved by super imposing black plastic plates by strips, a very effective finish.

Next, Grahams, brother, Martyn, described his model of an Oshkosh truck. This huge chassis stood on six axles, 5 driven axles, tandem steering, and six differentials. The model is driven by 4 p.d.u.s mounted in a square with a $\frac{3}{4}$ " pinion driving a 2" gear wheel. It is fitted with a 5 forward and one reverse gearbox plus a four speed auxiliary gearbox. The model is $41\frac{1}{2}$ " long $9\frac{1}{2}$ " wide and 11" high. I hope to see this model completed in September when Pickfords have contracted to transport it to Alcester.

Ernie Chandler was next to talk about his model of the seat belt sleigh, having ridden the original he thought it a good model and different. Basically the model is a car seat complete with seat belts which rolls freely down a slope with a sudden stop, speed approx. 7mph but the jolt amazing.

Mike Cotterill had completed his model of the Skegness lifeboat - tractor-trailer/launcher despite some difficulty with certain parts. This excellent model was very true to life. The tractor hauled the boat/launcher into the sea, quick release stays were released and away the boat went. Mike also showed how recovery was achieved by the trailer tow bar remaining central and the launcher tilted to receive the boat keel and then hauled into place. The tractor automatically re-coupled and then back to the shed. The tractor is driven by a 20 volt motor, is 20" long 11" wide 8" high, each track has an internal expanding brake with remote controlled front and rear couplings for towing, the rear winch has forward/reverse drive,. I nearly forgot to mention that each steel track has high/low forward/reverse drive. The trailer is 36" long runs on steel tracks and large tyres, has a central channel for the boat keel and tilting action for boat recovery. The boat is 48" long, fully modelled, twin screws are recessed and full steering. The driving seat and engine cowlings are both removable to show interior fittings. Mike also had a very good model of a derrick which could be operated either by steam or an electric motor.

Ian Henwood had built a huge model tower crane, from base to jib tip it stood 18". Certainly the largest model tower crane I have ever seen. Mounted on a 4 axle chassis with a 167 as the crane turntable and very heavy $\frac{3}{8}$ " screw rods, adapted to be fitted to Meccano parts, as stabiliser jacks. I hope to see this model completed in September: when a fuller description will be given.

Clive Hine has added a Scammell Showtrac and two large trailers to his model fair ground, Skydiver, This allows him to be a full showman because his model packs into the trailers. The Showtrac has all the features of its prototype with a 6 speed gearbox, dynamo driven from the P.T.O. full steering and suspension are provided. The front axle is worth mentioning, built from narrow strips end ways on with the correct crank to the king pin bearings, a very strong axle. I have seen this Showtrac haul the two fully laden trailers and gear changing demonstrated whilst in motion. The model is powered by a 12 volt windscreen wiper motor. I hope to see this model featured in a future M.M.Q.

John Lavers had his fruit machine, a spirograph and his meccanophone on display also an original No 6 outfit complete with its box and two mint condition Dinky Builder sets. John explained some details and mechanisms he had added to the fruit machine to prevent the coins from jamming in the slide.

Frank Palin displayed two very interesting models both by A.K. Cameron. The electrically driven Traction engine featured in the M.M for Feb 1925 slightly modified to use red and green parts and a 6 volt motor. The second model was from M.M. April 1926 the 4-2-2 Loco and tender.

Dennis Perkins brought a gem of a veteran car. Built from scrap parts cleaned and repainted, this model of the Brushmobile light car of 1904 was fully operationable with remote control and the Action man driver really put the finishing touch to a superb model. I know who knitted the polo neck sweater. Dennis says he will never take this model to pieces,

Terry Pettitt came in armed with two very good models: The model tank made a very welcome second

visit, a good looking model this with a very rugged appearance, The second model of a Morgan three wheeler car was a picture to look at. Powered by a P.D.U. and a two speed gearbox with clutch and fully operational exposed valve gear, a pleasing model with excellent body work and the spare nestled in the recess.

Esmond Roden had a very varied collection of models.

1. A pay as you enter Blackpool Tramcar.
2. A Belgian S.N.C.V. steam tram loco.
3. A coal truck for the loco.
4. A Bren gun carrier, built from army Multi kit and a combat kit to Esmond's own design with the minimum of plate bending.
5. "Isle of Thanet" open double deck tramcar.
6. An instruction manual multikit lorry.

Collectively this collection shows some very good building when Esmond's superb trams are away earning money for Liverpool. So the stock of parts is very depleted.

Eric Taylor, or the return of the prodigal son, by the grace of Allah, returned with a very good crane, using the cover picture from a Model Engineer for April 1965 Eric has almost completed a medium level portal Dock-side crane with back stayed fly jib load levelling arrangements and rear pivotal counter weight operated through reduction linkage from boom motion. The prototype weighs 130 tons and is owned by the Port of London Authority. This another must for September.

Roger Wallis has done it again, a bus that really looks like a bus. A Midland Red S15 finished in red plates and looked a picture. This model follows its prototype very closely, with under floor engine, independent springing and virtually had no chassis, all doors are correctly positioned. Driven by a P.D.U. on a 6-1 ratio to a 16-1 reduction to a clutch three speed gear box to an all bevel differential built into boiler ends with 2" strip spacing. Drum brakes are fitted to the rear axle and are pedal operated. Power is supplied by a 6 volt battery slung under the floor.

Eric Baldwin brought along his agricultural engine. Proudly showing off its new wheel strakes 72 x 1 1/2" narrow strips, still a good model. The synchronous electric clock from December 1954 Meccano Magazine was keeping excellent time. Eric has adapted this model to use current Electrikit parts. The rotor was a pair of wheel flanges fitted with eight bolts sandwiched between the flanges rim with a washer inside and out. Quite a ticklish job I would think. The 1916 manual Meccanograph Eric had on show was an excellent model and turned some very good designs.

Jim Gamble displayed some vintage pieces from his collection, these included 1929 Meccano steam engine thought to have been made by Bowman, for Meccano Ltd.

A steam engine thought to have been made by "Bing", not Crosby. A model powered Butter churn - from a steam engine workshop which had several models in. Jim, the chairman has a manual with this model in. Jim also displayed two mint condition Blue-Gold sets, very attractive indeed.

Eddy Brooker elected to be last to speak, time allowed did not do justice to his model of a differential analyser, Eddy tried hard to pass on as much information as possible. An hour would just about been sufficient time.

The next half an hour was spent inspecting other peoples models and tea was served at 4.50. by 5.15 members were seated for the short business meeting.

Business Meeting

The next meeting was fixed for Saturday September 25th 1976 at the same address subject to the hall being available.

The chairman suggested an impartial photographer be asked to attend future meetings so that pictures are available and other members day is not spoilt by taking pictures for other people. The meeting agreed this would be an advantage and asked for a trial in September

The secretary explained the arrangements for the guild stand at the Stoneleigh Town and Country Festival, all persons agreed these as satisfactory.

The Model Exhibition to be held at Stoneleigh on Whitsun holiday weekend in 1977 was brought to members notice. The Guild will have a stand there. This will not affect the Town and Country Show the following August. Further details will be available later.

It was brought to members notice that the one day insurance policy premium had escalated from £3-£5 and an expected £10 next year. No comments were forthcoming so the committee decided to discontinue the policy.

Members agreed that a letter of congratulations be sent to Meccano Ltd for their 75th Anniversary.

The question of junior members paying full meeting fee was discussed. The outcome was that a full meeting fee be paid but half annual subscription be paid by juniors.

The meeting closed at 5.40.pm and free roaming was the order.

Free Roaming.

Petticoat lane soon opened up and a brisk business was being done on the stalls. I did not hear any cockney cries. Letters from Bill Inglis, Peter Mathews, Bob Wies, Phil Bradley and Bill Winter were displayed around the room. Also the Capetown Guild newsletter.

Going around the room to view the display I noticed **Geoff Wright** with a paper folding machine, M.W going automated I thought!. **Wilf Bolland** brought along his No.10. outfit model of a universal milling machine. **Peter Dixon** made the long trip from Humberside with his partially completed Mini. Progress has been made and the model is looking very well. we may see it running in Sept.

Brian Edwards, a prolific builder of the smaller models brought along a very neat Road roller based on a Barford and Perkins around the 1880s. also Brian showed a double reduction/double drive differentials of a rear axle assembly for commercial vehicles.

Bob Faulkner's "Old Faithful" Blocksetting crane reappeared once again, a truly thoroughly good crane this.

Stephen Lacey's model of the Foxton lift lock aroused great interest, this model will be really worth seeing when complete.

John Nuttall came along and brought his Talylyn Well tank loco "Douglas". A real treat to look at, bulky just like its prototype, with everything in its correct place. Driven by synchronous mains motor, and the wheels are raised above the rails for display purposes.

Keith Orpin brought his model of a 2½ ton GMC Army Transport Wagon. This excellent model with much detail crammed into a small space. Fitted with a four forward and two reverse gearbox, winch, head, tail, brake lights, fully sprung and floating rear axle.

Alf Reeve- in the collectors' bracket now, Alf's model of HP42 "Hannibal" built from near perfect pre-war aeroplane construction outfit was a real beauty and I would think priceless. With a 32" wingspan this model really looked beautiful.

Chris Reeve also displayed a green and cream pre-war aeroplane outfit model as well as S.M.L 1A car chassis.

Michael Walker brought another American car from his unlimited supply, this time a convertible and a very clean job he had made of it. I'd like to see Michael have a go at a Range Rover.

Kenneth and Nicholas Wright showed two very good models- the first an aerial bombing game, where two planes revolve over numbered boxes and when the operator considers the plane is over the highest numbered box he presses a button to release the bomb. This model reminded me of Stratford Mop Fair pre-war when a stall used a pointed weight to stick the numbered portion of a circle. Nicholas had made a very good job of S.M.L. No 35 which I believe to be remote controlled.

Matthew Goodman had three models on show all the models were fully operational. A lorry with manual gearbox and remote controlled steering, a dockside crane and a fork lift truck. These models do the youngster credit - we will see more Matthews' models at future meetings.

Bill Robert's fence making machine made a welcome reappearance, more completed. This is a fully automatic model of a machine to make Chestnut fencing, using lollipop sticks as fencing lathe, these slid into position between two wire loops, than the wire is twisted, the lath is pushed slightly to make room for the next and so on, But!; the patience required to get two large fork pieces to stop in an upright position, to allow the lath to pass through the wire loop, each time is really amazing. To quote the motto of the Royal Agri: Society of England, "Patience with Science", is sufficient.

Ernie Chandler also had his second attempt Narrow boat on display. Built 1"-1' scale, with replica steam engine and a few decorative trimmings, like Green stripe super imposed with silver narrow strips to give a green lined silver strip. The M.M; model cabin monoplane and the M.M.Q. model of a demonstration three speed and reverse gear box, and a small scooter taken from February 1967 M.M. page 54. This has proved a useful addition to the narrow boat. I've tried-to remember everybody, please forgive me if I have missed anyone.

19th Guild Meeting – 25th September 1976

Nicholas Wright described his fairground ride "The Hurricane Jets". The rise and fall of the 'planes was controlled by a screwed rod driven by a P.D.U., which reversed itself on the extent of each run, the model was entirely automatic, complete with lights and floodlights. This model was packed into a box or boxes and transported in the car boot, built up on site and a 6' square space was required. A very good model, well-built and ran for 5 days at Stoneleigh and at Henley, an eye-catching display model and it had a flexible coupling in the drive shaft. Nicky had gone to a lot of trouble to take photos of the original and cut out pieces to display on the model for advertising.

Ken Wright brought along his steam driven scale model of a 1906 Mann's Lorry. The Meccano steam engine formed the basis of this truck and Ken had done a very good job of building a scale model round it. The load carrying portion could be lifted off to display the "works", when in steam the whole was very effective with the steam engine being modified to eject the used steam through the chimney.

Geoff Wright brought along a very useful addition to all advanced builders' kit - a strip rolling machine, very compact and built from standard parts. Strips of any length about $3\frac{1}{2}$ " could be curved into a circle without kinking at the holes and also straightened out again, a boon to vehicle chassis builders and railway engine models. I understand this model is to be described in detail in the M.E.

Roger Wallis had three models on display :- (a) The very good looking Midland Red S15 which had been seen at a previous meeting, but now mounted on a tilted stand with a mirror to show the working parts in motion, another excellent display model. (b) The No. 10 set model of a Leyland National Service Bus, scale 1 - 10, finished in West Midland colours of blue and cream. Driven by a P.D.U., on 3 - 1 ratio through a two speed and reverse gearbox, fully automatic, with an all bevel differential. A second P.D.U., is set on 32 - 1 ratio to provide powered steering through a 27 - 1 reduction steering box - so a fully remote controlled model with the air-conditioning "hump" at the rear, dummy suspension, hand operated folding doors, and some seating has been built with a No. 10 set, and accepted by Liverpool for a display model. (c) Roger's third model was quite a novelty and kept visitors to exhibitions mystified - a conjurer - by raising and lowering the robot's arms, a card was displayed or disappeared. To obtain certain movements correctly, adjustable cams were used, these consisted of 2" slotted strips in slide pieces. All movements are controlled mechanically, power being provided by a P.D.U., on 60 - 1 and 5 volts. interesting and fascinating model.

Michael Walker is still improving on his American car models, his latest Riot Machine Mark 5 has two P.D.U.'s., to provide power, power steering, fully operational suspension, four opening doors, opening bonnet and boot and a vinyl roof. "Bill Inglis" tyres used to great effect. All new style perimeter chassis frame, adjustable angle steering wheel, remote control is an optional extra. Michael's second model of an amusement arcade machine was based on one in M.M., 1968, a game of chance, either the coins fell into customer's box or into the management box.

Alan Scargill brought along a very interesting windmill which, besides driving the sails, the body of the mill turned from side to side as if the wind kept the mill facing into it.

Steve Sarawyn made a very welcome return visit after his success at college. Steve has gained his B.A., in engineering. Steve's rebuild of the walking dragline featured in M.M., December, 1952 was a very creditable effort. I have built this model myself, but Steve's effort was far better than mine.

Bill Roberts brought along his fence making machine, this time more satisfactorily operated. Basically it is four coils of wire and lollipop sticks, but a very interesting and ingenious machine. I have not heard if any fencing contracts have been obtained as yet.

Alf Reeve, a builder of robust veteran models, had a partly built model of a G.N.R., Stirling single drivers loco, the single driving wheels on the original were 8' in diameter. When this model is finished it will be well worth seeing.

Terry Pettitt brought along his army tank and Morgan 3-wheeler car, both these models have been seen at previous meetings, but are well worth a second or third view. I heard of a person who spent nearly two hours viewing the Morgan car at Stoneleigh.

Ian Perrins made a very welcome return visit after a considerable absence through illness. Good luck Ian, and hope you keep well. The traction engine was a very good effort and operated very well indeed. Ian's son also displayed a model he had built, the lad is quite young but shows good promise.

Dennis Perkins brought along a motor chassis. This was a rebuild of model 429 introduced in 1921. Dennis had used all nickel plated parts and a 1916 4-volt motor. A very satisfying model being the result. I wish my efforts turned out as neat and tidy as Dennis turns his out.

Alan Partridge had two models on display :- (a) The Jodrell Bank Telescope, built entirely from a No. 10 set and being fully operational. The complete cycle being of four minutes duration. This model has also been accepted by Liverpool for a 10 set display model. This model also won the No. 10 set model competition at this year's Henley Exhibition. (b) Alan's second model being a gear train to convert, I hope I'm right, Sidereal Time to British Mean Time. I quote Alan on this, Sidereal Day = time stars appear to take to rotate round earth = 23 hours 56 minutes etc., of Solar Time. Observatories need clocks showing both. This gear train converts one to the other with accuracy of 1 in 10^{10} . Further information please write direct to Alan. Alan also displayed a plastic model built with the entire contents of a kit he bought whilst in India

earlier this year. The name of the kit was "Plastikana".

Frank Palin made another weekend of the Guild Meeting, he brought two S.M.L.'s, both built in red and green and very nicely turned out too. These were the S.M.L. No. 1 motor car chassis and S.M.L. No. 11 horizontal steam engine.

Keith Orpin, another fairground modeller, this time displayed "The Whip", 6 cars on an endless rope on an oval track are thrown outwards by centrifugal force at the corners, these travel quite fast, I know, I've ridden the original. The track is constructed from strip plates overlapping one hole and bolted at the extremities only. This model operated for three days at Stoneleigh and featured in a film made there.

Stephen Lacey once again showed his model of the Foxton Canal Lift, this time with a programmer operating. Members were able to see the whole operation working. Credit is due to Stephen for his persistence in getting this model working. .

Tony Homden still has Pickfords on contract to move his models. The model of the German artillery gun was big by all standards. This 80 cm., German railway gun named "Gustav" was mounted on 4-mule wheeled bogies and ran on a semi-circular double railway track. If my memory is correct there are 80 x 1" pulleys in the bogies. The semi-circular track being used for the field of fire a gun of this abnormal size did not slew or move side to side when aiming. This model also featured in the film at Stoneleigh. I have since seen the model, and it was working very efficiently, with a little more effort Tony hopes to have the model operating off one switch.

Clive Hine still continues with his large fairground models. Clive's model is based on a set of three abreast gallopers built by Messrs. Savage of Kings Lynn. The model includes a centre engine, 36 horses set on 12 sections - now you chaps who require centre holes on even hole strips, sort that out. The model is driven by a 12-volt windscreen wiper motor, the speed of the horses can be increased if necessary, this does tend to give a more realistic appearance. This is done by an electro-mechanical programmer built into the centre section Each horse carries the name of a Guild member. This model is 5' - 6' in diameter and approximately 24" high, the crown head is an engineering feat in itself, each of the twelve arms carries a $\frac{7}{8}$ " bevel gear and $\frac{3}{4}$ " flanged wheel as its roller. I'm not sure how many 57 toothed gears are used, I counted 24 in the decorations. The model can be dismantled into sections and packed into a box for travelling purposes. This is the best set of gallopers I have seen built with Meccano.

Ian Henwood brought along his large lorry mounted crane once again. Ian has improved this model and has had the tower and jib to maximum height of 18' at the Henley Exhibition. The model is 4' long and $12\frac{1}{2}$ " wide, standing on 4 axles and includes tandem steering and all the necessary items of a lorry chassis, weighing 150 lbs.

David Guilleume tends to mystify us with his electrical control items. This time David brought along a, and I quote, "Positive control on a variable time cycle, comprising seven channels by 1 set N/O and 1 set N/C, giving a high reliability of performance built entirely from Meccano parts." I understand this is to be built into a model that David is working on now.

David Goodman brought along a very neat beam engine which had a very realistic action to it.

Mathew Goodman had made a very good job of a remote controlled truck and did very well answering the many questions put to him by other members.

Bob Ford did very well to bring along his very nice Beyer-Garrett loco, with wheel arrangement of 2-6-0 - 0-6-2, and I say the drivers were $5\frac{1}{2}$ " hub discs, to give an illustration of its size. The prototype of this model was used for coal trains from the Midlands to London about 1930. This was a well finished model and worthy of a display period.

Brian Edwards is well known for his very neat well built small models, and this time was no exception. The Bristol Lodekka double deck bus was one of the neatest models on show, scaled down to 2" wheels, the model had all requirements built into it. Brian's second model had been seen last March, but was well worth a second view - a very realistic Barford & Perkins Road Roller of the 1880's, built to represent heavy construction and heavy appearance.

Mike Cotterill once again brought along his Lifeboat and Tractor for a second viewing, also a clock of his own design, electric synchro with a strike mechanism. Mike's third effort being a freelance 2-cylinder horizontal steam engine, its size being 18" X 12", very neat too.

Ernie Chandler displayed models that had been seen at Stoneleigh, March meeting and at some other exhibitions. The 1" - 1' scale narrow boat complete with scooter, the safety belt sleigh, and the No. 10 leaflet model of the Combine Harvester, with some improvements.

Martyn and Graham Brown have done it again, being amongst the younger section these two brothers never fail to come up with a good model. Their model of an Aveling-Barford motor road grader to 1 - 13 scale. The model has all wheels driven and all wheels steerable The model is driven by a P.D.U., on 12-volts to a 3-speed gearbox to a centre differential where the drive is taken to front and rear axles each having its own differential, power take-off is fitted, Ackerman steering on front axle, the twin rear axles are fitted so that the wheels are steerable, but held by a brake. The blade movements are controlled by four levers in the cab as are all other movements. Bulldozer blade attachment at the front, handrails and lights are all fitted. The model is 27" long $12\frac{1}{2}$ " wide, 9" high and weighs 14 lbs. I do hope this model will be on view in March; it's a real credit to two younger members.

Paul Brecknell has rebuilt the Dragline which appeared in the M.M., some years ago, keeping within the limits of a No. 10 set, power being supplied by a P.D.U. Several modifications have been made and I hope this model will be accepted by Liverpool for their No. 10 set leaflet..

Eric Baldwin brought along his version of Phil Ashworth's Bandit modified to accept decimal currency, Eric's clock and showman's engine were also on show.

Geoff Wright brought along the very good model of a Coles Crane on a lorry chassis. This model had been loaned to the Guild to display at Stoneleigh, Henley and at the Guild meeting by Mrs Wright, widow of Len. The model is a tribute to two exquisite builders of Meccano models, who passed away this year. It is hoped to keep this model assembled for display purposes.

Chris Lester visited the Guild meeting for the first time and brought along a very well built American car with a four-speed and reverse gearbox with H type gate change, handbrake, automatic, lights etc., and all controls are from the driving position, it is powered by 2 P.D.U.'s.

I have tried to include everybody in this write up of models, if anyone has been omitted it is because their Q.A., did not include information on their model. A very good day was spent by all and I trust no one suffered too much with atrocious weather conditions of the late Saturday evening.

Any views about the style of the next meeting will be welcomed for discussion by the committee.

20th Guild Meeting - 26th March 1977

The 20th Meeting of the Guild was held at the Greig Hall, Alcester, Warwickshire on Saturday, 26th March, 1977. The weather was not very spring-like for our Spring Meeting - it was raining and cold. The doors were opened at 10.00 a.m., and the early arrivals were soon busy with nimble fingers and ready tongues getting their winter work in full operation.

The first brew at 2.00 p.m., soon had everyone in their best spirits and the events of the past six months were being discussed. Being "Free roaming" until 3.00 p.m., gave all present a good, chance to see the vast collection of excellent models that were on show.

The Chairman called "Order" at 3.00 p.m., and the 40 + members were soon seated in the adjoining committee room.

The assembled were welcomed by the Chairman who asked all to rise and stand silent to the memory of a former Guild Member - Sidney Whiteside, Chairman of the North Western Guild, who died last January after a serious operation. Sidney's last outing to a Meccano 'do' outside of his home town was to the Midland Guild show at the 1975 Town and Country Festival where he spent three days and really enjoyed every minute of it.

Mr John Higham, Production manager, Meccano Ltd., who, with his wife and son, were guests of the Guild for the day. The Chairman introduced the guests as well as four new members.

Esmond Roden started the model demonstration period with a flying plane, very similar to the one the late Sidney Whiteside displayed in 1975. This model was very realistic and, using a two-bladed prop and 1 P.D.U., made a very fascinating model to see in operation.

Terry Pettitt displayed a very realistic model of a Leyland Lion bus chassis, built from unpainted parts, but full of works and detail. The model is based on the 1950 Leyland Lion P.L.S.C.1 single-decker bus with a P.D.U., enclosed in the cylinder block, a centrifugal clutch drives a 3-speed and reverse all-pinion gearbox using 15, 19, 25-teeth pinions, controlled by remote lever through an H gate. The differential unit has a two-speed reduction gear using a 15-teeth pinion meshing a 25-teeth control and a 19-teeth pinion meshing a 57-teeth crown wheel. The built-up wheels use $1\frac{1}{2}$ " pulleys around which $2\frac{1}{2}$ " strips are fitted after being rolled conical. The 2" standard tyres are retained by these conical curved strips which make a very nice dished wheel. Steering is by worm and 15-teeth pinion, giving three full turns lock to lock. The body is to be fitted for a later date.

Roger Wallis gave a very interesting talk on his modification to Servetti's magician. Roger had condensed the base to $18\frac{1}{2}$ " square to get it in his car, and speeded up the operation which made the model much more interesting to watch in operation. Electrical types please contact Roger for details.

Phil Ashworth had another knockout, an Amusement Arcade machine "The Sweet Grabber", a coin operated crane which picked up sweets with its grab and deposited them in a chute for the 'lucky' one to collect. The Grab being powered, but the crane turned left or right by a hand wheel.

Bob Faulkner showed a money grabber, (not sure whether Servetti or Konkoly made the original). Bob had fitted the new motor supplied with the crane multi-kit, which was much quieter and more economical with batteries. Also Bob explained the siting of the works so that a clear panel could be fitted to allow the works to be seen.

Alan Partridge displayed some very interesting mechanisms. He showed two solutions to the January M.M., differential competition one being correct. His gear trains for prime numbers showed how, with a differential gear any required prime ratio P:1 can be made with standard parts. The three models demonstrated were 487-1, 397-1 and 59-1. A condensed model of a strip bending machine and compact version of January M.M., spur differential completed Alan's display.

Chris Lester showed his very well built J.C.B., excavator with remote control. All movements of the prototype are correct; operate by 6 motors and 5-speed resistance steps in each direction. All controls are on a separate unit, the driver's cabin control unit being separate for the operator to use. Other features being full lighting and the diesel engine effect; overall a very effective model and well finished.

This completed the smaller model demonstration so the assembly moved to the main hall where **Tony Homden** displayed the freelance simulated flight model. This model being an Aeroplane Constructor model set on a beam and controlled by remote joystick and rudder- to give the flying effect. A useful structural idea was the twin vertical roller bearing which carried the full weight of the aeroplane and counterweights. A $5\frac{1}{2}$ " circular girder forms the outer ring and an artillery wheel the inner, the rollers being $\frac{3}{4}$ inch flanged wheels located on a fabricated ring of curved strips. This model was very well received and worked very well, the prop being driven by a flexible shaft (spring card) from an Emebo motor. All movements were readily available, and more than one could be operated together to give a very good impression of flight.

Gordon Scott, a new member from Hull, brought a lorry mounted crane, Coles Colossus, mounted on 6 axles, the first 3 and the 6th are steerable and the rear 4 axles are driven axles. The 3 inch pulley wheels with tyres fit the scales of 1 inch to 1 foot almost exactly. The model weighs 120 lbs., and has 1400 parts held together by 2800 bolts and nuts. The chassis is driven by 2 E20R motors and a 3-speed and reverse gearbox and 4 differentials. The crane can be used as a lifting crane with a 10 foot jib or as a tower crane with either a 4 foot or a 7 foot fly jib. The crane chassis is 50 inches long and $14\frac{1}{2}$ inches wide. It took some 500 hours' work over three months to build and the model has attended nine exhibitions and 30 hours

running time with no serious mishaps. The model uses 24 x 1 $\frac{1}{2}$ volt torch batteries to supply power and counter-balance, these were arranged eight in line to give 12 volts and three rows wide to give capacity. Three methods of control are available :

1. D.P.D.T., non Meccano, switches in cab.
2. By remote control, plug in lead.
3. By repetitive programme obtained by 8 wheel flanges rotating one revolution each 90 seconds.

The flanges are masked with tape and a contact space left for pickup. All the crane movements are by independent P.D.U's., with various gear reductions to give correct scale speed of operation. A truly magnificent piece of model engineering and a fine example of what can be obtained in our hobby.

Alan Scargill came in with "Big Un" this time. A very good blocksetter on a 7 foot base board and everything working correctly, including lights. The model was remote controlled and took 5 months to build. This too was a very fine model and well built. Alan also had a traction engine with him that was powered by a 1936 blue long side-plated motor.

Mike Cotterill, not to be outwitted, brought along a large dockside crane which lifted river barges and tipped their coal load into ships' holds- This was a model of a Goole 50 ton crane, travelling on 4 bogies, each being a tandem pair with 3 wheels each, making 24 wheels all told. The model being 5 feet high and driven by a 12 volt motor. A number of novel features were built into this crane with demonstrations and exhibitions in mind, these being roof mounted jib, screw luffing, concealed slewing, fly hook, main lifting beam and clamp and the travel. Mike also had a second model, a self-designed general purpose traction engine powered by a P.D.U., considerable mechanical detail being used to ease the operations. Both models were very good examples of Meccano model building.

Edgar Whalley demonstrated his remote controlled tower dock crane, this model being based on S.M.L.36., The prototype operates at Rotterdam West Dock complex, named "Tiny Tim". Edgar has extensively modified the S.M.L., using 5 P.D.U's., one to each movement. The model is 6 feet plus high and 4 feet 6 inches boom length and is fitted with aircraft and hazard warning lights. The model weighs 34 lbs., and is mounted on 8 axles with 16 wheels on rails. This model was again a very good example of the scope of our hobby.

Tea break came at this point. The ladies had prepared an excellent spread and soon all were doing justice to the "Fayre" provided.

Following the tea break was a short business meeting.

The Chairman opened the meeting by explaining to members that a quantity of new parts, mainly hard to get, had been brought by Mr Higham as a gift to the Guild from Liverpool. These were set out in more or less equal packs and distributed to all present. Our thanks were expressed to Mr Higham.

The Hon. Secretary read out the apologies from 7 members and the notices of forthcoming events at which our help had been enlisted.

The correspondence from overseas had been pinned up for all to read.

The Hon. Treasurer reported a very good bank balance which was the reason for a second low meeting fee. David also explained that the layout for our room at Stoneleigh had been changed to our advantage. The small entrance had been removed and the staircase came right into our room.

The date of our next meeting on 24th September, 1977 was confirmed, at the same venue.

The Hon. Secretary asked the meeting if Mr. M. Nichols, Editor of the new M.M., could be given honorary membership. All agreed and favourably commented on the present standard of the publication.

There being no further business the Chairman closed the meeting and Petticoat Lane opened up.

Tea and crumbs were available at 7 p.m., when all were getting ready to "Hit the road" home. A very hectic and successful meeting. One member told me I would have to look around for a larger and higher room very soon!

Other models on show :-

Eric Baldwin had a "Konkoly" designing machine producing some very neat and intricate patterns and also a wall bracket clock which did its job well and looked good.

Wilf Bolland, being chauffeured by the Chairman to the meeting, displayed an up-dated version of S.M.L.19 steam shovel. The model had been modified to operate on a current motor and plastic tracks. Wilf also had a clockwork powered shaping machine on display.

Graham Brown brought along an automatic drawing machine, this model being incomplete will be written up after the next meeting. Seeing a model partially built shows what is under the surface and also the extent of the builder's skill in the "Not usually on view" places.

Ernie Chandler displayed his version of S.M.L.32 twin cylinder horizontal steam engine using all colours available. This made a very colourful model for display purposes. This model runs off a P.D.U., using a 6 volt battery. ratio 16-1 + 4-1 chain drive to crankshaft centre.

Brian Edwards displayed a very well built and detailed double deck tramcar. .

Bob Ford is still on super, super models. This time an American Grove lorry mounted crane riding on 5 axles. The Hon. Secretary supplied Bob with a couple of photos of this crane and Bob has taken a great deal of trouble to get more definite information. The chassis so far looks very good, robust with a wealth of detail. Mounted on W.R.I larger tyres it really looks very well. I for one, am looking forward to seeing this model completed. -

David Goodman brought along his small beam engine which works well and looks good, also a drop-sided child's cot, this was a hurried job for a stage play where a Meccano model cot featured in the props.

David Guillaume did not show a model this time, pressure of his own business prevented him building anything new, but we must extend a hearty vote of thanks to David for organising the hall and the excellent refreshments. "Thanks Dave".

Ian Henwood has persevered and produced a four section telescopic jib for a crane. The square sections are $3\frac{1}{2}$ ", 3", $2\frac{1}{2}$ ", 2". The 3" and $2\frac{1}{2}$ " sections extend on screwed rods and the 2" section by fireman's ladder rope style. Each section extends 10". "Well done Ian".

Stephen Lacey brought along his model of the Foxton canal lift lock. This model has been seen at previous meetings.

Norman Mason brought along his version of Signor Servetti's money grabber which was working very well. Thanks for coming Norman, I know it was a last minute chance.

John Nuttall displayed his "Super model type" dragline using a $9\frac{1}{2}$ " square base instead of a $12\frac{1}{2}$ " square base. This model has 8 bogies, all driven from a 5-movement gearbox of John's own design. The gearbox is driven by a single motor.

Frank Palin brought along his version of S.M.L. No. 3 motor cycle and sidecar, slightly modified to avoid bending too many strips. Very neat and life-like model taken from the June M.M., for 1926.

Jack Partridge brought along his version of Dr Keith Cameron's multi-storey elevator which worked quite well. Jack also displayed a pendulum clock of his own design, this kept good time and worked very well and looked good.

Mike Pashley brought along two models from his "Mining Company", an R.B.150 electric face shovel and a walking dragline, These two models looked very good, neat, well-built and the use of appropriate transfers made the detail complete.

Dennis Perkins' efforts with vintage cars are getting better each time, His model of a 1930 Aero Morgan three-wheeler sports car with the 998 c.c., V twin air cooled engine was a dream, and for me, "Never to be dismantled". Dennis admits that the working valve gear has been copied from Terry Pettitt's previous model, even so the body shaping was really immaculate. '.

Ian Perrins displayed his very neat and well-built traction engine.

Bill Roberts brought along his power loom taken from the M.M., 1974. Bill has done a good job here to have this model in operation. I understand he is on contract to the local hospital for bandage making. His next contract could be Guild ties!!!

Alf Reeve brought back his "Sterling" 8 foot single driver engine and tender for a second showing. This very robust model is a picture to watch in operation and one that never could get stale.

Esmond Roden has been tramcar building again, each time the trams are better. The Brussels articulated tramcar, commonly known as two rooms and a bath, fitted with one-armed Pantograph, safety tray, seating for 40 persons, driving controls, cash desk. Powered by 20-volt side-plate motor. The model was 6 feet long and really looked good.

Esmond also showed a gauge O diesel locomotive and wagon. The loco has standard flanged wheels on one side to collect the current to drive and Dutch Tensi plastic wheels on the other side for insulation, the wagon is fitted with Marklin flanged wheels, these also are plastic. The models were very realistic in operation and the notable clank, clank over the joints was present.

Roger Wallis brought along his second magician or conjurer, also the No. 10 set remote controlled Leyland bus, these were for a second visit and very welcome too.

Michael Walker produced another American car, a sports coupe, beautifully finished and clean lined. Powered by 3 P.D.U's., a good turn of speed resulted. Fitted with full suspension, opening doors, bonnet and rear door. Full-remote control to include head and tail lights, tilting seats, vinyl roof, WRI tyres. This model, being 12 inches shorter than previous ones, enabled table top manoeuvrability for demonstration at exhibitions to be carried out.

Edgar Whalley presented a south seeking chariot and a Foliot verge table clock as well as his dockside crane. The clock, being built from M.M., instructions, once again proves that models can be built from magazine instructions.

Ken and Nicky Wright brought along models that were, for a second showing, very welcome too. The Hurricane jets gave a good fairground display, no trouble and worked very well. The superb model of a Manns steam lorry of 1906 vintage is a picture, powered by the latest Meccano steam engine and steering powered by an electric motor and remotely controlled makes a fine picture when seen steaming across a floor.

John Stephenson, a new member from the north, brought along a blocksetter crane. This model was a very robust and heavy job with several new features including a self-winding drum set at the end of the rails to collect the power cable and save it from being fouled by the crane bogies. I hope this model will make a second visit so that I, for one, can have a better look at it. Do hope you found M5, M6 etc. John, and your journey was a steady one.

I hope I've mentioned all the models that were present, my mind is not photostatic, so my writing has to be taken from your notes. I tried to meet everyone and I apologise if I missed anyone. I know these notes are late, and the report is nearly overdue,

21st Guild Meeting - 24th September 1977

Eric Baldwin brought along a lantern clock built from photographs in Meccano and Allied Constructional Sets, using a 30-tooth non-Meccano gear for the escapement wheel. A very neat model, shown at Stoneleigh and which kept correct time. Eric's other models are on show in Cardiff.

Wilf Bolland, who I often see tinkering with his models when I pass his window, displayed the No. 10 set model of an O.H.V. motor-cycle engine which ran very well and looked the part, being driven by a P.D.U. The single horizontal steam engine was one of the 1928/35 era of super models, being No. 11. Wilf has made a neater job of this model by replacing a sideplate motor with a P.D.U., which is concealed in the base of the model.

Paul Brecknell brought along what he says is a stop gap model, based on a No. 9 instruction manual, but more detail added, the road roller was a very good model with a different colour scheme, crane and highway parts in red, black and silver, a very pleasing effect. .

Graham Brown, one of our younger set and from the North West group, displayed an automatic drawing machine. This model is really ingenious and, I will admit, way beyond my understanding. A punched tape controls the contacts which drive the motors and allows the pen to draw either straight or curved lines. The machine is controlled by a 4-function programme operating 4 switches which controls the motors, and determines the drawing. Graham was quite soundly questioned about the model, and his answers were satisfactory. I hope he gets a break like Ian Henwood has had.

I (**Ernie Chandler**) took along my version of S.M.L.32 complete with WRI channel segment flywheels. This model has been to several shows and runs very well. Every available colour has been used in its construction.

Mike Cotterill displayed 3 very good models. An electric synchro revolving novelty 4-face clock, the base being $12\frac{1}{2}$ " X $12\frac{1}{2}$ ", and the model stands 24" high. The synchro motor being made from standard parts with 4 coils driving 2 time faces and 2 minute seep hand faces, also revolving slowly on a stout roller bearing. A very neat display type of model. If this could be condensed into a No. 10 set model it should be worth approaching Liverpool.

The beam engine, being built with exhibitions in mind, a mine engine used for pumping water from mines around 1870. The large scale flywheel, crankshaft, cylinder and beam all built up and very heavy looking. The beam is supported on built-up roller races without an axle, The model is complete with a detailed parallel motion. There are no visible gears or any visible means of driving the model which makes it all the more fascinating to watch in operation.

Mike's traction engine has a new gimmick, a crane motor being hidden in the boiler to produce powered steering. These three models are a very good example of Meccano building and have visited a few shows.

Brian Edwards still believes in small and very neatly built models. The 1914 $2\frac{1}{4}$ H/P Velocete is another fine example of his work. The machine is powered by the crane kit motor. These models are always difficult to build, but the final result is very pleasing.

Bob Faulkner brought along his model of, I believe, Servetti's money box. Bob has been busy redesigning the works and fitting clear plastic plates so that the workings can be seen.

Bob Ford brought along his model of an 80 ton Grove hydraulic crane built to 1" - 1' scale. The chassis is American design and manufacture. The front three axles are steerable and the rear three axles are driven through a clutch and gearbox and bevel differentials. The jib is telescopic and very easy in operation, 5/16" screwed rods mounted in aluminium tubes are used to raise the jib. The larger size of W.R.I tyres are used and look very authentic and true to scale. The total weight of this model is 75 lbs. I have a particularly soft spot for this model because I gave Bob the first pictures of the crane.

David Goodman brought along his small beam engine, this model has visited many shows and, like its prototype, just keeps running.

Matthew Goodman brought along his model robot with arms working correctly. The model being free standing and easy running. This model is a good test for a younger member's ability to use parts efficiently.

David Guillaume brought his own design of a roller bearing for a pontoon crane. Do hope we can see the finished model in March.

Ian Henwood and a school friend were assigned a project for the Oxford Science Fair. These two lads built a differential analyser which took them 5 months. The machine is built in three units each unit being connected by universal joints. The integrating process is accurate to + 3%, the discs are of glass, but the rest is all Meccano.

Clive Hine still on fairground, displayed his model "Speedway" as usual an excellent model with undulating track, but from $5\frac{1}{2}$ " curved strips gripped in slide pieces so that no bolt heads interfere with the running wheels. The model has 16 sections to the platform which is held together with axle rods in R/S connectors. The prototype of this model was built in 1957 to commemorate the coronation of King George VI and Queen Elizabeth, and bought by the London showman, Harry Gray. The prototype has been restored and is now touring the country.

Tony Homden has turned his hand to old-world maritime workshop tools. These seem to be the forerunner of the present day mass production tools, Tony has started on a project to build a complete workshop of the machine tools to make the one, two and three sheave blocks for sailing ship rigging. The

two machines on show were a drill and circular saw, both were very well produced and did the job they were intended for. .

Chris Lester brought along his model J.C.B., excavator, now completed, and a very fine model it is. By using a separate control unit the model was put through its paces. A box of Rice Krispies was used to represent gravel, the machine trundled up on its caterpillar tracks, filled the bucket and did a reverse turn, trundled along and deposited the load in a container. A very efficient driver and a top class demonstration.

Frank Palin can be trusted to turn up something vintage; his model from a pre-war magazine was very neatly built and worked very efficiently. The lighthouse and supply boat made a very nice show model using the minimum amount of parts.

Alan Partridge brought along a very varied display of models starting with Konkoly's double rolling cavalcade table-tennis balls. This model is very neatly built and operates very efficiently. A composite gear wheel of 487 teeth made by a Mr H.T. Stott originally, this gear is made by bending rack strips on a suitable frame. Its use is for a calendar mechanism to take account of leap years, $365 \times 5 + 366 = 3 \times 487$, where 487 is a prime number. A gearbox using standard gears to get 487:1. A gearbox using standard gears to get 173: 57. These are used in lunar system models. A solar and sidereal time clock for normal time and star time for setting telescopes. The Orrery made a very welcome reappearance and new members found this an interesting model. A novel model of a half-track anti-aircraft gun using all except two parts of an army multikit set. Alan also displayed 5 different mains motors that are available from a local store.

Jack Partridge brought along his model of the "Gombert" clock which ran very efficiently and kept correct time. A second clock was also on view with a different pendulum. Jack also showed part of his next model, Dr. Keith Cameron's rack railway.

Mike Pashley, building models of the machines he is employed on, brought along the base and boom of a Ransome & Rapier W1800 walking dragline. The layout of the base is a replica of the original, using the crane kit motors there are 4 dray motors, 4 hoist motors, 4 slew motors, 2 walk mechanism motors, and 1 motor for the boom operation. The model is being built to a scale of $\frac{1}{4}$ " to 1'. I hope this model will be completed for the March meeting because it is an extremely good model.

Dennis Perkins brought along his model of a Watts rotative beam engine, based on the K outfit model, but much improved. The model, built from nickel parts, looked good and worked very well.

Terry Pettitt displayed his very neat bus chassis with the detachable bodywork frame nearly completed. A very neat model this and I, for one, cannot wait to see it completed.

Bill Roberts and unusual models seem to go together, this time an automatic vehicle seesaw where a trolley travelling slowly on rails caused electric relays to operate to balance the seesaw arms. Bill also displayed some small models including a car showroom built from a crane kit.

John Stephenson travelled down from Hull with a large automatic blocksetter with a self-coiling cable drum, this is an improvement on remote control models, saves the cables fouling the bogies. This model has been to many shows around the north of England and is still in good working order. John also brought along his fairground dive bomber with 5' long revolving arms. The model is programmed to load the cars, make a certain number of revolutions, vertical and horizontal, return to vertical, and unload. A very efficient model and a good show model.

Mike Walker brought along his remote controlled American sports coupe. These models of Michael's always look good and very efficient in operation, using WRI tyres with very pleasing effect.

Roger Wallis took up my challenge to build a Mercedes coach from a road test report and a line drawing. A very worthy model is the result, complete with seats, twin headlamps and correct rear lights. The chassis is incomplete, it is awaiting an automatic gearbox and two P.D,U's.

Roger's second model was an eight-wheeler lorry from the "8" manual of 1956 and built with the red/green of the same period. The traction engine, always a thing of beauty in my eyes, has been built from reclaimed and restored parts with brasswork that has been burnished and "Brassoed", and, complete with miniature coloured lights, it looks good, but there are more details to be added.

Ken Wright has made a very good job of a 20th century fairground ride, "The Cobra". This is a long arm with a set of chairs at each end. As the arm rotates so do the chairs. Complete with coloured lights, this model was really a picture to see in operation. The only information Ken had was a black and white picture in "Worlds Fair". Congratulations Ken on a good model.

This concludes the models on show.- If I have missed any, I apologise. If you have any queries on the models, please write to the builder, not to me.

Apologies for non-attendance were received from Phil Ashworth, Phil Bradley, John Beardsmore, Peter Dixon, Gordon Scott, Edgar Whalley, Bill Winter, Alf and Chris Reeve, Ian Sellick, Stan Johnson, a real veteran at 70+ was ill and unable to make his first Guild meeting, we all wish you a speedy recovery, Stan.

22nd Guild meeting - 25th March 1978

Report on the 22nd Meeting held in the Greig Memorial Hall, Alcester, on Saturday 25th March 1978.

The usual early starters were already on the scene and had not only got the hall in order but also set out their own "stalls" when your reporter for the day arrived bang on mid-day, having had a fair but contrasting journey south-west, ranging from a near deserted, virgin-like M69 to a holiday bottleneck in Stratford. There was just time for a hearty welcoming handshake from Ernie, and we were off down to the town, in convoy, in search of liquid refreshment, and more.

Staggering back to the Hall, we were not surprised to find it seething with men and machines, since a near record turn-out was expected, in spite of the unavoidable clash with the Easter break. (Intruders - we bagged the last Saturday in March first!) Proceedings for the first hour or so were informal, and then the Chairman called us to order at 3.0 pm. He intimated that, in view of the exceptional number of new and interesting models on show, formal demonstrations would be limited to just a few, thus leaving more time for free roaming; an arrangement which seemed to go down well with all.

Demonstrated Models

Alan Partridge was the first to take the floor. He described two families of models which occupied over half one wall of the Hall. The first family illustrated the various means of coupling together two shafts without conventional (locomotive) coupling rods as described in the recent MM. It was particularly enlightening to study the mechanism of No. 12. The second family also related to Alan's recent puzzles in the MM being various Chinese chariots. These ranged from a close-to-scale model of what is believed to be the original Chinese chariot, which utilised 13 gears, two differentials and was perfectly symmetrical, through a 5-gear mechanism which Alan had in mind when he set the puzzle, to two mechanisms which utilise only two gears each. One of these had a gearless differential, gearless reversing mechanism, and used two gears to the pointer drive, while the other arranged the Mandarin to be integral with the differential cage, the input to which was routed to top and bottom by suitable universally jointed shafts.

Mike Pashley demonstrated his now complete giant model of a Ransomes & Rapier W1800 walking drag-line. Calmly passing over the fifteen-motor layout within the body, controlled from either side cab, since this had been shown at the last Guild meeting, Mike went on to demonstrate the walking mechanism of which he was justifiably proud. Though all carried on a single unreinforced standard shaft, the machine lifted itself with a barely perceptible change of motor speed, and no "clunk" as it went over top dead centre. Later in the day, I studied Mike's modest motor layout and tried my hand at casting and reeling the bucket. With four crane drive motors hauling and another four dragging the bucket, a very rapid response was assured. For the mathematically minded, the other seven motors, all PDU's, were disposed - (4 slew, 2 walk and 1 luff). Mike also showed the base of a 500-ton Liever crane which his "company" has under construction - something to look forward to.

Jack Partridge brought along a model of a Heistler logging loco which he had built from photographs of an original model by Keith Cameron in the USA. This most unusual loco had its twin cylinders mounted mid-ships and inclined in a V with cross shafting and gears to the driving wheels. Jack said that the boiler which was built of curved plates bent round frames held on $5 \times 11\frac{1}{2}$ " screwed rods went together particularly well. Friend Cameron went to the trouble of using set screws in all external positions since they more nearly approximated to the scale size, but Jack confessed that his stock was insufficient! Hopefully, MW Models will be prevailed upon to produce detailed instructions one day.

Members will recall that last time **Tony Homden** showed a model of a machine to do part of the complicated business of changing a cube of wood into a sheave block. Continuing the theme, Tony has now perfected the shaping engine to contour the outside of the block, giving it a curved shape with different radii on each pair of opposite faces. In Tony's machine, which was a fair copy of the original device by I.K. Brunel, 10 blocks were clamped in a big wheel which rotated against a profiling gouge, the latter constrained to move in one of two different radii by selection. When one face had been profiled, it was necessary to index all the blocks through 90° and this was achieved via 10 arms radiating from a crown wheel. Tony bemoaned the fact that Frank Hornby tended to work in 6 or 8-off rather than 10, which had given him a very difficult problem. This was solved by making a circle of 10×4 " step curved strips overlaid 2 holes giving a useful circle with 60 holes. Circularity was assured by setting the loosely jointed assembly inside a $9\frac{3}{8}$ " flanged plate which just happens to be a snug fit over the bolt heads. The wheel centre was built upon a (10 spoked) artillery wheel and the drive from the $1\frac{1}{2}$ " bevel crown wheel was by $10 \times \frac{1}{2}$ " bevels (anybody else got so many?!) The machine was driven in authentic fashion with belt from shafting, and Tony put it through its paces during the day creating a large amount of saw dust.

Mike Cotterill demonstrated his improved version of the tug-of-war machine which was featured in M.M. long ago. The machine has two input handles, the drives from which are geared down into a differential whose output drives a team via a rack strip. Mounted on a beam is a representation of the two team. Mike assured us that the machine has a lot of the characteristics of real tug-of-war requiring a certain amount of psychology and endurance, and displaying more judging by the blood on Mike's hand! This machine got a thorough testing later in the day, particularly by our younger members and guests.

Free Roaming

Where do you start when there are nearly 50 more models worthy not only of mention but of detailed description? I'll try to group models by type, rather than by builder, or simply by geography (i.e. as one comes across them zig-zagging round the hall), and where more appropriate than starting with what was probably the oldest Meccano on show. This was a 1929 Vertical Steam Engine recently acquired by **Alf Reeve**, at enormous expense, from the father of one of his pupils, and lovingly restored to its shining brass appearance of almost 50 years ago, and shown off in a perfect setting of the Steam Paddle Boat featured in M.M. 12/29, no doubt to promote sales of the engine. Alf had built the boat from vintage parts, of course, and it was instructive to note how the designer conveyed the impression of his subject with really very few parts.

Whilst "steaming", **Alan Scargill** took time off from preparing flambé dishes over a meths burner to light up the burner under a modern Steam Engine incorporated in an adaptation of SML 19a, the Steam Excavator. Unfortunately, I didn't see it under power, but did get several whiffs of meths and burning skin!

Alan also had another SML subject - No. 15 the 4-6-4 Baltic Tank Loco, which brings me nicely to the first group of models (locos),

Other locos included a Schools class 4-4-0 with tender, whose drivers were $2\frac{1}{2}$ " curved strips packed on an circular plates. It had full valve motion, and removable boiler and cab for maintenance, since it was intended for show running up and down a length of track (2 rail pick-up). This loco also came from the "Skegness sheds", being built by **Mike Cotterill**.

Our Chairman **Stephen Lacey** has returned to loco building, taking as his prototype this time a 0-10-0 Tanker which was one of the last to be built at the Stratford works. This was very nicely detailed, particularly the steam ducting to the cylinders and the coupling mechanism which, of course, runs the whole length of the model.

Bob Ford is currently building another massive loco, and gave us a glimpse of it by showing part of half of it. This wasn't as silly as it sounds, since the prototype is an American 0-6-0 0-6-0 loco which is perfectly symmetrical. Bob showed one chassis frame with running gear, etc., and since no boiler was fitted one was able to examine the internal valve gear with working Stephenson's link. One piece of non-Meccano licence which I will readily grant Bob was the chain used to limit the drop of the "cow catcher" which is more usually seen attached to a bath plug.

It's a short step from trains to trams, and two Members showed the latter, our President and founder member **Esmond Roden** and new member **Mike Cuff** from Chelmsley Wood. Esmond had a rake of 3 Vicinao Belgian trams, a power car, trailer and "toast-rack" trailer. The power car had a PDU on each bogie, and working screen wipers. Tempsey plastic $1\frac{1}{4}$ " flanged wheels were used on one side of the vehicles to facilitate the feeding of a second electrical supply for lights, etc. Mike's prototype is much nearer home, being in Birmingham's Museum of Science & Technology. His model of a Birmingham Corporation tram was very nicely detailed, including fascinating spiral staircases each of 16 (?) trunnions. I gathered Mike had spent most of Friday night getting the mechanics completed, and it is to be congratulated on its high standard.

Other road vehicles were in plenty. For a start there was **Terry Pettitt's** bus, and what a real beauty that was! Members may recall seeing the chassis of this PSVL Leyland "Lion", and admiring the detail built in. Terry has now added the body and maintained the high standard set earlier. I particularly admired the contouring both at top and bottom of the rear of the vehicle, and the working front destination sign operated by the imaginary driver leaning out of his half cab with left hand to grasp the pendant handle.

Michael (Detroit) Walker had another sleek US car, this one having such features as sliding front seats (to give access to the rear), internally controlled fender mounted mirror and internally released, sprung, trunk (boot to you Limeys) lid.

Fellow Lancastrian **Graham Brown** brought a model of a Formula One racing car, fully detailed with rear engine/gearbox. I thought you always modelled British Leyland products Graham - have they diversified further?

Matthew Goodman had an old fashioned sports car; reminiscent of a 3-litre Bentley, but the builder's main objective was operational features rather than scale appearance, as was evident when Matthew put it through its paces. Not only were the drive and steering functions remote controlled, but the brake lights came on each time the car slowed (achieved by electronics) and there were winking trafficators complete with a pea lamp tell-tale on the end of the column stalk, ,

Scale appearance rather than multi-function was the objective of **Roger Wallis'** model of a 1907 Rolls Royce, though it did feature an automatic gear-box within its nice shapely body.

Another old-timer was a model of a 3-wheeled delivery van, of the sort which seemed to be half van, half motor bike, even down to handle-bar steering. **Edgar Whalley** was the modeller who successfully captured the lines of this unusual prototype.

A motor bike proper was modelled by **Brian Edwards**, and was scaled by the new "crane" motor. Brian used this, upside down, as the engine crank case, topping it with a finned cylinder head using alternate layers of wheel discs and large washers. The bike frame was constructed of rods and brassware, the rods being built out to scale size by use of many "Guild" washers.

To complete this section on motor vehicles, mention must be made of Paul Brecknell's Road Roller

which made a welcome re-appearance - was this inspired by the "Build a Dinky" competition, I wonder, since it instantly reminded me of one with its all yellow (Multikit parts) body and red wheels.

Bill Robert's recipe for an eye-catching model was "take two Konkoly (?) horses? (ex Horse & Chariot model, MM circa 1953), harness them side by side to a model Stage Coach, the entire device being powered by an E15R sited inside the cab." Bill used 5 1/2" Spoked Hub Discs for the rear wheels, and was a bit stuck for scale front wheels until he hit upon the idea of artillery wheels backed with 4" Circular Plates, the resulting annulus being filled with a home-made "tyre" of black foam plastic. This was most effective and, again, the end justified the use of non-Meccano licence. Bill also showed a Hand Loom and an electrical latching relay to control the forward/reverse motion of a trolley - I trust the tram builders took due note!

"Snap" is what **Ernie Chandler** said to **Edgar Whalley** when he arrived, since each had modelled a Portable Steam Engine to a similar scale Ernie had based his model on a 1912 Marshall, and displayed an illustrative page from "Steam Engines and Tractors" which showed this machine which, on first inspection, looked back-to-front since the single cylinder is over the fire-box. Ernie had faithfully captured the curved shape of the twin flywheels' spokes by use of 5 1/2" curved strips, and other features included a spark arrester etc.; the hinged chimney. Edgar's engine was remarkably similar in general appearance, though he said it was a free-lance design. It was well finished in a resplendent (modern) blue and silver colour scheme.

Also blue and silver, though this time the blue plates were of 1935-8 vintage with yellow stripes in immaculate condition, was a large, stationary, single cylinder horizontal engine coupled to a pair of vertical pumping cylinders which disappeared through holes in the bedplate and, due to an optical illusion, appeared to go through a hole in the table. **Dennis Perkins** was the chap who ventured to risk his museum pieces in this very good cause, it being a delight to see this machinery swishing majestically at about 10 rpm.

Wilf Bolland had also modelled a pumping device, his being a Beam Engine which, again, operated majestically and faultlessly throughout the day.

Now to the cranes, which were in rather short supply for a change. Quality instead of quantity? Yes sir. **John Nuttall** had a very well-detailed dockside (?) crane, with unusual luffing via lead-screw. The most attractive feature of this crane, to my mind, was the compact (3 1/2 x 2 1/2 x 1 1/2 approx.) all-pinion 4-movement forward/reverse gearbox which was accommodated on the counterbalance beam. I hope John will sketch details of this box for publication one day.

The other crane was a KONE double boom cargo lifter by **John Bridger**. This was only partly finished, but if the rest comes up to the standard of the portal sub-structure and travelling gear it will be quite some crane!

No new fairground machinery was on show, so we had to be content with another look at **Ken Wright's** 'COBRA', and study the centrepiece and crown head of **Clive Hine's** latest creation, an 'ORBITER'.

Nicholas Wright had combined his hobbies of Meccano and electronics and harnessed a Meccano plotting table to a box of electronics which included a microprocessor (sometimes called a computer on a (postage stamp sized) chip). The plotting table carried a pen on crossed arms, such that it could be driven in the X and Y directions. The pen could also be lifted remotely. Consequently the machine was able to produce pictures, print letters, etc., under control of the microprocessor. For a fuller description of this, see the magazine of the Amateur Electronics Society which recently featured Nicholas's device.

Roger Wallis had quite an exhibition of his own in one corner. In addition to his Rolls Royce he had both mantle and long-case clocks, a showman's road loco and a Ping-Pong ball machine, in which balls spiralled down the faces of a cube in opposite directions in a most effective manner.

There were at least 4 Meccanographs from **David Goodman**, **Ernie Chandler**, **Frank Palin** and **Eric Baldwin**, each respectively more complex. Even David's, which he acknowledged as exceedingly simple, with only two motions (one to table, one to pen arm) and no obvious anti-backlash precautions, was able to produce accurate, smooth, designs.

John Stephenson showed a Rope-Plaiting Machine, which plaited 8 coloured threads around a central core. John said he started with the M.M. model, and then proceeded to modify it until it worked reliably. Having seen it on exhibition, I can confirm that he has made a good job of it, and would hope his mods can be written up for publication as a companion to the original design.

Last, but not least, came the Younger Generation with a varied selection of models. **Ian Henwood** has been led off the straight and narrow and produced a Fruit Machine. For obvious reasons I wanted to have a good look at this, but somehow got diverted. I do hope Ian doesn't dismantle it for a while, though I appreciate he hasn't an infinite stock of parts and no doubt has other models in mind.

12-year-old **James Gilbert** has a No. 9 set, built a Mechanical Excavator with it and then developed it by motorising the various movements. Keep it up, James.

Other small models, whose builders I failed to identify, included a pair of Swing Boats, a head-less Robot, a Motor cycle with Sidecar and a set of programmed traffic lights. Having-gone just about full circle, I'm back at Mike Cotterill's patch, since I recall he also showed again his Traction Engine and a freelance Carriage Clock powered by a Cruegot mains motor.

Report of the 23rd Guild Meeting held in the Greig memorial Hall, Alcester, on Saturday 30th September, 1978.

The last weekend in September coincided with the return to University of my eldest son, and the trip to Alcester this time had to include a detour via London. Consequently the clock was approaching 3.00, and the 300th mile of the day appeared on the other "clock", when I turned into the grounds of the Greig Hall. A sign read "to the Jumble Sale", and I hesitated in case I'd got the date wrong. However, pressing on towards the usual room I saw the usual happy crowd of modellers, with paraphernalia that no way looked like jumble (with the possible exception of Mike Cotterill's trays of second-hand parts!)

I am usually one of the early arrivals, and this helps when it comes to trying to connect modellers with models, or vice versa, and also to get to know new faces. However, this was not to be this time, so I'm relying heavily on the notes most of you made on the back of the "Meeting Questionnaires" - if you've got no mention, or worse your Masterpiece has been ascribed to somebody else - it could be because we have no Questionnaire, in which case you've only yourself to blame!

Your Committee decided not to have any formal demonstrations or chats on any of the models, so the entire afternoon, apart from customary introductions and apologies, was devoted to free roaming, and there was plenty to do and see, with over 40 Members and Guests and about 52 models. I had no model this time (and was in good company with about 10 others, incidentally) so I spent all my time just roaming, admiring and sometimes marvelling at things. Now I'll get down to the job of recording as best I can, but where to start? Get out the pin. It's landed on **Alan Partridge's** name.

Alan had another mini-exhibition, starting with his Mars Lunarium as featured in the current MMQ. Unfortunately, the MM omitted to give the periods of the Martian moons, so Alan showed his calcs alongside the model. I didn't make a note of them either, but I did note they are called Phobos and Deimos.

Next was Alan's Jodrell Bank Telescope, utilising about 2/3rds of a yellow/silver/blue No. 10 outfit (whatever has happened to all that Partridge green hardware?) The model was partly stripped to facilitate inspection of the automatic gearbox which positions the parabolic antenna. Alan indicated he would also be showing a model of ye olde original Chinese Chariot, as deduced by his friend Prof. Sleeswyk, but I did not see this model. I did, however, make special note of his fourth offering, which Alan did not describe on his Questionnaire, since he intended it to be a shocking surprise for our President. It backfired in a way, since our President had had an earlier shock when he discovered he was booked to appear at the Crich Tramway Museum this weekend, so had to miss a Guild Meeting (first time, Esmond?) Oh, nearly forgot - Alan's "surprise" was a set of (32) Chessmen modelled in Standard Meccano, each instantly identifiable and none more than $\frac{1}{2}$ " in diameter. Very novel.

I did see one Chinese Chariot, however; this one by **John Nuttall** who had succeeded in devising a combination of gearless mechanisms in an elegant and symmetrical fashion to do the necessary. Sorry, but I find it impossible to describe the mechanics. John had 2 other novel, mind-boggling, models as well. One was a form of block-setting gear designed to pick up and then release its block on successive hauls. Such a device is unlikely to find an application in (real-life) quayside construction projects (since each block has to be set carefully) but could have use, say, in an automated warehouse. It also has possibilities in a display model used in conjunction with an automated Block Setting Crane. John's gear had 2 pairs of pads brought together by a lazy tongs mechanism, such that they gripped the block. However, the tongs were locked open on alternate hauls by a supplementary mechanism. Sorry, it's as indescribable as the Chariot! (Please, John, please send a .description of it to the MMQ. My attention was first drawn to John's third model by the small crowd around what was, superficially, a small railway breakdown crane bent on taking a suicidal dive off the table, but, just as eager hands stretched out to save it, it stopped itself. Closer examination revealed that this was no ordinary model, but a sequenced display model all driven from one motor with a minimum of gears and clutches. The drive was taken, through a slow operating auto reversing gearbox, to a differential, whose outputs fed 2 more diffs, whose ($2 \times 2 = 4$) outputs fed the required movements of haul, luff, slew and travel. Each movement had a positively limited range, so they were driven in sequence since the set of diffs always drove the easiest output first, until it came to its stop when it drove the next to the easiest, etc. Fiendish, what! Having exhausted itself on all four outputs the gearbox automatically reversed and the sequence started again in the reverse directions. I understand this model has been on display for hours on end without any hiccups.

Also in the back left-hand corner, with a host of interesting models, was **Roger Wallis**. First was a 4-6-4 "Baltic" Tank Loco as per SML 15, retaining the strip boiler construction, but using flexible plates for tank sides etc. The valve gear was modified to eliminate the use of old slide pieces without bosses. Note the silver strips in an otherwise green boiler to simulate a "lined out" boiler.

Next was a freelance Railway Breakdown Crane. This was built as a complement of the above to form a railway breakdown train, and to prove that crane motors can be used on 3 volts only, and provide adequate power to move a crane of this size (a 30" jib). 3 motors were used, luffing, hoist and rotation, controlled by a remote controlled box built from standard Meccano and Elekkit parts. This simulated centre off double throw switches with no moving wires, and therefore is reliable; the power is derived from a Meccano built "battery box" providing + and - 5 volts.

Roger's 1905 Rolls Royce made a welcome re-appearance, this time still in its "polished" vintage

appearance in which it appeared at Stoneleigh. He also showed a Meccano Jigsaw Maker in almost mint condition, including box and 3 of the 4 picture cards uncut.

Also fresh from Stoneleigh (where I had the pleasure of attending it on occasion) came **Mike Cuff's** "Big Dipper". A most eye-catching model this, only about 2 ft. by 3 ft. 6 ins, by 1 ft. high, but exuding all the thrills of the fair as the 2½" long cars are hauled slowly up an incline and then go twice round the rectangular structure, negotiating three dips on the way. It was amazing that the cars could coast for so far with only a "head" of about 10 inches.

Talk about "Speedwheels" if you wish, but Mike's wheels were ¾" Flanged variety, on plain axle rods. The secret seemed to be highly polished rods and no oil. (Tony Homden and I at Stoneleigh did put a few drops on one car which had slowed a little, and it promptly stopped. We had to strip it quick before Mike got back!)

The fairground theme was continued by **John Bridger**, who had freelanced an Octopus to exact scale proportions with help from a book on Fairground Machinery. John said it only took one week to knock up basically, and another week to add a few trimmings. If we could all model so quickly we should need Guild meetings monthly. Joking aside, the Octopus was most realistic, and retained its realism to the end, since it was dismantled in the same way as the prototype. Did anyone see John's car towing away the centre-piece truck? John also showed his version of the Nov. 59 MM's Model of the Month, a Twin Cylinder Marine Engine, resplendently polished in red and silver and set off by being mounted on a 2½" deep plinth.

Dennis Perkins too had modelled a Steam Engine, but his was a (stationary) Tandem Compound Pumping; Engine, which ran ever so slowly and smoothly.

Wilf Bolland had SML 28, the Pontoon Crane, but modified to accommodate the large toothed quadrant and much reduced gearing to give more representative speeds.

It was a pleasure to see that the Mexican Railways 0-6-0 - 0-6-0 Fairlie type loco, which appeared in a part built form last time, has now been completed by **Bob Ford**. Though the prototype is a narrow gauge loco, Bob's model ended up of massive proportions since it was built to 1/8th scale. (As normal, the scale was determined by sizing suitable drivers' with standard parts, and Bob said that when he started he forgot how small the drivers were on this particular loco!) The end result was a model some 6ft long and weighing in at over 100 pounds. It was mounted off the rails, and hence the motion could be displayed in action. Bob made the most of the big scale by incorporating loads of detail, including all controls for the driver and fireman whose stations are on opposite sides of the central, back to back, fireboxes.

Brian Edwards also had a tank locomotive, of more modest proportions but nevertheless fully detailed. It was based on the 0-4-0 used on the Himalaya - Darjeeling Railway and fitted with both well and saddle tanks and outside Walshaert's valve gear. Brian had as well a trench digger based on that shown in MM Feb 1934, and a solution to the current MMQ competition - figure of 8 buggy.

We both shared a frustrated view over this, since for the second time running the competition closing date approximately coincided with the date of delivery of the mag. What will CJ say next time, I wonder?

Whilst on the subject of locomotives, **Stephen Lacey** gave his 0-10-0 Tank another welcome outing. Stephen confessed that finding time for modelling is becoming increasingly difficult, due to the demands of his practice and other interests, not to mention the chores of Chairmanship. Cheer up, there's going to be a long, hard, winter ahead!

Now let's move on to the **Goodman** family. **David** had a useful demonstration of an automatic gear box on a test bed, whilst **Matthew** had a fleet of motorised vehicles - a scale model Bentley, a "high speed electric car", (and it was, being capable not only of outstanding acceleration but did quite realistic skid turns) and a Dumper truck whose single cylinder continued to "pop-pop" away whilst it was stationary, Brother **Peter** had built a well-proportioned Veteran car, and in obviously following in father's footsteps also.

Matthew also brought along a friend, **William Batchelor**, who showed a large model Jeep, fully motorised, etc., and including remote control of its gearbox.

Young member **James Gilbert** who, you will recall, won the Junior Cup at Stoneleigh, had another interesting scale model. Using just a side view from a picture postcard, James produced an instantly recognisable Type 59 Bugatti, with 14" body of blue plastic plates, naturally. The racing car was powered by a large motor under the bonnet, and featured coil spring suspension and remote steering via a lead screw. (Purists may say the prototype had elliptic springs, but the postcard didn't show this).

Another Racing Car, modern this time, came from the hands, and new No. 5 Set, of **Frank Palin**. It was developed, from that originated by Bert Love in the current MMQ, by David Whitmore and subsequently Frank, so that the crane motor was geared down 5 : 1, giving more realistic performance, and a simple steering mechanism was added. Frank pointed out to me that this model can't be made with the current sets 4 or 5, since it requires four 1½" X ½" double angle strips; which, by some odd quirk, are only provided in Set 3. So if you are thinking of buying a Set 5, Frank recommends you get a 3 plus Conversion Set, and you'll have 2 extra parts and be a few pence in pocket as well,

Enough of this digression, back to the Meeting, and **Eric Baldwin's** Meccanographs which performed faultlessly all afternoon. One was as featured in MM May 57, the other Konkoly's model ex MM Aug 65. Eric brought along a fellow enthusiast from the Black Country (Wales), Brian Walker, who had a model of a Gavioli Fair Organ, complete with animated bandmaster and figurines. Brian's Meccano was not big

enough to provide enough rods for all the pipes, so he used straws! Ah well, let him off since the end justified the means,

Another newcomer was **Leslie Gines**, who brought a remarkable model of an articulated lorry and trailer some 4ft long: remarkable, I thought, because he had captured the exact lines and rounded edges of a typical (Atkinson?) cab of the mid-sixties, in matching, immaculate red plates.

The **Wright** family kept up their tradition and produced new models once more. **Ken's** was a 1908 Mann's 5-ton oertype Steam Wagon, fitted with brewers' sides. Some 3ft long, red, silver and gold, it was fully detailed down to the last regulator and cock.

In complete contrast **Nicholas** had modelled an ultra-modern subject, the "Unimate" robot arm used in industry for handling dangerous substances, etc. The model had 5 remotely controlled motors, giving full control of the crocodile jaw type manipulator, and Nicholas had become very proficient in controlling it, such that he could pour out a drink, etc. This model was a great success at Stoneleigh, and Nicholas has improved it since then by means of a travelling counterbalance. Some idea of the size, and hence need for counter-balance, can be gained from the fact that the model included three built up ball races, each of 6" internal diam.

Tony Homden, travelling light for once, just showed 4 Aeroplanes and a Motor Car built from the Constructor Sets of the 1930's. He could have run a competition on the lines of "guess which parts are restored or replicas", since quite a few were, but it was not at all obvious to my eye. Tony also brought along the Morticing Machine from his set of Brunel pulley sheave manufacturing equipment.

Yet another father and son team, **Bill and Peter Roberts**, come next with a welcome re-appearance of the novel Fence Making Machine, using copper wire and "lollipop sticks". They also showed a small model of a Terex Earth Scraper built from the parts in the new No. 4 set, and a Multikit lorry powered by a French Meccano motor which was a snug fit below the platform between the side frames.

Mike Pashley has started upon yet another piece of plant machinery, an LR 1300 mobile crawler crane, and just showed the hull and tracks which he has completed to date. More details next time, when I hope the weather is fine enough to allow it to be operated outside and make the most of its 12ft jib.

Other models making a welcome re-appearance were **Terry Pettitt's** Leyland bus, going to Liverpool this time;

Mike Cotterill's Schools class loco, with modified drivers (4" circular plates) and now dismembered of boiler and cab and mounted on a slowly revolving plinth for exhibition purposes, and **Ernie Chandler's** Marshall 1912 Portable 8 HP Steam Engine powering a circular saw. Ernie also showed a Blocksetting Crane based on one of the 1960 MoM series, He says it was a very interesting model to build,

A further delight for early arrivals was sight of **Charles Catt's** 1/10th scale model of a Blaw Knox PF 90 Road Paver. Charles says he tried to copy the prototype as far as possible, but the 16 forward gears had to be reduced to 8, and some of the hydraulic movements modified. Since Charles had to leave at lunch time I didn't see his model, but am reliably informed that it was very impressive, with all movements powered from self-contained batteries, and far superior to the No. 10 leaflet model.

In the course of my roaming I also saw the following models, but am unable to name their builders - a large "Manitaube" 4100W Ringer, being a crawler tracked vehicle inside a large circular girder (under construction), a small beam engine, a small mobile, tracked crane, a dockside crane and 2 Meccanographs.

Reflections

We had a superb selection of models, in spite of the fact that at least 12 Members or Guests had no models. I won't shame them all by naming them, but I must mention the pleasure I had meeting once more our old friend John Lorimer, who was able to come for just an hour or so, being brought by Paul Brecknell.

Feeling among Members seemed to be about equally divided on the subject of formal presentations or 100% free roaming, I would prefer the former, since I think they help to break up the day and give one a few highlights to remember. Perhaps, since we are divided, we should have presentations at alternate meetings. I leave that Solomonic suggestion with the Committee.

24th Guild meeting at Alcester on 31st March 1979

Though I didn't arrive in time to see the doors open, I'm assured they did so at 10.0 a.m., and by lunchtime the Hall was a real hive of activity, with both clatter and chatter.

A few greetings and it was time to refresh the inner parts at the local. (Thinks, there were so many Members in there that we ought to get a discount). Returning to the Hall we had just about a full house, both in the meeting room with some 45 Members and Guests, and in the car park which we were sharing with a crowd of country types who were living it up in the main building.

New to our meeting proper, which got off to the usual start of a cuppa plus a formal welcome, followed by a wander around for a while. (Typists note: pints and cuppas, will the meeting ever start?) After some discussion the Committee decided to devote a limited amount of time to specific demonstrations, which commenced about 3.15.

DEMONSTRATED MODELS

First away was **Roger Wallis** with (dare I say it) a truly novel model of a Juke Box, designed to play 45 rpm records with the aid of a stylus, amplifier and very little else non-Meccano. The model still required a lot of work to complete it, but nevertheless Roger has broken the back of this formidable task, and gave an amusing commentary on progress to date. I can only do model and modeller justice by quoting from the very complete description supplied by Roger:- Starting with the coin slide, this is designed to accept 5p. (one play) and 10p. (two plays) inserted in a single slot, and by careful adjustments of the strips and angle girders, the slide will accept only these coins and reject all others. The 10p. coin travels through a different part of the mechanism before joining the 5p. section again, so that two pulses can be generated for 10p. and one for 5p.

Following on from this, the record selector holds 20 records vertically, in a horizontal rack, this rack made up from pairs of strips spaced by washers. Incidentally, there must be over 500 washers in this section! This rack traverses the whole width of the juke box and then automatically reverses to the other end.

There is no reset for this part of the mechanism, so when it runs out of "money" the selector stays where it is. The record select "buttons" will be $3\frac{1}{2}$ " rods with $\frac{1}{2}$ " pulleys as knobs. When one is depressed, the record selector will hunt for this and when found will complete a circuit to a relay switching off the selector motor. This will leave the desired record under the pick mechanism. This basically is built up from a curved pendulum rod and a $2\frac{1}{2}$ " rod with $2\frac{1}{2}$ " curved strips at the ends, These close around the record, under the control of a crane motor. A further pdu then takes over, driving a multi-output gear box to control the movement of the selector arm, to remove the record from the rack, turn it through 90 degrees and place it on the turntable, which also acts as flywheel, being built up from four 6" dia circular plates.

Control now passes from the selector to the turntable, where a small 15 rpm motor drives the turntable through a belt drive of $1\frac{1}{2}$ " pulley to $\frac{1}{2}$ " pulley on the turntable shaft, which is a $3\frac{1}{2}$ " pin-point axle found necessary to remove the "wow" and "flutter". The pick-up arm is mounted on a 2" pin-point rod (to eliminate friction) and is balanced by means of a worm to about 8 grams tracking force. The pick-up is controlled by a further pdu, driving a neat cam made up from a $3\frac{1}{2}$ " strip wrapped round a bush wheel and bent such that it has one indentation to control the pick-up lift. This shaft will thus rotate twice in a complete record play. A 2:1 ratio; from this shaft drives a large eccentric that controls the sideways movement of the pick-up arm to position the arm to the edge of the record and return the arm to its rest position after the record has been played.

As the pick-up returns to rest, the control is now once again passed to the record pick mechanism, which lifts the record from the turntable, rotates through the 90 degrees again and replaces the record back in the rack. The final part of the cycle will be to remove one play from the ratchet counter. If more money has been inserted, then the rack will hunt for the next button that has been pressed.

The record rack and selector has been made into one module, whilst the pick mechanism and turntable has been mounted on another module. These sit in a Meccano 'cabinet' some 4 ft high, by 2 ft wide and 18 inches deep, the framework for this having been constructed. It is mounted on four casters, made up from $1\frac{1}{2}$ " corner brackets and girders with the wheels being 1" pulleys with rubber rings as tyres. So far, six motors have been used, including the turntable motor, controlled by six relays, the whole thing being under the control of the programmer described in MMGG No. 2. There is still a lot of work to be done on the model, and Roger hopes to have it completed by the summer, although he was able to demonstrate the "noise" it makes at the meeting! .

Next to bat was **Ken Wright** who has built his own version of Keith Cameron's "Little Joe" loco, being a self-powered device driven by pdu and 4 Ni-cad (rechargeable) batteries. "Little Joe" comes out of his engine shed at the start of a sequence for a run round a track including two reversing loops, a rolling bridge and a drawbridge activated by the loco, Ken has modified the design so that it splits into 4 modules for ease of transportation (it contains 66 sectors plates!) The loco takes $1\frac{1}{2}$ mins to complete its circuit, and Ken plans added attractions to extend the overall sequence to 5 mins, and thus have a most attractive display model.

Our guest **David Neilson** from Solihull was invited to take the floor and describe his full-size space-frame chassis for a one man, car battery powered vehicle. David explained how his "model" fitted in with his

Mechanical Engineering degree project at Lanchester Polytechnic, which is to design a car for maximum distance in 2 hours round a 3/4 mile oval course. Meccano's versatility was used to establish the minimum sized space-frame which would fit around David, it then being built of other materials. I'm sure all the Guild will be interested in hearing how David has got on, both in the "race" and with his studies .

Hon. Sec. **Ernie Chandler** followed by demonstrating his large-scale model of a Sperry-New Holland 1545 Combine Harvester. The model was sectioned to show the workings within, which included 3-speed and reverse gearbox, clutch and differential, front (cutting) reel, rake-up auger, 3 threshing drums and 2 straw "walkers" with representative augers, one to the bulk tank and one to return the produce for another cycle. This was probably the most detailed combine built to date but, as Ernie remarks, there's always room for improvement and he thinks he could make an even better job next time.

Charles Catt demonstrated his free-lance model of a Showman's Engine, some 2ft long ($9\frac{3}{8}$ " drivers). An M5 motor was fitted in the position one would normally find the dynamo, so the model was back-driven via spring cord and the flywheel. Charles' model was full of authentic detail including Stephenson's link valve motion, 2 speed gear box, compensating gear (differential) and rope haulage drum.

A very interesting lesson in scale model development from good to near perfection was delivered by **John Bridger**. The Mark 2 fairground Octopus which he showed us last September has been subjected to a complete re-build, and its centre truck is now based on a prototype owned and operated by Bob and Robert Phipps of the famous travelling firm of Messrs. Anderton & Rowland. John went to the trouble of searching out the Phipps in their winter quarters and getting acquainted with them via the landlord of their local source of liquid refreshment. John showed photographs of his Mark 2 to the Phipps who said "It isn't like that" and took John to see the real thing. The basis of the truck is an ex WW2, gun carriage, and John took many measurements and sketches so the Mark 3 which he has now built is a faithful replica and folds exactly as per the prototype. Whilst demonstrating this, John pointed out one area on which he is not quite satisfied – the eccentric tilt mechanism which lacks some rigidity - and one area of justifiable pride - the immaculate lettering on the headboard, courtesy of Letraset. The Mark 3 has been seen by the Phipps and pronounced "good"; it remains to illuminate the model and build the tractor/lorry on which the chairs and arms of the Octopus will be stowed for transportation, again in authentic fashion.

Mike Cotterill's collection of yellow and silver parts continues to grow, and he must have needed most of it for the giant Gantry Crane which he demonstrated. The gantry is 6 ft. long, 1 ft. wide, and 4 ft. from ground level, being supported at the ends on inverted V frames spreading to 4 ft. apart on 4 bogies, each with 8 powered wheels. Most of the machinery is aloft in the gantry beam, including two E15R's which power the travelling gear and pdu's for trolley motion and main hoist, dangling below. Atop the trolley is a further crane with 360° slew, screw luffing and double throw fly hook, also all driven by pdu's. The luffing was novel, incorporating a (lead) counterweight system moving on the rear of the cab. In addition to this masterpiece Mike brought along a large scale, well brassed, model of a Beam Engine.

The most noticeable exhibit of **Jim Gamble** was not Meccano as we usually expect to see, but a small railway layout featuring a Hornby 'O' gauge train and accessories (the rare lighted variety) all in mint condition. Jim said the layout was an excuse to exhibit a small Meccano sequencer, which provided power to the layout for a pre-set time upon payment of 2p. (Or was the excuse the other way round?) Further treasures from the past were SML's 20 (electric mobile crane) and 5 (travelling dredger) all in vintage nickel plate. The mechanisms of the former were particularly neat and well worth study.

Michael Edwards then demonstrated his latest developments in electrodynamic piston engines, a twin "cylinder" device powering a nicely proportioned model of an 1895 Benz, with fully representative steering and suspension. He showed how the critical adjustment was made to the "spark" timing, i.e. to the contact which energised the electromagnet to pull down its solenoid, the contacts being set for time and dwell. The facility was provided to switch out each "cylinder" in turn in order to ensure that each was doing its share of the work. Michael also showed his model of a Leyland National single decker, with powerful non-Meccano motor, 2 speed gearbox, driving a differential with sprung cage in order to smooth the transmission. Further motors operated steering and doors, whilst a "crane motor" was used driving a fan to cool his H and M Power Unit!

Mike Cuff then showed his latest amusement park machine, the Round-up. Passengers stand with backs to the wall of a cylindrical cage which is rotated. When sufficient centrifugal force has been built up the entire cage is tilted up through some 70° by means of a hinged boom lifted by hydraulic rams. On Mike's model; the prototype's rams were dummies, power being applied by a concealed "ram" (screwed rod) running below the model, which worked surprisingly well in view of its mechanical disadvantage. I believe Mike also brought an unfinished model of a fairground Whip - more sensations to come.

Guest member **Mr. Bright** showed a couple of fine, antique style, carriage clocks, each powered by a 1 rpm mains motor, and he was followed by **Brian Walker** who demonstrated his version of Konkoly's "flying pendulum" or bob-weight escapement clock. This device keeps moderate time and runs for about 30 hours on a winding of its No. 1 clockwork motor. It is a simple but fascinating display model, which has been put to that purpose several times.

Regrettably there was no time for further demonstrations, though we had no shortage of volunteers. **Eric Baldwin** could have indicated the changes he has made to Konkoly Meccanograph, and **Leslie Gines**

has also modified the articulated lorry about which I enthused last time. Another, disappointed would-be demonstrator was **Tony Clapperton** who, aided by his two sons, has completed and brought down from Humberside a superb model of a Manitowal "Ringer" crane. You may recall I failed to identify the builder of this model which I saw in an unfinished state in the last report. It is now complete, built to a scale of $\frac{5}{8}$ " to 1 ft, this being set by the need to fashion the base ring from large curved strips giving 20" dia. A double track is built up on these curved strips, and the entire crane, all $15\frac{1}{2}$ ft. of it, slews round on this ring. Unfortunately, the room at Alcester was not high enough to allow all the mast sections to be used, but I have seen this crane fully erected, and it is most impressive.

Free Roaming

Once again there was so much to see, probably 2 or 3 times as much as already described, but descriptions will have to be condensed a bit. **Frank Palin** brought his Formula 1 racing car (current No. 3 set) and dumper truck (10.9), **Stephen Lacey** a railway breakdown crane (crane set), **Bob Faulkner** a go-kart (set 5+) and his money box (never goes anywhere without it!), **Bob Ford** a Twin Cylinder Stationary Steam Engine (SML 32) and **John Beardsmore** the Giant Dragline (SML).

Terry Pettitt has built a Universal Drum Twisting Machine, and hopes to produce companion machines one day in order to demonstrate all the processes in the manufacture of electric cables - some task he's set himself. Young **James Gilbert** produced another mini-exhibition, including a synchronous clock, robot arm or manipulator, Stirling single on display stand, and "Octopus" and a set of flying aeroplanes. **Matthew Goodman** also had variety in the shape of 3 vehicles, including a Bentley open tourer and a dragster, both remotely controlled. **David Goodman's** automatic gearbox has been adjusted and improved in operation, though its builder seemed too busy with affairs of high finance to devote much time to demonstrating it.

Staying with vehicles for a while, **Brain Edwards** has made a splendid job of modelling a Blackpool Corporation "Dreadnought" tramcar (ex-cover of MM 4/61), **Mike Walker** has made yet another variety of US car, a 4-wheel drive one this time, **Bill Roberts** a Terex earth scraper, Peter Roberts an Army half-track and a bridge from the crane set, whilst **Alf Reeve** has raided a museum and collected the necessary genuine parts to make a 6-wheeled vehicle of the 1939 Mechanised Army variety. Historical items, aeroplanes in fact, were also shown by **Tony Homden** and **Geoff Wright** - there seems to be a lot of old Meccano buried in the Thames Valley.

"Roll up, roll up" was the cry of **Clive Hine**, enticing us to take a trip on his truly representative Waltzer, whilst at the same time **Esmond Roden** was enticing us to spend a penny to see his original "Haunted Bedroom". This has 10 progressive movements, featuring such non-Meccano items as bed-linen, a revolver and a skeleton, but all in a very good, amusing, cause. Esmond also brought a hand loom, being an improvement on that in the MM some 20 years ago.

The old faithful Giant Blocksetting Crane was in evidence once more, this time modelled very well by newish member **Mike Brammer**. All 4 functions were independently controllable from one pdu, and the hoist and trolley travel had end of travel "knock-offs". **Alan Scargill** went to a lot of trouble to seek information on the late Eric Taylor's original level-luffing crane. That his quest was successful was evident by the re-creation which Alan showed us all with justifiable pride. **Mike Pashley** Enterprises have now acquired a Liebherr 500 ton crawler crane, of about $1/16^{\text{th}}$ scale. **Stephen Pashley** is following his father in the business and showed a well detailed and functional, smallish, walking dragline. Finally in this section comes **Edgar Whalley** with an improved version of the Collis crane truck recently featured in MMQ.

John Nuttall showed us the "guts" of a dockside crane in the shape of a 5 movement, forward and reverse gearbox, only $5\frac{1}{2}$ " x $2\frac{1}{2}$ " x $2\frac{1}{2}$ ". John exploited the fact that 15 and 38 tooth gears will mesh at $\frac{1}{2}$ " x $\frac{1}{2}$ " diagonal spacing, and thus built up a compact cascade of gears rotating in alternate directions from which to pick off the various drives. John also showed a mechanism to give a gearing of $25101/850 = 29.53$ which just happens to be the number of days in a lunar month. Schematic diagrams and mathematical calculations were provided to prove the point, as if we didn't believe him!

BUSINESS MEETING

This followed tea, commencing with a formal welcome by the Chairman, and apologies from George Illingworth, Chris Lester, Alan Partridge, Peter Dixon, Keith Orpin, Jack Partridge, Phil Bradley, Martyn and Graham Brown, Ivor Morgan and Ian Henwood.

Congratulations were offered to Michael Walker on his appointment as Editor of the MMQ, along with a request both to him and Members in general to endeavour not to duplicate articles in MMQ and MMGG.

The Hon. Sec. advised that satisfactory arrangements were in hand for our exhibition at Stoneleigh at the end of August. We have a large, airy, space in a prominent position. As last year, cars will not be allowed in the public area during opening hours, remember.

The Stratford Show was also mentioned, with apologies for the clash of dates with the Holy Trinity MC and North East Midlands MC. A meeting Calendar would be a good thing!

The Hon. Treas. gave a little lecture on inflation in justification of the £1 meeting charge. (In my case it pales into insignificance beside the cost of 10 gallons of petrol).

We were reminded that our next meeting is scheduled for 29th September, and the business session finished with a demonstration of the "mouse" which Alan Partridge had judged the winning entry in the last but 2 and 1 MMQ's, if you follow me.

Hand written note

This report took 20 days to arrive - rather crumpled - still we have it and very well compiled it is. I have to read the report as i never see all the models at a Guild meeting.

Thank you very much for an excellent job - well worth waiting for.
Ernie.

25th Guild Meeting 29th September, 1979

Dear Friends,

The 25th meeting was once again a very successful one, not quite so many members attending as there were in March. The tables were all set ready and the many other, behind the scenes, jobs which have to be attended to, were ably done by Dave, Clive and the Custodian, who we have come to regard as "one of us". Members were soon arriving, and the last six months' efforts were brought into the daylight. The usual Pub Lunch was enjoyed by many and tea and biscuits started off the afternoon session.

The Chairman welcomed the assembled, and introduced the guests. Then the tour of the models, starting with **Ernie Chandler's** version of a Viennese wheel. This was basically built whilst Ernie was off sick with pulled leg muscles, which allowed him to build, but not work. The supports are $18\frac{1}{2}$ " girders extended by $3\frac{1}{2}$ x $2\frac{1}{2}$ plates to form a box to support the axle which is mounted in a pair of ball races. The wheel has 16 radial arms built on to a 6" circular plate and braced by a double square of $12\frac{1}{2}$ " strips and a $7\frac{1}{2}$ " circular strip. The arms are $12\frac{1}{2}$ " strips extended by a $5\frac{1}{2}$ " strip with a flat trunnion as a finial; to take the cage axle, powered by a mains motor with suitable reduction bearing and a slipping clutch. The wheel turns very slowly, and has 16 light bulbs on it.

John Fuller, a new member, showed the paces of his dockside crane, beautifully built in blue and silver. His subject was the cover of the MM for 1965. Powered by an E20R all movements, hoist, slew, jib and travel, could be operated together. The drive to the bogies was by a worm on each leg, the jib being built from axle rods and "thickened" by rod connectors. Standing about $2\frac{1}{2}$ ' high this made a very neat and tidy job.

John Stevenson demonstrated his roller type water pump which pumped water from one vessel to another, very ingenious, and neatly done.

Michael Sidaway, our youngest and local member, brought along his dragster which showed good promise being neatly built and well-proportioned a good effort from the youngster.

Charles Catt had brought along his road loco, and the answer to a problem his 14 year old nephew had at school, which was to design a Meccano bridge with a span at least twice the length of the longest piece used, and capable of carrying 50 times its own weight. The bridge Charles showed was 11 " x $2\frac{1}{2}$ " x 3 ", weighed 343 grams, and withstood $17\frac{1}{2}$ kilogrammes being placed on it. Uncles can be useful.

Jack Partridge displayed a fine clock; I believe a French one, "La Bulle". Jack had improved the pendulum connection to avoid trouble during travelling.

Esmond Roden is building an added attraction to his haunted bedroom, a console organ in a pit which will be programmed into the sequence and rise prior to the display.

John Bridger is still improving his fairground "Octopus Ride". This is a real show model with hand-painted rounding boards, and beautifully done. Lights have been added to the 8 radial arms.

Further improvements are to improve the centre crank, add more lights, and to build fairground style vehicles to transport the model as per prototype.

Roger Wallis has been improving his juke box. The main features are complete except for reversing a record. The cash counter has been built and the coin slide redesigned to accept 5p and 10p, but to reject others. A power supply and amplifier have been built onto a Meccano chassis, $12\frac{1}{2}$ " x $2\frac{1}{2}$ " x $5\frac{1}{2}$ ", further work being carried out. Roger also showed a No. 8 Set jumbo crane, and a No. 5 Set lorry, also a kids' amusement game, tug of war, built from a 1950 MM article.

Bill Roberts brought along his earth moving machine built on 6" ashtray tyres, a very good model too. Also a neat workshop which Bill took to the French club meeting, and his effort for the "Nonutsandbolts" competition, a bucket dredger.

Alan Partridge had quite a display with a near-completed ball roller with a reject fitted, which rejects coloured balls. Alan also had various Bennetts mechanisms on display.

Bob Faulkner brought along his near-complete designing machine, this will be worth seeing when completed, even if it doesn't produce a pattern. This model tells us that Bob has recovered from his illness and back on the right lines once again. He also brought two aircraft from the new space sets and a No. 5 Set Go-Kart.

James Gilbert, our young genius and cup winner, brought along a very nice monorail with a neatly built, well-streamlined car, the rail being built from new blue girders presented electrical problems which, no doubt, James will iron out before March because, I know, several lads are hoping to see this car run.

One new member, **A. Lovett**, brought along a fully operational fork lift truck with pallet. This was quite a good model, but, I would like to see a more massive front end.

Mike Cotterill brought along his Baltic tank, as described in MMQ April, 1979, and a folly, a newly acquired hand generator operating a free wheel flywheel. I expect this will get another visit and a fuller description in March.

Ian Henwood brought along his huge model of a New York harbour dock crane to lift 250 tons, it looked as if it could too, standing 6' 6" high with an 8' jib and a 12-fall pulley block for the main hoist which will lift 30 lbs. The main hoist slew and main trolley are programmed.

Alan Scargill, our comedian, has a highly-prized aircraft model from a pre-war Special Aircraft Outfit. Seeing is believing. Yes, a driving band fitted for a universal joint, noiseless, vibration free and doing a good

job.

Terry Pettitt is still making exquisite patterns with his 3-way Meccanograph. This is built with a central column with 3 support arms at 120 degs projecting outwards. The central main shaft is driven by an E15R by a belt and worm drive. Each support arm has a choice of 3 speeds. The variation of patterns seems endless.

Wilf Bolland, a neat rebuilder of vintage models chose the No. 10 Leaflet beam bridge for his model, and made a good job of it. The improvement to the barrier operation is very good, yet simple, a downward protrusion on the beam roadway presses a plate under the barrier arms, and these rise to allow traffic to flow.

Mike Brammer had two industrial models on display, a vertical milling machine and a feeding device for a centre less grinder. I cannot do a good write-up of the milling machine, I would need a book. I hope it is written up for MMQ, it really is worth it. Mike has supplied two A4 sheets of info, so if anyone is really interested I will get it photocopied for you for the price of a stamp, 10p. I can tell you there are $31 \times \frac{1}{2}$ " pinions and 15×1 " gears in the machine.

Other models not mentioned on the tour, **Phil Ashworth** had brought his musical box mechanism which is really unique, a barrel 13" long, $5\frac{1}{2}$ " diameter pinned with $\frac{3}{8}$ " bolts to trip the hammers to play a xylophone. Two tunes are available on the one barrel, "The Merry Widow Waltz" and "Crimmond", the change being effected by moving the barrel axially $\frac{1}{2}$ ", a different set of pins strike the hammers. Powered by a No. 1 clockwork motor, 4 plays are on one winding.

Martin Bowen, a new member, brought 3 models. No. 10 Set robot but with variations, including eyes that light up when mobile. A pendulum driven Hipp clock, a good exercise in compact mechanisms, and a 5-pin bowling alley from December, 1962, modified to be controlled by switches and not levers.

26th Guild Meeting held on the 29th March 1980

First, the model tour where members spoke briefly about their models.

David Barrett started off with his loom built from instructions in MM December, 1953 - January, 1954. Although unfinished, all the working parts were assembled and working efficiently, next meeting should see cloth being produced I understand. Orders for ties are being taken, or was it a rumour?

Mike Brammer had asked for large table space to be reserved, but this was not sufficient to accommodate his overhead gantry crane. This very efficient model, built to 1/16" scale, being mounted on elevated rails 6' in length and 4' 8" wide, which is the crane span. The main hoist has a lifting capacity of 100 lbs., the auxiliary hoist has a 20 lbs., lift. All movements are protected from over travel by "built in" limit switches, including a slack rope. The auxiliary hoist can be fitted with tongs for block stacking. These tongs act without any tripping device, or manual intervention. They remain open until a block is in the jaws, then they close, put the block in place, and leave it. Altogether a very well built, interesting model which I hope we will see again. Also fitted to this model was an even rope feed to drums, all electrical pick-ups were with welding rods, and all movements driven by PDU's.

John Bridger made the trip up from the Devon sunspot, and brought No. 5 of the Guild Gazette, also a very delightful production of SML 32 in red and green which John had recently found in a local shop. The improved version of the octopus centre truck was also on display, with a multi-colour bulb display, showing the effect of the indelible dye in bulb colouring being developed for the improved version of the octopus. This lamp lacquer is available to Guild members, all enquiries to John direct, please.

Martin Brown came down from the North West territory with a peristaltic pump which had been used to inject water into an engine manifold in a college project. This type of pump being used because the flow rate depended on an impeller, and not upon pressure difference between inlet and outlet, the pump being powered by a suitably geared PDU. An impeller of four arms squeezes water through a rubber tube. The impeller arms are spring loaded, very efficient operation.

James Gilbert's monorail ran very well, a lot of patient work had made the operation smoother. His 1/6th scale Ford 6600 tractor was a very good model, fitted with an 8-speed constant mesh gearbox, and power take-off, with a 3-point hydraulic lift, including the steering all movements were remotely controlled. The power take-off was fitted to a fertilizer spreader, and when filled with peas and set in motion, peas flew everywhere. The room was swept up afterwards James, and the Custodian has an extra row of peas in his garden.

Les Gines moved away from commercial vehicles to produce a fully operational estate workshop, this being 4' x 2', and fitted with SMLS log sawing machine, and planing machine, then two pillar drills, a bench saw, and a swing saw. The two last-named models were fitted with a Meccano attendant, and very realistic too. The model was fitted with pushbuttons so the viewers could see the operations instead of running the model continuously. A very good demonstration of using a collection of models to make a good display model.

Alan Scargill must be in competition with Tony Homden to scare us all with hair-raising achievements, Last year Tony, nearly collected scalps with his rotodyne, now Alan is trying the same with his multi-prop chopper. Fitted to a 2' high tower with a 4' arm suitably counter-balanced, this remotely controlled "THING" proceeded to take off and circle the tower at quite high speed, and then land on a 6" square pad. To stop the "Thing", the pusher prop was reversed, and stopped, then the chopper dropped onto its landing pad. A highly amusing and interesting model. I don't think we shall see it again because Alan left the tower behind, and I dismantled it posted the bits to Alan, which I hope he received OK.

Yours truly (**Ernie Chandler**) spent most of the summer working out Konkoly's two designing machines which appeared in the July MMQ. These have been made to operate if not the same as the originals, quite a variety of patterns can be produced, also I have a pen arm designed to take a 10-colour pen with which multi-colour designs can be produced without lifting the pen off the design.

David Neilson again surprised members with the best reproduction Formula 1 racing car to be seen in this area, being 42" long and 21" wide, with the 6" ashtray tyres, three wide on the rear and two wide on the front, then covered with a wide rubber with the outer edges filled with plasticine to get the heavy tyre effect, and very well done too. The model is based on the 1980 Williams FW07 Grand Prix car and built 1/4 scale. It is built as per prototype with suspension steering on a monocoque chassis with a fully detailed engine. I feel we are all looking forward to seeing this model completed.

Tony Homden has once again done the unusual. The American Erector outfit Tony has acquired has been put to good use with a demonstration model stiff-leg derrick, driven with an erector 110 volt motor through a "Gearbox" without gears to drive all the movements. The similarity and differences of Meccano and Erector were very apparent, which was the result of the exercise. Tony also displayed his collection of Meccano car constructor models, and his latest TV model. This model of the Garrett steam carriage of 1862 is powered by a Meccano steam engine through a gear train to a differential, using a 3 1/2" gear ring as its crown wheel. The half shafts are sleeve pieces connected to the built-up rear wheels, the steering is by tiller. A PDU is also connected so that all the "Works" can be demonstrated with the model upside-down.

Roger Wallis explained his efforts, since last September, to get his juke box operating correctly. All tight spots have been eased; the coin counter has been re-designed, as has the coin slide. -The cabinet has

been plated with 45" x 9 $\frac{1}{2}$ " strip plates, and 27" x 12 $\frac{1}{2}$ " strip plates. The flashing lights are controlled by a simple electric kit switch. The Blackpool Tower was constructed as a reliable window display model for the Christmas period. Based on a No. 9 outfit model in MM, October, 1956, and covered with peanut coloured lights, the model was quite a draw. The skeleton clock is powered by a No. 1 motor and runs for 30 hours on a winding. The sub-frame is 4 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ ", and held by screwed rods, the standard gear train is fitted. The pendulum suspension is a 2" brass strip with a cone pulley as a bob-weight. Good use has been made of pivot rods.

Bob Faulkner brought along his first model since his serious illness, and what a fine job he has made of it. A designing machine that nearly does it all. Place a paper on the table, set the speeds, any one of three for each movement, and switch on. The table rotates as the pen arm descends. The pattern is drawn, the pen arm raises itself, and the machine switches off. A delight to see in operation, the model can be operated by hand if so desired. It was plated with Argentine red plates which seemed a more superior finish and looked good.

Alan Partridge had quite an assortment to show. Firstly, a card of red/orange tubing to make tyres for 6" pulley wheels, obtainable from Halfords. The original Chinese chariot with a central Chinaman and four boys, one at each corner, all point south. This has been viewed by Prof. Slieswyk who researched the subject some years ago, and he has agreed on authenticity. It is a symondrical layout of two differentials. The four corners are connected by 13" x 1 $\frac{1}{2}$ " gears.

Brian Walker brought along a very neat HIPP clock. Unfortunately, a sudden stop during the journey jolted it too much and it just refused to function.

Mike Cotterill showed his twin-cylinder horizontal electrical generating plant. This very interesting model was built on a base 18 $\frac{1}{2}$ " x 12 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ ", with 7 $\frac{1}{2}$ " circular strips for flywheels and a liberal use of brassware. This was a patience job to assemble, being on the small side, and so much to include.

Alan Lovett still with forklift trucks has a new one this time, a rough terrain forklift truck, and a good job had been done to reproduce it.

Terry Pettitt has produced another super model. This time an American express freight engine to 7/16" - 1" scale with 2" driving wheels, and 2" gauge. The boiler based on a 3" pulley, the wheel arrangement is 2-10-4, and the length of the model 44". Terry hopes to have this model running on a short track in the near future. I for one will welcome a return visit by this model, and I know our Chairman will as well.

Charles Catt has moved from steam to diesel with a chassis of a Grove TM1400E mobile crane, having eight axles. There are four driven axles, and the front three and rear three are steerable. An 8-speed splitter box is fitted and power steering is driven by a junior PDU with a ratio of 1539:1. The model is 4' long, 11" wide, and will have a lattice boom fitted. I hope this is completed for the autumn meeting. It looks a good one.

Brian Edwards MG sports car of 1933 era is a real beauty, very neatly built and really looks what it is. I do hope we are to see I this model again, it's really worth it.

John Fuller has done it again. He has made excellent use of cylindrical parts in the model of a shipyard level luffing crane. The slew bearing has horizontal rollers to resist overturning, and the weight carrying bearing is made up of Meccano ball bearings. A single PDU drives the hoist, luff and slew motions, all three movements can be operated together, or independently. There is a great deal more detail to this model than first meets the eye. I hope I get time at Stoneleigh to really look at this crane. 1960 light green Meccano has been used, except in the bogies which are yellow, standard safety practice. John is to be really congratulated on a fine model, and for a full A4 sheet of written detail.

Jim Gamble never fails to produce something different. This time a neat model lorry from a little known 1950 No. 9 manual, in later manuals this model was replaced by a clock. Jim also showed some of his vintage collection with a freelance lifting bridge in pre-1926 nickel Meccano, and driven by a 1912 No. 2 Trinity clockwork motor. It is very refreshing to see the really old come to light, and let us see how our dad's era compares to ours.

Wilf Bolland is still with SMLS. His latest is No. 5, the bucket dredger, finished in red/green. This model made quite a change to our scene. Wilf's second model, a tramcar, first appeared about 1919. Wilf has made improvements with parts added to the system since the appearance of the model. Wilf is one of our more senior members, and sticks to the vintage, a trend I agree with.

Michael Doughty, one of our younger members, has gone to a wartime model with his version of a 75 MM German self-propelled assault gun. This model is 1"12 scale, and driven by 2 PDU*s through a gearbox, all movements are by remote control and the model is finished in 1978 colours.

Mike Pashley is in a world of his own when building heavy cranes, draglines or excavators. Mike's latest model of a 195 ton Ruston Bucyrus electric shovel is an absolute gem, really neat building and very painstaking to be sure everything is correct. The model can be operated by mains, or by batteries. Scale is 1 $\frac{1}{2}$ " - 1". The rope reeving winch is identical to prototype. This fine model deserves more than just setting on the table. A good demonstration would be well worthwhile, it must weigh upwards of 50 lbs.

Mike's son, **Stephen**, is following dad with a very fine self-propelled mobile crane driven by four motors, one for each movement. The travel motor drives through two reduction boxes to the rear wheels. Keep it up

Stephen, good youngsters are hard to find.

Dennis Perkins has, at last, built a showman's road loco to surpass all previous attempts. This one is a permanent model. Based on a Burrell Scenic engine it is 1/14 actual size. A few non-Meccano parts have been used to good effect. Based on 5 $\frac{1}{2}$ " rear wheels and a single speed, with all the main features reproduced, it is a fine model. Finished in Burrell colours of maroon, yellow and black, and electrically driven. This model has to be seen to be appreciated.

Bill and Peter Roberts never fail to find something interesting and different to bring to meetings. Bill's model earth scraper is based on the GMC American machine, a lot of work has gone into it, with just reward. The illuminated windmill being a Christmas window decoration has been built as an exercise to get an electric current through two revolving parts. This has made an interesting model.

Peter brought his crane set model of Tower Bridge, with raising and lowering roadway, fitted with limit switches. The model boat also being fitted with limit switches.

Edgar Whalley is always good for an interesting model and neat, well-built fluent operation. The $\frac{1}{2}$ " - 1' Scale 'A' frame beam engine is powered by a mains motor with a step up power take-off, Watts link motion and feed pump are also fitted. SML No. 12 stone sawing machine has been faithfully reproduced, and operated very smoothly driven by the beam engine. Another case of two models combined to make a good one. Both these models were built in 1956 red and green.

Tony Clapperton is once again amongst the giants. This time it's a Leibherr GL 1200 mobile crane chassis with six axles and 52" in length. The first four axles are fitted with correct Ackerman principle so that each of the eight wheels involved turn at a different angle, as per prototype. Driven by an E20R sideplate motor to a 5-speed and reverse gearbox, with an on/off road ratio giving ten forward and two reverse gears to the two rear axles through three pinion differentials giving full compensation. Each axle has independent springing with coil springs. Power steering is fitted. This is only the base, I shudder to think what size the superstructure will be for the next meeting. I did hear that tenders are out to the Hull and District Transport Group to transport the model in October.

There is one model left to write about. I cannot say much about it because I have no notes from the builder. It is quite large as Amusement Park rides go, being a loop the loop roller coaster about 2 $\frac{1}{2}$ ' high, and I don't know how many feet long. This must present many problems to **Clive Hine** to get the geometry correct as well as the stress. All rails are screwed down with countersunk bolts. I only hope it will work to compensate for all the hard work that has been put into its building. We will soon know because it should be on show at Stratford in June.

That completes my report on the models. As I have said, I seldom see all the models so, if I have missed anything, I'm sorry and will endeavour to correct it next time.

There comes a time when a break in modelling is inevitable. This was the case with several members, but they did not stop away. I was only too pleased to see them knowing full well something was on the stocks to come out at Stoneleigh.

One overseas member I missed previously, Jerry Dubois of Canada sent his best wishes to all. All the best to you Jerry, and keep that engine on the straight and narrow.

Since I started these notes, Ken, David, Nike, Bill, Peter and myself put on a small show at the Stoneleigh Farm Open Day. As usual we had a crowd, and I noticed some of the showground bosses having a good look at our effort.

Report on the 27th Guild Meeting held in the Grieg Memorial Hall, Alcester on Saturday, 4th October 1980.

Once more all roads led to Alcester on a sunny autumn Saturday as some 50 Members of the MMG gathered for another regular meeting. Whilst traditionally an afternoon affair, members rolled up from the 10 o'clock doors opening time, and well over half were in time for convivial lunches in local hostelrys (or simply went down to the local caff).

By formal opening time there were over 50 models from 35 individuals all arranged for acclamation and admiration.

Proceedings commenced by the Chairman, Stephen Lacey, introducing new members, and inviting selected members to give short presentations on their models.

Our Hon. Treasurer and Editor of the MMGG, **Roger Wallis**, was first to bat. He quickly related the latest successful appearances of his Meccano Juke Box (45 rpm record player) which collected £22 at various exhibitions, and wore out about 100 records. Roger then moved on to his main new model - a Llandudno & Colwyn Bay single deck tram, some $24\frac{1}{2} \times 5\frac{1}{2} \times 8\frac{1}{2}$ " high, looking resplendent in yellow and green. A particular novelty was the individually powered bogies, affected by use of the basic motor part from a "crane" motor. The transmission was so effective that the tram will run on $1\frac{1}{2}$ volts. The bogies have coil spring suspension, and Roger's intention was that this should be the first of a fleet of trams for next year's exhibitions. He also showed us a neatly built blue/ 4 gold lifting bridge - No. 6 set, MM 1950-ish.

Alan Scargill presented the SML double cylinder horizontal steam engine with a difference - live steam. He had concealed a Meccano Steam Engine in the boiler, and could power the model either by this or by an electric motor. He also showed a model windmill which drove a twin cylinder vertical pump, so he'll be O.K. during the next energy crisis.

Next **Alan Lovett** from Shrewsbury demonstrated his model of a military fork lift truck designed for rough terrain, otherwise known as a "Giraffe". Rather than a vertical mast, this one featured an angled, telescopic, boom with forked end, and all movements could be remotely controlled. Alan also brought along a caterpillar track drive unit powered by 2 "crane" motors.

Young **James Gilbert** produced a very realistic $3\frac{1}{2}$ " gauge model of a Class 86 BoBo (?) electric loco, almost over-powered with 4 PDU's, one per axle. It charged up and down a length of plastic Hornby track (produced for their "Rocket" loco). James also showed one of the new Meccano "Action Packs" of a Mobile Rocket Launcher which he won at Henley.

Charles Catt has now built a superstructure on the Grove TM 1400 E eight axle chassis which he showed us last March. To ease modelling, he has built a lattice rather than telescopic jib, based on a Liebherr of similar capacity to the TM 1400. The crane section was mounted on a built up ball race with 6" circular plates for inner, $7\frac{1}{2}$ " circular strips for outer guides (as the late Eric Taylor's Smith's crane). Charles's model had each motion powered by a "crane" motor.

Continuing his fairground theme, **John Bridger** showed a part finished 1/10th scale model of a Scammell Showtrac, "Gladiator", based on the prototype owned by Showman George Devey of Anderton & Rowland. John admits to his model owing much to an earlier Showtrac from Phil Bradley's stable, but as seems usual in the these circumstances, the new version is even more lifelike than Phil's. The Showtrac was presented towing the centre truck of John's Octopus, behind which was another trailer functioning as pay and control box.

Mike Cotterill has modelled one of the earliest self-propelled, driver steered, steam engines, made by Wilson's of Leeds way back in 1849. Mike gave us an interesting talk on industrial history, pointing out the novelties and engineering challenges which both he and the original designer had overcome. The model was mounted on a rotating plinth for demonstration purposes, with both road wheels and steering powered by PDU's. Mike also displayed a small (O gauge) loco with trucks, indicating that you don't have to be a collector of old Hornby bits (and hence a Millionaire) in order to enjoy the delights of this gauge.

A novel Meccanograph was shown by **Eric Baldwin**, employing two, adjustable, cranks to actuate the pen arm, thus enabling the production of polygonal designs of large format. Eric unashamedly pointed out one or two limitations of his current mechanisation, but included an appreciation of why the limitations arose and what he intends to do to overcome them, given time!

Last to give a formal demonstration came **David Barrett** who has now completed the weaving loom ex MM*s 12/53 and 1/54. Powered by an E15R, David confirms that it can be built from the contents of set 10, with the addition of washers and healds but he did not exactly encourage fellow members to enter the textile industry, primarily because of the tedium-of winding the multi-stranded warp, even with the aid of a frame.

The following descriptions of other models draw heavily upon the information you supplied on the back of the standard Questionnaires, so if you don't get more than a mention, no mention at all, or credit for a model you didn't actually complete in time, you know who to blame!

As an appetiser, **Mike Pashley** showed the start he has made on modelling the world's largest walking dragline, "Big Huskie". He faces considerable challenge, including mechanisation of simulated hydraulic rams to effect walking. The plan is that the power house will contain something of the order of 32 motors. Roll on March, when no doubt there'll be some progress to see. **Stephen Pashley**, on the other hand,

showed a small but complete model of a mobile crane.

Dennis Perkin's model of a steam generating plant might truly be described as a work of art, he having achieved a pleasing blend of silver, blue plate and brass, with one or two non-Meccano items justifiable added for best effect.

Newish member **Michael Downen** has produced the SML railway breakdown crane, and advises that its gearbox has severe limitations as per the original design. So Michael intends to remedy the situation - how about writing it up for the MMGG when successful? He also showed a neat development of the current set 5 go-kart, using a replica engine on the lines of that of the Morgan car in the last MMGG.

Built to a scale of 1" : 1', **Bob Ford's** Caterpillar Earth Moving Machine was a mechanical marvel, with all movements of the prototype - travel, steer (by ram driven centre pivot), bowl raise/lower, apron raise/lower and ejecting blade in/out - individually powered, via screwed rod simulation of hydraulic rams in the main, and capable of remote control. The inspiration for this model came from a manufacturer's leaflet and a 1/50th scale die-cast model.

Alan Partridge was not too proud to display John Nuttall's simplified design of Alan's orrery as shown in Modelplan 59, with the original alongside. Alan also showed an "orrery" depicting the motion of Jupiter and its 14 moons, with all relative periods accurate to one part in a million. The model has 324 geared parts. Meanwhile **John Nuttall** showed another orrery (no details) plus a model of Newcomen's type atmospheric rotative (beam) engine, with a rather novel mechanism to restrain the top of the piston rod to move only vertically.

Now to the clocks, of which there were quite a few. **Brian Walker's** was of the digital variety, with "flip-over" digits, whilst **David Goodman's** was a more conventional, analogue, device with mains driven synchronous motor. **Richard Bingham**, a welcome visitor from the NMMG, displayed two wall mounted clocks - the No. 1 in an attractive all black or green finish, and the No.2 chiming clock.

John Fuller had just brought the base of his massive travelling crane this time, and the enquiring types were able to follow the ingenious way John had connected up all the gearing with linkages to a common control box near the base. **Wilf Bolland's** hammer head crane was based on the '28-35 SML, with improvements such as the fitting of ladders and handrails and an enclosed driving mechanism.

Bob Faulkner and his Meccanograph both made a welcome re-appearance, and Bob introduced a friend, **Peter Church**, who has taken up the hobby once more, and if your reporter isn't mistaken, showed us neat models of a stiff legged derrick and a small fork lift truck.

Coming all the way up from Exeter, **John Godfrey** brought an all nickel windmill. **Bill and Peter Roberts** from the south-east had a lifting bridge and ship, both controlled automatically by a large electromechanical sequencer. They also showed some delightfully simple, ingenious, animal models. **Leslie Gines** showed a very attractive display model representing a saw mill in two halves, containing log saw (SML 10), planing machine (SML 17) and a variety of drills, etc. with attendant workers, all of which could be set in motion at the push of a button.

Brian Edward's latest model is SML 6 - another Derrick crane, he also showed again his Blackpool Corporation "Dreadnought" tramcar, and superb MG Midget. At the other extreme **David Neilson** was able to show quite a bit of progress with his 1/4 scale model of a Williams FW07 GP racing car he says there is a lot to do yet, but the model is superficially complete and seems to be rearing to go. Other vehicles included an American railroad container handler or "Piggy Packer" by **John Anstey**, and an Army recovery/transporter vehicle ingeniously constructed in the main from 2 Army Multikits by **Mr. G.A. Wilson**. It carried a neat tank developed from yet another Multikit, Nearby **Mike Cuff** was able to show he is making a start on a vehicle, since he had a strong back axle assembly with "Ashtray" tyres.

Our Hon. Sec **Ernie Chandler** doesn't spend all his time with the pen, but has found time of late to model a most unusual subject - an ex-1914-18 war aeroscope observation tower which had been converted into a fairground ride. Ernie also has rebuilt the (1977?) Disneyland 4-4-0 loco, powered by a Meccano steam engine or PDU in the tender.

Terry Pettitt's 10-driver Santa Fe loco made a welcome reappearance and kept the "Old General" company.

And all that remains is to describe the offerings from North Humberside. **John Stephenson**, who alternates between Meccano and "Myford" type modelling, is constructing in Meccano a geometric chuck using plans from the "Model Engineer". This hybrid is sufficiently advanced to give a fair appreciation of its mechanical complexity, but has yet to be powered-up in order to produce elaborately engraved turning, (A geometric chock seems rather like an inside out Meccanograph, wherein the table oscillates as well as rotating).

In contrast **Phil Ashworth** showed an alternating drive mechanism, whereby 2 PDU's were wired to opposite sides of a change-over relay contact whose coil was alternately energised and de-energised by contacts in gear-boxes driven by the PDU's. The switching was arranged such that first one, then the other, motor ran in turn - truly a solution seeking a problem!

28th Guild Meeting - 28th March 1981

It is with great pleasure that I write this report, this was easily the best attended meeting to date. I understand 52 members with around 40 models gathered at Alcester, what a day it was too, the Guild Officers decided to dispense with the conducted tour of models. There were too many who wished to speak about their model, that some would be disappointed, so an open meeting was declared until tea at 4.30 p.m.

Before relinquishing control of the gathering the Chairman asked for guests to be introduced. Stephen Lacey had brought a Mr Bent who has started building, and making great strides, to complete a model for the October meeting. Alan Partridge had arranged for Steve Tonkin from Bristol to be present. Mr Tonkin is handicapped and confined to a wheelchair, but drove the 100 miles from Bristol himself and brought some of his gearless mechanisms with him. These have been include in recent MMQ's. Alan Scargill introduced his guest – I failed to get a name – who I observed climbing through many models to fathom how they worked. Richard Bingham I believe it was who brought along a Mr D. Penny to spend the day with us.

And now to begin to describe the models, we start with **Phil Ashworth** who attended with a rebuild and redesigned fruit machine MK5; with the basic design being the same as previous machines. The major changes are that a full rebuild of the coins sensing section to take 1p pieces, also the layout had to be redesigned to the smaller size coins. Payout is of three of a kind, with smaller prizes for cherries in the right hand window. Payouts are, 2,4,8,10 & 12, dependent on the fruit in the window. The handle has "feel" to it - a mechanism snaps when the handle is pulled. The sensing of winning combinations is done by electrical contacts, and connections between reel unit and payout counting mechanism is electrical. This is a more reliable model and can be confidently left all day to make a profit of 1/5th of takings.

John Anstey brought along his reproduction of an American container handler called a Piggy Packer. The model is hydraulically operated with the use of plastic medical syringes. The three hydraulic operations are powered by a P.D.U., on the screw jack principle. Transmission is a P.D.U., to each front wheel independently, each has a slimming clutch to replace a differential, the rear wheel steering is caster mounted on a ballrace and powered by two P.D.U.'s, The model is mounted on unfilled ashtray tyres and weighs around 30 lbs.

Mike Brammer never fails to surprise us, and this meeting was no exception. The pattern loom was a real outstanding achievement, and operated beautifully. The bumpiness of most Meccano looms has been eliminated with the use of an intermittent system to various movements. The warp threads are lifted by four heald frames whose sequence is determined by a cluster of four cams. The cam cluster is indexed by a 1/8th turn after each shuttle pass, so that a repeat length of the pattern is a maximum of 8 weft threads. The pattern is changeable at will by inverting alternative cam clusters which are held in by a spring loaded locking pin. The lift of the heald frames is accomplished by an intermittently driven rising and falling bar. A claw which is part of each heald frame leaver arm is positioned by the cam action to either engage with or disengage from the bar. The shuttle is positively driven by a rack mechanism and is supported in roller guides so that free running and thread clearance is obtained. The warp pitch is 15½ threads to the inch with a maximum of 70 warp threads giving a material of 4½" width. A very good model and well built.

Stuart Biddle is progressing well with this building. The modified 9-set pull shovel looked very good and when power is included, a big difference will be seen. The modification to the set model is that track packs are used instead of imitation tracks.

John Bridger gave us all a treat once again by showing his fairground showtrac and trailer. This trailer, I understand, is to back the model octopus into, both models were immaculate. The steam operated shovel next to the trailer, I was told, belonged to **John Godfrey** - this too was an immaculate model with a 1929 steam engine very highly polished. I really liked this model.

Wilf Bolland, still delving into the archives, has turned up an oscillating steam engine which has been adapted to operate from a P.D.U., with battery box concealed in its base. Wilf also brought two walking tractors, one powered by a clockwork motor, and one by a sideplate electric motor. Then, going back to 1916 manuals, a hand-operated Meccanograph, all these prove that the older models keep turning up.

Mick Burgess brought along his Scammell fire engine, this model being based on the engines supplied to the Watford Fire Service. Finished in red and zinc, with detachable escape. Quite a nice model

Charles Catt has decided on the heavy lift tackle for his latest model. This is based on the Hebelift 3, a large barge mounted crane used on the Thames to lift barrier gates into position. The model is OO gauge; 36" by 18", the massive jib is A-frame construction of 1½" box girders, 36" high. Two crane motors power the jib and two the hoist - at the meeting a lift of 20 kilos was easily obtained, All cards are curtain draw cords made in nylon.

Mike Cuff is taking a further step after his highly successful big dipper by attempting a loop-the-loop big dipper. The loop part and one car were on show and this did what it should do - loop-the-loop, much to the enjoyment of all who tried it out.

Mike Cotterill brought a very good blocksetting crane, built in yellow and silver, it looked a picture of efficiency, all movements functioned correctly and adding to the normal B/S.C., this model was fitted out with a fully detailed steam power house. I believe I counted three vintage flywheels in use. Altogether a very nice model, I hope it turns up at Stoneleigh.

Peter Church, one of our newer members, has modified the SML traction engine, still using a 6-volt sideplate motor, the roof has been made higher and rubber tyres added to wheels. This enhanced the general appearance and turned out to be quite a nice model.

Michael Doughty has proved that models illustrated and scripted in the MMGG can be built correctly. **Mike Walker's** Maserati sports car looked very good, and very speedy. Michael had added independent suspension and 4-wheel drive, making this a very efficient car.

Brian Edwards still keeps to his small and tidy style of modelling. Seeing a watermill whilst on a holiday in the west country, Brian built a very neat model of it with all inside workings. The model was built in the cut-away style so that the inside was on view.

Les Gines keeps with road transport for his models, this time a fully operational car transporter complete with seven cars, two vintage, two open tourers, two estate style and a Land Rover. All built on 1" pulleys with tyres. Two cars were built in blue/gold to please Alf Reeve, who wrote the recent article on the blue/gold era of Meccano. This made a very interesting model.

Bob Faulkner's almost automatic designing machine made a very welcome return, many chaps were keenly interested in it - could well be we will be seeing more of these.

Bob Ford, I understand, is building a 1972 Foden chassis to take a crane, I must confess I did not see this model - but I did see a demonstration tandem rear chassis which was a very good model and ran very smoothly - a treat to see in operation.

John Fuller has rebuilt the large crane base so that it can be sectionised for transporting. All controls have been re-positioned and all electrical items modified. John's building never fails to fascinate me, everything seems to drop into place so easily, mine never do.

James Gilbert brought along his prize-winning loco for its second showing, and it behaved itself very well. James also brought his version of No. 19a SML built mainly of nickel parts with a vintage bucket and powered by a crane motor. This model has been designed to use the same track as the loco - 3½" gauge.

David Goodman brought along his electric clock for a second showing - still an interesting model. David also brought a magnetic stirrer, a power driven magnet under a stand which supports a large bottle of coloured fluid, rotates a magnet inside the fluid, thus stirring the fluid. A very effective display model.

Ken Larner has rebuilt his freelance scorpion tank to include several new features, there are three main propulsion motors, one is driving through a 4-speed remote controlled gearbox and the other two are for steering via the tracks. The gun is fitted with a car screen washer jet and will "fire" a jet of water 10 to 12 feet. This is now a very nice model - looks good and operates very well.

Our Chairman (**Stephen Lacey**) is still keeping his steam trend, the latest from the stable is a 0-4-0 tank loco S.R. ex LSWR B1 class. This is a shunting engine mainly used around Southampton and on the Channel Islands. The model is as near scale as is possible with standard parts and driven by a crane motor. The motor drives a primary crankshaft which operates the pistons, therefore driving the coupled wheels via connecting rods. This is the first time I have seen this done, usually the wheels are driven and the pistons dummy. The slide bars are unique whereby a narrow strip overlaid by standard strips slides in the space between the slotted holes of two AG's spaced apart by a 1½" strip. This is a very nice engine and worthy of a return visit. I hope I can take it around the shows.

Now, I do not know what to say about the next model by **Dave Nielson** - 1/4 scale model of a Saudi Williams Formula 1 racing car. It's just beautiful, a model builder's dream. 42" long by 22" wide. Constructed as closely as possible to the original, using Hillman Imp car valve springs for suspension; all body panels are removable to show detail. I do hope this model is included in a future MMGG. It is in yellow and silver.

Alan Lovett has greatly improved SML level luffing crane by extending the jib and heightening the tower, also including four crane motors for travel, two crane motors for slewing, one PDU for luffing and one PDU for winching. The model is completely remote controlled and a credit to its builder.

Alan Partridge brought along his collection of universe models orreries, the model of Jupiter and its stars has to be seen to be believed. Perhaps Roger could do an article on this for the benefit of overseas chaps.

Jack Partridge builds some very exquisite clocks one the latest is no exception. Originally built by Hons. Claude Gobey in Paris, Jack has made an excellent job of this model, keeps correct time and looks good.

Dennis Perkins brought his steam generating plant for a second showing. This is a very neat and tidy model with a 5½" flywheel running very true and an electric fire effect in the firebox of the boiler, a flickering red bulb. Very effective and a detail that makes a model.

Terry Pettitt has the Meccanograph bug at present. The latest is a very nice model with several gear ratios and a turntable rotating on a 6" built up ballrace. Further developments to this model include an intermittent device to lift the pen at intervals so developing different patterns.

The President's (**Esmond Roden**) collection of "other peoples smalls" proved a mixed variety, with Bert Love's army tank, and flotilla leader. Keith Cameron's 5-set mobile crane. Hansom cab and horse, I think, was originally Andreas Konkoly's, Bob Moy of the Liverpool model root fare, big wheel display model and then his own fighter plane from space, set 2501 plus 4 tyres and 2 x 1½" strips. Quite a display and a good variety for exhibitions.

Bill Roberts usually turns un something unusual, this time his novelty of Santa Claus and sleigh was

quite eye-catching, but the trolley zig zag was quite amusing. A lift took a trolley to the top of the tower then on tilting tracks the trolley descended to be immediately collected and returned to the top of the tower for a repeat.

Alan Scargill has produced two very good models for this meeting - his rebuild of Eric Taylor's crawler tractor was very good indeed, really did justice to a good model. The M/C petrol engine was the best, operationally, I have seen.

Ken Wright brought along his Foden showtrac for a very welcome return visit. Built to a scale of 1½ " to 1' and resplendent in red/silver, built entirely from photographs taken at Stoneleigh in 1979, fitted with 12-volt motor in boiler with chain drive to rear wheels, belt drive to dynamo, ashtray tyres and lights all round the canopy. The original started life as a 6-wheel lorry in 1929, converted by Fodens to a timber tractor in the late 1950's, then later to its present form as a showtrac. To delight Alf Reeve, Ken has built the 10 set overtype steam stationary engine in immaculate blue/gold with a very smooth slow-running motion.

Brian Walker came up from South Wales with Dr Keith Cameron's Hipp clock from MM October 1980. This is a delightful model and ran very well throughout the day. Its good to see these models in the MM turning up at meetings, proves the popularity of the official organ of the Meccano world.

Edgar Whalley, a very neat and efficient builder, displayed a frame beam engine again, seen at the Stoneleigh Show I have no other information on this model except that I have seen it working twice and very well too. The Meccanograph Edgar has built is quite unique. Self-designed with auto stop each turn of the table. The designs can be from 2, 3, 4, 6, 8, 9, 12 figures and the table has three speeds with two speeds to the pen arm, giving single or multi-rev patterns. Powered by PDU or hand driven. '.

Mike and Stephen Pashley brought along a model of a 1930 Ransome Rapier 5560 rail mounted stripping shovel. I don't know much about this model except that it looked very much what it was meant to be, and worked very efficiently.

Lastly, the Hon. Secretary's (**Ernie Chandler**) clutter included Colin Cohen's rebuild of Andreas Konkoly's T-graph, built from the 4 photos Colin sent to me, a No. 9-set fork lift and a partially built 4-axle Seddon Atkinson chassis.

Richard Bingham turned up with a mantle clock and a rebuild of Ron Fail's balance wheel, also a friend of Richard's sent along a set of bullfighters. A very interesting motion model of two bulls and fighters, I hope I can build such amusing models at 75 years. Richard's guest, David Penney, displayed a Barber Greene road surfacing machine and model of a 20 ton rail waggon tippler.

Tony Homden displayed the latest to his collection of antiques - the mechanised army kit, gun, limber and clockwork driven tractor. Also his TV model - the Garrett steam carriage.

Alf Reeve has started on an SEL dragline and is adapting the 1929 steam engine to drive it. The base and engine were on show. I hope I have included all who brought models, I have tried to make this report interesting - I hope I have succeeded. Now I have to get it typed, copied, collated, enveloped, addressed and stamped, so I hope you all receive a copy very soon.

Ernie.

29th Guild Meeting – 3rd October 1981

The 29th Meeting of the Midland Meccano Guild really started late on Friday night with the laying out of trestles and tables, and making sure the 50-gallon tea urn was topped up and ready to go. A few hours later, the morning of the 3rd, an overcast sky with a little drizzle set the scene on Alcester. With over 40 members en route, it's time to get those doors open. 10.a.m., Ernie Chandler has already arrived and is busy unloading paraphernalia. Inside, the rows of empty tables await their loads of whirring motors and revolving mechanisms and the hubbub of Meccano talk.

The first distance traveller to arrive was Tony Homden who had spent the night in his caravan parked in Alcester after travelling up on Friday. As Tony juggled the 21" drum of his latest model through the 21 1/8" rear window of his caravan, Charles Catt arrived from Leamington Spa who, with a volunteer, struggled in with his 800-ton lifting capacity floating crane. Members arrived in a steady stream now, coming from as far afield as Hull, Exeter and Leyland.

The chuck wagon left for town to pick up the provisions, and promptly returned loaded with bread, cakes, tea, coffee and milk, which had been ordered some weeks previous by Dave Guilleume.

By 12.30 the room was once again alive with its bi-annual sound of Meccano. Alcester church clock struck one, the room was strangely empty of people - just loads of Meccano looking after itself. You've guessed it, they had all gone for a little of what gets to certain parts of the body that others don't, but by 2.30 (chucking-out time), everyone had returned ready for the official opening of the 29th meeting of the M.M.G., that was called to order at 3.05 by Ernie who handed over to Stephen Lacey who then introduced the guests - Mr. S. King, Stroud, Mr. T. Martin and T. Marriot, North England. Mike Bent, Hinckley. Russell King, Newbury. Dave Bedwell, Banbury and Steve Tonkin, Bristol.

Stephen then went on to introduce his own guest - Mr. Chris B'eith, the Organiser of Bingley Hall Model Engineering and Hobbies Exhibition in Birmingham, who gave a short talk about the aims and running of the exhibition. A couple of points were brought up by members present, one being insurance and security and he soon put everyone's mind at rest. The model is insured from the time it leaves the Meccano room to, and throughout, the exhibition and right back to the Meccano room, and on security, a wire is laced through models and plugged into an alarm system. He then went on to say that exhibitors and a guest receive free passes to the show.

We then moved onto the conducted tour of the models.

David Barrett kicked off with his blocksetter crane built from the GMM Supermodel leaflets with a few modifications. The gear ring, which is incorporated in the slewing drive, has been substituted for a large tooth quadrant, giving a more positive and smoother drive. Another improvement was in the speeding up of the hoisting and lowering. The whole model is powered by an E15, but David was unable to demonstrate because of a transformer failure.

Stan Greer was next with his displays of parts and mechanisms as a teaching aid for the blind. Three nicely set out display boards, two of which had many types of simple drives which could be activated by two leads off a battery plugged into various motors, the third board had a full range of Meccano parts all labelled up in braille.

Phil Ashworth once again was making money with his Meccano bandit Mark 5 with more payout symbols and slotted payout rail instead of the coins having to form a pile. It is hard to find anything more to say about this fascinating model that hasn't been said before. I think it is credit enough to the builder when other members build your model. What's next Phil? Space Invader?

Ken Wright with his ingenious truck building machine originally thought up by Servetti, rebuilt by Dr. K. Cameron, Ken has slowed up the conveyor belt which takes the completed trucks up to the dismantling point so the viewing public have a better chance to see the completed truck. Ken's model, like many of his past models, has run faultlessly for three days at Stoneleigh and at many one-day events.

Tony Homden's driving test was then called upon to go through its paces. 2p in the slot set the traffic lights from red, amber to green, and the 21" drum revolves, bolted to this are curved and straight strips forming a moving roadway. A car is suspended from an arm which is motivated by a steering wheel at the front of the machine. On touching the edge of the roadway with the car, a score is displayed on a 1 to 8 clock. On a clear run a free go is awarded. A nice big audience participation machine.

Mike Cuff's revolution big dinner was trying to defy gravity once again. The model 12' long by 2' wide, a chain lift pulls a car to the top of the slope where it is on its own to half circle, then plunge and gather speed for the full 360° loop. The rest of the ride, as in most prototypes, allows the car to roll on through hills, valley and curves back to the start. Mike does very well to travel this mammoth model in his Hillman Imp and, on arrival, assembles the 12 parts.

Charles Catt showed us his floating crane based on photos taken when the original was working in the Thames estuary - the prototype being able to lift 800 tons - today Charles' model was holding a 10 kg., and 6 kg., weight which was raised and lowered effortlessly. The pivot of the main jib has been built up from boiler ends and 3/8" ball bearings to give a substantial weight-carrying bearing. The model has a full complement of 8 crane motors.

Alan Partridge was asked by John Nuttall at Stoneleigh to design an intermittent drive to two shafts which, in turn, would give three revolutions whilst the other remained stationary. Needless to say it was

here. A crane motor driving a spur differential, the output shafts of which held a single arm crank, a 3 to 1 drive operates a collar with pallet pin which locks a rocker shaft after three revs of each single arm crank. For further details apply · A. Partridge, Sutton Coldfield.

Stephen Lacey's Matterhorn fairground ride originally designed by Mark Taylor and Bob Carter of South California Meccano club and featured in October 1979 MM. Stephen explained the difficulty with the track and how it had to be reinforced at the joints. Only two cars were running instead of four at the moment because of teething troubles, but a nicely turned out model in yellow and silver.

Alan Lovett was asked to demonstrate his Foden S.10 Haulmaster with multi-lift H.L.20 ground demountable lorry. For everyone who didn't make it to the meeting, it is a lorry where the bed slides off- the back. A nice big model mounted on 6" ashtray tyres with all lorry features, plus this sophisticated sliding bed which can be loaded at ground level then winched onto the back of the lorry. When in position it is locked onto the lorry and then can be tipped in the normal way.

A total of eight motors drive this very impressive model.

Touring the models there was plenty to see. **Ernie Chandler** had his No. 10,000 Gresley and Yarrow locomotive built from January, February and March 1935 MM. was one inch to the foot scale, over 6' long.

John Godfrey from Exeter with his blue and silver traction engine with a 1930/31 6-volt side plate motor and original flywheel. Clock corner was occupied by **Jack Partridge** with two electrically driven Bulle clocks. **Bill and Peter Roberts** filled up table space with eight small models. Helicopter, windmill, 2 monsters, half-track locomotive, plastic factory and an ingenious galloping horses roundabout. A large driving band passed round a $5\frac{1}{2}$ " hub disc and 1" pulley gives the model its drive, another hub disc forms the top which has four rods with $5/16$ " pinions that run round a fixed contrate wheel. Short couplings fitted to the other end of the rod holding the $5/16$ " pinion form a crank giving the Meccano horses rise and fall motion. **Dave Nielson** Formula 1 racing car - very nicely modelled in yellow Meccano with massive rear wheels. **Terry Pettitt's** bus collection included a single deck 1926/27 Leyland which he built in a week. **Brian Edwards** brought along his Sentinel D.G8 steam tipping Lorry. **Edgar Whalley's** mantle clock driven by No. 1 clockwork motor would look at home on any stately mansion's mantelpiece. **Bob Faulkner** was beating inflation by printing his own fivers on his multi-complex Meccanograph. **Peter Church's** works manual built Atkinson lorry in blue and yellow with two speed gearbox driven by a Marklin motor.

Russell King's agricultural steam haulage engine looked very impressive with its fine array of polished brass. **Les Gines** has his nicely proportioned car transporter with seven cars on their way to the dealer's showroom. Halfway to Henley Les remembered that he hadn't packed his tractor unit, but all was O.K., for Alcester. **Eric Baldwin** came up from Pontypridd and brought along his Meccanograph. I found a novel little pocket size Meccanograph with just seven gears which produced a variety of different patterns, but I'm sorry I didn't find out who built it. A smooth running marine engine was shown by **Geoff Wilson**, built in yellow, blue and silver. **James Gilbert**, starting another, hopefully, award winning X.Y. Plotter which will eventually be controlled by a computer. Also on the production line is an American switcher diesel electric locomotive which will have four crane motors as its power unit. **Jim Gamble's** renovated Binns Load display automated gantry crane ran trouble-free throughout the afternoon. **John Nuttall** showed his Scammell constructor heavy haulage tractor chassis powered by E20R through E.K.T. designed clutch into a 4-forward and 2-reverse gate change gearbox which drives tandem rear axle and front axle, mounted in semi-elliptical inverted leaf springs allowing any wheel to be raised $1\frac{1}{2}$ " off the ground, leaving the rest firmly on the ground. There is no body on yet, but we look forward to the next meeting to see what is bolted to this finely constructed chassis. John also had his elliptical gears with him, consisting of two units made up from two 60-tooth gears and two rack segments. When all bolted together with a single bolt and paired up, power is applied to one of the units which gives a smooth running elliptical movement. **Dave Bedwell** made a welcome return to the Guild with the start of a rebuild of Clive Hine's lifting paratrooper. He also brought along his showman's locomotive and fairground organ. Since Dave was last with us he has got married and moved to Adderbury. He and his wife, Lynn, are expecting their first baby in December. Alan

Partridge's ball-roller clunked merrily away, churning ping-pong balls through a number of tortuous routes which answered to the names of helter skelter, Archimedean screw, concrete mixer, boilerhouse, mystery box, up and over, zig-zag, cascade, spanner stairs and maze. **Dennis Perkins's** 1" to the foot scale agricultural traction engine roughly based on the "Fowell" engine, manufactured in the early years of this century. Dennis has designed this model to keep it simple and reliable, no doubt a lot of us will be seeing it at numerous exhibitions in 1982. **John Anstey** travelled down the M6 and had his Hyster Challenger 800 container handler with him. This model, on completion, will have remote control and hydraulic functions. The model will stand on 6 x 6" ashtray tyres and have 7 PDU's as its power unit. **Mike Bent** has recently returned to Meccano modelling. Even with a limited number of parts, he managed to turn out a set of 4-section 2-abreast gallopers. The centre crown wheel being a fixed contrate with $3/4$ " pinions running round a belt drive formed the final drive to the cranks. Two bush wheels made the cranks which gave realistic rise and fall motion to the Meccano horses. **David Goodman** had his small overhead Portal crane running on an overhead girder. A $1/12$ " scale racing car was brought along by **Mike Brammer** which included all round independent suspension and power steering incorporating position servo, so that the lock is proportional to the steering wheel on the control box.

Time for tea, Ernie Chandler took un position to collect £1-00 from members as they filed past on their way to tuck into the grand spread laid on by the ladies of the kitchen who had been beavering away all afternoon making sarnies and laying out cakes. I think all members would join me in a vote of thanks to Dolly, Nellie, Eileen, Alice, Yvonne, Joan, Win, Margaret and Kathleen.

Thanks to everyone who returned their questionnaires and made the writing of this report easier. Thanks also to everyone who wrote to say they couldn't make it. Alan Scargill who sent his regards to all, Stuart Biddle, Ted Brooker, Peter Dixon, Mike Cotterill, Mike Edwards, Mike Doughty, Phil Bradley, Gordon Scott, Roger Wallis and George Illingworth.

Mike Pashley and Wilf Bolland were down to come but didn't make it - hope everything is O.K.

Everyone emerged from the tea house fully refreshed and ready for the A.G.M, Report by our Hon. Secretary.

Clive Hine

30th Guild meeting - 27th March 1982

The clocks went forward on Saturday, 27th March, but for fifty Meccano enthusiasts forward movement towards Alcester was the main interest of the day, to the 30th meeting of the Midland Meccano Guild.

Alcester greeted the first of the long-distance travellers with fair weather. It must have been something to do with the weather; maybe Johns can't sleep, as the first arrivals were John Bridger, John Godfrey, John Fuller, John Anstey and John Nuttall. Alan Scargill, along with Mike Cotterill, were also soon on the scene with a car loaded down with the winter's Meccano creations. It was thought at the time that Alan had brought along the mummified remains of one of his ancestors, as a large 6ft by 1ft 6" - and 2ft at the shoulders - white box was roped to the roof rack, which after six hefty fellow members carried shoulder-high into the hall, was found to contain a Multikit Ambulance and crane jib. Members gathered thick and fast until it was time to adjourn to local hostelrys for dinner.

Everyone was back at the Greig Hall, though, well in time for the official calling to order at 3 p.m. by our new Chairman, Ken Wright. Ken welcomed members and guests, and then commented on the fine weather which always seems to be with us on meeting days.

Ernie Chandler was first to give a talk on his winter's building - a large model of Pitstone Windmill took his fancy... grinding wheels, winch for lifting loaded sacks and governor control were only a few of the details built into the model. Large sails rotated smoothly. The whole structure was built onto a bearing, allowing it to rotate to catch the wind from north, south, east or west.

John Bridger was next. He explained the story behind his Skeleton Clock. On seeing our old friend and former member, "The Clock Man" Pat Briggs at the last meeting of the S.A.M.C. with his Skeleton Clock, John thought how nice it would be to have one for his mantelpiece at home. Pat kindly lent him his clock to copy, and this was it - a fine model in the true Briggs tradition, the main spring taken from a No.1 clockwork motor (carefully) and fitted to the axle in the Elektrikit with the squared sections. The rest of the clock is built of standard Meccano. Its only shortfall is that it will only run for 3 hours. P.B. will run for 24 hours. Try butter, John..!

For five years **Mike Bent** drove a Scammell heavy recovery vehicle, so he has first-hand knowledge on all the detail on his fine model of the same. 3" wheels were chosen for the scale, six of them being driven via three differentials, transfer box, 2 speed and reverse gear-box, clutch and E20R. This powerful-looking monster has two lifting jibs and front and rear power winches, driven by separate motors. Plenty of other detail was also built into the model.

Mike Brammer had trouble with his level luffing crane. The hook kept twisting, so he looked up his collection of MM's and sorted out the October '63 and July '76 numbers, in which the building instructions for a plaiting machine were written. Mike, taking these for a basis, redesigned and built a beautiful compact and mechanically perfect three-strand plaiting machine, where the bobbins actually follow the path of a figure-8. Mike's machine has the capacity to plait 50 feet of cord.

Also on Mike's table was a tug-o'-war game which was to keep members busy all afternoon trying to beat it. Once again Mike had redesigned a 1951 MM model, so instead of two players competing against one another, a P.D.U. replaced one player, so only one handle was necessary. The input from the handle draws the tug-o'-war team towards the winning line, BUT at the same time cuts down the resistance to the P.D.U., increasing the revolution output to compensate for the handle trying to put the team away from the winning line.

Alan Scargill was the next turn on, with his array of models. These included a fairground "Starwheel" ride, which revolved at an alarming rate, fully automated to stop for loading, start then lift complete with flashing lights. A clock, helicopter and ambulance also adorned Alan's patch, but pride of place was taken by a 6' 6" building site crane, which wasn't remote controlled so a chair was provided for Alan to stand on to control the machine. Alan put the crane through its paces, including traverse which Alan was particularly proud of. In all a very entertaining ten minutes.

Terry Pettitt's copying lathe was next to have the Guild members' attention turned on; although not based on any particular prototype, it is typical of modern machines. The copying mechanism comprises a spring loaded stylus attached to the top of the cross slide. The stylus bears against the profile of the part to be copied, and as the cross slide is traversed along the bed, the stylus moves the cross slide in accordance with the profile by means of a servo motor controlled by the stylus, actuating a forward and reverse switch. Thus, when the stylus comes to an increasing diameter on the profile, the stylus is pressed upwards, which after a very small displacement energises the servo motor to raise the cross slide. If the slide moves too far the stylus loses contact and the servo motor reverses. This machine is mainly used to produce P.T.O.s and half shafts. Terry also brought along a Leyland bus and locomotive. '.

Jim Gamble brought his impressive collection of "X" Series Meccano. His collection of Meccano products are perhaps less common and little known by Meccano modellers. On display were two Electron kits, and a renovated car chassis. A lot of time has been spent polishing gears and making this model into a well preserved antique for the future. There were also a 1936 mechanical duck, a butter churn and a steam engine.

One of our older members, 72-year-young **Wilf Bolland**, showed us his red and green travelling gantry crane, based largely on SML24, with modifications to the gearing and overall appearance by substituting

flexible plates for braced. When Wilf connected the E15R motor to the power, the whole structure moved back and forth at a fair rate.

In spite of all the ashtrays there was a high risk of fire - but no fear... **George Illingworth** was on hand with a fire-fighting appliance to cope with any emergency. George started by telling the members how it started as a toy for one of his young sons and grew to a complete brigade. A water tender was first, complete with extending ladder, two extra ladders and a portable pump. Around the tender lockers were revealed, containing equipment found in the prototypes, all made from Meccano. A Landrover pump was next, also carrying ladder, hose reel and various hand equipment. On tow behind was a trailer pump. On building the first two models for Robert and Charles, George was left with nothing to play with, so out came the screwdriver and soon a Chubb "Pathfinder" airfield crash tender was built, with roof monitor plus ancillary equipment. Last but not least was a Dennis breakdown lorry with rear winch for the wife...? Nice to see George back in good modelling form.

At this point **Alan Partridge** (a medical man of some standing) had been mulling over what John Bridger had explained earlier about removing springs from No.1 Meccano motors. Alan advised the use of helmet and visor during this operation to save an operation in hospital later - also to do it outside.

On a fine afternoon, what better idea than to have your picture taken? Some fifty members sat or stood for a group photo taken by Alan Partridge and Tony Homden.

So back to the models... Looking round the room, a lot of members had been busy during the winter period. Also a few old favourites had returned. There were also members who hadn't modelled anything during the winter....

John Godfrey's SML No.20 mobile electric crane, built from zinc and blue plates, driven by a 1931 6v motor, was much admired.

Phil Ashworth, the man the space invaders will never atomise, showed his one-armed bandit which still works very well after numerous meetings, and shows great credit to its designer and builder.

David Goodman has been thumbing through the back issues of the MM, and built Ron Fail's strike mechanism into his electric clock.

Esmond Roden, breaking with his traditional trams, built himself a blocksetter this time (must have got a bigger room...). Built originally an SML4, but with grab bucket and remote control to 1 E15R and 5 PDU's which became visible when the cab was removed, the model was nicely finished off with handrails and ladders. Also on Esmond's part of the table was his exhibition of "Foreigners do it different from us" - two small cranes built identically from Marklin and (Chinese) Construct-o-Steele.

If you want to build a Schools class 4-4-0 railway locomotive like Dave Neilson's from a No.10 set, you can't. Although based on the above-said plans, Dave has re-designed valve gear and cylinders, revised boiler/smoke box and cab detail - and even the buffers got updated. A very nice model in yellow and silver, powered by a PDU along a length of track.

Peter Church's Clayton & Shuttleworth agricultural engine, complete with authentic valve chest and gear box giving it two forward gears and working winch and brake, had its overall appearance enhanced by its matt black chimney.

Roger Marriott, a descendant of Noah himself, built two No.10 Set robots in yellow, blue and silver.

Bob Faulkner had built an SML 28 Pontoon Crane, driven by 2 E20R's, the gear boxes incorporating new nylon gears - a nice old favourite model, but on an original 167 G.R.B.

Mike Doughty's armoured personnel carrier, based on a German WW11 Halftrack, built in blue, yellow and silver Meccano with 3" front wheels with independent suspension, a model 31" long by 11½" wide and 10" high, with only the tracks to be fitted, should be an outstanding model at the next meeting.

Eric Baldwin regularly makes the journey from Pontypridd to Alcester, and brings along his collection of designing machines and clocks. This meeting being no exception, his Meccanographs worked quietly on through the day until a fine array of designs were on display.

Mike Cotterill took over an 8ft table all by himself, to display his factory steam power plant - a model of massive proportion. This is a freelance model which would have powered a factory or mill in or around the 1880's. The model features two cylinders, one horizontal high pressure and a vertical low pressure. The 9½" boiler is a mass of detail with valves, sight gauge and pipes. The flywheel is made out of 16 channel segments, from which the drive is transferred to a mass of governors, gearing and link motions. A truly well engineered model, with built up counterweights, crankshafts and bearing blocks, and coupling used as journals on drive shafts to reduce wear on axles.

John Fuller had the start of a crane. An unusual choice of parts to build the tower was 4" plastic road wheels, and 3" pulleys with tyres. The rest of the model was built in immaculate red and green with brass washers under each bolt head. We look forward to seeing this neat model at the next meeting.

Dennis Perkins' immaculate collection of agricultural ploughing engines, finished in maroon and named Dolly; also his now improved, since the last meeting, "Fowell" engine in red and silver, now fitted with Stephenson's link motion reversing gear, more realistic wheels and brass plate with the inscription: MMG D.P. RUGBY.

Brian Edwards had his transport fleet including Sentinel steam lorry and Bedford O.B. type coach, probably better known as a school, the coach fitted with 27 seats, sliding doors and 3 speed and reverse

gear box. A substantial chassis supported the model.

John Anstey has been working on his Hyster Challenger container transporter through the winter, and it is now in its final stages of completion with well detailed cab.

John Nuttall's Orrery ran smoothly during the afternoon, showing the phases of sun, moon and earth.

Les Gines' car transporter has nearly reached its destination, which will be to assemble the cars onto a fairground ride.

Louise Bedwell brought her mum and dad along, so **Dave** thought he might as well bring along his almost complete lifting paratrooper. Mum and Louise went for a walk, leaving Dave to build up. Some 1½ hours later the trailers were empty and he was ready to run. Full automation of the ride has not yet been built into the model, so a turn on the knob of the transformer sets the circular movement into action; the twelve suspended two-seater cars then begin to be thrown out at an angle. At this point a second motor is started which turns two screwed rods which act as imitation hydraulic rams to lift the revolving structure to an angle of approximately 45 deg. We hope to see it fully illuminated and automated at the next meeting, Dave...

Alan Partridge still is not happy with his ball-rolling machine. He has added rocking bed, Konkoly's Elevator and Zigzag Cascade.

Roger Wallis, under pressure of work, couldn't manage a lifting Wurlitzer organ this time, so settled for a neat beam engine built in red and green, the flywheel built from two hub discs back to back, and link motion from Narrow Strips powered by a mains motor - always a good eye catcher at any show.

James Gilbert, along with **Stuart Biddle**, gave us a preview of what will be on show at Stoneleigh this year; James' American Yard Switcher loco, with train of tanktruck, boxtruck, flat bed and coal-truck; and Stuart's 4-6-2 loco and breakdown crane, all to run on a length of track.

Bill and Peter Roberts had their usual two-man show, including small dockside crane, twin cylinder engine and army halftrack, the dockside crane built from the manual supplied with the French Meccano Crane Kit, powered by the French Junior Motor. The twin cylinder engine is based on the model E24 from the Meccano 4EL Manual, using electro-magnets to motivate it. The halftrack, built by Peter, is assembled from Army Kits parts and powered by the French Junior Electric Motor.

Finally, **Edgar Whalley's** 1" scale single cylinder Fowler engine: this is built as a permanent exhibition model. A 12v American D.C. motor gives the drive to the two-speed drive to the rear wheels and shaft-driven winding drum.

31st Guild meeting held at Alcester on 2nd October 1982

Some 50 Members, Guests and Galley Slaves made the pilgrimage to the Mecca of Meccano enthusiasts on this occasion. For once the English weather was far from fair, being overcast with some rain, but that didn't stop people arriving from mid-morning onwards.

In contrast to the weather, the welcome from our Hon. Sec. Ernie, and the other early arrivers, was most hospitable, and the model room began to fill with the rumble of motors and the hubbub of intense conversation. Then it was time for a dozen of us to nip into the town for our lunch-time (liquid) refreshments. On our return the room had filled up completely with models (this was perhaps as well since otherwise I, for one, would have felt very guilty because I had come empty handed). There followed a quick stocktaking of the situation - which models was one most interested in? - A welcoming cup of tea, and it was time to be called to order.

Chairman **Ken Wright** then donned his Ceremonial "Deely Hobs" (Supermodel Leaflet No.-2) to show how Meccano can keep up with the times, welcomed us all, especially **James Gilbert** on his 17th birthday, and called upon new and potential Members to identify themselves, and then launched us on a mammoth model tour, so hold tight!

THE MODEL TOUR

Tony Homden opened the batting with a novel way to display some of his collection of Aeroplanes. He had two of them suspended by strings from a rotating arm pivoted on top of a tower. The strings were anchored to an off-centre point, so that the aircraft rose and fell as the arm rotated, and an intermediate linkage caused the strings to impart a climbing or diving attitude to the aircraft as appropriate. Tony completed his "montage" with a selection of No. 0 and No. 2 Aeroplanes and a Hangar. He also showed a selection of (1940) Mechanised Army models (makes a change from Astra models) and these were joined by the second Armoured Battalion provided by **Alf Reeve**.

Bill and Peter Roberts provided their usual mini display, the centrepiece of which was the No. 10.2 Leaflet Automatic Ship-coaler which, Bill said with typical modesty, they "knocked up in a couple of nights". Bill drew attention to one or two areas of difficulty, due to limitations in the instructions (not unusual), and no doubt he will soon overcome them. They also showed a Horizontal Twin Cylinder Engine with Generator, and a cute little model of a Traction Engine.

In complete contrast to the mechanical items, **Ian Henwood's** embryo fruit Machine is more electronic than Meccano, being styled on the current generation of gaming machines. The main frame, reels, and spinning mechanism were Meccano, but randomising of spin was by electronics (discharge of capacitor through a randomly selected resistor network), and win sensing via binary coded electrical contacts on discs attached to each reel, with decoding by a bank of relays. Ian outlined the method of operation of the parts completed to date, and his ideas for coin handling, random holds and nudges, etc. Roll on the finished article!

David Goodman gave us all a lesson in history and plant biology - he had brought along the original Electrolytic Docking Percolator which he designed in 1959. Its purpose is to allow the study of the way in which soil bacteria break down the nitrogen in fertiliser applied to the soil. David told us that, shortly after designing the apparatus, he had the opportunity to show it to H.R.H. the Duke of Edinburgh, and later it was featured in Bert Love's book on Meccano. Fame indeed! Twice?

Robin Schoolar's stylish Tower Crane started life as a design exercise to make a small slewing bearing. Having done this, using two sets of $\frac{3}{8}$ " dia balls between back to back wheel flanges, he proceeded to build the rest of a freelance crane, with a horizontal jib of triangular section, apex downwards, with unobtrusive rails within its cross-section. Simple drive arrangements from each of the 3 "crane" motors gave quiet, smooth, efficient operation of the model which amply rewarded detailed scrutiny.

Another Member with his own mini-display was **Mike Cotterill**, and he commenced by describing his model Steam Plant, using the script he had written for the previous Guild Meeting! Mike went on to describe briefly 4 Meccano Clocks, all offering a different challenge. Firstly Pat Briggs's clockwork one (MM3/67) with anchor escapement, then Ron Fail's with automatic rewind (otherwise known as 40 minute alarm!), then Keith Cameron's Hipp type Cathedral Clock (MM 10/80) and finally Mike's own design of synchronous clock. Those present with pocket calculators were able to establish the average time to a high degree of accuracy.

If the previous collections were mini-displays, **Jim Gamble's** was a maxi one. He had brought along a section of his Meccano Museum depicting the Blue Gold era of the late 30's. Neatly filling one corner of the room were at least 5 Outfits, including a No. 8, all with original parts in mint condition, and fully strung. Also several models, including a tram and a crane, a selection of motors and the famous display model of two tireless pugilists. Jim bought this 8 years ago and, once the grime of 37 years had been removed, it looked in mint condition and actually worked. The hawk-eyed amongst us noticed the non-Meccano components used unashamedly in this model, particularly the "roof" over the boxing ring built from trapezoidal plates and "obtuse angle girders", but all agreed the means justified the end if it sold more Meccano. Thanks Jim for the memory.

In complete contrast again, this time to Robin's small freelance crane, **Charles Catt** had fashioned his large crane upon the YD 171 Floating Crane featured in "Prototypes", (MM Spring 81). His model, to 1/72nd

scale, stood a mere 6ft high, and included 10 movements, each with its own motor (2 PDU's, 8 Crane type). These were slew, (luff, 3 trolleys and 5 hoists, all controlled from a switch panel connected to the model by a multi-core umbilical cable, thus enabling one to carefully manipulate the load from water level. Charles also demonstrated a 4-speed epicyclic gearbox, built from instructions in the 1948 American edition of *Standard Mechanisms*, in order to achieve an understanding of these devices - well, what else is Meccano for?

Mick Bent has captured the prototype's proportions well in his 3½" gauge (?) model of an LNER B.12 Locomotive, which he said took him only 5 days to build. At that rate we can expect a rake of carriages by Christmas! Returning to the loco, true to fashion Mick's version features live steam, though the cylinder is somewhat out of position. We were assured that the loco could propel itself, but that the entire business is rather messy and smelly.

John Bridger has gone round the twist - no, sorry - he is building a Twist, Cyclone, or whatever you call a fairground machine with 3 sets of 4 cars carried on vertical axles at the end of arms, with an arrangement such that they contra rotate, applying to their passengers a nauseating motion in a horizontal plain. John is modelling his Twist on that of Mr Michael Devey, to the same scale as his Octopus. The Twist is therefore over 5 ft. in diameter when erected, and, in common with the latest designs, the contra motion for the cars is derived by the simple means of a radial layshaft with pulleys either end, one running on the (stationary) central floor and the other running on the underside of the outer assembly carrying the cars. This method is much simpler and more reliable than the bevel gearing or subsidiary electric motors used on the "Mk.1" and "Mk.2" machines. In his model John is using fully reinforced bearings, those for the aforementioned layshafts (which are inclined a few degrees) being formed by collars carried in Double Bent Strips (part 45).

Next to bat came **Roger Wallis** with a veritable array of models, ideas and information. His main model was a Block Setting Crane, a re-build of one he produced some years ago, based on that on manual covers. This time the model is being designed from scratch to be idiot proof, since Roger intends exhibiting the crane and letting the Great British Public have a go, on payment of a suitable fee. In support he had a model of a Skeleton Clock - highly polished both where it shows and in all the bearings, such that it will run for 24 hours on a No. 1 Clockwork Motor (more than mine did - Ed.), a "polishing kit" - PDU, coupling for a chuck, and tin of Duraglit, a model of his mini electric motor to prove it goes (see latest MMGG) and a small hook on the end of a long rod, which is invaluable when it comes to re-threading the cords on a pulley block. Roger also showed photos and the 1952 MM article on Noel ta'Bois' trolley bus. This model was designed to respond independently to motive and steering commands fed via the normal single pair of wires by using AC for motive, DC for steering, and suitable decoupling capacitors and chokes. Roger said the original used a vacuum cleaner motor for motive power. One could tell from the way he talked about it that Roger has aspirations to make a similar vehicle, but please, Sir, let it not be quite so potentially lethal.

Mike Brammer demonstrated his knowledge of engineering and his modelling skill in a beautiful 1/10th scale model of a centre lathe, instantly identified by the machine tool cogniscanti as a Dean Smith & Grace machine. 9 speed gearboxes feed both chuck and power feed, and such features as fast traverse, automatic knock-off, powered cross slide with compound slide and lever-clamped tailstock with barrel screw feed convey total authenticity. To complete the illusion there was a workpiece (bar) being turned with apparent facility. Only later did we discover Mike uses candles for this part of the demonstration. A final touch was that the model was made from grey painted parts - could these be some of the late Eric Taylor's? If so, I'm sure he'd appreciate the good use to which Mike is putting them.

The final formal presentation of the afternoon was by **Alan Partridge**. He showed us his improved version of the classic "Tug-of-war". In this device the handle inputs of the two competitors are compared in a differential, and the resultant output, if any, moves the assembly of tugging figures to right or left. In the frenzy to apply the greater speed the whole supporting structure often gets twisted, so care was needed in the design of the diff to ensure that the input shafts did not bind. Alan has observed that small children are completely deceived by this device, and think that "their man" is capable of movement with respect to the other, i.e. that each is pulling on the rope. Perhaps somebody can devise a variant where this does happen.

Nell, there you have it! Some 14 speakers, 1½ hours of rapt attention, and we came to the end of what our Chairman described quite rightly as "one of the most memorable model tours of all time".

Free Roaming

Notwithstanding the bumper "tour" there were plenty of other interesting exhibits which amply rewarded an hour or two of free roaming and informal discussion. Where to start? Why not with transportation.

Two old time locos caught my eye, "Locomotive No. 1" by **Ivor Morgan**, which I first saw at Stoneleigh faithfully earning 2p pieces for St. Johns, and still resplendent, if a little rickety, on its plinth, and a nice model of "Rocket" by **Russell King**, some 2ft long. Russell also brought along a good looking model of a BB1 Ploughing Engine, to about 1/12th scale. Hopefully one day he will complete the pair, and model an anti-balance plough to haul between them.

Les Gines's model of a Schneider Trophy type Seaplane, constructed almost entirely of green strips,

really captures the streamlined shape of its prototype - don't bother to take it down, Les, you'll never get the strips straight!

Another model from Memory Lane was **Dennis Perkins's** Motor Cycle Acrobat, able to propel itself round and round in a vertical plain. Dennis had made several improvements to the version in MM 5/72.

In more modern vein, **Bob Ford** showed us he can model vehicles as superbly as trains with his large 1972 Foden Mobile Crane, complete with motorised outriggers and windscreen wipers as well as the usual motions, and working brakes, brake lights and trafficators. This model will take some beating, but **John Dalton** is trying hard with his Ford Cargo, the chassis of which is nearing completion.

Roderick Rich's Land Rover was quite a novelty. It looked as if it was made of all black Meccano until, on closer examination, one discovered there was no Meccano in it at all - the nearest one got was WRI tyres! All the other parts, including beautiful brass gears, couplings, CV joints, etc. were hand made by Roderick, some from odd scraps. I ascertained he has made over 8000 parts to date! Those comprising the Land Rover had been put together most professionally, so I propose we let him stay in the Guild, even if he has no genuine Meccano.

Mike Pashley has suffered several illnesses of late, but nevertheless managed to be with us, and to build a detailed model of a Ruston Bucyrus 3W Walking Dragline, which walked most realistically. Hopefully Mike's health will continue to improve, so that he can complete its big brother, a small part of which he had on show.

John Ansty's Hyster Challenger 800 Container lift truck is nearing completion - surely he can't be held up for lack of parts! John also brought two guests, **John Dalton** (mentioned earlier) and John Dawson, who had a model of the Dodgems - an attractive looking model, but I did not see it working, and from cursory study of the dodgem car I couldn't see how it could castor away from an obstruction. I'm told the model was featured in an MM, so it must work, mustn't it?!

Terry Pettitt's design of Meccanograph was exceedingly compact, with the draughting arm driven by 3 cranks so that novel, attractive, patterns were produced.

Edgar Whalley showed a classically cased mains driven electric Clock, Mike Cuff has joined the Robot brigade with a manipulating arm, and **James Gilbert** had a simple ping-pong ball machine which he says was inspired by a piece of "modern art".

John Nuttall put several orreries on display, and also a 0-9999 veeder counter, which made good use of the smallest size Plastic Meccano Gear, which fortuitously has 10 teeth.

The latest version of the Pitstone Post Mill by our Hon. Sec. **Ernie Chandler** is slightly enlarged with more internal detail, which can be studied thanks to the skeleton structure.

Meanwhile our President, **Esmond Roden**, is returning to his first love - tramways, and showed the embryo of an extensive Continental Tramway, scaled to run on Hornby 3 $\frac{1}{2}$ " gauge plastic track.

Several Members showed part built models - their description can await their completion. Also seen was the base of an R-B 195-B Shovel, and a red and silver GT car of nice proportions, but time prevented me identifying the builders of these models. Apologies to them, and anyone else I've missed.

P.V. Ashworth.

32nd Guild Meeting - 26th March 1983

After a horrid week of what should have been Spring weather Saturday dawned beautiful - calm, sun shining and a really pleasant day to go to a Meccano Meeting.

I arrived around 10.30 a.m. to find some members already setting up. Greetings over, willing hands soon emptied the VW, laid the wander leads and pinned up the many letters received by the Hon. Sec. since the A.G.M.

The "eats" were collected and the urn was soon boiling, so all was tidy for the ladies. The usual visit to a hostelry for lunch, and back to the business of the day.

Tea and biscuits and a general get-together from 1.45 p.m. got all in good spirits for the Chairman to call order at 3 p.m. and introduce the guests: Tom McCallum from Derby, Dr. Joe Bonello from Kings Heath, Roger le Rolland, Rob King from Tewkesbury and Brian Edwards' son David.

After a short model tour, members enjoyed free roaming until tea at 4.30 p.m. (On away dates Ernie uses a No.52 attached to two No.7's as a masher...) A treat for everyone... surprise, surprise! No.8 Double M

Double G issued with the tea tickets: Heartiest congratulations to John and Roger for an excellent production.

4.45 p.m., and the short business meeting commenced. The Chairman welcomed all to the meeting, and read apologies from Phil Ashworth, Stuart Biddle, Phil Bradley, Michael Edwards, John Fuller, Matthew Goodman, David Guillaume, Tony Homden, Gordon Scott and Nicholas Wright.

In answer to the Chairman's enquiry for correspondence, the Hon. Sec. stated that all letters were displayed for all to read.

Insurance: The Hon. Treasurer stated that a satisfactory Public Liability Insurance had been secured which covered members who were on Guild functions throughout the twelve months.

John Bridger has a Wooden-Cased Mantel Clock which he would like to hand to the Guild to be awarded annually to someone. The best model on show? The person who has done most to promote the Hobby? The person who has travelled furthest? Please send your ideas as to how this could be used to the Chairman.

I did see, and appreciated, the neat touch of Tom McCallum, who draped a burgundy cloth (I was going to say "curtain", but, perhaps "tablecloth" would be better) over the table and displayed his immaculate Red/Green models on it.

MIDLANDS MECCANO TRANSPORT EXECUTIVE

A Foden Undertype Steam wagon of c. 1930 was faithfully modelled by **Brian Edwards**. These models are always so worthwhile, showing as they do the real stuff of our industrial history.

David Barrett showed a double-decker, after the March 1954 MM instructions, but modified drive from a PDU, not the E20R, and using narrow strips for improved appearance. He also displayed the chassis and running gear of a Seddon-Atkinson truck to 1/7th full-size. Brave man... he showed-the prototype plan as well: This bodes well to be a real Supermodel when complete.

Roger Wallis brought along his part-completed re-creation of Noel Ta'Bois Trolley-bus. Those of us who remember Noel's masterpieces in the MM of fond memory will, I am sure, not be disappointed when Roger's model takes the wires - and speaking of which, I am assured that safety-conscious Roger will not be using the lethal voltages of either prototype.

The No.10 Set Dumper Truck has been redesigned by **Mike Brammer**, and a very solid and powerful-looking job it makes too:

Mike Bent's model of the 1958 Antarctic Expedition's Sno-Cat was a fully operational representation of this unusual prototype. (Absent friends please note: contrary to expectation, we were unable to test it on real snow!. The vehicle is mounted on twin pairs of tracks fore and aft (total 8). Each pair of tracks is powered by a separate PDU.

Another good 'un from **Bill Roberts** was a tiny traction engine he'd taken to France to the C.A.M.'s exhibitions.

Terry Pettitt showed a very neat motor-cycle based on current practice and to about 1 1/2" scale. The engine is a transverse parallel twin 4-stroke in unit with the gear-box and swinging arm rear suspension, whilst the front suspension, with correct and neatly-achieved geometry, is trailing link. An extension of the tank provides a neatly faired-in headlamp mount.

From the MMG's expert forger was his 109" wheelbase Land Rover. **Rod Rich's** craftsmanship produces parts which are vastly superior to - dare I say - anything from Binns Road - and probably Calais. The finished model faithfully captures the feel of the prototype; what a shame that Solihull has produced a new version; but in due course Rod will perhaps let us have another good 'un!

Ernie Chandler had a fine 1920's vintage bodied Rolls, based but not copied from the MM instructions of c.1922, and which followed the constructional article which later formed the basis of SML 1.

AIR NEWS

Les Gines showed a "Spitfire" model of some 4' wingspan, which he had developed from the pre-war

No.10 Racing Seaplane. (Remarkable, in that the prototype was developed from the Schneider Trophy seaplanes!). He also showed a neat helicopter.

Welcome guest **Roger Le Rolland** showed several of the miniature aircraft in which he manages to catch so well the essence of the prototype with a few aptly-chosen parts.

MECCANO MISCELLANY

The favourite Meccano topics apart, it was inspiring to see creations of so many diverse kinds.

For convoluted ingenuity, the (anonymous) member's model using only three (yes, THREE) parts (40, 162 and 167) of A. Partridge in a GRB (actually an owl), utilising two 20b's as eyes, and the cage bars craftily fashioned with cord between the teeth of the geared roller races, must win the palm!

Edgar Whalley's "Old Faithful" A-frame beam engine performed a rhythmic dance with grace and smoothness.

An elegant synchronous-motored clock, both going and striking trains driven from one motor, was offered by **Jack Partridge**; he modestly ascribes the idea to Claude Gobey of Paris, but one can appreciate the time and thought Jack has put into the construction.

Dennis Perkins showed the (K.25) Theodolite outfit model; it certainly looked ready for work, and one feels could probably be of quite some practical use.

Jack Orchard showed a Kinetoscope (model F.42, 1936), and had even most successfully reproduced the leaping dog of the original instructions.

Additionally to his tea-spoon, **Ernie Chandler** showed two developing Meccanographs on his pitch. One, based on the Konkoly Egg-Graph and one to Keith Cameron. Ern explained to the meeting the fine tuning required to produce a neat cusp in the patterns produced.

Mike Cuff had a remote-control manipulator (of the type for use in hazardous areas) which he showed running through its range of motions. It was controlled by three ingenious 2-way joysticks, a total of 6 motions forward and reverse.

Wilf Bolland had reconstructed the 1920's No.7 outfit coal-cutting machine, another effective and unusual model.

Russell King brought a walking Robot which seemed ready for a walkathon!

MIDLANDS GUILD RAILWAY

A fine reproduction of C. V. Bulleid's ill-fated 'Leader' Class 0-6-0-plus-0-6-0 locomotive on 3 1/2" gauge by CME **Esmond Roden** caught the eye. This unusual Prototype was fully encased, with separate cabs for driver and fireman. Esmond has caught the look and feel, and there is fine and ingenious detail in the cabs and on the draw-gear.

A complete contrast was the micro-miniature working layout of guest **Roger LeRolland**: a neat little 0-6-0 loco drew two tank wagons within, believe it or believe it not, a 5 1/2" circle. Dare one ask if it is possible to get any smaller..?

Mike Cotterill had a shunting loco, doing just that with a couple of wagons on a short length of track. what an eye-catching display for the shop window!

Bill Roberts had a pretty little tank as part of his display.

MECCANO SHOWMEN'S GUILD

Alan Scargill's Amusements showed the Automated Flying Seaplane Haircutting Machine, to the peril of any who came within its 8' sphere of operation. A neat four-engined flying-boat was suspended from a gimballed arm, and flew through the air with the greatest of ease, particularly when assisted by a further airscrew on the counterpoise end of the arm. The machine was controlled by an ingenious motor-driven programmer unit.

Amongst **Ernie Chandler's** exhibits was a soundly-engineered Chairplane Ride, which he showed to good advantage in operation. A nice touch (although it could shock the purist!) was the use of picture postcards on roundings and drum.

Dave Bedwell showed a fine ride with revolving cars, A very attractive and neat model some 24" in diameter, incidentally, I had always rather suspected the Supermodel roundabout, but I recently acquired a photograph of a prototype machine with revolving cars - AND it was based in the Liverpool area, so perhaps I should have had more faith.

A Zig-Zag Buggy Ride was displayed by **Bill Roberts**. The trolley runs down eight inclines, reversing at the end of each, before being hauled back up on the lift.

Ferris wheel presented by **Mike Cotterill**

A free-lance model of a Park ride. Ferris wheels have been a popular subject of Meccano models since 1911. The wheel is 4 feet in diameter, and the sixteen spokes use 96 12 1/2" strips, the two rings 12 more each - a total of 120. Eight of the sixteen cars are conventionally pivoted: alternate cars are rotated by a 1 1/2" contrate which engages a fixed 3/4" pinion on the hanging shaft. One revolution of the wheel therefore causes the car to perform half a revolution. (Mike Cotterill's very own contribution to fairground technology. Ed.) . The cars are scaled to carry eight persons each.

Drive to the wheel is taken by belt to the rim; the usual drive on Meccano wheels is to the hub, but this imposes excessive strain due to the effect of inertia. It also provides an opportunity to use 6" pulleys in anger. A jockey roller on an adjustable swinging beam adjusts the tension in the drive cable.

Motive power is provided by a mains induction motor from a hair dryer, and a free-wheel is fitted to the drive pulley. A handbrake brings the wheel to rest.

The wheel carries two circles of miniature bulbs, wired in two circuits, and connected through slip-rings (made from MW 3 $\frac{1}{2}$ " circular girders! on the main axle to switchgear under the base, which gives a flashing action. A further switch mechanism causes lights on the support towers to light cumulatively from the base.

There is a pay-box with turnstile at the entrance, and a further two on exit.

A lot of strips are bent to various radii in the model, and the Alan Partridge Strip Bender was much in use, as were a set of own design plate bending rolls for Flexible Plates.

CRANES

Peter Roberts showed a Radial Gantry Crane, as he says "based on the Crane Set Manual Model, but with some added parts to make it interesting". This they certainly did and I enjoyed seeing an unusual prototype giving us an unusual model.

An immaculate SML 19 Steam Shovel in Blue & Zinc and powered by an E20B motor was an elegant piece of nostalgia from **John Godfrey**. Despite the modern parts, the feel was very much 1928.

A Hyster Challenger Container Handler was shown by **John Anstey**. Representing 20 months' work, this most intricate model had an all-up weight of some 50 lbs., was supported on ashtray tyres and required 7 PDU's to drive its mechanical and two hydraulic functions.

Eric Baldwin brought along his model 10.2 (1938) Ship Coaler, for a welcome second showing. He has resolved the anomalies in the Manual Instructions, and has produced a very smoothly-running display.

Stuart or should it be **Tom McCallum** showed a very neatly-modified SML S.31 Steam Shovel, for automatic electric drive, running untended through all its motions,

HC

33rd Guild Meeting - 1st October 1983

Saturday, October 1st was not the usual standard of weather for the Autumn Meeting of the Guild - light damp rain and quite an autumn nip in the air. This did not dampen any spirits as the Members began to arrive around 10 a.m.

The usual visit to a hostelry for lunch and a chat, and back to business. By now a good number of models were on display, with tea and biscuits being served and a great deal of exchange of news and views, and modelling Members were soon in the spirit of a Meccano meeting. The Meeting was called to order at 3 p.m. by the Chairman, who told the assembled that Geof Coles had passed away the previous day. All stood in silent tribute, then the guests were introduced: Noel Ta'Bois, Joe Bonello and Tom McCallum. Then Steve Sarawyn was given a special introduction as he had not attended a Meeting since 1969. He was a schoolboy then, and has since travelled extensively and worked on oil rigs. The model tour followed, starting with **John Bridger** who explained why his Fairground Whip was named "Turbo" Whip: two cousins each owned an identical ride, and one was named "Cyclone" and the other "Turbo". Then the comparisons of the original and model were explained to show how true to prototype the model is, '.

Roger Wallis was next, and explained his method of a chain pickup for roller coaster cars. This will be dealt with in detail in a future MMGG.

Tony Homden then explained and demonstrated his very true-to-type Ore Crusher. Tony also showed the Book he used to build the model from. If you saw the TV programme recently of the railway journey from Sydney to Perth, Australia, you will have seen a similar machine crushing ballast.

Alan Partridge showed Members a very interesting Meccano purpose built set of drawers with a wrap over hinged lid. Alan then explained a clock mechanism he is currently working on; there is a similar mechanism used to operate Big Ben in London. A few other Members were included in the tour. All models will be described in the Model Report.

Tea was called for 4.30 p.m. and, sure enough, our esteemed catering staff did not falter. Soon all were enjoying the spread and chatting.

The AGM was called for 5.30 p.m., and all were assembled ready, Ken Wright, Chairman, being in control, supported by: Esmond Roden, President; E. Chandler, Hon Sec.; and Alan Partridge, Hon Treasurer. Apologies were received from several Members.

SCIENCE TODAY

Ken Larner's Bionic Arm made a welcome reappearance: at the moment he is experimenting with various types of hand. Progress is such that we shall soon perhaps have a C.A.M. system making models from a computer tape?!!!

ENGINEERING NEWS

John Godfrey brought his part-complete reproduction of the Collis Truck Crane (based on the M.M. Model of July '78). It was plain to all that this will be a neat one and true to prototype.

A revolving drop-stamp ore crusher was shown by **Tony Homden**, together with the catalogue illustration of 1880 from which he had worked. The overall effect of the model was most pleasing - reminiscent of the outfit models of the early '30s but with much extra in the way of finer detail and working features. Tony ran the model, grinding up cat litter, and produced a fine prototypical racket and clouds of dust!

In order to prove that he still knows which way to drive a screw, **Ken Wright** had the Meccano truck factory by Servetti via Cameron in an advanced stage of completion. Most of us will recall with pleasure the pre-war Meccano workshop display models, and this one is perhaps the logical development, where multiple processes take place to a single end.

A solid and impressive Ford Cargo Truck by **John Dawson**, faithfully modelled from prototype literature, with tilting cab revealing the complex mechanisms, including 6-speed and reverse gearbox (from a single gear lever!), steering box and everything that opens and shuts. The model, being of substantial dimensions (36" long x 18" wide x 16" high) is powered by a car heater fan motor on inclined mountings as the prototype.

ARCHAEOLOGY

Jim Gamble's indefatigable quest of the highways and byways of Meccano history gave us another glimpse of his collection, the variety of which constantly amazes one.

RAILWAY NEWS

A neatly-constructed model of the Kehrsiten Burgenstock funicular from the screwdriver of **Peter Roberts** offered a smooth way to the top, which was fitted with aircraft warning lights.

John Fuller's 0-8-0 freelance tank on $3\frac{3}{4}$ gauge offered a more leisurely opportunity of inspecting this very fine model. One of its features is a very solidly constructed transport cradle which not only makes handling its 52lbs weight safe and comparatively easy, but also allows the model to be stood on end, back, etc., so as to inspect or adjust its mechanisms. One of these is I believe, a real Meccano first: an accurate reproduction of the Gresley conjugated valve gear, which derives the valve events for the inside cylinder from the valve rods of the outside ones.

SUGGESTIONS SECTION

An interesting model of an epicyclic gear-box for Exhibition use formed one part of **David Goodman's** display. He also had on show examples of various types of battery for model use, giving costs, voltages,

capacities etc. I hope David will give us a "Battery Which?" in a future MMGG

Looking forward to a warm summer's modelling, **Wilf Bolland** has redesigned the electric fan in the MM of November 1926.

One of **John Dawson's** three models was from its appearance a very useful clutch mechanism. Perhaps John can give us details of this in MMGG?

TRANSPORT TOPICS

Another intricate and ingenious reproduction from the hands of **Roderick Rich** was his Scammell Truck chassis to 1/10 scale: the model boasts a 15-speed box, and working limited-slip differentials.

Two Clayton & Shuttleworth TE's from the spanner of **Peter Church** - one G.P. and one Crane engine - at about 3/4" scale steamed in from Shillingford (or at least LOOKED as if they could!).

Bob Faulkner showed that modern Meccano still produces satisfying models with his Motor Lorry (from "Trucker Fleet") and Space Ship (from "Hyper-Space").

A 1920's single-decker tram-car from Weston-Super-Mare provided the inspiration for a fine model by **Wilf Bolland**. Wilf had successfully harnessed the "Magic" motor as a drive.

Truly rugged is the word for the part-built Seddon-Atkinson 300 Truck displayed by **David Barrett**. David had obtained details from the manufacturers and had achieved very satisfactory proportions, based on a 1/7 scale. He will certainly achieve his stated intention of "including the main features operating as the prototype".

Bill Roberts showed his Tank Recovery Vehicle from Stoneleigh, with its remarkable climbing prowess. He also showed a most compact fork-lift, powered by a 4 1/2 volt motor, which achieved great realism without over-complication.

A 1" scale Burrell Showman's Road Locomotive by **Dennis Perkins** caught the eye, with its excellent realism and atmosphere. Dennis intends this as a permanent model (and hopefully this means we shall see it again!). He had therefore painstakingly painted and lined the model in typical prototype colours, which gave it a unique flavour.

MECCANO SHOWMAN'S GUILD - MIDLANDS CHAPTER

Mick Bent's Amusements presented the quadruple Swing-Boats - for many years a favourite on the tober. It was nice to see the spirit of this old friend so well recaptured.

John Bridger's Cyclone Twist - still embryonic - made another appearance. This large and very faithful model is to 1/10 scale, which gives an overall diameter of over 5'. John showed us the model partly "built-up" so that the assembly detail could be better appreciated. The ride has been twice built-up on the gaff and even powered by the showman's generator!

AIR NEWS

Les Gines had taken the Outfit 7 (1935) Spitfire and had made considerable detail improvements to it, a very satisfying model to behold. Beside it, he had also succeeded in producing a model whose 8" wingspan dwarfed by the 3' of the larger, but which still clearly proclaimed "Spitfire".

HURSTMONCEAUX HOROLOGISTS

Alan Partridge showed a demonstration model of Grimethorpe's Double-three-legged Gravity Escapement. This mechanical mouthful provides the power to move the Palace of Westminster clock (Big Ben to you!). The going train rotates a twin tri-lobar cam, alternately releasing two weighted levers whose weight when falling provides impulses to the pendulum which are unaffected by the variable resistance at the hands; caused by weather conditions.

John Dawson had amongst his exhibits an very neat clock driven from a 20 r/m Crouzet motor, which would have graced any mantel.

34th Guild Meeting - 31st March 1984

First to open the tour of the models was **George Illingworth** with a superb model of HMS AVENGER. A type 21 Frigate, the model is to a 1/36th scale and is 10'6" long x 14" beam. George was fortunate in obtaining scale drawings which enabled him to include an incredible amount of detail. A dealer mains motor is fitted which drives the Radar aerials, rotor of the Lynx helicopter and trains the 4.5" gun turret. George has also fitted missiles from the Meccano Space range: four large in launcher cases representing Exocets, and small ones for a Seacat launcher. Other detail included anchors and windlasses, two 20mm Oelikon guns (an extra one being mounted astern, as in the Falklands), a motor launch and whales, and two sets of triple torpedo tubes. Neat points were the use of a conical disc for the Seacat Radar dish, and the realistic representation of the gas turbine air inlets. Adding to the realism were Britains' figures forming the Ship's Company.

Next came **Les Gines**, who had brought a very neat model of the SML 15 Baltic Tank Locomotive in Red & Green, and also a model Helicopter based on the "Blue Thunder" series on TV.

Phil Ashworth was next to speak, and described the modifications made to his excellent Showman's Engine, based on a model by Phil Bradley. Modifications have been made to the front axle and water tank and, by the clever placing of the Powerdrive motor at an angle; Phil has been able to pass a cross-shaft right through to permit operation on both sides. Phil would welcome any suggestions for further improvements.

After Phil came **Tom McCallum** displaying some very nice models and early sets, all in nickel-plate. These included a freelance railway breakdown crane loosely based on SML 30 and powered by a 1916 4-volt motor, and SML 8 Bucket and Dredger built as the instructions but fitted with extra buckets, and also the SML 32 Twin Cylinder Steam Engine. This model was built in nickel, but with green strips for cylinder lagging. To complete the display were two boxed No.1 sets in nickel and a boxed nickel G.R.B.

Guest **Tony Knowles** described his excellent freelance steam engine and trip hammer made from Primus parts, which showed to great advantage the realistic flywheels which can be built up using the circular parts and wire spokes incorporated in the Primus system. Tony also showed the model derrick which featured in the MME manuals described as a Swivelling and Luffing Jib Crane.

Considering that only 25 different types of parts have been used, the model is remarkably effective, the only change from the original being slight alterations to the gearbox to allow more convenient control and the use of a non-Meccano mains motor.

The tour continued with a talk from **Mike Cotterill**. Mike's first model was an unusual type of steam engine that utilized a triangular member connected to the two cylinders at two corners of the triangle, the triangle also being connected to the crankshaft. The reason for this type of construction is that the engine starts readily, as there is no dead centre position. The model is very neatly constructed and runs smoothly, no doubt helped by the large flywheel using channel segments.

Mike's second model was a rebuild of a traction engine based on original models of Phil Ashworth and Bert Love. The model uses five-and-a-half-inch driving wheels and featured very neat power steering using an Emebo motor in the water tank.

Alan Scargill's first model was an excellent Showman's Engine. This model had flashing lights and also used five-and-a-half-inch drivers and power steering, this time using a crane motor, the whole model working very well as shown in a later demonstration.

Alan's next model was a 24-horse gallopers powered by a mains record-player motor and looking very realistic, helped by effective use of various coloured plates.

Ken Wright followed with his model "The Fantasy Factory from Piacenza", designed by Sr Servetti and featured on page 54 of May 1967 MM. This is an excellent model made to Ken's usual high standard. Briefly.... a grab lowers a boiler into a truck, which then moves along rails to a traverser which transports the truck to the other side of the factory, from where the truck then reverses down a second parallel set of rails to a pre-determined point below the overhead gantry, which has meanwhile traversed across the roofed part of the model, whereupon the grab is lowered, picks up the boiler and then returns across the factory, during which time the truck retraces its route in the reverse direction ready to receive the boiler again, at which time the sequence is repeated.

Next came a remarkable clock built by **Mike Cuff**. The clock is very unusual in that the time is displayed by vertical columns of marbles which are lifted into position by a continuously moving chain made from fishplates and driven by two synchronous Crouzet motors. The first column receives one marble every five seconds, thus after 60 seconds the twelfth marble trips a mechanism which passes one marble to the next column. This feature is repeated several times, the final column displaying a maximum of twelve hours.

Mike Brammer followed with three interesting models. The first was a display model of a Jacob's Ladder showing "Meccano" on one side and "For Boys" on the other, driven continuously by a motor via a lost-motion crank-

The second model was a very neat version of the Keith Cameron Bulldozer, redesigned to simplify the chassis.

The last model was an outstandingly effective Robot arm which had six movements, all separately controlled with individual motors. The linkage is arranged in a similar way to that of an arm-type draughting

machine, in that movement of the arm does not alter the orientation of the hand. A further important feature is that the wrist allows continuous rotation. Mike hopes eventually to arrange the model for computer control, and would appreciate any information to this end.

The tour then moved on to **Jack Partridge**, who gave a talk on his "Bulle Clock". Power is supplied by two 1.5v batteries energising two coils in the base of the clock. These are switched by the motion of the pendulum which advances the gearing by one tooth per swing. The pendulum is supported on pivots built up from a top cross shaft with handrail supports at each end, which in turn house pivot points. At the lower end of the pendulum are two permanent magnets which react with the coils to impart motion to the pendulum. Jack explained that the secret of good timekeeping and also long battery life is to maintain a very small clearance between the magnets and the coils. Altogether this was a very well built and pleasing model.

Ernie Chandler always brings a selection of good models, and for his talk showed an excellent Collis truck which was shown in the MM July 1978. Ernie had built his model as a tribute to its originator, the late Eric Jenkins, whom most Members will remember as the builder of some superb models.

Ernie's next offering was an impressive model of Tower Bridge, and is a rebuild of the Liverpool display model as featured on the cover of Bert Love's book. The colours were Red, Green and Silver.

The third model was a modified version of Keith Cameron's multi-purpose designing machine with new features such as an adjustable crown head and an epicyclic movement on the table.

Robin Schoolar then added a touch of humour to the meeting with his version of the Chinese South Seeking Chariot, named the "West Seeking Wheelbarrow" built by "Ron O'Bonehead". Briefly the model was three-wheeled with a pointer on top and the operating mechanism housed in the framework below, and driven by the two large rear wheels. Although Robin described the model in a humorous manner, he had evolved the mechanism in a most ingenious way which totally avoided the use of gears. Unfortunately the complexity of the various linkages etc. defies description, but the impression I had was a combination of Baker Valve Gear and some of the more abstruse of Alan Partridge's mechanisms.

Terry Pettitt next described his model of a Gas Engine. The engine is based on a British Westinghouse prototype built in Manchester about 1900. It is powered by a six-speed motor housed in a plinth below the engine and driving up to the crankshaft. The flywheel is built up from 7.5" circular strips and has three poppet valves actuated by a side camshaft driven by the crankshaft via two small helicals.

Roger Wallis closed the tour with a description of his latest model - a fire engine as shown in June 1951 MM. Roger had modelled the vehicle very neatly, and for a small model it was remarkably realistic. Some modifications to the original have been made by Roger, namely improving the steering linkage to improve the lock and arranging the tracking of the escape operating cord so that the escape remains at a constant extension regardless of the angle of elevation. For the record: Roger modified the front axle by increasing the length from 3.5" to 4.5". The escape is built in two 18.5" sections extending to 3ft., the overall size of the chassis being approx. 18.5" x 5. **Esmond Roden** brought along an excellent loom based on a "Model of the Month". This incorporated a hand-threaded shuttle, and a lever operated mechanism to provide a variety of patterns, a few examples of which were also shown.

Esmond's other model was a small car made from the Space Age set.

Tony Homden made a welcome visit, bringing a freelance model made from the Aero-constructor sets. This was a very large 8-engined flying boat in Red and Cream with approx. a 32" wingspan, the appearance somewhat similar to the Dornier DoX.

Dennis Perkins showed a comprehensive selection of models built in Primus. These included a station and house, a railway coach and a lorry. These were featured in an article in the Meccano Engineer for March 1976. Dennis had spent a lot of time on these models, having to restore a lot of the wooden parts and making replica brass hinges for the coach doors, and this was reflected in the excellent appearance of the finished models.

Dorian Beards, a new member, showed his Block Setter, which worked very smoothly and incorporated most of the movements of the prototype. An ingenious touch was the construction of a temporary roller bearing using the lids from sweet tins, the slewing being achieved by a driven rubber-tyred pulley in contact with the rim.

John Fuller brought his two superb tank locomotives and also the cylinders and bogie for another model. Although most members will have seen both models before, they are very well worth an opportunity of closer inspection, and I am sure that they will discover some new feature every time they examine them. In both models the valve gear is worth studying, the 0-8-0 engine having Walschaerts with conjugated gear operating the 3rd cylinder, while the 0-6-0 has inside Stephenson's gear activating the outside valves through rocking levers as on GWR locos. The bogie was very heavily built and incorporated equalising beams and springing with spring-loaded pivot.

John Nuttall showed a small 3-planet Orrery which depicts the periods of revolution around the sun and of rotation around their axes of the three inner planets - Mercury, Venus and Earth. These movements are produced to an accuracy of 4 significant figures, as are also the revolution of the moon round the earth and the rotation of the sun on its axis.

John's second model was a small mechanism which could generate an ellipse, and I hope John will

write a description of this. Both these models show the knack that John has for mathematical-type models, and also demonstrate the versatility of the Meccano system.

Stephen Lacey brought along a partly-finished model of a "Shay" tank loco. The detail work on the crankshaft had worked out very neatly, and the finished model should look very realistic.

Russell King displayed two very nice models - a single cylinder steam engine and a log saw. These always form good subjects for Meccano models, and both looked most effective.

John Dawson showed some components of his favourite subject - vehicles. These were a front wheel drive unit and suspension using 3" pulleys and ashtray tyres, driven by E15R motor and fitted with hub reduction, and also an automatic 2-speed and reverse gearbox. These were all soundly constructed, and perhaps John will write a description some time.

Also choosing his favourite subject was **Peter Church**, who had an excellent showman's engine which was the first engine of this type I had seen using the small circular girders for the front wheels.

John Stevenson showed an ingenious strike mechanism based on a model of Ron Tait's in a sixties MM. This used a 5.5" circular girder with angle bracket trips as a strike drum, which in turn used an electro-mechanical screw mechanism to control the hammer.

A very neatly built eight-wheel Steam Wagon was displayed, I believe by **Frank Smith**. These are always interesting vehicles to study, and the model captured the impressive lines of the prototype very well.

Wilf Bolland always seems very active in model building, and had on show a Roundabout and a portable crane. Both of the models are from the No.6 Outfit Manual of the early 1920's, when of course that outfit was far more comprehensive than in later days.

John Bridger's model was a fork lift truck from the 1950's No.9 Set Manual. - This was built virtually as the instructions, but John had to carry out several modifications to make it work.

John Ansty had a partly-built No.10 Set cargo liner hull in Blue and Gold.

Alan Fletcher, a guest of Bob Faulkner, had built a neat counter-rotating Ferris wheel which had seats for 64 passengers per trip.

John Godfrey brought along another fairground model. This was a roundabout built mainly from double-braced girders and driven by a pre-war clockwork motor.

35th Guild Meeting held at The Greig Hall Annexe Building on 6th October 1984

I arrived in Alcester a little before 10 a.m. to see the AA signposts reading "THE WAY TO LIFE" and pointing the way I wished to go...! we are famous... The AA have signposted our Meeting... Well, not quite - it was the right Hall but wrong Meeting!

The overcast morning and slight drizzle was not the weather associated with Guild Meetings - cold, too - but all brightened up when I got inside the room and found two chaps already present, and another party of four arriving immediately. We soon had the models on display, and all correspondence pinned up for all to read, and then meeting the chaps as they arrived. 12.30 p.m. and a general exodus to the local for lunch, then back to the business of the day.

The Chairman, Roger, called the Meeting to order at 2.45 p.m. and introduced the Guests, all potential new Members. Then the tour of the models began, **Terry McNally** being first in order of batting (sorry, talking).

Terry explained his progress with a 7' high Dockside Crane, unfinished but looking to be a very good model. He apologised for the many colours of Meccano used, this being due to various years of purchase of parts. Also Terry thanked the other Members who had advised him on points he was not too sure about. This being the first model from Terry, I for one, hope to see it fully operational for our next Meeting. Congratulations on a good start.

Yours truly (**Ernie Chandler**) was second in order, and I explained my version of a designing machine build from a script sent by Keith Cameron of the machine built by Bill Sangster who lives in Canada. This machine uses a GRB, courtesy of a fellow Guild Member, for the table with two cams North and South and a sliding platform for the pen. The penholder is the best I have seen so far, because it is so easy to change a pen and the thickness of the pen is catered for as well. It is claimed to have a 400,000 design variation. I shall be pleased with half-a-dozen...

I also explained my model of a seacraft recovery crane, taken from NMMG Newsmag March 1984. The original was built by Joseph Manducca of Malta. A very interesting model and excellent gearing, with quite a few ideas novel to me. Thanks to NM Newsmag for a clear, easy to follow script of a very nice model.

I also had a Funicular Railway Steam Plant and a multi-purpose designing machine on display, these having been reviewed before.

Mike Edkins, a newcomer to the Guild, had a partially completed weight powered clock. when finished it is hoped to include date, month and year and various other items.

Les Gines' "Railway Engines through the Sizes" started with a very good model Baltic Tank, wired so that the public using a bell push can see the wheels and motion working. The second engine, a freelance using wheel flanges as drivers, was wired for public use. This used a Boiler PN 162 as a Boiler; now an engine using a cylinder PN 216 as a Boiler; next an engine using a Sleeve Piece PN 163 as a Boiler; next a simplicity engine using Coupling PN 63 as a Boiler... this caused much amusement among the assembled Members.

Les used three-quarter inch flanged wheels on the No.2 engine for bogie wheels, plus multi-purpose plastic gears to represent spokes. Les pointed out the effect of added detail to models. He also appealed to Members who attend Shows to have a model(s) fitted for public to use, to involve the public more and so talk about the Hobby.

Roger Wallis was next in line, with a No.9 Manual 1915 model Marine Engine - basically the Manual Model but detail had been added to enhance the appearance for Shows. The model worked very well and was good to look at, being driven by a Cricket Ball motor.

Also on display Roger had built the Model Sports Car from the illustration in Hornby Series Books "Products of Binns Road", using Blue/Gold plates and Gold strips. His secret: an Aerosol Duplicolour Ford Amber Gold Metallic from Woolworths - a most successful replication.

Jack Partridge had a clock on display - a conical pendulum clock, the combined effort of Jack and his French friend. The two axis suspension required for conic movement is obtained very neatly with the use of two pairs of pivot bolts - a construction which would be interesting to apply to the SML Harmonograph. I understand the original clock is in the Paris Museum. The model is all Meccano, no cheating, the relays being built from Meccano. Jack said he had left it running for the two weeks he was away and only seconds had been lost on time, so it's a good timekeeper. The clock, once built, can be fitted into any suitable decorative case; this one stood about 6' high.

Jack also showed a collection of French electrical parts in a box, on sale for 100 francs.

Geoff Devlin, another first-timer to the Guild, explained all the features of his Ford Transit Van adapted to carry wheel chairs, with rear tailboard lift and folding ramp with doors opening and closing correctly, and a very neat wheel chair to use in the demonstration. This is a very good model of a tricky subject.

Geoff's son, **Simon**, explained all the features of his 8-wheel Troop Carrier with three trailers, bristling with guns, searchlights, rockets, Radar etc., all from Army Multikit Sets. I must say that for an eleven year old Simon spoke clearly, confidently and with complete knowledge of his subject, Congratulations to Simon - and to Dad for good training!

Mike Bent, still with Fairground models, had a model of the Satellite, I believe based on the MM articles of a few years ago. Power used was a Marklin and a PDU. I understand more work is needed to bring the

model to its best, so hopefully in March we shall see a resplendent Fairground model.

John Bridger was next on the list. John had a Meccano Advertising Display Model. This interesting, neatly built model comprised a Scammell Show Trac based on Phil Bradley's design and a trailer van with Meccano Model Photos on three inside sides, one side opening to display a Fighter Delta-wing Aircraft, the display being well illuminated and the aircraft rotating, with a very large "Meccano" sign on the roof to put the finishing touches to an excellent model. One thing John was adamant about: there was no Letraset used on the model!

John did mention that he would be displaying his Fairground Octopus and Whip models at Stoke Mandeville Hospital in the near future.

Stephen Lacey was next with his model Shay Loco, explaining the offset boiler to counterbalance the side cylinders and drive mechanisms, and the workings of Shay, Locos in logging forests and rough tracks. Stephen still had a third bogie to complete with drive to both axles. In reply to a question Stephen quoted from his book of Shay engines, the huge tractive effort of 40,000 lbs. and the immense loads hauled.

Mike Cuff tried to raise the roof, or at least the ceiling, with his 10' high Dockside Crane, fully automatic on all movements, being driven on a 6-volt output. Mike also had his unique Marble Clock for a second showing. I for one hope to see it at future meetings. I haven't found sufficient spare time to see the movement of it. Mike explained how his inspiration had been derived from an anthology of poetry - another MMG first!

Bob Thompson, another first-timer and I hope a regular visitor, displayed the Revolving Motorcycle model to good effect. The model worked very well - a well-practised driver, I would think!

The SML Baltic Tank looked very well in re-sprayed blue strips and yellow plates, the blue paint used being Tahiti Blue from a motorists' shop. Both Bob and Les Gines experienced the same problem with fitting the boiler to main frames - shortage of space.

David Starbuck, a fourth new Member, had an unfinished Tramcar in Yellow & Silver; this looks an interesting model, some 3' in length, which we shall review more fully when it is completed. I noticed Esmond casting a critical eye over this model; no doubt David and Esmond have had a good talk on Trams. David's idea of using Scalextric track will certainly become standard!

Also on display was a very nice 4-6-2 Tank - a rebuild of Keith Cameron's in a 1928 MM.

How nice to see **Mike Brammer** on his feet again - if not for long, long enough to demonstrate his excellent 36 ton Craven Railway Breakdown Crane. The model, built to one-tenth scale, was full of detail. Stabilising jacks pull out each side front and rear, and driving wheels can be disengaged for free run towing by engine, or when part of a train. All motors are hidden so, with two pistons as the only visible working parts, the impression is that the steam engine is doing all the work. A neat panel of Forward, Off and Reverse switches controls all movements. This is a very good model, and I hope to see it again, complete with match truck and other attendant trucks - that will be a sight. During the operational demonstration the model was faultless.

Eric Baldwin, having returned from holiday the evening before, displayed his very good designing machine with a five-speed gearbox being driven by a 50 volt AC motor. This machine is well behaved and turns out very good patterns, the firm nodes being a particular feature.

Tom McCallum brought along his 1925 SML. Steam Shovel and a very good job he had made of building it. He is the proud possessor of a 7" diameter Circular Strip, and the smaller diameter greatly improves the appearance.

The SML Gantry Crane was another very neat model. Tom had used Blue/Gold Braced Girders on the crane to replace the strip bracing - a great improvement. Tom also had his very neat and shining plough engine of similar size to the MM cover for October 1978. Altogether a very good display by Tom.

Alan Partridge explained to the Members about a self-grip screwdriver he had obtained. This 3" driver holds all screws from Grub to Pivot with no problem. There is an 8" model as well. I know the Canadian Newsmag were seeking the makers and had traced them. Alan has managed to contact the UK distributors. Alan proposes to place an order if enough chaps state their requirements.

David Guillaume surprised us all by turning up once again with a Meccano mechanism adapted to his trade, this being a table on a Flanged Ring Bearing to take a Veroboard fitted with transistor sockets. A special gun is used to attach a wire to each tag, the action being to strip and wrap the wire tight enough not to allow moisture in. David explained that this gadget enabled the literally thousands of connections to be made on a prototype, without the heavy costs of a printed circuit board. Another case where Meccano steps in to assist development.

This completes a very good model tour. My apologies for any errors and omissions. Taking notes proved rather more difficult than I imagined - must be the years catching up...

The Ladies had tea all prepared, so the Chairman announced the Meeting Fee of £1 and that tea was served.

The A.G.M. followed at 5.30 p.m.

REVIEW OF THE MODELS

Some further notes for you unlucky ones who couldn't taste the delights so many Members (but

excluding your humble scribe) provided. . .

Guest, and later new Member, **Allan Fletcher** from Abingdon, brought two models. The first was a Quinto Ferris Wheel, some 2' in diameter with illuminations, pay box and the lot. Seen in action it afforded a very pleasing spectacle, with the four smaller wheels contra-rotating and forming a complex tracery of movement. His second model was a fine reproduction which most neatly captured in a relatively small scale the exact proportions of the new Humber Suspension Bridge.

Ken Wright brought his Fantasy Factory for a second welcome showing. It is always interesting to see the detail changes the experts make to their models, which produce marginal improvements in appearance and in reliability. Ken's efforts had centred on the transport trolley, now fitted with an improved motor.

An Army 4 x 4 Bedford QL, Lorry from the spanner of **Brian Edwards** will have jerked the memory of many a "squaddie". At one-tenth scale, the model had very full detailing, neatly achieved in all green parts. A contrasting companion to the same scale was a 1902 12 hp Daimler Landaulette, again with Brian's eye for every detail.

An elegant Showman's Road Locomotive in immaculate Maroon and Black from the brush of **Dennis Perkins** made what was for all a most welcome second appearance. The only thing one could find missing was a whiff of steam!

Bob Faulkner celebrated his return to health with an "Action Pack" racing car of '83 vintage - a nice model to see.

Huibert van Wijngaarden had contrived a business visit to the UK which nicely fitted in with the Meeting date, and was able to bring with him some of the parts of his crane, described in MMGG of March 1984. What we saw confirmed that his crane was some Supermodel!

Geoffrey Wilson brought two models from the MM - a Steam Roadster powered by the Meccano/Malins steam engine, and a windmill. In both models Geoffrey has succeeded in adding details which greatly improved the realism.

Wilf Bolland had made two models from the '28 Manual - No.4 Outfit. The first was the Steam Shovel, incorporating the Digger Bucket; the second the Steam Winch. I have felt for a long time that these models were definitely amongst the best Outfit models of any era, and to see Wilf's re-creations certainly confirmed my view.

Roderick Rich has now completed his Scammell Tractor/Trailer set; at a scale of one tenth it stands on its 38 road wheels an incredible 10'6" of all his own work.

A splendid 1916 vintage tractor in Nickel and powered by an electric motor of the same date was offered by **John Godfrey**. The efficacy of these early models from what now seems such a restricted range of parts serves to remind us that simplification is a quality which is sometimes harder to achieve than complexity. . .

HUMPHREY.

36th Guild Meeting – 30th March 1985

Ken Wright, standing in for Roger who sent apologies for his absence due to pressure of business, called for hush! punctually at three o'clock, and started off a full and fascinating hour of talks on the various models. Ken asked Members' permission for Mike Walker to take a video recording to be sent to Australia; this being readily granted, the tour commenced.

First to face the bowling was **Ernie Chandler**, who scored five: he showed his version of Bill Sangster's (of British Columbia) Meccanograph. The fixed designing table is based on a 167, which gives very uniform rotation, and the number of teeth provides a drive with very little backlash. The phase of the table is altered simply by advancing the upper race by one or more teeth. The pen carried on a simple lever-operated slide, is attached to a coupling arm joining crownheads on either side of the table. One of these adjusts for throw, the other for phase. Various gear ratios are provided for the three movements: the points of attachment of pen and both crownheads to the coupling arm can be varied. All told, Ernie claims that there are 400,000 combinations; as usual, Ernie has given us a most unusual variation on the theme.

Ernie also showed two identical twin cylinder horizontal steam engines, explaining that he had to build the second so as to be able to produce a parts list! He also had a replication of Manducca's Seaplane Recovery Crane (used to hoist seaplanes aboard again after launching by catapult). A very specialised dog-leg jib characterises these cranes. He had also defied superstition by retaining his Christmas decorations well past Twelfth Night, and showed his Meccano tree, laden with accessory parts which would have done justice to the pre-war Dealers' Display Cabinet.

Our President, **Esmond Roden** was next with the '38/'51 No.9.13 Manual tramcar. Esmond had then gone on to super detail the model, adding seats, rainstrips and all the little touches which make for a very high degree of realism. He also brought along a No.6.13 Manual of '56 Tipping Lorry. However this model, though retaining the typical Bedford lines, had been much improved, and had Ackermann steering and remote control.

Next to bat was **Ken Wright**, who showed his 9.13 Tramcar. In very pristine Blue/Gold, it afforded a most interesting contrast with Esmond's model (in Red/Green). To my eye, the Red/Green was much more prototypical, but perhaps...? Ken had followed the building instructions most carefully (in the case of a model like this, using nearly every part in the outfit, no mean feat) whilst producing a most satisfying appearance. Out of deference to the TV camera, we then had a short commercial break, mentioning some interesting items in Whiston's list including a six-way solder lug and a double-pole micro-switch.

Simon Devlin showed a neatly-executed No.7 Outfit Cargo Plane (knowledgably identified from the floor as a "Beverley"), whose two neat engines he had motorised. He explained further that the original model was nose-heavy and had had to be weighted to stand correctly!

Father **Geoff Devlin** followed with a static model to one eighth scale of a Caterpillar D9L 'dozer. The prototype, faithfully modelled by Geoff, was a 57 ton monster, with the drive sprockets to the tracks set high above the ground, avoiding mud in the teeth, and with the driver's seat set at an angle to the centre line to afford a clear view of the blade.

Terry Pettitt showed a freelance farm tractor of very typical 50's style. A PDU drives a three-speed forward and reverse gearbox through a single plate clutch. The drive then passed via a 2-speed transfer box to a spur differential, from which the drive is taken to the hind wheels (which are mounted on a dead axle) via a 3:1 hub reduction. A further longitudinal shaft drives the radiator fan; at the rear hitch it emerges as the P.T.O. shaft. A friction drive from this shaft also provides, through a friction reverse, the power to the implement linkage. The front axle has a central pivot to give three-point suspension. The whole was most thoughtfully modelled from radiator grille to driver's seat, and the colour scheme of Silver/Red entirely right.

Robin Schoolar had a freelance WW2 Half-Track - he claims from badly-remembered pictures in library books. Having seen the real thing, I think his memory is 100A1. A scale of about 1" to 1' gave a nice size with plastic tracks; the finish French Army Green - which Robin says is just darker than Liverpool. Whilst he was explaining the construction of the transmission the model leapt to life and took off across the table! Then the mystery was revealed, and the MMG had had its very own radio-controlled model. Although only two-channel radio is fitted, the control is excellent for a model which moves at a realistic speed. Robin explained that he had fitted headlights and driven it round the front garden after dark. I wonder how many of his neighbours have signed the pledge...!

Mike Cotterill followed with his fine twin cylinder Beam Pumping Engine. He had taken a set of drawings published by the Kew Engine Museum of a smaller engine: this made a most appealing model, at a level which allowed nice detail without fussiness. Nice touches were the box girder section $1\frac{1}{2}" \times 1\frac{1}{2}"$ made from girders bolted together, and the finials on the columns formed by cone pulleys. The model was driven via the centrifugal governor drive from a mains motor. Beside the engine was a fine Lancashire boiler, replete with detail and fittings and based on one at the Papplewick Pumping Station. After showing the details of the model Mike spoke about the prototypes and the various problems overcome by their builders.

Bob Ford's truly massive Union Pacific RR "Big Boy" Locomotive took up nearly half the length of the room. At a scale of 1/12 it was a full 11'0" over buffers, and immaculate in Yellow/Silver. The loco, Bob told us, was one of a class of 25 built by Alco in 41-44 with a loaded weight of 540 tons and, with a tractive effort at 85% BP of nearly 60.5 tons, were designed to pull freight trains of 5360 tons over a line with a ruling

grade of 1 in 122, at speeds up to 68 mph. Bob had shown the model at Henley and had met former Driver, John Rollins of California, there, and learned what it was like to drive one. The loco carried, additionally to driver and fireman, the Train Inspector and a fitter. Unlike some, Bob had taken advantage of the articulation of the loco to allow it to split into four more manageable parts. I hope Bob will keep the model a while longer; I would like another opportunity, and I am sure that others will too!

Alan Scargill showed his twin-cylinder engine and his dockside crane from an MM of 1969. The tall jib was counterbalanced by parallelogram, with level luffing. Fitted with main and auxiliary hoists, the model also demonstrated its ability to luff, slew and, to the delight of all present, TRAVEL!

John Stephenson had re-created Eric Jenkins's Collis Crane Platform Truck from photos in the MM: he had incorporated Blue/Gold chequer plates which added to the realism, and fitted a worm driven slewing drive, primarily to prevent the jib waving about. The modifications were very neat and enhanced the effect. He also showed a demonstration model of Matthew Murray's Straight-Line Motion (mounted in a framework of a part.no.236 13" x 5 1/2" flanged plates). This mechanism was one of many seeking to overcome the patenting of connecting rod and crank which caused watt to invent his sun-and-planet gear. He also showed the new French motor, together with the possibilities of meshing 13 & 57 and 13 & 133 gears in its non-modular holes.

John Bridger pulled on with his Cyclone Twist again. Since its last appearance John has added the platform from which the punters mount. John explained that rides earn their money when they are standing, this being the time when the fares are collected! His friend and the owner of the prototype had explained that due to the easier loading and greater acceleration and deceleration of the later version, he got three loads in the same time as two on the older machine. A very substantial part of the platform is arranged to hinge to the chassis on which the ride travels, and this contributes greatly to the speed with which the ride is fitted up and pulled down - making the machine an even better earner.

Model Report

Many other models were on show, and their constructors willing to put them through their paces.

Brian Edwards had a fine 1" scale AEC trolleybus, powered by a PDU. The prototype was one of the earlier models of 1931 vintage, and Brian had the true outline faithfully captured. An interesting feature was the provision of the trolley wires in the form of axle rods, which solved the nasty problems of tension and instability at a stroke.

Also on the road was **Dorian Beard's** part complete articulated tractor and gooseneck trailer. Axles, steering and transmission were in place, and when we see it finished it bodes well to be a really massive and satisfying construction. I deduced an adjacent mineral funicular with a neat tipping gear as Dorian's work also; I hope we shall see this fully motorised, and it will then become a super "shop-window" model.

John Gilbert has taken to double-size imperforate Meccano and showed a crane jib he had constructed as a first year Stress Analyst's project, the requirement being to lift a 3kN weight over a 50cm high by 50cm wide wall. (For the non-metricians, my guessing stick makes this 650lbs x 20" x 20"). He had then, very properly in my view, tested it to destruction!

Eric Baldwin had another twin cylinder steam engine; the original I guess to have been a mine winding engine. Fitted with Stephenson link motion, the gear lever was connected by a concealed link to the hidden PDU powering the engine. A very nice touch was the provision of curved spokes to the flywheel.

Mike Edkins had a fine wimshurst machine to Noel ta'Bois' design, and also, from the 1918 Manual, a railway service crane in authentic period nickel. Although simple, the model had great period charm.

John Fuller had come South with a truly splendid Toplis level luffing crane. The features were not, in principle, far different from SML 37, but the execution was pure Fuller, and for neatness and ingenuity it would be hard to better. A modern design tower of closed box design enclosed the central mast of the superstructure, which was supported at its base by a thrust bearing and at the base of the cab by a journal. The "works" were compactly enclosed in a neat case, with a dummy cab mounted forward; however the luff and hoist motions were controlled by sliding strips which formed part of the structure. The jib was composed of H girders with a double web, the whole being made from narrow strips and long bolts, the result a very sturdy, light and uncluttered structure which was a pleasure to behold. The crane hook was on twin falls from two hoist drums operating at slightly differing speeds. Operated both in the same sense, they gave fast; with one stopped, a half speed; with opposite sense, an inching movement. Further nice touches were tubular enclosures on the drives to the bogies and a Magic motor powered lift to the upper platform for the driver and for maintenance supplies.

It was good to see **Les Gines** back in working order, and he brought his multiple locos back for their second innings. There was more than one finger on the button making the wheels go round! Les modestly asks me to mention that the idea of using multi-purpose gears as wheel spokes belongs to Pepe Ferretti, which I willingly do with a bow to both gentlemen.

Dennis Perkins showed an immaculately detailed and turned-out 3/4" scale model of an American loco of 1901 on 2' gauge. Construction and colour scheme of Black/Silver/Red was all pure Meccano; even the spark arrester was from two Steam Engine filler funnels placed mouth to mouth and painted black. The drawings had been lent to him by John Stephenson who, Dennis tells us, is currently building a 5" gauge live steamer.

Tom McCallum showed two early '29-'34 Dark Red/Green boxed outfits, together with an SML 1 Motor Chassis, a travelling Gantry Crane and a Paddle Steamer, all in pristine vintage colours. How lovely they all were! You young 'uns have missed something, but perhaps you can get an inkling from seeing an exhibit like this.

Some other models were obviously well on the way to high achievement: **John Dawson** had an E15 powered chassis under construction, fitted with dummy hydrolastic suspension; while

Mike Cuff also showed a heavy chassis with swing-link suspension on heavy-duty MW springs.

Finally, a special tribute to that ingenious and prolific modeller A. Nonny Mouse, who had scattered around the hall many a delightful model. In some cases he had left a clue; in others your faithful scribe can no more than record what was on view.

Even if J.B. has cornered all the "Letraset", there is always "Meccanorma" - a very similar and better-named product!

A. N. Other showed a collection of near-Simplicity models, with an excellent and realistic lorry-mounted mixer based on a 3.5" gear ring, whilst **Walter Plinge** had a most attractive model of a Fowler showman's loco.

37th Guild meeting – 5th October 1985

Geographically and happily the Model Tour commenced with the display mounted by new Member **Harry Jones**. He first showed a delightful model bureau in wood; the grace and craftsmanship of this important piece left all amazed, but by the right trick no less than six secret compartments beneath the fall were revealed!

Harry also showed us a collection of 1929 period Vertical Boiler Meccano Steam Engines. One of these was on a brass engine-bed instead of the usual painted steel, and a knowledgeable Meccano historian was seen muttering "Must have got his hands on a prototype". All was, however, revealed: Harry explained that he had MADE all three, and also a fourth engine at half-size. Anyone with a source of $\frac{5}{64}$ " BSW bolts?

Finally he showed an approx. three-quarter inch scale Showman's Road Locomotive of exact proportion and nice detail. Thank you, Harry; we shall certainly look forward to your next!

Phil Ashworth followed with his Magic Tramway from Stoneleigh, together with the tinsplate toy which had inspired it. For those who have not seen it, a length of straight track is spanned in the centre by a tram-shed; the double-deck tram runs up to the shed and disappears inside to emerge a moment later at the other end as a single-decker! The tram reaches the end of the track, reverses automatically and repeats the cycle in reverse. Phil explained the way he had arranged a trigger to retain the upper deck, which runs on concealed wheels on the roof of the lower saloon. A splendid moving display model, with an intriguing mystery action, it was alike fascinating to the sightseer at Stoneleigh and the aficionado at Alcester. Phil also showed the programmer controlling the sequence and, as an alternative, a very neat working driver's drum type controller, which could be switched into circuit for manual control.

David Barratt showed his reproduction of the October '63 MM plaiting machine smoothly turning out yards of 3-strand non-twist plait. He had avoided the mutilation of Windmill Sails; nonetheless the model was quietly plaiting away for the afternoon. He explained that critical adjustment of the 3-spoked bobbin was essential to smooth operation, due to the limited play in the Slide Pieces on which the bobbins are mounted. This he had achieved neatly and economically by using a 3-way Rod Connector as an exact jig for the 120 degrees required.

Mike Cotterill displayed his triple cylinder steam rolling mill engine, modelled from the 1905 engine formerly in Doncaster locomotive works and now in the Sheffield Industrial Museum. Although he had only a postcard and his own sketches to work from, he has produced a most striking model. Mike explained that the mill had to be very finely controlled, and could be reversed in two seconds. He had achieved the same sensitivity by driving the model from two E20R's powering a differential through differing ratios. He was able to point out every feature of the engine faithfully reproduced, including the Joy valve gear, lubricators, big ends, and crankshaft in neat journals. The final drive was to a compound gear made from Large Toothed Quadrants, and the whole a pleasure to watch in action.

Mike also showed (having become the proud possessor of some MW Large-toothed Rack Strips) a Falling Head Clock, in which the entire mechanism travels down a column faced with the rack, the downward movement of the head providing the motive power.

Brian Edwards' AEC 6-wheeler trolley bus of 1931 vintage made a welcome second appearance, but he had also brought a 1" scale model of the Scammell Mechanical Horse and Trailer which was such a familiar sight in the old LM Goods Yards of pre-war. This must have been one of the first Fifth (? Fourth) Wheel Couplings ever and the device must certainly have proved itself. Brian showed his model to very good effect, and one immediately said "Got it bang to rights!"

Bob Thompson showed his Double Deck Bus - starting from the 10.5 leaflet, he had added floors and seats. He had made admirable use of Red Flexible Plates, outlined with silver strips giving a most pleasing livery. The seats "upholstered" in Blue/Gold chequer looked good enough to sit on! He also showed the Binns Road Model, Room's Big Wheel, as described in the October '65 MM - a most attractive model and indeed Bob told us that two of these were built for dealers to every one of all other models.

Nigel Almond showed a dockside crane, the prototype of which he had seen on a holiday in Guernsey, I look forward to seeing further models from him.

Simon Devlin showed his model of a Naval Patrol Launch. It boasted a formidable armament, but the lines of the boat were most realistically reproduced.

These two youngsters had also collaborated in producing the vehicles and armament of an Army Base, including an armoured Scout Car, a medium tank, mobile crane truck and field gun, together with a road barrier and a most ingeniously reproduced Pontoon Bridge. Circumstances do not often permit joint ventures like this one, but the interest of the display will get everyone thinking...

Les Gines showed us the roundabout which had won him First Prize at Henley in the 1/4 Competition (every part except Nuts & Bolts had to end with the figure 1 or 4). Les confessed to some practices which could be frowned on by the utter purist; but all were agreed that an ingeniously designed, mechanically sound model had thoroughly merited its prize. Some very non-standard mechanisms were incorporated, and all congratulated Les on his achievement.

Alan Partridge showed his Matterhorn Bobsleds after Keith Cameron's design, but with considerable modification. The typically unusual Cameronian design consists of a tapered tower some 40" high, surrounded by a descending spiral track, the whole arranged much like a fairground Helter-Skelter but with

wheeled cars which are carried to the top by an endless chain. Among the ingenious modifications which Alan explained was the use of alternate links of Plastic chain and Caterpillar track, which gave very positive engagement of the cars with the transport chain.

Roderick Rich showed his Universal Horizontal Milling Machine to 1/4 full size. With the various fitments Rod has included, this fine machine will actually form complex helical surfaces (in soft materials) such as helical gears and "twisted square" sections, with a wide variation in pitch. Rod explained that the model was based on a machine in his tool-room which had been sunk during the war in Portsmouth Harbour; subsequently salvaged and rebuilt, it was still turning out precision work today. The drive to the spindle is taken via two four-speed gearboxes giving a choice of 16 ratios; further power feeds are taken to the knee and table traverse and optionally to the dividing head. A splendid piece of precision in prototype and in model.

Jack Partridge showed a Bulle electric clock in which he had incorporated the ideas of Keith Cameron and Georges Gombert. The half-second pendulum is driven by an electro-magnet powered by a 1.5 volt dry cell. When the amplitude of the pendulum has decreased, a trip mechanism makes a circuit and the electro-magnet is energised for the next downward swing. Jack has made some modifications which make the critical adjustment of the contact easy - without the use of non-Meccano parts. A very neat construction, which keeps accurate time.

Charles Catt showed some parts of a mammoth Bucket Wheel Excavator he is constructing. He had obtained some excellent literature from the German manufacturer. The machine is one of eleven operating in a West German open-cast coal mine; to reach the seam it is necessary to strip up to 1000 feet of overburden. The undercarriage is on three bogies, each with twin caterpillar tracks, the superstructure will be carried on a roller race, with a massive boom which will be, Charles told us, nearly 10 feet long. Some idea of the size of the prototype could be gained from the bucket wheel which he showed: the buckets in the model were some 1.5" x 1.5" x 2"; the actual buckets will each hold a Land-Rover!

Roger Wallis showed some H/Dublo he had just acquired, still in original boxes. The models were in pristine condition; from the expressions on the faces of those attending one wonders if anyone is going to be tempted to models-off-the-peg?! His next exhibit was a mini-skeleton clock, driven by a No.1 Clockwork Motor. Amongst the interesting features which he explained were the construction of the escapement, which used angle brackets ingeniously mounted on a 1.5" corner bracket's hypotenuse. In order to achieve a perfect beat, Roger had found it necessary to ease the holes in the bracket slightly with a file.

He also showed a Longcase Clock (Grandfather) after the BNL/MM design; but he explained, and rapidly demonstrated, the simple but effective modification he had introduced to make it easily transportable. Each section - base, trunk and head - mates with the next by fitting onto Threaded Pins; thus the whole is easily transportable by even a small car. These and other minor modifications make it not EXACTLY a 10 Set Model; but who's got a ping-pong ball in their 10 Set anyway...?

In response to energetic prompting, **Alf Reeve** obliged with a guided tour of his half-inch scale model of Stretham Old Engine in Cambridgeshire. The prototype dates from c.1830, Alf told us, and is a fine example of a single cylinder double acting Beam engine, driving a drainage scoop wheel. Alf's model, complete in an engine house which had one looking for (and finding) concealed detail, was most evocative of the parent; and it was fascinating to watch the complex compound movement of the motion work and the auxiliaries.

Varied, interesting and ingenious are the adjectives for the models on show from Members too self-effacing to speak; but the palm for originality must go to new-Member-to-be Mrs **Pat Edkins**, who despite being kept on short commons by husband Mike had used her spartan allowance of parts to incredible effect in creating... a washing line with an assortment of apparel fashioned with imagination from standard parts! Spring clips even scored as clothes pegs!

Billed as the beginnings of an astronomical clock, her husband **Mike** showed the basic solar and sidereal trains of this timepiece. Sidereal time (measured by Earth's rotation relative to the stars) differs from Solar time (relative to the sun) by approximately four seconds a day. Mike achieves this conversion with an error of 1 x 10 sec/day. We shall all be watching progress!

David Starbuck had two models on show - a neat freelance tramcar to about 1/30 (Gauge 1 scale, which typified the urban car of the 20's, and a twin-cylinder Funicular steam power plant by Konkoly out of Ern, with very neat and pleasing proportions.

Ken Wright had recreated the 1936 No.9 Model 1 Windmill, fully working with all the external detail: a most satisfying model, the sails sweeping a steady arc whilst the fantail-spins merrily.

Mike Brammer had a most realistic Land Rover to 1/6 full size; having taken his dimensions from the prototype he had achieved exact proportions. The model is intended for eventual Radio Control. Because of the weight of construction Mike has fitted power steering to avoid overloading the RC servo. There is built-in reduction gearing in the differential case, and further hub reduction.

John Anstey's ship has certainly come in with a vengeance - another chance to view this splendid model, now nearly complete. He has taken as a starting point the 1938 No.10 Set Cargo Liner - the original being only a waterline model - and has extended it to a full hull. Although John has not entirely completed it, the model is full of interest and working detail - driven propeller, working derricks, anchor winch and davits, steering gear. With the extra detail he has added, this model would stand comparison with many shipping

companies' glass case ones; and the prototype is absolutely typical of the cargo liner of the period.

Michael Connor showed the chassis of a Stanier L.M.S. Princess Royal loco, at a scale of 14.5:1, giving a 4" gauge. This looks to be a very promising model, with many neatly-modelled details, and we all look forward to its completion.

Ernie Chandler has yet another Designing Machine: his permutations of ingenious mechanism are getting nearly as numerous as the designs themselves! Ernie credits Keith Cameron with this one, and has building instructions. All attending the Meeting will testify to the intricacy of the designs. He also showed a rebuild of the 1916 London 'bus, originally by Stuart Wilson.

An immaculate 1920's vertical boilered Steam Lorry, incorporating the contemporary Steam Engine, was **John Godfrey's** offering. Had there been at the time more models of this calibre using the engine it would, I am sure, have had much better sales - simple, sound yet realistic are the adjectives.

John Fuller showed another crane masterpiece – a thoroughly modern freelance Hammerhead crane in pristine Red/Green, standing 3' high and with a 3' boom. John continues to show his mastery of closed construction; the boom is built with a 2.5" equilateral section, fully plated. Support for the boom is by twin tubes in compression, carried at about a 30 degree angle back to the superstructure. Swivelling follows Continental practice, with a journal at the top of the tower formed by a 6" pulley centred in 7.5" circular strips by 1" pulleys with rubber rings, whilst thrust is taken at a lower level by a ball bearing. The main and auxiliary hoists have laying gear on the drums which keeps the ropes evenly laid and engagement of the drive automatically releases an external contracting brake. John says the model is not yet complete; please put screwdriver down a moment, John, and let us have a Fuller description than space allows here!

Terry Pettitt showed a fine trio of vehicles – a welcome return of his Tractor shown at the last meeting, a Motor Cycle Combination, strongly Brough Superior of the late 1920's. Terry had used the basic Vee Twin cylinder engine which he had fitted to his 1929 Morgan three-wheeler, thus following the prototype (both Brough and Morgan used the J.A.P. 1000cc Vee engine!) The "chair" hitched to the machine was to the sporty "bullet" shape, and this was very neatly achieved using triangular flexible plates, a feat which calls for clever design and careful execution, which he certainly had achieved. Finally, he also showed a very daintily modelled single deck Leyland 'bus of the same vintage, although to a smaller scale.

Mike Cuff brought his Builders' Tower Crane, already shown at Stoneleigh. A square tower some 7' high supports the boom and counterpoise. The operation of this crane is fascinating: it is controlled from a fully automatic unit, which moves the crane through an elaborate sequence of movements.

38th Guild Meeting – 29th March 1986

A buzzing both of excited Members and of motors bode well for happy hours to be spent admiring the many models on display. Punctually at a quarter to three, Chairman Roger called the Meeting to order, invited our guests to identify themselves and then started the Tour with **Ernie Chandler** in the Red/Green corner.

Largest of his several models was a re-creation of Peter Matthews' LGOC "Old Bill" Omnibus - a prototype too well known to need introduction - to which he had added a motor (hidden in the engine casing), complete with 3 speed crash gear-box, single plate clutch, transmission brake and rear axle detail. The model is a splendid achievement; and the proportion and detail work beautifully executed, as one could judge from the Airfix model Ern also showed alongside.

By contrast, he had also a rebuild of the 1916 Stuart Wilson version; and a No.9 Manual model, together with a greatly improved version by the addition of a few extra parts and obviously much thought. He also showed a rebuild of SML 22.

John Bridger pulled on next with a Cameron Meccanograph (MMGG 10 – it appears we have a mole at work?). The Decaperm motor was more neatly housed in the body of the model; he had had some difficulty in resolving some anomalies between the script and the illustrations - sure sign that development continues.

Jack Partridge had also built a SML 22 Road Locomotive, and pointed out some of the difficulties encountered in following the instructions from Binns Road - in particular the width of the long side plate motor being greater than the width of the firebox/tender assembly, necessitating unscheduled packing out with washers.

Pat Edkins showed a very pleasing model of the Eddystone Lighthouse as rebuilt in 1882, to approx. 1/80 f.s. The base of the model was most attractively finished in blue metallised foil, with the blown spume represented by teased-out cotton wool; and there was fine detail in the woven MO representing the lenses in the lamp-house and the woven wirework above. **Mike** showed a very neat 3-roll Flexible Plate bending roll, which had helped Pat produce the characteristic parabolic cone shape.

Mike's Bending Rolls had certainly proved themselves in his wife's model; and they were novel in that they could roll up to 2.5" wide, dealing easily with flexible plates. The rolls themselves were from 1/4" diameter light alloy; but to provide sufficient friction without damaging paintwork they had been covered in 1/4" bore PVC tubing - a neat and novel solution. He also showed the Lunar dial unit from the Astronomical Clock he is constructing. Inspection of this unit at leisure revealed the intricacy of the gearing required to give the accuracy required. I noticed a differential used as a summing device which contained within the cage not only some non-standard meshings but even a worm-gear to obtain the ratio.

Phil Ashworth has constructed a 20-legged Bandit! This remarkable device is a five-horse race in which a 2p stake on a selected horse will deliver a packet of sweets for a win. Each horse is drawn along the 24" track by a crane motor; to give a degree of randomness the motors are stopped and started through two switches in series operated by cams. The sequence is operated by a programmer with four steps - Run race: deliver prize: return horses: pause. Completion of each step allows the programmer to step to the next operation. The cams in the pseudo-randomiser were most interestingly constructed from a bundle of rods held by driving bands on the rims of a pair of 1 1/8" Flanged Wheels, the lobes being the "legs" of spring clips. Having demonstrated the machine in operation, Phil gave us all a lesson in neat modular construction: each part, programmer, randomiser and coin mechanism, detached readily, and allowed its operation to be seen. If he can get the odds right, this one will make a fortune at Stoneleigh!!

Next into the arena was "Sir Haydn" - a beautifully scaled and finished model of Tallylyn loco No.3 to 1 3/8" scale from the screwdriver of **Ken Wright** (the prototype was one of two ex Coriss Railway locos bought by the T.R. in 1951 from B.R. for £25 each! She was built in 1878 as a 0-4-0, but later had a pony truck added). A magnificent achievement by Ken, who had captured the proportions beautifully. It seems now to be mandatory for models to be shown to move under their own power; Ken had realised this, and had burnt not only midnight oil but two PDU's before achieving the desired result. Only one feature was not incorporated: in her early days on the T.R. Sir Haydn developed a technique of derailing on the track - which was at that time two lines of rust held together with turf - but Ken's model was of perfect decorum.

Who says Meccano is not up-to-date? Certainly not **Mike Cuff**, who showed an as yet incomplete model of MAGLEV, the wheel-less tramcar system opened last year and linking Birmingham Unintentional station with the Airport. He has developed a mechanism which simulates the rise to the magnetic hover position, and a trackside door-sliding gear unit, there being insufficient space within the model car itself. This certainly will be a most fascinating model when complete - and Mike intends to programme its operation from his Spectrum computer.

Mike Cotterill had a finely detailed and beautifully finished Red/Green model of a 1920's Garrett overtype twin cylinder steam engine, to a scale of 1.5", the boiler being built on 7.5" circular strips. The model carried a well-modelled dynamo and field exciter, driven from the crankshaft by gears formed from plastic chain, and boasted full steam fittings, mechanical lubricators etc. These engines were, as Mike reminded us, the final flowering of the reciprocating steam engine, and some of the principles of their construction are still up-to-date - unit construction, easy access, centralised lubrication are all featured in

today's power plants. Mike freely acknowledged the helpfulness of the London Science Museum, who had provided photographs and photocopies of material in their possession.

Les Gines returned with his Henley Roundabout; freed of restriction on parts he has now incorporated hand wheel drive as an encouragement to viewer participation. This point is one which will always ensure a good crowd at any public showing for anyone who does it. He also showed a modified twin-cylinder Steam Engine (after SML 32), neatly incorporating the boiler from his Baltic Tank.

Geoff Devlin showed a fine NCK Andes crane to 1/8 full size from a prototype he had photographed working near his home. Some size! The boom is 8' long. The model is mounted on tracks made from the conveyor used by Cadburys on the line for 1lb boxes of Roses chocolates, and which, mounted on sprockets from 4" Circular Plates, scale admirably. A very true-to-life model which should give great enjoyment in operation.

Simon showed a nice trilogy of models: a Dune Buggy chassis in course of construction, powered by an E020 Cricket Ball motor, a very neatly executed half-track Military Transporter, and an SD II Tank, all very workmanlike and thoughtfully put together.

Their guest, **Nigel Almond**, showed a simple but effective Tower Crane, a motorised Dragster from the 2000 Set, a windmill in 1911 Vintage Nickel, and a very detailed RNLI Hydrofoil Lifeboat, together with launching trolley and tractor. The Lifeboat crammed with detail was an excellent representation of a complex shape; the Tractor, although simpler, looking exactly right.

Mike Brammer showed a miniature Beam Engine which, despite a base size of 8.5" x 3.5", included parallel motion, valve gear, governor etc., to a level of detail usually found in much larger models. Mike had made special efforts to make the model quiet-running, incorporating belt rather than gear drive, and an electronic "Black Box" giving an inertia effect on start and stop. He also showed an ingenious variation on the Std. Mech. Free-wheel (SM 92 - USA Edn.) which I hope we shall see in MMGG shortly.

He also showed an 8-strand Braiding Machine (? for making dolls-house sash cord) of considerable ingenuity. Eight 2.5" gears are set on a 6.5" p.c.d. meshing together, and eight bobbins are moved between them by synchronised picking arms. Even lay of the finished cord is achieved by a pinch-wheel take-up which feeds the cord to a belt-driven drum. Every crane-builder should have one for non-twist ropes.

Last, but by no means least, was **Roger Wallis** with a swinging collection of Meccano Clocks - five of them! No.1 was the elegant Skeleton Clock, already shown at the Autumn Meeting. A No.1 Motor gives over 2M hours running. Next came a synchronous clock from MM Dec.'54, with an 8-pole motor. Because of its mass the clock is clearly audible. Roger also showed his Granddaughter Clock, as published in MMQ, for the No.9 Set and a 24-hour run on the No.1 Motor.

Finally, he showed two and a half versions of the No.9 Outfit Clock, and challenged those present to do better than these.

His models comprised the 30's Modern Mantel Clock of the Blue/Gold 9 Outfit, and also the half-Grandfather of the post-'54 era. He explained the malpractices of the Outfit models. He completed a most interesting display with some vintage 3-rail Dublo, and also called attention to an excellent starting point for a model - a Matchbox Foden Steam Lorry now on sale in Woolworths.

"Free Roaming" was then the order of the day for those who could resist the call of nosh and natter. And food for thought there was...

John Godfrey had mastered the complexities of the SM 61 (USA Edn.) Planetary Gear-Box, and to be able to study this in 3-D made the intricacy of its construction much clearer.

Dennis Perkins had recreated in vintage Nickel the 1923 Manual No.724 (later SML 25) Hydraulic Crane, but had incorporated a built-up roller race using hub discs - a part not available when the model was originally designed. An unusual model to meet built up. Thank you, Dennis.

Harry Jones had obviously easily solved the complexities of the SML 1A Motor Chassis, which stood proudly on the bench beside his magnificent Shay Locomotive on 2.5" gauge. Immaculate in Silver & yellow, the model was neatly detailed even down to the buckeye couplings. Each of the two geared and sprung bogies was powered by an EI5R motor - the whole a joy to see.

David Goodman showed a mantel clock with synchronous drive and count wheel strike from the pages of the MM - an elegant design,

Terry Pettitt showed a very evocative model of a Thornecroft Lightweight Petrol Tanker of the 20's, which he had scaled up from a Yesteryear miniature. Finished in Red/Green, one said "That's Shell - that was!". Making a welcome return he also showed his Motorcycle and Sidecar.

Alf Reeve has, he says, "been turning out his attic". From thence he had assembled "from an awful lot of Aero parts" a Handley Page HPU2 Imperial Airways airliner of the early 30's - a N-engine Seagull wing biplane — and a fine model it made. He also had a single-engine biplane with strong ties with the SE5 Sopwith Camel, and also thoughtfully provided from the 1940 Army Outfits an AA troop with 4.5 gun and 3-tonner to enforce military discipline.

Clearly steam runs in the **Cotterill** family veins. **Diane** showed a trim 0-4-0 Loco and Tender, which looked just so.

Eric Baldwin brought his Meccanograph for a second showing. A feature of the machine is gearing giving 2, 3, 4, 6 and 8 nodes to the designs.

Roderick Rich has clearly some surprise in the making for us; he showed two components - a most compact 6-speed and reverse gear-box with proper gate change, and a bogie for a multi-axle trailer with spring steer, swivel, tilt and caster actions.

Alan Partridge's Matterhorn Bobsleds were again careering vertiginously around their spiral path - another Stoneleigh crowd-puller!

Esmond Roden showed a Co-Co Diesel Locomotive to his usual high standard. Powered in one bogie by an E20R motor, the model runs on 3 3/4" gauge track and will haul the no.10 Outfit Breakdown Crane which he is constructing and of which he showed the match truck.

Bob Ford showed a truly excellent Burrell Showman's Scenic Road Locomotive to 1.5" scale. 34" long, the model weighs in at 35 lbs. Front wheels are 5.5" diameter on 2.5" Curved Strips, hind 9.5" diameter on 4". He had captured particularly well the contour of the crane turret, attractively lineal in Silver Strips on Yellow Flexible Plates.

Guest **Peter Knowles** had a splendid eye-catcher in a High-wire Unicyclist from a design by Keith Cameron, but with some modification to the cyclist and the mechanism. In this model, an Unicyclist pedals along a downward-sloping high wire. The wire is then raised at one end, reversing the slope, and the cyclist returns to his point of departure.

Brian Edwards showed a 1" scale model of the Le Mans 4.5 litre blown Bentley. By using all-Green parts he had created the atmosphere of the BRG prototype; and mechanical detail was there also in the M speed box and differential axle.

New Member **Richard Greenwood** and his son had brought the Hammerhead Crane from the No.10 Manual - and despite the limitations, what a fine model it is.

Finally, congratulations to the authors of two displays - too shrinking to be named - who certainly don't need any bushel under which to hide their lights. One group of models (Bob Thompson) included a trim twin-seater pre-war car, a '78 style dumper truck, a motor breakdown crane in early Nickel and a nearly complete 2-speed twin cylinder Burrell's Showman's Loco, nicely detailed, which showed the progress in modelling when compared with the SML 22's on show. The other fine exhibit was a LSWR Steam-Motor Inspection Saloon to approx. 10mm scale, unusual in the prototype, and to my recollection unique in the model. Please overcome your modesty and give John Bridger an article for MMGG!

H U M P H R E Y.

39th Guild Meeting – 4th October 1986

Our indefatigable Ern had been at it again for his 39th consecutive meeting. The No.9 Manual Lorries (with variations) from the last meeting allowed one to see again the interesting permutations on the basic design. Ernie also demonstrated his Konkoly Supergraph from the Canadian Newsletter. The 'graph has x and y axes drives to the pen, and an oscillating and revolving table giving a total of six variable drives - the combinations are such that he confesses not to have tried them all, though he has motorised the model to save the tea-mashing arm. He also showed a delightful single-cylinder vertical boilered steam plant, the basic layout, looking very like the pre-WW1 Marklin engine sold by Meccano - or was it a super detailed model of that inelegant and over-sized Erector model of the late 20's?

Next to the table came **John Bridger** with a splendid "Nellie" locomotive from Roland Emmett's Far Tottering and Oyster Creek Railway. Using parts in pristine and carefully-chosen colours, and prodigious quantities of invisible Letraset, the sweet reciprocation and gently rolling gait of the model delighted the eye. John recalled how a visitor to Henley had wanted to know how the impossibly thin boiler had accommodated more than one fire tube! John pointed out that he had not entirely broken with the tober. Nellie was one of two 15" gauge locos built for the Festival of Britain funfair in Battersea Park in 1951.

Pat Edkins was cajoled into leading us up her garden, and a colourful and appetising display met the eye! In the shadow of a silver birch (11.5" axle rod and numerous healds) grew flowers and veg in profusion, and the tools to maintain it too! What an imagination!

Les Gines was hot-foot from Henley with a fantastic array of simple models from the starter outfits of Esmond Roden and Neville Read. He had carried off the prize for both outfits - a truly fine feat. Having seen his models one can understand why; the economy of modelling whilst retaining appearance was most striking. A delightful ferry boat from Esmond's set, and a twin-engine bomber (identified by the knowing as a Vickers Vimy of 1917 vintage) were the prize winners, but Les had eleven more from Esmond and two from Neville. The range was enormous - racing car, drill press, destroyer, working railway signal and drop hammer all figured.

David Goodman showed his now complete mantel clock - a most compact mechanism with a pleasant strike. The going train is driven by an 8-pole synchronous motor running on 16 volts AC. A modification of Ron Fail's count-wheel mechanism provides the strike. David pointed out the limited current-breaking capacity of the Meccano Elektrikit commutator when used with the inductive load of a motor - a problem he had overcome by the use of a telephone relay. The strike motor is powered at 12v DC from a rectifier in the case. Also fitted are half-minute synchronising contacts to drive a projected Turret Clock.

Guest **Nigel Almond** showed a snorkel fire engine, with many neatly modelled accessories including a portable pump and a winch. Despite a lack of rigidity due to lack of parts, the outline and workings of the appliance were faithfully rendered.

Geoff and Simon Devlin showed a fine model of an interesting prototype: a Guy 6-wheeler double deck bus of 1926, based on a photo of one built by Birmingham. Apparently the original chassis proved too inflexible for the sharp turns of the City Centre, and the bus was relegated to the No.11 Outer Circle route - and to increase the radius of turn it ran only counter-clockwise.

Rod Rich brought his Universal Milling Machine for what sadly he tells us is its final appearance. Not content with powered drive to spindle, knee and slide, he has a powered drive on the slide, permitting the generation of complex helical surfaces, and a vertical head to take slot and face milling cutters.

Ken Wright continues his labours in the Pendre Uchaf shops of the Tallyllyn Railway, and is now the proud owner of no less than three of the line's steam locos. All were able to approve his serendipity in the unobtrusive use of some non-Liverpool components. Treads of driving wheels from engine-oil tins and cab spectacles cut from brass with a radio chassis punch were no less than could be expected; but for ingenuity the use of tow-ball hitch covers as steam domes would be hard to beat! Like the prototype, the permanent way has not been neglected either; the stock now runs smoothly on Hornby "Rocket" track of 3" gauge, and a further nice touch is a simple but very effective slate truck.

Bob Ford showed and described a very fine Burrell Scenic Showman's Road Loco to 1" scale, with all the intricate detail of these giants faithfully modelled, a model such as this really exposes the shortcomings of the Dealers' Display model - the results from an expert modeller in terms of proportion are immeasurably superior.

On this sustained high note the Tour concluded, and we were free to admire the many other excellent models on display.

FREE ROAMING

Terry Pettitt showed a group of excellent models - motorcycle and sidecar, 20's petrol tanker, tractor and gas engine have all been noted before] but it is always good to see models like these again. He also showed a new Aero Constructor model of a high-wing monoplane. The versatility of these parts in the right hands is truly remarkable.

Jim Gamble has recreated the Model of the Month Ticket Machine - a clever mechanism most interesting to see built up.

The horses of **Phil Ashworth** were running again; one marvelled again at the elegance of construction.

John Fuller's Hammerhead Crane made its second appearance. He now admits it as complete, though

one would have said that on its last appearance. The boom assembly is carried two-thirds up the tower on a 168 as a thrust bearing; the overturning moment at the top of the tower is taken by a journal bearing, the inner member being a 6" pulley and the rollers being 1" pulleys with tyres mounted in circular strips. The hoist controls release brakes automatically when engaged. For transport four captive bolts and two electrical connectors are undone... very necessary for a model which weighs in at 72 lbs.!

In addition to his 4.5 litre Bentley, **Mike Edwards** showed an elegant Scammell tractor of 1931 vintage - a well-remembered prototype with chain final drive to the rear wheels, and with it a molasses tanker and freelance low-loader trailer typifying the usefulness of these units which were for so long the mainstay of heavy haulage.

The Dealer's Display Motor Chassis of the 50's, together with Motor Car Constructor outfits and an early Nickel set, still with its original box, were shown by **Tom McCallum**.

A prototype automatic transmission from **Robin Schoolar** challenged the understanding of the spectator; I confess I emerged baffled and we shall have to wait in hope for publication in MMGG for an explanation! .

John Anstey had the start of what looks to become another fine model in the shape of a dumper truck chassis. Although it may not float, or be 10' 6" long, we wait with interest quickened...

A Crampton locomotive of the German Railways of c.1860 came - from the spanner of **Mike Cuff**. The large drivers of the prototype and the enormous splashers were most satisfyingly reproduced.

A GP traction engine, originally by Spanner in the 60's, and the SML38 Vertical Log Saw were shown by **Wilf Bolland**. He has modified the saw for a P.D. motor, and the traction greatly improved by twin hub discs on the hind wheels and a Binns Road flywheel.

A mechanical Horse of a different colour was the Blue/Gold Scammell from the 1935 No.7 Manual by **John Godfrey**. Definitely one of the more satisfying Outfit models of the period. John had a fine representation of a once-familiar prototype.

Dennis Perkins apologises in his notes for heretical touches in his superb Showman's Road Loco. No apology is needed for this fine model; bring it again, Den! .

Mike Edkins had an incredibly compact Crawler Crane to about 1" scale. The cabin was crammed with mechanism and a unique touch was the jib made almost entirely from 113 's, giving a most pleasing light effect without too many holes.

Last and by no means least was a monster dockside crane standing over 8' high from **Mike Brammer**. Despite its size, the two hoists, slew, luff and travel performed smoothly, driven by a single motor and controlled from twin cabs, one either side. Each winch drum had automatic braking, and the auxiliary hoist was level-luffed by Toplis gear. Mike has ingeniously arranged the travel drive shaft down the tower to be insulated and to carry the live feed to the crane motor.

HUMPHREY

40th Guild Meeting – March 1987

Because Humphrey was so busy at this time it is believed no Model Report was issued for this meeting. Here I am attempting to create a report from photographs taken on the day, and any other information available.

Tony Homden's model replicated all of the motions of a typical cargo ships gear. The runners of the two derricks are joined to a common hook and they were worked in conjunction with each other. The inboard derrick lifted the cargo out of the hold and then the outboard one pulled it across the ship until the load was over the side. Weight was transferred from one derrick to the other as the load was moved across. A pair of skilled winch men working in harmony could load or unload at speed.

Terry Pettitt showed the early stages of his Chassis for the Leyland Lion PLSC single deck bus, also a Motor Cycle & Sidecar.

John Bridger's "picturesque" model was of "NELLIE", a freelance fantasy 2-4-2 tank locomotive based on the creations of the famous Emmett cartoonist., which unknown at this time, was to win 1st prize at Skegex 1987.

Sid Beckett showed 'The Countryman' a large scale agricultural engine, made at the request of the owner of the original, and painted in the original colours!

The Joint team of **Pat and Mike Edkins** came next. Mike had brought along a model of a Sentinal steam engine to a scale of 1:14 and running on a short length of Meccano track. Pat showed her waterfall, which was built on polystyrene blocks, with the water represented by blue plastic plates, and the foam with silver strips.

Tony Knowles displayed an Edwardian Style Omnibus built from Primus, also a Steam Hammer

Ken Wright had his Tallylyn Locos.

Rod Rich had his massive heavy duty transporter Scammell built to a scale of 1:10. It consisted of a free-lance 6x6 prime mover, followed by the low level loader,

Ken Larner also had on display his excellent model of a WW1 tank, in Yellow & Zinc.

Mike Pashley had a Gottwald 1200 ton Mobile Crane. This was modelled in typical Mike Pashley fashion in red, blue and silver parts, with its rugged jacks fully extended, a boom that reached to the ceiling and carefully laced up cord that defied the eye in its many loops

David Barrett demonstrated a large Crane in Red & Green, which was at least 7ft tall.

Bob Ford showed a part completed Recovery Vehicle which is a treat to cast eyes on. The Holmes 25ton Recovery Vehicle is scaled 1"-1'. Construction details we gleaned from a Publicity Leaflet and a plastic kit model chassis.

It is believed **Alan Scargill** showed a large Crane, this is to be confirmed.

Eric Baldwin showed a Steam traction Engine in red & Green.

Les Gines showed his prize winning models from Henley 1986 plus a large Star shaped fairground wheel.

Last but not least **Ernie Chandler** brought a Large Beam Engine, from a design by Brian Rowe.

At the moment there are several models where we are unable to identify their builders. One is a Ship entitled 'The Frank Hornby' constructed in red & green. Also an Excavator (in Red, Yellow & Green) and a Van in Yellow/Zinc, finally a Steam roller in red & green with fruit machine wheels.

David Goodman was also in attendance and spotted in the crowd.

41st Guild Meeting - Saturday October 3rd 1987

Held in the Annex Buildings at the Greig Hall in Alcester, Warwicks.

I arrived at the venue about 9.45am; I was second - Rod Rich was already assembling his Low Loader. I unloaded Wander Leads, various boxes, Guild Name Board, and models, parked the VW, and John Bridger with John Godfrey arrived. The tables had been erected the previous evening; the Hall Caretaker had attended to the kitchen equipment and had filled the water boiler which was just boiling.

By midday many members had arrived and set up, the whirr of motors could be heard as models were tested out after long journeys.

The many letters etc., received by the Hon.Sec.; were pinned up for all to read, the various reports of other club meetings held in UK and overseas were laid out for all to read also the large package of reading received from Peter Matthews appertaining to T.O.Y.Museum in Johannesburg.

Clive Hine had supplied a TV set with video player so the videos of Covent Garden Exhibition held in 1985 and the video of the Royal Visit to the Meccano Section, Model Boats and Mercia Military Models, the group that occupy the Farmers Club at the Town and Country Festival. could be shown. Grateful thanks to Ken Wright who supplied the tape to get a copy from Coventry Model Boat Club who took the video assisted by a member of the Mercia Military Model Club. The tape was shown many times during the day.

Tea and biscuits were ready by 1.45pm and the assembly was called to order by the Chairman at 2.45pm. The Chairman welcomed all to the Meeting and Guests were introduced. Terry Pettitt introduced John Milton. John had several photos of cranes he had built over the years and his interests are anything mechanical. John Bridger introduced his Guests, Mike and Olwyn Hooper from the South Wales MC. My Guests, Mr Cotgrove from Solihull put in a brief appearance but sufficient to join the Guild, Mr Dodeswell from Banbury had a previous engagement which prevented him from attending.

Now to the Model Tour; I'm afraid I am not to Humphries' standard of describing models so you must bear with me. For further information you will have to ask the builder.

Simon Devlin, one of our Junior Members, started the batting order, Simons' model of a present-day Jet Fighter Plane was excellent. The fuselage and wings were shaped very well. A very good job of a difficult subject. It is very refreshing to see how these Junior Members have progressed with their building over the past few years. This model is of the Farnborough Show model on a revolving display stand.

Yours truly (**Ernie Chandler**) was next, only because I was adjacent to the previous speaker. I had a rebuild of Brian Rowe's Side Rod Engine, a neat model 14" x 10" x 12" high with a heavy Flywheel of two 5 1/2" Hub discs, 12 Wheel Discs and 5 spokes either side being 1 1/2" axles in R/S Connectors. My second model was taken from M.M. June 1959 being the Rainbow Discs. Quite an interesting model for shows.

Our worthy Chairman **Roger Wallis** was next with his 'Go Nowhere' Tramway, Two trams on a figure-of-eight track build around two Flanged Rings with a very neat crossover. Power supplied by overhead pick-up from a cable of Peco model railway track. Quite a good model for shows, this one ran faultlessly for two days at Skegness 87 and for three days at Stoneleigh 87. Special features of these Trams: two trams run alternately on figure-of-eight track powered by crane motors without cases. The track has an electrically isolated 'dead' return, each tram has a contact underneath which wipes a contact that is connected to the 'dead' return, thus completing the circuit as the tram passes, this causes the tram on the 'dead' return to move and the previous one to stop.

Number four in order being **Bob Thompson** with his rebuild of Keith Cameron's Penguin Staircase. An interesting show model but requires an eye kept on it. Bobs' all nickel single-cylinder horizontal Steam Engine was a very nice display, running very smoothly. This nickel model brought back many boyhood memories to our Senior Citizen members.

Now the Ladies turn. **Pat Edkins** has 'done it again'. A dream of a model - a Faberge Egg !!! This model based on a circle of Formed Slotted Strips, horizontal and vertical, being lined with deep mauve velvet, with exterior decor of Multipurpose gears in Plastic, yellow and plastic 1/2" pulleys. A hand-painted head miniature of Frank Hornby and a Fancy Finial completed the exterior. The Egg opened to reveal a present, a Rocking Horse from standard parts, the rockers being plain 2 1/2" curved strips. The History of the Faberge Egg was beautifully written and framed on an easel. These eggs were made around 1685 for the Czars of Russia to present to their ladies. The inspiration to build this egg came from reading the book of 'Life and Work of Karl Faberge'.

Mike Edkins brought along his two Sentinel Steam Locos. These too were dreamed from reading 'The Book of Sentinel'. The Crane Loco is self-contained and all movements are controlled by own lever. PDUs and Crane Motors are used to move these Locos. The originals were built between 1925-1929. The models are scaled 3/4" - 1'.

Les Gines was next in line with his Big Wheel, built in Red and Green. This model is based on SML 32 and a larger Binns Rd. Display model. I did notice a unique use for Loom Healds Part No. 101. These were used to hang the passenger-carrying cages from the eight supporting points of the Wheel. Les also had three models from the '50 Bolt' competition, an aircraft carrier, a low wing monoplane and a box van.

Mike Cuff sent his meeting form back with 'Weather permitting' on it: well, weather permitted and the Roller Coaster arrived, in sections, some inside the car, some on the car roof. Mike explained some of the problems with building this type of model, such as what height is required to coast the cars over the

downward run with two humps in it, the problems of cars running very free. Mike said he had spent hours running axles in bearings using Graphite powder, then the problem of a coupling between two cars - this had to rise and fall and sideways as well as pivot in both cars. All together a model full of problems, but many runs were trouble-free. Quite a challenge to build, too.

Nigel Almond, another of our Junior Members, has greatly improved his building during the past few years. His models of a Railway Breakdown Crane, Signal Gantry and a small Nickel Windmill showed great promise for the future.

Now **Mike Brammer** in his usual quiet way has produced a very neat well-built Tractor, Trailer and Cultivator. These were taken from a book of 'Power Farming' 1983. Based on a Ford/Fendt the Tractor is fitted with a 12v DC motor driving a clutch, 6 forward, 2 reverse gears, a selectable P.T.O. working three point linkage, for implements, and draw hook for trailer; the trailer can be tipped by connecting to P.T.O. like explained tractor sizes, such as, the bonnet is no higher than the rear wheels, the bonnet and cab are the same length, so there is very limited space to cram all the power units into. The rear wheels were tractor wheels, really well built and looked the part they were, a very creditable model. I hope to have a chance to have a good look at it.

Geoff Devlin had been very busy assembling a 1908 Foden Steam Bus. Taken from an old photograph and scaled 1 - 7 presented many problems resulting in a very nice model. In the accompanying write-up with the photo, it appears that this bus is a converted Foden Steam Lorry to carry the Foden Yorks Brass Band around Lancashire and Yorkshire - so it must be a one-off.

Tony Homden brought the Ships Hold for a return visit, complete with centre-pole derrick for light-heavy and heavy lift. Tony delighted us with his usual style of a professional demonstration and 'off-the-cuff' patter. Very interesting and educational. Tony explained all the errors of operating the Heavy Lift using a Hornby O Gauge Tender Engine as a 50ton load - very impressive.

Rod Rich Heavy Haulage Low Loader being 20 feet long and weighing 1 3/4cwts with 128 wheels on the trailers all steerable and height-adjustable. The two Heavy Tractors were based on a Scammell S24 and a Freelance 6 x 6. Oh yes!! I did see it move along the tables. I do not know how many parts are in the model but Rod has made them all including the Tension Chains to hold the Bridge between two close-coupled trailers. They were made from wire clothes hangers, each individual link.

A real treat now - the complete set of five narrow gauge locos of the Talyllyn Railway; a superb set of models. **Ken Wright** gave a potted history of the Talyllyn Railway, and how the engines got their names. The engines run on Hornby Rocket Track with an electrical pick-up running centrally between rails and made from OO rails. The engine Ken emphasises being No.4 and the last to be built. This engine was built in 1921 by Kerr Stuart of Stoke on Trent for the Corris Railway. It was purchased by the Talyllyn in 1951 unnamed. I understand it was named "EDWARD THOMAS" after the works manager. The scale being 1.3/8"-1ft. Ken had three replica Slate Trucks and now hopes to complete a unique Brake Van.

Now a short survey of the rest of the models on show. **Terry Pettitt** had his unique designing machine producing very interesting patterns. This model is to be written up for MMGG, so 'nuff said' The Brough Superior Motorcycle and Sidecar are very well built and really look what they are - excellent. The Gas Engine too is well up to Terry's high standard.

John Fuller travelled light after his heavy display at Stoneleigh. John brought two bogies from the magnificent Hammerhead Crane, all that remains to be dismantled. At least we were given a treat to view these two pieces of engineering, in John's words - the dimensions are 7 1/2" long x 3" wide x 4 1/2" high including the motor. The motors are Meccano 6v MO.DC. The end thrust of the worm reduction stage taken on rounded ends of axle rod so reducing the power needed to overcome this. This bogie proved very successful, two being used in the model; the 6v motors were connected in series and operated through a 12v controller. The controller needed less than 50% full movement to move the model which weighed 72lbs. or 32kg. Through various reduction gears a total reduction attained being 3000 - 1.

A very neat designing machine was nearly hidden by Photograph Albums, but I dug it out; it was the work of **Robin Schoolar** and named a 'Scribble-o-gram' Mark 3. Size 7 holes x 11 holes, power being an MO Motor using two cells. The machine draws round patterns on a stationary table; being small limits it's' pattern variation. Plans are to develop this model - could be a new sphere in Meccanographs.

John Godfrey's Steam Tipping Waggon on tinplate road wheels says its size. Taken from a 1937 No.6 outfit manual and built in immaculate Blue, Gold. John is like I am, going through old manuals for a nice model to build, and dreaming of bygone days.

Tony Knowles made the long trip from Salisbury but had to leave early to get to familiar surroundings before dark. The Clock Tony had built was based on a design by Alan Partridge, standing 5ft.high. Instructions were from the Sheffield Group Magazine. The model has a redesigned pendulum and stands on a base with a mains motor for rewinding. I believe this model includes Grimethorpe's movement.

Now to Level Luffing and **David Barrett**, whose Crane is quite an outstanding model, being freelance. The model was built from a prototype article and scaled down 1-43, using two PDUs and 3 Junior PDs. Here in David's words is a little about the crane. "The Level Luffing is achieved by taking the hoist cord back to an extra winding drum driven from the luffing drum. As the Luffing cord is paid out so the Hoist cord is pulled in. A differential is incorporated in the swivel drive to help smooth rotation of the superstructure."

Bob Ford, too, made the long trip from the South Coast including a detour to collect another member en route, so had to leave rather early. Bob's Recovery Vehicle is a treat to cast eyes on. The Holmes 25ton Recovery Vehicle is scaled 1"-1'. Construction details we gleaned from a Publicity Leaflet and a plastic kit model chassis. It is based on an American International Harvester Transtar 4300 Eagle, with 3 forward speed and one reverse gearbox, driving tandem rear axles through spur differentials. Twin Booms and Hoists are driven from a PDU and selectors are engaged for each of its movements.

All the way from the East Coast came **Mike Cotterill** with his very neat model of a Hornby 0-6-2 Tank Engine. The model has 4" driving wheels and is a simple copy of the Hornby OO Tank Engine. The model is on a Stand and the OO Tank is displayed in the Stand; a very nice model to view and different again in choice of subject. It is driven by a 20v Sideplate motor, has a Gauge of 3" and designed for 3-Rail operation.

All I can find for **John Bridger** is 1/10th Scale Showtrac now rebuilt in Red. It is a very good model and I know it takes its' rightful place with Johns' Fairground Octopus or Twist, according which Ride goes on site. No doubt we will read more of this Showtrac in a future double-M-double-G.

Eric Baldwin travelled from the Valleys of Wales to show his improved version of a Konkoly designing machine. The patterns I saw were very good. I do not have any information about this model.

Mike and Olwen Hooper too came from the Valleys to display a chassis of Mike's latest Crane, a Grove TMS 250, 25ton, self-propelled Crane. We will have to wait a while before we see the finished model. Also on show were two Tortoise, very ingenious walking movements and 50-Bolt prize-winners at Henley this year.

This concludes the MODEL REPORT.

Ernie Chandler

42nd Guild Meeting – 26th March 1988

The Saturday morning of March 26th dawned bright and sunny over the Midlands – a beautiful start to the day of the Meccano Guild Meeting. Must congratulate the BBC weather men – they got it right for us after a week of wind and rain and floods.

I arrived at the venue a little before 10am to find several early arrivals setting up models. The VW was emptied and parked, very soon the wander leads were in line with the tables and correspondence pinned to the wall for all to read.

A trip to the Hostelry for lunch and back to business.

Upwards of 40 members were awaiting the Chairman to call order at 2.45pm after the first brew.

The Chairman asked the gathering to stand in remembrance of Noel Ta'Bois, a Guild Member and a very prolific Meccanoman, who passed away earlier in the month.

The Chairman welcomed Robert Dowdeswell a new member making his first visit. I trust Robert enjoyed the meeting. Welcome to our President, active again after fracturing his leg. Welcome also to Steve Sarawyn who brought along young Bob Faulkner, a mere youngster of 78, and so to the Model Tour.

Yours truly – (**Ernie Chandler**) your scribe, started the model tour with a short description of the Swiss Chalet. This model being A Keith Cameron model of a Swiss or Christmas Chalet used as décor at Christmas time. The three rotating tables carry figures appertaining to Christmas. The tables rotate by warm air power from four candles pushing up warm air to rotate the horizontal blades above the chalet roof. The Meccano version is driven by a slow running motor and the candles are dummy but the blades are above the roof for effect. On this model wax candles in the Seasonal Vein are used on the turntables. A very nice show piece model.

Alan Partridge described a beautiful brass Epicyclic Clock protected by a Glass Case, 13" x 9" x 10" assembled. Alan had brought the clock in Kit form and assembled it. The reasoning behind showing the Clock was a challenge to see if the epicyclic movement could be produced in Meccano. One epicyclic movement does most of the speed conversions necessary, hour hand to minute hand and minute hand to escapement. The clock has a 7 day mainspring.

Eric Baldwin discovered in a 1930 manual Model 7.8 'Crazy Driver'. This is a fun model where the motor is a 1A Clockwork and the steering is taken off the winding key. This causes some, ? Breathalyser driving. Why should a small model be in the top set manual? Answer, a pair of small bevel gears is required to drive the wheels and no 7 set only had bevels. Observation, it's good to see these older models make a reappearance and to see a clockwork motor used once again. **David Goodman** is building a Clock, another pre-war WW II model making a reappearance. This model is taken from MM April 1935. The following is taken from David's' Meeting Return Form:- "Waiting Train", control designed by Gents in 1907. Was the system installed in the Royal Liver Clock in Liverpool. Also fitted to the Singer Clock.

In 1935 the latter was the largest electrically operated true Turrett Clock in the British Empire having four Faces of 26ft in diameter. The clock is a pendulum movement electrically driven on the Hipp principle. The hands are moved the equivalent of half a minute in 26 seconds when the escapement is automatically disconnected until an electrical signal is received from a master clock exactly on the half minute when the escapement is reconnected and continues to drive it for another 26 seconds. Thus if strong wind pressure on the hands slow the clock it will still keep time.

Rod Rich has branched out and now is turning out many variations of toothed circular parts. Sizes, from memory, are 3½" to 7½" some ½" wide some two or three sets of holes wide. Rod had a display board with this wide selection on show. Rod also had an epicyclic gearbox built from the parts he had made. I have not much information on the gearbox – it looked to me a three forward and reverse in a high and low ratio, measuring 14 inches. Hopefully more information will be available next meeting.

Mike Edkins still baffles me, and others, with his skill in turning out models that work as they should do. The latest is a monorail based on the one running between Barmen and Elberfeld in West Germany. This being a smaller version of the one Robin Schoolar had built and will be described later. The model size being four feet long and fifteen inches wide and the cars are eight inches long, two and a half inches wide and three inches deep. I'm sorry I have no more on this excellent model. I trust it will be at Stoneleigh because it is a good show model

Pat Edkins never fails to amaze us all. Pecking Birds is the name of a model, basically a six inch circular plate has a handle attached with three birds set at intervals, plus a mall interloper, a cord is attached to the birds and knotted to a weight using a small circular motion of the hand to swing the weight in a circle, the birds are made to PECK, the bird tail is a counterbalance. Incidentally, I saw a China version in a TV programme on the evening of the Guild meeting. Ask Pat for details, not me.

Les Gines has achieved one ambition, to build a WW1 Tank from two pictures in a vintage manual. The model is very good in appearance and has all the requirements. The model has been built from all scrap parts, some very rusty, some very bent, what parts are not available were made from what was. Finished in a light grey paint it looks the part. Les calls it his scrap model. In contrast Les has produced an excellent model of a 1905 Rolls Royce Car from the M.M. December 1964. This is to be loaned for a shop window display, very nice too.

Phil Ashworth is making an attempt to improve on his original 'Corkwork', machine, or French Knitting

Machine. To clarify: a cotton reel with four tacks forming a square around the hole, two rounds of wool and the lower is lifted over the upper, the eventual cord is taken through the reel hole and can be made up in many ways, such as, child reins, plant mats etc. This second attempt by Phil is in response to a challenge handed out by our President some years ago.

This freelance model is 18 ½ x 12 ½ x 9 ½

Source of details, "Own Head"

Novel construction, switched intermittent motion driven via a differential. We hope to see this very interesting and ingenious mechanism completed for the October meeting.

Alan Scargill once again treated us to a hilarious few minutes. Alan had taken a Binns Road advert of a Gantry Crane and built the model, putting in his own design of gearing and control. A very good job has been made of this model. We hope to see it fully functional in October if not in July. Alan had produced Don Blakeboroughs' "SHADO" which did its stuff OK.

Bob Ford once again treated us to an excellent model which looked as if it had just been taken out of a showroom. Bob had produced a model of a Beam Blowing Engine to 1:21 scale. Originally built in 1851 for the Priorslee Works, it is now preserved at the Ironbridge Gorge Museum. The Engine consists of two units coupled together on a common crankshaft. The principle is that the Pumping side pumped water from the mine and the blowing side provided air to the Blast Furnace. The model is encased in perspex and a real credit to its builder.

Mike Hooper had reproduced the Binns Road model of the Blackpool Tower. This model promoted John Bridger to improve on it. The result an excellent model with lifts that went from and to the floors and not stopping short. Fully illuminated and driven by 12v motor the model did excellent service in a shop window over Xmas.

Mike Cuff once again produced an unusual model, this time a Clock with all gearing in the base with the face 12" above, the hands are driven by a built up square tube the inner axle drives the hour hand and the outer casing drives the minute hand. The model should be completed for Skegness.

Nigel Almond has started a Hi Speed Loco. The model of the bogie this class 91 is impressive – I'm looking forward to seeing the completed model.

Mike Brammer has produced a very neat fully working model of a combine harvester from the No. 10 set. Powered by a P.D.U. The reel tines are kept vertical with parallel motion and a swash plate drive to the cutting knife. The parallel motion is unique and uses a built up eccentric device. Knife really does operate. The twin auger is also modelled. The transmission has been redesigned to include a differential and the gearbox has steering column change lever. The cutting head is also power operated. A much improved 10 set model.

David Barrett had his large Level Luffing Crane for another visit. The model scale is 1:43 or "O" Gauge. With all movements fully operational very smooth, a treat to see working. In special Features, the Level Luffing System. A differential in the swivel drive to equalise Torque. 2 PDUs and 3 Crane motors are used. Level Luffing is achieved by returning the hoist rope to an additional drum, the levelling barrel, which is driven from the luffing barrel. As luffing rope is paid out, the hoist rope is pulled in. This concluded the model tour, tea being ready all adjourned to refresh.

43rd Guild Meeting – 1st October 1988

For the 43rd meeting (and 21st birthday!) of the MMG, there were fewer members and models than usual, but what we lacked in quantity was certainly made up for in quality. First off on the model tour was **Ernie Chandler**, who, in addition to all his other work for the Guild, never fails to bring at least one model to each meeting. Ernie remarked that he had not built a traction engine for 15 years, but he rectified this omission by displaying an almost complete Showman's model to a design by Brian Rowe. The colour scheme is silver on blue on red, and the rear wheels are based on Flanged Rings. The model includes a screw brake using a Hub Disc for the drum, based on a design by the late Dennis Perkins. The detail includes the use of black bolt heads on the smokebox, Chrome Bolts on the Canopy and new Cheesehead bolts on the body!

Next was **Pat Edkins** who had brought along her famous Faberge Egg (as admired by The Princess Royal) and the Pecking Birds toy for another visit. She had also brought a Newton's Cradle using large Crane Hooks for the steel balls. However, Pat explained that it was not entirely a success since the Crane Hooks did not have identical weights, nor was the weight of each one sufficient. She is having made (courtesy of Rod Rich, I believe) some heavier bolts with hooks fixed to them, which will enable the model to work exactly as it should. Pat never fails to put the rest of us to shame with her original choice of subjects to model, and the Newton's Cradle is "typical Pat".

Roger Wallis showed 3 model 3-wheeled Motor cars of varying sizes. The smallest was an outfit "0" model built by his friend Tina from the instructions in the July 1954 M.M. The next was the Outfit 4 model from the April 1953 M.M. powered by a "Magic" Motor, while the largest was built to Terry Pettitt's design described in issue 5 of the MMGG. Roger explained that this model is powered by a PDU driving the dummy engine, but it did require some non-Meccano parts in the valve gear – i.e. washers soldered to the end of the axle rods.

Rod Rich showed his demonstration model epicyclic constant mesh 8-speed gearbox, built as usual from parts made entirely by himself - no, I stand corrected, Rod says that there is one genuine Meccano part in this model. Your slipping, Rod!. Next to this he had the "secret to my success" - the punch and die set which he uses to make the holes and slots in his parts. A neat indexing arrangement ensures that each hole is always 0.5in, from its neighbour. At a rough guess, Rod reckons that it has punched around 100,000 holes!.

Mike Cuff, who always has a knack of producing eye-catching off-beat display models, talked about his "marble machine". In this model, a series of marbles are elevated by means of an Archimedes Screw (constructed from a large number of Fishplates winding around an 11 and a half inch Screwed Rod) and then allowed to drop and bounce twice on rubber "skins" made from household rubber glove material which is stretched across a circle of Meccano strips bent into shape. The marbles are then caught in a hopper and returned by a chute to the starting point, where the sequence begins again. Mike said that adjusting Fishplates round the screwed rod could be done whilst watching T.V., but personally I don't think I would have the patience!. He also brought along a very unusual clock (he seems to specialise in unusual clocks) where the striking mechanism was laid out horizontally, reminiscent of a xylophone. The method of providing the chimes at the $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ hours was to a design by Ron Fail, who happily had returned to the Guild that very day after a long absence. I hope that we can see the clock again at future meetings so that it can be described in a little more detail.

Next to Mike Cuff was **Mike Hooper**, who had also bought along a "Marble Machine", to Mike Cuffs design. He also showed a free-lance gantry crane with grab, to a design by Nick Rodgers, I believe. He had evidently saved a lot of time in its construction, as large sections seemed to have come from his previous model, a lorry-mounted mobile crane! The use of 2 and a half inch Stepped Curved Strips, in circles of 4, formed an unusual distinctive method of bracing the horizontal jib sections. I understand that 140 are required! A further nice touch was the use of soft brass wire as an electrical pick-up, avoiding loose trailing wires.

Strictly speaking, **Ron Fail** did not bring a 'model' at all; he bought a full-blown calculating machine called a differential analyser. This incredible apparatus has 3PDUs driving two integrators and a turntable. The two integrators provided horizontal and perpendicular drives to a pen arm, and could solve differential equations such as simple Harmonic Motion and draw fine curves as well as more mundane circles and eclipses. I hope you can bring it to many more meetings Ron, after I've see it about 6 times I might begin to understand it!

John Bridger brought "Nellie", which, by the way, is a locomotive after the style of Roland Emmett. This is based on the "Far Tottering and Oyster Creek Railway" design which was exhibited at the Festival of Britain 1951. As most people know, this is the model with which John deservedly won first prize at Skegness 1987. John also showed a Tower Crane to $\frac{1}{2}$ O scale, built from Modelplan design by Philip Webb. I understand that he has built it to assist with his next fairground model!. As John says, it uses all those Braced Girders you wondered what to do with! A nice touch was the use of a Space Set "Cockpit" as the cab, which fitted like the proverbial glove.

Ken Wright was on parade with a beautiful $1\frac{1}{2}$ in to 1ft. scale model of the last traction engine to be built by Allchin, in 1925. The prototype was built for the Royal Show at Chester and named "Royal Chester", but in fact was never shown there. Ken's model, re-named "Margaret" uses Circular Strips as a basis for the

front wheels, and 4 and a half inch Stepped Curved Strips for the rear. Nice touches were the use of yellow Narrow Strips as decoration on the rear spokes, and especially made brassware around the chimney cap.

Robin Schoolar, who, as he put it, in the absence of his usual rigging crew could not bring all of his "Schwebbahn", contented himself with one of the girder sections, in order to demonstrate the remarkable degree of flexibility in the original design. If one of the 4 legs had a block placed under it, all four legs still supported the rack, demonstrating how the prototype could adjust to uneven foundation. For the civil engineers amongst us, the amount of flexibility represented "one degree of freedom".

Dominating the proceedings as one walked into the room was **Eric Baldwin's** giant Blocksetting Crane, somewhat larger than the famous Supermodel. This was built to a scale of $\frac{3}{4}$ in to 1 ft., and was based on a crane which operated at East London, S. Africa. The original had a boom 119ft long and could lift a load of 40 tons. A photograph of this crane appeared in the May 1929 MM. Eric's model was complete down to a 2 - cylinder steam engine in the cab (driven from a separate PDU) and proper Fidler's Blocksetting Gear. Four further PDUs powered the various functions and slip rings at the centre of the boom conducted power to the revolving superstructure, thus avoiding trailing wires. **John Brown** brought along a lovely little model of a GWR 4-4-0 locomotive and tender, of the "Bulldog" class to approx. 1/30 scale. The model, which was named "Pelican", was complete down to proper brass fittings for the name and number plates, chimney cap and safety valve cover. John even incorporated working inside cylinders, and the whole was finished off in GWR green. He also showed a Showman's Traction Engine, using Hub Discs as a basis for the rear wheels. This model was constructed from immaculate blue and silver parts with additional brassware in the form of "twirly bits" for the canopy supports.

Mike Brammer brought his Milling Machine, building instructions for which are currently being published in the Sheffield Meccano Guild Magazine. This model is driven by an E20R motor, and features a unique rotary 8-speed gearbox to the spindle, in which each ratio is half the preceding ratio. The spindle has either hand or power feed to the work. All of the movements of the knee can either be controlled by hand or operated under power, with six speeds available on each movement. In addition, the table traverse can be pre-set to knock off by limit dogs, and the knee can be locked to its sides to eliminate shake when traversing the other axle. One would imagine that with all this complexity it is a large model, but in fact it is little more than a foot high! How Mike can cram in all those gears I shall never know!

In addition to those featured in the model tour, there were a number of others on show. **John Fuller**, who for my money is one of the best at building model locomotives, showed his latest effort, a part-completed American style 4-8-4 loco. Only the frame carrying the drivers (based on 4 in Circular Plates) the front bogie and the massive boiler and firebox are completed at present, but it promises to be a typical John Fuller masterpiece.

Les Gines was accompanied by his WW1 tank, based on an instruction manual model of the period, and made I believe entirely from re-cycled parts, painted field grey. He also brought a small but remarkably life-like model of a Gazelle Helicopter, which used a Fan to represent the "Fenestron" or tail rotor, which is a characteristic of the prototype.

Brian Edwards brought along a nice model of a 1938 Foden Timber Tractor and Trailer, using 3 in Pulleys and Tyres for the wheels, with some firewood for the winter tied onto the trailer with Meccano chain. He also had a part-finished Metropolitan Railway Bo-Bo Electric Locomotive, with an E20R motor driving all 8 wheels. This model promises to look very realistic when completed.

Bob Ford showed his model of the Beam Blowing Engine which is currently on display in the Ironbridge Gorge Museum at Telford. Finished in mint condition silver and yellow parts, the model consists of two units coupled together on a common crankshaft, operating at 12 r.p.m. as per the original. A flywheel made from a pre-war GRB set the scale, which was $\frac{1}{2}$ in to 1 ft.

Terry Pettitt had on show his unique Meccanograph which I understand is the subject of a future MMGG article; a Thornycroft Vintage Motor Tanker, and a Motor Chassis which featured all-around independent suspension, rack-and-pinion steering, and a 3 speed and reverse gearbox integral with the spur gear differential. Terry also included a representation of the engine, including drive to the camshafts.

Mike Edkins showed his Monorail with 2 cars starting and stopping automatically on a figure-of-8 circuit; **John Anstey** a Boxing Match in Blue/Gold, and also a demonstration 2-speed and reverse gearbox and differential; and **John Godfrey** a Band Saw made from a No. 3 outfit.

44th Guild Meeting – 25th March 1989

Despite the attractions of Easter Saturday with unusually mild weather for the end of March, by 2.45 p.m. a large number of modellers had gathered for the Spring meeting of the Midlands Meccano Guild. As usual, first off on the model tour was **Ernie Chandler** who had brought along a model of the 'P.S. Mundoo', an Australian Murray River Steam Paddleboat. This model was approx. 5 ft. long, 17 in. wide and 2 ft. high, and featured a reproduction of the original wood-burning Garrett Steam Engine which drove the side paddle wheels. The paddles themselves consisted of 7.5" circular strips and 2.5" flat girders, whilst braced girders of various lengths represented the wheel housings. Ernie mentioned that strictly speaking, the proportions were not correct, the need to be able to get it out of his front door having dictated some amendments, but nonetheless it was a very impressive model.

Ernie also showed the SML13 Meccanograph as modified by Hank Elema, which includes an additional gear ratio and sliding arrangement for the table. The table driving shaft has bolted to it a cam consisting of 4 ½" pulleys sandwiched between a face plate and a 3" pulley. A 2½" square flat plate slides between two 3½" flat girders and is held in place by 1" rods. When the flat plate is fitted it engages with the ½" pulleys to impart a regular eccentric motion to the table.

Mike Hooper brought along a small version of the Servetti Magician, entitled 'Just like that!' after the late Tommy Cooper's catchphrase. The conjuror was beautifully modelled using blue, red, black and white plastic plates to represent 'Tommy' in a dinner suit. He stands behind a table 12" wide x 9" deep. Each time he raises a red cloth, a different coloured light bulb (white, orange, red or green) appears on the table. Between each change of light bulb Tommy waves a magic (flashing) wand, 3 times over the cloth and his head looks from right to left and then down. The wand was NOT a drilled out Meccano rod, but a small aluminium tube with a pea-type bulb at the end.

Pat Edkins showed her latest creation, a greenhouse, complete with plants, watering can etc. I don't think anybody else uses Meccano colours to such good effect - e.g. different coloured multi-purpose gear wheels for flowers; red plastic parts with green cranks for rhubarb; and small red loaded hooks hanging from green double bent strips represented the most realistic Meccano tomato plants I have seen. The greenhouse itself was made from silver strips and girders, and transparent flexible plates.

Rod Rich showed a display of some of his special home-made brass parts, which enable his mechanisms to be so compact. These included extra holes in gearwheels, special size universal couplings, and dog clutches built into bosses. He also showed a compact 4,000:1 reduction gear in which the two halves of a differential are driven in opposite directions at slightly different speeds, to impart a very slow movement to the spider.

Mike Cuff must be suffering from a shortage of strips and girders, because the framework of his Master Clock consisted, for a change, almost entirely of rods and couplings. The model was based loosely on a Bulle Clock, and imparted an electrical impulse at regular intervals to a slave clock standing alongside.

Jack Partridge also brought along 2 Clocks: a conical pendulum Clock with no escapement, which was written up in the March N.M.M.G. Newsmag; and a synchronous motor clock based on an unpublished Supermodel leaflet. This model was designed by a French enthusiast who submitted details to Liverpool in 1945, but although the instructions were worked up into a French language Supermodel leaflet, it was never published. However, Jack gave details to N.M.M.G. Newsmag (in English!) and they DID publish, in November 1987. The model is noteworthy in that it was a single motor to drive both the hands and the half hourly chimes.

Alan Scargill demonstrated a very impressive Tower Crane, to his own design. Alan had solved the problem of balancing the boom on top of the tower in a very neat way; the weight of the boom was taken by a roller bearing located about 18 in. below the top of the tower, which was connected by girders to a gear ring, to which the boom was bolted. The gear ring was located by ½" pinions at 90 degree intervals, one of which provided the swivel drive through a slipping clutch to absorb the momentum of the boom when stopping. The model stands about 7 ft. high and the boom is 8 ft. long. It takes the combined efforts of 3 people to set up - fortunately Alan has plenty of friends!

Mike Cotterill continued his programme of modelling the Hornby Dublo locomotive inventory by bringing along a model of the 2-8-0 goods engine. He explained that an advantage of modelling the model, rather than the prototype (if you see what I mean) is that the Walshaert's valve gear need not be so complex! For drivers, the model uses 4 in. circular plates with stacked 2½" stepped curved strips for the rims. This has become quite a Mike Cotterill trademark! The loco was driven by an E20R motor through spur gearing and runs either on a stationary stand or 4½" gauge track when running on the latter, a striker on the loco connected to the reversing switch makes contact with a ramp in the track to provide auto reverse.

Les Gines showed two Vintage Cars, a 1911 Ford, as described in the October 1962 M.M., and a 1907 Silver Ghost, from the December 1965 M.M. Each model was nicely finished in red, green and silver parts.

Ron Fail made a welcome return visit with his differential analyser, so those of us who did not understand it last time could have another look! This incredible machine has 2 integrators and an x-y plotter, and can solve differential equations to an accuracy of 0.5%. I think the most amazing aspect is that except for the pen and paper, it is made entirely from standard Meccano parts, thus proving (if further proof were needed) the versatility and sophistication of the Meccano system.

Dave Evans brought along two nice little models - a Vintage Car to a Keith Cameron design, and a Showman's Traction Engine by Brian Rowe. He also showed the beginnings of a Caterpillar Crawler Excavator, namely the roller bearing and cab base. The bearing consists of steel balls running between a cage of 7½" circular strips separated by pivot bolts and stacked 6 in. circular plates for the hub. This model promises to be very large and impressive when complete.

Bob Ford showed a beautifully modelled American Shay Locomotive, to a scale of approx. 1 to 18. The 12 wheels, all of which are driven, consist of wheel flanges and face plates, with large bevels for the drive. The cylinders are represented by sleeve pieces and chimney adaptors, but due to the small scale only half of the reversing eccentrics are fitted. The whole was built in Bob's immaculate blue, yellow and silver parts.

Tony Homden had on display some interesting Aero Constructor models, some featuring the now rare corrugated section wing and fuselage parts. He also showed an intermittent reversing motion mechanism originally designed by Leonardo da Vinci, using lantern gearing. The input shaft drives a gear ring, one half only of which has spokes comprising 5-hole 2 in strips, in which threaded pins are fixed. These engage similar pegs on 2 bush wheels fixed on one axle, on opposite sides of the gear ring. As the latter turns, the rod with the bush wheels turns first one way and then the other. What models might L da V have built if he had had Meccano!

John Brown brought 2 models; a modified SML13 Meccanograph, as described in a recent issue of N.M.M.G. Newsmag, and a Beam Engine to a scale of 1 to 5. The Meccanograph had a modified crown head formed from a specially turned wooden wheel with extra holes to enlarge the range of patterns. The Beam Engine was based on a small non-condensing industrial type produced around 1840 - 50. The prototype was originally produced as a live steam model by Stuart Turner.

New member **John Evans** was accompanied by 3 nice agricultural models, a Portable Steam Engine to an Ernie Chandler design; a Threshing Machine based on a Ransomer design of 1926; and a freelance Baler, all in 2 in. scale. Each model is driven by its own PDU so that they can be operated either singly or as a set.

In addition to his famous Milling Machine, **Mike Brammer** demonstrated a Drop Stamp built to a freelance design from his memory of the original machines. The hammer is operated through an ingenious servo clutch, which enables it to be dropped with varying degrees of force, exactly as in the prototype.

John Nuttall had with him a most ingenious epicyclic clock. This makes use of the Argentine toothed circular strip, and plastic Meccano chain to form internal teeth, thus making a large gear ring. A 30 teeth plastic sprocket meshes with the internal teeth, and a pinion on the same shaft climbs round a fixed 133T gear. A No. 1 clockwork motor provides the drive. Any chance of some building instructions, John?

Brian Edwards had finished his Metropolitan Railway Bo-Bo Electric Locomotive, which looked most realistic. Built to a scale of 1 to 16, with all 8 wheels driven by an E15R electric motor, it faithfully captured the atmosphere of the prototype.

To complete the display, some members brought along models which we had seen before, but well deserved another showing: **Ken Wright's** Allchin Tractor; **John Bridger's** Showtrac; and **Terry Pettitt's** 2-10-4 Loco, Gas Engine and Motor Cycle and Sidecar. · My thanks to all those modellers who provided written details of their exhibits - it greatly facilitates the writing of the Model Report.

Model Report written by David Barrett.

45th Guild Meeting – 30th September 1989

"Wheels on Rails" could well have been the theme for the 45th meeting of the MMG, held on the last Saturday in September, 1989. It seemed that nearly half of the models were cranes, trams or locomotives running on rails. However, first off on the model tour was **Ernie Chandler**, whose Traction Engines (*Dignity and Impudence*) were certainly not designed to run on rails. *Dignity*, the larger, was a Brian Rowe design, decked out in Silver, Blue and Red. Since its first showing a year ago, Ernie has added a number of small details, including a ladder to enable the driver to get to the roof to erect the smokestack: *Impudence* was a Keith Cameron design from the 1978 No. 5 Set.

John Bridger showed a heavily modified vertical lift bridge from the 1950's No. 6 Set. He said that it was impossible to keep the lifting section horizontal when it was built strictly to the instructions, so with the aid of Huibert van Wijngaarden from Holland he set about modifying it to operate in a more prototypical manner. This involves reeving guide ropes from the base of one tower, along the lift section itself, and then up to the top of the other tower. Two sets of guides are required each side. This ensures that the bridge section itself stays level. Unfortunately, all these mods. mean the model cannot be built with a No. 10, let alone a No. 6 Set! An interesting point John made was that the lifting sections on the Dutch prototypes have to be pulled up and down, since at its full height, the weight of the counterweights and their cables is greater than the lifting sections.

Pat Edkins, still fresh from her success at Skegness where she won the Judges' prize, exhibited her greenhouse again. The vegetables seem to be changing with the seasons, since we now have some marrows, represented by plastic oil ampoules!

Mike Edkins showed a neat little model of the early G.W.R. broad gauge loco. "North Star" of 1837, to 1/24 scale. Artillery Wheels provided convincing driving wheels, and the construction of the remaining wheels is particularly ingenious. These utilise multi-purpose gears with a 1" Motor Tyre, backed by a small Steering Wheel with the cap removed. Motor drive is through the tender wheels, via a third rail pick-up.

Robin Schoolar demonstrated the "Handyman" access platform which won first prize at the Henley competition. He said that the model pretty well represented the outer limits of what he could do in Meccano, since the 3 independent hydraulic rams have no counterweight, and in effect have to operate with sheer brute force. The model successfully reaches its maximum height (the genuine Meccano cord standing up to the strain very well) but in this configuration is rather unstable, and it is essential that the screw jacks are set to keep the base absolutely level. We all know that anything with hydraulics in it is inherently difficult to model successfully in Meccano, and Robin is to be congratulated on tackling such a subject so well.

In addition to his popular "Bouncer" (200 instruction leaflets sold) **Mike Cuff's** fertile imagination has produced another off-beat model. This had no name at all until I pleaded with him to give me a title for the model report! Over a cup of tea the model was christened "Jacks-in-the-box" and is of an amusement machine in which representations of human and animal heads pop up in random fashion, the object being to hit as many as possible with a mallet in the time available. A simple cam provided the lifting mechanism and the heads-some lifelike, some grotesque-were modelled in "Fimo", a type of modelling clay. However, since it is sacrilege to mis-treat perfectly good Meccano, a Mallet was not provided!

Mike and Olwen Hooper showed the beginnings of a 4-6-0 "King" class loco. to a scale of 14.5:1. The drivers are Circular Girders backed by 6" Circular Plates, but the construction of the bogie wheels is more ingenious. These consist of half of a 3" Pulley for the flange, plus 2 broken Road Wheels, thus maintaining scale proportions. Drive is by 2 PDUs through the tender wheels, and the model promises to be very impressive when complete. Mike & Olwen also showed another Skegness prize winner the "Tommy Cooper, based on Servetti's magician.

Eric Baldwin brought along his giant block-setter first seen a year ago, with a few minor modifications. These include a service crane in the cab, and the replacement of 3.5" Gear Wheels on the winding drum with Gear Rings & Narrow Strips as spokes to give a more realistic effect. The model is fully remote controlled with 4 PDUs, and a 5th PDU for the steam engine.

Ben Cook showed a railway breakdown crane from the 1950s No.7 Set manual, with the motor drive modified and brought up to date. Two motors control the 4 movements through a gear box controlled by solenoids. Currently (no pun intended) control of the solenoids is by mechanical switches, however, it is intended to control the model eventually by computer, using an interface containing a number of relays, which is still under development. Mike, his father, confirmed that Ben had done virtually all of the work himself, a creditable achievement for one so young.

Mike Cook's own model was an interesting variation on the famous Blocksetter Supermodel. Like the prototype, it was steam powered, with a Meccano Mamod Steam Engine cut in half, and the motion mounted separately 90 degrees to the boiler. This provided a more compact arrangement. The engine drove all of the movements through a gearbox taken from the GMM version of the model. Later in the afternoon, it was fired up and drove everything with ease.

Ken Wright, having finished with the Tallylyn, so to speak, has turned his attentions to the Festiniog. He brought along a model of the 0-4-0 tender loco. "Linda," built to a scale of 1.75" to 1 ft., and running on 3.5" gauge track. The most obvious non-Meccano part is the steam dome, which is from a brass trophy cup bought at a car boot sale!

Mike Cotterill showed again his model of the Hornby-Dublo 2-8-0 goods engine, one of the rare occasions when the model is many times larger than the prototype! He also showed the promotional model that was used to attract visitors to Skegex this year. It consisted simply of a rotor with an advertising slogan written around the circumference, apparently turned by a number of Meccano men, working furiously at crank handles!

Roger Wallis has started to build up a complete tramway system, and so far has constructed two cars: a single decker based on a tram that used to run in Llandudno, and a double-decker (still unfinished) but based on the type that ran in Sheffield. The latter was in dark blue and yellow, and Roger said that all the blue parts were restored from scrap and painted Humbrol "Midnight Blue." The track is Peco Gauge 1, and the overhead wire, through which each tram is driven, is OO Gauge rail. He pointed out (before anybody else did) that, strictly speaking the prototypes could not run together, the Llandudno track being 3.5 ft., and that of Sheffield 4 ft.8.5"

John Fuller has progressed further with his 4-8-4 loco, the beginnings of which were first seen a year ago. The model, loosely based on USA and British Colonial practice, is of massive construction, the frames of which comprise stacked Strips, Flat Girders and Corner Gussets. The drivers are represented by 4" Circular Plates, and the bogie wheels are Wheel Flanges and Face Plates. It is typical of John's attention to detail that items not normally seen on a model are nevertheless faithfully reproduced; consequently he has included a mechanical stoker, ingeniously constructed from set screws in collars arranged in a spiral around a rod, the whole encased in Sleeve Pieces and driven by a separate motor. The taper boiler, firebox and cab are built entirely from Strips. John must have an enormous supply, because this model positively eats them! So far only the loco itself has been constructed, but I look forward to seeing it complete with tender, because when it is finished it will be one of the most impressive locomotive models ever built in Meccano.

By contrast, **Tony Knowles** took us right back to the beginnings of Meccano, with a 3 ft. high tower built from replica 'Mechanics Made Easy' parts. The model was shown in an early MME Manual, and includes two lifts travelling up and down driven by an electric motor. The whole assembly is mounted on a display base of pleasing design, creating a most charming effect.

John Brown showed one of the two astronomical models on display, an Orrery from the April 1973 MM. This has been modified to use an external power source, with an Elekikit Brush and Commutator inside the Ball Race. Other mods. were to the gears and bearings to give smoother running.

Nigel Almond, although not present, nevertheless with the help of some friends was able to show some models, namely a Mercedes container truck and drawbar trailer, and also something not often seen at meetings, some plastic Meccano models.

Simon Devlin showed a fearsome freelance "Moon Buggy" complete with Rocket Launcher, which looked as if it could go anywhere on its 4 independently sprung wheels. Use of three 3" Pulleys and Tyres produced a nice chunky effect. Simon also showed a model fighter plane, reminiscent of a Saab Viggen, except for the Butterfly Tail.

John Nuttall showed an interesting dockside crane, built from a 1960s French No. 10 Set, in red/blue/gold. A 110v motor drove all the functions through a 4-movement gearbox. The 2 winding drums were reversed by meshing a gear on their shafts with one or other of 2 contra-rotating Pinions on a split shaft in the middle of the gearbox. Braking was achieved by meshing this gear with a fixed Pinion when in the neutral position. John also showed a Sun/Moon/Earth Orrery, to his own design.

Other models on show which had been seen before but worth another look were **Alan Partridge's** Helter-Skelter; **Les Gines's** Roundabout, and **Terry Pettitt's** collection of vehicles.

Lastly, your humble (**Dave Barrett?**) scribe's offerings were a 3-strand Plaiting Machine, to a design published in "Newsmag," and the beginnings of the Eric Taylor Crawler Tractor. So far, I have completed the 4-speed forward and reverse gearbox.

46th Guild Meeting – 31st March 1990

The last day of March, 1990 was warm and sunny as the 46th meeting of the Midlands Meccano Guild got under way at Alcester. As ever, first off on the model tour was **Ernie Chandler** with an "Advertising Lamp," a dealers display model from the 'twenties era, and a horizontal steam engine. The lamp was built from a single picture in a Jim Gamble article in the July 89 "Newsmag," but the steam engine was built to detailed instructions provided by its designer, Brian Rowe. The model is based on the Swannington Winding Engine and is of massive construction, over 4ft.6ins. long, and with a flywheel diam. of approx. 20ins. As if these two were not enough, he also showed the beginnings of a single deck bus, to a Roger Wallis design from the Jan. 79 M.M.

Alan Partridge briefly showed a "nonsense" model - a walking machine to a design by (I think) Rob Mitchell but with wings!

Next on the model tour was the father and son team of **Mike & Ben Cook**. Mike showed a not-yet-completed version of the GMM Supermodel Loom, and demonstrated that although the shuttle movement needed some "damping," the timing was broadly correct. There followed a general discussion on the difficulties of building Looms, which concluded that the GMM model did work, and we wished him the best of luck!

Young Ben showed a model road surfacing machine from the No 10 Set instructions, but with proper plastic crawler tracks instead of the artificial ones of the original. The model is not yet finished, Ben having to save up for the parts, but promises to be very impressive when complete. Keep up the good work, Ben!

Next were that dynamic duo, **Pat & Mike Edkins**: Pat showed a model Anti-Aircraft Gun produced from a pre-war Army set that had been given to her. She explained that the person who had presented it had recently died, and the model was by way of a small tribute to the donor. Pat said that she was indebted to Tom McCallum and Jim Gamble for supplying some missing parts in order to make the outfit complete. Mike showed again his model of the GWR loco. "North Star," which has now acquired a first class carriage of a c.1851 design to pull. I particularly liked the clever use of Semi-Circular Plates to reproduce the carriage doors of the period.

Ian Henwood, who had driven through the night from Aberdeen to be present, showed a magnificent model of a lorry-mounted crane, to approx. 1:10 scale, with telescopic jib. The lorry part comprised a multi-wheeled chassis typical of heavy mobile cranes, but the centre of interest was the crane itself, with 4 telescoping sections. The cross-sections of each part were 3.5"x3.5"; 3"x3"; 2.5"x 2.5"; and 2"x 2" Each part was retained inside the outer section by means of carefully located plastic pulleys. A screw mechanism luffed the jib, and 3 motors looked after all the crane motions.

Next, **Huibert van Wijngaarden** demonstrated a small mobile crane from the new No 1 Set. He explained that the Set had been given to him by John Bridger, who thought that as Huibert had not built anything for some time, he had perhaps lost his model-building abilities, and needed to start again! Originally the model had been built to instructions in the Set, but when complete he realised that it was a pretty poor effort and set about improving it. The result is a model that will actually work, has steering gear as well, and uses almost every part in the Set. I remember that Binns Road models rarely seemed to make the best use of all the parts available, and it is sad that Calais are making the same mistakes.

Les Gines, dubbed the "Children's Champion" by the Chairman for his promotion of models with play value for youngsters, showed two roundabouts. The first was hand-operated, with a hefty reduction gear to frustrate the aggressive tendencies of small boys, whilst the second was electrically operated with automatic stepping and starting. Les explained that the timing of this needed to be considered very carefully if the model was displayed at exhibitions otherwise spectators would soon lose interest.

John Bridger showed an ingenious model of a sports touring bicycle, which he used to "plug" his attempt to cycle from Lands End to John O'Groats later this year in aid of the Deaf and Blind Association. (John collected a number of sponsorship signatures, and we all wish him well in his endeavour.) Returning to the model, Circular Strips represent the wheel rims, and the wheels themselves are made of perspex, thus neatly avoiding the problems of modelling the spokes! This created a most realistic effect.

Ron Fail made a welcome return visit with his Differential Analyser. For those who have not seen it before, this is a full-blown calculating machine with 2 integrators and an x-y plotter, and can solve differential equations such as simple harmonic motion, as well as drawing circles and ellipses. There are built-in programs to reproduce the paths of ballistic missiles and an inverted pendulum (tossing the caber). Apart from the pen, etc., it is made entirely from Meccano parts. Unfortunately I did not get a chance to study it closely, so I still do not understand how it works!

George Illingworth brought along the beginnings of a Lancaster Bomber. Judging by the size of the undercarriage section, it will be almost big enough for him to fly in it! The plane will be built to a scale of approx. 1:12, and will be a representation of the actual aircraft used in the Dambusters raid. George hopes to have it complete by the 50th anniversary of that event, in 1993!

Another "stranger" was **Tony Homden** who, in line with his interest in things maritime, showed a model of a 12in. rifled muzzle-leading gun from HMS Hotspur, a coast defence ship of 1870. The gun was mounted on a large Turntable made from 24 Sector Plates, and could be turned to fire through any of 4 ports.

Eric Baldwin showed a neat little Showman's Traction Engine, a Burrell 6hp design, incorporating differential, cable winch, E-speed gearbox, dynamo, governor, etc. A PDU provided the power, and reversing was effected through a switch made from Electrikit and operated by the Stephenson's Link Motion. Eric said the model was about 20 years old and was last shown at the MMG in 1973! Is this a record?

Mike Cuff returned to what I think is his first love, the roller coaster, or scenic railway. Comprising a figure-8 circuit, the model is not yet finished, and the cars still have a tendency to leave the track. Improvements consist of plastic chain to lift the cars to the top, and MW Models Shouldered washers instead of Flanged wheels on the cars. The whole is fixed to a secure base and it looks as if this time Mike will be able to sort out all the problems.

Tom McCallum brought some mere items from his historic collection and in this the centenary year of the Forth Bridge; he showed a model made entirely from "Mechanics Made Easy" parts, based on that shown in the 1907/8 manual. The parts themselves were all in original condition with shiny Tinsplate finish.

Last, but definitely not least on the model tour was **Phil Ashworth**, who showed a simple crane that he built to assist understanding of the cause of an industrial accident.

In addition to these featured in the model tour there were a number of other nice models on display, and this report would not be complete without a mention of them. **Brian Edwards** showed a model of a Scammell 1947 8-wheel lorry, with balancing beam front suspension and a spur gear differential, all as per the original.

Mike & Olwen Hooper brought along their "King" class loco chassis, with some minor details added since the last meeting, i.e. one side now has spoked wheels using Rods and Rod & Strip Connectors, and a bell, supplied by Bob Ford; Bert Love's Clock based on a No. 1 Clockwork Motor, from the June 89 CQ; and a "Plotter" from the Dec 89 CQ., controlled by a hand-joystick.

Tony Knowles showed us some vintage models built from ether systems - a Fire Engine from a 1930's Stabil Set, and a model-T type truck from a 1920's Erector Set. Both models have a typical pre-war atmosphere, but for me they serve to confirm how superior Meccano was in these days.

Terry Pettitt, in addition to his usual collection showed a neatly-modelled shaping machine, the features of which included a quick return motion with adjustable throw crank to vary the stroke of the ram and automatic feed to the cross-slide.

Mike Cotterill brought along a small beam engine, and a simple elegant synchronous clock, with a Circular Strip face. Other models on display included **Robin Schoolar's** "Handyman" Access Platform; **Ken Wright's** Festiniog Railway loco "Linda"; a 1:24 scale Showman's Road Locomotive from Bob Ford; and a Swiss Electric Loco from **Jack Partridge**.

47th Guild Meeting – 6th October 1990

The first Saturday of October, 1990, a blustery autumn day, saw many members converging on Alcester for the 47th meeting of the Midlands Meccano Guild. As is usual on these occasions, the model tour began with **Ernie Chandler** who demonstrated a transporter bridge from the April 1979 MM. Powered by a Crouzet motor through a bog-standard automatic reversing mechanism, the trolley with its under slung bridge section moved quietly to and fro, stopping for a few moments at the end of each run. A number of modellers recently seemed to have turned “green”, judging from the number of models claimed to be built from re-cycled parts; Ernie has joined the fashion with his transporter bridge, except that he has painted all his rescued parts red! He also showed a Binns Road display model Octopus - so far the central rotating section is complete, leaving fencing, box-office, steps, etc., still to be added.

Co Stevens, from Holland, was making his first visit to the club and showed one of the bogies from a large portal crane he is currently building. This has E wheels, equalised suspension, and its own individual motor. Co said that despite no electronic control, each of the bogies travelled at precisely the same speed. The whole model will be very large — the gantry is of triangular construction 6.5 x 6.5 x 5.5in., and is 3.2m. Long. If you can possibly get the whole model to Alcester, Co, we would love to see it!

Ken Wright brought along a section of “tricky track” and a loco, and recounted the difficulties he had in building it from his photos of an earlier attempt! He also mentioned the problems he had had with lack of capacity in NiCad cells, which was resolved by simply building a spare loco! He also mentioned the tendency of the worm drive to pull the PDU motor shaft from its bearings.

Rod Rich, who as we all know makes nearly all his own Meccano, briefly showed a 4-speed and reverse Wilson Epicyclic Gearbox, which was used in some 1930s cars and commercial vehicles. He commented that his next project, conceived after a discussion with a John Deere salesman, is a 15-speed version as used in their tractor!

Mike Hooper's beautiful model “King George V” 4-6-0 loco is progressing steadily. As the Chairman says, it is a brave man who brings an unfinished model to meetings! The frames and running gear (including inside Walschaerts valve motion) are now virtually complete, leaving the boiler and cab, etc., to be constructed in order to finish the model. For those who have not seen it before, the model is to a scale of 1:14.5, and uses, ingeniously, for the bogie wheels, 2 broken Road wheels plus half of a 3in. Pulley for the flange.

Colin Reid showed an impressive automatic rapier loom which works without a shuttle, rather on the lines of that illustrated in the Sep 90 “CQ”. The machine is apparently capable of weaving all kinds of different patterns. Unfortunately it was not loaded with material, but it was evident from his demonstration that Colin had got the timing sorted out. The model uses commercial standard healds, easily available from textile manufacturers' surplus stocks. Please come back and show it actually weaving, Colin?

Stuart Merrill showed a nice dragline based very closely on the No. 29 Supermodel. He also showed, separately, a compact 4-movement gearbox for cranes, each movement with its own reversing mechanism, and some beautiful wheels for a large-scale traction engine, utilising non-Meccano Rolled steel for the rims.

John Brown brought along E beautifully detailed locomotive models. The first was a 1:8 scale model of the little-known “Agenoria” locomotive of 1829, built in Stourbridge by Foster Rastrick & Co. for the Earl of Dudley. It was a sister engine to the “Stourbridge Lion”, the first loco to run in America. The original is in the Science Museum. It is a twin “grasshopper” beam engine, with the cylinder mounted vertically at the rear, and the beams, which are pivoted at the front, drive the rear wheels. At first glance, it resembles “Locomotion No. 1”, but closer inspection shows that it is obviously quite different. Interestingly, the driving wheels are fully counterbalanced, but springing is confined to the front wheels. John's other model was of GWR 0-4-2T No. 1442, the original of which is on display in the Tiverton Museum. This is to 1:12 scale, and includes full Stephenson reversing gear. He has unashamedly used Marklin cranks on the driving axle, and there is no doubt they give a better effect. The boiler fittings are all made of wood turned on a lathe. These non-Meccano embellishments are quite acceptable and undoubtedly finish off the model very nicely. John had re-sprayed all the appropriate parts in GWR green.

Mike Cook showed his automatic loom, still unfinished (see comments above re incomplete models?) and a neat model Supermarine F6 Seaplane modified from the 1950s No. 5 Outfit manual. In a way, very topical because the prototype had the original Merlin engine which was later used to some effect in the Battle of Britain.

Our esteemed Treasurer, **George Illingworth**, had brought another section of his partially-completed Lancaster bomber, this time the tailplane. The model is to 1:12 scale, and George hopes to have it completed by the “Dambusters” anniversary, in 1993. He also showed a Coriolis machine, which demonstrated some interesting effects on rotating chain drives.

Jack Partridge demonstrated an old favourite, the Servetti fantasy factory. This model, which was of course designed over 20 years ago, is fully automated, and built entirely from Meccano. Jack drew attention to the clever hoisting mechanism: The winding drum, which always rotates in the same direction whether hoisting or lowering, has 3 cords, the centre one of which opens and closes the grab and is fixed at 180 degrees to the other two, which raise and lower the grab.

Les Gines, who these days specialises in designing models for youngsters, showed some of his ideas

from the new No. 1 Set, which had won him a prize at Henley (again!). All hand-operated, of course, with special play value for young children.

Bob Ford, who never fails to impress with his immaculate yellow and silver models, had brought his 1:12 scale model of the original engine from the S.S. "Great Britain" designed by I. K. Brunel. In this design, 4 large cylinders in an inverted V drive a crankshaft at a speed on no more than 18 r.p.m. Drive is taken by chain from the centre of the crankshaft to the propeller shaft through a step-up ratio, increasing the revs. to 53 r.p.m. Bob used 4 layers of Meccano Plastic Chain for this drive, giving a very quiet and realistic motion. He commented that for some reason the original engine was not a success, being quickly replaced by a more conventional marine engine.

Mike Brammer showed a very neat model of the Guinness Brewery shunting engine, to a scale of approx. 1:7. The original was built in 1888 for use on the 1ft. 10in. gauge tramway system within the brewery complex. The loco is of unusual design, with cylinders, valve gear and crankshaft above the boiler; the drive is taken by vertical connecting rods to the driving wheels. An interesting point, and in contrast to John Brown's "Agenoria", is that these driving wheels are sprung; the crankshaft floats in vertical guides positioned by a link to the axle box below, so that the distance between them remains constant.

The Chairman, **Roger Wallis**, rounded off the model tour by showing again a pair of trams to a scale of approx. 1:15. These represent a Llandudno single deck 1920 model, and a Sheffield double deck "Jubilee" tram of 1960. All the strips and girders in both models have been recovered from the scrap box and painted Humbrol "Midnight Blue". Since its last showing the Sheffield tram has been rebuilt with a re-designed truck, the inclusion of seats and re-designed stairs. In the new truck, the PDU motor has been re-positioned and a mix of Argentine and Liverpool gears provides a high reduction gear whilst retaining reasonable ground clearance.

In addition to those demonstrated during the tour, there were a number of other interesting models on display. At the last meeting, **John Bridger** showed a beautiful quarter scale model of a touring bicycle, which he used to publicise his forthcoming ride from Lands End to John O'Groats in aid of the Deaf and Blind Association. John successfully completed the run, and raised over £500 for this worthy cause, a substantial proportion of which came from MMG members. The model has now been developed by the addition of a rider, pedalling long at a gentle touring speed. (Doesn't look much like you, John!) Drive is by rollers in the base acting upon the bicycle wheels (7.5in. Circular Strips).

John Fuller showed the latest progress on his freelance 4-8-4 loco. This magnificent creation is based on N. American and British Colonial practice, to approx. 1:15 scale. Since its last showing, John has concentrated on constructing 2 cranes designed to lift each end of the body off the chassis. The firebox, boiler, and cab are constructed as one unit, which, with the inclusion of a power-driven stoker weighs all of 30lbs. This has to be located very precisely on the frames, and, as anyone who has built a large model will be aware, fine adjustment when holding weights of this order is almost impossible. As for the model itself, John has now installed electrically operated brakes on the driving wheels, and a Hectoperm for the main drive. The model is still incomplete, but for my money it is one of the finest Meccano locomotives I have seen.

Mike Edkins brought along the solar/sidereal unit of an Astronomical Clock, and in addition some built-up gear wheels from sprocket chain. A small loop of chain, 13-25 links, is sandwiched tightly between 2 conical discs. The assembly is quite rigid, and the cone angle on the discs ensures that the chain runs concentrically. It will mesh with sprocket wheels (albeit at non-standard centres!) quite successfully.

48th Guild Meeting – 30th March 1991

This was an auspicious day for the Midlands Meccano Guild, for it saw the first meeting at the Royal Show Ground near Coventry. The actual venue is the Arthur Rank Building, almost in the middle of the Centre, and I think everybody agreed that the committee had made an excellent choice with this location for our new home. The only disadvantage is that the site is “dry” and somewhat isolated; the nearest pub is some miles away!

First off on the model tour on this occasion was **George Illingworth**, who showed a model of a Tiger Moth, to 1:12 scale, nicely finished in Yellow Flexible Plates. (Although George did not mention it, the colour scheme is, I think, authentic, since the prototypes were painted bright yellow in order to aid identification). The model will form a companion to the Lancaster Bomber, which George assures us is still under construction! The choice of a Tiger Moth is highly appropriate, since these were used as trainers before pilots graduated to more specialised types.

Continuing the scale modelling theme, **Tony Homden**, famous for his ships and similar models, showed the beginnings of “HMS Vanguard”, Britain’s last battleship, which will be approx. 8ft long x 12.5in wide when complete. Whereas George took us through the use of algebra, slide rules, calculators and reducing photocopying machines in order to produce drawings to the correct scale, Tony demonstrated a simple pantograph (of Meccano, naturally!) to scale up detailed drawings to the size required. Turning to the model itself, this will be built on correct marine principles, with bulkheads, or “stations” of the correct profile connected together to produce a hull of monocoque construction, combining lightness with great strength.

It was quite fortuitous that the next model was also of a ship, to scale, namely **Sid Beckett’s** “SS Great Britain”. As most people know, the prototype was built by I K Brunel, and languished for many years in the Falkland Islands before it was brought back to Bristol for restoration. Unlike most Meccano ships, it is not merely a waterline model; the hull is reproduced in full. The scale was determined by the screw, which consists of a Fan. This came out of the scrap box with one blade missing, whereupon a further five were cut off, making a realistic 6-bladed propeller.

John Brown showed a freelance Double Ferris Wheel, on the lines of SML 33, with two wheels rotating in opposite directions, each driven by a 12 volt Radio Spares motor. Illumination was by LEDs, rather than pea bulbs, which gives a neater effect, although they are less bright. The model was generously populated with “Duplo” people, both as passengers in the cars and as operating crew in the paybox, etc. Even the turnstile made the right noises! Accompanying “Fairground Music” added to the general atmosphere.

Young **Stephen Ellen** demonstrated a fully computer-controlled “Turtle” which carried a small auxiliary “Turtle”. Entirely under the control of a BBC micro-computer, the back of the turtle could locate and pick up a tin, whereupon the machine turned through 180 degrees and lowered a ramp to permit the smaller vehicle to disembark. This was equipped with a pair of jaws with which to pick up a screwdriver. It then proceeded back to the parent vehicle, where it docked and the ramp was raised behind it. The machine is still under development, because Stephen had to give it a helping hand now and again, but it was a very convincing demonstration of the possibilities of computer control. Some of us think that if Meccano had embraced computers and electronic control much earlier, the subsequent course of events might have been very different.

Mike Hooper demonstrated a model that threatened to bring out the little boy in all of us, a Pylon Electric Helicopter, based on a Tri-ang Toy advertised in the Aug 1961 MM. This consists of a small helicopter, with a rotor comprising 2 Propeller Blades driven by a Crane Kit motor, on the end of a rotating pole with a counterweight at the other end. By means of an ingenious lever arrangement, the helicopter can be made to pitch forward or backwards, and thus fly round the central pylon or hover, as the operator chooses. Power was supplied by a Marshall 2 Transformer, through a slip ring at the base of the pylon. Mike also brought for another showing his version of the Servetti Magician, entitled “Just like that” (the late Tommy Cooper’s catchphrase).

Alan Scargill brought along a miscellaneous selection, namely a miniature “Grasshopper” Beam Engine, which worked away merrily at high speed; another larger Beam Engine to a Mike Cotterill design; a Clock powered by a Cruzet motor which kept exact time, and a grab for a Level Luffing Crane based on that illustrated in CQ No 7, which Alan plans to show at Skegex later this year.

Robert Parker showed a very lifelike model of a Citroen 2 CV car, or “Tin Snail”, as the French call it. The model is to a scale of 1:7, and although unpowered, boasts a number of features including adjustable headlights, opening bonnet and boot, sunroof, working jack, and rubber operated suspension, which seemed to be almost as soft as the prototype!

Robert Parker Jnr showed a neat little Dockside Crane from the new No 3 Set. This was entirely to his own design, and was very nicely proportioned.

Roger Wallis showed a number of items from the “Wallis Collection”, including a partially finished Trolleybus. This is to a smaller scale than his famous “Noel Ta’Bois” model, using 2in. Pulleys & Tyres for the wheels, and powered by 2 “naked” Crane Motors. He also brought along a couple of clocks; the “Bulle” Clock, designed by Jack Partridge and described in Newsmag 29 - this is battery operated, whereby a pendulum is given a magnetic “kick” by a set of contacts that connect the battery to a pair of electrikits coils. One repels, whilst the other attracts a pair of Meccano magnets attached to the pendulum. This drives a

ratchet wheel, which drives the hands through reduction gearing. The overall design has been altered by using less brassware, and a MW 5:1 gear set makes the drive train more compact. Roger's other clock is also taken from Newsmag (No 49) and is of a synchronous motor type where the one motor not only drives the hands, but through a simple friction clutch also the chiming mechanism. The chimes are controlled by a "strike wheel" (made from the floor of a birdcage!) which has cut into it a series of slots. This wheel rotates once in 24 hrs. The slots allow a fishplate to drop into them, and by means of rod linkages, cause the correct number of chimes to sound. Incidentally, we were all pleased to hear that the budgie now has a new home.

Betteena Romain showed a Meccano picture of a Galleon in full sail based on that in a 1958 MM. However, Betteena was able to take full advantage of the wide variety of colours now available, so that the hull was in Dark Blue, the sails Yellow, and various silver and green parts provided the finishing touches. The overall effect was very attractive.

Mike Brammer has been busy during the winter months developing his Guinness Brewery Shunting Loco, first seen at the October meeting. This is modelled on a narrow gauge prototype used within the famous Dublin Brewery. However, Mike has now added a hoist and transfer truck so that the loco can operate on the (Irish) standard gauge. A special hoist lifts the loco up high enough to enable the transfer truck to be located under it. The loco is then lowered into it, where its weight is sufficient to drive the standard gauge wheels through appropriate gearing. For those who have not seen it before, the loco is of unusual design with cylinders, valve gear and crankshaft above the boiler; the drive is taken by vertical connecting rods to the driving wheels. These are fully sprung, and the crankshaft floats in vertical guides positioned by a link to the axle box below, so that the distance between them remains constant.

Ernie Chandler brought along 3 models: a Chemical Fire Engine based on a 1909 Seagrave, and built from the Canadian Meccanoman's Newsletter Modelplan No 15; a Keith Cameron Meccanograph as described in MMGG No 10; and a Carol Group from the Club Christmas Card designed by Pat Edkins. –

The **Cook** family brought along quite a substantial collection this time: **Mike** showed an Automatic Loom with Pattern Programmer, from the GMM Supermodel Series. He said that it was very difficult to build, largely because of the poor illustrations in the instruction leaflet. It was powered by a car heater motor, since the E15R in the original design was found to be inadequate. Setting up the Loom is a long and tedious process requiring much practice; in the end it did work, but not very well. It is probable that with slightly heavier warp threads it could be made to work. As the instructions state, even tension in the threads is vital to success, but how to stop them "hanging up" in the healds is not explained. Mike also showed the deckhouse and generating plant for a floating crane. This model, when complete, to a scale of 1:36, will represent an American 150-ton giant, built in 1920. It will be powered by an "Enicron" mains motor. Finally, he showed again the Supermarine S6B Seaplane modified from the 1950s Outfit manual. **Ben** showed an interesting live steam crane navvy, based on an 80-ton steam excavator featured in an old "Engineering" article. Due to the horizontal boiler of the modern Mamod steam engine the cab is oversize, but when the jib racking mechanism is complete it will reproduce all the motions of the original at scale speed.

John Bridger brought along "Nellie" the loco and his Bike and Rider for another showing. He went into some detail about the construction of the latter and also how he showed the loco to its creator, Roland Emmett. However, since this is reproduced in the latest issue of MMGG, I will say no more here.

Rod Rich, accompanied on this occasion by his wife and daughter, showed the 15-speed epicyclic gearbox, from a John Deere Tractor, now nearing completion, and also components to make a wartime Bailey bridge showing double truss, and single, double and triple storey sections. The prototypes were so well made that many are still standing.

Visitor **Alan Covel** showed one of the most astonishing models I have ever seen - a full size bicycle! His entrance would have been even more dramatic if he could have ridden it, but despite the rear axle being a non-Meccano part, crucial areas such as the pedals, etc. would not have stood the strain. The frame is comprised of built-up box section Girders 1.5in. square, to represent the tubes, and the wheel spokes and rims, which take a standard bicycle tyre, are of 12.5in. Strips. The chain is a realistic reproduction of the original, made from large numbers of 1.5in. Narrow Strips lock-nutted together. There are a number of beautiful touches - the rear sprocket teeth are Flat Trunnions, there are ball bearings in the steering frame, lin. Motor Tyres represent the handlebar grips, and 3.5in. Rack Strips are used in the "rat-trap" pedals. The brake is an old-fashioned spoon type acting directly on the rear tyre. One of the most impressive features is that, with the exception of the rear axle and the brake cable it is built entirely of standard parts, mutilation is minimal, and there is no excessive bending. Interestingly, the model seemed to weigh about as much as an old-fashioned touring bicycle.

In addition to those featured in the model tour, there were a number of others on show. **Roger Marriott** showed an Aeroscope and an Electric Loco from a 1920s Manual, both in nickel parts. **Mick Burgess** had 2 models not often seen on show, a Side Lever Marine Engine, and the Engine from the 1812 steamship "Comet", designed by Henry Bell. Both were, I think, taken from the excellent series of articles on Meccano Marine Engines which ran in the MM during 1934.

Ken Wright had "Linda" the Ffestiniog loco out for another showing.

Mike Edkins showed a Lost Motion wheel for use in H T Stott's Annual and Centennial Gearing. This is

a demonstration unit to show that it is possible to construct, without mutilation, a 73-tooth wheel with one tooth omitted and a 3-tooth sector plate, capable of working in the manner described by Alan Partridge in the April 1979 MMGG. Meanwhile, wife Pat showed a new use for Loom Healds in a Spiders Web!

Bob Ford brought along the beginnings of an LMS "Black 5" Loco and Tender. So far only the chassis and running gear have been completed. Interestingly, although the drivers are the usual Circular Girders, with short rods joined to the hub and rim by Rod/Strip Connectors forming the spokes, the flanges consist of 2.5in. Curved Strips. These form a circle of slightly bigger dia. than the Circular Girder, and creates a very neat effect. The bogie wheels are Spoked Wheels backed by 2.5in. Stepped Curved Strips.

If ever a model deserves a multiple showing it is **Ron Fail's** Differential Analyser. Fortunately, Ron did not "fail" us and duly brought it along. For those who have not seen it before, this is a calculating machine with 2 integrators and a x-y plotter. It can draw ellipses, reproduce the trajectories of ballistic missiles, and apart from the pen, etc., it is made entirely from standard parts. I would recommend anybody who has not done so to make a close study of this model, should Ron bring it again to future meetings.

Tony Knowles showed yet another little-known copy of Meccano, an Octopus Roundabout made from a Czech "Merkur" set, with holes at 1cm. spacing, powered by a small commercial 3v motor and gearbox.

Brian Edwards had 3 small models: a Motorcycle based on a 1919 Triumph; a Lorry to approx. 1:12 scale, based on a 1955 ERF, powered by a Clockwork Motor; and a Merchant Navy 4-6-2 Loco, to approx. O gauge. This represented the loco with the original "air smoothed" casing, and showed the general outlines very well.

Finally, **Terry Pettitt** showed an MG "Magna" Sports Car Chassis, with 3in. Pulleys & Tyres for the wheels, and driven by a Crane Motor incorporated in the engine driving the crankshaft via a worm wheel. The engine is fitted with a bell housing driving a working clutch through to a 2-speed & reverse gearbox to the rear axle. At a later stage Terry plans to fit a differential.

49th Guild Meeting – 26th October 1991

It was the midst of the season of mists and mellow fruitfulness when the Midlands Meccano Guild held its 49th meeting on October 26 at the Arthur Rank Centre in the Royal Showground at Stoneleigh. Anyway, enough of Keats, let's get on with the model tour.

On pole position was **Les Gines**, who showed his now famous display of No 1 set models, together with a charming hand-operated roundabout that even adults could have fun playing with.

Next, visitor **Philip Drew**, who was a guest of Ken Wright, demonstrated a remarkable "Revolution" Roller Coaster, based on the fairground attraction at Blackpool. Philip's model is designed to be automatic in operation, for the car (with its hapless occupants!) is launched by a powerful spring catapult (comprising 6 Tension Springs) on a tower at one end, travels round the loop, and comes to rest on an identical tower at the other end. Here two "fingers" mounted on horizontal Sprocket Chains gently push the car into its launching position, and everything is set for a return trip to the first tower, where the sequence begins again. Unfortunately, like good wine, these models do - not travel well, and Philip had a minor accident on the way to the meeting when the car was dropped from a great height. This of course did it no good at all and as a result it would run true in one direction only. The rails and loop were constructed mainly of "cheap" parts, i.e. 5 1/2" Strips and Double Angle Strips. The whole model is approx. 10ft. long, 2ft. high and 9 1/2" wide.

Alan Partridge reviewed an "Index of Meccano Models", covering all the models featured in the MM and other Liverpool publications, produced, I think, by a New Zealand Club. Alan commented that it was a most excellent and comprehensive document. Vol. II, out shortly, will cover the "MMGG" and all other Meccano Club publications. Alan also showed his revised version of Keith Cameron's self-righting Mars Rover, as recently featured in "CQ".

Ernie Chandler had 4 models to show us: A fairground "Octopus", based on a 1920 Binns Road window display model, 2 other fairground models, namely a Chair-o-Plane, based on an old photograph, and a Cakewalk, based on memories of Stratford fair; and finally, Andreas Konkoly's Colour Mixer, as recently featured in "CQ".

John Brown showed an impressive model of the Burntisland Level Luffing Crane, as pictured on the cover of CQ for Sept 1989. John's version is about 1:20 scale, approx. 5ft. high, and powered by 6 12v DC Radiospares motors. 2 of these, suitably geared, were mounted in the tower bogies to provide travel, whilst the remainder carried out the luffing, swivel, and main & auxiliary hoist. Swivelling was through a double thickness of Toothed Quadrants. Accompanying the crane, and sitting very nicely underneath it, was John's "Bulldog" class GWR Loco, fortuitously to approx. the same scale.

Next, **Tony Knowles** described his "Krazy Klock", a CMN Modelplan to a Keith Cameron design. This is characterised by the use of gear wheels constructed from large numbers of Angle Brackets bolted to Strips forming circles. Tony commented that it took some time to get the mesh of these gears right, so that they operated without any undue irregularity. The motor is of a 4-pole synchronous type, running at the rather odd speed of 500rpm. Tony said that the accuracy of the clock varied over a long period and wondered how accurate power stations were in maintaining the AC frequency. There followed some discussion about this, the consensus of which was that although the frequency may fluctuate significantly, in the long term it could be regarded as extremely accurate.

Eric Baldwin showed a model, predominately in pre WW II parts, of 'Watts' beam engine, based on the No 6 Manual model of 1930. Eric said that when he first built the model, back in the 1930s, he had problems with the connecting rod since the holes would not line up; he solved this by redesigning it. Building the model again, he encountered the same problem, but this time solved it by using 4 BA nuts and bolts!

Co Stevens brought all the way from Holland a magnificent model container portal crane. This behemoth was 3.27m. long, 1.46m. wide and 1.06m. high. Since his car is only a VW Polo, how he got it inside is probably a story in itself! In fact it breaks down into a number of pieces, and re-assembly takes some time. With the aid of 11 motors, Co demonstrated the 7 separate movements by picking up a container off the floor (representing the hold of a ship) and transported it to a lorry waiting at the "quayside" at one end of the crane. In addition to the usual travelling and hoisting movements, the special grab can rotate through 360 degrees, and can pitch and rock the load, thus providing for loading/unloading from a ship pitching in a heavy swell.

Chairman **Roger Wallis** brought a number of models, including a Torquay Lift Railway, based on Peter Mason's model of the Scarborough Lift. Roger has modified and improved the mechanisms, and has eliminated some of the gaps in the sliding doors that appeared in the original. In addition, the door opening mechanism has been re-designed so that it is now below floor level and hidden from view. Finally, the electrics have been completely rebuilt, eliminating the non-standard micro-switches. The model is driven from a single 5v power supply and controlled by an improved version of the Meccano Programmer (another Wallis design!) described in MMGG No 2. The only non-Meccano part is a relay to reverse the car motor drive, but Roger hopes eventually to eliminate this.

In addition, Roger showed a mains powered synchronous clock, with "universal" gearing, so called because it is easy to change the ratios and direction depending on the motor used. The clock strikes the

hours, and experiment showed that the most satisfactory “ding” was created by a Wheel Flange mounted on a rubber grommet. Roger also showed the beginnings of a Daimler “Fleetline” bus. However, he was critical of the instruction manual recently published for this model, commenting on the poor layout and deploring the widespread use of obsolete and mutilated parts.

Finally, Roger demonstrated David Guillaume’s rotating Motor Chassis. David had taken the chassis from the No 10 Set Sports Car Leaflet, bolted a Ball Race to each end and slung it between the ends of a stout framework. The assembly is rotated slowly by means of a mains motor. The chassis is driven by a PDU, a contact arm and commutator supplying the current. The simple rear brake has been replaced by proper disc brakes, and many other detail improvements have been made. Roger hopes to fully restore this model during the winter months.

Alan Covel brought a beautiful model of a Lotus Super Seven sports car. Although not quite as large as the 1:1 scale bicycle he had at the last meeting, nonetheless it was of impressive size, with Ashtray Tyres setting the scale. Detailed points included the use of shiny 1½” Pulleys as headlights, large compression springs for the front suspension and Black Plastic Rods for the exhaust pipes. The model was powered by an electric motor through a simple belt drive, but owing to the weight of the model this kept breaking.

George Illingworth showed some more bits and pieces in connection with his large scale Lancaster Bomber, the completion of which is, I believe, timed to coincide with the 50th anniversary of the “Dambusters” raid. These included a wartime “Type E” bomb trolley complete with bouncing bomb, a Merlin Engine on its test stand and one of the wing sections. The construction of the latter was reminiscent of the Forth Bridge, but as George pointed out, this was necessary otherwise it would bend under its own weight. Accompanying these parts was a Tiger Moth to the same scale, which aeroplane was the RAF’s basic trainer from 1932-47, and thus played its part in training Lancaster pilots. George also brought along a Meccano “first”, a ship that actually floats! The secret is the use of Meccano plastic box lids for the major portion of the hull. A twisted strip acts as the screw, driven by a small electric motor. Naturally it does not go very fast, but it’s much better than a rubber duck in the bath!

Terry Pettitt was persuaded by the Chairman to talk about his collection of motor vehicles, chief of which was an MG Magna F2 Sports Car from the 1930s. 3in. Pulleys & Tyres set the scale for the model, which is driven by a Crane Motor. The original had a 6-cylinder engine with the overhead camshaft driven through a vertically mounted dynamo at the front of the engine. This feature is reproduced in the model. In addition a 3-speed & reverse gearbox is fitted, but so far with no gear selector mechanism.

As ever, in addition to those featured in the tour, there were a number of other excellent models on display. **Roger Marriott** had a clock with a self-winding and striking mechanism. The original design for these was by Ron Fail, and they were featured in the MM for May 1969 and August 1971. The clock spring is re-wound through a differential gear to enable continuous running even whilst winding. The movement is regulated by a balance wheel driven by a hairspring as in a watch. 2 PDUs provide power for the re-wind and striking mechanisms.

Mike Cook produced a Trench Digger from the No 10 Set Leaflet. As ever with Liverpool models, some modifications have had to be made; e.g. the buckets in the leaflet illustrations are the wrong way round! In addition, the digging boom will not tilt up and down in the way that the instructions imply, and Mike has yet to sort this out.

Brian Edwards brought a 2-cylinder Pumping Engine to 1:7 scale, loosely based on an 1862 engine at Westonzoyland, Somerset. I particularly liked the flywheel; the 4 spokes were each comprised of 3-1/2” Angle Girders arranged in H-section, with the outer ends splayed out. The rim consisted of Flanged rings, whilst the hub was represented by Bush Wheels with stacked Wheel Discs in between. Toothed Quadrants around the rim enabled the drive to be taken from a motor in the base.

Mike Hooper showed two models built entirely from restored scrap Meccano - the Motorcycle & Sidecar from the 1928 SML, and a pre-war freelance racing car, the blue bodywork of which reminded me very much of a Bugatti. Both were in Blue/Gold colours, but the strips had been re-sprayed with Ford Solar Gold (Metallic) - ref. no. YAF 103. The Rubber Rings on the 3in. Pulleys of the motorcycle were made from Vacuum Cleaner driving bands, with approx. 1-1/2” cut out of the circumference and the ends stuck together with Superglue.

Pat & Mike Edkins showed their now famous collection of models, including for the first time a rather charming narrow gauge 0-6-0 loco, which I believe is freelance.

Mike Brammer slipped into the meeting room later than usual, but brought with him a magnificent Planing Machine, to approx. 1:12 scale, based on his memories of the original machines when he was an apprentice. The model was actually planing soft wood, and features an automatic, adjustable, quick-return motion actuated by a toggle. This is a super model, and I hope Mike can bring it to the next meeting and talk about it.

Finally, your scribe was berated by the Management Committee after the last model report for not including a description of his own models. So this time my humble offerings were the Eric Taylor Crawler Tractor, which I still cannot make work properly; a vintage Fire Engine from the June 1951 MM; and a 6-wheel Lorry derived from the early 1950s Outfit Manual. The fire engine was quite difficult to build, because of the poor quality of the illustrations, and the omission altogether of major parts of the model from

the instructions. In addition, the model is quite heavy, and totally beyond the capacity of the E20R motor, particularly with the gear ratios described. The 6-wheel lorry is an attempt to use 8 (and only 8) of that much-maligned part, the Road wheel; I accomplished this by "stretching" a 4-wheel lorry into a 6-wheel twin steer vehicle, a type fairly common in the 1950s until Construction & Use Regulations rendered it obsolete.

50th Meeting – 28 March 1992

This was very much a red letter day for the Midlands Meccano Guild, as that day saw its 50th meeting. The meeting room at Stoneleigh Royal Showground was simply packed with models for this auspicious occasion. We were celebrating not only 25 years existence, but, as the Chairman pointed out in his opening remarks, the formation of the MMG spurred a number of others to form similar clubs, from which sprang the network of Clubs/Societies/Guilds that we are familiar with today. First up on the model tour was **Philip Drew**, who demonstrated a 10-pin Bowling Machine. Plastic balls 1.5" dia. are rolled down an inclined alley to knock down 10 "pins" arranged in a triangle. The pins are actually spring-loaded levers which move backwards and upwards when hit. When they are knocked down a light comes on above the pins to indicate which remain upright. If all the pins are knocked down in 4 balls or less the balls are returned for the player to have another game. Meanwhile, a sweeper arm clears the area of loose balls to prevent jamming of the mechanism. The timing of the movements was perfect and as much a tribute to Philip's electronic capabilities as his model-building. , Philip also mentioned that he was restoring, or, as he put it, "renewing" Meccano. He showed some silver parts that had been re-plated (@ £60 for 77lbs) and some yellow items that had been re-painted using a "powder paint" technique, which was more scratch resistant. This cost £50 for 440 items. The yellow was a slightly different shade from the original, but looked very fine. Philip also had on display the Gantry Crane from the 10-set leaflet, primarily to show off the restored parts, which had a real "showroom" finish.

As usual, our Chairman, **Roger Wallis** had a number of interesting items on display. The Fleetline bus progresses slowly but surely; after the last meeting Roger had a long chat over the telephone with Paul Joachim, its original builder, and as a result a number of difficulties had now been ironed out. In particular, the engine and gearbox now forms a completely separate module (a la the prototype). Two nuts hold it in place, and on removal, gears separate to break the drive to the rear axle and the connection to the gear lever in the cab. The gearbox is now all mechanical (instead of the original cord operation) and gearchanging is now achieved by the use of a Rack Strip. In addition to the Fleetline, Roger also brought along the famous Noel Ta'Bois Trolleybus, for comparison; a display model excavator previously described in Newsmag 25 (Oct 1981) and a Lorry & Trailer from a brand new No 5 Set given to him for Christmas. To finish off, he also had with him a full-size blind from a London bus!

Bob Ford had brought a 1:8 scale model of the engines from the Victorian Paddle Steamer "Ruby" which in its day was the fastest boat on the River Thames. The engine was of the 2-cylinder side lever type, cylinders 3'4" dia. x 3'6" stroke; pressure was 3.5lbs and developed 100 bhp to drive paddle wheels 17'6" dia. The model was in Bob's usual immaculate Blue, Yellow and Silver parts. He explained that the most difficult items to construct were the pillars supporting the crankshaft, which were constructed from Cylinders between two of which a plate had to be sandwiched. In addition, it was virtually impossible to use a solid rod to connect the two cranks, and so a Flexible Coupling Unit was used instead.

Mike Brammer brought his planing machine for a second showing. At 1:12 scale this is not a large model, but, as ever with Mike's models, it is packed with detail and works faultlessly. The machine features 3 planing speeds, with a quick return motion; the table is driven through a Rack Strip, and a toggle mechanism at the end of the travel actuates reverse. A variable feed ratchet moves the cutter across the work. During Mike's demonstration, the machine was actually planing soft wood. A 12v DC motor provides the power.

Les Gines brought along a gigantic model, judged by the standards of his recent efforts, a fairground big wheel built for a shop display over Christmas. Les explained that the shopkeeper wanted a silent-running model, so belt drives were used throughout. He said that although the shop specialised in model trains, the Meccano was the biggest attraction for the children in the locality! Les also built a freelance 0-4-0 loco on a plinth, also for display, but in the shop it did not excite much interest when placed alongside the big wheel.

It is strange how some models are very rarely seen, and then by co-incidence two versions appear at the same meeting. Such was the case on Saturday, for **Tony Brown** also brought along a 10-set Gantry Crane. Tony is in the process of modifying/improving the model, by providing separate drives for the cab travel and hoist, and also a drive to the wheels supporting the entire gantry. In (making these improvements, he is trying to keep within the constraints of the original 10 set plus Elektrikit. Tony also showed a model of a Wolseley "Gyrocar"; this was an engineering folly built in 1913/14 by the Wolseley Car Co to the order of an eccentric Russian Count, who claimed that a practicable 2-wheel car could be produced, using a gyro to maintain balance. The prototype worked after a fashion, but experienced trouble with brakes and steering. Tony's model uses a stack of 4" Circular plates as the gyro, but he was not brave enough to demonstrate its balancing qualities!

John Palmer has been taking a leaf out of Les Gines' book and designed a selection of small trucks and vans, using the "Multikit" cab and running on 1" Pulleys & Tyres. The fleet was based on an East German "Multicar" design and very neat it looked, too. A car transporter was the obvious vehicle in which to bring them, so John made one of these as well, to the same scale.

Nick Brunning brought along a model of the GMM Blocksetting Crane, in immaculate yellow and silver. This was powered by a Decaperm instead of the original E15/20R, but the gearbox followed the original design very closely, I think these are amongst the most impressive of all Meccano models, and for me no

meeting is complete without a blocksetter, whether copybook or freelance.

John Brown showed a variant of Keith Cameron's Krazy Klock, which he christened the "Ironbridge Clock". John had built it to show at the Telford and Ironbridge Meccano Society, and therefore modified the clock by including a representation of the famous iron bridge on the top, and also two "workers", a blower and a smith, symbolising the iron industry of the area. The clock is powered by a Meccano Elektrikit synchronous motor driving an output shaft which appears to be turned by "Toiling Tommy" (Telford?)

Roger Marriott demonstrated a partially complete model of a Stothard & Pitt 25-ton portal type dockside crane, to a scale of 1:24, built from drawings originally published in "Engineering" for October 1920. All the movements are driven by separate electric motors, and the drive to the bogies goes down through the legs of the supporting tower, thus minimising the use of exposed shafts and chains. The cab slews on a GRB and at first Roger could not see how to get any wiring through the centre. He solved this by using a rod with keyway, which provided enough space for 3 wires to go through. The auxiliary hoist level luffs using the "Toplis" system, whilst the main hoist, when installed, will achieve this by returning the lifting cable to the luffing drum, so that as the jib is raised, cable is paid out. Roger said that this was the model's first outing - it had not even been tested at home. Brave man!

Gordon Snow had brought a neat little model of a Foden Steam Wagon of the 1920s, approx. 18" long, driven by a small electric motor, and mounted on a plinth. Spoked Wheels are used at the rear, and Wheel Flanges, with the flanges pointing outwards, at the front. Gordon wondered whether it was correct to include a differential in the model, but the unanimous opinion was that this was quite right.

Eric Baldwin seems to have been inspired by the David Guillaume rotating motor chassis at the last meeting, for he has now built his own version. The chassis itself is a slightly modified version of that in the Jan 57 MM, with a PDU inside the "engine", and with the aid of two Ball Races it is mounted between pillars constructed from Braced Girders. A second motor at one end rotates the chassis through a quarter of a revolution, it then stops and the PDU drives the rear wheels for a few seconds. The chassis then rotates back through 90 degrees in the opposite direction.

Alan Covel brought along a "dual purpose" model of a 1835 Liverpool & Manchester Railway Carriage. One side represented a first class carriage of the period, of the classic "stage coach" design with 3 compartments mounted on a common frame; the other side represented a Travelling Post Office, complete with net. As the carriage moved along, so the net swung down, picked up a pouch from a lineside attachment, and then closed up again. I don't know for sure, but the prototype must have been one of the first TPO vans in the world.

Young **Robert Parker** Jnr showed a neat little model lorry powered by a clockwork motor. Unfortunately, the model did not behave itself and wouldn't "go". Don't worry, Robert, it happens to all of us! Even Graham Gooch got a duck in his first Test Match!

John Bridger described his experiences as a "helper" at a local youth club, where he invited the youngsters to build simple model cars to a common design and race them. The reaction was interesting! John has written about the occasion in more detail in his editorial in issue 15 of the MMGG, so I will say no more here. He also showed (I think!) one of Eric Baldwin's Meccanographs and a small scale lorry and low loader trailer, carrying a miniature fairground organ.

Mike Cuff, making a welcome return to the fold, brought along an intriguing Westminster Chime clock, made in nickel parts, and utilising Channel Segments around the rim of the dial. The clock's chief feature is that it is driven by a single synchronous motor. The strike and chiming mechanism are each driven through one side of a differential, and the strike wheel locks one side or the other depending on whether the clock is to chime or strike the hour. In addition, to save space, Mike used a 2.5" Gear Wheel inside a Gear Ring, thus creating more slotted holes for adjustment purposes than in an ordinary 3.5" Gear.

Alan Scargill showed two models, the first he christened the "Meccano Mole", which consisted of a small truck mounted on crawler tracks supporting 3 drill bits for tunnelling. The track was driven by one PDU and steered by another, using a double differential system. Meanwhile, the drills rotated at high speed. His second model was a Road Grader, to a Canadian Modelplans design, using "ashtray" tyres and a E15R motor running on 12 volts. Alan's comments on the difficulties of construction are best left unsaid!

Mike Edkins demonstrated probably a Meccano "first" - a fully working, accurate clock from a 1991 series 5 set outfit. This is the result of a self-imposed task to see if a worthwhile clock could be built from one of the smaller sets. The clock consists mainly of a falling weight regulated by an escapement wheel, and a pointer on the weight marks the hour against a vertical scale. Minutes are denoted by a separate hand rotating once per hour. The running time is approx. 6 hrs. and it appears to keep reasonable time. I hope Mike publishes building instructions in due course, because this is a clock that even I could build!

Mike Cotterill brought along an automated freelance loco, running backwards and forwards on 7ft of track. The loco was of small scale, and operated through a 3rd rail pick-up. The buffers at each end were DPDT switches in disguise; each time the loco ran into them they swivelled backwards and thus reversed the polarity of the current.

Ernie Chandler, batting much lower in the order this time, had brought a comprehensive fairground display, complete with authentic music! This included a freelance Traction Engine, based on a Dennis Perkins/Brian Rowe design; a carousel, in which he had neatly evaded the difficulty of modelling animals by

simply buying some model horses in a toy shop; and a large Big Wheel (using doubled 5.5" Curved Strips around the rim) which seemed to use all the different colours available in Meccano. Accompanying these, but rather the odd one out, was a simple Keith Cameron lorry from a design recently published in CQ.

Reminding us that this was the 50th meeting, **Phil Ashworth** showed probably the oldest model on display, since it was first seen at the 5th meeting! This was a freelance Showman's Traction Engine, photos of which appear in one of Bert Love's books.

Finally, in a corner of the room, "somewhere in England", **George Illingworth's** 1:12 Lancaster was being "bombed up" and prepared for "take-off". Admittedly this is not quite true, because at present only the 2 inner engines are fitted, reminding one of the ill-fated "Manchester", from which the Lancaster was derived. However, George was able to demonstrate how the Dambusters Bouncing Bomb was loaded into the bomb bay, and spun up to 500rpm prior to dropping. It is remarkable how, in these days of Laser-Guided Weapons, the RAF was able to achieve almost the same results 50 years ago. The model is big enough to include a wealth of detail and thus in addition to the bomb rotation, there are working flaps and lights, etc.

As ever at the MMG meetings, in addition to those featured in the model tour there were a host of other models to see. **Tony Knowles** brought along a highly colourful 1:10 scale Beam Engine, constructed from Czech "Merkur" parts, with 1 cm hole spacing. **Mike Hooper** showed again his partially-completed "King" class loco; so far just the chassis and running gear has been completed, including the inside cylinders and valve gear. **Pat Edkins'** fertile brain has been at work again; her latest creation is a "Meccanoman" sitting on a park bench, reading a magazine (MMGG?). The tree was made from Loom Healds, and looked rather like a "Monkey Puzzle" tree. The shrubs and plants were, coloured multi-purpose gears and red Sprocket Wheels. **Stuart Merrill** showed a very neat rail-mounted yard crane, with a 4-movement gearbox similar to that in the pre-war Supermodel breakdown crane. He also showed an interesting 4—movement & reverse gearbox for a larger scale crane. **Ian Worrell** showed 3 models, the 10-set Motorcycle Engine with Keith Cameron modifications, a partially completed Eric Taylor Crawler Tractor (I wish him well with that!) and a Scammell Super Constructor Lorry, also partially complete. All in all, the meeting room was packed with models, and appropriately for the 50th meeting, one of the best collections we have seen for some time.

51st Guild Meeting – 3rd October 1992

The meeting was accompanied by the type of weather most suited to Meccano Modelling – wet and miserable. That was not the mood, however, inside the Arthur Rank Centre where yet another very fine selection of models of all shapes and sizes was on show to delight (and in some cases puzzle) the assembled members. Many of the models on show had previously been exhibited at the Stoneleigh Festival and the excellent model report of that event sent round with the invitations to the Autumn Meeting is a hard act to follow. It is quite tempting to refer the reader to that report but prize winning models like these cannot be treated that way.

The Model Tour “went in at the deep end” with **George Illingworth’s** Lancaster Bomber, the scale model prize winner at Henley this year. We were treated to a recording of the actual flight checks and start-up procedures with the model following faithfully to the extent that the No. 3 engine refused to fire at the first attempt. All was well, however, and the Lancaster did everything except fly and drop its bomb, much to the relief of the assembled audience. George has made the model to mark the forthcoming 50th Anniversary of the Dambusters’ raid. The model is the result of much research by George and has features such as retracting undercarriages, moving guns and turrets, opening undercarriage doors and bomb bay fairing, working height spotlights and working ailerons, elevators, rudders, flaps and, of course, engines. Built to a scale of 1:12, the model has an 8’ 6” wingspan, is 5’ 10” long, weighs 86 lb., is powered by 9 electric motors and built in 1950’s Red/Green. A really superb model!

John Palmer has extended his range of scale models based on the Multikit Cab to include two six wheel vehicles - a Tipping Lorry in Yellow/Zinc and a Recovery Vehicle in dark blue. Both were very smart and well modelled, illustrating the high degree of realism possible at a small scale and providing a nice contrast to the Lancaster Bomber.

David Barrett brought along a live steam 1929’s Foden Steam Wagon built exactly from the March 1971 Meccano Magazine and mounted on a rolling road. Built in 1950’s Red/Green, the model runs for 20 minutes on one steaming and is a delight to see.

Ernie Chandler then showed another of his Fairground models, in this case an adaptation of Dr Keith Cameron’s Herchall Carousel from the cover of the MMGG No. 13 Fairground Models edition. Ernie has purchased pairs of animals from the Children’s Learning Centre which looks very effective and adds much to the Model’s visual appeal. Built in a similar colourful collection of parts as the original, the only real difference was the change to the British clockwise motion from the anti-clockwise motion used in America.

Ken Wright was the next exhibitor with his Fun Palace, winner of the second prize at Skegex this year behind Mike Hooper (see below). This is one of those models which defies reasonable description. I’ve seen it in action on four occasions and each time I’ve spotted something new to add to the fun. The model is 4’ wide, 18” deep and 3’ high and is packed with features - flowers emerging from a flower pot, a rabbit from a hat, an orchestra on a rising floor playing music furiously, a tricky track loop with red and yellow trains, a ball run, a clock, a rocking clown’s face, Lady Godiva in a state of undress (with Peepy Tom) and all capped with a rising sun!. Built in yellow, Red and Green and powered by 9 motors, it richly deserves the attention it has received at all its outings.

Dr **David Whitmore’s** Overhead Steam Engine was the model shown by Jack Partridge. The model runs very smoothly and is a delight to watch but dire warnings emerged from a discussion of its assembly. There are apparently one or two errors in the plan and the crank shaft is very difficult to assemble, needing skill and patience. The final model, however, is well worth the effort.

Tony Knowles demonstrated a Giant Swing Boat with a very interesting governor mechanism. The main problem with a clockwork driven model is the progressive reduction in power output from the motor and Tony has put together a mechanism based on vanes which are tilted to reduce drag as the motor winds down and thus affect a reasonably constant speed throughout the run length. The tilt is controlled by a cam which resets the vanes and effectively stops the model when the motor is nearly fully wound down. The overall effect is to produce a 15 minute run of the model at an even speed as opposed to a 2 minute run when ungoverned.

The GWR 4-6-0 King George V Locomotive by **Mike Hooper** was the deserving winner of the Issigonis Shield at Skegex this year. This is a superb model to view in its GWR livery and really makes you want to see the real thing rushing through the West Country at speed. Built to the uncommon scale of 14.51 to 1 (!), the model employs 2 PDUs for prime movers and is primarily Meccano with one or two non-Meccano parts (copper $\frac{1}{2}$ ” bends, a soap dish and brass bell) to give that final polish of realism. Further description is a bit meaningless - you have to see the model to appreciate the time, effort and skill Mike has lavished on what must have been a labour of love.

Steven Hine brought along a Red Arrows display model with eight airplanes rotating at high speed around a central shaft. This model and another of a Jet Fighter, built in the finest Meccano tradition in the early hours of Saturday morning, must have nearly exhausted his dad’s stock of $3\frac{1}{2}$ ” x $2\frac{1}{2}$ ” triangular plates of which at least 20 were in evidence. A nice pair of fun models.

Alan Partridge was next, showing a completely new mechanism designed by John Yewen to demonstrate Keplerian Motion. The model chosen was a Mercury Orrery. Kepler’s 2nd Law states that an orbiting body sweeps out equal areas in equal times during its orbit which means that planets when close

to the sun travel faster than when further away. This is normally approximated by a uniform rotation about the empty focus of the ellipse in which it travels (mechanically inconvenient to builders) but this has been cleverly changed by the mechanism to uniform motion about the occupied focus translated across the centre of the ellipse. The demonstration has to be seen to be fully appreciated and no doubt Alan will be publishing this in the near future.

Alan Covel brought along another of his olden day railway models, this time a Duke Locomotive from 1897. Built in Yellow/Zinc, the model is a pleasure to see, particularly when presented with Alan's usual entertaining and cheerful style. Alan also brought along a most unusual pair of walking boots to the delight of everyone present. Built in blue and yellow, about 6" long and powered by a magic motor, the boots brought the house down as they clumped away along the table!

With only the addition of one extra flexible plate, **Les Gines** proved that a very effective Aircraft Carrier can be built with a No. 1 set. The model was equipped with tiny planes and was up to the Les's usual high standard of modelling. He had also brought along two models built from the 1914 No. 5 set for the Henley Exhibition - a Flyboats model and a Helicopter. Both were very interesting and show what can be achieved with limited parts and unlimited enthusiasm, certainly Les's speciality. The presentation was finished with a Red/Green bus model which is the only one ever built by Les featuring $1\frac{1}{2}$ " pulleys and tyres.

John Bridger demonstrated his Cycle Wheel Jig which he used for "re-truing" a distorted cycle wheel as well as building a new one. This model is in the spirit of his "useful uses for Meccano" challenge in the last MMGG and he noted that all his entries so far in this competition were from non-members, urging that we all have a go, I somehow doubt that the $3\frac{1}{2}$ " perforated strip I used to repair a peddle bin (under protest, of course) will be a winner but, if John wants it,

Alan Reed, a guest of Mike Brammer, brought along a Noise Machine designed by his profoundly deaf daughter as part of her college course. Built from a No. 6 set with a few extras which happened to be lying around (the course instructions said 'using available materials'), the model caused quite a stir when its full capability of producing three different types of noise were demonstrated. A good bit of fun, this one, and best viewed from afar.

John Brown's Double Rotating Ferris Wheels is a really impressive model 1:12 scale model needing a somewhat higher ceiling than the one at the Arthur Rank Centre to show it off to best effect. Floor mounted though it was (John was accused as a result of making it smaller), the model well demonstrates the rather fearsome nature of the ride with positions where the cars are nearly stationary and others where the cars are travelling at high speed with continuous acceleration and deceleration in between. John has modified the model since Stoneleigh to remove the chain drives which stretched each day, replacing them with motors for each small wheel. John also expresses fears for the ultimate fate of the 7 gear rings in the model - all I can say is you must suffer at times for Art, John.

Tony Brown, fed up with having his model contributions duplicated by chance at seemingly every meeting, went one better and duplicated his own model, or nearly so. Tony brought along two Ruston Dragline Cranes, one the SML 27 to the plans published and the other from the January, 1925 Meccano Magazine. Even superficial examination showed the vast differences in design and construction between these two impressive models despite literature references to their great similarity. Tony is convinced some rather dubious practice building went into the 1925 version, with possible use of $6\frac{1}{2}$ " angle girders and very difficult construction at certain parts. The gearing is apparently so low that Tony declined to demonstrate the action as it would have taken a few minutes to prove that any action was actually occurring. The two Red/Green draglines were a pleasure to see, facing each other like a pair of gladiators.

A 150 Ton Floating Crane on a 36" x 22" pontoon and in an incomplete condition was **Mike Cook's** contribution. This model looked exactly the part, built in Yellow and Zinc and giving a very strong impression of the immense strength of the prototype. Mike has been having supply problems with the Japanese motors he uses and their current drain proved too much for his power supply on the day. We all look forward to seeing the completed crane, with sufficient power, in action at a later date.

14 year old newcomer **Giles Regan**, my guest from Bristol, brought along a scratch built helicopter based on a year-old memory of my own re-build of the classic Mike Hooper model (tenuous thread, eh?). Using just a few non-Meccano parts, the model is very different from Mike's and reflects the reduced range of parts Giles has at his disposal. A very pleasing model which works well.

Philip Drew (that's me, of course) was last on the model tour with several models. It is hoped that many will feature in the 1993 MMGG so I will merely name these - A 4' long Tenpin Bowling Machine, a non-creep reversing switch, a flywheel driven truck and a "common parte" 10" bearing spider. I also had a display to demonstrate the great versatility of 28 tooth pinions recently introduced by MW Models from the original idea of Mike Wooliscroft in the December, 1987 Sheffield Meccano Guild Magazine. The main display was of a partially completed Sky Ride as featured at the Ebbw Vale Garden Festival this year. With a boom 3*6" long, this model presents a challenge of robust building and includes an all Meccano counter weight consisting of 250 x $5\frac{1}{2}$ " and 150 x $2\frac{1}{2}$ " perforated strips (cries of "show-off" from audience). The final model will be fully automated, I hope, and will include the landing mechanism and loading platform. The other partially completed model shown was an Earth/Moon/Sun Orrery I am building to the design of Steven Tonkin, a disabled Meccano fan living nearby in Bristol. This features all the main movements of the Moon -

elliptical rotation, swash and centre of apsides rotation - and uses computer aided design.

Other models on show but not included in the Model Tour were as follows:

A Lathe by **Mike Edkins** for pulley boss re-cycling, a man after my own heart.

Pat Edkins brought along her Reflections in Meccano with a Mirror showing a new use for girder frames and the Hornby Diamond!.

Gordon Snow brought along his Atkinson Steam Lorry and Steam Train, both in Red/Green.

Rod Rich had the Coventry Armoured Car, Trolley Jack and Front Axles of 4x4x4 Crane on display as well as giving me an insight into epicyclic gearing (an uphill struggle).

Roger Wallis brought along his rebuilt Daimler Fleetline Double Deck Bus.

Betteena Romain had a Fork Lift Truck from the May, 1955 MM with her but was unable to stay and let us into the secrets. She does, however, tell a familiar tale of poor instructions with final triumph against the odds with her first mechanical model.

Ben Cook had built the Meccanograph from the 1991 MMGG so we now know this highly recommended publication is reaching the parts that

Ian Worrell contributed his Scammell, Motor Bike Engine and Crawler Tractor to the general array of fine models.

Michael Bent had a Steam Lorry with him and last, but not least, was **Terry Pettitt** with his MG Magna Sports Car and Motor Cycle and Sidecar.

I think that's it. Please accept my apologies if I've left you out by mistake - it's not easy doing a Model Tour, believe me. Any complaints should be addressed to the committee who are gathering names of volunteers to write up future Model Tours.

52nd Guild Meeting 27th March 1993

As I set about writing this report I am tempted to question the wisdom of volunteering for the job! Philip Drew was coerced into writing the last report and what an excellent job he made of it; that report sets a standard which is hard to follow. Once again there was an excellent turn-out of models of all kinds to really excite the interest of everyone present.

So where better to begin than with **Philip Drew** who brought a relatively simple model of a Skill Ball Run arcade game. The object of the game being to steer a rolling ball down an inclined table and to avoid the hazards on the way, in his own words "simple but fun!" The model was built using his restored Meccano parts, zinc plated strips and girders and powder coated paint finish on the plates. He says that the paint finish is virtually indestructible - and it looks good too.

Thomas McCallum had "parked" his impressive LNER High Pressure Locomotive No 10,000 next door, and magnificent it looked too. Constructed entirely in early nickel parts to reproduce a model originally featured in MM. Being some five feet or more overall the prospect of acquiring that much early nickel in such good condition is daunting.

Nearby was a delightful model of a Fowler Gyrotiller built in red and green parts by **Peter Church** who, unfortunately, was reluctant to say anything about it. I liked the model very much, it was about No 10 set size, not too complex but sufficiently detailed to convey a nice impression of the prototype. I will return to this theme later.

Next on the itinerary, and needing no introduction, was **John MacDonald** with a pair of his superb military models. A Mk13 Centurion Tank modelled to 1:11 scale together with its M26 Transporter modelled to 1:8 scale. Painstaking research at the Bovington Museum produced the drawings from which these very accurate models were constructed. The transporter has a gearbox, with 8 forward and 4 reverse speeds, driving through all six wheels. Working rear wheel brakes, transmission brake and winches add to the realism. The tank weighs in at 55 lbs. and again everything works. Triple differential constant power drives to the tracks. Merit-Brown steering, Horstman suspension, turret rotation, gun elevation and even gun recoil and breech mechanisms to complete the picture. Not only that, the attention to detail is breathtaking and the models really do "look the part". John really must be congratulated on his superb Meccano modelling skill.

Whilst on the subject of military models, nearby was a welcome visitor **John Dawson** with his Six Wheeled Armed Vehicle. Nicely modelled in yellow and nickel parts this model belied the complexity of its internal workings. Including two E20R motors driving through automatic gearboxes to the four main drive wheels and four PDU's to drive gun elevation, turret rotation, steering and to reverse the E20R's. The model is controlled from a remote switch box and a brief demonstration showed that it all worked smoothly.

Roger Wallis put on a small show which included a new No 6 set together with photographs to prove that he now has a complete collection of 1990's sets. Alongside was a new Marklin M60 set which he had recently received as a gift from a very understanding friend. He also showed a collection of small models built to the instructions for Nick's Transport Fleet but cunningly modified to avoid serious bending of parts. With some thought and a little care it can obviously be done quite effectively. Serious nostalgia had also set in since he showed us a model that it has taken him 41 years to pluck up courage to build. The model was a nicely made Road Sweeper built in yellow and black parts from instructions in a 1952 MM. This was accompanied by a Land Rover constructed to No 7 set instructions from the same period but this time in the correct period colours.

Next were the **Edkins** family. Once again **Pat** showed a sample of her delightfully innovative collection entitled "Reflections of Meccano" Highly imaginative model design must run in the family since **Mike** brought along an original and very decorative skeleton clock. After much research and "jerry-wangling" he managed to achieve 30 hours between windings using no more than a clockwork Magic motor as the prime source of power! Among its many interesting features the clock has a working fusee to even out the motor torque variations and (shame!) a non-Meccano bell which strikes on the hour. Without doubt a quite remarkable demonstration of model building skill.

Rod Rich gave us a brief lecture on harmonic gearboxes during which he made reference to his "bible" - Ingenious Mechanisms for Designers and Inventors He used a small demonstration model to illustrate the principle of the harmonic drive and his chosen application was a clock incorporating the aforementioned harmonic drive. The clock was based on an article in a 1936 MM. So what's new? Well for one thing, nearly all of the gears and parts were home made. However, contrary to popular belief, Rod actually confessed to owning some real modern Meccano and to prove it, he produced a small model from under the table. The model was, of course, a much improved variant of a model taken from the instruction manual.

Next door **Gordon Snow** had an accurately reproduced 1927 SM Steam Excavator built in correct period parts with the exception of the motor. Unfortunately, the 1935 E20B was a little oversize for the model but it did work very smoothly. He also showed a freelance design early Tipping Motor Lorry from the same period. The models were thus complementary, carefully constructed and nicely presented together.

In my opinion Meccano was invented for the sole purpose of building model cranes, and to prove the point a number of examples were present. **Albert Rowe** brought along the carriage for a Blocksetter currently under construction. The model is based on SM 4 but he has incorporated many modifications in

accordance with a number of recent articles on the subject. So far so good and I for one look forward to seeing the completed model at the next meeting.

Mike Shaw also brought his Blocksetter along; again the model was based on SM 4. This model has lots of freelance modifications which certainly improve the scale appearance. The model was controlled from a remote switch box and included a number of motors to drive the various functions. A quick demonstration by **Val Shaw** proved that Meccano is not only for the chaps - the model works very nicely too! A nice touch was the adornment, little figures which gave the whole thing a proper sense of scale. However, I suspect that the flat cap rather than the hard hat would have been the workers head gear of the day!

Roger Marriott brought along his very fine model of a Stothert and Pitt 25 Ton Level Luffing Crane built to a scale of 24:1, which resulted in a jib length of 4.5ft. The model is based on a descriptive article and drawings published in "Engineering" in October 1920. The mechanical functions of the crane have been faithfully reproduced and derive power from four PDU's. The travelling carriage is similar in size and appearance to that of SM 4, it is driven by a single motor and runs on 16 wheels arranged into four compound bogies. The roller bearing is of the familiar built up construction using 32 small pulleys and slide pieces. Roger changed his original GRB for this bearing in the interests of scale fidelity and improved function. A Toplis level luffing arrangement is used such that both the main and auxiliary hoists remain quite stationary during luffing. A moving counter weight at the rear of the crane is linked to the luffing mechanism to maintain an accurate balance at all jib elevations. Of considerable interest, Roger has arranged to control and supply power to all motors via a single two wire pick up built into the track baseboard. He has successfully managed to use a Hornby Zero One train controller most effectively for this purpose. The realism of control provided by this means is very good indeed and is an idea worthy of further exploitation.

The remaining crane on display was built by Your Author (that's me!) and is a 1:36 scale model of a Wellman-Seaver-Morgan 150 Ton Floating Crane. The model is based on an article in "Engineering" in November 1920. Not entirely finished, this was the second outing of the model, but at least the machinery is now working. All that remains to complete the model is the addition of some detail such as ladders, rails, lights and other deck fittings. I am reasonably pleased with the result but it has taken two years to get this far, I am really looking forward to building a smaller simpler model now!

I think I can now begin to understand how **Mike Hooper** must have felt when he had finished his locomotive model after many months of building. He is now building a more modest model of a 1938 BSA 350cc Gold Star M24 motor cycle engine at full scale. As yet unfinished, it is about as big as the No 10 set model and there the similarity ends. As might be expected of such a skilled modeller, the detail is accurately reproduced and includes "working" dynamo, magneto, gear train, OH valve gear and "spark" I am sure we can look forward to another fine exhibition model.

Nick Brunning's Baltic Tank Locomotive. SM 15, was very nicely constructed and looked splendid in new current production French parts. However, the bends in the flat plates forming the tender made me wince a bit. Nearby **Brian Edwards** also had an incomplete locomotive model on show. A 1:12 scale Double Fairlie locomotive as in use on the Festiniog railway. Modelled in 1950's parts it should make an interesting companion for Ken Wright's models when it is complete. Brian also brought along a nicely made small but detailed showman's engine to his own design.

Geoff Devlin's model of an Overshot Watermill, complete with period carts and many little sacks of "flour" was interestingly different. After a fine exposition on the finer points of the history of watermills he commenced a demonstration of the workings of his model. Alas, mechanical gremlins struck almost immediately followed by the desperate call for a screwdriver. Many were instantly proffered, as might be expected at any self-respecting Guild meeting, but unfortunately, he was unable to solve the problem. Happily the mill was seen working later.

As always **Les Gines** amused us with two smaller models built with the younger enthusiast in mind. First, Roland Emmett's Little Nell locomotive being a smaller version of John Bridger's model. Les actually admitted to having seen the original in 1951. Second was a car transporter with seven cars and a caravan. Each car was modelled on a different, and recognisable type, all cars could be loaded on, and unloaded from the transporter most realistically. Guaranteed childproof the model has been played with for many hours. By whom I wonder?

John Sleaford brought along a Showmans Engine nicely constructed to the No 10 set instruction leaflet in new nickel, blue and yellow parts. I was surprised at the impressive size of the model. In an attempt to improve the scale appearance and proportions of the model John has made some changes to the design and has added some extra detail. A nice touch is the use of compressor belting for wheel tyres, a "fix" worth noting for the future.

Although unable to be present himself, **Mike Brammer** sent his son along with his demonstration model of a General Purpose Servo Amplifier for use in Meccano models. The demonstration includes bi-directional speed control, open loop speed control, position control and force or torque amplification. I was unable to see the model working so I hope Mike will bring it along to the next meeting.

Having "nothing to hand at the moment" **Alan Partridge** filled a little table space with his Mercury Orrery and what I can only refer to as a "Ray Tracing Conundrum" This latter curiosity comprised two hub discs, a few axle rods and was heavily bejewelled with swivel bearings! What more can I say?

John Palmer brought along a fleet of four multi-kit commercial vehicles nicely modelled in various colours. He also had a carefully built lorry tractor unit which reproduced a model featured in a 1950's catalogue; it was of course built in the correct period parts. Interestingly John also showed a lorry built from an East German kit, mainly in plastic parts I think and to about the same scale as his multi-kit models. No need to worry, although the model looked quite nice I don't think the system poses any threat to Meccano.

Dave Taylor brought his now legendary model of a 1905 GER Bus for us to marvel at, for those unfamiliar with the model it featured on the cover of CQ for December 1992. This really is a masterpiece of Meccano model building and it was perhaps not surprising to discover that it took some 1500 hours to construct. Also on display was Dave's Roller Coaster model resplendent mainly in new Argentine red and green parts. The model is loosely based on the original at Clacton and correctly features the little motor house at the top of the car lift. The model certainly worked very smoothly and realistically. Dave explained that oil on the car wheels slows them down whilst waxing the wheels speeds things up. This provided an interesting but tricky means for tuning up the performance of the model.

And finally we arrived at the **Ernie Chandler** show! Several things of interest here including a little 0-4-0 Locomotive based on a design by John Bader and previously published in CQ. When Ernie tried to demonstrate this model we discovered that Geoff Devlin's gremlins had moved post-haste into Ernie's electrics. Also on display was an assortment of four small models all based on the multi-kit lorry cab. To complete nostalgia corner, Ernie also assembled a selection of Christmas cards received from around the world, which just goes to show that Meccano reaches those parts, etc.!

Now to exercise the reporter's prerogative, I return to the theme commented on at the beginning of this report. At the short business meeting we were invited to consider how we might best use the proceeds of the generous legacy left us by the late Wilf Bolland. I would like to suggest that some small part of the proceeds be used to create a permanent symbol of our gratitude. In particular I would like to suggest "The Wilf Bolland Memorial Prize" to be awarded to the winner of an annual model building competition. The prize could take the form of a suitably engraved cup to be held by the winner for one year together with a certificate as a permanent record of achievement. The cost would be limited to a one time purchase of the cup and a small stock of certificates and perhaps the small annual cost of adding the winners name to the cup. The theme of the competition, triggered by **Peter Church's** Fowler Gyrotiller, could be for a model built from a No. 10 set or less. The model should be of original design or a seriously improved instruction manual model. The competition could be judged at the March meeting by the Committee or by an externally appointed judge. This would enable the models to be built over the winter months and would provide a crop of new models for the display season.

Limiting the scope of the model to the contents of a No 10 set opens the competition to most members and could also lead to some reasonable length articles for the Gazette. With that I rest my case.

What do you think?

53rd Meeting - 2nd October 1993

How time flies! The six months since the last meeting seem to have gone by remarkably quickly. Needless to say I managed little model building over the summer. As I begin to write I find myself contemplating the folly of taking this job on once again. This time I did not spend quite so much time checking out every model, the time was short and there was far too much to talk about! Less than half of the members spoke about their models so I have been forced to fall back on the descriptions, if any, in the meeting notices. Unfortunately, some jokers promised to bring a particular model and then showed up with an entirely different model. Please spare a thought for your reporter in future. So, I have considered the evidence and report as follows. My apologies for the inevitable errors, omissions and misrepresentations.

First over the starting grid was our secretary **Ernie Chandler** who brought along a mill engine built to instructions in an early (31.57) manual. The model was brought up to date by the use of replica channel segments for the rim of the flywheel and a PDU to provide the motive power. Ernie confessed that he still does not understand Corliss valve gear (who does?), but the approximation looked fine to me. Alongside was a pair of blocksetters, both modelled in 1950's red and green parts. The first, built by **Albert Rowe** was based on source material from SML4, GMM20 and various CQ articles. The model was nicely proportioned and was scaled to represent a Super Marine-London prototype. (whatever that is!) It was powered by four non-Meccano motors and made use of some non-Meccano parts in its construction. The second blocksetter, which has yet to be completed, was built by **Tony Brown**. The model was commenced as a rebuild of that in the 1937 No 10 set manual. However, the model has been developed to represent more closely the 1910 Gibraltar Titan crane featured in the Meccano Book of Engineering. The proportions of the model looked right and it certainly met with my approval since Tony has chosen to power it with a 1960's Meccano-Mamod steam engine. I very much look forward to seeing the model completed and in steam.

The "joker in the pack" on this occasion was **Roger Marriott** who gave notice of his intention to bring a schools class locomotive model to the meeting. So what did he bring? - A clock! However, it was a well-built clock to a well-known design by Ron Fail I believe. It ran continuously throughout the meeting but its time keeping was in need of some adjustment I think! And now for something completely different, Our chairman, **Roger Wallis** brought his computer along to demonstrate his answer to Isomec, the CAD software for producing computer drawn diagrams of Meccano constructions. Still in development, Roger's alternative is based on a Shareware CAD package. Drawing with the system looked quite straight forward and makes excellent use of the tools already available within the CAD software. At present the library of Meccano parts is small and growing. An advantage of Roger's approach is that it requires a relatively small number of views of each part to be stored in the library, since the CAD software readily facilitates rotation of the view about a number of suitable axes. Roger informed us that the software, currently called MECCAID will eventually be marketed as low cost Shareware. I am certain he will find a ready market among Meccanomen many of whom are also computer enthusiasts.

John Palmer showed two of the latest additions to his fleet of models based on the multi-kit vehicle components. The first was a neatly modelled furniture removal van built with 1950's red and green parts. The second was a very nice tank transporter complete with tank all modelled in army green parts. John informed us that the little tank was built to instructions for the well-known Bert Love design. Nearby **Brian Edwards** had brought out his showman's traction engine for another airing. This delightful little model is a freelance design and is of approximately 1:12 scale. Modelled in red and green it really looked the colourful part.

Terry Pettitt brought along his superb MG sports car model, as featured on the cover of CQ20 and veteran of several meetings and exhibitions. However, other developments are afoot, since he also showed the chassis for a Freelance design based on the Routemaster bus. Most of the "works" were in situ and included a six speed preselector gearbox driving through a complex arrangement of differentials to the rear wheels. As we have come to expect, the attention to detail was thorough and I for one look forward to viewing progress at the next meeting.

Once again **Colin Reid** brought his fascinating Rapier loom model. It is a very complex model of a shuttle-less loom and in his own words, is packed with special features. So don't expect me to describe its working here! Although seen "working" it was not actually weaving. However, a sample of cloth was on show which I assume was woven with the loom. Perhaps Colin will treat us to a demonstration of the model weaving before he dismantles it. Next on the agenda was **Mike Cook**, your novice reporter. Once again I brought out my model of a Wellman-Seaver-Morgan 150 ton floating crane built to an approximate scale of 1:36. Since I described the model in the last report I will not repeat myself here. Next time I hope to have it completed by the addition of all the "frilly bits". Alongside, Jack Partridge showed a very nicely modelled vertical boiler stationary steam engine. I may be wrong but it looked rather like a Brian Rowe design to me. Needless to say it ran very smoothly throughout the meeting. Unfortunately I have no further information on this model.

Mike Hooper really has "turned his bike round" when it comes to model size. Small is now beautiful, a good description of his model of Trevithick's road carriage of 1801. The model is based on an original design by Roger Le Rolland which was published in MM in November 1969. The model incorporates a number of modifications and is powered by a Tandy 12 volt motor. Modelled in modern blue-yellow-nickel

parts with the expected attention to detail, it really looked authentic.

Although I only have the vaguest recollection of seeing the model, **Mike Shaw** was reported to have brought along a small showman's traction engine. The model was built to the Keith Cameron design published in CQ16 and is a nice example of what can be achieved with a 1978 No 5 set. The main change incorporated by Mike was to replace the dynamo with a 6 volt French motor which provided a very neat solution with which to power the model. **Ken Wright** brought along his latest Tallylyn railway locomotive model "Tom Rolt". Being the sixth locomotive in the series Ken now has a full stable. Seen together at the Stoneleigh show they really make a very attractive exhibition. The latest model was built to the usual very high standard in 1950's red and green parts, including a quantity of refurbished parts, and the now statutory non-Meccano items. I suppose we can now look forward to a programme of model rolling stock production!

In addition to a couple of models, **Phillip Drew** brought along a wheel chair bound guest Stephen Tonkin. I am sure speak for us all when I sincerely hope that Steve enjoyed his visit. Philip's models were a Baltic tank locomotive, built to the 1929 super model design, and his ball lift arcade game as recently featured in CQ21. Philip is now something of an expert as far as mechanical game machines are concerned and the latest offering is probably the best yet - well worth a try! The locomotive was quite standard and has yet to be completed. However, it is worth noting that the model was built substantially from red and nickel parts which have been professionally refurbished. Philip has described the refurbishing procedure to us previously; that it is worthwhile is beyond doubt as demonstrated by the very nice appearance of his locomotive.

Moving on to the next model which was a nicely turned out refrigeration plant built by the expert in non-Meccano systems **Tony Knowles**. The model was built entirely in Erector pans including an original 110 volt motor. Apparently, the model was a popular 1930's manual model and was often used as a dealers display model. The reason for the popularity of this attractive model was very evident. Once again we were treated to the entertaining **Les Gines** show which this time featured a large big wheel model together with the usual assortment of small models. The big wheel was built for a shop window display and was designed to present the most attractive appearance as possible. Parts of all colours were included many of which were skilfully arranged to provide floral embellishments. A typically cunning Les trick, the result of years of designing models for small people, was to incorporate a free wheel to allow for over-run when the power is switched off by this means the stripping of gear teeth was avoided. Next on my list is **Gordon Snow** who showed a model dredger built to the instructions in a 1927 No 7 set manual. The model also features as SML5. In the flesh, so to speak, the model really looked very attractive especially as it was built in correct period red and green parts. It was also powered by a 1935 E20B motor. A novel feature worth remembering was the use of replica dredger buckets. So what? You may well ask. Well, they were made from plasticard, painted in the correct shade of grey and were very nearly indistinguishable from the real thing. Gordon also told us that the original gearing in the model was quite wrong, and in order to get it to work correctly he had to make some adjustments to various gear ratios. Now there is a surprise!

Rod Rich had parked his model of a Swedish S-type tank nearby. It was built to a scale of 1:20 and needless to say the construction was entirely in Rod's own brand of "Black Meccano". However, as reported previously, it is now known that Rod does actually own some of the real stuff! Conspicuous by his singularity, **Mike Edkins** was on his own at this meeting, sadly Pat was down with influenza. By the time Pat reads this we sincerely hope that she has made a full recovery and is busy building again. Once again, Mike brought his now famous Magic motor powered skeleton clock. And it is still going! Interestingly he also brought some small models to demonstrate harmonic drives, inspired by the works of Tony Rednall and Rod Rich. This caused me to wonder what mechanical wizardry Mike might be planning now!

And now to something else really different. An occasional visitor, **Alan Covel**, is a bicycle enthusiast as some members will know. So, it may not have been such a big surprise when he turned up with a full size replica of a Penny Farthing, or Ordinary as we were correctly informed. Quite amazing really, the model was completely detailed to include a sprung saddle, working bell, handle grips from 1" rubber rings and a working lamp suspended from the front axle between the spokes. What an achievement! Although Alan did say that building a 5ft diameter wheel in Meccano is rather tricky!

Now that the euphoria following the Lancaster beginning to fade **George Illingworth** seems to be wallowing in nostalgia for his more youthful days. Since he had run out of Meccano parts he revisited earlier days by obtaining a nice example of a 1948 No 5 set which he displayed together with a hammerhead crane built to the manual instructions, also in pristine 1950's parts. The shortage of parts must really be getting to him because he also purchased one of the recent theme sets with which he built a pair of nice little motorcycle models. Rumour has it that he is soon to dismantle the Lancaster as he has a new project on the stocks. However, whatever the project is it will need to be very good to outshine the Lancaster.

I have a note that tells me that **Ian Worrall** brought along models of a crawler tractor, a motorcycle engine and a lorry. It is with some embarrassment that I report only the vaguest notion of having seen the models. As I do not have any other information I am unable to write more about these models. I will try and do better in future, honest! This time nostalgia corner was provided by **John Ansty** who brought along a number of early Meccano items for display. Interestingly, the display included several very early boxed nickel sets and a variety of motors.

It is difficult to know where to start when describing **John MacDonald's** absolutely superb army models. I can hardly begin to do justice to John's models in this brief report. John brought two models to the meeting, a 1:9 scale FH70 post war field howitzer and a T26 Sterling wrecker vehicle to a scale of 1:11. Needless to say both models have been fully researched, they are both accurate in appearance and are fully operational. The FH70 has working clutch, two speed gear box, disc brakes, steering, recoil motion, jacking, gun elevation and gun traverse. The T26 includes an eight speed gear box, eight wheel drive, rocking beam suspension, turntable steering, and a fully working crane jib capable of telescopic extension. John gave us a brief demonstration of each model and those familiar with his work will need no reminding of just how convincing the models looked.

Last man to speak on the tour was **Mike Cuff** who showed us some prototype cars and track for a new roller coaster he is planning, The cars are an improvement on his earlier models and incorporate features to improve rolling performance whilst remaining on the track. My apologies to the following members who were reported to have brought models to the meeting which I failed to see, let alone note. Firstly, Michael Bent who brought a small crane tractor built from the 1955 No 5 set manual instructions. And secondly, **Mike Brammer** who brought a couple of small 1:30 scale lorries, a concrete mixer lorry and an articulated lorry, both based on Nick Rodgers original designs.

Readers of the newsletter will by now know that I have a "soft spot" for models built to the constraints of the No 10 set. So finally, I must report the superb combine harvester model built in immaculate 1950's red and green parts to the well-known leaflet instructions. The model was set up for display and really looked magnificent. Unfortunately, it had no label so I do not know who built it. But, whoever it was did a first rate job. On that note I wish all readers premature compliments for the festive season, a productive model building winter and I look forward to seeing a good crop of new models at the next meeting. And please do not forget to make a label for your models!!

54th Meeting - 26th March 1994

Well, once again it's that time again! How quickly the time seems to fly by between meetings. The number of members attending seemed greater than ever and we were pleased to welcome a number of new members and guests. As a result I think we had more models than usual to whet our appetites and they certainly kept me busy making sure that I did not miss any this time. Such were the numbers of models and members attending that more than one was heard to remark that the otherwise excellent venue might be becoming a little tight for our needs. As I get older I seem to get busier and busier which leaves less and less time for model making, so I was unable to bring a model to the meeting. This left me with time to scrutinise the exhibits in the hope that I would not miss anything. Even so, models kept on arriving right up to the start of the model tour. I think I "got" everything! However, some exhibitors failed to label their models which makes it very difficult for your reporter. My apologies for the inevitable errors, omissions and misrepresentations.

Once again the privilege of speaking first on the model tour was accorded to our secretary **Ernie Chandler**. His models included a demonstration of gearing built from a Canadian Model Plan, a little Christmas tree complete with lights and a small showman's engine built from instructions by Brian Rowe. He informed us that the tree was the centrepiece of his ever popular Christmas window display and the showman's engine was modified to include a rear mounted pole crane. Ernie informed us that the pole crane was a feature seldom found in Meccano models of showman's engines and he had taken some care to research the arrangement of the crane to be as authentic as possible.

First of a collection of models on the next table along was a fairground octopus ride to a freelance design by **Albert Rowe**. The model is 4.5ft in diameter and was working very smoothly when I saw it. A special feature of the model, which will no doubt offend the purists, is a hollow centre shaft 3/8in in diameter with a standard Meccano axle running concentrically within it. In the quest for perfection, Albert explained that the model has been rebuilt several times. Alongside were a number of small models built by **Stephen Hine**. The models built by Stephen included a low-loader truck complete with a tracked vehicle, a modern jet fighter aircraft and a delightful little wood-pecker who will peck his way down a tree when released at the top. Last in this clutch of models was a harbour crane built by **David Barrett** to instructions published in MM for March-April 1953. The model was built in period red and green parts and is not quite finished. David explained that, as per usual with Meccano designed models, some modifications to the mechanical arrangements were required before the model would function reliably and correctly. David's second model was in the very early stages of development and is intended to be a relatively large, about 4ft long, model of an 8x4 tipping truck. He told us that it is based loosely on a Volvo chassis. The basic chassis frame, front wheels, steering and suspension have been completed so far. The attention to detail is such that the model shows great promise and will be watched with interest at future meetings.

Alan Partridge brought along some small and not-so-simple ingenious mechanisms on which he is becoming something of an authority. His large aspect ratio Chinese north seeking chariot was rather disparagingly labelled a "Chinese muck spreader"! Also on display were a 24:1 harmonic drive and the contradiction called a "straight crankshaft". Needless to say all of these little novelties work convincingly. **Tony Knowles** showed us some Meccano look-alike construction sets together with a small model built with the contents of each set. The first was a Chinese Wisdom set, the model being a small crane truck. The second was a Steel-Tec set, also of Chinese origin, and marketed in the USA by Remco. The model built from this set was a walking dinosaur, the head being a realistic plastic moulding. The parts from the Steel-Tec set are remarkably similar to Meccano parts and the finish is excellent. Tony informed us that Steel-Tec is a more or less exact copy of Meccano and is currently available. The third set was an American Lionel construction set which was available in the USA for two or three years after WW2. The parts are made in aluminium and are joined by a system of rivets and rubber grommets. Despite its age the rubber grommets still work well as demonstrated by the tow truck built from the set.

Moving on, **John Sleaford** and his wife had assembled a nice working display comprising an agricultural portable steam engine driving two saw benches, a timber lorry and a matador logging crane truck, all equipped with miniature logs. The steam engine and saws were basically freelance designs although the boiler of the engine was based on the boiler of the 10 set showman's engine. It was interesting to see that the large rear wheels of the engine were standard 6in pulleys fitted with tyres. The tyres being standard 3in pulley tyres cut and glued end to end to fit the larger wheel, the result was quite effective. The timber lorry was based on number S set instructions and was built by John's wife - a husband and wife team that has obviously got its priorities right! **Brian Edwards** brought along a modestly sized but nicely detailed model, a style which I have come to recognise as typical of his work. The model in question was of a Foden C type steam lorry of about 1920 vintage. The model was built in the usual 1950's red and green colours, was powered by a rather more modern Meccano motor and really looked very nice. Returning to the fold after a lapse of nearly 20 years was **Peter Dixon**. Peter brought along a model of a mini clubman car last seen at a meeting in 1971 and still not quite complete! In the interim he has got married and now has a young family so he has a valid excuse. We wish Peter well and hope that we will not have to wait quite so long before the next model appears.

And now to something close to my own heart, a model built within the constraints of a number 10

set. **Tony Palmer** managed to build a very nice model of a fairground steam galloper. By using a large percentage of the contents of a number 10 set he managed to produce a very effective roundabout of about 3ft diameter. His ingenuity is considerable and fortunately we can all learn from his efforts since the building instructions are now available as Modelplan 80. **Roger Marriott** was adopting a rather lower profile after the success of his previously displayed level luffing crane. This time he brought a nice little 1930 locomotive, modelled in red and green, motorised and mounted on a display stand all built to the usual impeccable standard. He also brought his motor-cycle and sidecar out for another airing, beautifully built in pristine nickel to the instructions in SM leaflet number 3. **Roger Wallis** showed us the latest developments in Meccaid. I am much impressed by what he has achieved and was particularly impressed by the colour prints of his sample constructions. I for one wish him well in this venture and hope that his work gains the recognition it must deserve. The computer does not quite totally dominate his life since he also brought the beginnings of a model of a London Transport TD class bus based on a design by Adrian Ashford. No doubt we shall see more of this in the future, both in hardware and software forms!

Colin Reid must have read some of my previous writings since his Rapier loom is now "threaded up", if that is the correct technical terminology, and its weaving capabilities were demonstrated for all to see. Having built the GSM loom myself and having learned the difficulties of making such a machine weave I just do not have the words that adequately describe the magnitude of his achievement. Excellent, brilliant and incredible spring to mind. There cannot be many Meccano models, past or present, which have a mechanical complexity that even begins to approach that of Colin's loom. A little more fine tuning and then I expect he will be taking orders for suit lengths! On the other hand he may just dismantle it in order to build something else even more complex - I sincerely hope not, at least not for some time yet. Another superb example of the art of Meccano model building stood alongside, a level luffing crane built by **Mike Brammer**. The model was a freelance design taken from a photograph of a dockside crane and was built to an approximate scale of 1:24. The model really looked the part since the rather angular features of the prototype favoured Meccano construction methods. However, the really clever features were revealed when Mike removed the cover to the engine house. A single small 12v electric motor drives all functions of this impressive model through a very neat system of gearboxes. The functions are fail-safe since all winding drums are sprung loaded to the disengaged state which includes automatic braking. In operation the model is very quiet and all functions perform with scale like speeds. In my opinion Mike should be persuaded, and if necessary assisted, to produce building instructions for this model.

A very nicely modelled vintage bus caught my attention next. When I discovered that it was the work of that skilled model vehicle builder **Terry Pettitt** I knew then that I was looking at something of merit. The bus is a model of a Leyland PLSC Lion of 1927 vintage. It boasts a wealth of detail including a four speed and reverse gearbox. It looked finished to me but Terry's note explained that the gate for the gear lever mechanism has yet to be fitted. **Howard Somerville** showed us some excellent examples of his model building skills. His large model of a Caterpillar 14G motor grader was very finely detailed and most impressive. All of the hydraulic functions were reproduced using components from Action Engineering (are they still available?). Unfortunately the lack of an adequate device for controlling the hydraulics put paid to plans for a fully working model. Howard also brought along a pair of very nice hypocycloidal steam engine models based on the prototype in the Birmingham Science Museum. These engines do not utilise the common crank and connecting rod arrangement and were an attempt by a gentleman named Murray to get around the patents of the time. His last model was called Shirley and is a 1:3 scale novelty to represent a young lady called Shirley Norton who attended the meeting with Howard.

Geoff Devlin put on a display of models to commemorate the centenary of the building of the Manchester ship canal. I liked his display very much since I am an enthusiast for steam earth moving machinery. The models were a Ruston and Proctor steam navvy, a Wilson steam crane and excavator and a Stoney steam crane all built to a scale of 3/4in to 1ft. The models were powered by various electric motors and Geoff gave a short demonstration of each of the three models. The steam navvy is an unusual model and is worthy of further consideration since it is fairly easily modelled in Meccano. As ever **Philip Drew** has been beaver away down in the West Country and brought the result of his latest endeavours for us to look at. With an eye to the South West Meccano Exhibition he has built an X-Y plotting machine with which to amuse the children since it is a hands on model with a hand controller to move the plotting pen. In order to protect his valuable power drive motors from misuse he has built in various safety override switches which limit the pen movement to the plotting table which measures 10in x 7in. **Mike Hooper** brought his magician out for another airing together with the basis for his latest model. The chassis of his new model is based on the Kenworth W-900 tractor designed by Keith Cameron and published as a Canadian Special Model number 1 1. As might be expected from a perfectionist modeller the chassis has been modified to meet the requirement for a tractor unit for a fairground ride. Knowing Mike's exceptional standards this is a model we can look forward to seeing at future meetings.

Les Gines can always be relied on to produce something of interest and he did it again at the meeting. His WW1 tank was built from instructions in a very early manual, and comprised little more than a picture. Les managed to work out the detail, which included a vast number of 2in strips, and produced a model evocative of the period. Apparently, one or two old army buffers have put Les right on matters of detail

when he took the model to a public exhibition. Some of Les's younger fans have complained that his hands on models do not move around enough. He corrected this oversight with a very nice model of a 1920's van based on the Ford model T chassis. This model provided the perfect application for the spoked wheels which I have yet to find a use for. The model moves along very nicely when the starting handle is turned, this should keep the children amused for a while. Fittingly, right next door was a small model built by young **Jon Huskisson** who was a guest of Geoff Devlin. Jon is already an accomplished model builder as his mechanical digger built from instructions in a current manual testified. **Ian Worrall** brought along a couple of very substantial vehicle models. His model of Eric Taylor's crawler tractor needs no introduction and his second model was an equally solid looking Scammell tractor unit. The latter is, I understand, the basis for a lorry mounted crane which is currently under construction. The builder of the incomplete Laxey water wheel alongside took me a bit of effort to discover. It turned out to be **John Nuttall** who, in fact, brought two unusual and very interesting models to the meeting. The Laxey wheel is being built from the instructions in GMM super model leaflet number 48. It has been very carefully built in what appears to be mint 1950's red and green parts and will look absolutely superb when completed. John has made many modifications to the model in order to improve its fidelity including a cleverly assembled round tapering tower. His second model was the vast Dornier Do-X multi-engined seaplane built entirely in Marklin parts. This model is large, having a wing span of about 4ft and graces the cover of a Marklin construction manual. I guess this model qualifies as the Marklin variant of a super model and consumed a vast number of parts all of which also appeared to be mint.

Mike Cotterill brought two items of interest to the meeting. Firstly, his model was of a 2-4-0 tank locomotive nicely modelled in yellow and zinc parts. The model was built to a scale of 1:17 and represents a locomotive used on the Brecon and Merthyr railway around 1888. The model is powered by an E20R motor and was displayed on a stand. However, it also runs continuously on a length of 3.5in gauge track since it incorporates the Cotterill standard reversing mechanism. Mike also showed a calendar produced by a Dutch engineering company in which the picture for each month featured various Meccano items. Very interesting, and I hope it may have given Geoff Wright some ideas for next year! **John Palmer** of multikit fame brought along his latest creation to show what can be achieved with these modest kits. He showed a nicely made model of a Challenger 2 tank to his own design. The tank was complete with its own transporter based on the multikit truck concept but requiring rather more components. His other new model was a six wheel chassis carrying a cement mixer drum. The rolling ball clock is a fascinating piece of engineering. **John Stephenson** brought his model along which is based on a design previously published in CQ. He has modified the design to include am/ pm indication and he can run the clock at two speeds. One speed is the correct time keeping speed, the other is somewhat faster for the benefit of demonstration. At the higher demonstration speed it has the occasional habit of shedding ball bearings in all directions. it would appear to be quite a challenge to get this device correctly synchronised. Moving on, Michael Whiting brought a small orrery and **Ken Wright** showed some of his results obtained with Meccaid together with a motorcycle built from one of the new dynamic sets. Perhaps our youngest exhibitor, **Robbie Parker**, aged 10, showed us what he can do. He brought along his helicopter model made with the contents of the new number two set. **Rod Rich** would seem to be getting back to model building and showed us a nice little logging truck built with his instantly recognisable and unique "Black Meccano". The second successful husband and wife team, **Mike** and **Pat Edkins** brought along one or two smaller items. Pat's delightful models are quite unique and show what can be achieved with a feminine approach to engineering model building. Her poppies make use of conical discs in a way which Frank Hornby would never have thought of! Mike on the other hand has got his head down and is working on a new model. He brought along a trial construction of a power bogie for a tram. This was a scale model of an EMB Burnley bogie destined for a model of a Birmingham Corporation tramcar. We can all look forward to seeing the next phase of development at the next meeting.

Purveyor of interesting parts to Meccanomen with more money than sense, **Tom McCallum** attended the meeting with two hats on. He was indeed trying to sell old Meccano items for seriously large sums of money. He also brought a couple of interesting models to the meeting. One model was of a trick motorcyclist who spent much time looping the loop, the other was of a motorcycle and sidecar built to the instructions in a 1930's number 7 manual. This nicely presented model featured period parts including a number 2 clockwork motor which is the mainframe of the motorcycle. It would of course be a travesty for an enthusiastic collector such as Tom to build a vintage model in anything other than the strictly correct period parts. After the blinding stardom enjoyed by **George Illingworth** and his Lancaster model he is obviously now content with a much lower profile. He has now returned to the floating Meccano model theme and has built a model of a floating class 9 assault bridge, the kind of equipment used following the D-day landings. To give his model some interest he also brought along a nice little model of a Bren Carrier. It is of approximately multikit size and rolls over his bridge very enthusiastically. Alongside George, **Gordon Snow** had assembled a collection of smaller models. Quite the nicest of these models was a locomotive complete with coach built to a freelance design in 1950's red and green parts. The model was shown in a station setting, complete with footbridge and very aptly named Binns Road. Gordon's other models were a simple "joy planes" roundabout with crank handle for hands on amusement by the young (and not so young!) and a

simple trolley to demonstrate the new shock absorber parts.

Last, and by no means least, **John MacDonald** brought along the latest pair of models in his ever increasing collection of very fine army models. The first of these was a 1942 Dodge WC57 command car, a kind of jeep and sometimes known as a “Deep” apparently, The second model was a 1940 Scammell Pioneer crane truck. Both models were built to an approximate scale of 1:8 and as always everything works as per the proto-types. John gave a very brief resume of the models and concluded by saying “What more can I say?” Those familiar with John’s superb models will appreciate that his comment has to be the understatement to cap all under-statements! Well, what a meeting. Like so many others I really enjoyed the day and look forward to the next one. Meccanomen must be some of the friendliest people around, always ready to welcome a new face and discuss their favourite topic. And the models of course must be an inspiration to us all to go home and prepare for the next meeting in order that it will be even better than the last. Mike Cook

55th Guild Meeting at the Arthur Rank Centre, Royal Showground, Stoneleigh on 1st October 1994

Well, this time it was a bit touch-and-go whether would make it to the meeting at all. My son Ben started a course at Loughborough University this week and he was required to check in to the hall of residence during the morning of the meeting. Having installed him in his room I left him to contemplate his new life whilst I whizzed down the M69 to Stoneleigh. I arrived just as the AGM was commencing and not a little disoriented after all the rushing about. However, the AGM gave me a breathing space in which to settle down and concentrate on the matters in hand.

When I walked into the building, which by this time was virtually empty since everyone had assembled next door for the AGM, I was immediately struck by the large amount of unoccupied table space. This was in stark contrast to the previous meeting when members arriving later had a bit of a problem finding enough space to park their models. My immediate perverse thought was one of relief that I would not have quite so much to write about this time! However, my relief was tempered by the fact that I had not had time to inspect and note the models prior to the model tour. Fortunately I was rescued by Ernie Chandler who had the foresight to look around earlier and make a list of the models present. I am very grateful to him for this help which has made my job a little easier.

Now for the bad news! Despite Ernie's help I only got a good look at the models described during the model tour, so I failed to see and note some of the models present. As a result I was unable to do proper justice to some builders in the following report. So my profuse apologies for the unavoidable errors and omissions in this edition of the report. The moral of this story should be clear by now. If I do not get a brief written description of your model then, on occasions such as this not even artistic licence will enable me to "get away with it"!

Under the lively stewardship of our chairman Roger Wallis the model tour got off to a cracking start with the Hine family. Surprise, surprise! **Clive and Stephen Hine** brought their Red Arrows display team along for another sortie. Those who have seen this model will, like myself, have been impressed and amazed at the ingenuity and skill lavished on its design and construction. Clive was somewhat embarrassed to explain that he could not stage a working demonstration since some gremlins had taken up residence in the electronics. In any event the cloud base was too low in the Arthur Rank Centre. However, with deft prods of a screwdriver in the electrical plumbing he was able to demonstrate various functions of the model. When fully cleared for flight the Arrows can execute no less than six different formations complete with lights and "smoke" as appropriate.

Or at least that is what we were told! On the two occasions that I have seen the model it has been grounded for one reason or another. However, I have been told on good authority that it has been seen working. After all that our secretary **Ernie Chandler** introduced his latest model, a delightful overhead steam engine modelled in red and green. Ernie's model is based on a design by Brian Rowe which was published in CQ recently and which, in turn, was based on a 10 set manual model. The governor drive arrangement has been changed to avoid driving it through the cylinder. This involved the use of a pair of hinges to attach the governor drive shaft support to the curved boiler surface, which is a very neat way of achieving correct alignment in situations such as this. Ernie reported that the model will run continuously for many hours without attention and it has proved popular at summer exhibitions.

Next on the agenda was **John Brown** who had brought two of his models along. The first was a Daedaleum as featured in a recent CQ and John explained a few modifications which improved the model. In particular, he replaced the black plastic plates around the periphery of the drum and in the viewing port with matt black card. He had found that the reflections from the plastic plates prevented the model working properly. He also experimented with aperture size and rotational speed to achieve an optimum performance. Certainly this model of a Victorian curiosity was working very nicely when I peered into the viewing port. The second was a 1:8 scale model of "Super Lion" a Fowler B6 showman's traction engine. The model is a bit of a hybrid since it embodies quite a lot of model engineering technology. In other words, many non-Meccano items were used in its construction to improve scale fidelity. However, most of the mechanical components of the engine are strictly Meccano constructions. The model is powered by a 12 volt motor and certainly runs very smoothly indeed, although John considered it to be a little under powered. This is a very fine model which certainly looks very realistic and is a powerful demonstration of what can be achieved with a little lateral thinking.

Moving on to a model of an electric clock built by **Tony Knowles**. My limited information enables me to reveal that it was built to a design published in CQ25, it is approximately two feet high and is powered by a 250 rpm synchronous motor.

Nearby **Robin Schoolar** had staged a display of a very large number of photographs taken at various meetings, visual evidence of the considerable skills of many modellers and the incredible flexibility of the Meccano system.

Next door **Ken Wright** had brought along his latest model for us to see, and there are no prizes for guessing what it was. Yes, another locomotive! This time it was a model of "Prince", a saddle tank locomotive of the Ffestiniog railway. The model was built to a scale of 1.75in to 1ft. in the customary red and green colour scheme and with the odd non-Meccano item thrown in for realism. It is powered by a 12 volt motor and runs on 3 $\frac{1}{2}$ " gauge plastic Hornby "Rocket" track. As we have come to expect, the model

was very carefully built, has good looks and runs very smoothly. Yet another example of Ken's excellent modelling skills.

Our next exhibitor was **Tony Parmee** who seemed to be making a take-over bid for the whole meeting by bringing along no less than seven models. First was an immaculate model of Tower Bridge built from the instructions in the late 1950's No.9 manual. The model was built in correct period light red/green parts and included some modifications, in particular an automatic raising and lowering mechanism. However, even with the modifications and improvements the model was built within the constraints of a No.10 set. Next was a very nice showman's traction engine based on a design by Brian Rowe and the model in Bert Love's Meccano Constructors' Guide. Tony built the model in early 1950's red/ green parts and has incorporated a number of changes and modifications. Although substantially complete, Tony is planning some further additions to the model to enhance its realism. And now, not one but three double deck buses built to the design in the 1954 No.7 manual. One was built in correct period parts to the original design with only very minor changes. The remaining two were built in blue/yellow/zinc parts and incorporated as many changes as he could engineer to improve the fidelity of the models whilst remaining within the constraints of the No.7 set. These two models were a considerable improvement on the original design and were much more modern looking in appearance. Finally, a pair of lorries built to the instructions in the 1953 No.5 set manual. The first, was built exactly as per instructions in the correct period red/green parts. The second was built more-or-less to the same instructions but included a tipping body as per the design in a later manual. In my opinion the original design was one of the better manual models of the period and Tony's models were a delightful reminder of this.

John and Joyce Sleaford are obviously an industrious couple since they seem to bring a new collection of models to every meeting. Having built a miniature showman's traction engine John decided to build another, then another and he got quite carried away with enthusiasm. Having built a total of five he then decided to build a miniature fairground to go with them and the whole delightful show was working nicely for us all to see. A nice touch was the use of nine LED's of assorted colours under the canopy of each engine. Additionally, they brought along a marine engine and an aeroplane both built in current colour parts from the current No 6 set manual. The marine engine was modified and included a lot more brass than the prototype which improved both its running qualities and appearance enormously. The aeroplane, built by Joyce we were told, was more or less as per the manual instructions.

George "moneybags" Illingworth brought his little Bren Gun Carrier out for another airing. Since I last saw the model he has built a severely testing assault course for it, mainly to show off how well his crawler track mechanism can cope with a difficult terrain. Demonstrations were brisk since he was far more interested in extorting money from the members, a skill at which he has become particularly adept!

Next on my agenda was an excellent version of the Double Flyboats, SML 33A built by **Jack Partridge** in current new parts. The model had been modified to run continuously for exhibition and involved a sequencing controller to automatically start and stop the model in a realistic way. Jack explained that the controller incorporated integrated logic devices and was designed by Jean Berrie a French friend from Marseilles. Needless to say, the model ran smoothly, quietly and faultlessly. Jack also showed us a very neat compact differential unit which would undoubtedly be suitable for many smaller models.

Standing on the floor and somewhat apart from the other models was a splendid scale model of a 150 ton Hammerhead crane built by **Mike Brammer**. Being a crane enthusiast myself I ignored the comments about cranes made by our chairman in his introduction! The model was built in the unusual combination of red and silver parts which gave it an appropriate well used industrial appearance. Mike had a copy of the original 1922 article describing the crane and like the original, each function of his model was separately powered which required a total of live small 12 volt motors. The mechanical design of the model was superb in what I have come to recognise as the Brammer tradition. Of particular interest was the roller bearing incorporating independently "floating" rollers and an ingenious mechanism involving screwed rods to ensure that the ropes lay-up evenly on the winding drums. This was a first class model, it looked right and was a credit to its builder.

A couple of models which we have seen before and on which I will not comment again were **Colin Reid's** superb Rapier Loom and **Roger Marriot's** nicely presented little schools class locomotive. Also attributed to Roger was a small forklift truck which looked like a modern manual model. Unfortunately I was unable to have a proper look at this model so I am unable to comment further.

Howard Somerville then entertained us with a short introduction to his small hypocycloidal engine which I believe we have seen previously. This was another fine model by a very skilled Meccano modeller. Howard also showed us the remains of his "girlfriend" who he has been dismantling! He couldn't quite bring himself to dismantle her head until he had shown us how her cheek mechanism worked. He also showed us a very compact differential unit built to a design originated by Roger Wallis. Apart from its compactness, the unit is housed in a correctly oriented boiler end and supporting structure and looks very much like a "proper" automobile differential.

We were not disappointed by **Les Gines** who once again brought two small models along. Small models would appear to be his forte, or else he only has a small collection of Meccano - maybe we should club together and buy him a little more so that he can build something a bit bigger? The models in question were

his 1930 Ford van and a small version of Roland Emmett's Nellie to a design by John Bridger. Needless to say, both models were quite delightful in their relative simplicity. It doesn't have to be big and complex to be good!

Nearby a bus chassis caught my eye although I was unable to give it the attention it deserved. The model was the work of Terry Pettitt, he must be a bus enthusiast since he brought a bus chassis to the previous meeting. The previous model was of an early 1927 bus whereas the present model was of a Bristol Lodekka bus of the 1950's. It is built to 1 :12 scale, is very detailed and powered by a Meccano six speed motor driving through a three speed and reverse gearbox to the differential. Terry has obviously worked hard to considerable effect to reproduce the mechanical detail as accurately as possible.

The next speaker on the tour was **Ken Senar** who showed us an interesting relic rescued from Binns Road when Meccano closed down. The model was an original Army Multikit (Combat kit?) ambulance with the model room labels still attached! The two labels read "1st sample" and "Sample ambulance combat" respectively. The model did not make it into production since the manual models were similar but different.

Then it was **Alan Covel's** turn to say a bit about his latest model. Alan has acquired a reputation for building unusual models and his latest is no exception. This time we were treated to the sight of the chassis of a large Morgan three wheeled sports car. The model is very nicely detailed in current yellow/ blue/ nickel parts and includes a number of interesting scale like mechanical features. Of particular interest are the wheels. These were built up around 6" diameter plates with, what looked like new, pristine white tyres removed from a pram. In all, a very promising model and I am sure we all await the next instalment with interest.

And now for a real, and very ingenious novelty. **Jack Brown** described the incredible small part separating machine he has been working on for rather more time than he cares to think about. A demonstration proved that the machine is capable of sorting small parts mixtures including nuts, bolts, washers, fishplates, angle brackets, etc. He explained that it is not quite infallible yet and he is working on further refinements. Interestingly the machine comprises a number of independent mechanical modules which fit together on a common base. He found this approach to construction essential to facilitate the very large number of adjustments needed to tune the machine after final assembly. A very considerable achievement in which he can justifiably take some pride.

Nearby **Geoff Devlin** had assembled his collection of models of early earth moving machinery commemorating a milestone in the history of the Manchester Ship Canal. I liked his models a lot, they really looked very attractive as a working group. I think I also detected a few small improvements since the last meeting. It would seem that this collection of models has consumed Geoff's entire Meccano collection so, sadly, they are likely to be dismantled soon in order that he can build something else.

And this brought us into the "home straight?"

Once again the husband and wife team of **Mike and Pat Edkins** produced some interesting items for us. Pat had brought along a number of items from her "collection" of unique models. Whether her constructions should be called models at all is a thought which has just occurred to me. What Pat is so demonstrably clever at doing is to use Meccano as an art form! Yet another illustration of the flexibility of the medium in the hands of a person with lots of imagination. Mike, on the other hand has still got his head down, although he has not made much progress on his new model since the last meeting. The model has not yet progressed beyond the trial construction of a power bogie for a scale model of a Birmingham Corporation tramcar. Although extremely detailed he assures us that the bogie is built entirely from Meccano parts thereby proving that a scale model does not have to incorporate foreign parts. Striving for the last word in scale fidelity Mike has managed to incorporate the following working features into the bogie: brakes to all wheels, track brakes and magnetic track brakes. The model is proving to be a considerable challenge and may be in construction for some time yet!

It was really good to see that **Rod Rich** is now well enough again to undertake some serious model building. His latest model, still to be completed, is of a WW2 German King Tiger tank. Rod described the chassis of his model which is as much as he has been able to build so far. As might be expected it is constructed in his own brand of black "Meccano" and includes a wealth of mechanical detail. The track mechanisms and torsion bar suspension are fully and impressively working and are very close to the prototype in detail. He also showed us the beginnings of what will become a seriously detailed transmission. I think we can all look forward to watching this excellent model evolve – John McDonald watch out!

The next speaker was **Colin Cohen** who was visiting the UK from South Africa, and indeed he conveyed the best wishes of the Cape Town Meccano Club to the Midlands Meccano Guild. Colin's latest model is a vast Demag container crane which he was unable to fit into his baggage allowance. So he showed us a very compact push button switch he devised for use in the crane mechanism. So small and compact is the design that 21 switches can be fitted onto a 2.5" square plate, leaving four holes for mounting! He also showed us a tiny little aeroplane model which looked remarkably like the Ryan "Spirit of St Louis" flown by Lindberg.

Finally, the last speaker on the tour was **John MacDonald**. As always John had brought along yet two more of his superb army models and, as always, I cannot really do justice to his models in just a few

words. The first was a Kettenkraffrad, or tracked motorcycle, modelled on the 1939 original to a scale of 1:6. The model included working clutch, two speed gear box, sprung front wheel and sprung tracks. During his explanation John illustrated how tight turns were made by skidding, which was standard practice apparently. The second of his models was a White M3 Half-track, also modelled on the 1942 original to a scale of 1:9. The working features of this model included a three speed and reverse gearbox, a two speed booster box, front and rear drive, steering, involute track suspension and power operated winch. In all impressively complete.

Although I did not see any of the following, thanks to Ernie we have a record of other models brought to the meeting. A gearless 3:1 drive and a strip and plate bender by **Alan Partridge**. A part of his Tricky Track model by **Philip Drew**. A Stanier tank locomotive chassis and a crawler tractor by **Ian Worrall**. Two motor cycle models built from the current set and a motorcycle and sidecar on a flat bed lorry based on a 1950's manual model by **Michael Bent**. The last man of whom I have a record was **John Palmer** who brought along a selection of his multikit models. Although given relatively short shrift these models were no less important since they contributed to making the meeting as interesting as possible for all of us.

My last word this time is to say a special thank you to Clive Hine, Tony Parmee, John Brown, Mike Brammer, Mike Edkins and John McDonald all of whom provided me with more than adequate written details of their models. This was a great help given the circumstances I was faced with on this occasion and the perennial problem of ageing memory. The message is clear, please take note and let's make the next meeting even better!

Mike Cook

56th Guild Meeting 25th March 1995

It was a bright, sunny spring day, the kind of day when it feels good to be alive. As a result the cross country drive to Stoneleigh was rather pleasant and the general feeling of well-being was nurtured by the prospect of a day of pure self-indulgence. Unlike last time, I arrived reasonably early and was pleasantly surprised to find the "party" in full swing, so much so in fact that table space was already in short supply. The picture that seems to be emerging is that the March meeting is much better supported than the October meeting. Hardly surprising after being "confined to barracks" model building during the winter months.. I noted some 40 or more models this time, a splendid turnout to everyone's obvious pleasure. Perverse thoughts entered my head again! I really do have a lot to report on, so here we go - with the usual disclaimer For error, omission or misrepresentation.

Once again the model tour was conducted by our chairman **Roger Wallis** who for some obscure reason decided to start at the end and finish at the beginning, if you understand me. in other words we circulated the room in the opposite direction to usual! However, if you find the following confusing it is probably because my reporting does not strictly follow the model tour. My first note concerns **Peter Dixon's** Mini Clubman model. For various reasons it has been in the making for very many years and it is still unfinished. However, when it is finished it will have working torsion bar suspension, a PDU under the bonnet and cable operated gear change. On the other hand **Ted Newell**, a most welcome new member, brought along his first model to show us what he can do. He has started building the six wheel lorry and trailer from the early 1950's number 10 set manual, all in nice new Meccano parts. So far the rolling chassis is built and he plans a number of modifications and improvements to the mechanical detail. I have a preference for models built within the constraints of the number 10 set and will watch the development of this one with interest.

John Palmer was the first to speak on the model tour and he described a number of small trucks which most should recognise as his speciality. The models are based on the multi-kit models of a few years ago and there the similarity ends. His newest creation is a model of an American 500hp tractor with a palletised load system, the idea being developed from photographs in an Oshkosh manual. The model was quite an interesting development on the theme. His other models were an assortment of tractor-trailer units based on published designs by Roger Wallis and Nick Rogers. Next door **Terry Bullingham** had brought along some railway wagons on a length of track, all made in red and green parts to 1 gauge scale. The wagons comprised a well wagon with load and a most realistic brake van. The track was also particularly interesting since Terry had used wooden sleepers, the only way he could obtain the realism he desired. He is now seeking information on a suitable tank locomotive to complete the set and would welcome any assistance in this respect. These models were very nicely made indeed a credit to the builder, especially when it is realised that he is visually impaired.

John MacDonald needs no introduction as the builder of the finest army vehicle models to be seen in any Meccano exhibition. This time he had brought along a collection of smaller models, mainly to save on the lifting, but also to illustrate how the 1 1/2" pulley with tyre can be put to good use. These models were immaculate as usual, all included working mechanical detail and the scale was around 1:20. The models comprised a Diamond Tee tractor complete with Rogers trailer and Centurion tank, a Scammell Pioneer gun tractor, a White half track and an Austin K6 balloon lorry. Whenever the opportunity arises these models are worth a close look since they incorporate some ingenious mechanical detail necessary to keep within the scale dimensions.

An unusual but seriously interesting model was the Wimshurst machine brought by **Mike Edkins** to keep the chassis of his forthcoming Jones KL66 mobile crane company. I have always been fascinated by the Wimshurst machine and could not resist having a little "play". It certainly works since the spark was jumping a gap of some $\frac{3}{4}$ " and could obviously jump a bigger gap. The machine was developed from a design by Noel Ta'Bois and later refined by Keith Cameron; most impressively shocking! The crane is a very ambitious project to build the prize winning model of the mid-1950's by Hugh Henry. All Mike has to work with are some photographs loaned by the NMMG and the model is, by all accounts, very complex. Needless to say, we can all look forward to seeing the results of his labours and wish him luck in the meantime.

Ken Wright showed us an attractive little model buggy built from the new 4065 set. This means that either he is taking life very easy or, more likely, he is working on something new, large, interesting and secret. I guess we will just have to wait and see. Next to Ken's model was a small tower crane built from a mix of the new plastic and standard Meccano parts by **Mike Shaw**. The model was powered and illustrates the potential of the new plastic Meccano for extending the scope of the standard system. Something different here for the more ingenious of our members to ponder on.

Mike Cook, that's me, showed a new small model of a 1901 De Dion-Bouton steam omnibus built in pristine late 1950's red and green parts. The prototype was found in a 1901 issue of The Autocar, the photograph looked attractive and it provided an opportunity to use that much under used part the spoked wheel. The layout of the 'bus is similar to the Sentinel steam wagons having a vertical boiler and totally enclosed engine under the chassis. Motive power is provided by a reversing clockwork motor which, although new, is not really man enough for the job. Anyway, I think it makes an attractive small model!

The **McCallum** family, **Tom** and **Matthew** had put on a bit of a show alongside. Tom's model was

a modern looking mantle clock and Matthew's model was a freelance lorry chassis, both models were constructed in modern blue-yellow-zinc parts. Matthew explained that the model was based on a hydraulic tipping lorry produced by the company he works for. Most of the mechanical features of the prototype have been reproduced to provide an excellent working demonstration model. So much so in fact that the company plans to use the model as a centre piece in a forthcoming trade show, Matthew must therefore be congratulated on his modelling skill and also for providing an excellent opportunity to promote Meccano model building to a wider audience.

Moving on we came to **Les Gines** who, just to confuse things had brought along a large model for a change. The large model was a double big wheel based on the SML design and built for a shop window display, its main features were the silence of its motor and its ability to run for hours on end. More in keeping with Les' usual output was a family of bulldozers. The largest was built to the modern number 8 outfit instructions mainly in yellow parts. A smaller version was shown modelled almost entirely in black parts and, from his pocket he produced the most diminutive bulldozer ever. A fitting and typical conclusion for this seasoned entertainer!

John Bridger was next with a pair of rather massive fairground vehicles. These are built in red-nickel parts and are part of his fairground collection. Both lorries are to 1:10 scale, one models a Scammell "Showtrac" and the other a Scammell rigid eight wheel box truck. The latter houses a collection of electrical controllers which are used to control the ride models in the remainder of the collection. These are impressive models and I suspect that the whole fairground collection must be something worth seeing when assembled together. **John Evans** brought along a massive, but yet to be completed model of the Kenworth truck to the Keith Cameron design, CMN special model leaflet number 11. This is a complex model and, not surprisingly, John said he had experienced some difficulty decoding the building instructions. However, the evidence indicated that he has done a very good job so far.

My notes tell me that the next collection of models were the responsibility of **Richard and Harold Gilbert**. The models were the ocean liner from the 1950's number 10 set manual looking resplendent in the correct period colour scheme, the robot man from the 1960's number 9 set leaflet and an eight wheel lorry to the instructions in the late 1950's number 8 set manual. These last two models both built in yellow-blue-zinc parts. I can testify that the robot does actually walk quite well as I was treated to a private demonstration.

Master model builder **Bob Ford** showed us a very nice fairground carousel, the type with lots of horses. Apparently he cornered the market in suitable plastic horse models and then built the model to justify the acquisition. As expected the result was splendid. The model is constructed in modern blue-yellow-zinc parts to a very high standard and the authentic horse models give it a very realistic appearance- On the "downside" I noticed that the model required a large number of crank shafts most of which were cut down to fit. A small price to pay for such a nice model!

Amongst the other models I spotted a very complicated looking epicyclic gearbox built by **Robin Saunders**. Apart from the fact that it utilises a second mortgage worth of gear rings I can say little more about this exhibit.

That prolific model builder and restorer of Meccano parts **Philip Drew** was next. This time he had brought along a substantial version of Keith Cameron's "Tricky Track", the ultimate consumer of flanged sector plates. The locomotive, I was informed, is called "Little Joe" and trundles around the track ad infinitum (or until the battery runs flat). Philip also took the opportunity to advertise his horse racing game, Modelplan 88. Both models are obviously ideal for public exhibitions since they are very good for "drawing the crowds". The model I do not remember seeing was that of a tug derived from a 1929 MM. You will have to bring it again next time Philip so I can have a proper look at it!

Mike Cotterill brought along a very nicely made model of a twin cylinder horizontal mill engine. This model was basically a freelance design made up in modern blue-yellow-zinc parts. Unusually, it was powered by a mains hair dryer motor and featured a realistic working governor. What I liked about this model was its presentation; Mike had obviously built it with exhibition to the public in mind. A useful lesson for all of us there. Last, but by no means least, on this stretch of table space was **Tony Brown** who amused us with the unlikely but serious model of a walking truck. The original model was built by Hugh Henry in the mid 1960's, another attempt at recreating a fine model by a past master. The prototype, we were informed, was a highly secret development for the American space programme which is why not too much is known about it. That it was not an outstanding success is now easy to appreciate. We will all have to wait and see if Tony can sort out the mechanical detail before a walking demonstration can be given.

Watch this space for future developments!

So, on with the show.

Just around the corner was a marine steam engine built to the 1950's number eight set manual I think in the correct period colour scheme. The model was built by **Michael Bent** and that is about all the information I have about it.

Howard Somerville is a name I have come to associate with models built to the very highest of standards with painstaking attention to detail. His latest model is no exception. The model reproduces the engine and slip house of the Gladstone Pottery museum. This is a wonderful model, a superb example of

a stationary steam engine on one side of the wall and a host of small machines driven by complex belting from the engine on the other side of the wall. The model is continuously powered by a 12 volt car heater motor, its visual appeal is considerable and if you missed it then make a special effort to see it next time out. **John** and **Joyce Sleaford** can usually be relied on to turn out a bit of a show for us and we were not disappointed. Centre attraction was the showmans traction engine built to the number 10 set leaflet instructions with various modifications to improve its appearance. The engine was accompanied with a living caravan to approximately the same scale and, once built the temptation to furnish it was too strong to resist. Most of the considerable number of internal furnishings were created by Joyce we were told. A model from a much later period was also on show, a police Landrover from a recent number eight set manual to which John could not resist fitting flashing blue lights.

Moving on, **Gordon Snow** introduced us to his substantial transporter bridge. We were informed that this is an original scale model based on the 1911 vintage bridge over the Tees at Middlesbrough. He had certainly done his homework; he had visited the bridge, taken a few photographs and discovered that it is the only remaining bridge of its type still in commercial operation. A very nice model, set up for public display by arranging for the carriage to run to and fro continuously. His other model was of a 1802 Symington steam boat engine, used in a paddle boat which, so he assured us, was the first steam powered boat ever.

After all this excitement we came to **Mike Brammer** who had decided to confuse us all by building a non-crane model. Stung by the wafflings of our Chairman, Mike took up the challenge and built a model of a 1959 Routemaster London bus. To maintain appearances it is built in red-silver parts and was scaled from a die-cast miniature. It looks good and is mechanically detailed although some of the workings have yet to be built. Pole position next door, often occupied by Mike Brammer's large and intricate cranes, was this time occupied by an equally interesting floor standing model of a shipyard crane built by **John Fuller**. This model is a freelance design and represents a typical crane of the early 1930's. Interestingly it is built almost entirely in early nickel parts and includes two period 4 volt motors driving in tandem. Must be some Meccano collection since the crane is big, mechanically detailed and the parts are generally in very well cared for condition. A very impressive model indeed.

First to speak on the next block of models was **David Barrett** who has been building a "Fell" diesel-mechanical locomotive of 1951 vintage. The chassis and general outline is based on instructions published in MM for November 1953. However, the considerable internal workings are very original. In an attempt to replicate the working of the prototype, David has arranged for the output of four crane motors to be summed using differentials to provide motive power. By selectively switching the motors various traction speeds may be obtained. The "works" are very impressive and curiously, include a number of current production 1" gears made from what looks like some sort of aluminium alloy. **Albert Rowe** was next and his current model is a large fairground ride called a "Falling Star". The model is built to approximately 1:16 scale and was derived from a scale plastic model. I am not so sure about the customers who were obviously enjoying the ride, they were Teddy Bears! **Mick Burgess** put in a brief appearance before lunch and I managed to extract some information from him about the two nickel models he brought along. Both models were of small marine steam engines and were built in pristine early nickel parts. One of the models featured in a MM for 1967, being a re-visitation of an early 1930's model, and was a simple single cylinder vertical engine. The second model, a side lever marine steam engine was built from instructions published in a New Meccano Models manual from the past. The other item of interest he showed me was a tiny model of a 'jeep like' vehicle built in X-Series parts, a rarity this one!

A group of small models by **Geoff Devlin** and his visitor **Jon Husskinson** were next on the itinerary. Geoff's model was a bulldozer built from the highway multi-kit outfit and Jon's models included a Le Mans style racing car, a railway hand trolley and a pick-up truck. This last group of models was built from one of the modern Meccano outfits.

And then we came to a regular contributor to these meetings **Brian Edwards**. As always his models were nicely made in 1950's red-green and this time included a single deck bus and a tank locomotive. The bus is a 1:12 scale model of a 1925 petrol-electric vehicle by Tilling and Stevens. The locomotive, to 1:15 scale, is a LMS/BR Ivatt 2-6-2 tank type and incorporates working Walchaerts valve gear. Although both models were obviously built for display they are both powered by the current small black Meccano electric motor.

Alongside were two models built by **Terry Pettitt** both of which have been seen before. His MG car was brought out for another run as was the chassis of his Bristol Loddeka bus. The bus chassis had not changed much since the last meeting although I did spot the gearbox nearby, as yet to be fitted to the vehicle. Slow but sure progress, much after my own style of model making.

Being a total aviation person I was much impressed by **Alan Covel's** model of the 1933 Miles Hawk Speed Six racing aeroplane. The model is finished mainly in yellow plates which is near the original cream colour, it has a wingspan of 52", a length of 38" and the propeller is driven by a small electric motor. The prototype was the subject of an article in Aeromodeller for July 1951 and a plan for a flying model is available. I also purchased the plan for this attractive model many years ago but have still to find time to make it! Alan seems to have a preference for unusual models and this wonderful example is no exception.

It also demonstrates that aeroplanes, which are notoriously difficult subjects, can successfully be modelled in Meccano.

Jack Brown is rapidly acquiring a reputation as a bit of an inventor, his ingenuity being focused on machines for separating mixtures of small Meccano parts. Very useful after dismantling a large model when sorting out the small items becomes a chore. He demonstrated his latest development machine which he explained needs a little more refinement before it can work faultlessly. He also showed us a very high reduction gearbox he has been experimenting with which he has developed from the Standard Mechanisms model SM 40.

It was impossible to miss **John Brown's** giant windmill model next door, it tended to dominate the whole proceedings. The model is based on the smock mill at Cranbrook in Kent and is built to approximately 1:16 scale, MP 85 describes a similar model to which John also referred. Not yet complete, the model will eventually have a full complement of working mechanical features. It is powered by three 12 volt RS motors and its functions are being automated for display purposes. A very impressive model indeed.

Then it was our Chairman's turn. **Roger Wallis** introduced us to his latest model of the articulated monorail train, built to the instructions in MP69, and which at present is still in the course of construction. As always Roger has incorporated many new and novel developments in the model in order to improve its fidelity and since it was incomplete he was able to show us some of these new features very easily. Needless to say, the standard of workmanship is excellent and we can look forward to yet another splendid display model. He intends to auto-mate its operation using a programmer he described in MMGG 2 some time ago.

Sadly **Betteena Romain** was unable to be with us but she has certainly not been idle. Roger explained that she has now been building with her number 10 outfit and her latest model was brought along for us to see. The model, Valiant Car - The Cavalier was built to the instructions from the Konkoly supermodel plan number 31. The mechanics of this attractive model have been sorted out with one or two minor changes and it is currently either hand operated or, may be driven by a clockwork motor. Betteena has plans to replace the clockwork motor with a PDU in due course. Meanwhile we all wish her well with her model building.

And now for the last lap! **Tony Parmee** struggled along with the monster block setting crane built to the instructions in the 1937-53 number 10 outfit manual. Tony resolved to build the model within the constraints of the post 1954 number 10 set, with all motions working and with as many improvements as he could engineer. The model is powered by the Mamod-Meccano steam engine and we were treated to a demonstration once steam had been raised. The model worked well and was shown to be quite capable of lifting a heavy brick effortlessly. Tony has obviously succeeded in his rebuild and we can all look forward to reading about it as it is to be the subject of an article in CQ in the near future.

And at last we found our secretary **Ernie Chandler** tucked away in his customary corner. Ernie's model is very unusual as Meccano models go, but it just proves yet again how versatile the medium really is. He had acquired a drawing of a modern bobsleigh from the British Bobsleigh Association and built his model from it. The model is quite large, about 3 feet long, and features working steering, brakes etc. It looked nice finished uniformly in blue plastic plates which enabled him to achieve most of the complex curves with a fair degree of realism.

Tail end Charlie was out treasurer **George Illingworth**. As one might expect from the "Money Man" George had produced a graph showing the increase in price of the most basic Meccano set from the early post war years. To give his fiscal comment more meaning he also showed a group of small models built from those basic sets in the correct period colour schemes. A fitting conclusion to a meeting with what seemed like a record number of models to me.

Well that's it for this time. An excellent turnout of models with something to appeal to all tastes in model building. This time there appeared to be a greater number of models than usual built to standard manual instructions. It is interesting to see what can be done with some of these models in the hands of expert constructors. However, for some of us our formative years were influenced by these models and nostalgia can be a heady thing!

Mike Cook

57th Guild Meeting - 7th October 1995

I was about half way through writing this report when I received the appalling news of Roger Wallis's tragic death, news which I found distressing and profoundly shocking. I would certainly like to convey my sincerest condolences to his family and friends at this sad time. I, and I am sure a great many others, will miss his open friendliness and his simple human decency. It was sometime before I recovered my composure sufficiently to continue with the report. So if you find the latter half of the report rather more lack lustre than usual then this is the reason.

Well, for a change, the day of the meeting dawned grey and wet and it stayed that way all day. Just the kind of day for staying indoors and indulging in our favourite pastime! I arrived at the Arthur Rank Centre in reasonably good time for the day's proceedings and was greeted by what seemed like an unusually empty hall. However, it did fill up as you will read below. One of the reasons for the apparent emptiness of the room was the conspicuous absence of our two regular dealers, Mike Rhoades and John Linder. They were both missed by me, and I guess by many others who take the opportunity to procure a few extra parts for their collections. I hope both are well and will be able to attend next time.

As a result of the absence of our Chairman and regular master of ceremonies Roger Wallis, our President Ken Wright was obliged to take charge of the proceedings and, needless to say, the whole show ran very smoothly. Also conspicuous by their presence after long absences were Rod Rich and Alan Scargill. It was really nice to see both of them back in action again and with some models as well. Meccano is obviously an excellent therapy for those recovering from serious illness - maybe the BMA should be informed of this overlooked fact!

Over the last several meetings it be-came obvious that the model tour was getting out of hand. We were hearing more speakers than we really had time for and some of them showed definite tendencies to becoming "rambling Sid's". Listeners were becoming bored by the end of the tour and were showing serious signs of losing interest; like talking amongst themselves. So it was decided to streamline the proceedings limiting the number of speakers to six and giving them ample time to talk about their models. The speakers were chosen from those willing to talk and who had obviously interesting models to talk about. The choice of speakers was the Chairman's prerogative, and a good choice he made too. As a result the model tour was completed comfortably within the hour leaving everyone plenty of time to talk afterwards. The main drawback of this improved tour format was that I, as your reporter, was unable to learn quite so much about the many models on show. This means that I now depend even more on your written comments on the meeting forms returned to George. The message, I hope is obvious. So this time my report is probably not as comprehensive as seems to have become the norm. Once again, my apologies for errors, omissions and misrepresentations in what follows,

My own personal model tour kicked off with **Gordon Snow** who had brought along several models all built in 1950's red and green parts. His main model was a very nice pumping engine based on CSM 14 although Gordon had only built one half of the engine. Never-the-less it looked good, and in his own words "is obviously a worthwhile project". His other models were a small, nicely modelled traction engine and a modern tractor and trailer. Next on my itinerary was that prolific modeller **Philip Drew** with his latest idea. He is working on a scenic model of a canal with barge and he had brought along a short section of canal with barge for our inspection. It would seem that the electrically powered barge will eventually trundle around the canal which acts like a kind of restraining channel. Similar in principal to the Tricky Track models. It is a novel idea and obviously has lots of potential and I for one look forward to seeing the next development. Philip also had one or two other models with him but I am not sure if he was the builder or if one of his guests was responsible. Hiding inconspicuously behind these models were a matched pair of bulldozers built by **Les Gines**. Les gave these models an airing at the last meeting, the largest was built to the modern number 8 outfit instructions mainly in yellow parts and a smaller version was shown modelled almost entirely in black parts. Alongside were two models built by **Alan Scargill**, a pillar beam engine and a smaller display model of a mechanical digger. All were modelled in 1950's red and green parts. The beam engine really looked very nice, it was a copy of a twin beam engine originally modelled by Brian Rowe. However, Alan had chosen to incorporate one beam only, a sufficiency of parts being the problem. A really clever touch concerned the construction of the flywheel. The rim was made up from two replica channel rings, each representing a complete ring of channel segments, fixed open face to open face. The two rings are a snug fit between the lugs of new part number 45a thereby matting a neat and effective connection to the pairs of flat girders comprising the spokes. This model certainly looked and worked very well indeed.

Jack Partridge was next on the agenda and he had several smaller models on display. Nothing simple here, a couple of demonstration models of built up synchronous motors and a neat little crystal controlled clock. The straight forward appearance of the latter obviously is belying its clever content. I am beginning to recognise **Tony Brown's** models for the enthusiastic and painstaking research behind their construction. I am also grateful to him for the notes he took the time to produce which made my job very much easier. He has made considerable progress with his model of the Hugh Henry walking truck based on a 1950's experimental Nasa vehicle. Although I did not see the model working Tony reports that it is now substantially complete with steering and walking mechanisms. Built in red and green parts it includes epicyclic reduction gearing and the whole vehicle is propelled by a powerdrive motor. It is to be the subject

of a forthcoming Model Plan which I am sure we all look forward to with interest. Tony's other model, in the earliest stage of construction, was a much revised Titan blocksetter based on the 10 set model. He has really been doing his homework on this one so I think we can all look forward to a very interesting development over the next few meetings. Around the corner **Richard Gilbert** and his dad had brought along a collection of official Binns Road display models dating from the 1970's. These comprised an illuminated windmill, tower bridge, a ferris wheel and a smaller windmill, and all were working. The nostalgia quotient was quite high in this corner!

Moving on it was really nice to see that **Rod Rich** has been very industrious with his own brand of black "Meccano". He has now finished the model of his German Tiger tank and I cannot even begin to do proper justice to this model in a couple of sentences. The model is 12.4:1 scale, it weighs in at about 35Lbs, it is crammed full of accurate engineering detail, multiple torsion bar suspension, seriously complex gearboxes, turret slewing gear and gun elevation. What's more it all works, as he demonstrated to us - a very fine achievement indeed. Rod also showed us a small eight wheel lorry (Foden?) based on the original Dinky Toy and various interesting mechanisms he has been experimenting with. Next door **Trevor Frankling**, a welcome new member I believe, showed me several little engines he has made which are all solenoid operated. Quite a novelty here since the engines are "electrically operated steam engines" if you understand me. The cylinders are solenoid bobbins, made to reproduce the early 1930's part, and the current is switched by a simple mechanical brush gear. Another engine on the same theme was a four cylinder automobile engine based on an idea from a 1930's MM. Although these little engines run well they produce insufficient power for anything other than cosmetic use.

And then I came to the **Edkins** family. **Mike** had nothing new to report; he brought the chassis for his Jones KL66 mobile crane and to prove that he has not been entirely idle over the summer he pointed out that he has now fitted working brakes. So we will continue to watch this space.

Pat's models need no introduction; they are delightful, imaginative and quite unique. I wonder if "model" is an appropriate description for these constructions? The first novelty was a large cob-web fabricated from healds complete with a robust looking spider. The second, and rather more esoteric offering was entitled "The spirit of Meccano" or, in Pat's own words "a gong with wings!" Look out for it next time and then you will see what she means.

Last, but by no means least, on this stretch of table space were a pair of models built by **Mike Cotterill**. A small nicely made traction engine in 1950's red and green parts, and a rather more substantial arcade game. This unusual game featured a tug of war between two teams each of four men. A handle on each side of the game activated one of the teams through a differential gearbox arrangement. Opponents turn the handles as fast as they can, the fastest eventually winning, an interesting novelty model I thought.

Colin Reid's presence was heralded by his amazing Rapier loom which is difficult to miss on account of its size and complexity. Since I have described this model before I will not attempt to do so again. Instead, a few words about Colin's Congreve clock. In fact it is not exactly a Congreve clock since Colin invented his own variation on the rolling ball escapement mechanism. In his own words "it is difficult" and he is still trying to perfect the mechanism. Given the complexity of his other project, if he says it is difficult, it really must be impossibly difficult!

Geoff Devlin's model was rather unusual, a steam tram modelled very nicely in red and green parts. The model was an excellent attempt at an 1882 Krauss double deck steam tram which used to run on the streets of Munich. Geoff's model was built from a photograph only as he was unable to obtain any more information from the museums in Munich. At a scale of approximately $\frac{2}{3}$ " to 1ft the model is about 30" overall and boasts curtained windows and an unusual boiler arrangement. Geoff is to be congratulated on finding yet another interesting subject for Meccano,

John Palmer was next with a new collection of small trucks for us to admire. A breakdown lorry and tank from the army multi-kit series, but most unusual was a non-Meccano item built from a Constructo system kit. The system comprises both plastic parts and Meccano-like metal parts. However, the hole pitch is not quite the same as Meccano so the two systems are not really compatible. Even so, John managed to enhance the model with the addition of some Meccano parts.

As readers of the newsletter will know, **Terry Bullingham** is a relatively new member who is unfortunately only partially sighted. (Not even partially - Ed) It is to his very considerable credit that he is able to build Meccano models at all and it is a major achievement that he is consistently producing models of a high standard. This time around he brought along a very nice red and green locomotive scaled to run on gauge 1 track and it was accompanied by a small horizontal steam engine.

Once again **John Sleaford** brought along an assortment of very nice models all constructed in modern blue-yellow-zinc parts. This time the models were a car and caravan from the 10.29 instruction leaflet, an open top version of the 1970's double deck bus from the number eight set instruction manual and an accurately built version of the single deck bus, Model plan number 86. As always the models sported a few extras to increase their visual interest. In particular, the single deck bus was mounted on a stand above a mirror to reveal the "under workings". Altogether a nice show.

Albert Rowe's new model is a substantial version of the flying helicopter model first presented by Mike Hooper. Albert's model is set up to resemble a fairground ride and is somewhat larger in scale.

The helicopter is a twin rotor type based on an illustration in a fairly recent Meccano sales leaflet and the machine is programmed to run a sequence of events. Most impressive. Not forgetting the younger generation, Albert replaced the helicopter with an alternative flying machine, a "helicarpet" complete with a number of small teddy bear passengers! Why is it that there seems to be an increasing number of teddy bears finding their way into Meccano models?

A most welcome guest of Ken Wright was **Mike Beadman**, who I hope will "see the light" and become a regular. Mike's model was a detailed scale rendering of a 4-8-2+2-8-4 Garratt locomotive of the South African Railways. The model is powered by two M0 motors and is designed to run on Hornby 0-gauge three rail track with shoes to pick up power. It looked very nice in blue-zinc livery and was built to an approximate scale of 1:30.

Tucked away in the corner usually occupied by one of our regular dealers was a substantial, and no doubt valuable assortment of Meccano aeroplane models. Some of this impressive array was owned by **Bob Thompson** and the remainder was owned by **Tony Homden**. Included in Tony's collection were a pair of models made up from the 1930's Mechanised Army kit which I assume must be quite rare since I have never seen any "in the flesh" before

A superb Routemaster bus modelled in red and silver parts by **Mike Brammer** is, as you might expect, very accurate and very complete. Since its last outing Mike had revised a number of features to improve scale fidelity down to details like wing mirrors and working destination blinds. But most impressive of all, this large model is radio controlled with a microprocessor controller on-board to sort out the motor drives and steering. etc. The model is powered by two 12v motors, it runs very quietly and is extremely manoeuvrable; a small boy's dream! However, there were not so many of those about!

David Barrett brought his Fell diesel-mechanical locomotive out for another airing. The model is to about 1:23 scale and is loosely based on an article in MM for October 1953. There the similarity ends. The interior is crammed full of mechanical detail which replicates the Fell transmission system with considerably fidelity and some ingenuity. The drive train involves four crane motors driving through two primary and one secondary differential to achieve a fair representation of the prototype. An impressive piece of mechanical wizardry.

Mike Hooper had obviously been busy with his nicely restored blue-gold period collection of Meccano. He has built a correct period model of a four bucket dredger ship as featured in MM for January 1936. A large and nicely detailed model, it measures about four feet long by 9½" beam. The model is powered by a 240v motor arranged to give a continuous display of the crane dredger movement for demonstration purposes.

It seems to me that **Brian Edwards** always brings a different model to every meeting without fail, and this meeting was no exception. This time his model was of an LMS/BR Ivatt 2-6-0 tender locomotive of around 1950 vintage. As always the model was built in red and green parts to a scale of approximately 1:15 and was very nicely modelled indeed. Nearby, was the very basic beginnings of what looked like a bus chassis, also, I suspect, built by Brian. A novel feature to look out for in future is a steering rack mechanism involving two worm gears meshing longitudinally. I shall watch this development with interest.

Ken Wright brought along the latest locomotive to join his miniature Festiniog railway collection. Britomart is a 0-4-0 Hunslet locomotive which after a period in quarry service was rebuilt before joining the Festiniog railway. Needless to say, the model is immaculate in its red and green livery, it is built to the usual very high standard and, like its stable mates, is a credit to its builder.

Our Hon. Sec. **Ernie Chandler** has obviously been looking ahead to Christmas when I understand the lucky residents of Clopton Road are treated to a seasonal display of Meccano models. One of the delights this year will be his Christmas Twisters built from the instructions by Keith Cameron in CQ for December 1994. We were privileged to be given a preview of this colourful model which is a kind of fairground roundabout built with a mix of metal and plastic Meccano Parts. I am sure it will make a well received addition to his annual display.

So now into the "home straight". First was **Chris Copp**, a welcome new member I believe. He showed and attempted to explain to us the main features of his incredibly complex robot arm, christened the Heineken arm, since it is supposed to be able to pick up and pour a drink of that well known beverage from the can. I can't even begin to do proper justice to this construction in words so you will just have to be content with a brief comment or two from Chris's own note. The base, swivel and arm bearing were based on CSM number 4 with significant modification. It has independent movement in an assortment of fingers, thumbs and finger tips but residual problems still have to be solved before perfection can be achieved, a condition which is easily appreciated! The entire model is powered by six motors of various sizes from the humble M0 to the mighty Decaperm. I think I would rather drink the Heineken whilst building something simpler.

Alongside was yet another product of the Binns Road model room, a large display model of Blackpool Tower brought along by its new owner, **Richard Bingham**. This rather fine model was constructed entirely in 1960's red and green parts and has been almost completely restored by Richard. On dismantling and rebuilding the model he noticed that all the various subassemblies were perfect, they had obviously been put together originally with great care and precision. The model is very attractive with its multi-coloured

lights and working lifts. A nice touch at the end of Richard's talk was provided by Colin Reid who gave him a colour sales brochure of the time with the very model featured on the cover.

And then it was back in time with **Roger Marriott** who brought along a couple of models built in pristine early nickel parts. The first model was the motor-cycle and sidecar, SM3, which we have seen before I believe. His second model was the part built pontoon crane, - SM28, complete with correct period nickel plated electric motors. This one will certainly be worth waiting for since it is quite rare to see these models constructed entirely in good quality early nickel parts.

Terry Pettitt brought his Meccanograph out for an airing and, whenever I saw it, it was quietly drawing very colourful patterns in the time honoured way. The Meccano graph must be one of the most successful Meccano models ever, it has enjoyed many developments and can always be made as clever as the ingenuity of the builder permits.

Jack Brown was next on the itinerary and although he had not brought a model as such, he explained a most ingenious idea to me which may be of interest to others. It was basically a means for measuring the break-out torque of a shaft, for example, the input shaft to a gearbox. It comprised a 3" screwed rod screwed through a coupling to form a T shaped device for attaching to the shaft of interest. By turning the screwed rod gently it is relatively easy to achieve a balance with the screwed rod horizontal. The rod is then screwed further through the coupling until the unbalanced moment just causes the shaft to start to turn. Since the mass per unit length of the screwed rod is known accurately the degree of imbalance is easily calculated by counting turns from the balanced condition until rotation of the shaft is just achieved. The torque can then be calculated. I understand that Jack intends to elaborate on this idea in greater detail in a forthcoming edition of CQ.

Then I found a model I had missed earlier, an eight wheeled lorry by **Mick Bent**. A nice model this with a sizeable nostalgia quotient since it was modelled in early 1950's red and green parts and was based on the model in the number eight set manual for 1955.

And finally, something really different and extremely impressive. **John Bridger**, the world's expert on building accurate scale models of fairground rides in Meccano has excelled himself yet again. This ride is called The Condor and was designed and built by a German company. The model is massive, at nine feet high he had to assemble it on the stairs landing in order to get enough ceiling height. As yet it is unfinished and, in view of its mechanical complexity it will be sometime yet before it is completed. The model is to 1:10 scale and the prototype was at Great Yarmouth for a period where John was able to do some research. It is basically a tall slender tower with a twist ride built around the tower as its axis. As the ride rotates the passenger cars gyrate in various ways whilst the whole lot moves up to the top of the tower. John explained some of the very difficult mechanical detail and some of the most ingenious solutions he has found to implement them. Beautifully made in pristine blue-yellow-zinc parts its crowning glory is a superbly modelled impression of a condor-the bird. Don't rest until you have seen this model, and that's an order!

Well that's it for another most enjoyable meeting. It is a great shame that the meeting has been overshadowed by the terrible tragedy of Roger's untimely death. However, "time and tide wait for no man" and life must go on. We must now look forward to the next meeting and, in the meantime, perhaps we should consider how we might commemorate Roger's enormous contribution to the Guild over many years.

Editor's comment:- Thanks Mike for producing such an excellent model report.

58th Guild Meeting - 30th March 1996

The day of the meeting seemed like the first day this year which has been sunny and bright, a most welcome change after a very long and depressing winter. So what better than to brighten the day even further by indulging in our favourite pastime. The turnout of members and models was good, some old and some new. So there was plenty to look at, old friendships to renew, lots to talk about and as always, the time passed very quickly and all too soon it was time to leave for home. The enthusiasm is infectious and it seems that all members really look forward to the meetings. For those unfortunates who were unable to attend I will do my best to convey an impression of the wide assortment of models on display. As usual, my apologies to those I have mis-represented or overlooked completely. If this is the case please make sure you return the attendance form to George Illingworth with a description of your model in future.

First away on my personal model tour was our secretary **Ernie Chandler** who showed me what was possibly the smallest and most complex model at the meeting. A very small agricultural tractor based on a model featured in the New Zealand Gazette. The model made excellent use of many of the newer small parts to be found in the modern small French sets and incorporated a surprising amount of representational detail. It just goes to show what can be achieved with a modest collection of small parts!

Next door was one of the largest models present, a continuous running display model of the Snowdon Mountain Railway locomotive No. 5 "Moel Siabod", complete with coach, and built by **John Brown**. Alicionados of the type will recognise the sloping boiler of this rack and pinion locomotive, modelled to a scale of 1:10. Since the wheels are free running drive is transmitted to the track by means of a pair of pinions which engage in a double rack, this being modelled by plastic Meccano sprockets engaging in a single (long) length of plastic chain - representing many weeks' worth of John's pocket money! The engine itself is very interesting and is a kind of undertype beam engine with Hackworth valve gear. Mrs Brown also contributed to this excellent model by making the curtains and correctly dressed period passengers for the coach. Not to be missed this one!

Locomotives are obviously the favoured subject at the moment and the next one I looked at was another continuous running display model of "North Star" built by **Albert Rowe**. Somewhat smaller than the last exhibit the locomotive and tender were based on a design published by Mike Edkins some time ago. The track comprised a short length of straight with a turntable at one end. The model runs backwards and forwards on the track automatically and is turned at the end of each run. Albert tried to explain the electronics to me but I am afraid I was soon lost. The model is awash with relays, switches and motors, the circuitry for which was designed by that well known electrical wizard in the Rowe family, Phil Rowe. Unfortunately, the gremlin family had managed to get in at some time earlier so I was not able to see the model operating. Something to look forward to next time I hope.

Guess what? The next model was also a locomotive. However, this time it was one I have seen and described before, the "Fell" diesel-mechanical locomotive very nicely modelled by **David Barrett**. To remind you, the model is based on an article in MM for October 1953, which most of us remember well, but includes a wealth of mechanical detail to model the rather complex drive machinery. David informed me that it is likely to be dismantled soon so, if you have not seen it you have missed some rather ingenious engineering.

And now for something entirely different, a model illustrating communication satellite orbits. Built by **Steve Tonkin**, with perhaps a little help from Alan Partridge, and "guarded" at the meeting by Alan. To understand the function of this model you need to be a bit-of-a-whiz at orbital dynamics, which I am not. (Atmospheric Flight Dynamics is my particular forte.) To quote, the satellite is in orbit around the earth which is represented by a small plastic ball and has infinitely variable eccentricity and inclination. The model shows the narrow N-S figure of eight motion of the satellite caused by inclination, and the elliptical motion caused by eccentricity. It is also possible to demonstrate other orbital features with the model. A most creditable achievement by Steve, and Alan of course!

And now for something even more different, so different in fact that it is debatable whether the models should be at a Meccano meeting at all! **Tony Knowles**, the alternative construction systems expert, brought along three small models built from various alternative systems. The first was an architectural model representing an eight storey building and constructed from an American BILT-E-Z set dating from the 1920's. The second pair of models were two little vehicles, a breakdown truck and a lamp inspection vehicle, constructed from one of the latest STEEL TEC sets. The third model construction system illustrated was EREKTIT, which dates from the WW1 period. The model represented a small railway breakdown crane, comprising rods and strips fastened with special clips rather than nuts and bolts.

John and Joyce Sleaford's approach to model building needs no introduction, they had assembled the usual collection of models in immaculate yellow, blue, zinc and this time to a slightly smaller scale. The two larger models were built from the contents of a number 7 set, a bascule bridge from instructions 7.1 and a battleship from instructions 7.5. Both were modified a little to vastly improve their appearances. In particular, the bridge boasted working traffic lights whereas the battleship had the forward funnel removed and replaced with a bridge structure, not forgetting the little helicopter on the quarter-deck of course. Other small models included a six wheel tractor (4/95 MMGG) designed by the late Roger Wallis and a low loader, designed by Niels Jalling, complete with a load comprising three tractors. Now it is always difficult to find a

new subject for a Meccano model, just about everything seems to have been modelled by someone before.

So it is full marks to **Tony Homden** for finding a new and imaginative subject for his latest model. The model represents a Liberty Ship construction yard complete with slipway, gantry crane, delivery railway and modular ship. Tony had done a lot of research for this model so the demonstration was both interesting and informative. The ship arrives in many modular parts on the railway trucks and comprises hull sections, engines, boilers, decks, superstructure, masts and so on. Using the gantry crane the modules are lifted into place for assembly on the slipway and once assembled the ship can be rolled down the slipway and launched. Or, at least that's how it should happen. However, Tony has some more work to do to refine the model which he was good enough to bring along for us all to see at its current stage of development. Keep an "eye out" for this model, it is one you should not miss!

The secret is out! Not only does **Les Gines** build small models for the amusement of small people he also builds large models for the amusement of us all. Two sizeable fairground rides were his subjects for this meeting. He has reproduced a Big Wheel in 1927 colours for an Exhibition of Memorabilia to be held in Sussex later in the year. His second model was a smaller version of the Spinning Star Wheels ride designed by John Brown. Both are powered to run continuously since they are intended for display purposes, and very nice they looked too.

Jack Brown is a bit of an inventor as many will already be aware. So it was no surprise to find that this time he had brought along his small parts separating machine, his friction measuring device and a new device, a mechanised copy/text holder. The first two items have been described before so I will not attempt to describe them again. In any event the friction measuring device was featured in a recent issue of CQ. The mechanised copy/text holder is a device Jack invented out of necessity and is the kind of thing typists use. The text for typing is clipped to a board in front of the typist and a moveable bar is used to underline the current line of text. The bar may be moved down one line at a time by means of a foot switch. The clever bit concerns the way the bar is moved down. The bar is generally free to slide down but is held in place by friction and a large spring. When required, the bar is encouraged to descend by a small motor spinning an out of balance weight, the vibration being just enough to cause the bar to move gently down the page.

And now for some smaller scale locomotives. First **John Fuller** has built a 0-8-0 diesel locomotive complete with a couple of container wagons to run on "O" gauge track. To go with the rolling stock John also brought a small articulated lorry together with small loads comprising a containerised gas tank and a load of wood. We are told that these models have been built to compliment a model of a container crane which is not yet fully operational. So this is something we can look forward to next time perhaps? Two smaller models, a mobile crane and a fire tender completed John's collection.

And second, our president **Ken Wright** has been busy building yet another Tallylyn locomotive for a change! However this one is different, The model is of "Dolgoch" and scaled to approximately 1:14 in order to run on standard LGB "G" gauge two rail track. Built to the usual very high standard the model is resplendent in immaculate red and green parts.

John Bridger's expertise as a builder of superb fairground models is well known so it was not surprising to discover that he had brought two such models to the meeting, However, these were not of the usual kind, they were in fact models built from the number 6 and number 7 set instruction manuals from the 1950's. The models were of Swing Boats and High Flyers which John had built to illustrate a talk he gave recently on "Frank Hornby and the products of Meccano Ltd.". It goes without saying that the models were carefully built in the correct period red and green parts.

In a similar kind of way **Terry Pettitt** has become associated with scale models of road vehicles, cars in particular. On this occasion he brought his well-known MG model for another airing and to keep it company he also brought a new model of the Morgan three wheeler. Although not quite complete the Morgan is very nicely detailed and makes good use of red and yellow parts to represent an attractive two-tone colour scheme. The model is based on an original example, and it is for the owner of the car that Terry is building the model.

On a very much larger scale **Ted Newell** brought his current model, the Blocksetter built to SM4 instructions in yellow, blue and zinc parts. Again, not quite complete but very nicely turned out. The model has a number of modifications to improve its appearance and function. Ted has discovered, like all of us who have built the model, that the mechanics of the original are not too wonderful. Consequently, he is planning to install a better gearbox and a more powerful motor. Having been there myself, I can recommend the excellent gearbox from GSM20 which worked very well for me in partnership with a Mamod-Meccano steam engine to provide the motive power. Next door was a new model built by Brian Edwards, who we should really applaud since he manages to bring a new model to just about every meeting. This time his new model was of an agricultural traction engine of freelance design and, as always, modelled in red and green parts. The scale of approximately 1:10 was set by the rear wheels which were made from hub discs and, or circular girders. Another nice compact model built to the usual high standard.

When it comes to aeroplane models I suppose George Illingworth and possibly the Hine family must take the prize for the biggest and best yet. However, **Alan Covel** is hot on their heels. After his superb Miles Hawk Speed 6 he has done it again and has now built an excellent model of the De Havilland Tiger Moth.

The model is to 1:7 scale which gives it a wing span of 50" so this model is of quite a nice size. The model is finished mainly in yellow parts which are a surprisingly good match for "RAF Trainer Yellow", in use from the mid 30's to the early 1950's. There are no prizes for guessing which variant Alan has reproduced! As an aeronautical person I liked this model very much. It shows what can be done with Meccano with a little care and a good dose of imagination. Aeroplane models are generally difficult to reproduce in Meccano but Alan has proved twice now that it is quite possible to build very realistic models. Alan's other model was a small scale version of the Snowdon mountain railway which he had set up next to John Brown's model for comparative purposes I guess. The locomotive for this model was built to approximately 1:12 scale and included a powerdrive motor for travelling the inclined track. The rack comprised very many links of the plastic crawler track which engaged a plastic sprocket in the locomotive. I did not actually see this model working so I am unable to tell you how well it works.

Yet more locomotives! Certainly the most popular subject at this meeting. **Alf Reeve** brought a GNR Stirling Single modelled to about 1:12 scale. The model was built more than 20 years ago so it has been around for a bit. During its extensive travels it has spent a period on display at MW Models and has also appeared on TV. Modelled mainly in red and silver parts with a fair amount of detail it looked very nice indeed; no doubt as a result of its recent clean up!

Next door was a sizeable part built model of a Fowler 2-6-4 tank engine constructed by **Ian Worrall**.

Unfortunately I did not get a chance to have a good look at this model since it did not stay for very long. I shall look out for it next time when I hope it will be nearer completion so, watch this space!

And last on this length of table was a nice little display of Bayko models built by **Chris Reeve**. A nostalgic reminder that Meccano Ltd. did not just produce the Meccano we all take for granted.

As readers of these reports may recall I favour models built within the constraints of a number 10 set and there were at least three at the meeting for me to get excited about. The first was a level luffing crane built by **Tony Parmee**, who now has several new model designs for the number 10 set to his credit. It is also encouraging to note that Tony manages to find the time to write up the building instructions which are being published in the Model Plans series. The crane is a freelance design based loosely on the American Demag Crane and at a scale of approximately 1:32 it stands 7' 4 1/2" high. The crane is a typical dockside variety and comprises a tower bogie which runs on a short length of track. The mechanical detail draws on many ideas that Tony has picked up over the years from other published instructions. I was given a short demonstration and can vouch that it works well and maintains the load within 1/2" when luffing over its full range. A nice achievement which makes good use of a large part of the content of a number 10 set. The second number 10 set model was the Maudslay Table Engine built to the instructions in CQ15 by Ken Senar. Ken has broken in to his new number 10 set in a big way to build this model but the result was worth it, it looked superb in all mint parts. With one or two minor alterations the model ran extremely smoothly in "display mode", motive power being provided by a very quiet 230v motor,

After a bit of sleuthing I managed to discover that the builder of the third number 10 set model was **Richard Gilbert**. The model was the combine harvester from the 1950's leaflet instructions, built in correct period red and green parts and complete with E20 motor this model also looked very fine indeed. I suspect that the mechanical man and the swing boats alongside were also built by Richard, but I am not sure as there was no label to tell me.

The **Edkins** family were represented by Mike only on this occasion as Pat was not able to attend.

As many will know, Mike has been working on a reconstruction of the 1955 Hugh Henry prize winning model of a Jones KL66 mobile crane. The model is now mechanically complete and requires only the cab to finish the job. Without the cab it is easy to see and appreciate the mechanical complexity of the model, all functions are controlled by the hand and foot levers at the drivers position. Have a look at this model when you get the chance, an awful lot of ingenious mechanisms are crammed into its small volume.

The ingenuity was maintained in the next group of small models built by **Trevor Frankling**. These comprised a small vertical boiler steam engine in which the piston and cylinder arrangement disguise a switched solenoid which provides the motion, a display showing some rather unusual elliptical gears which actually mesh satisfactorily and a right angle drive which uses axle rods and bush wheels instead of gears to transmit rotary motion at a 1:1 velocity ratio. However, the show stopper was a "mysterious machine" originally featured in a 1930 MM which might more correctly be described as a money laundering device. This little novelty comprised two wooden rollers in rolling contact and on feeding well used five pound notes into one side mint ten pound notes emerged from the other side. Or alternatively, on feeding it ten pound notes it produced blank sheets of paper, a process which could of course be reversed! Definitely a case of "every home should have one"!

Michael Bent brought a collection of small models for us to appreciate. The largest was a double deck bus built from the number 7 set manual instructions with a few modifications. Two considerably smaller models of sports cars in the Morgan style and a little helicopter built from one of the current sets completed his display.

Mean-while, Howard Somerville produced an unusual clock, the use for which completely mystified me. His, so called, Universe Clock takes for ever to achieve any kind of change in the indicated time, must be quite useful for those individuals who are very reluctant to acknowledge change! On the other hand, the

message about gearboxes designed to achieve vast step down ratios might be the point.

Geoff Devlin seems to have developed a knack of building original models which appeal to me a lot. His latest model is no exception and is of a Marion 204M Superfront mining shovel, built to an approximate scale of 1:24 in red and green parts. Geoff had done his research on this machine, including a letter to the manufacturer which had produced useful explanatory brochures, almost as good as Meccano building instructions in fact. The modern style and mechanical complexity of the prototype make it an ideal subject for a Meccano model and Geoff has done a really good job on it. The model has turned out well and at 3' 6" overall it is not too big, in fact, it looks as though it could well be within the constraints of a number 10 set. So how about a new Model Plan?

Like locomotives, clever little novelties seemed to be in abundance at this meeting. Tony Brown's contribution was an interesting diversion intended to demonstrate chaotic motion. A pendulum, whose bob was a small magnet, was suspended over a circular plate on which were mounted three more magnets arranged at 120° spacing around a circle. The poles of the stationary magnets were arranged to repel the lower pole of the suspended magnet and the result is "perpetual" chaotic motion of the pendulum - very simple and very effective.

Next on my itinerary was a WW2 tank transporter complete with "tank" and there are no prizes for guessing that the builder was **John MacDonald**. As always these models were superbly presented and as accurate in their detail as Meccano will allow. The Models comprised a Diamond "T" Tractor unit, a Rogers M9 Trailer and MKIII Crusader Tank. At 1:10 scale everything worked as intended and reproduced the originals with a high level of fidelity. Rather apologetically, John explained that he had to fit the incorrect type of steering to the tank as he could not get the correct type into the space available! I cannot do justice to these models in a few words so, if you have not seen examples of John's model building then you really must make a special effort at the next available opportunity.

Jostling for space alongside was another splendid model by Bob Ford, an equally skilled model builder. Bob's latest model is an American class J 4-8-4 locomotive of the Norfolk and Western Railway built in mainly yellow and zinc parts to approximately 1:20 scale. Bob had some difficulty reproducing the detail at small scale and in some areas he has tried to convey the correct impression rather than an exact likeness, what aero modellers call "eyeball scale". Again, I should not need to tell you how well this model is presented, its builder is well known for building superb models and this latest is no exception. Of particular interest is the most effective way Bob managed to model the hemispherical front end to the boiler using triangular plates. He also had a few problems with the assorted wheel sizes for which he found some ingenious solutions as well. At approximately six feet in length this is a very impressive model indeed.

Last, but by no means least, on my look around was **John Palmer**, the vehicle Multi-kit specialist. John seems to find endless applications for Multi-kit components and this time his models were an American Oshkosh truck and a British "drops" truck, both military models using army green parts. The American truck incorporates a palletised load system complete with lifting gear and pallet. The British truck incorporated a demountable rack off load and pick up system complete with simulated hydraulic ram, lifting gear and pallet. A working demonstration of these models proves that it does not need to be large and complex to be effective.

Well that was it, another memorable meeting and another long wait for the next one.

59th Guild Meeting - 5th October 1996

What a glorious day! For some peculiar reason we seem to have been blessed with some really fine weather for our meeting days for some time now - at least, I always seem to start my report with the same comment. This day was no exception, a beautiful sunny autumn day which made the drive from Bedford to Stoneleigh very pleasant indeed. No doubt the "feel good factor", to use a rather over-worked phrase, was improved by the anticipation of seeing old friends again and the opportunity to inspect another crop of the model builders art.

On arrival the room appeared to be packed with models but, in fact, the number was slightly fewer than previously. The deception was caused by the presence of a number of superb large models. More of these later. As usual, my apologies to those I have misrepresented or over-looked completely. If I have omitted your masterpiece, and at risk of becoming boring, I repeat my whinge - please make sure you return the attendance form to George Illingworth with a description of your model in future. It would also help a lot if you would label your model and include your name on the label.

Once again I started my tour in **Ernie Chandler's** customary corner. Ernie's first model was a rather typical modern rectangular touring coach finished in a kind of harlequin colour scheme. Inspiration came following a visit to the coach park in town. The model is quite large, 3½ ft long 9½" wide by 16" high, and it incorporates a three speed gearbox with reverse - all driven by a PDU motor. The model also includes a baggage boot and four under floor baggage spaces all with their own lift up doors as per the prototype. His second model was a rather nice reproduction of a 1921 steam quarry crane built from a copy of the original drawing. He told us that it required an 8" axle rod with keyway in order to engineer the winding mechanism. He had the rod modified at a local engineering works in next to no time, which I hope will not offend the purists. Any way the result is a very attractive model.

Alongside **Colin Reid** had set up his model of a Rapier shuttle-less loom once more. Since I have attempted to describe this incredible model on previous occasions I will not repeat myself again.

Moving on, the next model was built by the doyen of alternative construction systems **Tony Knowles**. This time his model was built from the Stokys system, the parts of which are all aluminium but otherwise compatible with Meccano. The model was of the engine from the Comet steamship of 1811-12 and built to approximately 1:8 scale. Tony informed us that the model is based on a drawing he found in a book on the subject dated 1859. As always, the model was carefully built, looked the part and ran very smoothly.

Ken Wright must be breeding Tallylyn locomotives! This time he brought out his latest of the line Dolgoch which, he says, he brought to the last meeting. However, this time there were two, one large and one small! As ever, impeccable in their red and green colour scheme and not without the odd embellishment as we have come to expect.

A whole stable full of models by **John and Joyce Sleaford** were next on the agenda. I don't know where they get the time to build so many models, must be retired I guess! John and Joyce can always be relied upon to put on a bit of a show for us and this collection of models was no exception. Joyce's models were all built with the current yellow-blue-zinc parts and comprised an action control loading shovel, a twin engined aeroplane from the new E6 set and a freelance model of the Stealth Fighter. John's models were also built with similar coloured parts and comprised a set of Birmingham City Transport buses of different periods together with a breakdown recovery vehicle. All of the models were of about number eight set size, very nicely made with obvious and careful attention to detail. At this point I paused for a bit and contemplated second childhood, missed opportunities and incurable nostalgia. I suspect that these are conditions we all suffer from to a greater or lesser degree, and long may it continue!

From time to time it is nice to see the occasional overseas visitor at our meetings. This time we were pleased to welcome **Huibert van Wyngaarden** from the Netherlands. Fortunately Huibert speaks and writes English like a native so it is easy for me to report on his model. He told us that he expects to be made redundant in the near future and intends to put his time to good use by building an enormous dockside crane to which he took a shine when he saw it in the German port of Rostock. Since he has insufficient parts to complete the model John Linder and Mike Rhoades probably thought Christmas had arrived early this year! Working from a photograph he has built one and a bit of the four bogies so far which he showed us and which incorporate a great deal of detail. The finished model will be impressively big and, if the bogies are an indicator of things to come, will include lots of engineering detail. A model for us all to look forward to seeing in the future.

Next door **John Bridger** had brought along a "small" part of his new Condor fairground ride, which is currently in development. The item was a test rig for one of the arms which carries the ride cars and was built in order to jerry-wangle the drive along the arm to the revolving car spiders. One of the problems was to provide a free-wheel drive in both senses to allow for over-run due to inertia. This was neatly devised using a friction drive arrangement. As the complete model is some 9½ ft tall it cannot be assembled in the Arthur Rank building at Stoneleigh. However, John expects to take it to Skegness and the Town and Country meetings next year. Don't miss it, and that's an order!

Now I think **Tony Parmee** is getting a bit carried away these days, he brought along no less than seven models several of which were designed to be built from the number 10 outfit. It seems that Tony is producing a whole range of models for the number 10 outfit and the building instructions are being

published in the Model Plans series. I for one think he is doing a tremendous job. I have always believed that Meccano failed to make the best of the number 10 set by neglecting to develop the model building instructions after about 1954. His first model was a big wheel fairground ride, fully developed and looking very nice in early 1950's red-green parts - instructions are now available as MP96. The second model, an articulated lorry comprising tractor and box trailer in a modern style, was not quite complete. Built to an approximate scale of 1:10 it is enormous and also looks good in early 1950's red-green parts. One of the few models I have seen which makes good use of the full complement of tired 2" and 3" wheels. This model will also feature in a Model Plan in the near future. He is also developing a hammerhead crane for the same series but the only evidence so far available is a rather neat roller bearing, built within the constraints of a number 10 set of course. The bearing works well as he demonstrated with his entire weight! Even more remote is a planned 1:10 scale superbuss which, at present, exists as an off-set differential unit only. On a more modest scale Tony also brought along a rebuild of the 1954 number 8 set model of an eight wheeled lorry. The model has been improved in scale fidelity by lengthening and narrowing the rear carrying platform. To round off this one man exhibition the remaining models were the toddler robot from the McKarno family and a little workshop built from instructions in NMMG Newsmag No. 75. Quite a show!

And then I came upon the "Money man", **George Illingworth**. As I am sure you all know, George is a member of the TA and on a recent posting his old gang, Wales and Western Districts REME, gave him no less than three current number 6 outfits and invited him to go and "build his own local manufacture task". George's interpretation of this instruction resulted in a splendid model of a Scammell Pioneer, a 6 x 4 heavy breakdown tractor. Built to a scale of 1:10 the model is very fine indeed and required some extra parts to provide the engineering detail. As presented, the model is on a stand so that the mechanical features can easily be demonstrated without resorting to hands and knees on the floor. A really nice pristine model, makes a change from very large aeroplanes!

John Fuller was good enough to give me a brief conducted tour of his latest model, a container crane. This model was quite substantial so I was surprised to learn that John had managed to get it out of a number 10 outfit with the few extra plastic gears that came with the motor kits he had used. He also used a few extra nuts and bolts, in fact 50% more than contained in the number 10 set! The model is powered by two black 6v motors and two red 6v motors and he managed to make all of the many functions work very nicely. Built in 1950's red-green parts this is an interesting and attractive model and would make a very nice addition to the Model Plans series. So I hope somebody out there is listening.

Centrepiece of the meeting was a very large model of a fairground ride brought along by visitors **Michael and John Molden**. They are no longer visitors since they were signed up at the meeting, a very welcome addition to the Guild. The model was of a Sizzler twist ride and I believe that Michael was the builder. (Yes you're right Mr. Cook, but his Dad is also an equally talented Meccano builder but in Red / Green. - Ed) It is some 5ft in diameter, extremely well made in current colour scheme parts and includes a considerable amount of engineering and decorative detail. The ride was accompanied by its 4 x 2 ERF towing tractor and also by a 6 x 4 ERF self-contained generator vehicle, both vehicles having fully working mechanics as per the prototypes. Amazingly, the ride "folds down" as per the full scale ready for transporting with the tractor unit. From its folded state Michael informed us that it takes about 1½ hours to erect the ride, that's the kind of model it is. Some serious competition for John Bridger here I suspect!

Alan Covel has done it again! That is he has built yet another very large aeroplane, this time it was a 1912 Blackburn Monoplane and is based on the prototype which is in the Shuttleworth collection. The model is approximately 1:5 scale and has a wing span of 100" and that is large. Built in pristine current colour scheme parts the only non-Meccano items are the 6½" diameter wheels. As always it is very nicely made with just the right attention to detail including a working rotary engine and pilot, Cyril Foggin! Where does it all end I wonder?

John Brown was also into aeroplanes this time but of a smaller continuous running display type. John's model was a 1:48 scale Grumman Tomcat and was based on the current number 6 set model. The model is mounted on the end of a rotating arm such that it can fly in a circular flight path more or less continuously. The elevation of the arm is variable and the model is also able to roll very smartly about its own axis on the press of a remote button. This latter feature is for the benefit of small (and not so small!) boys. The model is powered by three 12v motors and controlled by a very complex package of electronic wizardry which includes a variety of switching relays. John gave me a written explanation but it is rather too long to include in this report. Interested readers should tackle him head-on next time we meet. A very attractive model which is guaranteed to excite the crowds.

Yet another fairground ride, but this time built by **Les Gines**. Something of a departure for Les, with whom we normally associate small models, this model was quite a respectable size and intended for continuous running as a display model. A smaller version of John Brown's original Spinning Star Wheels ride it looked really nice in a mainly yellow and green colour scheme.

Pat Edkins brought along her Faberge Egg and her Poppies for another airing. These delightful whimsical novelties are quite a tribute to Pat's artistic abilities, not to mention her skill in creating them from what are really engineering components. Long may it continue!

Regular readers of these reports will know that **Mike Edkins** has been building the superb Hugh Henry

prize winning model of a Jones KL66 Mobile Crane for some time now. Well, he has finished it! The model first featured in the MM for June 1955 and Mike managed to obtain some additional photographs from which he constructed his version. The model is built to the customary very high standard in blue-yellow-zinc parts and although it is not too large it is packed solid with brass. All of the functions work as per original and Mike has also engineered one or two improvements into the mechanical detail in order to improve reliability. This model is well worth a look next time you get the opportunity.

Next I found a familiar model built by **Philip Drew**, a revised version of his ball lift game as featured in CQ some time ago. This time he built the model with his nicely restored red and green parts for a change, otherwise it is as per the original design.

The early stage of a large Fowler 2-6-4 Tank Engine was next on the itinerary. The model is being built by **Ian Worrall** in 1950's red- green parts. The scale is similar to that of the tank locomotive in the number 10 set leaflets so it should look good when it is complete.

And then I came to another aeroplane, definitely a rising star and one to watch in the future. Imagine a 1:6 scale F-86E Sabre modelled in red-green-zinc parts - it is big and it will certainly be a show stopper when it is completed. The builder is **Ken Senar** and when researching the model he went to the RAF museum to look at their example only to discover that it was the very machine he used to fly in his more youthful days. So far he has built the nose section back to the rear of the cockpit. Notable features are the very clever way he managed to construct the air intake, the fully detailed cockpit including working ejector seat and the base frame for the sliding canopy. The nose wheel and wheel bay door mechanism is a superb example of Meccano model building skill. Mechanically programmed, the wheel and door cycle through the extend and retract process at the touch of a micro switch. When stowed the wheel is turned through 90° on the leg and Ken has managed to get the whole sequence just right. This is definitely a model to look out for in future, although when present at a meeting you will be hard pushed to miss it!

Now for some serious nostalgia! **Geoff Devlin** has built a nice little model of an Albion CX33 tractor unit for an 8 x 6 tank transporter. To a scale of 1:12 the model is about 2ft long by about 9 $\frac{1}{2}$ " wide and is built in red-green parts of 1950's vintage. The model incorporates a ballast body, rear cab for the winch controls and two fully steering front axles. Now for the nostalgia bit. When he was somewhat younger Geoff saw one of these vehicles parked near Stafford in 1948 and was allowed to climb inside. Obviously a profound experience for a young lad since he can recall it so well!

In passing I spotted **Terry Pettitt's** familiar MG sports car and his newer Morgan three wheeler models. The latter has been built for a friend who owns the prototype which explains the excellent degree of scale fidelity Terry has managed to achieve.

I don't know how he does it but, **Brian Edwards** seems to manage to bring at least one new model to every meeting and this meeting was no exception. The model is of a Burlingham Seagull style motor coach of the early 1950's, built to a scale of approximately 1:12 and in the correct period parts colour scheme. The prototype was unusual at the time since it had an under floor engine in a Leyland Royal Tiger chassis. Very nicely constructed as always, the model is powered by the modern small black motor driving a spur gear differential via a three forward speeds and reverse gearbox.

The multi-kit specialist **John Palmer**, brought along a pair of trucks built from parts in the army multi-kit sets. The models were of a Scammell tractor unit and a rather sophisticated military pallet lorry. I think I have seen and described both on previous occasions so I will not witter on here. However, I think it is appropriate to acknowledge John's imagination and skill in creating something rather better than Meccano ever seemed to achieve for the army multi-kit.

Even more aeroplanes! I next found two small aeroplane models, a biplane and a monoplane built in early 1950's red-green. It was at this stage that I found myself recognising these models and succumbing to nostalgia. After a bit of sleuthing I managed to establish that they were built by **Michael Bent** and he says that both models were built from the set 4 instruction manual of the period, but with a few modifications.

Jack Partridge can usually be relied upon to produce something a bit different and we were not disappointed. His model was one of those useless automated plants that appear from time to time and for which Meccano is the perfect building medium. Jack's model was an Automated Ping-Pong Ball Transporter, built to an original design by Bob Robson, and which sits on a space measuring 5ft x 2ft. Quite some model! Extremely well made, very complex electro-mechanical switchery to control the motion sequences and attractive to watch at work. This is the kind of display model which keeps young, and not so young, boys amused for hours.

I always associate **Mike Hooper** with large prize winning models of steam locomotives so it was nice to see that he also builds equally fine small models. The model he brought to the meeting was of a 1935 Universal or Bren Gun Carrier built to an approximate scale of 1: 10. The model was built in the appropriate army green parts and although quite small incorporates a lot of detail. The tracks are the standard plastic parts and run on wheels based on the steering wheel, sounds strange but it looks very good. The model also incorporates fully working suspension and independent motor drives to each track to give forward and reverse motion as well as directional control.

Last, and by no means least, was a model of a Blaw-Knox Super 12 Grader built by **Tony Brown**. The model is not yet complete but enough had been done to convey the overall appearance. Built to an

approximate scale of 1:12 the model is big enough to include lots of working mechanical detail and Tony certainly has plans to reproduce the working functions of the prototype. So, watch this space!

Well there we are, that was the roll call of models at the 59th meeting. Some old, some new, some big, some small but something for everyone. Once again we enjoyed a room full of interest, not forgetting our traders **John Linder** and **Mike and Carole Rhoades** who helped the show along by enticing us to stock up with yet more bits and pieces that we really don't need but always seem to be able to make room for. I would certainly miss them since I always go home with something I did not intend to buy! With the winter approaching fast I hope the model building will get under way and I look forward to seeing a new crop of splendid models at the next meeting. After, all we have to do something with the parts we bought but don't really need!

Editor's comment:- Thanks again Mike for an excellent Model Report, and I promise you will get your discs back!

60th Model Report - 29th March 1997

The Meccano fraternity must be blessed in some way since, yet again, I found myself driving to Stoneleigh on a really nice day. I arrived a little earlier than usual to find a good number of enthusiasts setting up models, renewing friendships and inspecting the wares on offer from our resident dealers, John Linder and Mike and Carole Rhoades.

The fact that the date was Easter Saturday meant that some of our regular attendees were unable to be present but, never-the-less we enjoyed a very good turnout of members and models once again. For me personally, and for many others I am sure, a bit of a dark shadow was cast over the day by the absence of our late friend Rod Rich. Rod was one of the very first people to befriend Ben and myself when we were considering joining MMG some years ago. From that time on we always managed to exchange a few pleasantries when- ever we met and, like many others, Ben and I were seriously impressed by the evidence of his very considerable skill. We would certainly like to join everyone else and convey our sincerest condolences to Rod's family at this sad time.

So on to the models. Some old, some new, some large and some small but, in general, something to appeal to everyone's sense of humour! As always I will do my best to convey an impression of the wide assortment of models on display. As usual, my apologies to those I have misrepresented or overlooked completely. If this is the case, then I cannot emphasise enough the importance of returning the attendance form to George Illingworth with a description of your model in future. My special thanks to those members who gave me a little write up of their models during the meeting, this really does help me enormously. Another small whinge - it is also re- ally helpful to me, and informative for everyone, if you will place a label on your model at the meeting. It is nice to know who the builder is.

Just inside the door in what has become his usual pitch was **John MacDonald** with some of his superb army models. Once again John had brought along his familiar and superb Scammell Pioneer which I have described in some detail in previous reports. However, he told me that he has added a few details including an equally splendid scale model of a Bedford 15cwt truck. The clever bit is that he has modelled the truck in a wrecked condition suitable for the Pioneer to recover and this is how the models were presented. I do not need to say how remarkably well John has modelled the seriously bent truck! To complete this little display of army models was an International 4x2 tractor unit modelled to 1:10 scale. The usual attention to detail was evident and the model was fitted with working clutch, three speed and reverse gearbox, brakes on all four wheels and a hand operated disc brake on the transmission.

Les Gines has obviously taken to very large model building in a big way. He has turned out all his rusty old parts, given them a coat of paint and is currently assembling them into a transporter bridge which looks suspiciously like SM21. Most of the parts have cleaned up nicely and have been painted silver to give a fair impression of early nickel plated parts. One tower and about half the bridge span were completed for inspection together with the carriage and gearbox for the traverse motion. Les still has a lot of cleaning and painting to do before the model is complete but, based on what we have seen so far it promises to be an impressive model when it is completed.

Ship models were in evidence at this meeting, the first I came across was by **Trevor Frankling** and his model was a kind of little naval diorama containing three small battleship models. The models were "Simplicity" silhouettes from the MM for June 1939 and represent HMS Hood (17" long), HMS Manchester (13" long) and a "W" type destroyer (10" long). At that size the models contain very little detail but look nice modelled in the correct period parts.

Also into somewhat larger ship models of the naval variety is **Tony Homden**. His previous model of a liberty ship assembly line has been surpassed by his latest model of HMS Majestic, a late Victorian battleship. The model is impressive at approximately 1:70 scale which makes it six feet long with a beam of just over one foot and nearly three feet to the top of the masts. Black, red, yellow and white Meccano parts have been used to model the appearance of the ship as closely as possible and to very good effect. Lots of things work on the model; the turret guns rotate and elevate, the gun ports can be opened and the large guns on the main gun deck can be run out and trained on a target, the anti- torpedo nets can be deployed and eventually Tony will motorise the derricks used for deploying and recovering small boats. An interesting statistic provided by Tony informs us that the model contains 32 hinges which at today's prices would cost nearly £100! If you have not seen this model, don't miss it next time you get the chance to see it.

And now for something closer to my own interests, models built to the constraints of the number 10 set. **Tony Brown** has been busy trying to re-invent the very poorly proportioned model of a showman's engine featured in the 10 set manuals and instruction leaflets. Tony's model is based loosely on a Burrell scenic showman's engine and at approximately 1:12 scale is 26" long, 12" wide and 14" high. As always, he reports that the main difficulty concerns the rear wheels which are built on the ring frames (167b) and for the model are a little oversize. However, at the meeting his model was sufficiently advanced to give a fair impression of what we can expect and, without a doubt, it will look very much better than the original Meccano models. He anticipates publishing the building instructions as MP100 which is most appropriate as the 100th anniversary of Burrell's first showman's engine is nigh.

"Mr number 10 set" must be **Tony Parmee** who has been extremely busy constructing even more new models two of which he brought to the meeting. His articulated lorry, now published as MP99, comprises

a tractor unit and large European type box trailer all to an approximate scale of 1:10. It is big, being about five feet long. Everything works as per prototype and includes semi-automatic coupling and decoupling, automatic gear box (Roger Wallis design), power steering, sprung axles, etc. An impressive model and a nice demonstration of what can be achieved with a 10 set in the modern idiom.

His second model was a nice example of a modern Superbus, in fact he brought two versions to show us. One was strictly to the 10 set limit and contained little internal detail the other was finished internally with complete floors and many rows of seats. Again at a scale of approximately 1:10 the models are large. Working detail is much the same as the lorry and includes automatic gear- box, power steering, differential, in-hub reduction and folding doors. So there we have it, several examples of good looking 10 set models which prove that it can be done with a bit of ingenuity. Any chance of MMG publishing a manual with about 20 of these new models in it?

Now for some aeroplanes. **Alan Covel** has become a bit of an enthusiast and this time he brought a new model of a Moravan Zlin Akrobat aeroplane. This Czechoslovakian aeroplane was flown by the late Neil Williams, one time European champion, in the 1970 World championship. As always the model was impeccable in its pristine yellow-zinc parts, accurately built with a span of 29" and, curiously, Alan had chosen to power the propeller with a large rubber band. If you would like to know more about the remarkable sequence of events from which Williams escaped with his life in this aeroplane then have a chat with Alan some time.

Needing no introduction, the **John and Joyce Sleaford** show included a squadron of small aeroplanes among the many models they brought to the meeting. All of the models were built from various modern sets to the very high standard to which we have become accustomed from this husband and wife team. The aeroplanes were all modern types, three from the Evolution 6 set instruction manual, one from the 1991 6 set manual and a delta from an earlier 5 set manual. Non aeronautical models included the low-loader built from 10 set leaflet number 30 and the bulldozer from the 1960's number 8 set manual. Quite a self-contained Meccano exhibition from these two enthusiasts.

Railway locomotives were also much in evidence at the meeting and the first I came across was a 1:24 scale Beyer Garratt type built by **Bob Ford**. Bob's modelling skill is well known and this model, in pristine yellow-blue-zinc parts, was built to the very high standard we associate with his models. This model was a half size rebuild of his earlier 1:12 scale model which was described in MMGG for April 1992. The wheel arrangement for this enormous locomotive is an impressive 2-6-0+0-6-2 although at the chosen scale Bob explained that he had a few difficulties getting all the functions in. However, he did a splendid job, power for the wheels was hidden in the water tank and the revolving coal bunker hides an MO motor in the rear of the bunker.

John Brown also brought a new loco- motive model for us to inspect. His chosen subject being the Lynton and Barnstaple Railway 2-6-2 tank locomotive Exe built to an approximate scale of 1:12. John's modelling style is a rather liberal interpretation of Meccano modelling in order to achieve a higher level of fidelity. Purists will no doubt raise an eyebrow but they cannot deny that the result is very attractive indeed. The model is powered by an RS 12 volt motor and includes accurately modelled Joy valve gear. Some of the de- tails derive more from model engineering than from Meccano practice, but it works - how else do you get a nice brass steam dome? I also spotted a nice set of turned cast iron wheels fitted with brass bosses, now that's a good idea for would be locomotive modellers.

And finally in the locomotive works, who else but our president **Ken Wright** with yet more Talyllyn railway models. Another first class modeller with his own interpretive style. Not content with his larger Talyllyn locomotives he has built a pair of smaller engines, a Fletcher Jennings 0-4-2 and 0-4-0 Dolgoch scaled to run on LGB track. As with his larger models the usual accolades apply, they are very nice indeed. Ken informs us that he has in mind the possibility of laying out a garden railway in the not too distant future. Early nickel models were also represented.

John Fuller must have access to a substantial collection of early nickel parts since he has commenced building a version of the block setting crane SM4. So far he has only built the carriage base which he brought along for us to see. His model is rather more substantial in the bogie department since he has designed fully articulated bogies, an improvement on the original. A shortage of some brassware has caused him to find a novel solution to the many jointed drives to the bogie wheels, have a look next time he brings this splendid model out. Based on progress so far, the finished model should be very impressive indeed.

Roger Marriott is also an enthusiast of all things concerned with the early nickel period but only if it is in near mint condition. His two super models SM3, the motor cycle and sidecar, and SM28, the pontoon crane, were perfect. Even the two motors in the crane were originals in very fine condition. His third model was an accurate reproduction of a tower (Blackpool?) commonly seen in 1920's Meccano advertising. This model was constructed mainly with nickel with a few items in the then new red and green colours. Quite a nice little collection which Roger had taken the trouble to present most attractively.

Whilst on the subject of display models, other interesting items were to be seen. **Albert Rowe** brought along a rather large model to a freelance design intended for window display over the Christmas - New Year period. His idea was derived from some kind of German machine spectacular called "Weihnachts

Pyramide". The main feature being that Albert's model has lots of continuously running components designed to attract attention - of the young and, in our case, not so young! Like most models of this type it is big and attractive and will undoubtedly prove to be irresistible when it is completed.

It was most evident that **Richard Gilbert** has been busy scouring the country for Meccano items of interest and his efforts obviously paid off. He brought along a late 1920's dealers cabinet which was in superb condition and in which the display parts were virtually as originally strung - one of the best I have seen in recent times. He also showed a 1926 dealers display model of a windmill. This model was constructed from nickel, red and green parts of the period and looked most attractive. Of later vintage, his 1956 dealers display model of a ferris wheel in period red and green colours had me wallowing in nostalgia as did a nice automated dealers display of a 1964 number 2 set. The latter display was set up to continuously open and close the box lid, very eye catching indeed. Richard has obviously been very lucky in his searches and he has also done a very good job of presenting these collector's items to their best advantage.

Now for something a little different, **Alan Partridge** had been up to his usual tricks and had produced an interesting little gizmo which he demonstrated to us. He explained that laser cut gears are cut on a machine controlled by digital computer and as a result the teeth surfaces comprise many very small steps, a bit like a microscopic saw I suppose. In use these gears cause considerable and rapid wear to brass pinions for example, so he had devised a way to smooth the teeth mechanically. His gear tooth polisher is a simple device in which the offending gear meshes with a softer metal pinion (brass), is lubricated with metal polish and run continuously at very high speed for an hour or two. The abrasive particles in the polish embed in the soft brass to provide a polishing surface on which the laser cut gear teeth are smoothed. A simple and most effective solution to what could otherwise be an expensive problem.

Mike and Pat Edkins had set up their stall next door. Mike brought his Jones KL66 crane along for its final outing before dismantling and this time the housing was removed to reveal the incredibly complex interior "works". Getting the multiplicity of gear boxes and transmission into such a small space was quite a feat indeed. He also showed us a large axle system constructed entirely from Meccano parts which should appeal to the purists although it is not as compact as some of the commercially available systems. His final offering was a simple electrical generator comprising a black Meccano motor driven in reverse when it behaves like a simple dynamo.

And then it was something new, completely different and entirely in keeping with **Pat Edkins** interpretation of Meccano modelling. Probably not what Frank Hornby had in mind all those years ago! Would you believe a "Camping scene"? Well that was it! Her most ingenious use of Meccano parts had created a tent, pressure oil lamp, back pack, torches, alarm clock, stool, camping stove, wok, pressure cooker, litter bin, etc., etc. However, the most ingenious model was the camp bed the "mat-tress" of which was knitted from Meccano cord and suspended between two parallel axle rods to most accurately represent the real thing. Not a "foreign" part in sight, a remarkable and quite delightful achievement by Pat yet again. If you did not see this collection of models don't miss it next time, and that is an order!

As always, road vehicles from very ancient to quite modern were represented by the efforts of various modellers. The first I came across were built by **Brian Edwards** who, to my continual amazement, always seems to bring a new model to every meeting. Brian always builds in 1950's period red and green parts and his first model in these colours was of a Model T Ford delivery van of approximately 1920 vintage and modelled to an approximate scale of 1:7. His second model, or part of a model to be precise, was of a Leyland Royal Tiger bus chassis of 1955 vintage and built to an approximate scale of 1:12. The chassis includes an under floor engine, gearbox and differential arrangement all modelled in Brian's very careful style. I have a feeling I have seen the bus chassis before so maybe some models take rather longer for Brian to build. Nevertheless two very fine models.

Also on the public transport theme **Terry Pettitt** brought along a scale model of a motor coach of with a very definite 1950's look about it. In fact it looked very similar to one I used to go to school in. (He we go again, wallowing in nostalgia!) The model is constructed in a mix of red and silver parts to give a nice impression of the prototype. Many of you will have seen this model before since Terry informed me that he built it some 20 years ago!

Also on the transport theme, and a model I nearly missed, was a McLaren Tractor built by **Geoff Devlin**. The prototype was an oil engined tractor unit, with coachwork by Charles H. Roe, built in 1940 and owned by Pickfords for heavy road haulage work. Nicely built in 1950's red and green parts the model gives a nice impression of the massiveness (for the time) of the original. Some facts about the original provided by Geoff inform us that the engine had five cylinders, the tractor weighed over 12 tons and could manage 10 miles per hour flat out. It could haul 100 tons and even managed 190 tons on one occasion.

A number of stationary engine models were on show at this meeting for the first time. **Tony Knowles**, the alternative system specialist, had built a model of a single cylinder steam engine from a system of parts called FAC which are of Swedish origin. The model was a freelance design loosely based on SM 11. The collection of parts are owned by **Colin Reid** and were on loan to Tony who explained that they were from a constructional system intended primarily for industrial use rather than the toy market. The system appeared to comprise rods, perforated plates, bearings and special fixtures for fitting them together as the rods are

also extensively used as a structural component. All the parts are coloured black and Tony's model looked very business-like in this colour scheme, it also ran very smoothly indeed.

David Barrett's model of the Weatherhill Winding Engine was built in the rather more familiar red and green colour scheme to the instructions first published in the Sheffield Meccano Guild Newsletter for December 1985. David told us that it is straight forward to build and he has built it strictly to plan with no embellishments. It has a single vertical cylinder and Watt parallel link motion which is interesting to watch in action. A very nice display model of a sensible size for transportation.

Our secretary **Ernie Chandler** also brought along a substantial stationary engine. Ernie's model was built from SM32, instructions the picture of which must be familiar to everyone although it is not often we see the model built up. The model is big and since it has two flywheels it requires a large number of channel segments which, to most of us, would be prohibitively expensive. However, Ernie informed us that he used a set of well-travelled channel segments belonging to MMG, donated some years ago by Bill Inglis, and of which he is custodian. An impressive model and very well suited for display work.

It was impossible to miss the models by **Michael and John Molden** on account of their size and complexity. Michael's model of the fairground ride Sizzler was a bit of a show stopper at the last meeting and as I described it in the last report I will not repeat myself. However, this time the model was displayed in its travelling mode in which the ride was folded up to make a large trailer for the tractor unit. Either way, the model is very impressive especially as it folds down as per the prototype to a road vehicle model very nearly six feet long. John Molden's equally impressive model was of a Foden 6x4 tractor unit of massive proportions, 10" wide by 24" long. This model incorporates a lot of working detail including, tipping cab, steering, hand brake, six forward and two reverse speeds gearbox, twin differentials and a small telescopic crane. My advice is to "watch this space" since I expect this model is the front end of something very large and interesting. And that was about it, or at least that was all I managed to see.

However, the records show that **Michael Bent** brought a tractor and trailer model built from a 1950's instruction manual and **John Palmer** brought a model of a Foden logging tractor. My apologies to these two members with the promise that I will pay more attention next time.

Finally, I was just about to leave the meeting when my attention was caught by **Terry Bullingham** who was discussing the beginnings of his latest creation with several members. Terry has built the bunker and some of the mechanism for what will be a large and detailed showman's engine. I was impressed with the workmanship and attention to detail which is especially praiseworthy since, as most will know, Terry is visually impaired to quite a degree. This is really good work and I for one look forward to seeing the next instalment.

Well, another meeting was over all too soon. So, it was back home to look forward to the next meeting and to contemplate the possibility of finishing at least one model in time. My apologies for the delay in producing this report. Since the meeting, pressure of work, and of life in general, has kept me exceptionally busy with little spare time for writing.

Mike Cook.

61st Guild Meeting – 4th October 1997

At risk of becoming boring I have to report that, yet again, the day of our meeting was brilliantly sunny and warm. However, I suspect that it was the last day of summer since the weather has become much more autumnal and wet since. The signal for the winter model building programmes to get under way I suppose. Now is the time to get started on those new projects so that I have lots of new and interesting models to report on in March, not that we were short of interesting models at this meeting. As usual, my apologies to those I have mis-represented or overlooked completely.

Immediately inside the back door stationed on his regular pitch was **John MacDonald** together with some of his superb army vehicles. This time he brought his American tank transporter comprising Sterling tractor and M15A1 trailer together with his Crusader tank. I think we have seen these splendid models before, but just in case any new readers out there are not familiar with John's models then here is a small indication of what a really skilled modeller can achieve. The tractor is modelled to a scale of 1:11.5 and John obtained the information from the Aberdeen Proving Ground in the USA. The model features a working clutch, 8 speed gearbox, inter-differential, power take-off to two clutch controlled winches, turn table steering and rocking beam suspension. And that is only the Tractor! The tank and trailer, complete with crane, are equally detailed and must be seen to be properly appreciated. In the last report I mentioned **Les Gines** transporter bridge model, part built from old parts re-sprayed silver. Well, at this meeting it was complete and what a splendid sight it made. Based loosely on SM21 and considerably improved to represent the former Runcorn-Widnes bridge. Les wrote to the local authority and obtained some photographs and information about the bridge which he put to good use in his model. Huge quantities of rusty old parts were sprayed with silver Hammerite to build the model which is about 10 feet long by about 3 feet high. Interestingly the original bridge was built in 1905 at a cost of £138K and demolished in 1960 at a cost of £140K! Les probably spent as much again on paint, but I think all would agree that the effort has been well rewarded with an excellent model.

Full marks to **Tony Brown** for his redesign of the No. 10 set showman's traction engine. Re-modelled on the Burrell engine it shows just what Meccano could have achieved with a little more skill, research and imagination. Tony's model is nicely proportioned and looks really nice in the original red-green colour scheme. Fittingly, it is available as MP100 for all to build. Tony informed me that a new derivative is on the stocks, an incomplete version of which he showed at the meeting. This is a Burrell crane engine and differs sufficiently from the showman's engine that it is to be published as a new Model Plan (MP100a) in due course. Traction engine builders should look out for this one at the next meeting.

Alongside, **Albert Rowe** had set up his new, partly built harmonograph model constructed according to the instructions in CQ36. This model is built to a very high standard, and it shows, although Albert told me that he had some difficult times constructing the mechanisms. For the mechanically minded, this model includes a very interesting floating bearing design which Albert assures me enables the machine to run very smoothly indeed. A solution to the problem of getting very long shafts in many bearings to line up and run at all! Look out for this one, especially when it is completed and producing interesting graphics.

Next on my itinerary were the husband and wife team of **Mike and Pat Edkins**. Pat had brought out her delightful 'Rent-a-Tent' campsite once more; the only thing missing was a genuine camp fire! The originality demonstrated by this model is truly artistic and shows what can be achieved with Meccano and lots of imagination. Mike's models, on the other hand, were rather more traditional. First a Meccanograph built to a design by Terry Pettitt, since Mike is writing building instructions for the machine. Good news this, as this particular Meccanograph is capable of producing some outstanding designs. Mike's other offering on this occasion was a bogie for a 1:10 scale Birmingham Corporation Tramcar. No doubt we can look forward to a bigger piece of it next time!

Then I came to some small novelty models built by our resident joker **Trevor Frankling**. Most have seen the 'electric steam engine' and money laundering machine. However, this time we were in for a really amusing surprise; the winding-less electric motor. I don't have space to describe this machine but words like 'field poles', 'trunnion', 'magnetic circuit', 'boiler', 'alignment', 'north pole' and 'smart card' feature in a description of its modus operandi. Trevor's very accomplished demonstration had the gathered falling about laughing. I will say no more except, "don't miss it when you next get the chance to see the show!"

For some strange reason, there was a plethora of Meccanographs at this meeting. Maybe Meccano-men are subject to some astrological influence, but whatever it is, it is powerful! **Terry Pettitt** was seen tuning up his Meccanograph, built to his own design, and brought along expressly to assist Mike Edkins with the write up. Although conventional in appearance, the model can be modified with various attachments to produce a bewildering array of very attractive designs. The building instructions will make a useful addition to the literature on the subject.

Colin Reid seems to be a real enthusiast for the prohibitively difficult mechanism. Not a loom this time. Not any old clock. Not even any old congrave clock, but a congrave clock modified to include a verge escapement. Colin seems to have succeeded in making it work but, as always, on the day the machine refused to co-operate. A clever model this, built mainly in early nickel parts it is certainly attractive. The problem seemed to be with the refusal of a large ball bearing to trigger the escapement properly. On the other hand, it might just have been me peering intently at the works!

Tony Knowles brought along a little articulated tanker vehicle, the one described by Bernard Périer in CQ37. Although small, it has lots of detail including a novel method for transmitting power from the motor in the tank through the articulation bearing to the tractor wheels. Since it was not quite complete Tony could not tell us how well the mechanics actually work.

Alongside were a number of models, a crane, bulldozer and rudimentary tractor of early American style, built by visitor **David Hobson**. These were Erector models built from sets of varying vintages from old to relatively recent. As always the hawk-eyed members were able to spot the differences introduced over the years by the manufacturer.

Ken Senar is still working away at his F-86 Sabre aircraft project, although work has been temporarily suspended on doctor's orders due to a damaged wrist. However, this time Ken showed us the rear half of the model and, like the front half, it is very carefully constructed to include working controls and airbrakes. At a scale of 1:6 the whole model will be about six feet long when completed and should look really impressive. Since we are all anxious to see the finished model, I am sure we all wish Ken a rapid recovery of his screw-driver wrist so that he can finish it in time for the next meeting. This space is very definitely worth watching!

Whilst on the subject of aeroplanes, **Alan Covel** has built yet another large model. This time it was a 1:7 scale model of the Ryan monoplane 'Spirit of St Louis', as flown by Lindberg from New York to Paris in 1927. The model looked superb in pristine yellow-zinc finish parts, built to the very high standard we have come to expect from Alan. With a wing span of very nearly seven feet it is a large model. Most of the details are carefully modelled and include a realistic sound effect when the propeller is turned by the internal motor.

Just to remind us that he has quite a collection of large fairground models, **John Bridger** brought out his Octopus ride all packed up and ready to travel. The whole model comprises a Scammell Showtrac tractor unit, the Octopus centre truck, Octopus pay box and a box truck containing various Octopus components. At 1:10 scale this is a large model, and when the ride is assembled it is very large indeed. Those familiar with John's modelling skills will appreciate the attention to detail and very high standard he consistently manages to achieve with his fairground models.

At some stage during the meeting **Michael Bent** slipped in with a tractor and harvester combination built from a No.8 set instruction manual. The models are probably familiar to many members, Michael's were built in 1950's red-green parts and were a nice reminder of the models we rarely see.

New member **David Bradley** brought an assortment of road vehicles of varying sizes for us to see. The largest was of a French city vehicle to approximately 1:3 scale! It resembles a kind of cross between a Citroen 2CV and the familiar British mini. The model has a four speed with reverse gearbox, adjustable seats, working lights, working screen wipers, opening doors and tailgate, in fact, it is just like the real thing! His smaller models included a Bedford truck, built from the 1970's No.9 set instructions with modifications, an unmistakable 1954 taxi, and a mini-moke built from the Combat Multi-kit.

The next group of models have all been seen recently (I think), so I have just noted their presence for the record. First was **John Brown's** Lynton and Barnstaple Railway locomotive 'Exe'. This is a 2-6-2 tank engine built to a scale of 1:12 using a mix of Meccano modelling and model engineering methods, for which John is renowned, to achieve a very realistic result. Second was **John Molden's** collection of fairground transport models for moving his Terminator ride around. The main unit was a 1:12 scale model of a Foden eight wheel truck with Luton body, into which was packed the ride itself. The model is big, approximately six feet long, and therefore able to accommodate a high degree of working detail. Just about everything moves or works as per the prototype, very impressive indeed.

Ken Wright's one and only exhibit this time was his Hunslet locomotive 'Britomart' built to the usual very high standard at a scale of approximately 1:7. As always, very attractive in the style to which we have become accustomed.

And lastly, **Roger Marriott** brought along a couple of small models and his familiar schools class 4-4-0 locomotive. The locomotive is modelled in red-green parts and has a short length of track which it runs up and down continuously for exhibition display. The model is built to a scale of 1:20 from original drawings and is similar in general construction to a model described by Mike Cotterill in MM for April, 1979.

Now for a surprise! **Tony Parmee** has actually produced a model which is not a No.10 set model. M.S. Nausea is a ship model mounted in a base which conceals an ingenious sea motion mechanism. The ship, a ferry boat built from instructions in a more recent No.8 set manual really looked the part rolling and heaving most realistically. A replica of the mechanism was also on show for those interested in the mechanics and Tony has promised to write it up in the near future.

I am surprised that **John and Joyce Sleaford** were not sea-sick as their usual collection of models were set out next door. As always these two had produced yet another small show of beautifully turned out models which I certainly had not seen before. I am sure most will have seen the building instructions for the garage and petrol station in the 1937 No.9 set manual and, like me, I suspect that most have not been moved to build it. So it came as a pleasant surprise to see that John's version of it looked really attractive with all the appropriate accessories, including lights, in place. Also on show was John's immaculate version of the JCB featured in MP95 which, he explained, includes a few modifications to improve its scale fidelity

and make it easier to 'drive'.

Last, but by no means least, was a most attractive space model built by Joyce. This was a standard model built from the American Meccano-Erector Space Explorer outfit. We all admired the late Rod Rich's 'black Meccano', well now it has been copied. All of the parts in the space set are very nicely finished in matt black with a small number of flexible plates finished in a bright orange, the brass parts remain brass finish. This combination really does look nice and some of the black parts could, I am sure, find application in models of steam machinery. By the way, Joyce's model also worked well as demonstrated by John.

Yet another Meccanograph, this one was built by **Richard Bingham** in blue-gold parts to a design by Bill Sangster and written up by Keith Cameron. In keeping with the vintage style the model is powered by a 20v long side plate motor and the drawing table is one face of the GRB, part No.167. I did not see it working, but the proof was also on show. The machine is capable of producing quite large circular designs of impressive complexity. Then I came to two very fine models of stationary steam engines built by **Howard Somerville**. The first was his 1910 Hathorn Davey triple expansion pumping engine, the prototype of which is in the Kew Bridge museum. The model has been described by Howard in CQ36 so I will say no more here. His second model was of James Booth's rectilinear engine built from drawings loaned by Brian Rowe. Howard explained that this interesting engine was intended to drive paddle ships and machinery where head room was limited. Instead of the usual crankshaft arrangement the engine has two pairs of mutually perpendicular sliders arranged in a very compact linkage to the piston. Unfortunately, a gremlin, or two had taken residence in the works, so Howard was unable to demonstrate this unusual machine. Look out for this model next time!

Lastly on my tour, I came to a small collection of models built by our secretary **Ernie Chandler**. First, a small showman's traction engine built to a Brian Rowe design. Ernie named his model Lady Columbine since, like Jacob's coat, it was built from many different coloured parts. His second model was a Meccano graph built to a design published in CQ35. The original Meccanograph design was by one Les Nightingale and subsequently written up for CQ by Keith Cameron. Unfortunately, I did not see this, or any of Ernie's models, working as he was unable to find a mains extension lead to provide power. His third, and most recently built, model was the No.10 set lorry and trailer. Despite its large size Ernie was rather disappointed with this model and announced that he would dismantle it immediately after the meeting. He should maybe talk to Tony Parmee who, I am sure, could do something rather more imaginative with the design than Meccano Ltd.

62nd Guild Meeting – 28th March 1998

Looking back over my reports, and I surprised myself by discovering that this is my fifth year of reporting, it would seem that a common theme has been gloriously sunny days for our meetings. It is said that the sun shines on the righteous and Meccano enthusiasts, so I do not know what we have done wrong as this day was rather less splendid than those to which we have become accustomed. In fact, on the way to Stoneleigh I drove through some uncharacteristically heavy rain. However, by the time I arrived it had stopped and the day improved from that time on. In my last report I encouraged lots of winter time model building. I am pleased to report that the turnout of new models at this meeting indicates that everyone was paying attention. Whilst on the subject of reporting, I must say how grateful I am to the number of members who came up to me to tell me how much they enjoy my reports. Those who have written reports previously will know how many hours it takes - a lot! It is a bit of a chore so it is really nice to know that my efforts are appreciated. To everyone, my thanks. Now on to the model tour and as usual, my apologies to those I have misrepresented or overlooked completely.

This time I started in the corner where I found that **Tom and Matthew McCallum** had set up shop and were offering a nice assortment of 1920's sets for sale, but only to those members with lots of spare cash! To prove that they are proper Meccano enthusiasts they also brought a very nice display model along.

The model a Buxton and Thornley steam driven water pump was very nicely presented, having been carefully constructed in 1950's mid-red and green parts. It has an unusual mechanism and was chugging away quietly, an ideal display model and interesting to watch in motion.

Next, was a pair of the small, ingenious novelty models that we all associate with the skilled hands of **Trevor Frankling**. One was a kind of electric steam engine with a vertical boiler which I have described previously. The second model was new to me and was described as an epicyclic gear arrangement that had something to do with drains! I have no notes on the model. I did not see it working and so the mystery will have to be explained on another occasion. If Trevor reads this report, perhaps he will remember to make an explanatory note for me in time for the next meeting.

Taking up most of the real estate along the same row of tables was **Les Gines's** huge Hammerite and Meccano transporter bridge. However, now it is completed and was working very nicely for us all to appreciate. A really impressive model this, certainly a show stopper in the average model exhibition. What I find difficult to come to terms with is the time that it must have taken Les to cut up, clean and repaint the enormous quantity of rusty old Meccano parts required to build this model. Since I have been reporting these meetings, Les's models have progressively grown in size. So, what does he follow this one with I wonder?

Then I came upon a small collection of models built by Major Moneybags, none other than our own esteemed treasurer, **George Illingworth**. Being a keen TA type, it was not surprising to find that George has built five miniature mechanised army vehicles to a common nominal scale of 1.35. The models included a Guy 6x4 Breakdown Gantry Lorry- towing a 7½ ton light recovery trailer loaded with a Universal Carrier, a Scammell Recovery- Tank Transporter loaded with a Sherman Armoured Recovery Vehicle, a Diamond T Tractor towing a 24-wheeled trailer loaded with a Churchill tank, a Thornycroft Antar Ballast Tractor and a Scammell SV/2S Heavy Breakdown Tractor. Whew! All very nicely made in army green coloured parts with painstaking attention to detail. Obviously the work of an enthusiast.

In his usual pitch on the end of the row by the door was **John MacDonald's** display of army models. Two of his latest models were on show supported by one or two models we have seen before. The first was a tractor unit, a freelance design based on a German 'Elephant' tank transporter and built to a scale of 1.11.5. Constructed in the immaculate style to which we have become accustomed and absolutely bristling with working detail. John showed me around the model which has an 8x6 layout, working clutch with six speed gearbox, lockable third differential fully powered twin winches, powered twin steering and its main feature is the correct working M.A.N. suspension. The suspension detail included independent axles, each supported by coil springs and radius arms as per the full scale vehicle. Yet another masterpiece to join his growing stable of army models. To finish the job off the tractor was towing his M15A1 trailer equipped with a tank, both of which I have reported before. His second model was a somewhat smaller freelance version of an 8x8 Oshkosh 'Drops' truck, built to a scale of 1:18. The vehicle is so named as it is capable of dropping the entire rear body complete with load rather in the manner of a skip truck. A conducted tour informed me that the working detail includes five differentials, twin steering, coil spring front suspension, inverted leaf spring rear suspension and a power operated body. If you have not seen these models yet have a look next time to discover some examples of the Meccano model building art of the very highest standard.

Whilst on the subject of the Meccano model building art of the highest standard, I then came to the model we have all been waiting for, **Ken Senar's** F-86 Sabre aircraft which is now impressively complete. This is a big model, not quite as big as a well-known Lancaster, but that is only because it has swept wings. Built in the 1950's red and green colour on its raised plinth, Ken has done a very good job with some very difficult compound curvature, which is virtually the entire external surface of the model. The model is about 6ft long, it has a wing span of about 6ft and it weighs in the region of 140lbs. Everything works as per the full scale, and it does not include a single mutilated Meccano part. Seven motors and countless micro-switches activate the control surfaces, flaps, airbrakes, canopy, undercarriage and even a 'blast' from the

tail pipe. I doubt that anyone missed this splendid model at the meeting, for those that have yet to see it, don't miss it at the next opportunity. Ken told me that it will not be too long before the model is dismantled to release parts for the next model but how do you follow something like this? Remember, MMG meetings have certainly been the place to see some of the best aeroplane models built in recent years. On another topic entirely, Ken has invented what he calls K-Nuts, a kind of double square nut with two tapped holes at the standard spacing. I am surprised that such an obviously useful part has not appeared before. It is possible that they may be produced commercially - watch this space for further developments. In the meantime talk to Ken if you have a serious interest.

The next model I looked at was an absolutely pristine excavator built in current yellow-blue-zinc parts by **Hugh Freeman**. The model was built as per the number nine set manual with a few minor differences. Some of the differences Hugh states are due to his inability to follow the instructions whilst others are due to his refusal to bend his nice shiny new parts. Well, I didn't notice and I thought it looked very nice indeed.

Pat Edkins brought along a typical selection of her inimitable collection of small models. However, parked in the middle of this lot and quite out of character, was a model of an AA gun built from the 1940's army set which I think I may have seen before. The new 'model' this time out was a delightful little Meccano basket filled with the very small chocolate Easter eggs. Later, Pat passed the basket around the members gathered in the tea room, so, in fact, everyone received one of the Easter eggs. A generous gesture which everyone enjoyed. Heady stuff nostalgia!

Mike Edkins model this time was a nicely presented London trolley bus. The model was originally designed by Noel Ta'Bois. Roger Wallis developed the design as only he was able to do, and it was this latter design which Mike has rebuilt.

Moving on I came upon a substantial model of a Fowler-Stainer 2-6-4 tank locomotive built by **Ian Worrall**. The model is not yet complete but sufficient progress has been made to give a fair indication of what we can look forward to. The model is built to an approximate scale of 1.12 in 1950's red and green parts, it is nicely detailed and will look splendid when it is completed.

The next model was very different but that is what we have come to expect from **Roger Marriott**. His cat and mouse grab game is a substantial version of the traditional arcade game in which the object is to drive a mechanised grab to pick up a prize and drop it in the exit chute. The model is very carefully built in a red and green colour scheme and incorporates a veritable 'nightmare' of electro-mechanical switchery. The game is activated by a coin and is timed to run for 45 seconds. During this time the grab must be positioned, the prize picked up (very difficult) and then moved to the exit chute. Amusing asides are provided by the cat with lighting-up eyes and wagging tail and the whizzing-round mouse next to the lighting-up cheese! The model is nicely presented, very attractive and, not surprisingly, won the 1997 "Bill Roberts" memorial trophy at the June meeting of the Runnymede Meccano Club.

Now for something a little bit different, **John Bridger's** collection often very small windmills. In recent times I think the model has been included in the number two set manual, although it has been around for a very long time. The models were built to illustrate the Meccano colour schemes from 1907 to 1978 in support of a talk John gave recently. Despite great care to get everything correct, one of our hawk eyed members spotted the wrong crank handle in one of the models. However, this was a minor distraction. To accompany these small windmills was a somewhat larger windmill model built from the instructions in the late 1940's number nine set manual, also in correct red and green colour scheme. Quite an attractive and unusual show.

Alongside, and in a different league altogether, was the early beginning of a monster crane by **Huibert van Wijngaarden**. I described one of the bogies for this crane last time and commented on Huibert's vast appetite for red and green parts. The model is based on a Bunker Bridge crane, the prototype of which resides in the port of Rostock. This will eventually be a very large, very accurate and very complex model. So far, a couple of bogies and the travelling table have been built and have swallowed up vast numbers of parts. Huibert showed me a list and all I can remember of it is that the model includes around 150 double arm cranks already! Words like "investment" rather than "collection" spring to mind at this point. Look out for this model at future meetings.

Finally, on this stretch of table space I came to two of **Colin Reid's** models, his Rapier loom and his less well known Congreve clock I have described these superbly engineered models before, so I will not repeat myself again. Last time I reported on some of the difficulties Colin had experienced with his clock, making it go that is. Although it was not working at the meeting, Colin explained that he has been tinkering with the mechanism and did manage to get 3 1/2 hours out of it on one occasion. I guess he has quite a way to go yet before he can catch up with Harrison! By the way, in view of the subtle variations in the mechanical detail, this kind of clock has been christened the "Colreid Clock".

Alternative systems are **Tony Knowles** speciality and he usually brings a representative model built from some obscure system of parts. This time the model was a ferris wheel built in parts from a MEKSTRUCT kit. This construction set originates from Hong Kong and, like most Chinese construction systems is very similar to Meccano. So no real surprises here. The wheel was 16" diameter and was powered by a geared three volt motor. Such is my memory that I cannot remember whether I saw it working, or not. Tony's other model was the little tipping lorry by Bernard Périer as described in CQ38. As always, the model was very

nicely made, but unusually the parts appeared to be unpainted metal. I assume the parts were from the Meccano system although the tyres on the one inch pulley wheels were from the Marklin system.

From time to time we see models built from the Primus Engineering construction system and this time the models were brought along by **David Hobson**. He obviously has an interesting and varied collection. A number of railway coaches of about O-gauge and made of polished wood and black metal parts looked very substantial and rather attractive. On more familiar territory was a horizontal steam engine constructed in the characteristic black and brass parts of the Primus system and when I inspected it, it was chugging away steadily driving a little dynamo. David reports that he has been doing his homework and is now reasonably knowledgeable on the Primus system, for those interested and who would like to know more.

It was fairly obvious that **Brian Edwards** is now retired. He has more time for model building and had been quite busy over the winter months. This time he brought four models to the meeting, all built in his standard red and green colour scheme to the usual high standard. First, was the loading shovel built to the instructions in the 1950's number ten set leaflet 10.6. However, the model incorporated many modifications which Brian found necessary to make it work. Second, was a Model T Ford van of approximately 1920's vintage built to an approximate scale of 1:7. This model incorporated an epicyclic gear drive and transverse leaf spring suspension. Thirdly, a model of a Massey Harris four wheel drive farm tractor of about 1930's vintage. This model was fitted with a working three speed and reverse gearbox with power take-off for auxiliary equipment. Finally, Brian's fourth model was of a typical 1950's gully emptier lorry about which I have no further information. All four models were of compatible scales and made a very attractive display, would have been perfect in a 1950's toy shop window.

Terry Pettitt can be relied upon to bring along something interesting, usually a vehicle of one kind or another. This time was no exception and his model was the chassis for an AEC Mammoth Major eight wheeled lorry of late 1950's vintage. The chassis was built in a combination of zinc/nickel and early dark red parts, and very nice it looked too. The model features double reduction differentials with an inter-axle differential. When completed it will also include a four speed with reverse gearbox featuring two ranges of speeds. Terry's second model was the somewhat smaller chassis for his Loddeka bus which we have seen before. The mechanical aspects of this chassis appeared to be complete and are very compact indeed, so it was good to be able to savour these aspects before they are hidden within the bodywork.

Moving on to **Alan Covel's** latest creation, it seems he has had a change of allegiance. For some time now he has brought bigger and better aeroplane models to every meeting. This time his model was a superb reproduction of the GWR broad gauge locomotive Iron Duke of 1848, built to an approximate scale of 1.16. As always, the model was immaculately turned out in yellow, blue and zinc parts. The model has a wheel layout (2+2)-2-2, it is about $18\frac{1}{2}$ " long by $7\frac{1}{2}$ " wide and runs on $5\frac{1}{4}$ " gauge track. 11ft of track was set up for the model to run on and it is driven by a powerdrive motor and battery tucked away inside the firebox. Certainly, this model made an eye catching and attractive display. Well, Alan has not given up on aeroplanes entirely, his second model was a diminutive Concorde built to an approximate scale of 1:80 mainly from white 'space' parts. Although this was a small model I was impressed to see how Alan managed

63rd Meeting Report -3rd October 1998

For a change I can report that autumn seems to have arrived earlier this year and the day of our meeting was a typical miserable, grey and damp day. However, that was outside! The climate inside The Arthur Rank Centre was far more agreeable. With lots of friendships to renew, news to catch up on and, of course, lots of new models to inspect - what more could a Meccanoman wish for? A number of our regular attendees were conspicuous by their absence on this occasion and I was informed that the turn-out of models might be down at this meeting. However, I am pleased to report that I counted just any many exhibits as usual and that we were not short of interesting models at the meeting. As usual, my apologies to those I have misrepresented or overlooked completely.

We seem to have welcomed a number of new members into the Guild in recent months', and my first report concerns the efforts of new member **Colin Smith** who had built a simple, but detailed, model of a Herbert Morris worm-gear pulley block suspended in a three-legged shear. The design was taken from a Morris catalogue dating from 1933 and Colin has managed an accurate functional representation. Altogether very nicely presented, including - I stress - some very clear labels to explain the model. Next on my agenda was a Big Wheel fairground model built in 1927 red and green parts by **Les Gines**. The model was built to the usual high standard we expect of Les expressly for an exhibition of memorabilia. The model was built to a freelance design although it does have certain similarities to SM33.

Roger Marriott is well known for his enthusiastic collection of Meccano items from an earlier age, and on this occasion he treated us to a very nicely presented collection of Elektron sets. The sets on display were very colourful and typically attractive and, as with all of Roger's exhibits, absolutely immaculate. In those days Meccano Ltd. certainly knew how to present their products to the market place.

John Brown brought two substantial models to the meeting. The first, a fairground Octopus ride was built for display purposes and had been in attendance at the Town and Country show I believe. The model was based on MP98 by Tony Brown which, in turn, was derived from the Hugh Henry model first published in MM in October 1955. Typically, John had included the usual electrical wizardry of which he is so fond. In particular, several sets of Christmas tree lights were arranged around the periphery fence of the model, and all of the wire was enclosed within the braced girders forming the inner and outer walls of the fence. The interesting item was the electronic controller which contained no less than eight different programmes for switching the lights in various sequences. An impressive eye-catching model!

John's second model was a 0-6-0 tank locomotive of the Welshpool and Llanfair railway - No.2 "Countess". The model was built to a scale of 1:12 from original Beyer Peacock drawings supplied by the Manchester Science Museum. The model is powered by a 12 volt Radio Spares motor which enables it to trundle up and down a short length of G gauge track. This is a very nice model but, in John's words, it probably owes more to model engineering than to the kind of Meccano modelling favoured by the purists.

It was nice to see **Tom and Matthew McCallum** with a large assortment of eminently collectable Meccano items for sale. As might have been expected, most of the items were from the early period of manufacture and some were relatively rare. In addition, Matthew had assembled a display of Hornby Dublo and Bayko items to encourage the nostalgic amongst the membership - not that the average Meccanoman needs much encouragement to get over excited by the sight of such items! Tom also had a very novel model on display built from an unlikely combination of early Meccano parts. The model was a very nicely detailed motorcycle of modest size, but incorporating parts from the motor car, aeroplane, x-series, Elektron and lighting sets. An original idea which worked extremely well.

Once again **Pat Edkins** brought along a small selection of her unique models. Such imaginative models deserve, and indeed have been given, equally imaginative titles. For example, "The Cobweb", "Gong with the Wings", "The Spirit of Meccano", "Caterpillars" and "Picnic on a park bench". The last of these was a new model for me and incorporated a heald tree, a most ingenious use of part N°101. I doubt if, even in his wildest dreams, Frank Hornby had envisaged the loom heald being used to model a cobweb or a tree, and even more unlikely, the use of knitted Meccano cord to fashion garments for very small people!

Mike Edkins has also been concentrating on small models of late. This time he showed us a diminutive freelance 0-6-0 narrow gauge locomotive built to approximately 00 gauge - now there's a challenge! Needless to say Mike had succeeded in producing such a small model, and what's more, it was capable of running up and down a short length of track under its own power.

One of the stars of our meeting was a large block setting crane, based loosely on SML4 and built by **John Fuller**. However, this model was a little different since John had modified the model very considerably to improve both its scale accuracy and its mechanical accuracy. The attention to detail was very impressive indeed, but most impressive was the fact that it was built entirely in polished pre-1926 nickel parts. The mechanical detail of the model is quite bewildering in its complexity, and involves some clever mechanical features, not least of which is the lever frame at the front left hand side of the cabin through which all functions are controlled. Without a doubt, this splendid model is a credit to its builder and I hope John will take it to future meetings in order that it may be properly appreciated by a wider audience.

In the shadow of the block setter was a collection of models with a military flavour built by **George Illingworth**. George was obviously impressed by Tony Parmee's model of "HMS Chunder", or whatever he called it, in particular the sea motion mechanism. George's ship model was of HMS Campanula, a flower

class corvette built to approximately 1:72 scale and sitting on the aforementioned sea motion mechanism. Very nicely modelled, it gave a good impression of the prototype although its undulations looked a little like a "force 9" to me! Guarding the ship was George's miniature mechanised army, a collection of accurately modelled army vehicles to a common scale of 1:35.

Although much smaller than John MacDonald's models George wishes it to be known that, as far as we know, he is first in the MMG to model a DUKW. What I must say is that the collection of models is constructed in army green parts, to a high standard and with careful attention to detail. A coherent set of models like this really does look very nice.

Whilst on the subject of small army models, **John Palmer** brought one of his multi-kit designs to the meeting. His model was of a Scammell ballasted 6 x 4 tractor, it was motorised and fitted with the new $1\frac{1}{2}$ " wheels with tyres. However, John's main offering at the meeting was to show us one of the new Meccano Master Connection sets - the ones with the tarty fluorescent coloured parts! The set in question being No. 0020 - Cyber Buggy. These sets are nicely presented and contain a number of interesting new parts. Unfortunately, some of the engineering parts are made in plastic and looked rather too similar to some parts in a well-known construction set with a four letter name! (More about the new Meccano sets to follow.)

Brian Edwards can always be relied upon to bring something interesting to the meeting and his models are always nicely constructed in mid-1950's red and green parts. His first model was a 1930's Massey-Harris FWD farm tractor. This was the second outing for the model before it is dismantled - it was last seen at the March meeting this year so I will not describe it again.

His second model appealed to me enormously, especially since I have never seen anything like it before. A standard fairground Dodgem ride, complete with little car on a covered base, just like the real thing. Not only that, the roof included some close mesh wire netting for the overhead pickup, again just like the prototype. So a very novel model on a modest scale - just think what the builders of the large scale fairground rides could do with a model of this kind! But, remember, as far as I am concerned Brian Edwards did it first.

Another stalwart member who can always be relied upon to bring something to the meeting is **Terry Pettitt**. However, he must have a lot of models since many I have seen have been before, but not recently. This time he brought his Meccanograph, which never fails to please. His second model was the chassis for his forthcoming Bristol Loddeka bus. Although the chassis is quite compact. It packs in lots of mechanical detail and is coming along very nicely.

Another of the stars of our meeting was **Alan "Aeroplane" Covel's** model of, guess what? An aeroplane! He's done it again. This time a monster 1:5 scale Fokker Triplane resplendent in pristine yellow-blue-zinc parts as ever. A really nice model built to the usual very high standard, but probably heavier than the prototype in view of the large amount of steel in its construction! A few facts; it was nearly four feet in length, had a wing span of very nearly five feet and a propeller diameter of 20". Of particular note was the very high quality of the modelling of the rotary engine and its cowling. The engine of course worked to give a very realistic appearance, although the large propeller whizzing round was definitely to be avoided! Just in case you were wondering, this model was a landmark in Alan's modelling career being his 60th Meccano model.

Now, readers of this and other columns will recognise that **John Bridger** is noted for building and presenting models to a high standard, usually fairground rides of the larger and more complex variety. So it was interesting to see that he had tackled a rather more modest model on this occasion, but without compromising his standards. His electric dockyard crane was based on the No. 10 set model designed by Bert Love and published in MM for July and October 1978. The model was built in pristine 1950's red and green parts and nominally within the constraints of the outfit. However, John explained that he had incorporated the usual built up roller bearing design and powered the model with no less than four separate motors. This is yet another very attractive model designed for the No. 10 set- why doesn't someone collect all these modern designs together and publish a new No. 10 set manual?

Alongside the crane was a magnificent clock built in blue, red and gold parts by **Tony Knowles**. The mechanism of the clock was based on a design by Keith Cameron of an electric pendulum (Hipp) clock first published in MM for October 1980. Tony's contribution was to put the works into a splendid "cathedral" style skeleton case which stood about three feet tall. Despite a few gremlins, the clock mechanism had been lovingly nurtured to work very well - as far as I was aware it ran continuously throughout the meeting without a murmur of dissent. A beautiful model and a credit to its imaginative builder.

Tony Knowles now has some competition from **David Hobson**, another new member I believe, who is also into alternative construction systems. Of his two models, the first was the 1929 SM19a steam excavator - nothing alternative about that, you might say. However, David has followed the late Rod Rich's lead by using chemically blackened Meccano parts throughout. The model looked superb, and I was informed that the blackened Meccano does not chip, tarnish or rust.

David's second model was a rare Trix display model of a four cylinder marine engine in red and blue painted parts. Perhaps rarest of all was the substantial Mico-Trix synchronous mains motor for driving the display model. Although very interesting to see a nicely presented alternative system model like this, I don't think it could have represented serious competition to Meccano in the days when these constructional

systems enjoyed a wider popularity than they do today.

Ken Senar has obviously been basking in the glory following the success of his outstanding F-86 Sabre model and has taken a well-earned rest. No new models for the time being, but he did bring along a small bending roll built in the true model engineering fashion. The bending rolls were just a properly engineered version of a Meccano bending roll described by Alan Partridge in CQ 30, a very handy tool and very nicely made.

We seem to be doing well for new members, **Chris Copp** being another who brought a model to the meeting. Chris has been wrestling with a one arm bandit gaming machine, otherwise known as GSM 5. The model has a very complex coin operated mechanism which has given Chris a hard time. At the meeting it was still not working correctly and pays out every time it is operated! Obviously not the way to untold wealth. The model was nicely constructed in mid-1950's red and green parts - more a "labour of love" I suspect.

The father and son team of **John and Michael Molden** have established an enviable reputation as builders of magnificent fairground models. On this occasion, only John was able to attend the meeting and he brought along a new model (to me) of a "Miami" fairground ride, another substantial model which made good use of the many Meccano part colour variations. The model was built to an approximate scale of 1:12 which gave it a base area of about 2ft by 3ft when assembled. As per the prototype, the models folds up onto a six wheel trailer which is a permanent part of its construction. Power was provided by a Hectoperm motor with a smaller motor to operate the safety bar.

As per usual, **Tony Parmee** brought along an assortment of models built from various 1950's outfit manuals, but in most cases with some modification to enable them to work properly. Isn't it amazing that Meccano got away with publishing so many model designs that did not work properly, if at all? It is even more amazing that so many Meccano boys persevered with the models without complaint. Today, the Company would be "run in" by the trading standards people!

First of the models was the giant swing boat from the 1953 No. 8 set manual built in correct period red and green parts. This model required an additional 3:1 reduction gearing from the No.1 clockwork motor for it to work properly.

His next model was a triple expansion marine steam engine based jointly on the pre-1954 manual model 8.19 and the post-1954 manual model 9.18. Tony managed to engineer his three cylinder version out of a number eight set to include a gear box giving slow astern, stop, slow ahead and full speed ahead. A nice model making excellent use of the parts in the set.

There's more! A hydraulic tipping lorry derived from the pre-1954 outfit manual model 5.25 of a heavy goods lorry that Tony had much modified previously. The modifications concern a cord operated tipping mechanism to a novel Parmee design, which works very well and which Tony intends to develop in future models.

Finally, Tony went to Australia in the summer and as a memento of that visit he has built a wind pump based on the 1953/54 No.7 set manual model. Within the constraints of a No.8 outfit Tony has managed to include a full complement of 12 vanes, and a novel friction drive mechanism from the mains motor powering the model. A nice child-safe display model that runs continuously and quietly.

Alongside was a rare model by myself **Mike Cook**, your long suffering reporter. The model was rare in-as-much-as I do not seem to be able to find the time to build very many! The model was based on the No. 10 set manual model 10.3, the overtype stationary steam engine, built in late 1950's red and green parts. The model was somewhat improved as per the Brian Rowe version in CQ21. The original crankshaft and bearings design was absolutely hopeless; I don't know how Meccano Ltd. got away with it. After some development I managed to get the model working very smoothly as those who saw it at the meeting will testify. This is an attractive display model, but if you decide to build it be prepared to modify the mechanics somewhat (and to bend an awful lot of those precious red flexible plates).

Geoff Devlin is a consistent builder of interesting models of a sensible size, usually in early 1950's red and green parts. To his credit, most of his models are original designs and his offering at this meeting was a Grantham steam tram to about 1:16 scale. The prototype was, apparently, the first steam tram and dates from 1872. It had a centrally mounted vertical boiler with passenger saloons at each end, the entire upper deck was open and reached by ladders, which must have given some passengers a difficult time. Model dimensions were 22" long by 6" wide by 15" high.

Meanwhile **Howard Somerville** has gone from the magnificent to the minute and has obviously taken a rest from building his usual complex models. His model at this meeting was a little space filler – Bert Love's dentist's chair, which must be familiar to many members.

John and Joyce Sleaford between them produced another small show of impeccable new models. John had built a modified version of the dock quay and warehouse model from the 1937 No. 9 set manual in the usual pristine yellow-blue- zinc parts. Most of the modifications were concerned with alternative forms of electric power, rather than clockwork power, for the various functions of the model. John had also brought along the little tanker lorry by Bernard Périer from CQ41 together with a second version to a larger scale. Joyce, on the other hand, had cornered the market in the new Master Connection sets having purchased and built up no less than four of these to make a very colourful display indeed. Some of the new

parts look very interesting, but seasoned Meccanomen might have a little difficulty with some of the brightly coloured fluorescent parts. Whatever you might think, when all of these models are displayed together the result is very eye catching.

Once again **Colin Reid** brought his Rapier loom out for an airing together with his Congreve clock - the one that didn't work too well last time out! In his own words, it took a couple of weeks to design and build and three years to get it to run properly. Colin has been wrestling with the rolling ball escapement design and has now solved the earlier problems. His escapement is now sufficiently different to the standard design that some clock makers have shown an interest. Just reinforces the value of Meccano for prototype design! Well done Colin.

David Barrett said that he was not going to bring a model to the meeting, but I spotted his nice red and green Weatherhill steam winding engine which was brought out for another meeting. Little escapes my attention at the meeting!

Albert Rowe is also ticking over at the moment. He brought out his version of the Meccanograph and a new model in the early stages of construction. The latter model was a fence making machine built to a design by Bill Butterfield and published in the Newsmag for November 1993. Sounds very interesting this one, and I shall be expecting to see it making fencing by the yard at the next meeting!

Last, and by no means least, was a little Harley Davidson motorcycle model built by **Ernie Chandler**. The model was a rebuild of a design by the Reverend Philip Webb published in Everything WLMS (whatever that is!). The revolving stand for the motorcycle was to Ernie's own design and was powered by a Cruzet mains motor. A very nicely detailed model which I know was on display at Skegex in July.

So there we have it for another six months. Another enjoyable meeting with lots of models which provided lots of interest for all who were able to attend. With the winter rapidly approaching, now is the time to get started on all those new model projects so that we can all enjoy an even bigger and better show in March next year.

Mike Cook

64th Meeting Report - 27th March 1999

Once again we were blessed with an absolutely glorious day for our meeting at The Arthur Rank Centre. Since it was such a fine day, and also the day on which we advanced our clocks to British Summer Time, it really felt like the first day of summer. So, in all ways the day turned out to be a most uplifting experience for all those enthusiasts who, like me, find the winter months a dreary and depressing time. Judging by the turn out of members and models, it was evident that many members had been far too busy to even notice the winter month's ticking away. My immediate reaction to the line display of models that greeted me as I entered the building was that there were rather more new, or different models present. Not only that, it seems that the membership has been growing steadily and I now have quite a number of 'new names' to report on who are also beginning to produce models. As usual, my apologies to those I have misrepresented or over-looked completely.

After missing the last meeting, it was good to see **John MacDonald** back in his usual pitch just inside the door. As always he had brought along a number of his superb army models and star of the show was a 1:18 scale model of a Mighty Antar articulated tank transporter. As usual, just about everything on this model works as per prototype and it was built to the very high standards to which we have become accustomed. On the trailer of the Antar was a nice 'little' model of a WW1 tank built to a scale of 1:19. This model was new to me so I was given a brief introduction by John. Generally much simpler technology than later military vehicles, the tank boasted steering, gun elevation and tail wheel elevation. Also on display was a German half-track vehicle built to an approximate scale of 1:14. Again, this model has a veritable 'shopping list' of working functions including the tricky suspension components. It is with an air of apology that John explained that the differential in this model is not as it should be since the correct differential would be too large to fit into the model!

The Molden family are still building large and very detailed fairground ride models. **John Molden** had brought along a part built ride which has some way to go before completion. Unfortunately I do not have a name for the ride, so I will describe it as best I can. So far it comprises an articulated trailer carrying the rotating ride superstructure. A number of arms radiate from the hub and each arm carries four seats at its extremity which also rotate about a vertical axis fixed to the end of the arm. The main axis of the ride is tilted so that the arms rise and fall as they rotate. Nicely built in red and green parts, when this substantial model is complete it will have a diameter of about four feet or so.

For those who missed it earlier, alongside was the final remnant of **John Bridger's** enormous Condor fairground ride. Now in the process of dismantling, John brought the base section along in order to show the intricate and complex internal workings. Quite an achievement in Meccano modelling terms - how will he follow that? - is the question most are now asking.

Then there were a few models that have been aired before. **Roger Marriott** brought his nicely detailed schools class locomotive out again and most of the time this model was busy trundling up and down a short length of display track. An interesting accessory was a signal gantry built from a rather early Meccano instruction manual and sporting quite a collection of very rare signal arms.

Nice to see **Mike Hooper** had managed to bring another of his novelty models to the meeting. This model, entitled "The Jolly Fisherman", was an animated model based on a Skegness poster, which in turn was based on an oil painting by the artist John Hassall. The history behind this attractive model dates back to 1908 when the poster was used to advertise trips from Kings Cross to Skegness at a fare of three shillings! Mike had made very good use of the various Meccano colour schemes to reproduce the poster to great effect.

Alongside **George Illingworth** had a couple of small models on show to prove that he has not been entirely idle in the Meccano department over the winter months. George, not surprisingly, also likes military models and had built a model of a 5.5" medium gun to approximately 1:35 scale - as ever, nicely modelled using Meccano army parts. He had also built a nice model of an engineering lathe, also to a small scale, and about which I know little else.

John Brown had obviously been very constructive over the winter months and had built a large fairground ride based loosely on the Rotunda Tristar ride at Folkestone. Due to lack of information John is unsure of the accuracy of his model but it certainly looked good having been carefully constructed in red-yellow-zinc parts. At 50 inches diameter the model is impressively large. It is powered by a number of 12v motors, illuminated by 40 bulbs and it has six passenger cars each containing three Duplo people. Look out for this model in future as John intends to develop it whenever he is able to obtain the information to improve its accuracy. (Personally, I wouldn't bother. The model looked splendid to me and, after all, a model is a model!)

Ian Worrall is one of those elusive members who I never seem to speak to and who nearly always manages to slip an interesting model into the meeting without me noticing. Since I do not miss very much, I found a rather nice 2-6-4 tank locomotive, nearly completed and modelled in red and green parts. No clues were provided to suggest who the builder might be, but eventually I discovered that Ian was the builder of the Fowler/Stanger locomotive. The model was about 10 set size with wheels comprising the usual circular parts which I suspect dictated the scale. This should be a nice model when it is completed.

One of my newer 'names' is that of **David Hobson** who had brought along a number of pristine models

built from the Primus construction system. The models comprised two car chassis, some wooden rolling stock on a short length of track and a wooden van body to match one of the chassis. Quite delightful little models. Where on earth does one find such very old construction sets in such fine condition?

He of the alternative construction systems, **Tony Knowles**, had obviously also been extremely busy over the winter months. His substantial model was of a 1795 Boulton and Watt 10HP rotative beam engine built to an approximate scale of 1:20. The model was built from the German "Construction" system which has been available since the 1950's. All of the very many parts in the model were either nickel plated or brass, so its appearance can be appreciated when it is realised that all of the parts were 'as new'. The model comprised the engine house itself of which the beam engine was typically an essential part of the structure. The diameter of the flywheel of the prototype was 12ft and its stroke was 4ft: which should give some idea of the size of this very nice model.

After a very long lay-off **Roger Salter** has returned to the Meccano modelling fraternity, has acquired a French number 10 set, lots of spare parts and has set about building a sizeable tracked dragline. Although not completed, the model on display gave a good indication of its eventual appearance. The freelance design was based loosely on a machine operating in the environs of Northampton, the tracked base was about 18" square and the jib was nearly four feet long. Of special interest was the track, the flexible element of which was a car safety belt sandwiched between a large number of 2½" strips. The strips were shaped according to the Bert Love track design and drive to the track belts was arranged by angle brackets engaging suitable 'sprockets' in the drive train, I look forward to seeing the completed fully functioning model at the next meeting.

Colin Reid has been persevering with his own interpretation of the Congreve clock, which I guess most of us have now seen. Colin also kindly took the trouble to write a lengthy summary of the design of his clock and the trials and tribulations of getting it to run. Unfortunately, I cannot reproduce his words here although they would make a nice little article in their own right. However, his sense of humour shines through and I would like to add a short quotation for you to share. With reference to model designs published by Meccano, and with particular reference to the SM loom, Colin summarises the mechanical design as "intrinsically inept". He then goes on to speculate; "I have often considered this to be purposely introduced so as to steer the users mind a step or two further along the path of skills and capability? Wishful thinking, I suggest! History provides the evidence that the mechanical design of many Meccano models was, in fact, probably inept. Whilst on the subject of looms, Colin also showed me an extremely complex and very clever pattern programming mechanism that he is working on, so keep an eye out for the new loom to go with it!

Ken Senar seems to have had a serious attack of nostalgia, or just felt like building something very simple for a change. His model was a small crane from a set 4 or 5 manual, built using modern parts. The model represented the second that his father built for him in those far off pre-war days.

To my knowledge **Jack Partridge** has built the odd Meccano clock previously. However, on this occasion he brought two substantial mantel clocks to the meeting, both nominally built to the same design. The basic design for the Meccano clock was attributed to Michael Adler, whereas the design of the gravity escapement mechanism was attributed to a modern professional clock maker, James Arnfield. The first of the two clocks used a Tensator clock-work spring drive mechanism, whereas the second clock was weight driven with an automatic electric rewind mechanism. To build just one of these splendid clocks would be a test for any Meccanoman, but to build two represents a considerable achievement. These were two very fine models indeed, bearing testimony to the skill of their builder.

It is pretty obvious to us all that **Brian Edwards** is now retired. Instead of bringing one or two models to every meeting, he has now started to bring small collections. As always his models were built in the 1950's red and green colour scheme and this time all four were relatively small. The largest of his models was an open top double deck bus based on a 1939 Bristol K-type and built to an approximate scale of 1:12. The model was fitted with a four speed and reverse gearbox to drive the rear wheels through the usual differential. A Meccanograph and a fretsaw were two smaller models built by Brian from information gleaned from 1960's Meccano magazines. The last of his models was a small six-wheeled tipping lorry to a freelance design, but scaled to utilise 1" pulleys with tyres.

Tom McCallum was much in evidence with his assortments of elderly, but desirable, Meccano items from a bygone age, all of which were for sale. He also brought along a model of the Jumbo mobile crane built from the 1950's instruction manual for the number 7/8 set. The model was absolutely immaculate in its light red-green parts appropriate to the period. Displayed alongside was an original shop show card in 3-D showing two boys and a model of the same mobile crane in the same period colour scheme. Altogether an attractive eye-catching display.

Since the last meeting **Terry Pettitt** has been working on his model of a 1950's AEC Mammoth V Major eight wheeled lorry. This is a large model measuring about three feet overall. The model now has a PDU inside the dummy engine which drives a four speed and reverse gearbox through a single plate clutch. The rear wheels are then driven through a pair of double reduction differential units. The cab has been built and is now also in place on the chassis. All that remains is to add the body of the vehicle, which I hope we shall see at the next meeting.

Geoff Devlin can always be relied upon to bring an interesting and unusual model to the meeting, and

this time was no exception. His model, built in early 1950's red-green parts, was of a Holt Manufacturing Co. steam tractor of around 1910 vintage. The prototype was a vast machine, quite unlike the familiar steam traction engine. The main mass was supported on crawler tracks, a single outrigger wheel in front was used for steering, and to stop this wheel sinking into the ground it was preceded by a large roller. All-in-all a most unusual machine. Built to a scale of about 1:12 the model was 31 " long, 13" wide and 17 " high - it would make an excellent 10 set model if someone out there is paying attention! Full marks to Geoff for finding yet another unusual prototype.

Alan Covel has taken a rest from building superb aeroplane models. His model of an American Militaire motorcycle from about 1914 was impressive in its detail at a scale of approximately 1:4. The prototype had an in-line four cylinder 1100cc engine, two forward and one reverse gear, retractable stabilising wheels at the rear and a curved front axle which slid in bearings in order to turn. Interestingly, Alan had found another use for the 6" pulley, which when fitted with a white pram tyre and suitably dressed up looked just right as a vintage motor cycle wheel. As always the model was beautifully finished in yellow-blue-zinc parts with a meticulous attention to detail. It is a pity that some of Alan's more recent models have not been written up since they would make excellent subjects for the Model Plans series, and the Militaire is no exception.

Picture this if you will, a very large totally enclosed Meccano box measuring 3ft by 3ft by about 9" high sporting a Ford motor car badge. When the power was switched on a Matchbox model of the Model T Ford emerged from a small door every six seconds! Alan had built this model to commemorate the production record achieved by Ford in October 1925. On raising the box all was revealed. Inside was row upon row of Model T's, 48 Match- box models in all, together with the powered release mechanism. Quite an unusual model I think.

Sometime during the proceedings **Alan Partridge** crept in with one of his typical novelty models under his arm. The model was of a rather sophisticated ping-pong ball machine incorporating novel movements and improved reliability. Alan's modest description of the model as "small" seemed a bit misplaced since it measured 2ft by 1ft by 1½ ft high.

In similar vein, **Ken Wright** brought along an exceedingly complex one-arm- bandit gaming machine. According to Ken this was a rebuild of an original Phil Ashworth design using mainly modern yellow and zinc parts. I am told that the reasons for building the model were, for enjoyment, nostalgia and for preparation of a descriptive article in MMGG.

Richard Gilbert had obviously struck gold when he managed to find a couple of original Meccano display models which he brought to the meeting for us all to enjoy. The first was of a ferris wheel of mid 1970's vintage and the second was of the poorly proportioned showman's traction engine of 1968 vintage. Both were built in yellow, black, blue and zinc coloured parts which, sadly, had faded considerably - the result of years in a shop window somewhere.

Alongside, **Harold Gilbert** exhibited his very nearly completed railway break- down crane, SM 30, carefully constructed in red and zinc parts. Harold had obviously given some thought to the appearance of his model and the combination of colour scheme and high build standard resulted in a very attractive version of this perennial favourite.

Moving on to a collection of small models brought along by **Les Gines** who said that he had been too busy to build anything substantial. The first, and best, of these models was a 1908 Rolls Royce van modelled in red and green parts around the standard spoked wheels fitted with tyres. The other models, all road vehicles, comprised a small Austin Maxi towing a caravan, a flatbed lorry constructed from a modern number 1 set in yellow, blue and zinc coloured parts and a very small Rolls Royce saloon modelled entirely in yellow coloured parts.

Les's collection of models were dwarfed by **Tony Parmee's** latest number 10 set model next door. Tony's latest was a hand- some 4-6-0 express passenger locomotive and tender modelled in 1950's red and green parts. The model was a freelance design based loosely on locomotives of the Lord Nelson class, and similar, and built to an approximate scale of 1:14. The model featured fully working Walschaerts valve gear, working springs to the bogie and all axles, spring centred bogie and alternative electric power sources depending on whether the model is intended to run on a track, or to be raised for static display. Many members commented that this model was far more attractive than the model described in the 10 set leaflet number 12. Just in case you were wondering, yes, it is to be » published as Model Plan II4. Congratulations to Tony on creating yet another fine 10 set model to add to his lengthening list of models.

Another newcomer to these reports is, I think, **Hugh Freeman**. Hugh had brought along a superb model of a JCB Loadall built from the instructions in MP 95. The model was immaculately presented in its pristine yellow-blue- zinc parts and included wheels with the large heavy tyres favoured by industrial vehicle modellers. Hugh said some complementary things about the author of the Model Plan, Tony James, and this model was certainly a credit to both of them.

Then I came to the regular mini exhibition of models put on by **John and Joyce Sleaford** at every meeting I have attended. The principal model in the show was built by John and was of a cross-channel steamer from the instructions in the 1937 number 9 set manual. As always, the model was very nicely presented and modelled to a high standard in pristine yellow, blue and zinc parts. John had modified the design a little to incorporate a rudder and single screw propeller at the stern, the latter driven from a small

internal electric motor. Joyce had also been busy building several models from some of the newer outfits. These models included the survivor car from set 0050, and an assortment of models built from the 100th anniversary set 7080. In fact John said that he had to buy Joyce a second set in order to cope with her latest building programme! In my opinion, I think that Meccano have got the latest crop of outfits something like right. Many of these new models are innovative and utilise very attractive colour combinations, and if you would like to see the evidence then head for John and Joyce's model display at the next meeting.

David Bradley has been indulging in nostalgia in a big way! He brought not one, but two very large models to the meeting of the Isetta 300 bubble car - remember those? Both models were constructed in yellow-blue-zinc parts, they were essentially identical in appearance, but differed in mechanical detail. These vehicles were basically three wheelers with the single driven wheel at the back and a steerable pair at the front. In one version David had replaced the rear wheel with a pair of wheels separated by a differential. One of the models was fitted with the Meccano infra-red controller for steering and power control. A short demonstration proved that the TR controller works better than I had been led to believe.

Nearby was an unusual novelty model built by **Bob Ford** to the usual very high standard. The model comprised a 25" diameter wheel rim free to rotate about a horizontal axle fixed to a suitable stand. The whole appearing like a vertical bicycle wheel in size. The inside of the rim was an N-gauge electric railway track on which ran a diminutive locomotive. When set in motion the locomotive caused the 'wheel' to rotate - much like a hamster in a wheel - and could be left to run forever in a display situation.

Tucked on the end of the line were a couple of small models by **Albert Rowe**. The first was of a farm tractor, described by Jack Partridge in Newsmag 72 of July 1995, with the addition of a trailer and large packing case. Albert's second model was of a small steam engine designed by George Illingworth and powered by a small stepper motor driven by an electronic controller.

Finally, in the usual corner was a display of 80th birthday cards sent to **Ernie Chandler**. For the first time to my knowledge Ernie decided not to bring a model and to let us all share in the celebration of his recent birthday. Certainly congratulations are in order, to reach such an age and to be fit, active and still Meccano modelling is quite an achievement. Let us all wish Ernie many more years of model building yet. So that brings me to the end of yet another most enjoyable meeting.

The meeting was enlivened by the seemingly ever increasing turnout of members not forgetting our dealers John Linder and Mike and Carole Rhoades of course. I vaguely recall hearing a comment that our membership is growing steadily. If that is true, then it implies that we should also expect a steadily growing number of models at our future meetings. I look forward to that with interest.

65th Model Report - 2nd October 1999

I have just surprised myself by discovering that I have been writing these reports for more than five years. It doesn't seem that long, although every time that I sit down to start writing it seems like forever! (Ed: I know that feeling as well) I have also discovered that nearly every report indicates that we enjoyed fine weather on the day. That I find curious. For example, very early on the day of this meeting it was raining very hard, in fact much the same as we enjoyed for several weeks beforehand. But, by the time I set out for Stoneleigh, the sky had cleared and the sun was shining. Another glorious day and that is how it remained.

For the first time in many meetings there was a conspicuous shortage of models and members at this meeting. One or two regulars were absent, and were missed, and others had nothing much new to bring. Never-the-less those of us present enjoyed the company and the models, as always.

On a sad note, before I report on the models, I would like to add my condolences to those of so many Meccano enthusiasts on the recent passing of Keith Cameron and Bert Love. It is without any doubt that both gentlemen have influenced all our lives to a much greater extent than any of us can possibly begin to appreciate. We all owe them both an enormous debt of gratitude for their individual contributions to the hobby. However, I am sure that they would prefer me to get on with the model report. So, as usual, my apologies to those I have misrepresented or overlooked completely.

First on this occasion is **Alan Partridge** who moved his kit in quietly whilst I was looking the other way. His main offering was his ping-pong-ball machine, which is still going strong. Since I have described it before, and as most people have now had the pleasure of seeing it, I will not describe it again. The interesting new items Alan brought along were much smaller, in fact, the result of Competition Corner in CQ 45 (I think!). The object of the competition was to design the smallest, or slimmest, differential using standard parts. On display was a collection of about eight variants made up by Alan. Certainly worth filing away for future reference since so many models require small differentials.

Next on my itinerary was something a bit bigger - a new fairground ride by **John Molden**. Yet another superb model from the Molden stable, although this one was still under construction. The model is a 'Breakdance' ride, built onto the trailer of an articulated lorry, all to an approximate scale of 1:12. As shown the ride was packed up for transportation, although some detail has yet to be constructed. Built in red and green parts, this is another model to look out for in the future.

Roger Marriott brought his cat and mouse grab game out for another airing. Superbly made in the usual pristine red and green parts, this model provides an entertaining challenge for those prepared to part with the necessary coin. The prizes consist of an assortment of small Meccano parts boxes of 1950's vintage, I would guess. "Prize" is not really the right description as the boxes are empty! Not only that, they are very slippery on the rare occasions when the player manages to grab one. But then, that is how I remember 1950's Meccano parts - slippery and rare - since I rarely had enough money to buy what I wanted!

Les Gines declared that he would not be bringing a model to the meeting as he had not had time to build anything new. However, he couldn't resist the opportunity to bring a little car transporter complete with seven small cars based on No.1 or No.2 set models. Interestingly, Les had contrived to make the cars look something like recognisable models, Triumph TR7, Triumph Mayflower, Austin Princess, etc. Quite a difficult thing to do in such a small scale. Also, I must not forget to mention the yellow Rolls Royce, Les's pride and joy!

Geoff Devlin always seems to produce nice models in 1950's red and green parts which appeal to me greatly. The subject is always interesting and the size always seems to be within the scope of a No.10 set. To me, that is how it should be, but then I might be biased! His model at this meeting was of an Atlas railway excavator built in 1901 for the Swedish railway. Built to an approximate scale of 1:16, the model was 36" long, 18" high and 12" wide. The boiler and works were enclosed in a long narrow box van, which rides on two typical railway bogies. The turntable mounted jib and bucket arm are mounted on one end of the chassis. The bucket arm is 'racked' in and out by a small steam engine mounted halfway along the jib. Alongside the racking engine is a precarious operators platform attached to the side of the jib. An interesting subject with lots of scope for Meccano modelling.

One of our newer members, **Paul Hubbard**, is currently building large models and brought two to the meeting for us all to admire. The first was a block setting crane of his own design, but including some elements derived from the No. 10 set model. The main differences are that much of structure is built up using quantities of strips to replace some girders, and the various functions are powered by separate geared motors. The main slew bearing is built up as per the No. 10 set model.

Paul's second model was SM 32, the twin cylinder steam engine. This model did a tour of duty at the Town and Country festival since when Paul has cleaned it and replaced the drive unit. He has also improved the bearing to reduce axle rod wear. It now runs very well as I can testify, since I had a short demonstration.

Another newish member **Colin Smith** had also been very busy since the previous meeting. His very large model was of a quay side crane, derived from photographs taken at Newcastle upon Tyne. Impressive original work this, the model has a 'footprint' of 2ft x 3ft and is some 6ft high. Of particular interest is the ring gear in the slew bearing which, according to Colin was made by Rod Rich. The desire to build a model

to incorporate the ring gear was one of the reasons he chose to build the crane. Colin's other model was a very tiny block setting crane, no more than six inches long, build largely from narrow strips.

Of particular interest to me was **Howard Somerville's** model, as I am trying to build something similar. The model was a four cylinder triple expansion marine steam engine, superbly well made in shiny red and green parts. As always the model runs very smoothly, but when Howard tried to show it to me a few gremlins seemed to have taken up residence. Howard's second model was really a mechanism destined for what will surely be a magnificent model when completed. The model will be of a road grading machine that, in full size, depends heavily on hydraulics for its many functions. Howard has devised a working imitation hydraulic cylinder that contains a tiny geared servo motor driving a screw ram, and the prototype was on display. The works fit into one of the new longer sleeve pieces to form a very compact and work-man like mechanism which is capable of doing useful work. The prototype ran very smoothly and very quietly, showing great promise for what is to come.

Brian Edwards can always be relied on to bring something new to the meeting. This time he brought three models built in red and green parts as always. First was a vintage motor cycle and sidecar of about No.7/8 set size, of freelance design, but incorporating the crane set motor. Second was a chassis based on the 1939 Bristol K-type bus, modelled to approximately 1:12 scale. The model includes a four speed and reverse gearbox, differential, etc. and appeared at the last meeting complete with superstructure. So this was an opportunity to study the internal works. Brian's third model was the beginnings of a Taylor jumbo crane, and so far only the basic chassis has been made. Something else to look forward to next time?

Terry Pettitt's Meccanographs and superbly detailed road vehicle models are familiar to most members. So there are no prizes for guessing what he brought along this time? One of each! The road vehicle model was of an AEC Mammoth Major eight wheeled lorry with a flat load carrying platform. The chassis of this superb model has been shown at meetings before during the course of its construction. However, readers might like to be reminded of some of its features. The engine and transmission is based on a powerdrive motor with clutch and four speed and reverse gearbox. The back end includes twin double reduction differentials and the front end incorporates a 2:1 ratio between the twin steering axles. A very nice example of Meccano modelling. The Meccanograph was one of many built by Terry, and the model at the meeting was based on the original 1966 MM version modified to include three independent pen movements. Judging by the sample pattern produce by the Meccanograph, it obviously works very well indeed.

It is well known that **Alan Covel** usually builds large unusual models, and on this occasion he showed that he had excelled himself yet again. Most impressively, his first model was of John Cobb's Railton 'Mobil' Special car used for various attempts on the land speed record from 1938. The model was built to approximately 1:7 scale, to measure 49" long by 14" wide, and the body shell was constructed entirely from zinc plated strips to give it a very appropriate appearance. The wheels, which were hidden within the body shell, were 6" pulleys fitted with plain rubber ring tyres. Two dummy Napier 'Lion' aeroplane engines, each concealing a powerdrive motor, provided the motive power through bevel gearing.

Alan's second model was even more unusual, an almost full scale 'Trice' tricycle. Having spotted one of these on the road recently, he learned from the cyclist who the manufacturer is and promptly obtained the necessary information from which to build his 'model'. The model measured 33" wide by 62" long and the wheel diameter was 22". The wheels were very robust, each having 32 angle girder spokes and tyres fashioned from car heater hose, and were fixed to $\frac{5}{16}$ " diameter axles. The rider sits in a low reclining attitude between the two rear wheels and the transmission from pedals to the rear wheels was by means of a fairly long chain. Alan's chain was made up from no less than 232 $1\frac{1}{2}$ " narrow strips and seemed to work reasonably well most of the time. Total weight of the model was 48Lb. The reason for the robust construction was to give the model sufficient strength to carry a full scale human cyclist, and to make the point, Alan cycled a few feet under his own steam! Whatever next?

David Hobson brought along a very nicely made model of a 1903 Gobron- Brillie racing car chassis. The model was constructed entirely from highly polished nickel, or zinc, plated parts to give it a very attractive appearance. Of special interest was the four cylinder engine, and in order to better appreciate the unusual features of the engine, David had also brought along a separate model of same to a larger scale. The cylinders were connected in pairs so that each pair of pistons ran in parallel and were connected to an overhead connecting rod. The overhead rod was then connected at either end to the cranks on the main for-aft crankshaft at the bottom of the engine. A most unusual arrangement, probably owing more to steam technology rather than the technology of the internal combustion engine. Altogether an interesting and very well modelled display.

On a grander scale, approximately 1:12 to be precise, **George Illingworth** had made a model of an X-Wing fighter as featured in the film "Star Wars". George had perceived that the reason for the lack of interest in Meccano by modern youngsters is that they think the models are old fashioned, and generally in keeping with the ageing practitioners of the art! So, George's answer was to build a model that very firmly relates to the world of the modern youngster. By all accounts it was a smash hit with the younger generation at the Town and Country festival. The fighter was typically different from a normal aeroplane and the variable geometry wings are supposed to give it certain characteristics which are a mystery to me, but could no doubt be explained in great detail by any self-respecting small boy. The model was mounted on a

stand and the wings could be moved by means of the Meccano infra-red controller, the whole looking very impressive indeed. I think there is obviously a message here that we would all do well to pay attention to.

Mike Hooper had also been busy since the last meeting building a new version of his magician, Tommy Cooper. Mike tells us that his new model is built almost entirely from re-sprayed scrap parts, but you would have been hard pushed to tell. The model was built nominally to the same scale as the original and was dressed in black dinner suit, bow tie, red cummerbund and the trademark fez. Seated on a single leg stool behind a small table, Tommy Cooper produces a white rabbit from a top hat at the wave of his wand - assisted by electric propulsion behind the scenes! As always, very nicely turned out indeed.

Mike also brought with him a guest, **Bob Latten**, who, I am pleased to say, did not come to the meeting empty handed. His model was of a twin cylinder steam engine, although in the absence of any information about it, I cannot say whether it was representative of a pit winding engine, or of a typical mill engine. When I looked at the model I concluded that it was probably a pit winding engine, and now that I know where it comes from I think I may well have been correct. However, maybe Bob will explain all next time we meet.

Having got aeroplanes out of his system, **Ken Senar** has decided to move into looms in a big way. His principal model was the loom with pattern programmer as published in GMM leaflets 49 and 50. Having built the model myself in the not too distant past I can vouch for the high entertainment value in getting it to work. Needless to say, the published design had been developed by the late Dr Keith Cameron and is perfectly capable of weaving a narrow band of cloth. Ken's model was seen working, but so far he has not plucked up the courage to thread the thing up - a task which took me an entire day. However, the result is worth the effort, to see it producing cloth is satisfaction indeed. So, how about next time Ken? Having got this far, Ken has decided to go one better and build a loom of his own making, he has been experimenting with a Rapier shuttle-less mechanism for drawing the thread across the loom and cutting it off. He has also built a 5- action dobby pattern programming mechanism, and I suspect he might have been in consultation with Colin Reid on this topic. Anyway, the demonstrations show great promise for future meetings, so watch this space!

El Presidente **Ken Wright** brought his one arm bandit along for another outing. This model was built to a design by Phil Ashworth, and obviously also has a high entertainment value in more senses than the obvious. At one stage I saw Ken, screw driver in hand, with his head in the works trying to sort out some minor problem. However, by all accounts the model has been very popular with the crowds who saw it at the Town and Country Festival in August.

And then we come to our loyal and long suffering Secretary, **Ernie Chandler**. Never one to let the side down, Ernie always brings something along to every meeting and this time he brought a largish showman's road locomotive, built to a design by the late Brian Rowe. As always, a business like job which, says Ernie, was based on Brian Rowe's instructions and is powered by one of the new 'Canadian EI5R' motors. The success of the model is self-evident when it is realised that it ran for 9 hours every day throughout the Town and Country Festival without attention.

Nearby was a smaller model built by **Albert Rowe**, Albert's fork lift truck looked remarkably like the 1950's number 9 set model, but he assured me that his model was to his own freelance design. It was very well constructed and its scale proportions looked right. Not only that, it boasted a rather more comprehensive variety of powered functions than the outfit model. The functions included steering, forward and reverse, mast tilt, platform hoist, etc., all powered by separate electric motors. A very nice compact model to fill in the time between bigger projects I suspect.

Bob Ford brought his novelty model out for another airing. I don't know if it has a name but basically it was a 23" diameter wheel, very similar to a bicycle wheel, and supported vertically between two supports. A length of 'N' gauge railway track runs continuously around the inside of the rim and a small 0-6-0 'N' gauge locomotive runs on the track. The locomotive sits at the bottom of the wheel and the application of power causes the locomotive to run, the action of which causes the wheel to rotate in turn. As always, this unusual model was very nicely built and would undoubtedly be an ideal crowd pleaser at exhibition.

Then **Dave Bradley** gave me another demonstration of his Isetta Bubble car, which has been the subject of some improvement since the last outing. In particular, the model has an improved front suspension and has been fitted with a tow bar in preparation for the next phase of development- a caravan, no less! The model was very effectively controlled remotely by the Meccano infra-red gizmo, another convincing demonstration of this handy piece of kit. Without giving anything away, Dave has promised further humorous additions to the model, so keep your eyes open at the next meeting.

With Dave was **Mary Edwards** and she seems to have caught the Meccano bug as well. The bug in particular was a spider and it is promised a web in the future. Looks like we have another lady member with imaginative aspirations in the manner of Pat Edkins.

The **John and Joyce Sleaford** show was up to the usual standard and comprised a mini exhibition of pristine models. John's principal model on this occasion was a very fine skip lorry built to the instructions in MP107 in zinc, yellow and blue parts. The model boasted a few modifications to improve its fidelity and it certainly worked very well.

Also on display was a tiny JCB built to the instructions by Guy Kind published in CQ45. Models by Joyce included a road sweeper built from the 1999 9550 set and a tractor built from the slightly earlier 7530

set. Resplendent in their new colour schemes these models were very attractive indeed. I was particularly attracted by the road sweeper which, according to John, actually works as intended, unlike many published Meccano models. The wheels and tyres of the road sweeper are of a useful size and I think many Meccano men could find a plethora of alternative applications for them.

Nearly last, but by no means least, was a nice pair of models built by **Tony Parmee**. His latest model for the 1954 number 10 outfit was a "Superbus", a sizeable double deck job built in the usual red and green colour scheme. Built to a scale of approximately 1:10, the model was about four feet long. It was powered by a 12 volt motor and remotely controlled by the infra-red gizmo (I think). Features included sprung axles, Ackerman steering, folding doors and continental exit door complete with folding step. An impressive model which is probably quite good at knocking the furniture about at home owing to its size!

Tony's second model was of a small endless chain hoist based on the differential pulley block. To his own design it worked very well indeed. Never having seen a Meccano model of such a hoist before, Tony was pleasantly surprised to find an example in the 1928 edition of Standard Mechanisms. This just goes to show how difficult it really is to find something genuinely different to model in Meccano.

At the very end of the row I found an interesting vehicle of unknown provenance. A few enquiries later determined that the model had been built by **Geoff Burgess** and was unfinished. The model was the chassis for a Thornycroft Mighty Antar military vehicle - the kind that would excite John MacDonald enormously. For those that know about these things, the model included differentials with epicyclic gearing, a separate clutch and fan cooling. Looks like another splendid model to look forward to at the next meeting. That was about it, another successful and most enjoyable meeting over.

Although numbers were down this time, there were plenty of interesting and innovative models to be seen. Since a number were still in development, the next meeting looks particularly promising if they are all completed in time. A little reminder for the next meeting that my job is made very much easier when models are labelled with the name of the builder and the briefest of detail about the model. The more information I can obtain, the more interesting the report should be. I look forward to meeting you all again next time with a new crop of models to report on. (Editor's comment:- Many thanks to Mike for another excellent model report.)

66th Meeting Report - 25th March 2000

As I get older, time simply seems to evaporate at an ever increasing rate. It seems like only yesterday when I was writing my report for the last meeting - and that was six months ago! I am not alone. Many members remarked on the difficulty of finding time to do anything useful these days. In spite of this little difficulty, many members had been busy over the winter months and had produced some splendid new models for us all to enjoy. In fact, the number of 'exhibits' was close to a record, certainly more for me to report on than has been the case for some time.

So, another fine day, interrupted by the occasional April shower, lots of interesting models and some very good company - what more could a Meccano enthusiast ask? As ever, my apologies to those I have misrepresented, or overlooked completely.

After a temporary absence last time, it was good to see **John MacDonald** back in his usual spot by the door. As ever John had brought a couple of his superb military models along for us all to enjoy. The first was a freelance model, to approximately 1:24 scale, comprising a tractor, trailer and tank - overall length about 3 ft. Just about everything on the tractor worked, 8 wheel drive, 5 differentials, 4 wheel steering, winch and lights. The trailer just had working suspension! The tank was based on a Centurion and boasted working steering, gun elevation, turret rotation and Horstman suspension - whatever that is.

John's second model was of a Matador gun tractor with 5 .5" gun, all to a scale of about 1:12. The tractor had lots of working features, as might be expected including 4 wheel drive, 3 speed and reverse gear box with an auxiliary box for high and low ratios, winch and lights. The gun had all the features a gun should have including brakes, elevation and slewing mechanism, opening breech, recoil mechanism, split trails and, not forgetting, the spades. All of this exhibit was, of course, built to the very high standard that we have come to accept as the norm for John. Once again, another very fine show.

Next door was a rather more modest show of militaria by **George Illingworth**. Modest because the scale was much smaller at approximately 1:35. However, the models were becoming familiar since George's model was of a Matador and 5 .5 " gun as well. As ever, nicely made and a fitting compliment to John's larger examples.

From militaria to fairground rides, what a contrast! A very substantial model of a Volvo F16 6 x 4 tractor/generator unit was **John Molden's** offering at this meeting. This was a very detailed model, built in red and green parts; to what is now a familiar style and excellent standard. The model was about 2ft overall and just about all of the essential functions worked as per prototype. It now awaits its trailer/ride, which I hope we will get to see next time.

Keeping this mighty model company were two very similar models by **John Bridger**, also noted for his expertise at creating superb fairground models in Meccano. First, a Scammell Showtrac tractor/generator unit built to an approximate scale of 1:10. Again, a very detailed model and extremely well constructed in the appropriate red and zinc colour scheme.

John's other model was the centre truck from his Octopus ride, which is currently undergoing a re—build around a $\frac{3}{8}$ " centre axle. This gave us the opportunity to inspect the works, which were very complex and incorporated considerable evidence of electrical wizardry. So, plenty for fairground fans to look forward to here!

It appears that **Colin Smith** has acquired a quantity of the 'black Meccano' produced by the late Rod Rich. Colin has been making good use of the variety of special parts devised by Rod, and I am sure Rod would approve of Colin's latest modelling efforts. Colin has started building a model of the RR K10 Pick'n Carry crane, a variant of the familiar four wheel mobile crane. The chassis was more-or-less complete and awaits the addition of powered steering. Other developments were concerned with the effective modelling of hydraulic jacks for elevating the jib, and a mechanism for telescopically extending the jib. Colin demonstrated his test rig to me and it was clear that some of Rod's special parts facilitated this tricky modelling problem. Another interesting model to look out for next time.

The next model I looked at seemed familiar. It comprised a diesel road roller towing a compressor unit, which in turn was towing a tar boiler. It was all nicely constructed in yellow and dark blue parts by **Michael Bent**. It looked familiar because, I have since discovered that it was modelled from the instructions for a Road Repair Unit in the 1950 No. 9 manual. This was the first time I have seen this model made up, and very attractive it looked too. Must have been high on the nostalgia scale for many of us present!

In my last report I told you all about **Howard Somerville's** experiments with tiny servo motors inside sleeve pieces. The idea being that the motor drives an extensible screwed rod arrangement such that the assembly may be used to represent a working hydraulic cylinder. The concept worked beautifully, and at this meeting Howard brought a model which included eleven of these working 'hydraulic cylinders'! Another fine example of Howard's modelling skill - a road grading machine. Difficult to describe simply, but recognisable as soon as you set eyes on it. Built in . yellow and zinc parts, all major functions worked as per prototype, and it was ably demonstrated by its builder who controlled the machine from a switch panel in the engine compartment. If you missed this model, don't miss it next time!

The next group of models were exhibited by **David Hobson**, who seems to be following in Tony Knowles footsteps by specialising in a range of period construction sets. First was a small tractor with front lifting shovel, built in Meccano but actuated by another 'hydraulic' look-alike system. The hydraulics were in fact

working pneumatics by Orsta/Modeltechnik, a German educational supplier. The air supply was provided by an electrically driven reciprocating pump integral with a storage cylinder about the same size as the Meccano boiler. This little plant was a self-contained bench unit which supplied the model via a flexible pipe. The control valves and their respective power cylinders were installed in the model. Very effective but not too powerful.

David's other four models were all very small cranes built from four different small construction sets dating from the early 1930's. The construction sets were, Trix, Meccano X-series, Ulox and Mex. If my facts are correct, the latter two sets were originally sold by Woolworth in 6d packets - that's 2½p in new money! All very interesting and also high on the nostalgia rating scale.

It was probably more than coincidence that the next model along was built by **Tony Knowles**. Not a model from an alternative construction system, but, for a change, it was the Meccano model of the twin cylinder motorcycle engine as described in leaflet No. 10/16. Very nicely built in early nickel parts and sporting a few refinements to enhance its display appeal. Some small coloured lights were wired up in one cylinder to illustrate the role of the various strokes in one cycle, green for induction, yellow for compression, red for power and blue for exhaust. Impressively, the model ran extremely smoothly indeed, a fitting tribute to its builder!

As ever, **Alan Partridge** slunk in at some time unnoticed and set up his now familiar ping-pong ball machine. The machine appeared to be running faultlessly whenever I caught sight of it, just steadily and quietly 'pinging and ponging' away nicely. Surely the construction of a machine like this must be an exercise in futility, but then on the other hand, most Meccano models are, by definition, ephemeral.

Steam engines are forever, at least in Meccano model form. **Sid Beckett's** latest model was an attractive and not quite so common example of the genre. I am especially grateful to Sid as he attached a colour photo of his model to his meeting return form, so I can't possibly get this one wrong. Sid must be a stamp collector as well, as the idea for this model came from a most unlikely source, a picture in the British Philatelic Bulletin. The model was of a horse drawn stationary steam engine dating from about 1850 and would have been used to power farm machinery, or similar. The model was of modest size being about 18" long by about 20" high, and built in an attractive red and zinc colour scheme. Most notable was the very tall chimney and large flywheel. Altogether very nice, and we don't see so many models like this.

A kind of homely ambience surrounded the next group of models which were presided over by their builder, **Colin Reid**. As always Colin spends a lot of his modelling time wrestling with the impossible in the shape of weaving looms. Once again, his Rapier loom was in attendance - must be one of the most travelled Meccano models ever! Readers will recall, that not so long ago I reported on one of Colin's developments, a loom dobby, or pattern programming mechanism that he had been experimenting with. Since then Colin has been developing a loom loosely based on the SML version to include a 10 shaft dobby. He has also been experimenting with alternative shuttle designs, made largely from Meccano parts, and an improved picking mechanism. All of these developments were on show and Colin spent a while explaining his ideas to various loom enthusiasts. He has also sorted his Congreve clock out, it was present at the meeting standing guard by the door and, as far as I am aware, it ran faultlessly all day.

Regular readers may recall that last time I also reported on **Ken Senar's** foray into loom building. Well, he announced that he has given up on that project to concentrate on marginally less demanding modelling projects and was actually heard muttering expletives like "Doom and loom!" However, his new model of a double ferris wheel had also given him considerable grief in the electrical department. The model was based on the original by Phil Ashworth and described by Bert Love in the MM of October 1969. The model was working very nicely at the meeting, and the electrical sequencing appeared to be doing the right things. The model was Ken's alternative to the London Eye, which he called "The Aye Aye" - Get it?

Now **Alan Covel** had been really busy over the winter months. Still continuing an aeronautical theme in his modelling, this time his efforts focused on the Wright Brothers. The Brothers started out in the late 1800's as bicycle makers and turned their attention, and practical skills, to the problems of powered flight around the turn of the century. Their story is remarkable and their place in the history of aviation is known by just about everyone. The familiar Wright Flyer III of 1905 is generally regarded as the world's first practical aeroplane and was the subject of Alan's model. This superb model had a wing span of 50½" and an overall length of 35". The frame work was built mainly from zinc strips, the fabric covering was represented by a very large number of transparent plastic plates and, of course, the wire bracing was Meccano cord. This novel construction technique, together with a great deal of care and attention to detail, resulted in the very fine model which really looked the part. Even the 11" diameter propellers were chain driven and rotated correctly, being driven from a small electric motor buried in the engine.

To complete the historical connection, Alan had also built a bicycle. The wheels of the model were based on pairs of 7½" circular strips fitted with a rubber ring to represent a tyre. The model also sported a bell, inflator and sprung saddle. However, there was some debate as to whether the inflator was relevant, or not. The model was adorned with the 'Van Cleve' logo, which identified it as a top of the range product from the Wright's workshop. Who said our meetings are not educational?

Newish member **Paul Brecknell** has returned to the fold after a lengthy lay-off from Meccano modelling, about 18 years he reckons. His model appears to have been his first serious effort in recent times and was

of the unusual Opperman three wheel 'motorcart'. This small vehicle comprised a simple tipping flat back and a complex single front wheel arrangement which provided not only the steering but the power drive as well. The prototype dates from around 1950; the model is based on a Dinky original and was built to an approximate scale of 1:12. The overall length of the model was about 18", which limited the space available for engine, gearbox, front wheel steering, etc. since the whole package was a moving item relative to the body. This posed a real challenge for Paul who decided to put his powerdrive motor in the main body and to convey the drive to the gearbox and front wheel through the steering column. To his considerable credit, he did get it all to work in the end, the mechanics were very complex and the effect was to create a rather overweight front end. So full marks to Paul for persevering with this model, and if this one was anything to go by, then we are in for some interesting models from him in the future.

Terry Pettitt is also noted for his very fine models of commercial road vehicles, and he usually brings the latest development to our meetings. However, this time he excelled himself by bringing three, which served to keep the three wheeled motorcart company. Firstly, two models we have seen before. His Leyland Lion PLSC1 single deck bus looked splendid in red and green and always reminds me of my school days, since I travelled in something similar every day.

His Bristol Lodekka open top double deck bus of rather more modern times has also been seen before in various stages of construction. This model had also been built with the usual attention to detail and was finished in an attractive yellow and green colour scheme - a most appropriate use for this unusual colour combination.

Lastly, Terry's eight wheel AEC Mammoth Major flat back lorry has now been completed and was on display at the meeting. We have also seen this model in various stages of development, but this was the first outing of the completed model. In common with the others, the model was built to an approximate scale of 1:12. As we have seen before, the model had considerable mechanical detail 'under the bonnet'; powerdrive motor disguised as an engine, three speed and reverse gearbox, clutch and lowered drive train connected to a side mounted differential with two stage reduction. All in all, some very nice examples of road vehicle models of a bygone age.

Tom and Matthew McCallum were also in attendance with a small sales pitch offering some very desirable Meccano items. As ever, Tom also brought a model along to show off some facet of their considerable collection of Meccano. This time the model was the road surfacing machine built from the instruction leaflet 10:19 in the correct period mid red and green parts. The parts were pristine and the construction was near perfect to re- create this very attractive model. As a youngster, this model was my goal. I owned the leaflet, the only leaflet I possessed mind you, but I never accumulated all the parts needed to build it. It has been a long wait, but now I know what it looks like and I know that my youthful enthusiasm was not misplaced.

Moving on, most members will know that over the years **Les Gines** has accumulated and refurbished a large quantity of old Meccano parts. He has painstakingly cleaned and repainted countless items to give them a new lease of life. However, every item has been repainted with silver Hammerite paint, so his models built with these parts take on an interesting and unusual appearance. Most of his models have been large and this enterprising source of parts has obviously kept costs down. Well, Les brought another large model to this meeting - the Baltic tank locomotive built from SML 15 instructions. Very nice it looked too in its all over 'silver' finish although it may be the last for a while, since I think Les said he has used up his vast stock of refurbished parts. Does anyone have lots of rusty old Meccano they wish to dispose of?

Brian Edwards always brings something new to every meeting, and all of his models are built in the 1950's mid red and green colour scheme. Two small models this time. First a very nice little 0-4-2 tank locomotive of freelance design. This attractive model was built to run on 1 1/2" gauge track and was powered by a post war clockwork motor.

Secondly, an unusual model of a very early German car based on a 1898 prototype known as an "Orient Express". Of classical appearance for a car of the period, it was an open two seater with tiller steering and measured about 12" overall. It is amusing to reflect on the fact that such a mode of conveyance was regarded as express at the time.

Dave Bradley has also been busy since the last meeting. Once again he brought out one of his Isetta bubble cars, although it had been deprived of its infra-red controller since this has been built into his latest model. This new model was an articulated lorry with a flat trailer built to an approximate scale of 1:15. In Dave's own words, this was a no frills model, built to try out the wheels with tyres from the new "50" set. These wheels have internal 57 tooth gearing and the model utilised this facility to include a 4:1 drive reduction in the hub. Although relatively straightforward, this model was very successful as Dave demonstrated by driving it around by means of the infra- red controller. I cannot understand why this obviously useful controller does not enjoy a greater popularity among Meccano enthusiasts.

I never cease to amaze at enthusiasm and perseverance demonstrated by **Terry Bullingham**. He certainly does not let his disability get on top of him and has achieved a quite incredible level of ability in his Meccano modelling. He has chosen to build a large scale model of the Fowler Super Lion traction engine and, so far, has constructed the cylinders and motion work which were on show at the meeting. Complex mechanics here, a twin cylinder compound arrangement and Terry has made excellent progress so far. A

first class example to us all!

Next door were some models built by **John Palmer**, who usually specialises in road vehicles based around the multi-kit construction sets. Over the years John must have extended the original scope of these sets considerably. Continuing with his tradition, he brought a small red furniture van and an army wrecker built in the appropriate colour scheme parts. He has also moved on from road vehicles and has started to build a replica of the gantry crane shown on the cover of Bert Love's book. So far only a few parts of the model have been constructed, but they have been faithfully and carefully reproduced in the correct yellow and zinc colour scheme. Something to look out for next time.

Bob Ford needs no introduction as a builder of very fine models. His latest model was of a Mexican wood burning locomotive, superbly constructed in yellow, blue and zinc colour scheme, but about which he claimed to know very little technical detail. Built to an approximate scale of 1:12, the model was about 3 feet overall, and the layout was that of a Fairlie locomotive. Despite the lack of information, Bob had obviously fallen back on his extensive locomotive knowledge to produce a good level of detail which looked absolutely right. A very nice model indeed.

Whilst on the subject of steam locomotives, **Ken Wright** had also been busy over the winter building yet another model for his Festiniog stable. As always it was immaculately turned out in red and green livery, and in Ken's usual style it included one or two deviant parts to improve the scale fidelity. Another double Fairlie locomotive, also built to a scale of approximately 1:12. However, it was smaller than Bob's model since it represented a narrow gauge variant. In common with Ken's other Festiniog models, the locomotive ran on G gauge track, and this one was powered by an ER style electric motor from the late Norm LaCroix.

It was very good to see **Mike Edkins** again, after his move to Devon. Unfortunately Pat was not with him on this occasion. Mike brought a couple of models to the meeting. The first, a very business-like small lathe for turning old wheel bosses in to collars. A very solid machine built to work, not just for show. According to Mike, the only non-Meccano items in the model were the motor and the cutting tools. A typical, compact and built to last piece of Edkins machinery this!

The second model was a tiny 0-6-0 tank locomotive and rolling stock, built in red and green parts to run on track of about 1" gauge. Very nicely made, as might be expected from this experienced modeller.

I might be biased, but I like **Geoff Devlin's** choice of subject for his red and green models. Always original, usually different, of a sensible size, not too complex and very evocative of the 1950's No. 10 set models. The prototype for his latest model was a Bradford Corporation Experimental Car No. 1, or a tram to us philistines. The original design dated from 1927, and was unusual as it was the only tram to use coupled wheels on each of its four wheel bogies. Each bogie was electrically powered and the motor shaft was geared to one of the two axles. Power was transmitted to the second axle by means of the locomotive style coupling. Unlike many trams of the period, it was totally enclosed with one deck and was fitted with folding access doors. The model was built to a scale of 1:15 to measure 9" high, 5 $\frac{1}{2}$ " wide and 33" overall, and as usual, Geoff's model reproduced all of the essential detail of the prototype to result in a model of very pleasing appearance.

It would seem that **Tony Parmee** has now turned his attention to improving Meccano models from the smaller 1950's sets. He brought two such models along to this meeting. The first was the eight wheeled lorry from the 1954 No. 8 set manual. Strictly within the parts count of the set, he has managed a re-build to near 1:16 scale to include a working differential on the forward rear axle and four wheel steering as well! Quite an achievement! For amusement, he also incorporated the infra-red control module and was able to demonstrate his manoeuvring skills for us all.

His second model was a re-build of the heavy duty tipper truck, also from the 1954 No. 8 set manual. Tony's main change to the model concerned the use of a powerful cord operated "hydraulic" tipping mechanism, which he also demonstrated. He has not yet finished with this model and intends to refine his re-build in the future.

His most unmissable model at the meeting dominated the scene, it was a rather large lighthouse complete with helipad and helicopter on top. Having "acquired" a pair of amber lenses from a roadwork's lamp, Tony was inspired to fit a lighthouse around them, and this model was the result. This attractive model would undoubtedly make an excellent centrepiece for an exhibition, with its rotating lamp it was certainly very eye catching.

Richard Gilbert brought a few models to the meeting of the nostalgia invoking variety. If my memory serves me correctly, his Meccano display model of a windmill dated from about 1926 and was used to promote the change to the red and green colour scheme of the late 1920's. This model has featured in many publications of the time and would be an image familiar to most. Richard found the model somewhere » in the USA and managed to get it back home without too much difficulty. Model number two was the combine harvester described in leaflet 10:13, immaculate in correct period red and green parts and also mounted on a base board for display purposes.

Model number three was the double swing boat ride built from the 1950's No. 7 set manual instructions, also in the correct period red and green colour scheme. And lastly, the model robot very carefully constructed from the 1960's No. 9 set leaflet instructions in a yellow, blue and zinc colour scheme. Altogether a very nice display covering a considerable period of Meccano development.

The adjacent rival display of models was the latest output of **John and Joyce Sleaford**. As always, they had been busy during the winter putting together a large collection of new models. John's contribution was a collection of steam models of various sizes, assembled to convey the impression of a contractors yard. Centre piece was the horizontal saw built from SML 10 instructions and driven by a traction engine based on SML 20, with refinements derived from Bert Love's book, plus a few of John's own devising. Also included in this group was a very small portable engine, based on Keith Cameron's tiny traction engine, and which was driving a circular saw bench.

Joyce's contribution to the show was a collection of attractive models built from the newish Motion System outfits. » These comprised a helicopter, garden rotovator, rotary mower and a road rolling machine. A very colourful display in view of the colour schemes adopted by Meccano in recent years. John, pointed out to me a design fault in the helicopter model from the 1999 95550 set, in which the gears driving the rotor do not mesh properly as the shaft hole spacing of the supporting framework is wrong. This is simply due to the way two parts (160g's) are assembled and, of course, John had found a neat way of correcting this problem. Altogether, another attractive exhibition.

Clocks, or more correctly, French clocks seem to be **Jack Partridge's** modelling forté. The first clock was very nicely built in red and green parts, suitably ornamented, and included some mechanical design features attributed to a Mr Bonneau and dating from 1946. The clock was driven by a single built up synchronous motor which, unusually, drove both the clock mechanism and the striking mechanism. Clock number two looked similar, although it differed in detail. It was built in a red and zinc colour scheme to a design by Claude Gobez. Two very interesting and attractive models. Jack has obviously got the business of clock building down to a fine art, since both examples were working throughout the meeting and, better still, were seen to be keeping good time.

Alongside, **Roger Marriott** also had a clock on display - I think. However, he was obliged to leave at lunch time, so I did not get the chance to inspect and make a note of his model.

Albert Rowe had brought along an interesting assortment of small items and a large box containing all sorts of small electric motors which he was offering for sale. At Christmas last, Albert was lucky enough to 'acquire' an Erector/Meccano set incorporating two M0 motors and a remote control unit- and all for £23! I cannot remember what the model was, and Albert doesn't say in his note, but it was variant on one built from the instructions in the set. (I guess there must a message here somewhere!)

Albert's second model was more of a mechanical gadget derived from an article he found in an old Model Engineer magazine. I can't possibly describe the device with any degree of accuracy, but its function was to measure the rpm of electric motors and it involved all sorts of electronic wizardry. However, it involved wiring a micro-switch into an old calculator, which is far too complicated for most of us. When in use, the motor runs for one minute and the calculator indicates a measure of the rpm of the motor. If this is the sort of gizmo that excites you, then I suggest you talk to Albert for a proper explanation.

Ernie Chandler had built a very large model of a Wilescro twin cylinder horizontal steam engine to a Brian Rowe design. When I arrived I found Ernie trying to coax it into life, but it seemed very reluctant to run properly. A little later Ernie had it in bits and had his head in the works. Later still, he must have solved the problem because I saw it running very nicely. Apparently, all it needed was little care and attention in the shape of the oil can!

This was a very attractive model, most suitable for display purposes as it will run for ever with little attention - or, at least, that is the theory. The model was built on a 24½" square base and the twin flywheels were built around hub discs. The boiler was 12½" long and sits on the firebox which was somewhat longer to accommodate the chimney. A typical Brian Rowe design which lends itself to the addition of detail and which Ernie had recreated very nicely.

Last on my list of exhibitors at this meeting was **Roger Salter**. He had built a very nice small model of a flat back tipping truck. It was built mainly in a yellow and black colour scheme, and Roger makes no bones about his willingness to use alien parts when they can help improve his models. Like many of us, Roger has accumulated quite a number of the wide plastic 'Calais' set wheels which are just about useless for anything other than racing car models. Perhaps rising to the challenge, he had attempted to construct a heavy truck chassis to use these wheels. It certainly had lots of wheels, and looked suitably heavy. I think we can conclude that his attempt has been a success and, who knows, with a little imagination what other models could be built to use these 'useless' wheels effectively? And that question completes my own personal model tour.

Well that was it, another most enjoyable meeting with lots of interesting models. Conspicuous by their absence were our regular dealers, **John Linder and Mike Rhoades**. Quite a number of members remarked on their absence, since it left a big hole at one end of the room. I think all were hoping that this was a temporary phenomenon and that we would enjoy their company as usual at the next meeting. I must also thank all those members who have commented very kindly on my model reports, but especially John MacDonald and Colin Reid who were most effusive in their enthusiasm. I make no secret of the fact that writing the report is a bit of chore, mainly because it takes quite a lot of time. However, I am used to writing and I do not find it too onerous a task. The real pleasure for me is knowing that it is appreciated and well received by my readers. Remember, you can make my job very much easier by including a brief description

of your models on the meeting return form. Or, as some members do, give me a brief written description at the meeting - every little helps a lot.

I must say that for once I enjoyed a success in the auction. I have been looking for another light red boiler for my 1960's collection for a very long time without success. Then to my delight, a box of assorted parts of 'dubious parentage' including a good example of the elusive boiler turned up in the auction. Not only that, the boiler was in its original box! A few £'s later and the prize was mine, and I also got a bonus in the form a few additional parts of the same period. The remainder will probably turn up at the next auction. Whilst on the subject of acquisition, does anyone know where I can get a good complete working example of the infra-red controller? Is it still available new? At this point, I must take my leave and hope that you have enjoyed reading this report. I am now looking forward to the next meeting and its crop of new models.

67th Model Report - 7th October 2000

In keeping with the poor summer weather we have had this year, the day of the meeting was pretty awful. I drove to the meeting in heavy rain and this is, I think, probably the first time I have reported a really bad day for our meeting in the last six years, or so. Although it remained dull all day, it did stop raining before it was time to leave for home. All this indoor weather should be good for us Meccano enthusiasts, as it should give us more modelling time. The expectation was, therefore, of a meeting well stocked with new and interesting models. However, on arrival, the hall seemed less busy than usual with fewer models on display. This must have been some kind of illusion as the number of models I have to report on is, I am pleased to say, more or less the same as usual. Well, there were some new and very interesting models for us to see, including one of my own for a rare change. So let's get on with my tour. At the time of writing it is three weeks since the meeting so, be warned, even more so than usual, my apologies to those I have misrepresented, or overlooked completely. My memory is not always as reliable as it used to be!

John MacDonald's very fine models were in his usual pitch by the entrance door and were first to greet the eyes of every new arrival. I was very sorry to see that John is now pretty much full time wheel chair bound, although it was abundantly obvious that his handicap has not affected his superior model building skill. His models on this occasion were a Land Rover 101, a Mk1 towed Rapier missile launcher and an as yet unfinished AEC Matador gun tractor. The Land Rover was superb and, as ever, just about everything worked as per prototype. Working features included a clutch, three speed and reverse main gearbox, two speed auxiliary gear box, four wheel drive, winch and several differentials. Even better, John informs us that the differentials were designed and built by the late Rod Rich - a most fitting home for some of Rod's equally splendid modelling skill. Probably an unbeatable combination! The Rapier missile launcher was also built to the usual very high standard, it looked very convincing and included correct suspension, training turret, elevating missiles and lights. John promises us a full description of the tractor unit for a future edition of this report when the model is completed.

Next door was the first impression of yet another of **John Molden's** very fine, and very large fairground models. The model is of a drop tower ride in the early stage of construction. When completed the tower will be approximately 8ft high with a 6" square cross section. The tower is transported horizontally resting on two articulated trucks which, are joined together to form the base when erected. Sliding frames on each side of the tower each carry approximately three seats for the intrepid passengers. In operation the seat frame is propelled up the tower to free fall down again! So far only the tower has been built, it is mechanically very complex and will eventually become another splendid example of John's modelling skill. Watch this space!

Les Gines is now enthusing about railway locomotives and to make the point he brought along several examples ranging in size from the very large to the absurdly small. I think Les is trying, in his own inimitable way, and with some apparent success, to demonstrate the versatility of the Meccano system. His main exhibit was a large 4-6-0 locomotive with tender constructed from refurbished parts and finished in his favourite colour scheme - uniform Hammerite silver. The model was of a freelance design, but nevertheless very convincing, and to give you some idea of its considerable size the six main wheels were based on 6" pulleys. In general appearance and proportion the model was not unlike the classical super model.

Colin Smith was definitely in nostalgia mode, a common and rather contagious condition amongst Meccanomen. Colin's display comprised several simple classical models built from early (1920's - 1930's) Meccano instruction manuals. The models on display included the high level bridge (No.45), a 0-4-0 shunting locomotive (No.432) and an elevated jib crane (No.202 and No.4.60). All of the models were constructed with late 1920's red and green colour scheme parts, and very nice they looked too. Colin also brought a large crane, or digger, chassis fitted with substantial non-Meccano caterpillar tracks. The model certainly looked very robust and business like, but I guess we will have to wait until the next meeting to find out what kind of super-structure Colin has in mind. .

On the next leg of my tour was the unmissable model of a Boeing 777 airliner built by **Tony Parmee**. This model is now quite famous, a well-deserved reputation in my opinion. The model is impressively large. At a scale of approximately 1:34 it has a wing span of 6ft, it is 6ft long and, remarkably, Tony managed to keep it all within the confines of a No. 10 set - apart from a few extra nuts and bolts. All being well, the model is to be fitted with the infra-red controller in order to permit motorised taxiing. Without a doubt, Tony must be congratulated on his imaginative use of Meccano and his ingenuity for achieving it all as a No. 10 set model.

It was good to see **Mike Edkins** again who confessed to travelling light in the model department. His ingenious novelty model looked lost under the wing of Tony's 777. The model was really a 'toy' gyroscope which rode around a circular track - a large flanged ring. The gyro wheel comprised two 2" pulleys with tyres mounted on a vertical axle in a simple frame. The gyro frame was fitted with a single central wheel which rode on the track. The shaft of the gyro was arranged to rest on the wheel such that in motion it remained upright and travelled around the track until it ran out of energy. A sharp pull on the string and away it went, very neat!

And then I came to a real monster, a 1:30 scale walking dragline which, conveniently, is still under construction by **Ken Senar**. When it is finished Ken will have a real problem moving it around and it might

not fit into our meeting room! Of course he could walk it to Stoneleigh. Its sheer size is impressive and it even made the Boeing 777 look small!

The model is based on drawings of the Ransomes and Rapier W1400 dragline "Sundew" published in the Engineer in November 1951. Some dimensional facts; It is 13ft long, 2½ft wide and 6ft high. The tip of the jib describes a slew circle 21ft in diameter and it weighs a lot! Power for the model is provided by no less than seven electric motors which include one Hectaperm, three Decaperms, one Monoperm and two smaller motors. As might be expected the model is superbly well made, largely in mid 1950's red-green parts, and as ever Ken has been meticulous with respect to the mechanical detail. The model has an electrical controller which will automatically run through two cycles of operation, or when disconnected the functions can be demonstrated manually. Ken gave us a demonstration of what we can expect when the model is finished - impressive is really an understatement in this case! This is a model which is definitely not to be missed by anyone! Congratulations on a splendid achievement Ken.

Did you know that a (very) big wheel fairground ride was installed at Earls Court from 1895 to 1907? Well neither did I. **David Hobson** has put all this right by building a model of the forerunner of the London Eye using the German "Construction" modelling system. The original wheel diameter was 270ft; it carried 40 cars, each having a capacity of 30-40 persons. The 7ft diameter hollow axle was supported on two substantial and ornate towers, and provided a connecting walkway between the observation platforms at the top of each tower. The model wheel diameter is about 3½ft to define an impressive model built in the pristine nickel plated parts. It looked very nice and ran quite smoothly once David had sorted out the drive arrangement. Whilst on the subject of alternative construction systems,

Tony Knowles had assembled three small examples next door to the big wheel. First, a small railway crane built in the Marklin Minex system. It looked a bit like Trix and the parts were about half the size of equivalent Meccano parts. Second, a simple generator model, 12" long, built from the instruction manual with the American Technical Trainer system. The parts are simple, quite large, unlike those found in most construction systems and manufactured in aluminium. The result is an ungainly and rather crude representation of the machine it is supposed to replicate. Third, a tracked - digger manual model built with Erector Constructor parts. This 1960's model was probably the best of the three; it looked the most convincing since the system comprises a mix of metal and plastic parts. An interesting display, but according to Tony, all three systems were relatively unsuccessful, and when compared with Meccano it is not difficult to see why.

As regular readers of my reports will know, **Geoff Devlin** always seems to find subjects for models which appeal to me greatly. Apart from the imaginative subjects, his models are always of a sensible size and always built in the attractive 1950's red and green coloured parts, so they always have a highish nostalgia coefficient for many of us. It is a pity that some of them have not found their way into the excellent series of Model Plans. Geoff's model on this occasion was of a South Staffordshire Tram No. 50 which was in service around 1900. The model was built to a scale of about 1:12; it was 25" long, 5½" wide and 12" high. The prototype was a small double deck type with open upper deck and with typical open spiral staircases at each end. The symmetric, bi-directional body was mounted on a single central four wheeled truck and was regarded as being somewhat under powered - which was just as well really since it looked a little insecure balanced on a single bogie. Geoff had obviously done his homework to produce yet another nicely detailed, but not over complicated model.

Next was a pair of fine models built by **Terry Pettitt**. However, Terry is a man of few words so I am not able to tell you very much about his models. First was his Bristol Loddeka bus, a superbly well modelled open top bus in yellow and green parts. Choice of colour scheme was imaginative and produced a model evocative of the genre. The model was also of a comfortable size being approximately 24" long, 7½" wide and 12" high. Terry's second model was an example of his now world famous Meccanograph together with some samples of the very complex and colourful patterns it is able to draw. His brief note explained that the machine has now been fitted with a differential in the drive to the table. The differential is used to add reciprocating motion from a crank to the table rotation. This results in the rotational speed of the table advancing and retarding in a cyclic manner, which in turn makes for more interesting patterns.

As always, the interests of **Tom and Matthew McCallum** were represented by a pair Meccano advertising models. The first was a display model dating from the 1930's of two boxers having a scrap. Impeccably constructed in modern French yellow and zinc coloured parts, it kept us amused throughout the meeting. The second display model was an original dating from the 1970's of a double arm rotating carriage fairground ride, turned out in yellow-blue-zinc coloured parts. Although this particular model was not so common, it is quite typical of Meccano display models.

These two models were somewhat dwarfed by **Alan Covel's** model, which was parked alongside. Alan is still managing to find new and interesting aeroplane subjects for his models. This time it was the turn of the De Havilland DH88 Comet racer dating from the mid 1930's. The type caught the public imagination when it became famous in 1934 as a result of the England-Australia air race. Alan's model is built to a scale of approximately 1:8 which gives it a wingspan of 63" and an overall length of 42". The model is very nicely constructed in yellow-zinc parts and one or two features work as per prototype. The two propellers can be fired up by means of a power drive motor in each nacelle and the undercarriage can be raised and lowered

by means of an awkward cable drive mechanism - exactly as per prototype. Alan told us that his model is based on "Boomerang", which was lost on a record attempt to South Africa in the 1930's.

Alan also brought a much smaller model of a 1922 Model T Ford snowmobile. This unusual model has a half-track layout. Each rear wheel is replaced by a tracked pair and the front wheels are replaced by a pair of steerable skis. The model is representative in that it was built from a single photograph of the original, it is 24" long and is very nicely finished in yellow- blue-zinc parts.

John Palmer is still working on his model of the late Bert Love's gantry crane which features on the cover of Meccano Constructors Guide. Although incomplete, it now comprises several sub-assemblies all nicely constructed in yellow-blue-zinc parts. The advanced state of construction suggests that it should be complete and ready for inspection in time for the next meeting.

Ted Newell brought an interesting model of a railway breakdown crane with match truck complete set up on about 6ft of track. The model is a hybrid being based securely on both the L set model and the more recent No. 10 set leaflet, but incorporating many modifications. Ted told us that the gearbox is an entirely new design, which is not surprising since the original Meccano gearbox designs often left a lot to be desired. Approximate scale of the model is about 1:16, it is constructed from modern yellow-blue-zinc parts and the four main motions work as per prototype. Altogether this was a very nice example.

The next model on the agenda is that of your reporter, **Mike Cook**. This rare offering has taken some considerable time to build and is a model of a Fowler ploughing engine. The idea for the model was inspired by the small showman's engine which has featured in many of Bert Love's articles (and GMM leaflet No.5). It seemed that the 'technology' could be adapted to produce a ploughing engine of manageable proportions. The model is built in late 1950's red-green parts to an approximate scale of 1:14. The scale is set by the rear wheels, which comprise hub discs, and the proportions of the rest of the model are reasonably accurate to give a pleasing impression of the prototype. A 12v motor is hidden in the tender and drives all of the main functions quite realistically. I am sufficiently pleased with the result that I am planning to build some more kit to go with it. So, watch this space!

Roger Marriott seems to have a preference for display type models which he builds to a very high standard indeed, and often uses historically correct colour schemes in their construction. Having acquired a collection of immaculate blue-gold parts he has used them to construct a fine display model - The Wizard. This very colourful model is not unlike that of Tommy Cooper built by Mike Hooper some years ago. The model hides a mechanism which runs through the wand waving display sequence automatically for the amusement of the gathered crowds. The apparent visual simplicity of the model belies its hidden complexity. Another unusual model from this accomplished builder.

Dave Bradley has announced that his Isetta bubble car model, with which he has amused us on numerous occasions, is now finally finished. The model is built to an approximate scale of 1:5 and features opening door with attached articulated steering column, monocoque body construction and working front suspension. It is controlled by means of the infra-red controller as Dave has demonstrated to us lots of times.

He also got carried away and built himself a pair of silly glasses, which he wore at the meeting. The glasses are fitted with working windscreen wipers; most appropriate in view of the weather, and suggest that humour is certainly not in short supply amongst Meccanomen. Do we actually have a category for unusual or humorous novelty models?

Moving on we then came to a sizeable traction engine rally, all modelled in miniature by **John and Joyce Sleaford**. These two prolific modellers need no introduction to regular readers of these reports as they always seem to produce an entire show of their own. The engines are all loosely based on the small No. 5 set model originally designed by the late Keith Cameron. These have been adapted by John to represent various types of engine and the display included a showman's engine, a general purpose engine, a crane engine, a portable engine, a steam roller and two ploughing engines. In addition, the display included several living vans, a modern tractor towing a water tank, a 13 tine cultivator for the Fowlers and, of course, a beer tent. Not being content to leave it there, the Meccanoman's humour comes through yet again in the form of miniature pints of beer being consumed by rather dirty engine men! As usual, Joyce's contribution comprised several models built from the new Evolution series sets. In particular, two of her attractive models were the quad bike and trailer built from Evolution set No. 4 instructions. I must say that I do like the colour schemes of these new sets and the quality of finish of the parts. Altogether, a commendable show to brighten our meeting.

Now **Paul Hubbard** had obviously been busy for the last few months building the cargo ship described in the No. 10 set leaflet. This model is impressive simply because of its size, it is 7 $\frac{1}{2}$ ft long, 12 $\frac{1}{2}$ " wide and 12" high, and it must be a problem to move around although not quite as big a problem as that faced by Ken Senar! The model has some modifications to improve it in a number of ways. Extra strengthening girders in the frame, and working radar antenna to improve its scale fidelity. This is one of the better Meccano Ltd. model designs, this was the first time I have seen it made up and very nice it looked too!

I am not the only member who has some difficulty finding enough time for model building, **Bob Thompson**, our busy Chairman, also suffers from the same problem. Bob's rare model was his version of Little Joe and Tricky Track, of which he brought some parts as evidence. In fact the complete model

is reputed to have performed almost faultlessly for three days at the Town and Country show. The model was very nicely constructed by Bob with the much appreciated help of Sid Beckett. The fact that the model works really well and is an excellent crowd pleaser encouraged Bob to acknowledge the late Keith Cameron, its designer, Philip Drew, who prepared the model plan, and Charlie Pack, Pauli Dale and Ken Wright variously for their advice on how to build a successful version.

Nearby, the elusive **Michael Bent** had placed his latest model. This time it was a nicely constructed fork lift truck based loosely on the No. 9 set instructions. Michael had used yellow-dark blue parts in its construction and it caught my eye as it is a model I like, and it was obviously a bit different from the published version. The modifications clearly improved its appearance and it looked rather more robust than usual, just like the real thing of course.

And now for something completely different. One **Stephen Wilson** turned up with three large battleship models built from various early outfits, together with a contemporary K outfit in its original wooden box. Unfortunately, all of it was in pretty poor condition, but never-the-less it was interesting to see these unfamiliar models. All models were of a revenge class battleship, the first built from 1931 No. 6 outfit instructions, the second from 1926 No. 6 outfit instructions and the third was built from 1934 K outfit instructions. All were built in correct period, but rather rusty, coloured parts, all were about 5ft long and, together made an impressive show. I understand that some, or all, of this collection was for sale, but I do not know if Stephen received any offers from the membership.

Sid Beckett's short note indicated that he had not been too well and had not built anything new for a while. I hope all is well now Sid. The model he did bring along was his Lion locomotive with tender. This is a nicely made model which utilises red and zinc coloured parts most effectively. The model was first published in MM for February 1969 and its scale is set by the wheels, which comprise the familiar construction of 6" circular plate combined with hub disc for the flange. Overall, the model is about 3 ft long and Sid's version is fitted with a push switch for the admirer to set the wheels in motion. This is a very attractive model and, what's more, Sid included a photograph to prove it- many thanks.

The three locomotives models alongside were from **Ken Wright's** extensive collection of Welsh narrow gauge engines. First, a double Fairlie, "The Earl of Merioneth", from the Festiniog railway together with the 0-4-2 saddle tank locomotive "Talyllyn" and the 0-4-0 "Dolgoch", both from the Talyllyn railway of course. These familiar models are superbly well made in 1950's red-green colours and are scaled to run on standard 'G' gauge track. So, nothing new here.

Albert Rowe likes to dabble in things electrical, so he usually manages to bring an interesting item or two to our meetings. His main exhibit was a substantial bubble blowing machine whose primary role is to entertain the crowds (continuously). Albert reports that his Mk3 machine consumed $\frac{3}{4}$ of a litre of soap solution during the three days of the Town and Country Festival!

Spurred on by success he has since built the Mk4 machine and it was this machine he brought to the meeting. Quite a substantial model it measures 22" high, $9\frac{1}{2}$ " wide and $7\frac{1}{2}$ " deep. It is powered by a pair of ex-video machine motors and is activated on demand by a push switch. The various motions make this an attractive model to watch in operation, but on this occasion it was not actually blowing bubbles.

Another item brought by Albert was his version of a 'poor man's' E15R electric motor basically a small motor driving a 57:1 reduction gear all packaged in approximately the same volume as the genuine article.

And finally, Albert has discovered that computers contain very 'beefy' power supply units which are ideal for driving the largest of electric motors used in Meccano models. The item that Albert took out of an old computer provided four separate supplies- 12v 4.5A, 12v 3A, 5v 18A and 5v 3A. This is obviously worth knowing if you need lots of power for your large models.

Next, my good friend **Colin Reid** had obviously decided to travel light to this meeting. His only offering was his familiar Congreve clock which, despite his best efforts, refused to run at this meeting. It is probably fed up with all the travelling to exhibitions and meetings, which can play havoc with the best regulated mechanisms! Colin also brought an assortment of odd items of interest, including a small photocopier which he used to copy all sorts of bits and pieces for grateful members. He also had a couple of 'cricket ball' motors for sale, both of which were in pretty good condition. As far as I know he did not find a buyer for either motor.

Loom builders should now turn the volume up! Colin has found a small manufacturer to produce replica reed hooks, an item which is absolutely vital if you wish to thread a loom. up in this lifetime! Colin thinks that the Company may have manufactured the originals for Meccano Ltd.; the replicas are certainly an excellent reproduction. In fact, they are better finished than the originals. Colin has a small number of these for sale, for a few pounds each, if anyone is interested. I suggest you get one while you can, they are very nicely made. I must also report that Colin responded to my plea last time around for information concerning the availability of the infra-red controller. I am very grateful to him for getting me a new Erector set containing said item for less than £20. In case you are beginning to wonder, Colin is not paying me a retainer?

Last, and certainly not least, on my tour was a very nice model of a fork lift truck built by our Hon. Sec. **Ernie Chandler**. Ernie set himself the task of building a model strictly to the instructions in the manual, a No. 9 set manual in this case. It was not as easy as he thought it was going to be and the model is not yet working. He has a number of excuses of course! He says he had trouble with an E20R motor and controller

- don't we all! But, much more plausible, he was side-tracked by the Olympics on the TV. Now that really is no excuse as any self respecting Meccano enthusiast can build models whilst watching the TV!

So that was it, an enjoyable meeting with lots to see and talk about. It was good to see Mike Rhoades back again. Whatever would we do for red-green parts without him? Tom McCallum also stepped up his trading activity at this meeting. He had the usual assortment of highly desirable collectables together with a good range of everyday parts. As always we were well catered for in this department and for that I think we should all be grateful to our two `traders'. Mike Cook's final paragraph appears on the back page, I just ran out of space (thanks Mike for another excellent report)

The last word is one of apology for the time taken to produce this report. Don't blame Bob, the fault is mine. It takes a long time to prepare the report and this year it has coincided with an extraordinarily busy period for me. I can't do much about that I am afraid - better late than never! Now that the winter is well and truly upon us, it is time to get building. I look forward to reporting on the results of your endeavours after the next meeting. Mike Cook

68th Model Report - 31st March 2001

A well-turned out meeting with plenty of excellent models. Mike Cook wasn't at the meeting so I'm doing this edition. As I live to the west of the M5 I chose not to write in my native Black Country as most of you would never understand it. "This is the fast time I've done it for yet; so I'll 'ave a good go at it". I'm open to suggestions and criticism. This will help me to improve. I hope I've included everyone and I apologise to anyone I've overlooked. So, here we go:-

David Hobson brought an Excavator, which was powered by an "Orsta" pneumatic system. He also came along with a few models built by Meccano imitators. One being an Austrian copy of Marklin, Meteor. There is one difference. Meteor has a hole spacing of 8mm instead of the 1/2". You get a model two thirds of the size but you get more complexity in a smaller space.

Colin Smith brought a Tower Crane to play with which was a metre square and some real and model hydraulics. Colin also brought copies of his interesting Engineering Drawing Manual.

Bob Ford brought an American Big Boy Locomotive which was constructed to a scale of 1:20, which was an estimated seven feet long. When the real thing was built in 1941 it was the most powerful locomotive in the world. On a test run it hauled a load of 4,500 tons. When it was retired in 1961 it had travelled a total of 1,052,005 miles (equivalent to going to the Moon and back twice).

Peter Goddard brought a 1:24 scale Hercules Table Bay Block Setting Crane originally from South Africa, the model measuring about 6 feet long. This particular crane was built in 1930 by Stothert & Pitt in Bath for the South African Railways and Harbours Department.

The crane consisted of: -

A revolving superstructure carrying a single boom.

A central pivot around which the revolving portion of the crane rotated.

An undercarriage supporting the superstructure.

A grab, running on the outside of the boom having pulleys on either side for supporting the load.

Four electric motors to drive the four motions of the crane. Travel, hoist, traverse and grab.

Hydraulic Matthews Patent brakes, for lowering the load.

A ballast box at the rear, containing up to 62½ tons of pig iron ballast.

Travelling gear able to traverse a 300 degree radius, and uneven track.

All eight wheels are driven. It was built with a combination of 6 and 12 volt motors.

The details of the prototype came from the archives of Philip Bradley (no relation to me).

Tony Parmee brought a 1901 House. Built to a scale of 1:16 in medium red (Liverpool brick, apparently) with green window and door- frames. Being of Victorian! Edwardian style it featured bay windows, a tower surmounted by a cupola roof surmounted by a weather vane, fancy gable ends & ridges, a conservatory, porch and veranda. There was lighting operated sequentially. I've always believed that Victorian architecture was more down to their confidence than their taste. They didn't have the facilities like we do today.

Tony also brought along a Modern House from a 1937 No. 10.7 instruction manual. This was built in blue/gold from the relevant period. An interesting feature Tony pointed out was the design of the windows. Have you ever seen anyone cut a piece of glass in an 'L' shape? It is very difficult to do and it would be very expensive to mould it in that shape, too.

Alan Covel brought his "London High". A 61⅞" diameter wheel giving a scale of approximately 1:76. An M5 motor using rubber tyres mounted on 8 springs powered it. I suggested to Alan that he removed the capsules and fitted paintbrushes and he would have a machine that could paint the ceiling.

Also a model of the Clegg - Samuda Atmospheric Railway which was patented in 1839 and first ran in Dublin in 1844, and on the London to Croydon Railway in 1845. In 1847 Brunel adopted it for his South Devon Railway between Teignmouth and Exeter which in a trial run sucked six coaches along at 68 mph. This worked by steam engines driving vacuum pumps at three mile intervals but problems mainly with the longitudinal valve it was forced to close the following year, £375,000 down the chute. The model was built with 8 feet of atmospheric tube screwed to a baseboard. 8 feet of wooden rail protected the artillery wheels. The train was drawn by an endless cord, which is powered by a Powerdrive motor in the engine house. Narrow strips with sellotape hinges represented the longitudinal valve. Alan commented that there were too many holes in the atmospheric pipe for it to work as the original.

Alan Partridge brought a selection of mechanisms showing an example of Tony Rednall's Oldham Couplings and also some Universal Joints.

Geoff Devlin brought a French Somua Heavy Artillery Tractor half-track vehicle built to a scale of 1:7. This was based on a vehicle built in the 1930's. This particular half-track was designed by Adolphe Kegresse in 1910/11 when he was technical manager for the Imperial garages in Russia. He converted the cars of Tsar Nicholas II for improved performance on snow. After the Revolution he returned to his native France.

Dave Bradley brought an Australian Road Train built to a scale of 1:15. It featured a 6 X 4 Tractor Unit with opening doors which ran on the French Action Control system. This in turn pulled 3 trailers giving a total model length of about 10 feet. It was built from a few pictures and a feature on the BBC's "Top Gear" programme. The secret of building an Action Control model of this size and getting it to move is mainly

down to three things. Use 'D' size batteries. Cut the 'AA' battery box off and sling it because the current that little black motor draws far exceeds what four 'AA' batteries will ever give out. Use something bigger and Duracell are what I would recommend. Keep the weight down as low as possible. That motor has to pull every little nut and bolt fitted. For smooth running discard any bent axle rods and gear spacing is vital. You need a very tiny back-lash (but not too much) and plenty of lubrication (I use 3 in 1 oil). I find the use of plastic gears useful, as they are light and quiet running. Also use a suitable drive ratio so that it doesn't overload the motor. The bigger the model the slower is the speed.

George Illingworth brought 2 examples of the Sopwith Camel. A fighter aircraft used during World War 1. The first being at a scale of 1:12 in Army Green and French Yellow, the second at a scale of 1:24 in Nickel. Also a nice display of 100 wheels to celebrate 100 years of Meccano.

Trevor Frankling brought 4 models. A 1:680 scale model of a small Battle Cruiser similar to HMS Hood from 1916, a smaller Cruiser similar to HMS Southampton from 1916 built to a scale of 1:630, and 2 small Steam Traction Engines from the 1930's Meccano Magazines.

John Palmer brought 3 Army Lorries, a Scammell Lorry with Trailer, a Foden 6 x 6 Mobility Range Lorry, an Oshkosh Palletised Truck (all in Army Green) and also a Small Block Setting Crane finished in yellow and zinc.

Mike Edkins brought a Narrow Gauge O-6-O Locomotive with a Side Tipping wagon and also an incomplete model of a class 587-636 Birmingham Coronation Tram. Built to a scale of 1:24 it showed a realistic representation of a Burnley Maximum Traction Bogie. Power to one bogie came from a transverse motor between the two bogies.

Mike, when is Pat coming again?

Albert Rowe brought a Push Button/Switch Designing Machine that was designed by Dr. Keith Cameron. All functions were electrically controlled.

Terry Pettitt brought his models of an AEC Mammoth Major 8 wheel Lorry in red / green and of the Bristol Loddeka Open Top Double- Decker Bus in yellow / green.

Tony Knowles brought 3 models made from Meccano imitators. A dredger from a Vogue set, a Fork Lift from a Yugoslavian Mehanotehnika set and a Racing Car from an Australian Ezy-Bilt set.

John Bridger brought a Showman's Traction Engine, which was built from photographs in Bert Love's books, similar to a model built by Dennis Perkins. A French electric motor and power unit powered it.

Paul Hubbard brought a Bulldozer which was under construction. This is a slightly larger model than the one featured in the 1970's No 9 set and Paul's model showed a gearbox, clutch and engine.

Tom & Matthew McCallum brought a Pontoon Crane from the Super Model Leaflet no. 28 which was built in the period colours from 1927 in nickel, red and green. Also some small anchors made from pawls and a rod and strip connector.

Ken Wright brought the Ffestiniog Railway Locomotive "Blanche". This was built to a scale of 1:12 from red and green parts and black parts from the Space Explorer sets. Running on a G gauge track and on 12 volts and using a few Marklin bits on the wheels and couplings. The Ffestiniog obtained the locomotive Blanche and it's twin sister Linda from the Penrhyn Quarry in 1962. They are 0-4-0 Hunslet engines built in 1893. The railway added the tender.

Brian Edwards brought a model of a Wartime Southern Railway Utility Locomotive, Class Q1 built to a scale of 1:15, and a 1935 Austin London Taxi which drove through a 4 speed gearbox.

Les Gines brought a selection of Locomotives. One with 6" wheels, another with 3" wheels and several small ones. All of these were made from refurbished parts. It showed a gradual step in size ranging from very small to very large.

John Sleaford brought 3 models that were designed by the Frenchman, Bernard Perrier. A Ready Mixed Concrete Lorry from the CQ 34, a Railway Steam Crane from the CQ 45 and a Refuse Skip Lorry from the CQ 49.

Joyce Sleaford brought a Hovercraft and a Snowmobile as featured in the instruction manual for the Evolution No 5.

John McDonald brought a Coles Crane mounted on a Thomeycroft 6 x 4 Chassis at a scale of 1:11. The chassis featured 6 forward and 2 reverse transmission, double drive bogies with differentials, twin inverted semi elliptic springs on each side and lights. The crane had hoists, lifts and a heavy duty ball race turntable, all movements operated by remote control.

Also a German towed Search-light which trained and elevated at a scale of 1:16, which had working lights, auxiliary steering and 2 jacks. Both these models were in Army Green.

Ernie Chandler brought a Showman's Locomotive in red, green and silver with 5½" rear road wheels. This model was shown in December 1986 edition of the Sheffield Meccano Guild magazine by Brian Rowe. Stephen Wilson brought Vic Saverley's Transporter Bridge as seen on the cover of the April 1979 Meccano Magazine. This was accompanied by a 1949 No. 8 Heavy Duty Motor Dumper and a 1952 No. 8 Marine Steam Engine.

Tony Jennow brought 2 completed models from the Aero Constructor Sets with a box that was intended for the Danish market. Also a Fairground model, a 1930's Breakdown Truck and a fully functional Traction Engine.

Terry Bullingham arrived with his Traction Engine and a Fowler Fly- wheel, which was described as a conversation piece. It took some building looking at the complexity of it.

Tony Homden brought a model of a Mark 3 British Army 3.7" Anti-Aircraft Gun from 1943. Built to a scale of 1:6 to compliment the Action Man figures, which represented the crew. The main features of the model of the model are as follows:-

It can be set up for road movement or firing exactly as the prototype. The front steering wheels fit onto a pintle made from two armatures from the Elekkit, which fit into a round electro-magnetic coil within the front cross beam which forms a reasonably scale size bearing. The rear wheels are on a rigid axle and can be detached and lifted onto spring cases to act as counterweight when firing.

The legs raise, lower and lock into position as the prototype. The screw jacks at the outboard ends operate and are capable of raising the model clear of the ground.

The turntable contains a commutator and wiper to transfer power to the elevating motor situated in the cradle. The centre rod of the bearing is a rod with keyway. A second electrical feed passes up the keyway to the motor powering the simulated bearing drive. A common rail earth system is used so that only a single current reversible wire is needed to feed each motor. The other side of the motors being earthed to the frame, which is connected to both the positive and negative of a pair of transformer rectifiers.

The loading mechanism is duplicated with a fuse setter, loading tray and loading cord.

The breech mechanism opens and closes and shells can be loaded into the barrel. On "firing" the barrel reciprocates. This is done with a concealed spring mechanism within the dummy recuperator. After "firing" the breech is opened and the spent shell falls out, the shell which in real life would have been left in the barrel is retained, giving the appearance that it has been fired. Four "shots" can be "fired" before removing the shells for re-use. The barrel is elevated by a Powerdrive motor which also drives the handles of the elevating gear situated at the side of the cradle. The 'Action Man' figure has had its arms removed and substituted by rods and couplings to allow the handles to back drive them. This gives the appearance that the figure is actually doing the turning. Traversing is achieved by a concealed Powerdrive in the platform driving a cord wrapped around a 6" pulley that forms the top of the main bearing.

A second Powerdrive, slaved to the above drives the dummy gearing and back drives the second "Action Man" figure as with the elevating number.

The great weight of the barrel is compensated by two powerful spring systems, which take most of the load off the elevating gearing. Without this the model would not work. This is exactly as the prototype. Future plans include a searchlight and a sound detection system.

(Editor's Note: Many thanks to Dave Bradley for doing this model report in Mike Cook's absence, and what a good job you have done Dave, and I may add returned very quickly. Well done Dave. Bob T)

69th Guild Meeting – 6th October 2001

As I was unable to attend the March meeting, I felt that I had become a little out of touch and speculated on the modelling delights to come as I drove to Stoneleigh. As ever, it was a lovely late summer day, a fitting day to be indulging in a favourite pastime. My anticipation was well rewarded, the room seemed more crowded than usual with a wide variety of examples of the Meccanoman's art. Having missed the last meeting, most of the assembled models were new to me. Once again I managed to bring another new model myself – there is a danger that this could become habit forming! My personal tour of the models was interrupted many times by eager friends wishing to tell me something about their model, so the models are described briefly in no particular order. As ever, my apologies to those I have misrepresented, or overlooked completely.

The first model to catch my eye was the impressive room dominating grandfather clock by **George Illingworth**. George built the model to a Bert Love design which is within the constraints of a number 10 outfit. Resplendent in immaculate yellow-blue-zinc colours, the model makes imaginative use of virtually all the parts in the set and is a most impressive example of what can be achieved in Meccano. By the way, it keeps excellent time too! George also brought a pair of cranes built from the number 5 outfit. The first was in early 1950's red and green colours and was a formative milestone in George's Meccano model building career. The second was built from a 1980's outfit in yellow-blue-zinc colours and was intended to show the evolution of the type. Basically nothing much has changed.

Ernie Chandler's offering this time was the small Meccanograph to the Konkoly design as modified by the late Keith Cameron. Keith had sent Ernie some photographic negatives which were duly printed and which provided enough information for Ernie to build the model. I must say that the designs this simple Meccanograph produces are superb.

Albert Rowe being a thoughtful kind of chap, produced a little write-up of his model for me. For this I am extremely grateful as it makes my task so much easier and, hopefully, the result is all the more interesting for my readers. (If you haven't spotted it yet, there is a hint here!) I must add that Albert was not alone here, as a few members gave me a write up of their models and I am equally grateful to them all. Albert had built a slightly modified version of Alan Partridge's Ping Pong Ball Roller machine. Ever resourceful, Albert had incorporated transparent panels made from tonic water bottles into the "stairway", this modification also involved the demolition of lots of Vodka as well! Power was provided from what sounds like a very handy 20v motor salvaged from a laser printer. To add colour, Albert's grandchildren were enlisted to decorate the ping pong balls. This sounds like a champion display model, since it has run for hour without problems.

Ken Wright's model on this occasion was his one armed bandit built to a design by Phil Ashworth. I have described this model before, so I will not repeat myself here except to say that the model is a superb example of Ken's very refined model building skills. If you have not seen this model, look out for it in the future.

Alongside was a new model by **Ken Senar**, which on his scale of Meccano model building must rank as a sub-miniature. The model was, in fact, the travelling gantry crane built exactly as per the instructions in SML24. Although the model does not look so inspiring on the page, in real life, in immaculate modern red-zinc colours, it looks very attractive indeed. For a change, it also works very nicely as Ken demonstrated for me.

Dave Bradley brought along a couple of smaller models than usual. The first was a 1:8 scale UNIMOG, a very substantial 4wd flat back truck, very nicely made in yellow-blue-zinc colour parts. The very 'fat' wheels were of Nikko manufacture and certainly gave the truck the right kind of appearance. As ever, Dave had incorporated the infra-red control system into this model, but unfortunately we were not given the chance to see it working. Dave's second model was a digger built from the new Future Master outfit 8600. This is an attractive and colourful model, although it does incorporate rather too many plastic parts for my liking. Next were a pair of freelance army models by John Palmer and based on the Army Multi-kit vehicle format. Both were built using the appropriate coloured parts, and the first was an Oshkosh 10'10 palletised loading truck. The second of John's models was a Scammell tractor and trailer of 6'4 wheel layout, complete with motor driving the rear wheels. Both models were of typical Multi-kit size and typical of the small nicely built models produced by John over the last few years.

John and Joyce Sleaford produced the familiar attractive display of models, although on a smaller scale than usual. Star exhibit at this meeting was a classical fairground living caravan built in yellow-blue-zinc colours to an approximate scale of 1:12. The scale was important as it corresponds with standard 1:12 scale doll's house equipment and, needless to say, Joyce had been busy fitting the caravan out with furniture, lights and other essentials. In all a very attractive model, measuring about 28" overall. John had also built a model of a Scammell showman's tractor/generator unit, which incorporated the correct twin chain drive arrangement to the rear wheels, a hang over from the days of steam lorries no doubt. The remaining three models of assorted sporty looking boats were built by Joyce from the Evolution No. 5 outfit. These models were also visually very attractive, since modern Meccano is finished in some rather imaginative colour schemes – perhaps too garish for some, but I think they look good.

Moving on to an interesting model built by **Tony Knowles**, His automated crane model was basically of the dockside variety and was built entirely from what looked like early nickel parts. Tony informs us

that the model based on a design by Tom Marlow which was published in the North Midlands Newsmag, August 1980. The model includes a geared sequencing arrangement to carry out a cycle of motions which comprise picking up a heavy load by means of an electromagnet, raising the load, slewing through 180°, dropping the load at the top of the ramp, the load rolls down the ramp and the crane slews back to repeat the cycle. The model was about 2ft high and was obviously built for continuous display. As far as I was aware, the crane operated faultlessly throughout the meeting, it was fascinating to watch and, I am sure it would be popular in a public display situation.

It was good to see that **David Goodman** had brought a model to the meeting, which on this occasion, was an electric mantle clock with hour strike. Clocks seem to be rather popular at the moment. The clock was built in early 1950's red and green parts and incorporated a built up 16 volt synchronous motor mechanism – and very complicated it looked too! When I saw the model it was not running, but there was ample evidence to suggest that it has provided long service in the past.

The next model I came to was a splendid Edwardian omnibus built from the Primus system by **David Hobson**. This splendid model was about 2ft long by 18" high, beautifully finished in wood-zinc-brass parts, and it looked absolutely right for the period. The model was mounted on a stand for display with a mirror to enable the viewer to see the under workings, which were driven by a clockwork motor. Of particular note were the wheels, which were built up spoked wheels complete with solid flat rubber tyres – very authentic indeed. David also brought along a couple of navy ship models built from early Meccano and from the American Model Builder system, also of some age. Both looked very similar in construction and, unlike the omnibus, the parts had seen better days.

From time to time **Tony Homden** can be relied upon to bring along an interesting Meccano model and his subjects are often imaginatively unusual. At the last meeting he brought a substantial model of a WW11 3.7" Anti-Aircraft gun. This model was brought along again together with a complimentary new model of a direction finding sound location unit. All were very nicely made in yellow-zinc-blue parts and were set up for display with their action men crews. Since the gun was described in the last report I will not attempt a repeat. The sound locator comprised a sturdy trailer chassis with retractable jacks to steady it when working. The superstructure comprised a large U shape frame, mounted vertically, and centrally, on a turntable secured to the chassis. Each arm of the U carried trumpet shaped sound receivers which could be elevated by the operators. By means of headphones, the main operator could locate, by sound balancing, the direction and elevation of incoming enemy aircraft, his crew driving the directional controls of the superstructure on his command. This crude system was used for a while until it was eventually replaced by radar. Tony explained that the model is not quite finished and by next meeting it should be powered and fitted with a full complement of listening trumpets.

Our Secretary **Colin Smith** brought along a couple of small items. The first was a Meccano rendition of a new design for a triangular lapel badge, at a substantially enlarged scale of course. His second offering was some sample pages illustrating how photographs and a few brief comments should be used to keep a record of model building projects. The nature of this hobby, and the kind of people who indulge, suggests to me that few need instructions on how to record their model projects. After all, writing up illustrated model building instructions for publication is a thriving aspect of the hobby.

My good friend **Colin Reid** is what might be called, "a bit of a Meccano magpie" on the grounds that he seems to unearth all sorts of interesting acquisitions. Having recently had a particularly rewarding time (at enviously low cost) in this respect, he brought some of his new acquisitions for us all to admire. His "duplex" display case had been fitted out with an interesting assortment of parts old, new and obscure to make an attractive portable exhibition item. Various early electric motors and an even earlier, almost complete, Meccano vertical boiler steam engine rounded off his collection of new artefacts. The steam engine was obviously rare, since it predated the model manufactured by Meccano Ltd. at Binns Road. Also on display was Colin's familiar rolling ball clock which has been modified to include weight drive in place of the original clockwork motors.

Always to be relied upon to bring an interesting new model, **Geoff Devlin's** Wolverhampton Corporation Tram lived up to expectations. Built in mid red and green parts to an approximate scale of 1:12, the model looked very nice and was of a practical overall size. Geoff's notes describe the model as a Milnes' single deck closed combination tram body riding on an American Dupont truck, and measuring 27" long, 10 ½" high and 6½" wide.

Nearby, **Paul Hubbard** spent most of the meeting with his head in the works of a large horizontal twin cylinder steam engine with boiler. The model looked very similar to SML 32 although Paul had used flexible plates to replace the open framework structure. There was obviously a fairly serious mechanical problem in the works which gave Paul a difficult time. His second model was an incomplete ships coaler, built to the familiar Meccano pattern which I sincerely hope gave Paul fewer problems when he gets to set up the machinery.

Next, I had a look at a model built by **Roy Whitehouse**, a name unfamiliar to me, so I assume he must be a new member. Roy's model was the railway breakdown crane, SML 30, and carefully built in yellow-blue-zinc colours. It looked very nice indeed, a credit to its builder. Perhaps of greater interest was Roy's second item brought to the meeting – a Meccano/Dinky toy/Mobilier dolls house with furniture. The house

and garden was entirely assembled from printed card components, and the furniture was still packed in small sets in the original boxes. Considering the age, probably 1930's these items were in extremely good condition. Since I have never seen these items before I can only assume that they are rather rare.

For the first time in a long while **Tony Parmee** failed to bring a new model built to the constraints of the number 10 outfit. Instead he had been building someone else's design for a number 10 outfit model. Yet to be completed, Tony's model was the Jodrell Bank telescope, MP64 designed by Alan Partridge, and which he has assembled in yellow-blue-zinc parts. I must say that the dish looks especially splendid when built with care and accuracy. Tony demonstrated the operation for me, but explained that he has had some difficulty getting a particular switch mechanism to work correctly. This is a model worthy of close inspection, so look out for it at the next meeting when I hope it will be completely finished and working correctly.

Tom and Matthew McCallum were in attendance with the usual selection of very tempting items for sale and, as ever, a pristine model illustrating some part of the development of Meccano. The model was the signal gantry from an early manual, built in blue and gold parts with a handy selection of signal arms. It was obviously designed to complement the Hornby O gauge railway system, so Tom & Matthew added a few locomotives to create a pleasing display.

The next collection of models dwarfed just about everything else in the room. Once again **Alan Covel** had been very busy creating something a little different and three of his new models were brought to this meeting. First, a little 1:35 scale goods train with rolling stock running on a 20ft oval of track, all made in Meccano. The locomotive named "Puffin", was loosely based on a GWR 4-4-0 Bulldog class. It was powered by an internal 7.2 volt battery driving a crane motor and it certainly put up a lively performance hauling four assorted trucks and a guards van. Model number two by Alan was another, but somewhat larger locomotive. Based on a 0-4-4 single Fairlie locomotive of the Festiniog railway, it was built to an approximate scale of 1:14 which gave it an overall length of 18" and it ran on a short length of track. Alan's third and most impressive model was of a man powered Gossamer Albatross aircraft which was suspended from the ceiling. With a wing span of 9ft 4" this was a big model. The model represented a substantial investment in narrow strips, string and nothing else very much! Very appropriate, since the flying weight of the original was only 205lb, of which the pilot was 145lb. The cabin included a 'pilot' who pedalled suitably furiously when the motor driving the propeller was switched on. Whatever next from this imaginative builder of Meccano aeroplane models?

Two stalwarts of the MMG were next on my itinerary and both usually build very fine models in early 1950's red and green colours. First an extremely fine model of an eight wheeled flat back lorry built by **Terry Pettitt** and which looked remarkably like a Foden of 1950's vintage. This was a sizable model, about 3ft long, and bristling with mechanical and structural detail. Very much what we would normally associate with Terry's model building skill. Second, a couple of models built by **Brian Edwards**. His 1935 model of a London taxi looked very much the part and was brought out again for a repeat airing. Brian's second model was of an 1870's GER/LNER 0-4-0 class Y5 shunting locomotive, otherwise known as a "Coffee Pot". Both models were very nicely constructed in red-green parts and were typical of the high standard we regularly see from this prolific builder.

Alongside was yet another locomotive model, this time built by **Sid Beckett**, and on a somewhat larger scale. This model was of the LMS 0-10-0 type expressly produced for pushing trains up the Lickey bank, a well-known and very steep challenge for most conventional locomotives. This large locomotive model is about 4ft long and constructed in red-zinc-black coloured parts to give it an interesting appearance. According to Sid's note, the model is only loosely to scale, especially in the valve gear department, and is powered by a single PDU motor. I then came upon **Alan Partridge** who, as ever, was demonstrating some ingenious mechanism. His two items this time were firstly, his "reliable" ping pong ball roller which is a regular attendee and second, a very clever "Cup-and-Over" mechanism destined for his forthcoming advanced ping pong ball roller machine. Alan kindly gave me a private showing of this latter mechanism and his ingenuity is, as always, impressive. This virtually attractive mechanism is due for publication in CQ in the near future. No doubt to promote the competition for machinery for this special application.

Dwarfing everything else in the immediate vicinity was one of **John Molden's** fairground rides, on this occasion his Miami ride all packed up for travelling. This distinctive large model was built from red and green parts with the usual Molden attention to detail. Very impressive, and all working as per the prototype.

It was good to see **Mike Edkins** again who seems to have been focusing on trams for some time now. We all know about Mike's well developed modelling skill, so it was no surprise to find a very nicely built model of a Birmingham Corporation 587 class tram on a short length of track. The model was built to a scale of approximately 1:24 to give it an overall length of 16". Superbly constructed in yellow-blue-zinc coloured parts, electrically powered and complete with working overhead power pick-up; Mike also brought along an extremely detailed bogie destined for a much larger 1:8 scale tram. If this is anything to go by, the finished model will be something to look out for in the future.

Nearing the tail end of my personal tour, the next pair of models were brought along by myself, your reporter Mike Cook. As I have not yet dismantled it, I brought my model of a Fowler ploughing engine for a repeat showing. Inspired by the small showman's engine which has featured in many of Bert Love's articles, I described the model in the report for October last year so will not repeat myself again. Spurred on by the

relative success of the ploughing engine, I decided to build a second similar model, but to incorporate the Meccano infra red controller which my good friend Colin Reid managed to acquire for me a while back. Some challenge in view of the small scale of the model! This was the first time out for this new model.

Prototype for the model was the Burrell light steam road tractor, but constructed in yellow-blue-zinc-black parts this time, again leaning heavily on the Bert Love approach. Well, I managed it and the model is entirely self-contained, it can be driven and steered remotely and it has two forward speeds driving the rear wheels through a differential. At an approximate scale of 1:14 the model is 15" long and, yes, it was a considerable struggle to get all that drive gear with batteries into such a small space.

Saving the best for last, my final model this time was one of John MacDonald's superb military models in his usual pitch right by the door. Some components of the model we have been seen before a 4 x 2 International Tractor Unit pulling a Queen Mary trailer containing an aircraft fuselage. Built in superb style, and to the very high standard that we all take for granted from John. The new bit was the aircraft fuselage which was based loosely on a Spitfire, or possibly a Hurricane. John was not so sure, but it did not matter as it really looked the part. If John is looking for a new challenge, or just a change, the evidence suggests that he might like to look into aircraft model building in Meccano. Am sure his results would be brilliant. So how about it John?

There we have it, another most agreeable day comprising some of the best of the art of Meccano model building – very stimulating and I for one cannot wait until the next meeting.

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George Illingworth brought a demonstration on how to drill a square hole called a Reuleaux Triangle, named after its inventor, Franz Reuleaux (1829-1905). The theory is by drawing arcs about the vertices of an equilateral triangle. It is therefore a figure of constant width. Consider one in which the constant width is 1 inch. Such a figure will fit exactly in a 1 inch square. Furthermore it will rotate within the square touching at four points, sweeping over the square less a small radius at each corner. If it were a drill bit it would drill a square hole. However when it rotates it does not turn about the centre of the square, for its vertices would simply produce a circle. The centre of the triangle processes around an apparently circular orbit in the centre of the square. The size of this orbit can be calculated. When a vertex points to the centre of a side the radius is 0.07735 in. When a vertex points to a corner of the square the radius is 0.08168 in. So it is not a circle. It can be shown to be four quadrants of an ellipse joined together. Finally as the centre of the triangle processes around this centroid, the triangle itself rotates. For one complete procession of the centre, the triangle makes one third of a rotation, in the opposite direction.

The Meccano Version is made from six $5\frac{1}{2}$ " curved strips. This has a constant width of 10", which keeps the mathematics simple. Three $5\frac{1}{2}$ " strips join the vertices to a 6-hole wheel disc. The centroid should vary from 0.77 in. to 0.82 in. radius. George made it 0.795 in. using two couplings joined by two $1\frac{1}{2}$ " axle rods. He considered introducing two cranks at right angles to one another to move the centre of an approximation of the ellipses. However the throw required is only 0.05 in. so the complexity hardly seems justified, as this is only 0.05% maximum error in the hole size, it is less than errors due to backlash.

The rotation requires a ratio of 4:3, which is obtained by using a 15 tooth pinion driven by an obsolete 20 tooth pinion, fixed at the centre axle. A 19 tooth pinion acts as an idler to reverse the direction. So for one rotation of its centre the triangle rotates forwards and $\frac{4}{3}$ backwards. In other words the $\frac{1}{3}$ backwards, which is required. For the triangle to become a drill it needs cutting edges and relief, simulated by various curved strips replacing three of the $5\frac{1}{2}$ " curved strips. The original principles remain. The resulting mechanism is remarkably effective, impressively following the square outline.

George also brought some two 1:35 scale models of Army Tanks. One being a Sherman Beach Armoured Recovery Vehicle and a Churchill Carpet Layer Type D.

Albert Rowe brought his own version of the Tricky Track Railway. A very popular model at exhibitions, but a pick up method being used instead of batteries. The old centre rail used for positive and the frame used for negative.

The materials used were as follows:-

1. A double sided adhesive strip similar to relay pads, 12mm wide and sold in rolls at some auto shops.
2. Plastic cut to shape as required for the layout. This was obtained from defunct computer cases, i.e. keyboards, printers and some computer boxes have plastic tops. In one printer was found a thin 0.012" sheet of steel. This was rescued for the pick-up strip. The metal can be cut with snips or scissors and wire soldered to it as required. Card templates were made and then copied in plastic and steel.
3. The heavy duty bearings (6mm) were produced from V.C.R. recording heads. These have sealed roller bearings in them. They are approximately faceplate diameter.
4. The commutator was made from scrap and the wiper blade came off one of the recording heads.
5. The power train is also from an old V.C.R. The model has the turntable, a rolling bridge and a formed circle. A single locomotive is used to snag any running problems. Advantage has been taken of plates being prepared for re-painting. A shed to cover the circle is being made; a second train is at hand so that hopefully one train will run into the shed, and the other one will run out. The train has two pick up pads to "jump the gap". Some examples of extra over bits were displayed for interest from a V.C.R. A complete recording head, a dismantled recording head, a power unit and a double sided adhesive roll.

John Bridger brought his 1:10 scale Fairground Ride Paratrooper. An ever present problem when building Fairground models in Meccano to this scale, is weight. Meccano screwed rods in compression are just not strong enough - also, if long enough to represent the 3-stage hydraulic rams of the prototype they would foul the revolving ride above. Clive Hine built a very nice Paratrooper some while ago (see MMGG 13), but it did not rise to a steep enough (45 degree) angle.

The mechanism demonstrated here attempts to overcome these problems by using the screwed rods in tension. The motor running from a 5 amp controller is powerful enough to lift the ride quite easily - it is almost unstoppable and has already chewed up one screwed rod coupling! To help keep the weight down alloy rod is used instead of axles for the bracers between the arms. The rotation motor should really be on the lift arm, but mounting it and most of the reduction gearing in the chassis, is another way of reducing the lifted weight. The prototype machine is owned by West Country Showman, Simon DeVey of Messrs Anderton & Rowland.

Dave Bradley brought an adaptation of a model originally built in 1977 by Roger Wallis of a Mercedes-Benz 0-310 coach. Built to a scale of 1:10 and featuring the Action Control. The model featured 49 seats.

Also the use of roller bearings were used on the axles. Dave has implemented the use of a Mecarep/Exacto large axle bush wheel, used 4mm stainless steel rod carried by an 8mm. O.D./4mm I.D. bearing which improves efficiency and load bearing considerably, thus being able to use Action Control for larger models. The model built from one photograph shows the original talents of Roger Wallis.

Paul Brecknell brought his model of a Lifeboat and Tractor based on the instruction book 8.12 from the early 1950 using his own design for the tractor unit. The key features were a Multikit caterpillar track driven by large sprocket wheels. Adjustment to the track was facilitated by the use of $5\frac{1}{2}$ " slotted strips, coupled with sandwiched channel bearings which were free to move longitudinally. Outtrigger supports to the main drives were via short couplings and handrail couplings to eliminate gear chatter. The model was powered by a 6 speed motor and gearbox and it was steerable by disengagement of alternative drives.

Ernie Chandler brought a Sports Car from a No 10 set manual. It had a 3 forward, 1 reverse gearbox and was built in three sections so that the chassis, etc. could be shown without turning the model about.

Alan Covel brought his 1:4 scale Prospect/Ford Fire Engine. This was based on a Model 'T' Ford Chassis with fire fighting equipment added by Prospect Manufacturing Co. of Ohio. Owing to its small size, speed and manoeuvrability it could arrive at a blaze before large apparatus could be mobilised. The scale of 1:4 is set by the four road wheels which consist of 6" dia. pulleys fitted with white rubber tyres.

The wheelbase of 25" was nicely compatible with a $24\frac{1}{2}$ " angle girder chassis. The track of $14\frac{1}{4}$ " equates to the 56" track of the prototype, this dimension being chosen to match the 'Horse and Cart' ruts of the time. The dash-board mounted non-Meccano bell was a £2.50 bargain from an antique shop. The engine block houses a 'Powerdrive' motor activated by the starting handle, the engine just visible through a small opening in the bonnet. The 2 seater settee was a little tricky to make, whereas the fire fighting equipment, water tanks, ladders, etc. proved fairly simple. Alan hopes you all liked the axe.

Geoff Devlin brought his model of an Aveling & Porter Steamroller. This was Britain's first steamroller, built in 1865, but the world's first steamrollers were built in France in 1860. Like the French machines they were very heavy at around 25 to 30 tons, in part because of a large 500 gallon water ballast tank over the main roller which was at the rear of the machine, this heavy roller steered by a ship's wheel. The layout, though consisting of three rollers was the reverse of subsequent practice. By 1873 Aveling & Porter's steamrollers had been revised and emerged in the classical three-wheel layout. The "Invicta" rampant horse was to grace 8,600 steamrollers before production switched to motor rollers. The model was built to a scale of around 1:12 with a length of 19", a width of 7.5" and a height of 11".

Mike Edkins brought his Single Deck Tram & Track. The track being laid to a gauge of $\frac{9}{16}$ " (14mm) and incorporates a set of points. Power for the MO motor is supplied from the overhead wire via a working pantograph. Positioned at the centre of the chassis, the motor drives both bogies via flexible couplings to allow each bogie to pivot when traversing curves. All eight wheels which consist of 16 tooth bevel gears are driven, it is their use which makes possible the narrow track gauge. The dimensions of the tram are:- length $10\frac{1}{2}$ ", width $2\frac{1}{2}$ " and height $2\frac{3}{4}$ ". The pantograph was 5" high. The track was 4ft. long and 9" wide.

Brian Edwards brought a model of a Shay Geared Road Roller built to a scale of approx. 1:10. The originals were built by Aveling & Parkes of Rochester around 1910 - 1912. The rollers have been constructed in such a manner that their surfaces are free of any bolt heads.

Bob Ford brought a slightly modified version of an Overhead Type Horizontal Steam Engine. The original version was built by Andreas Konkoly with a clockwork motor mounted externally. Bob managed to mount an electric motor in the boiler.

Trevor Frankling brought a part constructed Motor Chassis as on the Super Model Leaflet 1A.

David Hobson brought a Ford Model 'T' with a working epicyclic gearbox and 12 spoke artillery wheels.

Paul Hubbard brought his Horizontal Twin Cylinder Steam Engine from last year, which is now working fully after a lot of time adjusting and re-building parts of it. It worked for a whole week at the Telford Shopping Centre Exhibition back in October.

Another model of Paul's was a Whip Ride which was under construction. This was a model based on a Model Plan Leaflet No. GMM 16. The ride was a series of chairs linked by a chain which is propelled by two large wheels at each end of a flat track. As the cars hit the wheel end of the track, the cars whip round very fast. To make it more interesting he put a roof on this; cantilever style, supported in the centre.

Tony Knowles brought a Mid-ship section of an early Paddle Boat with a 2 cylinder oscillating piston engine and 12" dia., paddle wheels. This model was described in the April 1934 Meccano Magazine and was under construction.

Stephen Lacey brought his first model in 12 years. It was an ex-G.W.R. 2-6-2 (Prairie) Tank 4500 Class, built to an approximate scale of 1:18. The power for the model was a Power Drive in the boiler of the loco, drive taken from this via a worm drive, down two shafts running through the "steam pipes" then via a contrate and a 19 tooth pinion to a 57 tooth gear. This had a peg (bolt) in it driving an oscillating piston which drove the motion via connecting rods. Driving wheel are artillery wheels with flanges fitted following Mike Edkins' suggestions and to which have crank pins also fitted.

John Palmer brought three models. The first was a AEC Mk.1 Military Tipper Lorry, 6 x 4, Finished in army green. The second, an Oshkosh 8 x 8 Palletised Lorry, both fitted with the new style wheels from the Multi-Model series. Finally, a blue racing car set model from the Master Connection series.

Tony Parmee brought another No 10 set outfit model of a Fairground Spider Ride which was recreated from a model he built 25 years ago. Tony stated that it works just like the real thing - the cars take off and free fall when up to speed. The inspiration came from a ride at Walton-On-the-Naze pier. Originally powered by an E20R motor, Tony has now installed a more sophisticated mechanism to start and stop the motion

with acceleration to “take-off” point: This would be particularly suitable for exhibitions, and hopefully will be published as a Model Plan in due course if successful.

Terry Pettitt's model was an engine and pre-selector gearbox as fitted to Daimler, Lanchester, BSA, Armstrong Siddeley and Riley cars. The units fitted to the Siddeley and Riley cars had a centrifugal clutch, the others having a fluid flywheel. The model shown has a centrifugal clutch and a 4 speed and reverse gearbox. The ratios were 1:1, 2:2, 3:1, 4:1 and 5.4:1 for reverse. The planetary gears incorporate the new plastic road wheel hub with 57 internal teeth.

There are four of these which are free to rotate about the central shaft, the first three of which support stub shafts and pinions. These mesh with pinions locked to the central shaft and with the internal teeth of the plastic hub. The 4th hub is attached to one half of an output differential, the other half being locked to the central shaft, with the output shaft being locked to the central spider. The four plastic hubs are each equipped with an external brake band, each of which can be selected to hold the hub stationary which results in power being transmitted to the output shaft. By this means, any of the intermediate ratios and reverse may be selected. 1:1 ratio is obtained by sliding a 57 tooth gear keyed onto the central shaft into the internal gear teeth of the plastic hub. This locks the whole assembly and results in a straight through drive.

To select a gear the lever is moved from the neutral position into the gear required, normally first or reverse. This action biases a hand brake actuator into contact with an actuator bar.

By depressing the foot pedal in place of a normal clutch pedal, the actuator bar is lowered which then engages the brake band actuator. Release of the foot pedal raises the actuator bar and brake actuator thereby preventing rotation of the plastic hub and thus engaging the appropriate gear.

The selection lever can then be moved to the next gear position and when the pedal is pressed and released, the previous gear will disengage and the new gear engage.

Ken & Margaret Senar brought models of a Yard Gantry Crane and Mike Edkins' Tank Engine and two Trucks.

Colin Smith brought a model of Cord Band Hydraulic Motion.

Sid Beckett brought his model of a Saxophone with only one non-Meccano part. A 6cm length of black tape! For the mouthpiece Sid had used a missile (491) and a launcher (493) from the Space 2000 set so the tape was used to hold it together as there were no mounting holes. This was then displayed on a rotating exhibition stand driven by a 12 volt motor using only 5 volts.

Another model Sid brought was a Cylinder with Revolving Sphere. Taken from a book called 20th Century Art, the picture showed a highly polished stainless steel cylinder with a highly polished ball running round the top. It said the ball was motorised. Driven by a 12 volt motor, the ball runs on the outside of a gear ring.

Ken Wright brought two models. One the Crazy Inventors 8650 The Walking Boat as featured in the previous Bulletin. The other a Talylyn Railway 0-4-0 Locomotive Dolgoch, based on an engine originally built by Fletcher Jennings in 1866. The model was built on request of Mr. Derek Allen, display stand organiser for the Talylyn Railway who has had the loan of some of Ken's models for many years. The request was for a non-motorised Meccano twin of the model Dolgoch. To build a one off in all new Meccano was too expensive, so an alternative was sought. All the main Meccano parts were gleaned from the scrap box, paint stripped and de-rusted, then finished in red and green colour. All brass parts were duplicated using the lathe. Most of the plate work was fabricated from the casings of old video recorders, supplied by Albert Rowe. The Completed Model retains a Meccano model appearance. This is important as visitors to the Talylyn stand are drawn to the display making the comment “Oh look, a Meccano model”. Ken says he gets the reverse when he displays his Meccano models “Oh look, the Talylyn Railway” Ken hopes the non-Meccano content of the model has not offended too many of you.

Alan Partridge brought two models of Ping Pong Ball Roller Units. The first being an “Cup and Over”, from his previous large multi movement roller. Now all the drives are on one side and also has a ‘one at a time’ ball feeder. The other was a Crank Handle Tower. Gravity dropping from top to bottom using the spread of crank handles to provide a drop to the next point.

Tony Moore brought a Car Chassis from an early Super Model Leaflet.

Terry Bullingham brought his Horizontal Single Steam Engine with Generator and Boiler.

71st Guild Meeting - 5th October 2002

Once again we were rewarded with a very pleasant late summer day for what was our last meeting at the Arthur Rank Centre at Stoneleigh. The building is about to be demolished and replaced with a new development, and as there is no other suitable venue on site our Committee have found a new location just down the road at Baginton village hall. Our years at Stoneleigh have been very good, we have certainly had some excellent meetings, there has been a steady throughput of some truly magnificent models and I have been privileged to report on most of them. I think it is also true to say that our membership has increased during this period.

On arrival the room seemed less crowded than usual with fewer models and members present, due no doubt to a number of other meetings on the same day. However, as we shall see, there was no shortage of interesting models of excellent quality for us to enjoy. During my personal tour of the models I was interrupted many times by members wishing to give me lots of information about their models. Some of this information was written and I found the little colour photocopier that my good friend Colin Reid had brought along a great asset. I think this could become very popular as several members used it to copy model building details and other items of interest. Enough of this, let us get on with the model tour! As always, my apologies to those I have misrepresented, or overlooked completely.

Starting by the entrance door, the first on my tour on this occasion was another splendid military model by **John MacDonald**. Un-usually, his choice of prototype for this model was a Maz 543 Scud and Gun, a piece of Russian military hardware built to a scale of 1:15 to give the model an overall length of about three feet. The chassis features an 8 x 8 layout having eight independently sprung driving wheels with four cross differentials and one lockable inter-differential, all driven by a six speed gearbox. The chassis carries a large naval gun and, not surprisingly, the gun elevates and can be trained $\pm 120^\circ$ in azimuth. It was commented, that this superb model may well be one of the first Meccano models of a Russian military prototype.

Our new Chairman **George Illingworth** was next with an even larger military model of a Landing Craft Tank Mk4, built to a scale 1:36 to give it an overall length of about 5ft. An interesting colour scheme involving red, white and blue flexible plates was used to give the model an authentic camouflage appearance. The flat deck was fully loaded with seven military vehicles, all built to an approximate scale of 1:35. These included a Churchill AVRE, Churchill tank, Churchill ARV, Sherman BARV, Sherman ARV, DUKW and a Scammell 6 x 4 vehicle. The vehicles were of course all built in army green parts and the average length of the vehicles was about 9", or so.

We also have entertainment at MMG meetings, this time provided by **Alan Covel**. On one of the tables two models were concealed by cardboard boxes when I arrived and remained hidden until the grand unveiling during the formal model tour. The smaller box was about shoebox size and the larger box was approximately a 2ft cube intriguingly, the large box had two metal extremities poking through a small hole in the top-one of which looked suspiciously like an eye! There was much speculation until all was duly revealed. Alan had become interested in vintage tractors at the recent Town and Country show I believe, in particular a 1934 John Deere model had caught his eye. The smaller box concealed a nice die cast model of said tractor obtained at the show I think. The larger box concealed Alan's Meccano model based on the smaller model. As ever, superbly well-crafted and built to an approximate scale of 1:5 to give it an overall length of 24". The $10\frac{1}{2}$ " rear wheels presented a problem as suitable tyres could not be found, so Alan constructed the spiked version of the wheels instead - probably not so popular at home when run across the dining table! Built in yellow and green parts to give it an authentic appearance, it was (just) powered by a power drive motor - the driver must have had a rough ride on a smooth surface as its rolling performance was a bit knobbly. The eye? This was the clever use of a Meccanoid part to represent the vertical air intake. Is there no end to the ingenuity of the Meccanoman?

It was good to see **Mike Edkins** again, who had made the long trip up from Devon to prove to us that he is still labouring away over his Burnley tram model. He has finally completed an example of the power bogie to an approximate scale of 1:10. Needless to say, the model is so compact and so complex that it is almost solid! Everything works -- wheel brakes with Bowden cable linkage to track brake air cylinder, hinged covers to axle boxes to facilitate oiling, and tilting side bearers over the driving axles to allow correct running over uneven ground. All this has taken a long time to develop, so it may be sometime before we see the tram complete with two such bogies. This is serious Meccano modelling of the highest standard, to Mike's considerable credit.

Tony Parmee has taken a break from developing No.10 set models to indulge in some early nickel model building. Since I last saw him he had acquired a substantial collection of early nickel Meccano in good condition. So, in true Meccanoman style he could not resist knocking up a few models, his so-called Nickel Trilogy. Three models built from period manual instructions with a few modifications here and there to improve their exhibition potential. First, the Eiffel Tower model from the 1912 No.6 outfit, but modified to include electrically powered automatic lifts which run up and down all day, if necessary. His second model was a rudimentary light house from 1913 instructions. The modification in this model was to incorporate a cut down cycle reflector in the lantern together with 12v electric light bulb in a 1930's bulb holder. In Tony's words, "a model with an ancient feel!" His third model was a rather splendid General B-type omnibus which

reproduced a design originally published by a Mr S. Wilson in 1915. Built from photographs in MM, the model was modified to include all round sprung wheels, Ackerman steering, rear differential and correct period clockwork motor drive. A short demonstration showed that it runs across the floor very nicely. A really nice model which, I think, could be developed into a more substantial red and green version, which I am sure would look splendid. How about a No.10 set version Tony?

Ken Senar is at it again. After the very large F-86 Sabre aircraft and the even more gigantic walking dragline, he is now building an even bigger model of a Butters Brothers mono-tower 100 ton dockyard crane. So far Ken has only built the undercarriage which, at a scale of 1:27 is pretty big - about 2ft square by about 3ft high. When finished the crane will measure about 11ft high! Built in immaculate restored red and green parts with the customary meticulous attention to detail it looks superb and of course it all works as per the prototype. Features include a trailing power cable spooling gear, 16 two wheel bogies eight of which are powered by four powerdrive motors and a very neat slip ring assembly to convey power and control signals to the rotating superstructure. We await the next instalment with interest.

Next, a pair of road vehicles by **Dave Bradley** whose specialisation is applications for the Meccano infra-red Action Control System - certainly his success with this system has inspired me to attempt similar model developments. His 1:5 scale Mini Moke is a fairly large model of about 18" length and incorporates the Action Control System. The model also includes a front wheel drive arrangement as per the prototype. Dave's second model was a Mercedes Benz 0-310 coach, as originally modelled by the late Roger Wallis in 1977. Nicely finished in a coach like red and yellow colour scheme this large model also incorporates infra-red control, together with a few other improvements to improve its rolling efficiency. Both models were demonstrated to prove that they work pretty well. It is a pity that so few of our members have investigated the obvious potential of the Action Control System.

A fleeting visit by **Howard Somerville** meant that his models were displayed in the morning only. His main offering was his river Don steam engine and rolling mill, superbly modelled in yellow and dark blue parts and which most of us have seen before at various times. His second model was about as minimal as models go - a "picnic site" in new blue and gold Exacto parts. These excellent quality parts looked indistinguishable from 1930's Meccano and will obviously be sought after by enthusiasts for that period.

Tom and Matthew McCallum were once again in attendance, wheeling and dealing as usual, and showing off one or two Meccano niceties of the collector variety. It appears that Matthew has started collecting Meccano shop display models and brought a couple along to crank up the nostalgia coefficient of the meeting. The first was a fully restored Mississippi stern wheel river boat in yellow, blue and zinc livery which was obtained from the original shop owner somewhere in the USA. The second model was a rather more familiar double Ferris wheel, also in yellow, blue and zinc colours which adorned many a toy shop window not so many years ago.

Roy Whitehouse, another of our collector members, brought along a No.8 set, No.9 set and No.10 set all from the 1936 to 1940 period. All of these sets are in excellent condition and all contain the familiar red and green coloured parts -- an absolutely superb display. I do not know how he resists the temptation to build something from these outfits! It was from Roy that I discovered that excellent quality brass nuts and bolts can be obtained from Dave Taylor - for those that are unaware of this useful fact.

Terry Pettitt brought along his Meccanograph and the beginnings of another road vehicle incorporating a complex pre-selector gearbox. Both models have been seen before, but Terry pointed out that the Meccanograph has been modified to superimpose 2, 3, 4, 6 and 8 lobe shapes on to the basic patterns. To prove that it works well, the Meccanograph was quietly producing interesting patterns all day long. The gearbox is worth a look too if you have not seen it. I cannot possibly describe how it works in a few words, even if I knew! Of particular interest, and Terry has explained this before, the gearbox utilises the 'new' plastic wheel hub which has internal gear teeth. The gearbox comprises a series of epicyclic stages, each being based on the plastic wheel hub.

Another member who can always be relied upon to bring a different red and green model to every meeting is **Brian Edwards**. His model on this occasion was of a Shelvoke and Drewry dustcart of 1920's vintage. It was reminiscent to me of the classic dustcart in use in my part of the world in the early 1950's. The tipping body was covered by a cylindrical framework incorporating sliding doors through which the bins were emptied, crude by today's standards, but practical. The model was about 18" long and included a transverse engine and tiller steering.

The next model on the tour was that of your reporter **Mike Cook**, and has been seen before. However, having nothing new to bring I felt that others might like to see it one more time before it is dismantled. The model is of a Burrell "Gold Medal" steam tractor of 1910 vintage, built to an approximate scale of 1:12 in yellow, blue, black and zinc colours. At approximately 15" long, the model was scaled around 5 1/2" diameter rear wheels using the technology pioneered by the late Bert Love and others. The primary objective was to incorporate the Action Control System for propulsion and steering. In view of the small size of the model this was very difficult indeed. However, I succeeded eventually and the model works very well. Encouraged by this success, I am now searching for a new challenge of similar kind - watch out Dave Bradley! However, my plan to dismantle the model has been shelved temporarily in view of the threats received from the membership!

Next door was another interesting model, a mechanical horse and trailer built by **Michael Bent**. This particular vehicle, with its three wheel tractor unit, was commonly used by British Railways in the 1950's. I remember such a vehicle making regular deliveries in my home area, and it was painted up in Meccano yellow- now there's a convenient coincidence! Michael's model was about 18" long and was nicely constructed in yellow and dark blue parts.

As ever, **John and Joyce Sleaford** brought along a display of several models, some old and some new. A number of attractive small models built in the Bernard Perrier style included a cement lorry and a couple of diminutive aeroplanes. Rather larger was a nicely built articulated low loader complete with steam roller. The tractor was to John's own design, whilst the trailer was a modified version of the model described in a number 8 outfit manual. Built in the usual yellow, blue, zinc parts the trailer boasted working jacks and removable rear wheels in order to lower the rear to allow the steam roller to drive off. Built in a similar style and to a similar scale was a fairground organ mounted on a lorry chassis. The cab and chassis was taken from a tipping lorry design published in CQ35 whilst the organ was to John's original design. Last, and by no means least, was the American locomotive model built from Nikko's new outfit, lots of black, silver and grey parts. Interesting, but a bit crude would be my observation - it certainly represents a different direction for 'off the shelf' Meccano models. It will be interesting to see what other innovations are produced.

John Palmer brought along a nicely presented model of the classic 1950's railway breakdown crane, built in red and green parts to the number 7 outfit manual instructions.

Alongside were two models built by **Tony Moore**, the first was a motor car chassis which looked very much like the 1920's supermodel, built mainly in period red and green parts. Tony's second model was a very nice beam engine, built in light red and green parts to an excellent standard. This attractive model ran very smoothly indeed and its pleasing appearance owed much to the imaginative use of curved strips in the construction of the supporting frame and beam.

Tony Knowles, he of the alternative persuasion, brought along an attractive tug boat model built from what looked like over size Trix parts. The construction system illustrated by this model was the MKA system from the former East Germany in which all of the structural parts were stamped from aluminium and were not paint finished. A short conversation with Tony revealed that the alternative persuasion encompasses at least 150 known construction systems (not including L- -o!) all having some resemblance to Meccano. Lots of scope for the collector, and over the years, we have been privileged to see many models built from many of those construction systems.

Now for something rather different, is it a bridge, a tram or a pier? **David Hobson's** own words to introduce his unusual model; Le pont roulant, St Malo, France - a kind of transporter bridge for moving people across the harbour entrance between St Malo and St Servan. Basically the machine is a platform on a stilt like structure which runs on rails of about 5m gauge set in the sea bed between two jetties. The travelling platform was cable hauled back and forth by means of a steam engine in one of the jetty houses. At 13m high the travelling structure looked rather too spindly to me, but it remained in service from 1874 until 1919, so it must have been reasonably robust. A similar device was installed between Brighton and Rottingdean around the 1900 period.

David's superb Meccano model was set up for display purposes and was controlled for continuous operation by a programmable electronic controller. The track between jetties was about 3ft long and the travelling structure was about 15" high with the passenger platform about 6" square. Local detail and a working rowing boat added interest to this attractive model. Altogether a significant improvement on the crude models in the 1920's Meccano manuals.

John Ozyer-Key, a name well known to Meccanomen, brought along a pair of substantial and very complex models. The first, and most difficult to describe was a fairly large scale model of an Alvis Stalwart chassis, measuring about 24" overall. This was John's third attempt to get it right, and it was easy to see why he had such difficulty achieving a satisfactory result. The model is mechanically very complex and hence very heavy. The six wheel chassis is radio controlled, it has a six speed gearbox, each wheel is independently sprung, the wheel hubs include ball races and internal 3:1 reduction gearing and steering involves the front four wheels only. The model has yet to be finished, so watch this space!

John's second model on this occasion was of the classic Coles crane built in red and green parts from MP128. When I saw this model, the top was off and John was explaining the substantial internal machinery to some interested members - another fine example of Meccano engineering.

Stephen Lacey brought along a model of a GWR 2-6-2 Prairie tank locomotive of 1907 vintage. Very nicely presented in yellow, zinc and black parts, the model measured about 24" overall. The boiler concealed a power drive motor and the wheels were an interesting variation on the small flanged wheel attributed to the inventive Mike Edkins. The wheels comprised the spoked artillery wheel with made up flanges which appear to work very well at this scale. If I have interpreted Stephen's information correctly, the drive from the motor to the wheels is a convoluted process involving transmission via steam pipes, oscillating pistons, connecting rods and thence to the wheels - curious.

The next model was so small I nearly missed it. **Ken Wright** has acquired and built the new Rattle Trap motor car from the Crazy Inventors series of model outfits. A funny little cartoon like motor car showing leanings towards the Ford model T. Delightful - what more can I say'?

Last, but by no means least, my good friend **Colin Reid** had brought along his usual assortment of interesting Meccano items plus one or two other acquisitions which he picked up for next to nothing at auction - literally. For example, a colour photocopier for £8 and a video camera with flat batteries for a little less - real bargains. Colin's Congreve clock was once more doing sterling service, but very slowly, since it was only to be seen running on an occasional basis. But we know it works as we have seen it before!

Also in attendance was **Alan Partridge** with his ancient strip rolling machine and a large quantity of reproduction Meccano washers for sale. It was also good to see our regular dealers Mike and Carol Rhoades again, who were doing a steady trade throughout the meeting.

Well there we have it. Another excellent meeting with an interesting variety of models, a fitting conclusion to our years at the Arthur Rank Centre. It was such a nice day that a number of members sat outside to eat their lunches, chat and drink tea. And all this within a few feet of Colin's dog who was not best pleased not to be offered so much as a sniff, let alone a nice sandwich, or a piece of cake. So the musical whistling and whining continued until Colin relented and gave his dog a snack, which didn't even touch the sides. So, about 50 satisfied members and one satisfied dog - everybody was happy!

As the winter approaches, get those ideas going and produce an interesting collection of models for our next meeting, after all, we want to make a good impression at our new venue in case any of the locals are watching. Don't forget to bring a reasonable description of your models too, it helps everybody and most of all me. I look forward to meeting you all again in March next year.

72nd Guild Meeting - 29 March 2003

Well, we all managed to find Baginton village hall with little difficulty and what an excellent venue it proved to be. The village hall is a modern building and adequately equipped for our needs. It is in a sunny sheltered location with its own patio, complete with tables, and a reasonable size lawned area alongside. Car parking is also sufficient for our needs and is just outside the entrance door. Full marks to our Committee for sorting out the move.

I am not sure whether it was the fine sunny spring day, the move to a new venue, or possibly a bit of both, but it certainly brought out the membership and their models on what seemed like a grand scale. On arrival I found the hall buzzing with activity and the room was packed with models of all shapes and sizes. Latecomers had to do a bit of negotiating to acquire table space on which to set up their models. Reporting on such a large turnout of models was just a little daunting. However, it turned out that there were no more models present than on a good day at Stoneleigh. The illusion was created by a slightly smaller hall and a little less table space, together with the fact that several of the models present were very large indeed. Now that we know what the facility can do for us we will probably be better organised next time. For example, there is a sizeable side room which was little used on this occasion and could obviously be put to better use to ease the pressure on the main hall, although Bob Thompson found it very useful for his larger than usual auction. What about the superb display of models then? As always, my apologies to those I have misrepresented, or overlooked completely.

Initially, I was a little unsure as to where I should begin my model tour so I started in the most convenient corner where I found my good friend **Colin Reid** who had brought along an assortment of interesting artefacts that he managed to acquire at auction for absurdly low prices. For those who are unaware, Colin usually brings a small colour photocopier which is very handy for copying items of interest which cannot be taken away. He has also acquired some substantial video kit which he is learning to use and which will be put to good use on future occasions I expect.

Sid Beckett brought along the saloon car and caravan model built from the 1955 manual, model No.9.3. The car was built using red and zinc parts and the caravan was similar except for the roof, which Sid modelled in yellow - for no other reason than he had run out of red parts!

Ernie Chandler had also been working on a 10 set model, the double deck bus from 1950's leaflet No.10.5. So far the chassis has been assembled in period red and green parts and Ernie is not too happy with the result. By the next meeting he should have sorted out the problems and then we can all look forward to seeing the completed model.

Also on the road vehicle theme **Terry Pettitt** brought along his eight wheeled AEC Mammoth Major flat back lorry for another airing. This is a classic 1950's model measuring about 9½" wide by 30" long and built to the familiar high standard with the appropriate mechanical detail. Terry's other model was a prototype mechanism for a constant velocity joint destined, no doubt, for one of his excellent vehicle models. In his own words "...it is self-explanatory", but that remains to be seen! Look out for this clever example of Meccano modelling if you missed it this time.

Next I came upon a large number of examples of models from alternative systems, some built by **Tony Knowles** and some by **David Hobson**. Of particular interest was a smallish racing car built by Tony from a Belgian Gigant construction set which was literally a twice size Trix system of early 1960's vintage. Built to last, this really was heavy gauge steel and the model felt very solid indeed. Other examples brought along by the duo included a Slovenian Metallico breakdown crane (~1995), an Italian Condor lifting bridge (~1970's), a Chinese Metallico (~2000) breakdown crane, an American Instructo-Scale bridge span (~1950's), an American Manufax bridge (~1930's), a British Juneero air raid shelter and jeep (1935-1950's) and a British N-G-Neero gantry crane (~1930's). What a splendid collection! David's other model was a regular Meccano rendering of the Handley Page HP42 four engined biplane airliner. Built to 1:43 scale in nickel/zinc/silver parts with a wing span of 36", and each engine nacelle enclosed a small electric motor to complete what was a very nice model indeed. Careful manipulation of silver painted flexible plates produced a convincing cambered aerofoil shape for the wings.

John Molden is still building very large models of fairground rides and his latest part completed example was brought out for us to see. His new model is of the EuroStar giant big wheel which, at 1:10 scale, will be positively huge when completed. The wheel diameter will be 7ft when finished! Shown in its travelling form on three six wheel trailers each about 4ft long. The model is built in red and green parts and looks very impressive even in its dismantled state will literally be unmissable when finished and set up for normal operation.

Also requiring a lot of "real estate" for his models was **George Illingworth** who brought along a collection of 31 breakdown crane lorries! The models were all built from published building instructions, outfit manuals, Meccano magazines and so on. George has obviously been suffering from some kind of deficiency which he has now got out of his system! However, the display looked very nice and was of considerable historical interest, since it included model designs spanning the period from 1919 to the present day. As far as was possible each model was constructed using the correct parts and colour schemes. It was nice to be able to compare designs and it was only too obvious which were the winners and which were the losers. For me, some of the 1950's models were probably the best ever - but then I am

biased by nostalgia.

This meeting was certainly outstanding for the sheer size of some models, and the next one was positively enormous.

Ken Senar has finished his Butters Brothers 100 ton mono-tower shipyard crane and this very impressive model occupied a substantial volume of Baginton village hall. Built to an approximate scale of 1:28, the model stands 11ft high, runs on 2ft gauge tracks and weighs in excess of 1cvt. The model was constructed from red and green coloured parts and built to a very high standard with the usual meticulous attention to the engineering detail. The model is radio controlled and travel, slew, luff, main and auxiliary hoist all work as per prototype. Four built up Meccano slip rings transfer power to and from the rotating superstructure. These ingenious mechanisms have been featured in a previous report during the development of the model.

Dwarfed by comparison was **Alan Covel's** model of a 1923 Leyland single deck omnibus, which just happened to be parked nearby. This model was certainly no miniature - built to a scale of 1:7 it measured 48" long by 12³/₄" wide by 17" high. As ever, very nicely finished in immaculate modern yellow and zinc coloured parts and complete with solid tyres on plastic wheels, disguised to blend well with standard Meccano parts. Somewhat under-powered it did not have a great deal of "get up and go", a problem that could easily be remedied. Otherwise, lots of attention to detail, even down to the luggage on the roof rack.

It was good to see **Hubert van Wijngaarden** who had once again made the trip from the Netherlands to be at our meeting. He is building what will eventually be a vast red and green model of a bunker bridge surmounted with a luffing and revolving crane. So far, only the base of the crane and cab structure are finished, but what attention to detail! The size and weight of this monster will be such that the moving parts need substantial bearings. To deal with this problem the model has, so far, consumed no less than 240 green double arm cranks! I hate to think what the final tally might be, probably the entire Binns Road production. Serious engineering this, have a look next time Hubert brings the latest construction along.

Also on the largish side, the Alvis Stalwart model brought along by **John Ozyer-Key** has had several outings before. This is a very complex six wheeled military heavy lift vehicle, radio controlled, and with all its many functions, including the crane, driven from a single motor. Built in yellow and zinc colours with large chunky tyres on the wheels, this model is yet another first class example of the scope of Meccano in capable hands. John also brought along another complex model, the crawler crane build in red and green colours to the Mike Edkins design published in MMGG 14.

Influenced, or inspired, by Tony Parmee's comments, **Tony Wakefield** had built the railway breakdown crane featured in instruction leaflet 10-1. This model was nicely built in red and green parts and incorporated a number of modifications which generally improve its functionality and appearance. It certainly looked more like the real thing as its proportions were much improved. The cab side panels were made easily removable to facilitate access to the internal mechanisms, which were to Tony's own design.

Chris Beckett came to the meeting as a guest of Bob Thompson. However, he did not come empty handed as he brought along a small earth-moon orrery which was running nicely when I saw it. It was nice to find a relatively small and compact model for a change.

Having said that, the next models I looked at were all small and compact. First **John Palmer's** familiar multi-kit vehicles comprising a military truck, small van and breakdown crane. Second, Terry Bullingham's horizontal steam engine and, surprisingly in view of Terry's unfortunate disability, a modified Sheerline model makers lathe. The lathe has been modified by the addition of "knobbly" hand wheels made entirely from Meccano which enable Terry to use the lathe entirely by feel. Quite remarkable, shows what can be achieved with determination - a real credit to Terry. I nearly forgot to mention that his horizontal steam engine also runs very smoothly indeed. Thirdly, it was recorded that Tony Moore brought along a bus chassis, a car chassis and a beam engine all built in red and green parts, although I failed to spot these on my walk round - possibly because they were unlabelled, or I confused them with someone else's models.

In addition to finding the time to produce our newsletters and meeting reports **Dave Bradley** had also found time to start work on a new vehicle model over the winter months. His new model is still under construction and is of an LDV Convoy van of approximately 1:5 scale, which is big. Built in his familiar style it has acres of yellow flexible plates, zinc trim and large wheels, and it will eventually incorporate a five speed constant mesh gearbox. It will also, no doubt, be driven around the meeting room by means of the Meccano infra-red controller, as with Dave's previous models. In his own words, "This is a big project" and one to look out for next time.

Roy Whitehouse is one of our Meccano collectors and on a previous occasion I recall drooling over his superb restored blue/gold number 10 (or L?) outfit. It appears that he has now used the outfit and has built the pontoon crane model from SML28 leaflet instructions. Seeing this beautiful pristine model it was easy to appreciate the attraction of Meccano during this colourful period in the 1930's. I hope he is tempted to build some other contemporary models, although his Meccano is unlikely to stay pristine for long if he does. For those keen on nostalgia, which must be all of us, models like this should not be missed.

Alongside were some equally pristine display models brought along by **Tom and Matthew McCallum**. An immaculate red and green gantry crane of classical 1950's vintage - the one featured in various adverts and brochures, a smaller gantry crane built from parts of the Mechanics Made Easy period and an

impressive Huey helicopter built in modern yellow, blue and zinc coloured parts. All of these display models looked rather good together.

After a bit of sleuthing I managed to find out that the next two models I looked at were built by **Paul Hubbard**. First, Tony Parmee's big wheel design, built mainly in yellow, blue and zinc parts, but omitting the timer for automated display. This model is quite large and has a wheel diameter of 4ft, approximately number 10 set size I guess. Secondly, a ping-pong mine machine built to the instructions published in CQ35. This model is built in red and green coloured parts and was unfinished at the meeting. It will be interesting to see it working at the next meeting.

Stephen Lacey has been revisiting his youth, since his model was a rebuild of one he built 24 years ago. The model was of a GER Decapod 0-10-0 tank locomotive of about 1903 vintage, built very nicely to capitalise on the yellow, blue, zinc and black colour scheme that Stephen had chosen for the model. The scale was not given, but the model is about 2ft long and, interestingly has built up wheels based on $3\frac{1}{2}$ " pulleys with curved stepped strips forming the flange. Apparently, the original model was written up in the Newsmag by Geoff Coles and it was from this source that Stephen re-built the model, which was rather more difficult than he thought it was going to be!

Nearby were a couple of models built by **Brian Edwards**. First, his 1930's dustcart was brought out for another airing. Second, his new model, still under construction, of an AEC "Q" type bus/coach chassis, the prototype of which was also of early 1930's vintage. Both models are reasonably compact and are built in red and green parts in the unmistakeable Edwards style with the usual attention to detail. So, we can all look forward to seeing the finished bus at the next meeting.

Roger Marriott eventually decided to bring an assortment of novelty models, which seems to be his specialisation these days. Needless to say, all were built to a very high standard using near mint parts, consequently his little collection looked very attractive. His very simple horse and chariot model dates back to much earlier days in the Meccano calendar and has been spotted before I think. As slot machines seem to be Roger's forte, it was not surprising to see one of his models based on the crane grab principle - the "crane" bit being a distraction whilst the machine "grabs" your money! I didn't try it out, but I am sure it works fine. Lastly, a small fork lift truck which looked like a manual model, immaculately turned out in light red and green parts.

The other purveyor of novelty models, **Alan Partridge** showed me his latest gadget for the universal ping-pong machine - a golf unit. As ever, very simple yet very clever. A swinging club is activated pendulum fashion to send the ping-pong ball on its way, having first rolled down a delivery chute on to the tee. A suitable "green" with hole, but sadly no flag, is strategically placed to catch the ball and direct it to the next, yet to be devised, novelty mechanism. It's all in the adjustment you know! Since Alan has now invented quite a large number of these novelty mechanisms, I think it is time that some industrious builder out there put them all together in one big display model. How about it then?

John MacDonald needs no introduction as he is our prolific resident builder of superb military models. His model at this meeting was of an Albion CX33 8 x 8 tank transporter, or rather the tractor unit of the transporter. As ever, very massive and bristling with mechanical detail, all of which worked. Two engines, one driving axles one and four and the other driving axles two and three. Each engine drives through its own gearbox and the two gearboxes are coupled to a single gear shift lever. Other mechanical features include steering to axles one and four, semi elliptical springing, working lights, a powered winch and a separate rear cab for the winch driver. John informed me that this was model number 46 and still he manages to find new prototypes to model.

Another regular whose models were nearby is **Tony Parmee** and, in his usual style, he brought two models built from regular 1950's instruction manuals. First, from the number 8 manual, the road sweeper built in correct period red and green parts. Not surprisingly, the model did not work too well and Tony was obliged to make a few changes to get it to run properly. According to his research the model design was based on a version published in the MM for May 1952. Tony's second model was a diesel generator, model 7.12 from the pre-war manual, also built in a red and green colour scheme. Built, he says, because it appealed to him. This version was motorised for display purposes although it is not so exciting to watch. Apart from the main shaft the only other visible moving parts are the valve rods, which were arranged to set up a continuous clatter as per prototype. It could also double as a modern marine engine.

Mike Edkins has been developing bogies for tram models for some time now and those we have seen have been, typically, mechanically very complex and very compact- his hallmark style I suppose. Latest of the line is a Preston type four wheel truck destined for a model of Birmingham Corporation tram No 359. Built to an approximate scale of 1:21, the wheels are multi-purpose plastic gear wheels fitted with motor tyres and the flanges are represented by small steering wheels. Buried in the works is an MO motor to provide motive power. Mike's longer term plan is to construct a fleet of Birmingham trams to run on a prepared layout- something interesting to look forward to at one of our future meetings.

We were privileged to have not one, but two, blocksetting cranes at this meeting. The first one I looked at was built, or part built since it was not complete, by **Paul Brecknell**. So far the model, built to an approximate scale of 1:26 and bears only scant resemblance to SML 4, although it is of similar size. His model is based loosely on the Titan cranes shown in various Meccano literature and was built in light red

and green parts. The gantry carriage and boom were completed almost entirely in green parts to give the model an interesting appearance, which is helped by getting the overall proportions more-or-less correct as well. The main roller bearing was built up with considerable attention to detail and looked very appropriate in this model, certainly much better than the Meccano GRB. All that remains to be completed is the machinery house and machinery. Since I am an enthusiast of the block setter, I hope Paul will finish the model in time for the next meeting.

From time to time **Bob Ford** has brought models to the meetings of mechanically challenging locomotives. For this meeting he had constructed an American Climax logging locomotive to an approximate scale of 1:8. Built in yellow, blue and zinc coloured parts to his usual meticulous standard the model looked very nice indeed. The interesting bit is the complex arrangement for driving the wheels. The locomotive is driven by two four wheel bogies (trucks), one at the front and one at the rear. The inclined cylinders drive a fixed cross shaft from which the drive to the two bogies is taken via a differential. That is as near as I can get in a few words! So, if it is locomotive models you aspire to build and feel like a challenge, take a look next time Bob brings the model out.

Albert Rowe brought along his interpretation of the novelty model "Riders in the sky", designed by Bernard Périer and described in CQ52. Albert's model has grown in size a bit, like $2\frac{1}{2}$ times bigger! The horizontal circular track is approximately 3ft 6" diameter and is mounted on a built up tower about 30" high. Two riders are suspended from the track and in this model they obtain electrical power for their motors from an ingenious pick-up arrangement, made from a plastic desk top computer case. Albert is working on the automated manoeuvring aspects of the model and intends to add other attractions to the tower in the fullness of time. Festooned with Christmas lights, it should make an eye catching display when finished.

Now for the **John and Joyce Sleaford** show! As ever this industrious pair had brought along a variety of models to create their own mini-exhibition. Mainly an assortment of fork lift trucks built by John. The biggest and most impressive was built from MP136 and was based on a JCB 930 prototype. Built to an approximate scale of 1:8 the model boasted a number of working features; a three section tilting mast, two speed and reverse gearbox and working levers in the cab to control all motions. This model is powered by a single powerdrive motor. The second smaller forklift truck was built from a number 7 set instruction manual and is un-powered. The smallest versions were built from the Evolution set 3 instruction manual and the 8540, 40 model set instruction manual. John had also built a stealth bomber from the instructions in the Evolution number 6 set manual. However, he had acquired some second hand parts which he had repainted black and from which the model was built. It therefore looked rather more like the real thing than the brightly coloured original. The remaining model, the robot from the 9550, 50 model set instruction manual, was built by Joyce. John explained that even this modern model needed some minor modifications before it would work properly.

A few enquiries later and I discovered that another two very large models were built by **John Nuttall**. Firstly, a substantial 2-6-4 tank locomotive, type unknown, built in red, green and grey parts of 1930's vintage. This model was nicely built and looked very good because of the excellent condition of the parts from which it was constructed. Then across the room, John's other model was a part built block setting crane, the second at this meeting. The model was constructed in 1950's red and green parts and comprised the gantry carriage and boom. This version is also awaiting its machinery and machinery house to be completed. As far as I was able to see, the model bore closer resemblance to SML-4, although John might tell me otherwise at the next meeting. This model also promises to be another superb example of the art of the Meccanoman and should be worth looking out for in the future.

Then very finally I looked at **John Bridger's** latest fairground ride model, which was the very large solitary occupant of the side room. Since there was absolutely no more room, especially for a model of this size, in the main hall John had little choice other than to erect it off-line. Well, what about the model? It was a very large 1:10 scale model of a Paratrooper ride, whatever that is. As yet to be finished, John demonstrated its main functions which involved the rotation and elevation of a large rotating structure, which he advised should be viewed from a distance, or preferably from an adjoining room! I can tell you that it all seemed safe enough to me and its complex mechanical elements operated very smoothly, in the manner to which we have become accustomed from this builder. Maybe one of these days we should persuade John to team up with the Molden's and bring all of their fairground models, which could then be assembled on the grass alongside the hall - what a show that would be

Well, there we have it, another milestone in the first class Meccano modelling history of MMG. The new venue certainly brought out the models and their enthusiastic builders. I look forward to the next meeting with the hope that it also will be graced with many fine new models. With some relief at having reached the end of this report, I too can now relax and perhaps find a little time to work on my latest model.

73rd Guild Meeting - 8th November 2003

After weeks of being rather too busy I was really looking forward to a few hours out of the "rat race" in congenial company and with a large variety of interesting Meccano models to focus the conversation. I was not disappointed. Our second meeting at Baginton village hall was another outstanding success. Since the meeting was several weeks later than usual, the weather was definitely more autumnal - a grey, but dry day. However, when I arrived, the atmosphere in the hall was warm and welcoming, and positively buzzing with the sound of friendships being renewed and models being shown off.

Having learned a few lessons from the last meeting, the table organisation was improved which gave sufficient room for all the models and our two dealers within the hall. The side room was reserved for lunch only, a good arrangement. The organisation was also helped by the fact that we did not have any vast super-super models to find room for on this occasion. Never-the-less we had a very good turnout of models as we shall now see. My personal tour was a bit haphazard as I was continually waylaid by enthusiastic owners wanting to tell me about their models and to demonstrate their *modus operandi*. As always, my apologies to those I have misrepresented, or overlooked completely.

Most appropriately, the first two models that came into view on entering the hall were Binns Road display models. Not surprisingly both were brought by **Tom and Matthew McCallum**. The first very nicely restored model was the classical rendering of Blackpool Tower all in mid 1950's red and green parts. With lots of lights and a pair of continuous running lifts the model was very attractive and must have caused waves of nostalgia amongst the gathered, as it was very much featured in advertising material of the period. The second model was rather less attractive and much more difficult to describe. Basically a kind of windmill with rotating light assemblies together with three of waving arms fitted with some oddly coloured conical discs, which caused some mutterings among the collectors. The model was of 1970's vintage and appeared to have had a hard working life. Obviously an attention getting construction, but otherwise quite forgettable!

On seeing the adjoining display you might have been forgiven for thinking that you had turned up at a meeting of the local philatelic society. **Sid Beckett** had brought along various postal items relating to the recently issued set of stamps featuring toys - a Meccano aeroplane, Hornby clockwork train, a Dinky car and a couple of other similar toys. Very attractive, buy a set if you can before they disappear.

Next was undoubtedly the largest model at the meeting, one of John Molden's fairground rides. The Breakdance fairground ride was broken down and packed up for travelling and comprised two articulated tractor-trailer units. Scale unknown, but these are big models requiring some eight feet of table space, and that was with both models side by side. These superb models are built mainly in red and green colours and, in view of their large scale, incorporate a large amount of mechanical detail. The main ride is assembled on a tri-axle trailer with working coil springs and is hauled by a model of a Volvo F16 tractor unit with generator unit mounted behind the cab. The smaller of the two models carries the pay box and lighting equipment on its trailer, which is hauled by a Foden tractor unit which incorporates a crane for erection of the ride.

Alongside was a smaller, entirely different and unusual model built by **Albert Rowe**. From the earliest days he has always wanted an electric fretsaw machine, so now he has one built in Meccano! The machine was built according to instructions by the late Keith Cameron, which were published in *Model Engineer* sometime during 1976. It works! The machine cuts thin ply quite satisfactorily, but is power limited. Albert has plans to try and improve its performance by installing more power in the shape of a mains motor.

Geoff Devlin usually builds attractive "sensible size" models in '1950's red and green colour schemes. For this meeting he turned up with a very nice model of a diminutive Sentinel 0-4-0 shunter modelled on one of pair built in 1929 for the Somerset and Dorset railway. The peculiarity of the design was the reduced height to enable the locomotive to pass under a low bridge near Radstock. To illustrate the difference Geoff had his model on a short length of show track fitted with a standard loading gauge. Built to a scale of approximately 1:18, the model measured 14½ inches long, 5½ inches wide and 7 inches high.

Roy Whitehouse is a name that will be familiar to enthusiasts of the blue-gold period since Roy has turned the restoration of Meccano and outfits from that period into an art form. Roy had brought along a fully restored and restrung 7a outfit which, of course, looked absolutely superb. The Meccano Company had certainly got the business of product presentation cracked and it is not difficult to see why these very attractive sets made the Meccano system so popular. Roy had also built a mechanical shovel in the same pristine colour scheme which, despite its simplicity, also looked very attractive. I did not establish if the adjacent model of a very fine gas engine belonged to Roy, or not. This model was extremely well constructed in green and red colours and its size may be judged from the flywheel comprising 7½" diameter circular strips. The model ran very smoothly for most of the meeting - an attractive model.

The next model, also built largely in early blue parts, was of a classical Fordson model N farm tractor. **Terry Pettitt**, the builder, based the model on authentic looking ashtray size tyres for the rear wheels. The front wheels were fitted with standard Meccano 3" tyres which gives some idea of scale. The model is driven by a small black Meccano motor via a clutch, three speed and reverse gearbox to a spur gear differential in the rear axle. The result was a superbly authentic model which does all the correct tractor things.

Brian Edwards was next with a couple of typically modest models. The first, a tricky subject to tackle,

was of a Junkers JU87 Stuka aircraft built to an approximate scale of 1:24. This attractive model was built in green and silver parts to give it the right kind of appearance, and at about 2ft wing span the model was of an easily transported size. Brian's second model was of a rather more unusual subject, a Glasgow three wheel farm tractor of about 1918 vintage. This odd looking vehicle has a layout similar to the Morgan three wheel sports car - two wheels in front and one at the rear. Built very nicely as ever in Brian's favoured colour scheme of mid 1950's red and green to an approximate scale of 1:7, which gave the model an overall length of about 2ft.

The next, and very much larger model, was **Paul Brecknell's** block setter which was quite a lot nearer completion since its last outing. In the interests of improved accuracy the model is only loosely based on SML4, it is built to an approximate scale of 1:27 in light red green colours and looks very authentic at this stage of development. All of the machinery is now working and is driven by four electric motors although models of the steam engines are included in the machinery house. The steel cables are represented by standard nylon cords dyed black which certainly looks more realistic than white string. Paul gave us a brief demonstration of the model which proved that it all works very well and announced that he hopes to have it completed in time for the next meeting. So, watch this space!

A chat with **Stephen Wilson** revealed that he has accumulated quite a lot of assorted Meccano as a result of conscientious attendance at car boot sales. Some of his hoard has been put to good use and was on display at the meeting. Firstly, two versions of the same model of Malcolm Campbell's Bluebird record breaking car built from a 1941 number 6 outfit instruction manual. One of the pair was built in the rather more authentic blue and gold colour scheme, whilst the other was constructed mainly in red and green colours of early 1950's vintage. His other model was the mechanism for the grandfather clock from SML 14 built with the appropriate period nickel plated parts.

Now it is time to congratulate **Ernie Chandler** once more for being awarded the well-deserved Go/den Spanner. His offerings on this occasion did not include a model, just some photographs showing the award ceremony of which he can be justifiably proud. Other material brought along by Ernie included a selection of the numerous newsletters and other correspondence he receives from Meccanomen around the world.

Tony Parmee brought three models to the meeting, and all three showed what improvements can be achieved when some engineering common sense is applied to standard outfit models. This happens to be one of Tony's particular interests of course. Firstly, the General B Omnibus built entirely from original nickel parts has been seen before, so I will not attempt to describe it again other than to say that this delightful model really does do justice to its prototype. Secondly, a tipping lorry built in early 1950's red and green colours and within the limits of the 1954 number 5 outfit. However, the model is a mix of features from the standard instruction manual of the time - Heavy Goods Lorry (1953) and Tipping Lorry (1954). Tony's third model was his own design for a heavy duty tipper truck, of the kind found in quarries, and built within the constraints of the 1954 number 8 outfit. Again built in correct period red and green colours it was inspired by the eight wheeled lorry featured in the number 8 outfit manual of the time. These models show what could have been achieved within the constraints of the outfits had more imaginative engineering know how been applied to the design of the original manual models.

Although a regular attendee at MMG meetings, **David Barrett** rarely brings a model. However, on this occasion he brought along a very compact Meccanograph to his own design. The basic 'chassis' measured $12\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{2}$ and was striking because of the large amount of brass ware crammed in together with a PDU motor to provide the motive power. The visual evidence suggested that it works as well as it looks, although David still has some improvements he wishes to add.

Mike Edkins brought along an unusual demonstration model of a Galileo escapement mechanism. The following description is in Mike's own words. "It is thought that sometime in the 1630's Galileo devised a form of clock escapement coupled to a pendulum. His son Vincenzo, who died in 1649, is reported to have made such a mechanism. In 1660, a drawing thought to be of this mechanism was sent to Christaan Huygens, who is regarded by many as the inventor of the pendulum. From this drawing a model was made in Florence in 1883, and is now displayed in the Science Museum, London. In a series of articles published in The Horological Journal between October 1976 and February 1977, John Wilding described the building of a slightly smaller version of this model. In the Meccano model I have tried to reproduce the shape and layout of the framework and mechanism, but in the interests of stability have mounted it on a base with adjustable feet for levelling purposes. The original escape wheel had twelve impulse pins and locking teeth, this has been simplified to eight of each. Power is supplied by a spring removed from a No. 1 clockwork motor which provides a running time of just under three hours. " - and, yes, I can confirm that it does work!

I am pleased to report that **Ken Wright** has still not run out of steam and has built another very fine locomotive to add to his Talylyn railway stock. The prototype for the model is No.3 Sir Haydn, built by Hughes Locomotive and Tramway works in Loughborough for the Corris railway in 1878. It was subsequently purchased by the Talylyn railway in 1951. Ken's model is immaculate in its red and green colour scheme and built to a scale of 1 :12 it runs very nicely on 'G' gauge track. Ken's other models were the Hudson locomotive built from the Meccano special edition set and a small model of the Harley-Davidson Electra Glide motorcycle built from a Steel-Tec set, literally a Chinese copy of Meccano.

David Hobson is yet another member who builds interesting and unusual, models. This time he brought

along a co-ordinated display of three WW1 tanks. The first was of a 1918 German A7V tank built to an approximate scale of 1:20 to measure about 18" overall and painted in the correct camouflage scheme. The second was the classical Meccano tank of 1915 vintage measuring about 2ft overall and finished in the blue-grey of the time. The third and most unusual model was of the 1917 Renault FT tank, built to a scale 1:12 to measure about 12" overall, and also painted in the appropriate colour scheme. This tank looked the most vulnerable of all three, but in fact it was the most successful as it was the only one sporting the latest innovation - a rotating turret, which obviously gave it an advantage on the battlefield. An interesting and timely display since Remembrance Day was only a few days away.

Next door he of the alternative construction systems, **Tony Knowles**, demonstrated a pair of nice looking Erector models. Both models were of the No.1 outfit steam shovel. However, one was built from a 1924 outfit to the original instructions and the other was built from a current, or recent, Erector outfit. I thought they both looked nice and colourful although Tony was not quite so complimentary and obviously thought them to be inferior to a Meccano version.

A substantial model of a funicular railway was presented by **Paul Hubbard**. This was a two track, two car cliff type railway and the only one I have seen is at Scarborough. The model is big, measuring about 6ft long by about 4ft high. A motor and gearbox to drive the model is housed in the bottom 'station', but I did not see the model working as it was visited by some gremlins when Paul attempted to give us a demonstration.

Alongside was a very substantial tractor unit for an articulated lorry built by **Dave Bradley**. The style was familiar, but for this model Dave had abandoned the Meccano action control system in favour of multi-channel radio control. Overall length of this model was about 2ft 6in, so when it gets its trailer it will very large indeed. Meanwhile, Dave gave us a demonstration and I can report that it all works very well.

Whilst on the vehicle theme, next was **John Palmer** who favours smaller vehicles based on the Meccano multi-kit system, of which he has built many to his own design over the years. However, for this meeting he brought along a car transporter of about No.7/8 outfit size, built in mid 1950's red and green parts, and looking very much like a model of that period. The really nice touch was the assortment of small oars loaded on the transporter which were built by the late Les Gines. I think John also brought along one of our guests,

Tony Moore, who showed us what he can do with Meccano in the shape of a very nice open top MG TC sports car. The model was built entirely with white and blue flexible plates and with 1½" brass pulleys with tyres for the wheels. At about 12" long, the choice of colour scheme gave this attractive model a very realistic appearance.

It is always a pleasure to welcome and report on new members, especially when they are significantly younger than is usually the case. Young **Stephen Way** is clearly an enthusiastic and accomplished Meccano model builder as demonstrated his latest model. The model was of a Caterpillar D10R built to approximately 1:10 scale in modern yellow, blue and black parts. Of particular interest is the built up track, based on 2½" flat girder segments I recall, to give the model an appropriate and substantial appearance. This complex model is not yet finished, but shows a high standard of modelling, so we have something to look forward to at the next meeting.

Another guest at the meeting was **Richard Payn**, who was a visitor from the Holy Trinity Meccano Guild based in Kent. Richard did not come empty handed and brought a substantial model of an Oshkosh PLS heavy duty military vehicle, whatever that is. I am sure John MacDonald would recognise it. At present the model is unfinished and comprises the chassis and drive mechanisms, of which there are many. At about 4ft overall, the model has ten wheels with ashtray type tyres. {Four of the wheels are steerable and the remaining six provide the tractive effort. Now for some statistics. The model has a five speed epicyclic gearbox, nine differentials in the various drive trains and has, so far, consumed over 100 ½" Meccano pinions.

Since **Ken Senar** has now dismantled his vast crane in order to release the parts for his next model he arrived uncharacteristically empty handed, or very nearly so. His 'model' was a covered food serving dish, based on the 12½" diameter circular plates of the large bearing, with strict instructions that the 'lid' was only to be lifted by the Chairman during the model tour. Ken's sense of humour was much appreciated and the 'delicacy' under the lid did not offend the Chairman so much! We could do with a few more entertainments of this kind to liven up the model tour at George's expense!

And then we were all sobered up again with the next model, which was **John Ozyer-Key's** prize winning Alvis Stalwart heavy duty military vehicle. Also on the largish side, this is a very complex six wheeled military heavy lift vehicle, radio controlled, and with all its many functions, including the crane, driven from a single motor. Built in yellow and zinc colours with large chunky tyres on the wheels, this model is yet another first class example of what can be achieved with Meccano. This model deservedly took the Issigonis shield at SkegEx 2003 and is a very fine example of Meccano modelling.

After building a very large number of outfit manual models of breakdown trucks, described in my last report, **George Illingworth** could not resist making a few more. He brought five new models to this meeting built from outfits covering the period 1998 to date. I must say that some of the very latest models, parts and colour schemes do look very attractive when made up. Hints of what might be to come were provided in the shape of a couple of demonstration models of six speed gearboxes destined for some heavy Scammell

military vehicle I expect. All will be revealed at the next meeting.

Whilst on the subject of things military, **Tony Homden** had also been very productive in the last few months. Tony's main objective in building the four models he brought along was to use, as far as possible, parts from the 1939 Mechanised Army outfits supplemented with modern parts where necessary. The first model was of an M19 quadruple machine gun mounted on the very common American built M3/M5 half track vehicle. This is quite a large model at approximately 1:9 scale which gives it an overall length of 31". The jaded olive green colour of the early Mechanised Army parts gives the model a correct period feel and modern plastic tracks running on metal road wheels help to enhance its appearance. Needless to say, this model has lots of correctly working features.

Tony's second model was of an early 1940's six pound anti-tank gun built, I suspect, to utilise the barrel include in the Mechanised Army outfits. This item also determined the scale of the model. Again, all of the main functions work as per prototype. Model number three was a universal Bren gun carrier which also utilised the modern plastic track in its construction. The main objectives here were to have a fully working model, including a representative suspension and steering system. The model is powered by a pair of PDU's which provide sufficient power to drive over small obstacles. Lastly, a working model of an amphibious vehicle based on the DUKW of WW2. Having previously seen a floating Meccano model based on the water tight plastic parts box, Tony experimented to establish that it could support a floating weight of about 3½ Lb. So an authentic looking model was built from this beginning. It is powered by a PDU which drives both the road wheels and a simple built up propeller for propulsion when afloat. According to Tony's description it works properly; it can be driven and steered on land and when it enters the water the propeller comes into play and pushes it along at a realistic pace. The steerable front wheels also provide some directional control once in the water. Unfortunately the finished model exceeded 3½ Lb so some additional buoyancy was needed in the shape of polystyrene blocks cut from old Meccano boxes. Altogether a nice collection of models well researched and well presented.

Tony Brown turned up with a solid looking model of an American Mack wrecker truck built in red and green colours. This model is intended to be built within the confines of a No.10 outfit although it is not quite complete. Essentially this is a heavy duty 2 x4 chassis with a crane and the model measures about 2ft 6" overall. When complete, Tony hopes to have sufficient parts remaining to build a jeep for the wrecker to recover when in demonstration mode. It should make a nice addition to the increasing library of No.10 set Model Plans if Tony can find time to write it up.

After a bit of detective work I discovered that the next model was also built by yet another Tony - **Tony Wakefield**. His model was a nicely built version of the No.10 set model leaflet 10.3, a coal tippler. The model looked very nice in its well-presented mid 1950's red and green colour scheme. According to Tony's note he has modified the mechanism in some way, which is not at all surprising. However, I did not see the model working. This model had a fairly high 'nostalgia coefficient' for me!

Moving on, I next came to the usual display of models by **John and Joyce Sleaford**. As ever, an interesting assortment of nicely built models large and small. John's main offering was a model of the JCB 930 rough terrain fork lift truck, built from instructions in MP136. Very nicely finished in modern yellow and zinc plated parts, it looked good and worked well when I was given a private demonstration. Joyce brought along three colourful models built from modern outfits and these were; a three wheeled motor cycle from outfit 6700 instruction manual together with a car and a recovery lorry both built from the instruction manual with outfit 7700. Whenever I see these attractive modern models, especially when they are as well built as Joyce's, I get a good sense that the current manufacturers of Meccano are getting their act together again. These were their main models which were supported by a number of smaller models built mainly from modern parts - altogether more of a mini-exhibition really!

A conversation with **John MacDonald** revealed that he now has a grand total of 47 military vehicles in his ever growing army of Meccano military models. Was he trying to tell us that he might be close to exhausting the inventory of western military vehicle prototypes suitable for Meccano modelling? Anyway, more recently he has been looking further afield for prototypes and came up with a Russian YPAΛ - 377C tractor with trailer. The model is built to the usual very high standard and all the principal functions work as per the prototype.

The trailer carried a substantial Frog 7 missile, modelled mainly in white flexible plates, and looking of rather doubtful parentage! At approximately 1:12 scale the model measured about 3ft over all, in fact the typical size of John's models. The tractor has a 6 x 6 wheel layout and features power to all wheels, a gear box with six forward and two reverse speeds, three link suspension, leaf springs and lights. In addition to the missile, the trailer includes leaf spring suspension, working landing gear and lights.

Tucked in behind this impressive model was a little Coles crane, also built by John, but I have no further information on that model.

And that brought me finally to my good friend **Colin Reid**. Colin had brought along a display cabinet filled with all sorts of interesting Meccano items that he seems to collect without limit. He also brought his little colour copier along which provided a most useful facility for a few members. Some may remember the early Meccano vertical boiler steam engine that Colin obtained for next to nothing, an excellent find but with a few details missing. However, he has since obtained a second example of the steam engine, but in first

class condition with all items present and correct. Both engines were on display, and very fine they looked too. How does he do it?

Finally, I must not forget our dealers who help to make the meeting a proper enthusiast's event. **Tom and Matthew McCallum** set up shop at one end of the hall and **Mike and Carol Rhoades** set up their stall at the other end. Like most members, I find it difficult to resist buying a few additions to my collection although it is debatable whether I actually need any more! It was also especially pleasing to see **Geoff and Elizabeth Wright** with their Meccano literature stall; I hope they will become a permanent feature at our meetings.

One thing is for sure; our meetings would be much less interesting without the dealers.

Well there we have it, another interesting and well attended meeting. Having recharged our batteries look forward to seeing an interesting collection of new models at the spring meeting. Don't forget that it helps your reporter if you complete the notice of attendance form with a little detail about your models and, most importantly, you put a label on the model at the meeting. My grateful thanks to the many members who already do this. Finally, my best wishes for Christmas and the New Year, and may all your wishes be perforated with holes at $\frac{1}{2}$ " centres!

74th Guild Meeting - 27th March 2004

One year on and it seems like forever since we moved our meetings to Baginton Village Hall. The Guild has adapted well to its new venue and the organisation has settled down to a workable arrangement; the main hall for the display of models and space for our two resident dealers whilst the side room is reserved for lunch and auctions. The membership seems very comfortable with this, so all thanks to our committee.

On arrival the social buzz of members and models renewing friendships seemed rather more anticipatory than usual. Not only that, the vista was dominated by Tony Parmee's huge gantry crane, more of which later. The meeting was the appointed venue for the auction of a quantity of Meccano belonging to the late John Pentney, who had kindly left it to the Guild for disposal to members. This explained the higher turnout than usual together with a bumper crop of new models for me to get familiar with. In fact I counted about 25% more models than usual at this meeting - a daunting task for me!

On a sad note, our Secretary Dave Bradley had his car broken into the evening before did not receive the usual returns from members summarising the details of their models until I was some way through my report. So this time I was "flying blind" for some of the report and as my ageing memory is not so good these days do not be surprised if what you read is a surprise! I did of course tidy things up a bit when the information arrived. Of necessity, my commentary will be brief except for the few models for which I was given a written description by their constructors - to these gentlemen I am even more grateful than usual. Note the subtle message here! As ever, my apologies to those I have misreported or overlooked completely.

Where better to start than with our President **Ernie Chandler**. Ernie was forced to travel light by his lift to the meeting, but he did not arrive empty handed. He brought his diminutive showman's traction engine, a rebuild of the design by the late Bert Halliday, together with the equally miniature VW Camper Van which was built and presented to Ernie by the late Les Gines some time ago as a souvenir of Ernie's full size prototype. Ernie's third model, which I don't remember seeing, was a gyro-scope built from instructions in the New Zealand Newsmag.

Tom and Matthew McCallum brought along the usual assortment of mouth-watering items: The Meccano motor chassis display model of 1957 vintage together with the MM for January 1957 in which its construction is described. Two restored and restrung Meccano Aeroplane Constructor sets, a No.1 and a No.1aS (Special) which is very rare. Altogether a very attractive display with a high nostalgia coefficient.

Rather more modest in its scale was the little vertical boiler steam engine brought by Trevor Frankling. This little model has enjoyed numerous outings before, its novelty being the switched solenoid electric motor disguised as the cylinder, connecting rod and crank-shaft. Neat.

Then I moved on to look at some rather larger models. First was **Bob Ford's** Climax logging locomotive, resplendent in pristine yellow-blue-zinc colours. Superbly well-built with lots of attention to detail, this is a nice model to look at which has lots of interesting mechanical features.

Second was a large London trolley bus built by **David Barrett** to instructions by Noel Ta'Bois and published as MP132. Another very fine model which looks very good in the mid red-green colour scheme. Overall the model is about 3ft long by about 2ft high -- quite big for a model of this type.

Thirdly an even bigger model of a Metropolitan Railway 2-6-4 tank locomotive. Built by **John Nuttall** in late 1920's red-green colours to a design first published in a 1925/6 MM. Set up for display, the wheels were turning and the motion was doing its job in a very smooth fashion. Another very nice model measuring about 3ft 6" overall.

John Bridger is best known to me as the builder of superb and substantial fairground models. However, on this occasion he brought a pair of very small models of a Caterpillar D8 tractor and tipping trailer, built to the usual very high standard. The models were built from instructions published in the 2003 NZFMM magazine (issues June and August) by Bruce Geange, their designer. Both models were each about 10" long and employed the standard Meccano Caterpillar track, which gives some idea of scale. These very solid looking models were constructed using yellow-blue-zinc parts, but mainly yellow, to look very business-like. In the true tradition of the Meccanoman, John had modified the model to incorporate two drive motors, one driving each track, and the result was capable of climbing the steepest gradient.

Moving on to **Mike Edkins** who brought along the chassis for his model of a Birmingham Corporation tram, 762-811 class for the purists. Although at an early stage of development the intention was clear and at approximately 1:10 scale the model will be 2ft+ long when completed. This model of course incorporates the power bogies that Mike has been working on for some time, another considerable achievement in its own right, since the bogies are so complex they are almost solid metal! So, watch this space.

I think **Ken Wright** had caught something from George Illingworth! Having worked breakdown crane trucks to extinction, George has decided to do something similar for the fire engine since they are also well represented in the regular Meccano books of instructions. However, George has enlisted help in realising his dream and Ken has given a hand by building the model from the modern Fire Engine Master Builder set, which is immaculate in its pristine red-white-zinc colour scheme.

Much inspired by the recent article in CQ 63 by John Herdman, Ken had also built the diminutive model of a Rolls Royce Silver Ghost which uses the 'Crazy Inventors' set spoked wheels so effectively. Modelled entirely in zinc and brass parts this little model is most evocative of the elderly prototype. Lastly, Ken also

brought his immaculate Tallylyn railway locomotive No.6 Douglas, modelled to 1:12 scale mainly in red-black-zinc parts - need I say more?

The next expanse of real estate was occupied by models brought along by two of our more serious collectors. Firstly, **Roger Marriott** brought two similar dealer display models he had no doubt picked up somewhere for at 'song'. The models were both eye catching variations on the chair-o-plane fairground ride, except the chairs were replaced with small jet aircraft models. The display model from the 1960's was built in light red-green colours and incorporated delta wing aircraft models. The 1970's version was built in yellow-blue-zinc colours and featured jet aircraft with a T tail - no doubt an attempt to represent the aeronautical technology of the time. Needless to say both models have been carefully refurbished, their electric lighting worked correctly and very attractive they looked too.

Roy Whitehouse, on the other hand, is best known to me as a collector and restorer of pre-war blue-gold Meccano. For this meeting he had put it to good use by building the very attractive fire engine model to instructions in the 1936 No.7/8 manual. Since the parts were in mint condition; this gave the admirer at proper indication of just how attractive that short lived colour scheme really was. I think Roy had also been influenced by George!

Roy's other exhibit was a fully restored and restrung No.2S Aeroplane Constructor set, from the series of sets which were uncommonly common at this meeting,

Paul Hubbard was very quiet at the meeting, but put the time to good use for the benefit of all. He appeared to have brought a large part of his Meccano collection to the meeting and spent most of the time building the model of Frank Hornby's house, designed by Tony Parmee and published in the Model Plan series as MP135. It was up to the first floor by the time the meeting ended.

Well, **Paul Brecknell** did manage to complete his block setter in time for this meeting. To reiterate my notes from the last report, this very fine model is built to an approximate scale of 1:26 and bears only scant resemblance to SML 4, although it is of similar size. His model is based loosely on the Titan cranes shown in various Meccano literature and was built in light red and green parts. The gantry carriage and boom were completed almost entirely in green parts to give the model an interesting appearance, which is helped by getting the overall proportions more-or-less correct as well. The main roller bearing was built up with considerable attention to detail and looked very appropriate in this model, certainly much better than the Meccano GRB. The previously unfinished machinery house and machinery was up and running for this meeting. Although I did not see it working it is a mass of detail, lots of steam engines, winding drums and drive gear which gives the finished model a very authentic appearance.

Roger Burton brought along a small Meccanograph which was producing incredibly detailed patterns. Apparently it was built to a design by the late Eric Baldwin.

John MacDonald and his usual superfine military models were conspicuously absent from the meeting.

Consequently, **Tony Homden** had no competition on this occasion. Tony has a large collection of the early Mechanised Army set parts, which are a darker olive green than the modern alternative, and he frequently brings military models along to our meetings built in this colour scheme. His model was of a London General B Type omnibus as requisitioned in large numbers for troop transportation in France in WW1, a topic on which Tony gave us a short history lesson. The model is familiar as it is based on the early nickel period model, built to approximately the same scale (1:12), but modified to capitalise on the later parts and to incorporate rather more detail. A PDU under the bonnet provides the motive power and the model features a working clutch, gear box, differential, rear wheel brakes and worm and pinion steering. Although quite capable of running around, the model was set up on a stand for display purposes; A nice variant of an interesting prototype.

Brian Edwards brought along a small collection of three models all built in mid red-green as is his usual style. Firstly, a modified version of the log saw based on SM10 instructions. Secondly, a nice little model of a steam powered table engine measuring about 12" high. Thirdly, a rather more detailed model of an Ariel Leader motorcycle, a nice piece of machinery of 1960's vintage.

The scale of this model was fixed by the use of 3" pulleys with tyres for the wheels to give it an overall length of about 15". A fine collection: of models constructed by this experienced builder.

Nearby the father and son duo, **Keith and Stephen Way** respectively, were showing off their handiwork. Since the last meeting young Stephen had made considerable progress with his large and very ambitious model of a Caterpillar Big R Bulldozer, built almost exclusively in yellow parts to give the model an authentic appearance. I was told that the main structure of the model is essentially completed and that all it needs now is the internal machinery. This is an impressively complex model and will be even more so when it is finished. Dad Keith is also a competent Meccano modeller and he brought along his latest model, a Titan 10-20 Tractor of 1916 vintage built to an approximate scale of 1:7. The inspiration for this model was the use of an early grey boiler to represent the tank over the front wheels. Otherwise the model was constructed largely from red-zinc coloured parts to give it an interesting prototypical appearance. Keith thoughtfully produced a photograph of the original vehicle for comparison and it was clear that he had made a fine job of the model.

By now all the world knows that **Tony Parmee** has built the world's largest model from a No.10 set! In all the photographs of various Meccano Guild meetings I have seen recently, this huge model dominates. As

ever Tony had constructed his gantry crane from mid red-green coloured parts to an approximate scale of 1:63 and the result measured 8ft span by about 5ft high and was set up to straddle adjacent rows of tables, so everyone was obliged to walk under the span. That is why it could be seen from every part of the room. In spite of its size it is remarkably rigid. The model works nicely and Tony demonstrated it to me briefly, he also informed me that it will be written up in the Model Plan series in due course (I think).

Howard Somerville turned up with his Gatling gun again and proceeded to torment selected members with the occasional shower of elastic bands.

We all know that **Alan Covel** builds very nice models, often of unusual prototypes. His model for this meeting was no exception, a 1924 Bugatti type 35 racing car. At an approximate scale of 1:4 the model is 39" long by 12 $\frac{1}{2}$ " wide, quite large since the scale was fixed by Alan's well used wheels comprising white pram tyres on 5 $\frac{1}{2}$ " pulleys. The 2 $\frac{1}{4}$ litre straight 8 was represented by a PDU hidden under that characteristic Bugatti bonnet, which delivers just about enough power to turn the wheels. A nice touch was discovered when I was invited to turn the starting handle -- yes, the 'engine' does have realistic compression feel! As ever, a superbly presented model in yellow-blue-zinc colours.

Nearby, **Terry Pettitt's** dark blue Fordson tractor was brought out again. This is a superbly authentic model which does all the correct tractor things and is well worth a closer look next time you get the opportunity.

Terry's guest at the meeting was **John Bland**, a prospective new member, who had not arrived empty handed. An established Meccano modeller already, John brought two models, a mid red-green steam lorry built from 1929 No.7 set manual instructions and a little gas engine, also in mid red-green, which was running exceptionally smoothly when I saw it.

Sid Beckett brought a nice little model of a Panzer Tiger Tank modelled in army coloured parts. The scale was determined by his use of standard Meccano caterpillar track. At an approximate scale of 1:13; the length overall, including the gun, is 44cm I was informed by Sid. This compact model is powered by 3 PDU's, one for each track and one for the turret rotation. Sid explained that it had been well broken in by a pack of Cub Scouts; that it was still in working order says a lot about the quality of its construction!

Ever heard of a Harbour Defence Ship called HMS Glatton? Neither had I. **Geoff Devlin** had unearthed this unusual prototype and had built a model in his inimitable style to an approximate scale of 1:72 using mid red-green parts. Some facts about the original of this odd looking ship: It was launched in 1871 only to be scrapped in 1903 after spending most of its life running along the south coast. It was 245 ft long; it sported two 12" muzzle loaded guns and had a great deal of armour. With engines capable of producing nearly 3000hp, its top speed was only 12 knots - not exactly a fast mover! Whatever, the model looked good and once again Geoff had succeeded in producing something just a little bit different.

David Hobson collects all kinds of constructional systems, so it was no surprise to find that he had brought along several models constructed from 'alternative' systems. First, and ever so common at this meeting was his General B type Omnibus, built meticulously as per the Wilson/Parmee variant in absolutely pristine nickel Meccano. It was set up for display on a stand with a mirror positioned so that we could see the works underneath, This is an excellent example of what could be achieved with Meccano all those years ago and it gave a powerful indication of what models made from new parts must have looked like - always extremely appealing, as we all know to our cost! Second, was another and less splendid model of a veteran omnibus built in the curious mixture of metal and wood parts of the Primus system. This model looked good too, but it could not really compete with the Meccano version. David's next example of an alternative system was a bridge span, carrying an OO gauge railway, built from the German Metallo Trigon system. The bridge represented the capability of a single outfit and dated from about 1913-1920.

Lastly, David brought along his very latest acquisition a large boxed set of Colombian Mecano. Cheeky this one, a red-green copy dating from the period 1950-1970, of poor quality manufacture and the box was rather too big for the strung contents. "Never mind the quality, etc "The power of the internet - David purchased this outfit via e-bay with little hassle. It will be interesting to see what kind of models it is capable of producing,

Tony Knowles is also one of our well known collectors of alternative systems. However, on this occasion he only brought a nearly genuine Meccano model. Nearly genuine, because the model dated from the Mechanics Made Easy period of around 1904 and include many replica parts made by Tony himself. The model is of a tower with working lifts, a well-known Meccano image and this particular model has been in existence for some years. The model is really first class and to add to the display value it includes an automated lift control sequence - started when the curious onlooker presses a button. To give some idea of scale it is about 2ft 6" high and looks vaguely like the Eiffel Tower.

My good friend **Colin Reid** has been developing his clocks theme since the previous meeting. He now has two interesting variants of the Congreve clock, dubbed by George Illingworth as "Colin's confusing clocks" The original clock, which we have all seen many times, has a rocking table and a ball bearing rolls along a zigzag track from one side to the other and back again.

The new variant is very clever; it has a circular ring channel (a one piece replica of lots of channel segments) mounted horizontally such that a ball bearing can roll continuously around the annular channel. Pivoted at its central diameter the ring rocks as the ball runs around it, thereby creating a very nifty

alternative to the rocking table. If you think that is fun, how about this development? Colin has also been developing an escapement wheel from the toothed plate being the bottom half of a ball bearing, standard part number 168b. The problem is that the plate has 73 teeth, which is not so convenient for dividing into 1 day = 24 hours. The solution was to bend one tooth out of line so that the escapement gizmo missed it out, then we have 72 divisions which is divisible by 24. Have a look next time; I am sure Colin will be only too pleased to demonstrate it for you. An ingenious mechanism for building a "day dial" into your clock.

At risk of becoming boring, our Chairman **George Illingworth** has moved on from breakdown crane trucks to fire engines. He is now starting to build every published model going! As he has only just started on this second major model building offensive, he only had four examples to show us at the meeting. The earliest dated from 1919 and no doubt others will follow. Roy Whitehouse's model, described above, is a contribution to the project and I expect others might be tempted to join in as we move forward. Watch this space for the next thrilling instalment.

John Ozyer-Key's meeting return tells me that he brought along two models. The fairground Terror Tower Ride, designed by Tony James, published as a Model Plan and built from the contents of a No.10 outfit. I have no recollection of seeing this model, so I can not tell you any more about it. John also brought along a part built County 4 x 4 tractor, which I did see. This is another of those massively complex solid looking models for which John is now rightly famous. Since I did not see this model running you will have to wait until my next report for a better description.

Alan Partridge is well known for constructing all manner of clever little mechanical gizmo's, and he brought a couple of such items to the meeting. Evidently he has been experimenting with compact differentials and his two examples both used an entirely spur geared arrangement. One was compact and the other was even more so, eminently suitable for smaller scale vehicles. Typically, both are improvements on similar Meccano constructions which we see from time to time.

His third 'item' was new to me, but may be familiar to those with an in depth knowledge of Meccanographs. Apparently, a novel and compact Meccanograph has been designed by Colin Cohen, a name not known to me. The arrangement appears to have a vertical orientation rather than the more usual horizontal layout and Alan showed me the framework for his version of the Meccanograph, the completed version of which I shall look forward to inspecting at the next meeting.

More or less alongside, **Tony Wakefield** had his demonstration model for the A320 Airbus landing gear mechanics. At a scale of 18:1 this is a large model, but as it is intended for mechanical demonstration the aeroplane outline only is modelled using a skeleton strip structure. The layout is geometrically correct and shows the operation of the main gear and nose gear very clearly. As an aeronautical person myself we had a good chat about such things and it reminded me that I have always intended to build something similar to demonstrate an aircraft auto-trim system. However, like so many interesting things it remains on my very long list of things to do!

It was evident at this meeting that **Ken Senar** has turned the gain down a bit and built something significantly smaller than we have become used to of late. Never-the-less still a decent size model, his rendering of the No.10 set Beam Bridge had definitely benefited from his interpretation of the original. Whilst not built precisely to the instructions, which Ken found faulty, his model has a simplified drive mechanism and a number of improvements. The bascule rise higher than the original and settles to a level position when closed, which the original did not. The modified model was built within the constraint of the No.10 set, but attempts to automate its operation for display have not yet been entirely successful.

Inevitably, I then came upon **John and Joyce Sleaford** who brought along the usual collection of smaller models all very carefully built and pristine in their appearance. Dominating the scene was the new Renault F1 racing car displayed on a revolving turntable. This superb model bowled me over such that I went to my local Renault dealer a few days later and purchased one myself. This is probably one of the best looking models Meccano has produced in recent times. Think what they could do for Ferrari or Jaguar with a change of colour scheme!

The remainder of the display comprised a collection of smaller fairground items, built using some of the more colourful, and very appropriate, modern parts. First the Ferris wheel built from the new outfit 8257 and dressed up with some lights (LED's) so that it really looked the part. The second model, also from outfit 8257, resembles the chair-o-plane ride of my youth, although John had spruced it up by doubling the number of chairs from four to eight. The third fairground ride was built from the black parts in Special Edition outfit 7080 and also looked similar to the chair-o-plane ride, but on a smaller scale. Lastly, John also brought his little showman's engine out for a run to improve the scene but, alas, forgot to bring the beer tent - What a tragedy!

I had not seen **Alan Scargill** for a very long time, so it was especially pleasing to meet up with him again. No doubt coaxed to travel to foreign southern parts by the lure of the auction. He did not arrive empty handed as he brought his very attractive beam engine, modelled in yellow-blue-zinc colours. A fair sized model with a base size of approximately 24" x 9". When I saw it, it was running very sweetly and sported a For Sale sign. Why would Alan want to sell such a nice model, I wondered?

After a bit of sleuthing around I caught up with **Richard Payn** who had a couple of nice models at the meeting. Firstly, a substantial and complex model of a DAF 8 x 4 tipper truck with demountable skip.

Richard showed me around the works which are very detailed, fully working mechanical details including an eight speed gear box, differentials, rear axles, steering, etc. Carefully modelled in yellow blue-zinc colours it measures about 2ft overall and was scaled around wheels comprising 3" pulleys with tyres. His other model was a nice example of the Meccano shop display windmill of about 1979 vintage, which provides the clue that it was built in dark blue-yellow colours of the period.

Lastly on my model tour I found two models built by **Ian Worrall**. His first model was the floating pontoon crane built to the instructions for SM28 in pristine dark blue parts. A very fine looking variant of this interesting model. Ian's second model was a modest size, part built showman's engine modelled in dark blue and yellow parts, again, an interesting colour scheme for a model of this type. Although I was previously unaware, Ernie informed me that Ian has been very ill for some time and was still recovering from surgery at the time of the meeting. Clearly, Meccano model building has helped him to get back on the road again - long may it continue. I am sure we all wish Ian well and I am told that his dad, who brought him along, also enjoyed the meeting. What a fitting conclusion to my personal model tour.

As ever, our meeting was completed by **Mike and Carole Rhoades**, our resident "traders" who provide such a valuable service tempting our members to exchange cash for "gold" in the form of yet more additions to our collections.

This meeting was also enlivened by the auction of a substantial quantity of choice items from the late John Pentney's Meccano collection. Bob Thompson did the honours as usual as the auctioneer encouraging us to part with our money. He did a good job by all accounts and a fair sum was raised for the benefit of MMG. Then, sadly, it was time to go home. There we have it, a really good meeting with lots of everything important to the Meccano enthusiast. I look forward to the autumn meeting with lots of new and interesting models to report on — and don't forget to label your models!

Mike Cook

75th Guild Meeting - 9th October 2004

Yet another year nearly gone! Our autumn meeting being a reminder that winter is just around the corner, but at least we can look forward to some model building on those dark evenings. The road to Baginton is now becoming familiar and, to digress, I was interested to discover recently that the airfield alongside the road to the village was once the home of the Armstrong-Whitworth aircraft company, one of numerous aircraft manufacturing companies whose name is sadly now only history, instead of large assemblies of fire engines or crane trucks, perhaps we should attempt to build a memorial collection of AW aircraft models - just a thought.

As at the last meeting, the promise of obtaining a small collection of parts from the late John Pentney's Meccano collection ensured a good turnout of members and, I am pleased to report, a few potential new members as well.

At this meeting the sight that greeted each arrival was a room devoid of very large models, for a change, with the exception of Paul Brecknell's superb block setter and Tony Homden's aircraft carrier. My natural reaction was one of pleasure at the prospect of having less to write about. However, my enthusiasm was short lived as I counted more, not fewer, models than usual and many have interesting details to report. My apologies for any omissions and misrepresentations, that have inadvertently found their way into the report.

My first stop was with my good friend **Colin Reid** who had brought along a different collection of items, including a pair of new models. The nickel period General Omnibus has been a popular model recently and Colin's version was equally attractive but sported a few modifications. A more realistic rendering of the curved stairway and especially the alternative cast wheels with solid rubber tyres, obtained from an Ewbank carpet sweeper, looked much better than the Meccano spoked wheels. His other model of similar style and size was a 5 ton Yorkshire steam wagon of freelance design and also sporting a few interesting details true to prototype. Living up to his reputation for having lots of luck in the sale room Colin also brought along a little used and boxed Mersey Models steam engine - obtained for few pounds, a Meccano K-type oilcan (I think) and a diminutive photocopier which I made good use of thanks to his co-operation. It is extremely useful to have a photocopier available at meetings, but most people seem unaware that Colin usually brings one "for the use of".

Next to Colin's models was a substantial AEC Matador log tractor built by **Mark Rolston**. This model was based on an earlier version by Bill Charleston, it was constructed in yellow and green parts and measured about 3ft over all. As far as I was able to ascertain, this model incorporated lots of fully working mechanical detail.

Just about everyone who builds a model from Meccano instructions modifies it in some way, even if only to get it to work correctly. **Tony Wakefield** had built the number 10 outfit model 10-18, the bottom dump truck in very clean light red and green parts. This model looks rather more attractive built up than its photograph in the instructions suggests. As built by Tony it all works just fine, but he had modified the model by taking a power drive from the tractor to the trailer to operate the bottom dump doors. This is a nice model and is worth a look next time you are deciding what to build.

Geoff Devlin also builds nice models in mid-1950's red and green colours to about number 10 outfit size, although his models are invariably his own original designs. This time his model was of a maintenance vehicle for the Tyneside Tramways and Tramroads Company based on a 1911 prototype built by the United Electric Car Co. The body of the vehicle comprised a closed van, with a tower platform above for access to overhead cables, and an open wagon with side doors. The van has accommodation for the gangers, stores and equipment, whilst the wagon carried materials for track work repairs. Geoff built this attractive model to a scale of about 1:18 to give it an overall length of about 20", a width of 6½" and a height of 14".

The rolling lift bridge is not very common although the 1948-53 Meccano instruction manual for outfit number six does include a model of such a bridge. **Tony Knowles** was inspired by the Rehoboth road bridge of 1929 vintage in the USA and decided to build the model from the Meccano instructions but, as ever, with modifications to improve its scale fidelity. His model was built using modern yellow-blue-zinc parts and incorporated a clever racking arrangement to keep the rolling action positive and true. The addition of improved counter balancing and an electric drive resulted in very smooth operation indeed. A really nice model for those who like something interestingly different.

The next models I came to were built by **David Hobson** who is also an enthusiast for alternative construction systems. Firstly, a diminutive windmill built from polished stainless steel parts from a Molecki construction system. Clearly of superior manufacturing quality, it is sad that this system did not catch on. Secondly, a much larger model of the entrance to Skegness pier resplendent in red-green and zinc Meccano parts, which captured the ornate Victorian facade very well. This superb model measured about 3ft by 18" and David had used Meccano parts to great effect to model the intricacies of the elaborate architecture. What really sets the model off are the working lights in the lamp standards!

As ever, **John and Joyce Sleaford** brought along a collection of models built from the newer Meccano outfits. Since the outfits are new, the assembled models are pristine and looked very attractive gathered together in their own mini-exhibition. Models built by Joyce included Tower Bridge from outfit 0509, Big Ben from outfit 0512, a police launch from outfit 2716 and the very new Design radio controlled car from outfit 8700. As an enthusiast for remote control I have been awaiting the launch of the radio control outfit,

so I was naturally very interested to have a good look at it. I was disappointed since the entire radio control element is enclosed in the large plastic chassis, so the components are not accessible separately for incorporation into freelance models. The Meccano "bit" is the car body which is simply a built up super-structure attached to the chassis. The nature of the outfit leaves little scope for the imaginative Meccano enthusiast to "do his own thing". John demonstrated the model to me and it really does "go" on a fully charged battery. I am sure it might appeal to some youngsters. Not to be outdone by Joyce, John brought along two small models, a skip lorry from CQ49 and a lorry mounted crane from CQ50. Needless to say both models were very attractively presented.

Then I ran into one of the largest Meccano models I have seen for some time, namely **Tony Homden's** model of HMS Furious, an aircraft carrier dating from about 1920. This is an impressive model, comprising mainly yellow parts and measuring about 8ft from stem to stern it certainly has presence. The ship was originally a battleship to which an aircraft landing deck was added later in its life, and Tony has incorporated both variants into his model. The following is from Tony's own description. The landing deck is a substantial model in its own right, 42" long by 12 $\frac{1}{2}$ " wide. The deck is made from twelve long, and twelve short strip plates. Fitted to the landing deck are the arrestor cross wires which caught the aircraft's undercarriage and longitudinal wires which were intended to prevent the aircraft going over the side. The cross wires were tensioned by fifty pound sandbags at each end which are reproduced using Meccano loaded sacks, perhaps the first time this useless part has been used as a constructional feature! At this period the arrestor hook on the aircraft was fitted to the undercarriage, rather than to the tail. Positioned behind the funnel is the net which caught aircraft which were not successfully arrested.

Other details include a working signalling lamp in one of the searchlights mounted on the funnel and several small aircraft models, one of which has a propeller from a "O" series Aeroplane Constructor outfit driven through a piece of spring cord from a motor concealed under the deck. The aircraft are fitted with torpedoes and bombs and re-loads are sitting in trolleys on the foredeck.

Having purchased some of the newer outfits Tony found that he had a useful assortment of silver parts from which he managed to model a 1918 Navy airship of about 15" long to go with Furious. The envelope is made from silver plates and flexible strips. The front and rear sections of the model are joined at one third of the way from the front using couplings as fixed nuts. One half of each coupling being attached to each part of envelope. This allows access to nuts inside the model which is otherwise totally enclosed. The rudder and tail surfaces are made using small plates and have working control surfaces operated from the gondola, which is suspended under the envelope by means of four float tie rods from the pre-war Aeroplane Constructor outfits.

Tony's final contribution to the meeting was a variable pitch propeller demonstration based on three or four Meccano propeller blades. The obligatory demonstration was made, the model works well and I suspect Tony is gestating an interesting aircraft model in which to install it- watch this space.

As young lad I always recognised it as a Messerschmitt Bubble Car, But **Alan Covel's** latest offering describes it correctly as the 1953 Messerschmitt Kabin-Roller. Apparently they were built in large numbers between 1953 and 1962 and were a reasonably common sight on our roads. Alan's model was built to a scale of 1:3.3 in his usual pristine yellow-blue-zinc parts and measured about 33 $\frac{1}{2}$ " long by 13 $\frac{1}{2}$ " wide. The colour scheme gives the model a reasonably accurate visual impression, the original being cream if my recall is reliable. To avoid building the domed transparent "cockpit canopy" Alan chose to model the convertible version, which I must say I do not remember. As always, the model was scaled around the use of the large plastic wheels and tyres favoured by Alan and, with their white walls they lend an additional air of realism to the model.

Nearby, and of a somewhat smaller size was a very nicely modelled version of SM19, the steam shovel. The model was built by **John Bland** in the original period red and green colour scheme. According to his note, he had made some small modifications to the main slew bearing to improve its operation, a common enough reaction by anyone building from original instructions.

Terry Pettitt brought along his model of a Leyland Lion PLSC single deck bus, based on a 1927 original. I thought the model was superb, measuring about 2ft long and modelled using a convincing mix of red and zinc coloured parts. Needless to say the attention to detail and care with which the model had been built is typical of what we have come to expect of this very accomplished modeller. Not only that, the model was built about 25 years ago and it still retains its interest after many outings over the years. Like a number of our very regular meeting attendees,

Brian Edwards invariably brings a new model along to just about every meeting. This time Brian's contribution was a vertical steam engine, a model of a Savage No.1 organ engine of 1860's vintage. Modelled as ever in 1950's mid-red and green colours, the flywheel comprised a pair of hub discs and the whole was mounted on a 6" diameter circular plate. This attractive compact model measured about 12" high. Brian also brought his nice little model of a steam powered table engine, also measuring about 12" high and which he showed at the last meeting.

John Palmer is still building multi-kit style models of road vehicles based around the Meccano lorry cab, which was the essential component of that series of outfits. I have been writing these reports for some years now and John's models have featured in nearly every issue. It is testimony to his imagination and

enthusiasm that he is still finding new variants to build. This time his models were a breakdown crane truck modelled in dark blue parts, a tipper truck modelled in yellow and zinc parts and a basic truck modelled in yellow and blue parts, and that is how he does it.

John's models were rather dwarfed by **Dave Bradley's** go kart model which was placed nearby. I think Dave's model featured in the Stoneleigh report so I will limit my comments to the most interesting feature - the engine. At first glance I, like others, thought the engine was an adapted model aeroplane glow-plug engine. But we were mistaken, as the engine made very clever use of Meccano parts to conceal the black motor and plastic gearbox found in a number of modern outfits. The model measured about 18" long with a wheel track of about 12" and was constructed with parts of various colours to give it a business like realism.

Even after their recent auction sale, **Tom and Matthew McCallum** still have lots of interesting items remaining in their collection and they brought some to the meeting for our admiration. Of great historical interest was a show case made up to display every Meccano Guild medal and badge ever produced, some of which are extremely rare. The second item was the Meccano signal gantry model which appears in some 1920's instruction manuals, although this version was constructed with late 1930's blue and gold parts. Their third exhibit was a very nice model of a motorbike which makes extensive and very effective use of parts taken from the car and aeroplane constructor outfits. Mixed with blue-gold Meccano parts this resulted in a very attractive model. The history I am unsure of, but I know two people who would be only too pleased to elucidate!

Conveniently, the next model was also a superb vintage item brought along by **Roy Whitehouse** who, I am pleased to say, cannot resist building models with his superb collection of restored blue-gold Meccano. This time it was SM22, the showman's engine which looked enormously attractive in those pristine colours. It is pity that the mechanical design of the model is not more scale like. However, we can overlook that in such a superb model. It is easy to see why Meccano must have been so appealing to small, and not so small, boys over the years. The Company certainly understood how to best present its products.

John Molden brought one of his many fairground models to the meeting, this time a Scania Devastator built in his familiar colour scheme of mid-red and green. His models are characterised by their large size and intense attention to detail. This model has an overall length of 2ft 6", a track of 12" and height 15", and this is only a tractor unit! As always in John's models just about everything works as per prototype - it has six forward speeds and two reverse speeds, clutches and numerous differentials, just to name the obvious.

Then I came to **Martin Whitehead's** model of the Nuremberg clock, which was quite miniature in comparison. The model was built to a design by Pat Briggs published in a 1972 MM with only few modifications. Martin's choice of colours, red and dark blue, gave the model an attractive appearance. The model has a foliot-verge escapement and is powered by a No.1 clockwork motor and it works, although Martin had some trouble getting the escapement to run true.

Now, as most members know **Trevor Frankling** is quite an expert at building reciprocating electric motors from Meccano electrical components with some success. Most impressively he has exported his technology to the motor car chassis model, SM1A. The four cylinder engine looks runs and sounds very authentic and it fits into the allotted space under the bonnet. The crankshaft was built up from especially machined couplings in the interests of accuracy and the switches for the four "cylinder" solenoids, dating from 1929, were hidden in the clutch housing. The model is permanently set up for display so I do not know if it has enough get up and go to run along unaided. Quite an ingenious achievement by Trevor.

I cannot remember reporting on a model made by **Humphrey Crawshaw** before, so perhaps this is a first. The model was made in response to a challenge set by Alan Partridge, to make any object using only double angle strips, double brackets, nuts, $\frac{7}{32}$ " and $\frac{1}{2}$ " bolts. The Waywiser, as it is called, was used to make the earliest road maps of England, by one James Ogilvy, in 1655. Properly speaking this is not a model - it is a full size replica of a measuring instrument working in good honest yards, chains, furlongs and miles, English distances. The basis of the machine is a wheel of exactly 36" circumference (made out of lots of double angle strips), which rolls along the ground. Attached to the wheel is a small cam which actuates, through a tappet and push rod, a pawl engaging with a 22 tooth wheel. (The pi-eyed reader will note that 22 holes have a $3\frac{1}{2}$ " diameter) One revolution of this wheel gives one chain. A cam on this wheel drives a 20-tooth wheel to measure two furlongs. A two-furlong cam on this wheel drives a 24-tooth wheel to measure 8 furlongs thrice, or three miles. And, in Humphrey's own words, "Surprise! We have fortuitously measured a League!!"

Humphrey's other model was of a Shand Mason Steam Fire Engine of 1880. The steam pump is a double acting single cylinder machine, working on a Scotch crank, a feature not often modelled in Meccano, and is driven by an electric motor concealed in the water tank. Most of its plumbing is represented using non-Meccano parts. The model was built to a scale of approximately 1:12, and was based on a photograph published in the magazine "Old Glory".

A while ago I reported on a model in the course of construction by **Tony Brown**. The model, a Mack "Wrecker" is now finished and Tony brought it along to the meeting. The model is based on a Mack 6x6 truck which was fitted with the wrecking gear from a Diamond T near the end of WW2. All four of the back wheels are driven through differentials although the way this is done has more in common with Foden Steam Wagons than the prototype. Drive from a powerdrive motor under the bonnet is taken through a

three speed and reverse gear box into a hi-lo selector which also acts as a splitter box to drive the winch, and from there the two booms. This gives the model six forward and two reverse speeds. The model is now complete with an original Mack type fold down cab roof. The model can be constructed from the parts in a No.10 outfit and the Jeep model which the wrecker can 'recover' can also be made from the same outfit. The jeep can be lifted by a single-boom to recreate a period 'war bonds' publicity shot and which Tony demonstrated for us during the model tour.

A brief chat with **Roger Burton** revealed that the shaping machine model built from outfit No.7 instruction dating from the 1950's was all his own work. Built from mid-red and green parts the machine looked right and ran very smoothly. Roger explained a more than passing interest in the machine as he had been trained to use a shaper in his younger days, he also pointed out the mechanical deficiencies in the Meccano model. It would appear that there is some scope here for a more accurate rendering of the shaping machine. In particular, the mechanism for the reciprocating ram would pose a significant challenge. A word with Roger would see you on the right track.

The next model was **Paul Brecknell's** superb block setter modelled mainly in green Meccano parts. Since this model has now been described by me and others on several occasions I will not repeat myself. However, I did take advantage of the meeting to take couple of photographs of the crane.

Once again **George Illingworth** brought along a small selection of his fire engine models - no less than 12 models being a small selection! The assembled models included an example from every decade between 1918 and 1996, and all were modelled in the correct period parts and colours. This is an interesting way of bringing Meccano history to life.

The next model, also a fire engine was built by your reporter **Mike Cook**. I was much inspired by Roy Whitehouse's outfit No.8 fire engine modelled in blue and gold parts, which he brought to the last meeting. This model looked so attractive I decided to make my own contribution to George's continuing fire engine story. The model was also constructed from the 1950's No.8 outfit instruction manual in my best early 1960's light red and green parts. Initially built exactly as per instructions, however I could not resist modifying it as I could see all sorts of ways in which it could be "improved".

For a start, the body of the vehicle is a vast empty space, so I filled it with the infra-red remote controller to link into the standard steering arrangement and to drive the rear wheels via a standard differential. Since this worked well I decided to add power to the ladder elevation and extension functions using a crane motor driven by two AA cells. Now this was a challenge, especially as there is not so much space in the ladder base to house the reduction gearing needed and the motor produces virtually no usable power. I am still working on a solution to this challenge - I am nearly there. A comical twist is that my fire engine caught fire at the meeting! I up ended it to show off the remote control mechanics and when I turned it right way up the battery moved, a terminal shorted on the structure and the plastic battery holder got hot enough to produce smoke. However, no damage done, except to the battery holder which will be replaced with one that does not have exposed metal parts.

I wonder how many members **Roger Marriott** fooled with his Meccano display model featuring four little aeroplanes suspended from the usual style illuminated rotating superstructure. The model looked very nice modelled in blue-gold parts and was a convincing example of a classical Meccano Ltd. shop display model. However it was entirely fictitious, being the product of Roger's fertile imagination. He also brought along a mint example of the No.00 Aeroplane Constructor outfit from his collection.

David Barrett brought along a shoebox size Meccanograph being a Mk2 version of one he built earlier. All I can say about this model is that it was put together with great care and looked very much the precision engineering machine that it is. Examples of patterns produced by the machine emphasised the "precision" in my description. They were very complex and indeed, were also very attractive.

Mike Edkins also builds compact precision engineering items in Meccano. At this meeting he showed us a new demonstration model of a small ball bearing table for application to a wide variety of models. The inner race comprised two rings, again suitable spaced, made up from 3" curved stepped strips. A full set of ball bearings between the two races resulted in a very compact and rugged turntable - absolutely typical of Mike's modelling ingenuity.

Tony Parmee: has taken a rest from building, or engineering, outfit No. 10 models and instead built "The Boxers" from Roger Marriott's article in CQ. 20 in the slot and the two pugilists fight it out for a couple of minutes. However, in Tony's example the fight was a bit one sided as there appeared to be some sort of bias in the construction of the boxers. Otherwise an amusing and nicely presented diversion.

The next model I came to was the beginning of a substantial and incredibly detailed Oshkosh truck by **Richard Payn**. The finished model will incorporate a mechanically actuated version of a hydraulic crane which sits on the already complex chassis. Richard demonstrated this and it is a splendid example of Meccano engineering, probably at its most complex, although the ingenuity of Meccano model builders seems to be unbounded.

Richard's other model was a tower clock built to a design by Noel Ta'bois dating from about 1986. This also represents a clever bit of model design by a past master of the art. Of particular interest is the way in which the second hand is driven via a rod with keyway journalled within the main hour hand spindle.

Since Richard Payn's and **John Ozyer-Key's** model building interests are obviously similar, it was not

surprising to find John's latest model alongside and the two enthusiasts discussing the finer points of their models. John's model was of what can only be described as a very substantial modern tractor together with an equally substantial six furrow plough, also in the course of construction. Based on wheels with monster tyres, the tractor alone measured about 2ft 6in overall, built mainly from brass, but with a few yellow & zinc parts for good measure. This radio controlled model incorporates a huge amount of mechanical detail and includes an eight speed and reverse gearbox among its many features.

Then I moved on to find a very much smaller model, also part built, by **Albert Rowe**. The model is of a Sopwith Camel, the details for which were downloaded from the model library of one Chris Bourne. The nicely detailed bits and pieces I saw included a fuselage and a couple of wing panels built mainly in red and green parts. The size suggested a wingspan of about 2ft, although Albert says the scale is approximately 1:12. Apparently two variants of the rotary engine have been evaluated, one based on nine worm gears to represent the cylinders and an elegant alternative by a certain G. Illingworth. This would be a nice model when completed and one for us all to look out for at the next meeting. Albert also showed me some cardboard cut-outs of aircraft which he had downloaded from another site, and which lend themselves to translation into Meccano. Incidentally, Albert recommends web sites of this kind as a vast resource for Meccano modellers.

Ken Wright did not bring a model to this meeting, but he did bring some of his photograph albums of past meetings and events in which large numbers of models are preserved for pictorial posterity.

Among his usual items of interest, **Ernie Chandler** brought along a little tipping lorry built in red-green parts from 1950's outfit No.6 instructions. As ever, nicely put together and, in Ernie's own words, "an exercise in following a script".

Last, but not least, I caught up with **Stephen Wilson** who, happily, has recovered some of his stolen Meccano collection. As if to make the point he brought along an articulated lorry built in light red-green parts from the outfit No.8 instruction manual dating from about 1960. I believe the model is one of the stolen items that he has managed to recover.

Our meeting was completed by **Mike and Carole Rhoades** and by **Geoff and Elizabeth Wright**, our resident "traders", who provide a variety of tempting Meccano items for those of us who still have not got enough of the stuff!

There we have it -- that was the October meeting. We were fortunate to have lots of models as usual, but the average size was rather smaller than we have become used to. However, as you see there were lots of interesting models to contemplate, but you had to look just a little bit harder to find the real gems.

Eagle eyed readers may have noticed that some models have received a more detailed write up than I usually manage. The reason for this is that their builders produced a type written description, for which I am always grateful and find very useful. On this occasion I scanned the text into my computer and have edited it into the report. So, if in future you would like your model to get good "coverage" you could help by providing a typed or word processed description, as short or as long as you like. I, of course, reserve the right to hack it about to suit! It is also a great help to me to have a few written comments about your models on the meeting return form. Sometimes this is literally all I have to go on. It is also of greatest benefit to us all if you label your models at the meeting.

The final memory was one of members packing up to go home, but each one left clutching a strong white bag containing the treasured items obtained from the late John Pentney's collection. No doubt these parts will be put to good use and I look forward to seeing the results at the next meeting.

76th Model Report at Baginton - 26th March 2005

An enjoyable meeting on Easter Saturday, with an excellent attendance.

Tony Parmee came with his No. 10 Set Railway Crane which was a new version of the one he brought to the last meeting. Able to lift his 4-6-0 loco which weighs 21 lbs. Slight modifications included a slow slew drive, a recess for a hole in the match truck and a multi roller support for the jib cradle as inspired by Terry Bullingham.

John Sleaford brought his models of Concorde, a radio controlled Tractor with Muck-spreader and a Model Plan 86 Bus modified to a Birmingham Leyland PS2.

Stephen Way brought his Caterpillar D10K, currently under construction. Accurate replica workings included dummy hydraulic rams and diesel engine. This model also featured a fully sprung track base with equalising beams, the model painted in Caterpillar yellow.

Keith Way came two models of Steam Engines. Firstly, a simple model of a Vertical Victorian Engine built with a compound wheel and a simulated governor on top. The second was that of a Beam Engine, inspired by the 1830s engine built by the Coalbrookdale Company now assembled in the Enginuity Main Hall at the Ironbridge Gorge Museum. Keith said that the flywheel of this model was a non-standard part but could have been constructed from a series of No. 119 channel segments. The overall scale of the model was approx. 1/12.

David Hobson brought two Trix models from the last period of production in Germany. A motorised crane, and a yellow Tower Crane. Trix finished in Germany in 1998 when the company was taken over by Marklin.

John Molden was with his Station Section which was still under construction. The model being of a Wild Mouse Spinning Roller Coaster with one of seven seating modules. The finished model will be 6 feet by 10 feet square and 4 feet high. It will fold down into four tri-axle articulated trailers.

Sid Beckett arrived with his 84cm long Yellow Submarine built to his own design.

Ken and Margaret Senar showed the first part of another impressive aircraft model. This will be the Vampire which Ken flew. The nose makes good use of the new dished triangular parts. Ken explained the problems he faces in mounting the twin booms.

Alan Covell brought two models, one being a 1913 Mercer Raceabout built to a scale of 1:4. The Mercer company was founded in 1909 by the Roebing family. The Raceabout was launched in 1913. The cars had a five litre engine, 3 or 4 speeds and a differential. They were completely open except for a small monocle of a windscreen for the driver. Behind the two armchair like seats was a 40 gallon fuel tank and two spare wheels. A top speed of 70 mph was claimed. Not many "Raceabouts" were made and the 40 or so survivors are said to be worth their weight in Uranium! The model was 41" long, 17" wide and ran on 8" pram tyres.

Alan's other model was a Special Racing Car based on the 1962 Lotus Type 25 this model was 33" long, 14" wide and ran on Goodyear Ashtray Tyres. It was powered by a small electric motor housed inside the Coventry Climax V8 engine. A small brass gear rotated between two 3" rubber tyres mounted inboard on the rear axle. One tyre drove while the other freewheeled. Of the six or so cars built, two were destroyed due to accidents.

John MacDonald had a Mack Artillery Tractor. Finished in John's usual Army Green paint.

Tony Knowles came along with an F-86A model made from an Argentinian set called "Combiplano". It was old in the 1950s and is the only set Tony reckons from which a range of fairly realistic models of actual aircraft could be made, from pre-war bi-planes to the B-36 and B-47.

Roger Marriott brought the model of the Magician. The model displaying someone making objects appear and disappear on a table.

Geoff Devlin arrived with a Howards 3 Wheeled Ploughing Engine dated from 1866 with a single cylinder and a single rope drum. Built to a scale of 1:16 the model was 16" long, 7½" wide, and 9" high. Another model being a Fork Lift Truck from the design 4 kit from 2004. 11" long, 4" wide, and 7" high. Finally a chair made from the left over bits.

Ken Wright brought his two Talylyn Railway Locomotives as seen before. A new model was a No. 4 Edward Thomas Locomotive built in 1921 for the Corrls Railway which was purchased by the Talylyn Railway in 1951.

George Illingworth's model was a version of Chris Shute's Forth Bridge which was built from the Marks and Spencer Monuments set.

Ernie Chandler came with four small models. A rebuild of Bert Halliday's prize winning Showman's Engine, a blue Volkswagen Van which was a gift from the late Les Gines, a model from New Zealand and a No. 8 set Lorry.

Richard Payn also came with a Model of Bert Halliday's original large Traction Engine along with several photographs from Bert's collection.

Tony Wakefield brought his model of a Travelling Staircase Escalator. The size, being 34" long, 25" high, and 12½" wide. A total of 25 moving steps and built to a scale of 1:10. It was built from the book "How stuff works". The steps were 3½" flanged plates. The step pivots were double brackets with bolt heads as runners. Power to move the link steps used two 20 volt motors. The handrail guides were made from old brass curtain rail because nothing was suitable in Meccano. Chain was used for the hand rails using a PDU

for power.

Paul Hubbard had four models with him. The first being a 1950s set No. 9 Marine Engine. The second being a No.10 set Beam Bridge. Third was a Helicopter from the Multi Set which was under construction. Finally the Model Plan No. 62, the Terror Tower. This has an 18" x 18" base with the gearbox titled under the base. This model has been rebuilt since the Telford Exhibition. The winding drum has been moved so that the cable comes up through the middle of the tower on to a connector cage tower and has been made more stable and it does not rock any more. The tower is nearly 6 feet tall by $5\frac{1}{2}$ " square and was made in three 2 foot sections. Added to the outside were guide rails for the lift. These were to stop the lift hitting the sides of the tower as it dropped down to the base. At the bottom were two shock absorbers to help the lift as it slowed down to a stop.

Roy Whitehouse arrived with a No. 5 set Railway Breakdown Crane in his usual restored blue and gold parts. Also there was a No. 4 set with all the original parts.

John Nuttall's 1:32 scale Hammer Head Crane was built in pre-war dark red and green. The tower being $9\frac{1}{2}$ " square and $24\frac{1}{2}$ " tall, the boom being $5\frac{1}{2}$ " wide and $43\frac{1}{4}$ " long. The crane ran from a 3 movement gearbox and a long sideplate motor and was mounted on a flanged ring roller bearing. Martin Whitehead brought a model of the Blackpool Tower. This was the Meccano Magazine model of the month for October 1958. Constructed to the illustrations in the magazine from red and green parts. The lifts worked and were controlled by an automatic reversing mechanism powered by an M5 powerdrive motor. The base of the model was only $2\frac{1}{2}$ " high so the reversing mechanism had to be built flat.

Bob Ford came with his 1:12 scale Caterpillar 621 Scraper. These machines came from America for the building of the M1 motorway. To drive the front wheels was via an all pinion differential and a hub reduction gear on each wheel. The raising and lowering of the shield and bucket was operated by a small motor in the arch. The pusher blade for emptying the bucket was operated by a screwed rod.

Terry Bullingham came with his Horizontal Steam Engine.

John Palmer arrived with an array of Multikit based trucks.

Dave Bradley brought a model based on the new remote control system. The chassis being fitted with a Marklin MAN cab and an extra axle at the rear.

Mike Edkins, Christopher Bond and Tony Homden's models are in separate features.

Jim Gamble who is an enthusiast in the history of Meccano came with a great nostalgic display. This Meccano is decades old but looks as if it was made only recently.

Terry Pettitt brought two models of car chassis'. One having an Armstrong Siddeley pre-selector transmission. The other displaying various ratios via chain drives.

Tom and Matthew McCallum arrived with their nice model of a harbour crane.

David Bradley

77th Model Report at Baginton - 8th October 2005

Alan Covell brought a model of the Forth Road Bridge, not the one that is available through Marks & Spencer, but a bigger one, 1:450 scale & 12' 2" in length, together with a train running across built up from the Cylinder piece. The train was being pulled to & fro by string, but is now motorised. Alan's second model was a Mercedes Car Transporter 40" in length & finished in yellow/zinc. Not content with this, Alan also built 8 vintage racing cars. The top deck of the Car Transporter was raised & lowered by a pull cord operated by the starting handle at the front of the lorry!

Ken Wright had a splendid display of his 'G' gauge Tallylyn Locomotives together with the new Diesel locomotive, trucks & Brake Van, & these were merrily running around on the railway track. Beautifully finished in Ken's colours of red & green.

Tony Homden brought his model of the 'Wisbech' Fire Engine as featured earlier. John & Joyce Sleaford as usual brought along a good selection of models, starting with the black lorry, advertised in this year's catalogue & available from M&S; on the advertising this lorry is shown in purple! Another lorry based on the Bernard Perrier's Model shown in a recent CQ article. These lorries are complete with trailers which carry Traction Engines and Ploughing machines, fully fitted with winches & screw-jacks. Also there was a Steam Lorry with coal pulling a Living Van & water cart,

John MacDonald came with the 'Honest John' rocket resting on the specially-adapted REO 6 x 6 Truck. Finished in John's usual colour of army green and with everything working; steering, gearbox and differential.

John Bridger brought the 'Nellie' locomotive which won the Issigonis Shield back in 1987 and displayed on track on a plinth.

John Molden brought along the Lorry and Trailer of the Fairground Ride, 'The Devastator!'

Tony Wakefield brought along the Escalator and where before the handrail was sprocket chain, Tony has now altered this to electrical wire, which is very effective and is of better appearance.

Terry Pettitt brought his Blue Fordson Farm Tractor with 3 speeds and reverse. This towed a trailer with a tipping action and a tow bar brake release. Terry also brought his model of a Fraser Nash Sports Car Chassis.

Tom McCallum arrived with a selection of other Meccano Products' showing a railway bridge finished in blue/gold with a Hornby gauge O locomotive crossing with several wagons, together with a Car Kit and hoardings.

Geoff Devlin came with his model of the Snaefell Mountain Railway Tramcar No 2 which was mounted on an incline of 1 in 12. The tramcar is held in place by a 'Fell Patent Caliper' brake on the centre rail.

Trevor Frankling with the puzzling worm-driven mechanism

Dave Bradley arrived with a model from the new 5 model set. This was the Mountain Bike. This was accompanied by a 1970s Mogul Truck

John Palmer arrived with his Volvo Low Loader.

Ernie Chandler brought a selection of small models. Notably a very well detailed Traction Engine which was featured in a Meccano Magazine. Another being a Volkswagen Transporter originally built by the late Les Gines.

Tony Parmee came with two models. The first being a Toplis Level Luffing Crane rebuilt from the January 1931 Meccano Magazine. The second a General 'B' Omnibus from 1915.

Mike Edkins brought his Birmingham Corporation Tram. Built to a scale of approximately 1 1/8" to 1 ft. Brian Cotgrove came with his Double Deck Steam Locomotive. Originally built by Boynton in 1894 for a railway in Long Island, U.S.A.

The latest addition to **George Illingworth's** collection of Breakdown Trucks was a new model From the 15 Model set. Another from the Pocket Meccano.

David Hobson brought his Cinema Organ Show, with lights, action and music. His other model being a Radio Controlled Tracked Vehicle based on the new 4x4 Remote Control Chassis.

David Barrett came with a new Mechanical Digger with the new Cable Commands from the new 15 Model Set.

Tony Knowles brought an improved version of the current model Spitfire.

Stephen Way's progress with his Caterpillar D10R Bulldozer continues. We are starting to see signs of it running.

Stephen's dad, **Keith Way** also came with his Wagon Load of Wagons. One being a Steam Wagon based on instructions from the 1935 G Set. Two other similar models were scaled down to cater for the payloads.

Paul Hubbard arrived with his Small Table Engine which was under construction. Paul also brought two versions of the 30 Model Set Trike.

Roger Marriott brought a nice model of a Clock incorporating the dial from the 1970s Clock Kits

Roy Whitehouse came with his selection of blue/gold models and original Meccano sets.

Albert Rowe came with his Pacific Type Express Locomotive.

78th Guild Meeting March 2006

Ken Wright brought his Tallylyn Railway Loco Dolgoch with Coach No. 3 Brake van no. 5 with three Slate Wagons. Built to a scale of 1/12, it ran on an LGB 'G' gauge track.

Chris Copp arrived with his Rickshaw Man. A design based on an original idea by Phil Edwards which was shown at the Toronto Exhibition in 2003. Also a Walking Robot using an adaptation of leg, hip and knee movements as used on the Rickshaw Man. Finally, two Crawlers, and one Walker. Chris is hoping to enter them for Meccanuity 2006.

Paul Brecknell's model was under construction. His model was a Multi-Caterpillar base for a large Tracked Wheel Excavator.

Tony Wakefield followed with two 4 speed and reverse Gearboxes originally built by Philip Webb's Everything Automotive Pt.3

John MacDonald came with two models. A Military Concrete Mixer, a fully operational freelance model and a 6 x 6 Tank Transporter which again was fully operational.

Keith Way a collection of steam wagons ranging from one about 1/2 inch long upwards. The wagons gave an indication of the various boiler layouts employed by Foden, Sentinel, Naylor and the Yorkshire Steam Wagon Companies.

Stephen Way had his Caterpillar Bulldozer, now featuring the rear ripper, and hopefully having the dummy rams assembled.

John Sleaford arrived with a Pick Up from Constructor Quarterly 69. Using the Radio Control, a Mercedes Unimog with similar mechanics, a Dumper Truck built from set no. 6515 which was cable operated in pale blue and finally a Recovery Lorry from the No. 8 manual in Yellow, blue and zinc.

Roger Burton came with his Weatherill Winding Engine, as originally designed by Peter Mason. The model represented a winding engine used on the Stanhope and Type Railway which was opened in 1833. The engine was designed to haul coal wagons up a rope-worked incline over a mile long with gradients as steep as 1 in 12. It was an adaptation of the usual colliery winding engine of the area, and had a single vertical cylinder 2 feet 6 inches in diameter by five feet stroke. The piston cross-head was supported by James Watt's parallel link motion. The engine is now preserved in the National Railway Museum in York.

Sid Beckett had his Leaflet 9.14 Vertical Milling Machine.

Roy Whitehouse brought his small display of small Meccano Aircraft.

George Illingworth arrived with three 1/12 scale Fire Engines. A 1914 Dennis N Pump Escape, a 1943 Austin ATV - National Fire Service with a Coventry Climax Trailer Pump and a Bedford QL Fire Tender as used by the Army Fire Service. This pulled a Dennis No. 2 Trailer Pump.

Alan Covel brought two models. The first being a G.W.R. '1400' Class 0-4-2 Tank Engine pulling a Goods Train from the 1930s era, scale 1/27. Having bought a small 'OO' gauge model of the train, Alan wanted to make it so he multiplied it by 2 3/4 to make the Meccano model. The Tank Engine was followed by a Saxa Salt Truck, a Bogie Bolster Wagon, an Open Truck, a Petrol Tanker Wagon and finally a Guards Van. The model had a Powerdrive motor and chain drive to all four wheels in the Saxa Truck. The overall length, 75".

His second model was a 50" wingspan model of the Wright Brothers' Aircraft of 1903. The model slowly rotated on a central pivot due to the thrust from the two 11" dia. Propellers.

Tom & Matthew McCallum came with a Heavy Lift Railway Crane as described in CQ No.71. Also a Twin Rotor Helicopter all in immaculate red and green.

John Bridger brought a Lartigue Monorail Loco and Carriage with Listowel & Ballybunion Stock built in the style of Rowland Emmett. The loco was named "Ellie" (after the neighbours charming daughter, Eleanor) and because it rhymed with "Nellie", his other Emmett. The loco was based on the design by Peter Matthews (Model Plan 134) but with mechanical and cosmetic modifications.

Tony Parmee arrived with two models. The first being a Mississippi Steam Boat, a free lance design. The paddle wheel slowly rotated with a slow crank rod typical of those boats which engaged wheels underneath. Castor steering was connected to dummy rudders all controlled by the wheel on the bridge. Tony plans to embellish it with lights, play people and accompanied by Scott Joplin music. The second being an Outline Vertical Lift Bridge, which demonstrated the principal of lifting from one end only, using a clever arrangement used in Rotterdam in 1933.

David Hobson had two models based on the new Radio Control Series. A crawler Tractor, and a Churchill Tank.

Geoff Devlin came with three models. Big Ben and Son built from the Special Edition and the John Lewis' set, the Remote Control Six Wheel Tractor Unit and a Batman Car built from scrap Meccano bits.

John Molden's Fairground expands with a Trailer Section for transporting his Wild Mouse' Roller Coaster Assembly. The Trailer was 6 wheeled with a 5th wheel dolly section which could enable the trailer to be either towed by a draw bar or a tractor unit.

John Nuttall showed a Front Wheel Drive Unit based on a Scammell Truck.

Terry Pettitt arrived with an AEC Mammoth Major 8 Wheel Lorry. Fitted with a clutch, gearbox and differentials, it also had compensated springing on both rear axles.

Terry's other model was a Fordson Tractor with Tipping Trailer, fitted with a 3 speed gearbox, clutch and

spur gear differential in the final reduction drive.

Paul Hubbard brought an American Double Ferris Wheel, the size being $18\frac{1}{2}$ " x $12\frac{1}{2}$ " X 36" high. This model was run by a motor in the base via a gearbox. It also had a slack reverse mechanism so the boom could be moved for assembly and. Breakdown.

Paul's second model, a Storage Area and Lift with four floors and two lifts. The dimensions being $12\frac{1}{2}$ " square by 30" high.

Ernie Chandler was once famed for driving a Volkswagen Transporter in the past so a small model of it originally made by the late Les Gines was present along with a very intricate miniature model of a Showman's Engine. This was a model plan featured in the December 1970 Meccano Magazine.

Roger Marriott came with a Dealer Display model of a 1950s red and green Digger. This featured the shovel at the front lifting up and down via a mechanism below in a box. It was a shame there wasn't room in the meeting for Roger's car A beautiful red 1950s Jaguar XK150 in immaculate condition.

Alan Partridge continued on a theme by a North Midlands Meccano Guild member, John Lacey. John had made a model of a cheese board so Alan complimented it with his Just Desserts'. A Butler's Tray built from part of a Geared Roller Bearing carrying six slices of Salami, Spring Onions and Sour Grapes.

Robin Schoolar brought 2 small compact model of a Mini Front Wheel Drive Mechanism with Reduction Gearing. This was made with the small plastic gears.

John Bland arrived with an Articulated Tank Lorry as featured in the September 1955 edition of the Meccano Magazine, which was possible to build from me No. 8 set. Also a Super Model Traction Engine.

Dave Bradley's model was a hybrid between Meccano and German Marklin. The chassis from the new Remote Control Series carried a Marklin MAN Cab. This model made as a Tractor Unit to attach a trailer, of your choice.

Terry Bullingham had a model of a Railway Breakdown Crane.

A new member, **David Shirt** brought his Traction Engine based on the 1928 Showman's Engine Supermodel, but as an agricultural version.

Tony Homden, Mike Edkins, Christopher Bond, Trevor Frankling, and Ken Senar are mentioned in separate articles.

The meeting was complimented by dealers, Tom McCallum and John Thorpe (standing in for Mike Rhoades) keeping us all in bits.

79th Model Report -14th October 2006

It is quite some time since I last wrote a model report and I am now beginning to question the wisdom of volunteering on this occasion! As ever the meeting was well attended by members and the number of models was also as large as at any previous meeting I have reported on - good news for the membership, lots of work for me.

Since I had not attended a guild meeting, or any Meccano meeting, for a year, I was really looking forward to meeting up with old friends again and catching up with their model building. I was not disappointed. One advantage of writing the model report is the opportunity it provides to talk with just about everyone present about their models, so after the meeting it really feels like a worthwhile day out. Before getting on with my personal model tour there are two important things for me to say.

Firstly, Carole Rhoades enthusiastically informed me of her fund raising sailing escapade in aid of multiple- sclerosis. In the photo she was clearly enjoying the role of helmsman in what looked like a high performance yacht. As result of this jaunt and the generosity of her sponsors, many of whom were our members, she managed to raise about £400. Later in the meeting she graciously thanked all for their support.

Shortly after my arrival I realised that Ernie Chandler was not present, and he never misses a meet- ing! So I enquired after his whereabouts, and it turned out that he was not so well on this occasion and decided to give the meeting a miss. I am sure I speak for all and wish him well with the hope that by the time he gets to read this report he is fully recovered and is busy building a new model or two.

First stop on my tour was to look at the beginnings of an unusual and substantial model by **Ken Senar** called "Big Lizzie", a one-off Australian tractor. The machine was developed by Frank Bottrill, the inventor of the "Dreadnought" wheel, a kind of walking wheel, and a forerunner of the caterpillar track used for agricultural machinery. This huge and ungainly vehicle was used for rough agricultural work; it had a top speed of just over 1 mph and a turning radius of 200 feet. It carried a three year supply of fuel oil for its 8 ton, 60 hp, single cylinder Blackstone engine. It also had tanks for both drinking and general purpose water. The vehicle was equipped for long periods in the bush as it carried a winch, crane, spares, a blacksmith's forge, anvil, and full workshop for running repairs. The tractor could carry an 80 ton load, although it usually towed two trailers, also fitted with 'Dreadnought' wheels. Subject to the satisfactory conclusion of the experimental development, the model will be to a scale of 5.5:1 as dictated by the sizes of the large circular parts in me currently accepted Meccano system. The finished model will be approximately 52½ inches long by 18½ inches wide. Its height has yet to be determined due to lack of information about the roof crane. To take the stresses of the anticipated heavy weight, large axle components are being used for wheel bearings and for the front axle bearer pivot.

At the meeting, Ken showed a complete rear wheel, a part built rear wheel to illustrate its construction method and the steerable front axle complete with wheels - impressive! Typical of this very experienced builder, this model will eventually be big, heavy and accurate in its mechanical detail. A model to look out for at me next meeting.

After such a humbling start I then found several models of a more familiar kind by **Tony Homden**, including his Auxiliary Fire Service Land Rover, which was made to complement his Green Goddess model and to illustrate the way in which the pipeline gradient was measured. It is unpowered and is without sus- pension or steering. The emergency pumps, popularly known as Green Goddess's, were not originally intended to act as single units, but as part of a mobile column. Their prime function was to be linked together by a six inch pipeline to pump water from distant supplies. In order to do this the route of the pipeline had to be surveyed and the position of each Goddess determined according to the pipeline gradient. Land Rovers fitted with a gradient measuring device, based on a simple pendulum, were used to survey the proposed route for the pipeline. The model represents a Series Two machine and is built to a scale of 1:10. It is constructed mainly from Mechanised Army plates and strips, some girders from the Army Multikit and a few standard parts. The sides and doors make use of the pre-bent plates which appeared in the second version of the Mechanised Army kit. Meccano tyres have not been used, although the three inch tyre was the right diameter it was far too thin to look right. Instead, much "chunkier" rubber tyres were used which came from a model lorry construction set. Although still not quite wide enough they do look rather better. The "canvas" rear cover is removable to reveal the interior and on the work table is a gradient/ distance chart and a map which were scanned and reduced in scale by computer.

Tony also brought along a little house built from a number 5 Minibrix set. As he pointed out, Minibrix was one of three kits for the construction of buildings which were extensively advertised in the Meccano Magazine, presumably as they worked well with Hornby trains. The other two were Brickplayer and Bayko. The Minibrix system used interlocking rubber components which were similar to Lego, but not so versatile. Interestingly, the main business of the manufacturers of Minibrix was rubber components for the boot and shoe industry!

Three Meccano aeroplanes completed Tony's show. Two biplanes were assembled from a collection of genuine aeroplane parts, standard parts and non-standard items obtained from other systems such as Juneero. One of these models was fitted with a working rotary engine, engineered from a standard radial engine and fitted to the shaft of a crane motor removed from its case. A Townsend ring is attached to the

front of the fuselage the wrong way around to complete the engine, which spins a propeller in a realistic manner. The third aeroplane was a monoplane built to utilise a pair of rare corrugated tapered wings and one corrugated fuselage side. Again, using a combination of bits and pieces Tony managed to create a convincing version of the Italian Caproni heavy bomber.

Next, I came to my good friend **Colin Reid** who had brought along a rolling ball clock based, I believe, on a John Wilding design. We have seen similar clocks before, but as Colin is always tinkering they seem to evolve with time. His model used a large circular channel girder around which a 3/4" ball bearing ran causing the girder to tilt from side to side in order to regulate the clock. The clock was working nicely, but I cannot say how well it keeps time, or for how long it runs between motor winding.

With Colin was **Mark Rolston** whose model was of a road grading machine, built mainly in yellow-blue colours to a Canadian Model Plan design. Mark informed me that the model has been assembled for 12 years and during that time he has made various modifications to improve its functionality.

In spite of the fact that John had only been out of hospital for a couple of days, it was good to see both **John and Joyce Sleaford** at the meeting, together with a sizeable collection of their smaller models. Just goes to show that a good Meccanoman is irreplaceable! John's problem concerns his vision and he is now finding it difficult to see well enough for Meccano modelling, but I am sure he will not give up and we all wish him well for the future. To their credit they brought the following models, two showman's engines, two ploughing engines, a crane engine, a steam roller, a larger steam lorry, a tractor and water cart and a small model of the Empire State Building constructed from one of the newer theme sets. As ever a nice little exhibition of their own.

John MacDonald never ceases to amaze me - he is still finding enough Meccano to build his inimitable military models! His model collection must now be pretty large with examples of most types of vehicle I guess. He showed two models at the meeting, an 8 x 8 Wrecker and a freelance 6 x 4 tipping truck. The scales of the models were such that the Wrecker is about 24" long and the Tipper truck about 18" long. As always just about everything works as per prototype. The Wrecker boasted, eight wheel drive, powered turntable steering, a gearbox providing six forward and two reverse speeds, powered winch and crane hoists, jib luffing and extension, rocking beam suspension, working lights, etc. And all of that by means of a remote switching unit. The tipper has the correct type of suspension, a gearbox with power take-off for the tipping mechanism, double drive bogies with differentials and working lights. Wonderful stuff! A credit to John's boundless ingenuity as a Meccano model builder.

For some time **Paul Hubbard** has been working on a very large Ferris wheel fairground ride, with construction based loosely on one half of the double flying boats super model design, I think. Anyway, it is big - having a diameter of about three feet or more.

At the previous meeting he had some mechanical problems which have since been resolved by installing a more powerful motor, and it was running well when I saw it. He told me that he still has a little more to do on the base before he can call the model finished. Paul also brought along three small Outfit models comprising a dragster, a racing car and a micro-light aeroplane.

Also on show as his very latest acquisition, the radio controlled rally car, which looked very fine in its shiny modern colours, and which Paul had received for his birthday a few days earlier.

Next I came to **Keith Way** whose model was of the Coles six ton mobile crane described in MP128. This model was originally derived from the 1949 Dinky Toy, and built in yellow and zinc colours it really looks right - as I remember the Dinky Toy! The model was carefully built, it looked very nice and Keith took the cab off to show me the interior mechanics. A nice manageable model.

Alongside I found the alternative systems department!

First, **David Hobson** had three models built from various constructional systems: A railway breakdown crane built from F.A.C., a Swedish industrial prototyping constructional system featuring mainly black parts. A small marine diesel engine built from what looked like red and green Trix, but was in fact the Danish Techno system. And a small "Meccanograph" look-alike built from super quality nickel parts. This latter system was also an industrial prototyping construction system originating in Switzerland and later taken over by a German company.

Second, **Tony Knowles** showed two models built from the French Constructor system which survived from 1916 until 1964 - its history is beginning to sound familiar! This system appeared rather delicate compared with Meccano and was based on a curious lozenge shaped component not unlike a double-sided Meccano girder frame (part number 113). The building parts were mainly red, green and nickel, depending on age - much the same as Meccano in the 1920's. Tony's models were of a small gantry crane built in 1920's nickel, and a 1930's house built in the red-green colours.

Bob Ford brought along an unusual model of a modern aircraft tractor, the type used for moving aircraft around at airports. Basically, the tractor is a rectangular box with large inset wheels at each corner and an elevating driver cab at the front. Of low height, these vehicles are intended to be manoeuvred underneath parked aircraft, when the cab is lowered. However, to improve the drivers' all round vision whilst towing an aircraft the cab can be elevated above the main body of the tractor. Built in yellow and zinc colours, the model somehow looked right. It also functioned correctly as Bob demonstrated, including raising and lowering the cab.

Next I came to **Mike Edkins** who had built a mechanical shovel from instructions which were originally published in the October 1951 issue of Meccano Magazine. Like many building instructions published by Meccano over the years, there are errors and several structural shortcomings, which resulted in a model with mediocre operating performance. A major error was the impossibility of installing the roof when the back of the cab was in place, so the latter was made removable. The undercarriage, which deflected under the weight of the superstructure, has been unobtrusively reinforced. Track steering was ineffective since the non-driven track tended to continue moving when its drive was disengaged; the addition of a simple brake cured this. Also, the cab would rotate whenever the track drive was engaged; a simple automatic brake fitted to the slew drive eliminated this tendency. Several other minor changes have also been made to result in what is now a reasonably successful model.

Tony Parmee continues to produce models that can be built from a number 10 outfit or, as on this occasion, from a 1954 number 9 outfit. The model is of the classical lifting bridge inspired by a 1930's Rotterdam prototype, but he stressed that it was not a standard construction manual design. The clever feature of the model design is that the lift is driven from one end only by means of a special arrangement of cords. No visible cords run over the top as in most manual models. The lifting cycle is automated for display purposes and the gearing is also within the scope of the number 9 outfit. The model is about four feet long and is quite typical of what we have come to expect from this expert builder.

Nearby I spotted a nicely built dumper truck from the number 10 set instructions and finished in correct period mid red and green parts. It was built by **Roger Burton** who explained that he had improved the superstructure a little, and he had also equipped the model with some rather nice tyres, which gave it a more realistic appearance.

Tom and Matthew McCallum were represented at the meeting by a sizeable walking dragline carefully constructed from mint light red and green parts. The model was unmissable and immediately recognisable as the model shown on the cover of the mid 1950's Meccano instruction manuals. The model was built from the instructions assembled by Jim Gamble, with the help of Ian Stoney, and published as MP87. This really is a lovely looking model and epitomises what Meccano must mean to so many of my generation - seriously nostalgic!

Then it was a case of one extreme to another. **Alan Covel** is noted for building fairly large models in a style which is recognisably his own, and he always manages to find some interestingly different subject. This time it was an early Morgan three wheeled single seat racing car of 1912 vintage. The original was a record breaker since it managed to cover 59 miles in one hour. The model is big at six feet long and 31" wide across the front wheels. It is built up as a sturdy space frame with a dummy V-twin JAP air cooled engine at the front in the standard Morgan layout. Only the wheels are non Meccano items, the front pair having been rescued from a wheelchair and the single rear wheel was from a child's cycle. At about two thirds scale the model was obviously not far short of full size and since Alan is a fairly slight person, he proved his point by sitting in the model and moving it around the floor! This event caused not a little excitement amongst the members and really demonstrated the remarkable versatility of Meccano - whatever next?

And now to another substantial model of an entirely different kind and built by **Howard Somerville**. The model represents a 'two car' lift operating over several floors, and is based on that installed at Stansted airport. Most importantly, the lift is not cable operated, rather it is driven hydraulically, and so the cars do not have counter weights. Howard has modelled this using a complex arrangement of motors and electrics, but we were unable to see it working as it had not travelled so well and some gremlins had got into the works. I do hope Howard will bring the model to the next meeting as it would be instructive to see it working, and the builder is noted for the ingenuity of his electro-mechanical Meccano systems.

Dave Bradley's model which was an experimental model of a four wheel drive model based on a Quad Buggy showing the use of the tyres from the recent blue Action Man jeep incorporating fully independent double wishbone suspension. Quite large at about 18" long and equipped with remote control gear in his usual style.

However, **John Molden's** model next door dwarfed Dave's vehicle. His fairground model collection continues to grow and the latest construction will be of a very, very large big wheel when it is finished. So far he has nearly finished the Foden 8 x 2 box lorry which carries the power supply for the wheel machinery. This model is familiar in size, at about four feet long and built from red and green parts, as are most of the other models in the collection. This very solid model incorporates the usual refinements, namely three speed and reverse gear box, working clutch and working hand brake. One to watch out for in the future.

Then my tour took in a number of smaller models by a gaggle of reliable "performers". First; and in keeping with his regular theme, **Terry Pettitt** brought along a compact five speed and reverse gearbox scaled to suit his usual road vehicle models. Terry's other model on this occasion was a Frazer Nash sports car chassis complete with a three speed and reverse gearbox connected by a chain drive to the solid rear axle. The scale of the model produced a chassis of about 18" overall length.

Next I came to a nice little locomotive built by **Brian Edwards** in his recognisable style utilising mid red and green parts as ever. The model was of a Duchess/Coronation class locomotive built to an approximate scale of 1:20. At about 30" overall, the model looked like a classical 1950's example of a number 9 outfit

model, but of course this model was a freelance design.

As we all know, **John Palmer** likes to build models using road vehicle multi-kit parts and it is interesting that he continues to find new prototypes for his models. This time, his models were based on the army multi-kit parts and comprised a Scammell tractor and trailer, and a Land Rover. However, in a departure from his usual choice of model, he also brought along a somewhat larger model of a Mack tractor unit, built using Meccano parts from a Marklin instruction manual. The model looked good in a red and green colour scheme and I would describe it as being of about number 8/9 outfit size, to give you an idea. The model has a 6 x 4 layout with working steering, three speed gearbox and differential.

Sid Beckett brought along a nice little locomotive model as well. The model is of a GWR 0-6-0 pannier tank locomotive sitting on about 2ft of made up track. The model utilises a large area of green parts to give it an authentic (1929) appearance and it has been engineered to give display demonstrations, although it was static when I saw it. Quite a solid little model of about 16"~18" overall length, it certainly looked the part. Railway theme models appeared to be popular at this meeting.

The next model was of a railway breakdown crane built by **Terry Bullingham**. The model is representative of a typical steam powered, railway heavy recovery crane from the latter half of the 19th-century. The relatively small Gauge-1 scale (10mm: 1ft) was selected for ease of transportation and that it will run on 'LGB' garden railway track. This determined the overall length of the model, including match truck at about 30". The chosen scale lends itself nicely to the 'Meccano' system in many ways, for example, flanged wheels, pulleys, and gears. In order to maintain the scale

Terry found it necessary to manufacture some parts - with apologies to purists! Model features include travelling fairleads for hoisting and luffing drums, stable central bearing (20 rollers in there!), full bearings on the bogie pivots, supporting out-riggers, and insulated flanged wheels on the match-truck and on one side of the main chassis. The model is electrically powered and picks up its power from the track. The model was depicted on 'Foundry duty' at the locomotive works for the time being, since Terry has yet to construct a suitable load.

Additionally, Terry brought along a small, but very heavy, flywheel he has devised. The flywheel is about 4" diameter and the rim incorporates 48 couplings to give it high inertia. An interesting idea, but costly in brassware! Given Terry's visual handicap all of this is quite remarkable!

Aeroplane models were also quite popular at the meeting. Five or six small models had been brought along by new member **John Reid**. One was constructed from an aero- plane outfit to represent, I think, a Ford Tri-motor layout? The others were built up from carefully selected standard parts to give good representations at small scale of a number of WW1 biplanes. Quite a nice little display.

However, all of John's models were completely dwarfed by the vast construction alongside, which is currently under construction by **John Ozyer-Key**. Those familiar with John's models will understand the style - a very big vehicle chassis built in dark blue, yellow and brass colours - mainly brass! The model is about five feet long and will eventually be the chassis for a substantial mobile crane. The chassis has 12 wheels most of which are driven and steerable. All of the mechanical Features work (or will do when complete) and represent a huge investment in modelling time and brassware. John explained that the model will eventually have a five section telescopic jib. However, I did not manage to find out what the prototype was.

And then to something a bit more manageable. **Hugh Freeman**, another new member or more correctly, returning member after a long lapse, brought along an orrery built to the instructions in MP156. It was seen working quite happily at the meeting.

Tony Wakefield brought along a rather unusual model to demonstrate the workings of an escalator of the kind found on the London underground and in department stores everywhere. Apparently he built it on request for a TV programme - National Geographic series "I didn't know that". Built in red and green parts the model showed an "up" and "down" escalator pair in an open framework such that the mechanisms can be seen clearly. It works very well and is a nice example of how Meccano can be used for instructive purposes as well.

Michael Bent's contribution to this meeting was a model of a fair ground spider ride, built in red and green colours from the instructions in MP140. Unfortunately, I did not see the model in action, but it certainly looked the part. This is a nice model which makes good use of the number 10 Outfit parts and, I suspect, the design was originally crafted by Tony Parmee.

Roger Marriott is well known for producing excellent models, usually in the context of Meccano history. His latest model of the modern motor car chassis was no exception to his record. The model was originally featured as Model of the Month in the MM for January 1957. The model is a rebuild of a dealers display model released at the time. This is one of the most complex dealer display models with more features than normally found in such models. Dealer display models generally have simple operating mechanisms and few actions to go wrong.

However, this model is fully equipped with steering, brakes, clutch, gear-box and differential mechanism. The gear box gives three forward speeds and reverse. For demonstration purposes the gear box is locked into top gear. The model has independently sprung wheels, the clutch can be operated by depressing the pedal and the brake pedal operates on one rear wheel only to demonstrate the action of the differential

gear for the rear axle.

A very nice model in period red and green parts, it is mounted on a base board such that it can be "rolled" over to view from all angles.

Immaculate 1930's blue-gold period models are the prerogative of **Roy Whitehouse**. However, for this meeting he had also been delving into MM for 1957. In particular he had constructed the automatic gearbox for a model crane featured in MM for October 1957. The idea being that the crane function could be entirely automated for display purposes. Roy had chosen the steam shovel, SM 19, in which to incorporate the automatic gearbox. As with so many published Meccano models Roy explained that it did not work! At least, not until he had made considerable change to the design. He was not too impressed with the result, but he was able to demonstrate a degree of automation at the meeting. Now there's a real challenge for the mechanically minded!

Sandwiched between Roy's models and a collection by George Illingworth, was a pair of steam traction engines built by your reporter, **Mike Cook**. My two models were a Fowler ploughing engine built in light red green colours and a Burrell road tractor built in the later blue-yellow-zinc colours. The Fowler was modelled at approximately 1:14 scale and the Burrell at approximately 1:12 scale. This made them compact enough to utilise hub discs for the rear wheels. The Burrell is also fully automated for remote control using the Meccano infra-red control unit, which works very well. Both models have been seen on a number of occasions before, so enough for now!

Finally, an assortment of fire engines by our Chairman, **George Illingworth**. As far as I could make out, the models are part of a larger collection which represents the history of fire engines. The models were built to a common scale of about 1:12 and included a Dennis 30cwt engine dating from the 1930's, a Land Rover dating from the 1950's and a Green Goddess also dating from the 1950's. Nicely built using colour schemes to complement the period of the prototypes this is a nice way of building an informative and attractive display. So there we have it, another most enjoyable meeting was over.

Regulars **Geoff Devlin** and **Ken Wright** were conspicuous by their absence - both were attending the nearby Midlands Model Engineering Exhibition together with their model displays. However, Ken did put in an appearance later in the afternoon.

Our resident dealers on this occasion were regulars **Mike and Carole Rhoades**, and **John Thorpe** all of whom help to create that special Meccano atmosphere. As ever, my apologies for errors, omissions and half-truths. I can only do so much with my notes and my memory and I rely on members to inform me of their model details.

So my grateful thanks go to those who gave me written notes on their models, however brief as it helps me to develop a better report. The hawk eyed among you will recognise the material I have scanned into the report.

So next time around, please remember to write a brief description of your models on the return you send to Dave Bradley and, if you have time, a nice descriptive model notice for the edification of those at the meeting is also really useful. With 'batteries recharged', now is the time to start building over the winter months in time for the meeting in March.

Mike Cook

80th Meeting Report - 31st March 2007

Paul Hubbard brought a Twin Steam Engine 3ft x 18 $\frac{1}{2}$ " wide. Has two twin fly-wheels and valve gear and an American Double Ferris Wheel 24 $\frac{1}{2}$ " long x 18 $\frac{1}{2}$ " wide x 24 $\frac{1}{2}$ " high from base. Paul also came with some small kit models. A Micro light Plane, a Motorbike, a Go Cart, an Off Road Quad Buggy, a Helicopter, and a Gun Ship.

Sid Beckett came with a No. 9A model 9.18 Marine Engine. Building it from a manual, but it took ages to get it to work.

Paul Brecknell showed his Crawler Track Base for Giant Bucket Wheel Excavator.

Dave Phillips brought a 1938 Standard Fordson Tractor and Pettit 11 Ton Tipping Corn Trailer, built from a photograph.

Tony Parmee's No 10 set High Flyer was inspired by the Blackpool Pleasure Beach ride, the mechanism is exposed to view, and engages, accelerates, decelerates and disengages drive to the rotor automatically. Mounted on a tower the cars fly out just over head level, and are in all 6 colour schemes of the No. 10's existence.

Ken Wright displayed his Marks & Spencer 3 for 2 Bling, Bling, Radio Control Car.

Alan Scargill came with an Chassis of an Eight W/heel Lorry. Built in red and Green With seven differentials.

Roger Marriott showed his 1928 SML No. 1 Meccano Chassis and Display of Meccano Products from 1928/ 29.

Alan Covel brought his 1935 Morgan 3 Wheeler "Super Sports" with Matchless V-Twin Engine. When jacked up the model had working steering and the rear wheel was powered by a small electric motor and a chain drive. The model sat on three 13 $\frac{1}{2}$ " dia. cycle wheels with the spare carried on the barrel back body. At a scale of 1:2 overall dimensions are:- Length, 61", Width over front wheels, 28" and the wheelbase, 42". The full size machines were provided at Malvern from 1935 to the outbreak of the Second World War in 1939. They could travel at 73mph and up to 40 mpg. They weighed a few pounds over the 8 cwt limit.

Glen McBirnie joined us with his display of Collectable Model Vehicles as shown at Stoneleigh.

Dave Bradley is experimenting with a six speed automatic transmission. This uses a differential as employed on Paul Joachim's model plan of the Leyland Atlantean Double Decker Bus, but by using epicyclic gear ratios selected by a cam. Hopefully this will be used in a 1:7 scale bus. Although only three epicyclic gear trains show, one is a straight through drive giving top gear and two multiples giving the bottom two ratios.

Bob Ford came with his 1:24 scale model of the Chesapeake and Ohio Articulated Locomotive. It was used for hauling coal on the 125 mile section of the Hinton Division. It was more powerful than the double sided consolidations. This resulted in crew costs being cut by half and an overall 38 per cent reduction in ton mile costs. The source information was from the Model Railroader Encyclopaedia volume 1.

John Molden's Big Ben Drop Tower was in transport form. This model is made up from two trailers bolted from end to end. The height is 9ft 6ins, the seats are pulled to the top of the tower and then dropped to the bottom.

Roy Whitehouse brought a Horizontal Steam Engine in mid red and green. Sourced from Mike

Rhoades, Roy bought the model because it was a good runner and ideal for the Model Engineering Show. Christopher Bond's 1:8 scale Horizontal Boring Machine is based on the Richardson 5N of 1960. This was shown at the spring meeting of 2006 and was on the Guild's stand at the Fosse Midlands Model Engineering Exhibition in October 2006.

John & Joyce Sleaford displayed Three Red Arrows on a stand, Three Spitfires and a Piper Cub from the Constructor Quarterly by Bernard Perrier with a Wing Walker added.

Tony Knowles showed his small Multi Jib Level Luffing Crane made from an East German system called WEMA, produced in 1947. The posts are mainly black and have alternative holes and slots. The model is based on a drawing of a crane from a German web site.

Roger Burton's Congreve Rolling Ball Clock was designed by John Wilding and featured in the Constructor Quarterly No. 73, September 2006, looked like an appealing design. Roger has not been able to make it run for more than an hour and has made no attempt to adjust the timekeeping. The only ball bearing he has is larger than recommended, but works after the track has been widened. The fence around the model is to prevent the ball bearing going absent without leave. Two methods described for driving this model. Roger was attracted to the version using an electric motor as the driving weight but had no solid state tilt switch to control it, so one was designed using Elektrikit parts. It appears vital to level the clock using a spirit level. Red Arrows Hawk which was a Christmas present from his wife.

Keith Way brought his Fork Lift Truck, Model 9.3, Special Model Leaflet; The Meccano E15R motor listed in the plans has been replaced by an alternative motor. Controls in the cab provide steering at the rear end, lifting and lowering of the fork lift, and forward/ reverse travel. However, the mechanical arrangements are such that the motor itself needs to be put in reverse in order to make any of the power options perform in the opposite direction.

David Hobson's Empire State Building with King Kong was built from Swiss Stokys parts.

Terry Pettitt showed his Frazer Nash 1930s Sports Car. The chassis has been shown before and

incorporates a 3 speed and reverse by chain drives to a solid back axle (no Differential) as in the prototype. The model has a powerdrive unit in a dummy engine and is fitted with a simple clutch. Terry also brought an MG Magna Sports Car (old model) and Brough Superior Motorcycle and Sidecar with the same engine as fitted to the Meccano Morgan 3 Wheeler.

John Palmer came with a Marklin based Tractor Unit.

Terry Bullingham came with a Crankshaft form a Triple Expansion Beam Engine. John Armstrong visited us with a Coles Crane, a freelance adaptation form the No. 9A set model adapted for remote control via cables. John also came with an interesting model of a clock.

Trevor Frankling brought a Single Cylinder Acting Steam Engine as on the Meccano Magazine suggestion page from June 1930, with added boiler, valve and lagged steam pipe. Also a Two Cylinder Under Type Steam Engine from around 1925 modified to operate with solenoids. Finally, a Four Cylinder Internal Combustion Engine, basic engine as the MM suggestion page from November 1930. Carbs, air filter, dynamo, fan and spark plugs are added. The engine is mounted on a test bed with the radiator with the flywheel cover drawn back to show the distributor.

Paul McMahon's Orrery showed the Sun, the four inner planets and the earth's moon. This was accompanied by a nice model of a clock. Paul's daughter, Kristina brought some motorised Swing Boats from the Ferris wheel set.

John Ozyer-Key came with his Liebherr 1300/1 Crane which featured a 5 speed and reverse transmission with a 2 speed splitter. Also with differential locks, steering and out riggers which will be all remote control when the model is complete.

Alan Partridge arrived with a Light Weight Crane jib as originally constructed by Colin Cohen. Alan explained that the design enabled better visibility through it.

Colin Reid brought his No. 10 set Dumper Truck and a Car Chassis.

Howard Somerville showed us a model of a man based on the cover of the NMMG's Newsmag, originally created by Geoff Coles.

George Illingworth's three Fire Engines were an 1894 Shand Mason Twin Cylinder Vertical Steam Horse Drawn model, a 1939 Bedford WL Heavy Unit in post war colours and a 1996 Dennis Sabre Water Tender Ladder as currently stationed at Kenilworth. All models built to 1:12.

Anthony Els joined us from South Africa with an interesting clutch mechanism.

Tom and Matthew McCallum brought two locomotives. One of them being a dealer display model.

Tony Homden's Land Rover and Trailer, **Geoff Wright's** The Wright "Patent" Non-Wobbly Table, "Leyland Van" Jigsaw Puzzle, Leyland "Titan" Tdi Double Decker Bus and **Geoff Devlin's** Case Steiger Stx 530 Quadtrac, Vadervstad Top Down Plough & Seed Sower and Suzuki Tu250x Super Classic Motorcycle will be featured in detail in the next bulletin.

Finally, many thanks to the ladies, who prepared the refreshments. I enjoyed them very much. I'm sure you all did too.

81st Model Report - 13th October 2007

Welcome to the 40th anniversary report of the Midlands Meccano Guild. It is one year since I last wrote a model report so I am a bit out of touch - I hope what follows is reasonably coherent. Since I had not attended any Meccano event or meeting in the interim, I was really looking forward to, once again, meeting up with friends old and new and having the opportunity to see a new collection of models. As ever the meeting was well attended by members and their models so we were all in for an interesting and enjoyable day. My apologies to those I have overlooked or misrepresented, but a few models were completely anonymous.

First to catch my eye was a well-made model of a Scammell "Mechanical Horse" and trailer built by **Michael Bent**. The vehicle comprised a small three wheeled tractor unit and small articulated trailer and was a common sight in my youth delivering from the local railway yard to businesses in the area. The model was built in yellow-blue-zinc colours, it was powered by a PDU motor and was about 18" long.

Alan Scargill busied himself by selling lots of old stuff surplus to requirements, but he also brought along an interesting tower crane model. The model comprised a bit of a mongrel colour scheme, but mainly 1950's red and green. The model stood on a $12\frac{1}{2}$ " x $9\frac{1}{2}$ " base, the tower was about 24" high, the jib was about 18" long and I counted at least 4 motors hidden about the structure. Alan explained a novel feature of the model was its rising telescopic tower which just about doubled the height of the model.

A reliable contributor to our meetings is **Brian Edwards** who, on this occasion, brought along a very nice model of a 1950's Lambretta motor scooter. Another item of nostalgia I can remember well. Nicely made in 1950's mid red-green parts, the model was scaled by the ashtray tyres used for the wheels. Quite large at an overall length of about 24", the model included lots of internal detail when the side panels were removed to reveal the engine as per prototype.

Our treasurer **Paul Brecknell** seems to like large challenging models. This time he brought the beginnings of what will eventually become a very large model of a giant wheel excavator. So far he has completed the undercarriage which comprises three independently powered bogies each fitted with 4 crawler tracks. A large flanged ring indicated the lower part of the main superstructure bearing. As ever, the workmanship was of a high standard and the model will look very nice in its light red- green colour scheme when it is completed.

Roy Whitehouse has developed a reputation for building very fine models most suitable for display. This time it was a classical model of an oil field pumping engine immaculately finished in light red-green colours. In operation it was extremely quiet and Roy explained he had taken some care to achieve a very smooth trouble free operation for display purposes. The model was of an eye catching size, occupying an 18" cube approximately. Roy's other model was also for display being a novelty construction to rotate a plastic "rain-maker" intermittently. It also worked well- very amusing!

Ken Wright has built another small scale locomotive model to add to his stable. The style is familiar and the model was a typical example from this very skilled modeller. The model was of a narrow gauge Hunslet (No.3) 0-4-0 tank locomotive "Holy War" as originally supplied to Dinorwic slate quarry in North Wales in 1902. Built to an approximate scale of 1:12, the model includes the later addition of a cab; it runs on standard LGB track and is powered by a 12v motor.

Mike Edkins brought along an improved version of his skeleton clock which first saw the light of day in 1993, for those with long memories. The design was published in the Meccano Newsmag 108, July 2007. The novelty is that it is probably the only Meccano clock design to successfully utilise a Magic Motor For its power, it runs for 30 hours on a winding, it has an accuracy of 2 minutes per day and it strikes the hour. A significant achievement by one of our acknowledged innovators.

Locomotive models are quite popular at the moment and **Tony Wakefield** brought along the large 4-4-0 passenger locomotive as described in the number 10 set instruction leaflet 12. This attractive model is about 4ft long and Tony's model was carefully built in mid red-green colours. Tony explained that he had incorporated numerous modifications and improvements, especially in the motion and valve gear detail, and that he had found it an interesting way to pass the very wet summer we have just experienced.

Tom McCallum's offering at this meeting was a large gantry crane, beautifully built in pristine light red-green colours. The model measured about 5ft wide by about 2ft high and the bogies on either side ran on standard (as new of course) O-gauge track. Designed for display, the model ran through an auto- mated sequence which involved the hoist running across the gantry, picking up a girder frame from a flat truck model returning across the gantry and finally depositing the load back on the Hat truck. Unmissable, even in a room full of Meccano models.

Matthew McCallum brought along an unused 1970's number 10 set, blue-yellow-zinc period, in a four drawer cabinet. Now very much a collector's item, it is nice to see these sets from time to time. In similar vein,

Roger Marriott frequently brings along Meccano display models as produced by Binns Road for shop window display. His model at the meeting depicted a lifting shovel based around a tractor and sitting on an illuminated base depicting the Meccano logo. When working the model cycles through the shovel operation continuously whilst the wheels rotate. Using 1950's mid red-green parts the model was a reproduction of an original, but it did look sufficiently genuine to fool me!

Next I came to an interesting collection of colourful exhibits by those exponents of the "other constructional systems", namely **David Hobson** and **Tony Knowles**. David's main exhibit was in fact a superb Meccano model of a Doxford Opposed Piston Two-Stroke Diesel Engine. The prototype on which the model is based was built by the Sunderland firm of William Doxford and remained in production from 1919 until the 1980's. They were about 30ft high and had between 3 and 9 cylinders. An example is preserved in the Beamish Museum. The model was a 3 cylinder version with cut away cylinders to show the opposed piston motion. The model was built in a carefully selected red-zinc colour scheme, its base measured about 24" x 9 1/2" and it was about 24" high. For the purposes of display the various essential components of the engine were labelled and it all looked very attractive. David also brought along an example of a French PY- FLY construction set together with a small model made from some of its contents. The system comprised a curious mix of smallish pre-formed bamboo parts, some unusual purpose made brass fasteners and some very attractive wooden wheels. The system dates from about 1916 -1922 and although this example was in excellent condition, the method of construction seemed extremely fiddly to me.

Tony, on the other hand, brought along three models made from British construction sets dating from the 1950's and all were attempting to capture the intense interest in high speed flight and space exploration prevailing amongst youngsters at the time. The influence of The Eagle comic was much in evidence here. First a Dan Dare spaceship built from hefty pre-formed steel parts from a Spaceship Builder outfit, Second, a very similar vehicle made from almost identical parts from an AJET outfit, and thirdly a delta jet aeroplane, also made from the equally hefty steel parts of a Supersonic Konstrukta outfit. All of these models were of similar size and measuring about 8" long by about 6" wing span.

Aeroplanes were also the meme of the next collection I came to, which was assembled by **John Reid**. First an Aeroplane Constructor model of the Handley Page "Hannibal" based on a model which featured in a 1930s Meccano Magazine. Built to an approximate scale of 1:40, this attractive four engined model had a wingspan of about 30" and a similar overall length.

John's second model was a modified version of the Armstrong Whitworth Argosy as featured in 'SML 34. The model as shown was only part completed and was built in an attractive red-yellow-zinc colour scheme. The modified radial engines had a double bank of cylinders, unlike the original model, which consumed vast numbers of worm gears.

Terry Bullingham never ceases to amaze! Here we have a modeller with seriously impaired vision who had machined a 6-spoke flywheel as he was not content with the Meccano approximation. The flywheel was about 7" diameter, the spokes screw into the rim from inside and the hub accommodates standard Meccano shafting. This was an impressive accomplishment. The heavy flywheel was made to an excellent standard and finish, so it will be interesting to see what model Terry has in mind for it.

David Shirt is a new name for me and he is a pretty competent model builder. The part completed model he brought was of the Combe Mill beam engine, nicely built in yellow-blue-zinc colours and used channel segments for the flywheel, which determined its scale. In David's words - "the engine is on the Blenheim Estate sawmill near Woodstock, it dates from 1852, and was used to operate the sawmill line-shafting when the river flow was insufficient to turn the water wheel". David is a member of the Combe Mill Society which puts on public steaming days four times a year, when he usually has a selection of his models and Meccano steam engines on display.

I have absolutely no idea who built the rather nice part completed astronomical clock I came to next.

Ken Senar seems to have been having a rest from building his more usual very large models. This time he brought along some ingenious novelty models, designed no doubt to appeal to the younger at heart! Dumble the Dragon was powered by a 12v motor and was capable of wing flapping, walking motion and mouth opening, but without the roaring flame. Dumble's companions were a funny little Spiffy the Spider, also powered by a 12v motor, and the simple, but very effective Willie the Worm who simply ran along under clockwork power.

George Illingworth brought along yet more fire engines. Firstly, a nice model of a 1934 Merryweather unit, built to a scale of about 1:12 in mid 1950s red- green parts, it was about 18" long and was based on the Dinky model. George managed to incorporate some nice pump detail into this model by dexterous use of Meccano brassware.

His second model was the later Land Rover based unit, similarly constructed to copy the Dinky model. His third model was built from instructions by Bert Love published in a 1978 MM. Nicely built in yellow-blue-zinc scheme of 40 years ago, in typical Bert Style, the model ingeniously used nearly every part in a 1970s No 5 outfit.

Geoff Devlin brought along his very nice model of the Matlock Cable Tramway (1893- 1927) which was the earliest non-horse tramway to be constructed in the country. The route climbed through 300ft from Crown Square at the foot of the hill, to the top of Matlock Bank close to the Spa Baths. It was also the steepest single track cable operated public tramway in the world, having a one in five gradient with a passing loop at its steepest point. The cableway was a continuous loop, the steam winding house being at the top of the hill with the tram shed alongside. The tramway had three cars available with two in use at any one time, one on the up side and one on the down side. The two cars counterbalanced each other, but

the last car returning to the depot at night struggled up the bank at a snail's pace! The cars were made by Dick, Kerr & Co., the lower deck had 13 seats and the open upper deck 18 seats. The three inch cable, in the conduit below the road, was gripped by a control operated by the driver who stood on one of the two platforms under the stairs at either end of the vehicle. Two braking systems were fitted, one on the wheels, the other for emergency use directly onto the rails, the driver or conductor being able to activate them from either platform. The model was nicely presented in red- green colours and was built to an approximate scale of 1:12 to give dimensions - 22" long, 6" wide by 11 $\frac{1}{2}$ " high.

John Nuttall brought along a very nicely modelled class K 2-6-4 tank locomotive, carefully built in mid red green parts set off with grey chimney, dome, etc. The scale of the model was determined by the "standard" pattern wheels based on a 6" diameter circular plate and hub disc combination. Overall it was similar in size to the SML locomotive model built by Tony Wakefield and described earlier.

Our regular husband and wife team, **John and Joyce Sleaford** had once again assembled their familiar collection of smaller models, most having been built from the newer outfits. Pride of place on this occasion was taken by an attractive and colourful Ferris wheel built from two 8257 sets plus a few additional parts. The wheel was driven by a 12v motor and was decorated with 40 illuminated LEDs - a nice display model. Other models in their display included an excavator built from the "Cable Command" 6515 outfit, a small car built from the "Tuning" 4952 outfit and the diminutive steam roller, living van and water cart.

That very talented model builder **John MacDonald** has expanded his modelling subject matter to include automobiles since I last had the pleasure of looking at his workmanship. He had models of a 1936 Auto Union racing car and a 1960s Dragster at this meeting, built to the usual very high standard to feature a host of functional detail. The Auto Union mechanical details included trailing link front suspension, swing axle rear suspension, clutch and three speed gearbox incorporated with the rear axle and working drum brakes. The Dragster, being a simpler kind of vehicle, only incorporated a clutch with two speed gearbox and working disc brakes on the rear wheels.

Also on the theme of speed, **Alan Covel** brought two models of record breaking "cars" to the meeting. In the style we have come to expect, Alan always manages to find unusual prototypes, he likes to build big and his models often include some innovative element. The smaller of his two models was based on the prototype "La Jamais Contente" (never satisfied) Land Speed Record Car which, in 1899, the Belgian Camille Jentazy raised the record to a staggering 65.7mph. The car had a bullet shaped body constructed in aluminium and was electrically powered. Alan's model was built mainly from zinc parts to give it the appropriate appearance, it measured 24" long and 9" wide, also electrically powered and its wheels were 3" pulleys with tyres to give it a remarkably life- like appearance.

His second model was based on the 1970 prototype "Blue Flame" record breaker driven by Gary Gabelich (U.S.A.) which raised the land speed record to 622.4mph. This monster also had an aluminium body, it was rocket powered and the fuel was a heady mix of liquid propane, hydrogen peroxide and natural gas. The model was indeed large and very eye catching, it measured 78" long by 18" wide, it was electrically powered and Alan found four 6 $\frac{1}{2}$ " diameter model aircraft wheels to give it a most authentic look.

Alan's other model was of a little Sentinel shunter with which he amused us all by running it up and down 10ft of LGB track - the auto reverse was a bit fierce but it did work fine when I saw it in action.

Chris Bond brought along the head from his horizontal boring machine, which is presumably a model in progress. The machine head was quite a complex piece of equipment, so Chris included a mock-up to illustrate the method he used to obtain the three concentric rotary motions required to rotate the head, drive the radial tool slide and drive the drilling spindle. The latter has an axial feed facility implemented using a hollow shaft from the heavy axle system and a differential. And just in case all that was a bit tricky to digest, he also brought a Meccano Cling-Film dispenser which is used daily in his kitchen. "It takes all kinds", as they say!

Also on a machine tool theme, **Dave Bradley** brought his Meccano dividing head. The drive comprised a worm meshing with a 60 tooth gear to give a 60:1 ratio, thus one turn of the handle resulted in six degree output rotation. Cleverly using a six hole wheel disc as a dividing plate, rotation through one hole resulted in one degree at the output. Neat!

Then it was back to the road vehicle theme. **Terry Pettitt** is well known for his detailed heavy duty road vehicles and on this occasion he brought along some work in progress. A freelance design for an eight wheeled model lorry chassis brimming with all sorts of ingenious mechanical detail. The model was scaled around 6" diameter ashtray tyres to give the chassis an overall length of about 4ft. Mechanical features included independent front suspension, drive axles located by radius rods and incorporating epicyclic reduction gear at each wheel, and coil spring suspension on all wheels. The model was driven by an electric motor hidden in a dummy engine driving through a centrifugal clutch and four speed and reverse pre-selector gearbox. Watch this space to find out what Terry's choice of bodywork will be.

Paul Hubbard brought along his SML 32 based twin cylinder horizontal steam engine for its last outing. The model runs well and has done sterling service at numerous meetings, but I suspect that Paul needs the parts for his next model which will be rather bigger. The new model, most of which was on display, was of a container crane derived from an example published in CQ. This is very big, occupying a space of about 6ft

x 2ft x 2ft. Paul spent most of the meeting tinkering with the construction of this model, so again, we have something to look forward to at the next meeting.

Tony Homden had obviously been busy making a number of aeroplane models and was able to put on quite a display at the meeting. Not satisfied with the Marks and Spencer Spitfire model, in true Meccanoman tradition he had improved it by powering the propeller and by fitting flashing LEDs into the machine guns.

Next was a very nice model of a three engined Junkers 52/ M3 built from Aeroplane Constructor parts and mounted on a base unit for display. The base housed three PDU's to drive the three propellers. Tony had also built a model of a Bristol Pullman airliner from Aeroplane Constructor parts. This unusual model was a four engined triplane, and each engine was replicated by a small motor driving a Meccano propeller. At sufficiently high engine revs the model was capable of taxiing under "its own steam". However, it was definitely a case for keeping fingers well out of the way! To complete his display Tony had also devised some parachutists from modified Meccano Spacemen - the parachutes comprising boiler ends and loom healds.

Tony Parmee brought along another of his architectural models, this time of the Great Singer Building in New York. At 612ft tall, it was the tallest building in the world at the time of its construction in 1908. It was situated on the corner of Broadway and Liberty Street until its demolition in 1968 to make way for a much less ornate modern construction. Tony recreated the building in Meccano at 1:82 scale (OO/HO scale) to show off its theatrical tower top and classical ornamentation features applied over a massive steel frame. This was a big eye catching model and was unmissable in the room full of Meccano models.

And that was about it for another splendid meeting. My apologies to those I have missed or overlooked. I know that there were one or two models present whose ownership was totally anonymous. The message is simple, please label your models as it makes it easier for your reporter and it is also more informative for the membership to see who built what, and to learn more of the interesting features of models.

Once again **Ernie Chandler** was conspicuous by his absence. Enquiries established that he was not feeling so good and decided to give the meeting a miss. I am sure I speak for all and wish him well with the hope that he will be cheerfully inspired when he reads about the splendid collection of models at the meeting.

Mike Cook

82nd Model Report - 29th March 2008

Well, this was a meeting of mixed emotions, a sentiment shared with many of those present. The recent deaths of Ernie Chandler and Carole Rhoades were still very much in the minds of the membership and I am sure both will be remembered as really good friends who, sadly, will be missed. I would like to add my message of condolence to Ernie's family and to Mike Rhoades, and I know this is echoed by all the members who knew Ernie and Carole. How they would have enjoyed this meeting. There were more models and members present than I have seen for some time, and a high proportion of the models were certainly new to me. It was let slip that it was also Cynthia MacDonald's birthday and she seemed to spend most of the meeting generously sharing a number 10 size tin of sweets with the membership - definitely a case of "Many Happy Returns"! So, as I said a meeting of mixed emotions.

On this occasion, my model tour was very haphazard, a great deal to report on, too many enthusiasts wishing to tell me about their latest creations and not enough time to take it all in properly. As always, my biggest problem was tracking down the ownership of some models - some sort of informative label showing the builders name is always appreciated. My apologies to those I have overlooked or misrepresented, but a few models were completely anonymous.

The first, and probably the most impressive model to "hit" those coming into the hall was **Ken Senar's** Big Lizzie, a one off Australian heavy tractor. The model comprises the substantial tractor and one of two equally large trailers, although Ken only brought the tractor to the meeting. According to Ken's brochure describing the model, this superbly researched and constructed red and green monster was built to a nominal scale of 1:5.5, which gave it approximate dimensions of 4' 4 $\frac{1}{2}$ " long, 1' 7 $\frac{1}{2}$ " wide and 3' 4 $\frac{1}{2}$ " high with crane erected. The machine was developed by Frank Bottrill, and utilises his invention, the "Dreadnaught" wheel, a kind of walking wheel. This ungainly vehicle was used for rough agricultural work; it had a top speed of just over 1 mph and a turning radius of 200 feet. It carried a three year supply of fuel oil for its 8 ton, 60 hp, single cylinder Black stone engine. It also had tanks for both drinking and general purpose water. The vehicle was equipped for long periods in the bush as it carried a winch, crane, spares, a blacksmith's forge, anvil, and full workshop for running repairs. Needless to say, the model replicates all the mechanical detail quite accurately. A Powerdrive motor provides the steering and motive power is provided by a Decaperm motor. The power train includes a three speed and reverse epicyclic gearbox, and a differential gearbox which drives the rear wheels via geared half shafts which engage with toothed inner rims on the wheels, as per prototype. Since the tractor weighs in at 77 lbs it was necessary to use large axle components for the wheel bearings and front axle pivot. Readers interested in the mechanical minutia should secure a copy of Ken's excellent descriptive brochure.

Now for some smaller models. First a very nicely made beam engine modelled in red and green parts, some of which looked suspiciously like Marklin parts. The model was built by **Hugh Freeman** and was seen running smoothly for most of the meeting.

Second, a "Conveyancer", a truck specially configured for moving containers about in docks, etc. Nicely built by **Dave Bradley**, the model used mainly yellow, blue, zinc colours and was based on standard instructions from various set manuals from the 1960s-70s. I found it as model 8.8 in a 1962 set No.8 manual.

Terry Bullingham brought along a Lancashire boiler model which is eventually intended to become a part of a beam engine. Nicely modelled in mid red and green parts, the boiler is to an approximate scale of 1:12, comprises circular girder ends and is clad with a large number of 12 $\frac{1}{2}$ " strips. It sits on a base incorporating Firebox and chimney, and Terry has included some detail which makes good use of common small parts.

Alongside were a couple of smaller models built by new member **Bob Chater**. The first model was of an agricultural tractor with a working power auger tool attached. The scale was determined by the use of standard 3" pulleys with tyres for the rear wheels. Bob's second model was again small and represented a single cylinder motor cycle engine, or similar. The engine sat on a base which gave it an overall height of about 9" and Bob had used the Meccano part colours to good effect - cooling fins in zinc, crankcase in red, base in green and valve gear mainly in brass.

It was good to see that **John Palmer** is still building manageable models of various commercial vehicles. The first of John's models was a Cargoliner 6 x 6 tractor unit based on a model design first published in CQ68. The model was constructed in the customary, red and green parts and its scale was determined by the use of fairly bulky 3 $\frac{1}{2}$ " diameter plastic wheels. John's second model was of an articulated Volvo tractor unit with low loader trailer. Again nicely modelled in red and green parts the model features working steering, gearbox and differential. Its scale was determined by the use of 2" pulleys with tyres for the main wheels, which gave it an overall length of about 2' 6" - a classical No.8 set sized model I think.

John Reid has now finished his interpretation of the Armstrong Whitworth Argosy aircraft which is the subject of SML 34. This is a nicely built model of the three engined biplane built to an approximate scale of 1:24 using a pleasing combination of yellow-red-zinc coloured parts. Whilst retaining the basic appearance of the model as given in the leaflet, a number of features have been changed to improve the scale fidelity and to introduce a common scale throughout the model. In particular, John has improved the radial engines to include two banks of cylinders each and since each cylinder is represented most effectively by a worm

gear, the total worm gear count numbers about 48!

Jostling for space alongside the Argosy was **Dave Phillips** Compound Steam Engine beautifully assembled from the instructions in SML 32. To improve its visual appeal the model incorporated a number of detail additions including a water injection pump, smoke stack, counterbalanced cranks, ratchet operated oiler for the steam cylinders, steps to the deck, a Mamod take off pulley and an alternative plastic drive chain. Built in pristine red and green parts this model was visually very attractive and ran very smoothly when set in motion. Dave explained that it was constructed from about 95% reclaimed Meccano parts, all of which had been lovingly restored and repainted. Now that is dedication!

Next door was an entirely different construction - **Tony Knowles** model of the Angel of the North. Nicely presented as ever, the Angel had a wing span of about 2' and was finished in a curious shade of non-Meccano metal colour - it was inspired by a very much larger model spotted at Skegness some years ago.

Now the amount of information I have on the next model is absolutely minimal and certainly cannot do it the justice it deserves. I am referring to the superb demonstration model of the Napier Deltic locomotive engine built by **David Hobson**. The engine is an 18 cylinder, opposed (36!) piston two stroke diesel configuration arranged in six banks each of three cylinders. Quite an amazing feat of synchronisation to get it all to work properly. However, David managed to produce a most instructive model. And to make his point, this large model was mounted on a base board which also included an oval of OO gauge track upon which a Deltic locomotive model ran around whenever the engine was in motion.

Mike Edkins brought along a little lathe, which I am sure I have seen a variant of in the past. Nevertheless this model is a "proper job", it is built in yellow-blue-zinc coloured parts and it is intended to work for real. Its purpose is to turn salvaged wheel bosses, etc. into more useful collars. It executes three operations; parting off the old boss to the correct length, deburrs the internal bore of the new collar and correctly chamfers the outer diameter. The only non-Meccano items used in the model are the mains drive motor and the two cutting tools. Moving on to a superb model of a Sentinel DG5 eight wheel steam lorry, currently under construction by Matt Goodman. However, it was sufficiently advanced for the membership to get a very good impression of its finished appearance. The main wheels comprise 3" pulleys with tyres which scaled the model to an overall length of about 3', a width of $9\frac{1}{2}$ " and height of approximately 15". The model is very eye catching in its blue and red livery, and its Binns Brewery advertising. Its builder has lavished attention on the mechanical detail, most of which is unfortunately hidden from view.

Geoff Devlin brought along his latest model of a French Potain HD40A Tower Crane, built in red and green colours to an approximate scale of 1:16. The proto- type for this crane weighs 16 tons, it stands on an 18' square base and is 86' high when erected. Most unusually, the crane is self-erecting with only minimal operator intervention and folds down to a transportable size. The challenge for Geoff was to replicate the unfolding/ folding mechanism, but the ungainly size and weight of the Meccano components made this difficult. However, undaunted by such things Geoff gave us a brief demonstration of the main features of his model. The model has a tower height of 6' 7" and a boom length of 5' 4" and it does show how the folding mechanism works.

Across the aisle, yet another very nice demonstration model by **Roger Marriott**. The model was built to SML 1A instructions for the Bentley motor car chassis, in pristine blue-gold colour parts and it stood on an illuminated base for demonstrations. Roger explained his completely redesigned gearbox since, as is often the case, the original Meccano design was not really up to the job. The model wheels sit on the rims of driven wheels hidden in the base. This enables the effects of the differential, brakes, gear selection and steering to be demonstrated correctly which after all, was the intention for the original model - a very eye catching display.

Tucked in next door were two small aeroplanes built by **John Evans**. Both models were high wing monoplanes being similar to the Auster type. Both have a wing span of about 18", one was built in red and green colours, the other was built in yellow, blue and zinc colours.

These models were dwarfed by the latest phase of development of **Paul Brecknell's** model. His bucket wheel excavator is slowly inching upwards and now has one working conveyor belt (made from nonslip rubber grip from Wilkinson's) and using home-made wood rollers (without groove, made from sink plunger handles, also from Wilkinson's). I must say that I was seriously impressed by the effectiveness of conveyor construction as it lends itself to so many Meccano models and can be engineered easily and very cheaply. If you have not seen it, then I recommend you make an effort next time Paul brings it out. Progress so far on this very large model has reached a stage where the central tower and turntable supports are in place. I guess the next move will be to commence work on the superstructure, so watch this space!

The next model I looked at was a small demonstration model of a variable pitch aircraft propeller mechanism built and professionally presented by **Roy Whitehouse**. The model works most effectively and to avoid potential damage to operators and viewers alike, the model is encased in a clear acrylic box of about 1' cube.

This was followed closely by a pair of Ffestiniog railway locomotives built by **Ken Wright** in his inimitable style. Both models were built in the familiar red-green colour scheme to represent the 0-4-0 Locomotive Prince, built in 1863 By George England & Co. It is the oldest narrow gauge locomotive preserved and still in use. The smaller model scale is 1:12 and was designed to run on LGB 2 rail track in common with most

of Ken's locomotive models in his "stable". Also, the final showing of the larger scale version of the same locomotive model, but scaled to run on the broader gauge Hornby Rocket plastic track.

Alongside was another loco motive model built to the high standard that we associate with **Bob Ford**. The prototype for Bob's model was the Kitsen Meyer Articulated Locomotive which was built in 1927 at the Airdale Foundry in Leeds and exported to Colombia for use on the hill section of the Giradot Railway. The side tanks held 1450 gallons of water, the tender tank held 1050 gallons and the tender carried $3\frac{1}{2}$ tons of coal. The total weight of the locomotive was 94 tons. The model was very nicely constructed using yellow-blue-zinc parts, it measured about 3' overall and runs on 4" gauge track.

John Ozyer-Key had "been, gone and went" before I caught up with the empty table space where his model had been earlier. All I can tell you is that he brought along a model of a mobile crane he is currently working on.

Tom and Matthew McCallum brought along a large quantity of used Meccano parts that they were selling off at sensible prices and they seemed to be doing a good trade. As always, they also brought a pristine display model of the Meccano red-green Showman's Engine which graced many toyshop windows in the late 1950s. The Binns Road factory certainly knew how to capture the imagination of boys young and old with such eye catching advertising - and it worked well as most of us can testify!

The next biggish model was the unmistakeable work of **Alan Covel** who always manages to find interesting prototypes that translate into very attractive Meccano models, usually with a whiff of period nostalgia as well. But that is not all; he also knows how to present his models to their best advantage.

This time Alan's prototype was a 1930s AEC Single Decker Tour Bus. Built to a scale of 1:7 the model is 44" long, $13\frac{1}{2}$ " wide and $16\frac{1}{2}$ " high and is based on the small Lledo die cast model. It is built in the familiar style using yellow-blue-zinc parts and runs on Meccano wheels shod with F1 racing tyres. The two mechanical features are the working steering and the working destination blind, which is operated by a remote drive wheel. Some 26 destinations are available, mainly in alphabetical order and featuring places of interest to the membership. This is a very pleasing model.

John Molden is working on yet another giant model of a fairground ride called the Mouse Roller Coaster. John brought the illuminated sign to the meeting since that is about the only part that will fit easily into the building! The intricate sign is made from Meccano parts and spells out the ride name. The letters are illuminated with about 1000 LED's and we are told that John made the Meccano structure, and the electronics for the LED bulbs were constructed by son Michael. The main ride is still in construction and when finished it will be too big to assemble at one of our meetings.

Tony Homden also builds interesting and well researched models. His latest offerings on display at the meeting were another pair of aeroplane models. The first was a carefully crafted model of the Handley Page Heyford bomber assembled from standard military outfit parts. The model was mounted on a raised pillar stand to show it off as if it were flying and the propellers are electrically driven for added realism. Altogether a very nice model with a wing span of about 30". His second and smaller model was a version of the Italian Caproni bomber made up from parts from the standard Meccano Aeroplane Construction outfits and shows just what can be achieved with a bit of imagination.

Brian Edwards always brings a different model to every meeting. His models are always constructed from red-green parts and they are always of a manageable size, and usually within the limits of a No.10 outfit. This approach to Meccano model building always appeals to me. On this occasion his model was of a substantial 1950's Foden four wheel Dump Truck. It looked familiar since it is similar to the six wheel version which appeared as a Dinky toy during that period. A robust nice looking model with a high nostalgia coefficient!

We were pleased to welcome **Michael Walker** to the meeting, sometime editor of MM in the later years of its publication and obviously well known to some members. He did not come empty handed since he brought along a nice model of a modern double deck bus. This attractive model made very good use of blue and green coloured parts to give it an authentic appearance. The model is about 18" long and is reminiscent of what can be made from a No.8 outfit. An added feature was the inclusion of radio control, but I did not see it working at the meeting.

George Illingworth continues to amuse us with his seemingly endless stream of nicely built fire engine models, mostly built to a scale of approximately 1:12. I spotted a little model of a Merryweather manual pump, presumably horse drawn, since the prototype dates back to 1886. Also present was a model of a Bedford/HCB Water Tender of 1963 vintage and a model of a Leyland turntable ladder dating from 1935. All models were very nicely turned and are of a manageable size, the Bedford measuring about 15" overall and the Leyland measuring about 18" over all to give you some idea. The Leyland model in particular included a complex and nicely engineered five section telescopic ladder. Nice models these, and worth closer inspection should you get the chance again.

Alongside was a very nice red and green model of a Floating Crane built from the 1950s No 9 outfit instructions by **Roger Burton**. At the last meeting of the Telford and Ironbridge Society a request was made for models which the public could operate at their forthcoming exhibition in May. This model will be Roger's contribution. The model is not yet complete although it looked very attractive to me - carefully constructed using pristine condition parts.

As is usual, **Paul Hubbard** spent most of the meeting working away on his latest model of the Transporter Bridge from SML 21. The main structure was more or less complete, but he has some way to go on the detail. Paul also brought along a part completed model of the Pontoon Crane from SML 28. Again, the model is structurally complete with one of the motors in place. But the second motor and slewing mechanism has yet to be fitted. Hopefully, we can look forward to seeing the finished models working at the next meeting.

Nearby, was the familiar display of numerous smaller modern outfit models brought along by **John and Joyce Sleaford**. It is good to see that these two enthusiasts continue to put on a good show at every meeting, and this time we had a good list of exhibits. The F1 racing 'car from the special M&S outfit, a Sopwith Camel model also built from the special M&S outfit, a two seat car built from a Mechanical Workshop outfit, a foundry crane built from the Exacto version of the Multi-Crane outfit and a helicopter also built from the crane outfit instruction manual. John informs us that the helicopter model design was originally the work of the late Wally Inson and was published in MM for April 1978. As always a really nice show, of well made models which looked very colourful and attractive.

This is the second time I have reported on non-military models built by **John MacDonald**. It seems that he is diversifying his interests, which is good, since there is much we model builders can learn from his excellent example. This time John brought along two substantial automobile models, the first a 4 x 4 racing car based loosely on a Ferguson prototype and the second a very nicely built version of Hitler's G4 open top Mercedes. No information on scale, but both, models were about 18" long if my memory is correct. As always, both models feature accurately working mechanical detail. The Ferguson includes four wheel drive, two differentials and an inter-axle differential, three speed and reverse gear-box, clutch, independent suspension and inboard disc brakes. Equally impressive, the Mercedes includes three speed and reverse gearbox, clutch, double differential drive to the rear axles, suspension and working lights. And most appropriately, the Mercedes was finished largely in black coloured parts. Then for something rather different; a model of the Anderton Boat Lift built by **John Bland**. I do not have much information on this model, but it is built in red and green parts in keeping with the period - the prototype featured on the cover of MM for March 1949. I am not sure if the model was finished, but I do recall that it include a large number of part 57 used to represent the many lift cable pulleys on the "roof" of the lift.

Next, I came to another road vehicle model of the kind very much favoured by **Terry Pettitt**. He has been building a freelance model of an 8 wheel lorry, the chassis of which we saw at the last meeting. The model incorporates the usual mechanical detail, four speed and reverse gearbox, inter-axle differential drive and epicyclic reduction gearing in the rear wheels. The cab has now been built and fitted, and reproduces modern day practice - it tilts forward for access to the engine and it has opening doors. To give you an idea of scale, the model measures about 3' 6" overall and it requires a little more work for completion.

Chris Bond brought along a very nice model of a 1:8 scale Horizontal Boring Machine, based on a Richards 5N proto- type of about 1960 vintage. The model has been taking shape over a long period and is now almost complete. The engage and reverse mechanism for the feeds have been changed to constant mesh. The boring bar steady now moves vertically in unison with the main head, and as its travel along the bed is some 6" this requires a compound telescopic drive using two keyway shafts. A self-feeding boring bar for long work can be fitted to give an actual feed rate of approx. 0.0015" per revolution, equivalent to 0.012" full-scale. This is an impressive model, very nicely presented in red-green colours and is quite large - occupying a space measuring about 2' x 18" x 18". Quite an achievement!

Yet another really nice model of an eight wheel lorry chassis was brought along by **Tony Wakefield**. The model is a freelance design which was originally built and set up for display at the Meccanuity 2008 exhibition. The model is very attractive as it is carefully modelled, mostly using green parts, to show off its working mechanical detail. It is powered by a PDU motor, it has a three speed and reverse gearbox, and differentials for both rear axles.

The model brought by **Geoff Brown** was a Duchess class locomotive which, in estate agents parlance, is in need of renovation! Geoff explained that he had acquired the model recently; it was built in the 1960s and had clearly seen better days. Undeterred, he plans to carry out the renovation, when it should, once more, become a nice display item. It is big, based on 5½" main wheels and includes quite a lot of detail - very much in the classical Super Model style.

I also spotted **Richard Payn** who had brought along a four section telescopic jib destined for a future crane model. Unfortunately, he had left the meeting before I got around to looking at the model.

Finally, an interesting display model by **Keith Way**. The nicely made model was built expressly for display purposes - an automatic racer. The little vehicle runs up and down a tilting track arrangement when set in motion. Certainly a novelty item to catch the eye of the onlooker.

What a splendid meeting; more models than I have reported on for some time and a terrific opportunity to share our enthusiasm with other like-minded individuals. However, on this occasion I found myself short of information on quite a number of models and I had some difficulty identifying the model and its builder for too many models. Please remember to label your model with the essential information; it makes it more interesting for everyone, not just the reporter. For those of you who like to provide a little write up, thank you, it helps the reporting task very considerably. For those who have access to e-mail, you can send your write up to Dave Bradley or me directly. (cookmv@aol.com)

83rd Guild Meeting Saturday October 11th, 2008.

Alan Covel showed his 1/28 scale Concorde on the landing approach. Model is 38" wing span and approx. 84" long. It is mounted 14 degrees to the horizontal, the correct angle for landing. A drop snoot is fitted as on the original to improve the pilot's view on landing. Nose gear, main gear and tail bumper can all be released and allowed to descend under their own weight. The model had a tubular fuselage with axle rods projecting from each side onto which the two triangular wings are fixed.

Tony Wakefield brought a Combine Harvester Model no. 10.13. An interesting model to build with very confusing instructions. The model is unbalanced, when lifting the reap head, the cab and mechanism tip up. The model is screwed down to work.

Tom and Matthew McCallum came with a Hammerhead Dockyard Crane nicely finished with braced girders. Fully operational by gearbox in the control cabin. Built in 1950's red and green.

Paul Brecknell brought a Giant Bucket Wheel Excavator (gradually creeping up). All the base structure including roller race is now in place (with the exception of electrical pick-ups and case). Upper super structure partly built to include hoist mechanism for the bucket wheel arm. Unconventionally used to enable use of flanged sector plates which really fit the slope angles of the counterweight boom. Of note is the single tensioning arm that keeps the electric motor at constant staging in the gear train and avoids any oscillation.

Sid Beckett showed his Harp in Red, which was about 2 feet high.

David Phillips came with a Static Steam Engine.

Tony Parmee's Singer Building was previously seen at last year's October meeting, it is now in its exhibition mode, with vehicles and figures to the same scale (1:82) to appreciate its size.

Keith Way brought his 'Toy Trains' built from Bernard Périer plans. A 4-4-0 Locomotive and Tender which was the smaller of the three units and unmotorised. Another was a 0-4-0 Tank Locomotive and Wagon which was fitted with a 3v motor, which hid in the wagon. The gauge on this could be adjusted to suit O gauge track, and finally another 4-4-0 Locomotive and Tender. Bernard described this model with a 3v motor but Keith found that this model would require extra power to improve performance, so the tender was revised to accommodate a larger battery box providing 6v power. This model was also designed to run on O gauge track.

Christopher Bond displayed his 1/8th Scale Vertical Boring Machine, based on Geo. Richards Machine of c. 1910. This will be a rather simpler companion for my Richards Horizontal Borer seen here in 2006 & 2007. Christopher wishes to thank Dennis Backler, who sent him some information on borers, including an illustration from an Engineering Practice Text Book of Bennett College Sheffield, which inspired this model. Apart from general tidying up it should eventually acquire a horizontally mounted tool ram.

The prototype would have had a table of some 80" diameter, with speeds of from about 1 to 150 rpm. The cross beam can be raised and lowered, as in the prototype by power only he thinks, in the view of the apparent lack of balance weights. Each ram can be rotated through about 60 degrees, and moved up and down independently, in the model by hand only; a balance weight is located in the tube mounted at the side of each ram. There is power and hand feed to the cross feed for the saddles, which can be traversed independently in parallel or contrary directions. Tools are carried in turrets for quick changing. Since balance weights are provided for the rams it seemed a good idea to provide them in the model for the beam as well, since this, plus the two saddles, ram guides, and rams themselves would be a considerable load on the elevating mechanism.

Geoff Devlin showed three of the same model at different scales. The NCK Rapier 'Andes' Crane. Built to 1:8 scale with a 7' 7" boom, and a cab 2' 2" wide, 1' 4" wide and 3' 3" high. The model was built for display at the Midlands Model Engineering Exhibition the following week. It was first shown at MMG on 29th March 1986. The model has a Cadbury Ltd. conveyor track (3" wide) off the Roses production line (which was sold to Geoff as scrap when the new conveyor was installed). The second model was 1:24 scale with a 2' 6" boom and the third model 1:58.25 scale.

Alan Scargill came with a Large Beam Engine in red and green.

John Molden showed the Scania 'T' cab 8 wheel Mobile Crane (under construction). This vehicle will be used for building up and transporting sections of the "Wild Mouse" Roller Coaster, on display will be the chassis and gearbox which is a 4 over 4, 8 speed and 2 reverse system. Part built rear axles and front and rear suspension.

John MacDonald's Murty Tank Recovery Vehicle and Tank Transporter followed in army green to a scale of 1:14. The tank climbs off any transporter. All mechanisms operate authentically featuring 4 wheel drive, 4 wheel steering, rear suspension full track, 3 forward speeds and 1 reverse, double elliptic front suspension, coil spring and link rear suspension, 2 rear and one front winch driven from a PTO and working lights.

John Reid showed three Aeroplanes. The first two were a Spitfire (from the kit) and a Hurricane, also made from the Spitfire kit but with the relevant adaptations. Both models were 1:28 scale based on the wingspans. The other model was an Avro Lancaster Bomber constructed from the Aeroplane Constructor and standard Meccano parts. The scale of this model was 1:55. John showed an interesting scene or the

Spitfire losing a wheel on landing and the propeller had been removed using a Morris Gantry which was designed by engineers at Morris Motors, Cowley for the field recovery of crashed aircraft during World War II.

Tony Knowles exhibited two small Non-Meccano (other systems) models. A Watermill driving 2 Trip Hammers from a 1950's German set called BENCO. The holes are at 12.5mm pitch with metric M4 threads. The model is powered by a small weight driven motor. Also, an 18" high Eiffel Tower made from gold plated Erector parts. They were made from an Executive set sold in 1977 by a small company as an executive toy. The parts are from the Erector: range, but specially plated with 24 carat gold.

Roger Burton brought an interesting model of a Lotus Concept Ice Vehicle. An item about this interesting vehicle appeared in a newspaper. The model is based solely on the photograph, and some aspects of the design may not be represented accurately. Underneath is a component which hangs down. If so, how: does it operate? Also it would be interesting to know how the linkage between the steering rod and the front ski works.

David Hobson displayed his Bodmer's Opposed-Piston Locomotive of 1845 with Tender in red and green and a MecaNo set made by 'Disa' in Mexico.

Ken Wright brought a Welsh Highland Railway Beyer Garratt Loco NGG16 No. 140. Built to a scale of 1:12 on LGB G gauge track.

Roy Whitehouse's SML Giant Drag line was restored blue/gold, modified to use 3 power drive motors instead of the original unusable control system.

Colin Reid came with one of the Dealers Window Models as shown at Skegex 2008. Acquired at a local auction, all three mills in one lot, for little money. A Palitoy representative placed two complete models and one part dismantled in the care of his brother-in-law for safe keeping. When the owner died the brother-in-law gave the lot to the dustmen, who put them in the auction - six months after Colin acquired them, NWMG held an auction at Leyland. A visitor expressed surprise at seeing three mills working and after informing her of the circumstances he gleaned their history. One of the three is a lighter shade of blue than the other two - except one of the sail assemblies is '70's dark blue.

John Bridger showed a Small Traction Engine, originally designed by Phil Ashworth - Taken from Bert Love's book, Meccano Constructors Guide- A classic model!

Tony Homden brought a WW1 German Gotha Bomber built largely from Mechanised Army parts. An interesting feature that it dropped its bombs too, but Tony did emphasise that the loading on his model was different to the real thing. You don't turn the real thing upside down to load it!

Tony's other model was an inclined twin cylinder compound steam engine of the type used to power paddle steamers.

Alan Partridge sent his reply back as "A modem subject copied almost entirely from Plastic Meccano" A very nice model of an electricity generating Wind Farm.

Mike Edkins' Bracket Clock was powered by three magic motors, the clock and striking trains run for 30 hours on one winding. The going train is powered by two magic motors that connected directly to the spring barrel, receives via gearing, 60% of the output of the second 'booster' motor. Using such a motor combination is necessary to deal with the extra power requirements of actuating the strike release levers, and the extra gearing involved in driving the seconds dial and spiral 'cam'.

Before the going and striking trains are chain driven from their respective fuse, these together with the spring barrels and motors form a separate unit in the base of the clock case. The clock mechanism itself, is built and installed as a separate unit, and is fitted with a pendulum beating half seconds, making the inclusion of the seconds dial possible. This is contained within the chapter ring of the dial, its pointer taking one minute to traverse the 120 degree aperture, the layout of the gear train dictating this form of display. The number blows to be struck on the bell at the appropriate hour, is controlled by a rack striking mechanism.

Directly above the left and right of the pointer ring are two subsidiary dials fitted with "pointers", that on the left controls the rise and fall of the pendulum. This allows the length of the pendulum to be altered, thus regulating the time keeping without stopping the clock. Turning the pointer to the left and right from its neutral 12 o'clock position respectively raises and lowers the pendulum, thus speeding up or slowing down its rate of swing. The dial to the right selects the silent / strike mode, with the pointer in the 12 o'clock position it is silent, turning to the 3 o'clock position selects the striking.

The winding positions for the going and striking trains are directly below the main dial. The action of the winding cord onto the fuse rotates the spring barrel below, thus winding up the motor connected to it. The fuse is best described as a variable diameter pulley, which is used to even out the varying power output of the motor as it runs down. The winding key is also used to set up the motors, and to prevent accidental engagement, they are protected by cover plates.

John and Joyce Sleaford displayed a nice army of small models, a Small Car from set 4952, Design 4 Robot set 7700N, Small Locomotive Tender CQ79, Small tanker from CQ, WW2 Dodge WC51 CQ58, Drag Racer built from Mechanical Workshop set

George Illingworth displayed his latest creation with Walter the Water Tender Radio Controlled Fire Engine built on the smallest of the Remote Control chassis?

Ken Senar brought his Australian Steel Horse. An oil engined prototype built in 1916, it was believed to be Australia's first caterpillar track. It was part built and is constantly under development. Built using 4 photos, the apparent prototype seemed primitive with no track tensioning device and the body / track ground clearance minimal. 'Because of the shortcomings it did not sell well in the market- place and only one example was built.

Dave Bradley came with 2 Side Tipping Lorries. The first being a model from the No 8 set instruction manual. Thinking Meccano held a key to the former East German Patent Office, judging by the design of the cab, another model was shown with the Marklin cab giving it a more modern and better proportioned model.

John Palmer showed a further Marklin inspiration but built from Meccano. Originally this was based on the Marklin "Feuerwehrauto", but converted to a mobile crane finished in red and green with steering, gearbox and differential.

Terry Bullingham came with his Steam powered Pumping Engine. The model is a representation of a typical pumping engine, common in the early 19th century, for draining mines and providing water supplies.

At a scale of 1:12, this was not a model for the purist. Terry simply avoided the tedium of fabricating a Meccano flywheel, by utilising a casting from College Engineering, Codsall, South Staffs, costing £10. The stainless steel plates and strips, are available from David Fellows, West Sussex. The handrails and lifting chains on the maintenance hoists are available from any B&Q store, and the 8mm elbows are available from any good plumbers supplies. Watt's parallel motion has been incorporated between the beam and both the pump and piston rods. (Watt felt that the parallel motion was equally as significant as steam power itself as it allowed steam to be ported to both sides of the piston). Another Watt innovation is the sun and planet gear at the crank. (The flywheel speed is twice that of the crank).

Trevor Frankling showed an interesting Right Angle Drive Mechanism. Without using my gear wheels, also the mechanism could be arranged to operate at any angle.

Richard Payn's Oshkosh PLS was built with 5 axles driving through all 10 wheels. It has taken a very long time to build but with a very high level of detail and to a very advanced stage. This model is fully remote control and releases and engages the load deck and incorporates a crane jib between the deck and the cab. Built to the ashtray tyre scale, it has 3 steering axles, 2 at the front and one at the rear. It has a 5 speed epicyclic gearbox with a 2 speed splitter, and lockable differentials. The model contains a total of 13 electric motors.

Bob Chater brought 3 models along. A Green Crane from the 10.20 instruction manual, a detailed Single Cylinder Petrol Engine to show how a 4 stroke engine works and a Schmidt Offset Coupling believed to be used in the litho printing industry which allows it to lift the roller without stopping the machine.

Paul Hubbard's Aircraft Carrier was from the 1950's No 10 set. Approx. 5ft long and $9\frac{1}{2}$ " wide with a $12\frac{1}{2}$ " wide deck built in red and yellow. Paul said it was very easy to get the shape and hopes to build an aircraft lift into the deck to add some realism.

Terry Pettitt came with a nice model of an Engine with 3 Speed Gearbox which is intended for future model and incorporates 21 working clutch based on full sized practice with the outer friction plate consisting of a $1\frac{1}{2}$ " sprocket with the teeth engaging with two 45° angle brackets bolted to the inside of a boiler end thus providing a sliding drive. The last meeting in March was a special occasion when Nellie Perkins celebrated her 90th birthday. I'm sure you will all join me in congratulating her and wish her health and happiness.

Dave Bradley

84th Model Report - 28th March 2009

It is quite true what they say about retirement - I don't know how I ever found time to go to work! Many members have given me the benefit of this information and I now know exactly what they mean. To compound my personal situation, I moved house from Bedford to the environs of Frinton on Sea at the end of August last year. So life has been especially busy building a new home and a new life. As things settle down I really hope to find some of that rare commodity, time, to do a spot of model building. Amongst all this change I was keen to maintain my association with MMG in spite of the considerable distance. Having now made the trip to the meeting I find it was pretty easy - the roads are good and Saturday is of course rather quieter. So once again I can report on what was an excellent meeting. A very good turnout of both members and models meant that the hall was buzzing and late comers had a job finding table space for their creations. Plenty for me to report on and, as always, my apologies to those I have misrepresented or even missed altogether.

Bob Chater was the first member I met up with and he explained that he prefers models that can be set in motion and left to entertain the crowds for as long as necessary. He brought along a very nice beam engine modelled in light red and green parts, and true to his word, it chugged away quietly through most of the meeting. His other models were a Schmidt offset coupling demonstration model and a little stone saw. The Schmidt coupling was one of two I spotted at the meeting and to see it in motion, it really is a curious device.

Tucked in amongst a number of models was a large built up roller bearing by **Terry Bullingham**, quite a considerable achievement for our visually handicapped friend. Terry did explain what the bearing is intended for, but I can't remember what he said! (Probably the Block Setter.) The bearing was based on two large flanged rings with about 30 flanged wheels for the rollers. I never cease to be amazed at Terry's model building achievements.

There really were a large number of models packed into the end of this table space, including a substantial Land Rover vehicle built by **Dave Bradley**. The model was constructed in yellow-blue-zinc colours, measured about 2ft long and Dave explained that it will probably incorporate radio control in due course.

Completely over shadowed by Dave Bradley's Land Rover was a pair of very much smaller models built by **John Palmer**. In John's usual style these were small models of a 6 x 4 tipping lorry modelled in red and green colours and a slightly smaller scale articulated "Trucker Fleet" lorry with six axle trailer. The tipping lorry was based on instructions from a Marklin outfit.

Dave Phillips brought along the No.9 outfit model of Tower Bridge very nicely presented in red and green colours, mounted on a base board for display purposes and for ease of transportation. Based on the 10.26 model instruction leaflet the model was built entirely from reclaimed and repainted parts - a credit to the single minded dedication of its builder.

On the small airfield next to the tower, several aeronautical models built by **John Reid** were on show. Three aeroplanes which were a Supermarine S6B Schneider trophy racer, an Avro Lancaster and a Handley Page Hampden, both the latter being WWII bombers of course. These models were built using the parts from the Aeroplane Constructor outfits supplemented by standard Meccano parts. Very nicely built, I thought, to give models of a manageable size. However, John's main item was a largish Clerget aircraft rotary engine in construction. So far three cylinders with valve gear have been completed to establish the engineering principles, the remaining six cylinders to be copies of the first three. Model diameter is about 18", being approximately half scale, and it is mounted on a wooden stand for demonstration purposes. John demonstrated the complex valve gear mechanism and explained that he was obliged to use a special laser cut cam gear, previously developed by Russ Carr of the Sheffield MG, and who kindly provided the CAD files to John. Russ had been there before, having built a Bentley rotary engine some years ago. Altogether a very nicely themed show!

Alongside was an equally impressive array of models brought along by **Tony Parmee**. Since his main Meccano collection is currently in storage and since he was unable to contain the desire to build something, Tony bought some Meccano at an auction sale last November. With this he built a "rowing eight" boat, which is an extended version of the model 7.13 from the 1970s manual and when pulled along, the eight rowers do their bit in unison, but slowly!

His second model built from this cache of Meccano was the transport aeroplane, Model 8.16 also from the 1970s manual. The wings have been moved forward as they were unrealistically too far aft in the original model. The rest of Tony's array of models comprised his "Clockwork Corner" creations. A General B Omnibus -- inspired by S. Wilson's original from 1916, an ancient novelty motor car from a 1930's manual, the giant swing boat model built from the 1937 No. 8 manual instructions and the toddler from his Meccano family as mentioned in an old CQ.

Roger Burton brought along a pair of smaller models. The first was the diminutive beam engine described in Bert Love's book and originally powered by a magic Motor. However, Roger's version is fitted with a small geared electric motor for continuous running.

His second model, as yet unfinished, was a simple but interesting variation on the ferris wheel theme. The wheel is modelled on a typical spoked bicycle wheel and mounted on a single cantilever bearing

similar to the London Eye arrangement. To give you some idea of the size, the wheel is approximately 18" diameter. The hub of the wheel incorporates some ingenious elements to enable smooth running, and no doubt we shall see more of this model in the future.

And now for something completely different, **John Bland's** model on this occasion was of the Anderton boat lift, complete with a short length of aqueduct and various fittings. The model is quite impressive, it has been tackled by Meccano enthusiasts from time to time but the "show stopper" is the very large amount of overhead gearing required to hoist the lifts up and down. In John's model, the gearing was present alright and comprising a very, very large number of part number 27a, 57t gears - I did not count, but the number would make a big hole in any Meccano collection. However, this very impressive vista of gears was representative only, it looks the part but does nothing gear like on the model at all. The actual hoist mechanism was a much more modest affair of ropes and pulleys hidden within the structure. At about 4ft long, with more than one square foot of 27a gears this is an impressive looking model which is both interesting to look at and informative, since it tells us something about our industrial heritage.

Tucked away amongst all this ironmongery was a modest little traction engine built by **Sid Beckett**. The model was of the Avery traction engine, GMM supermodel No.25, originally designed by Keith Cameron. This model has caught my eye more than once since I like building model traction engines and this one is rather different having an undertype engine. However, I have yet to build one myself. The scale is convenient too as the rear wheels comprise a total of six hub discs. So a very nice compact model with lots of mechanical detail carefully modelled by Sid using a red and zinc/ nickel colour scheme.

Overshadowing just about everything else in the room was **Paul Brecknell's** giant bucket wheel excavator which is now structurally complete. Since Paul has been working on this impressive model for some years we have seen parts of it during the course of construction and I, have reported on it before, but this is the first time I have seen it in its completed state. Measuring about 7ft overall and modelled in red and green parts, this is the kind of model that most of us have aspired to over our long Meccano careers. Paul explained that the slewing drive is yet to be fitted, a way has to be found to route the electrical wiring via slip rings through the main slew bearing and cladding to the skirt has to be completed.

Some of the more interesting features of the model include;

- Overall length almost 7ft, height 3½ft, estimated weight 75lbs.
 - Both conveyors now working with 21 wood rollers in all and requiring 41 1" sprockets in the drives.
 - Conveyors comprise non-slip rubber matting (sourced from Wilkinson's) cut to size and joined with super glue.
 - Bucket wheel is based on 7½" circular strips.
 - Novel use of washers stacked on pivot bolts as idlers for the sprocket chains.
 - Lifting masts constructed of perforated and narrow strips but heavily braced.
 - Straining wires on the bucket wheel arm were sourced from B&Q.
 - Substantial weight ballasting is required to counter balance both the bucket wheel arm and the boom
- Luffing cables are nylon cord dyed black (ends up grey!).

Robin Schoolar had been experimenting with 21 curl/ roll up bridge mechanism originally attributed to one Thomas Heatherwick. Alan Wenbourne built a successful Meccano model sometime earlier and Robin decided to have a go at his own interpretation of the model. The bridge model comprised about six sections with a mechanism to lift each section relative to its neighbour. The key component in Robin's model was a 20" heavy driving band and he managed to break two before calling a halt to further development. I guess we will have to wait until the next meeting to see if he finds a way to actuate the bridge satisfactorily.

Stephen Lacey brought along an interesting model of a steam railcar, a combined locomotive and coach as used on various branch lines. His model was specifically of a 1907 G.W.R. steam railcar 0-4-0 locomotive and coach which has yet to be completed. The model was constructed using yellow-blue-black-zinc colours, the overall length is about 3' 6" and the rail gauge is 3", as far as I could see. Alongside was a Modern Meccano steam engine with a compact differential mechanism built on. It is Stephen's intention to power the model with this unit eventually and, conveniently, it just fits into the width of the coach section of the model with very little room to spare. I hope we get the chance to see this model working when it is finished.

Roy Whitehouse is well known for his collection of beautifully restored earlier Meccano outfits and the superb models he makes from them. He did not disappoint on this occasion. The model was the traction engine, supermodel SML 22, resplendent in its pristine blue, gold and red colour scheme. The restored outfits he brought were both the same, the Mechanised Army outfit from the 1930's. He even made new boxes! Being unsatisfied with the first box he made a second, which is why two fully strung outfits were on a display. Now that is dedication!

Next to Roy's impressive display was the latest locomotive from the **Ken Wright** stable. On this occasion Ken was represented by his rather splendid locomotive model of a Welsh Highland Railway Beyer Garratt Loco NGG16 built to a scale of 1:12. Ken reported that the model was as shown at the last meeting but with a few minor modifications. As always, superbly presented in its red and green colour scheme.

Our ingenious mechanisms man **Mike Edkins** has been working on a bracket clock and he brought along his test rig for the Gathering Pallet. With the aim of building the bracket clock using only Meccano

parts, Elektrikit tinned copper wire; (part No 557) was selected for the gathering pallet in the striking mechanism. The durability of it in this mechanism was unknown and since it is a vital component in this section of the clock, rigorous testing was required to prove its suitability. The gathering pallet can be thought of as a one tooth pinion which engages with each successive tooth of a rack segment once per revolution, advancing it one tooth at a time. The number of times the gathering pallet rotates and engages with the rack segment in each 24 hour period is 156. The gathering pallet rotates once for each strike, the clock strikes the number of hours on the hour, so in a 12 hour period the total number of rotations is $1+2+3+4+ \dots +12=78$ and twice this is of course 156. Multiplying this by 365, the number of days in a year, gives a total of 56,940 rotations per year! In the test rig this was rounded up to 57,000, and the pallet mechanism comprises a 95 tooth gear which the pallet pin engages with, one tooth at a time. A 60 to 1 reduction gear stage followed by a stage of 2 to 1 and a stage of 5 to 1 to give the required reduction drive to the pallet gear. It takes approximately 10 hours for the pointer to make one revolution powered by the motor, which is equivalent to one year's operation.

The gathering pallet is also required to actuate the indexing pawl, release lever and the locking lever when it engages the rack segment, and these are included to make the test as realistic as possible. After the equivalent of a one year cycle, the tinned coating had worn showing the copper wire beneath, but the pallet was still serviceable. Whew!

Geoff Devlin had managed to find an- other unusual prototype for his latest excellent red and green model. The model was of a Los Angeles tramway work crane, built to a scale of 1:18 to give an overall length of $27\frac{1}{2}$ " , width of $6\frac{1}{2}$ " and height 10". As its name implies, it was used to service and maintain the Los Angeles tramway system. The operator's cabin is raised above the truck platform to enable it to carry 40ft track rails to the work site. The crane operator sat in front of the winch mechanism, with no safety rails, and fully exposed to the boom. Controls were on either side of his chair. The boom had wooden planks at the top to isolate it from live overhead trolley wires. Quite an intimidating sight for motorists as it rumbled along the streets of Los Angeles. The original crane may now be seen at the Orange Empire Railway Museum in Perris, CA.

To show how Meccano is attempting to keep up with the technological age, **Bob Thompson** brought along his Spykee robot which he then demonstrated in action from his laptop computer. This is all new stuff for me, and I expect for many of us, but it could be the way of the future!

After some sleuthing, I discovered that the neat "O" gauge railway crane model nearby was built by **Richard Payn**.

Right on the end of the row I found the unmistakable fire engine models built by **George Illingworth**. First off was a small red and black model of an 1820 horse drawn manual fire pump nicely built to a scale of 1:12. Representing the latest in fire fighting technology,

George's second model was of a 2008 Kuiken Hytrans high volume pumping unit dismounted from its prime mover. Again,, very nicely built in appropriate red and zinc colours, also to a scale of 1:12. This substantial piece of kit was used at the Buncefield oil depot fire a year or so ago.

Moving on to a new row of models, the first I came to was of a folding jib crane, built to the constraints of a No.10 outfit by **Tony Brown**. This is a freelance model based on the folding jib design patented by Tornborg and Lundberg in 1963. The main sources of information for the model were various patent specifications downloaded from the internet, both from Europe and the USA. The purpose of this design of crane is to facilitate operation in difficult city building sites where a considerable reach is required and they may also have to lift loads over adjacent buildings.

In addition, keeping the load at a reasonably constant level saves power and eases the job of the operator. The main reason for building this model was an experiment to see whether it was possible to use the motors and controllers from the new infra-red sets in larger models. Obviously if this is possible then it simplifies the construction of tall model cranes. In the final configuration of the model it is intended to add 3' 6" to the tower for a couple of local exhibitions, making the model over 8ft high. This could possibly make it the tallest No.10 outfit model yet? Because of its height Tony has modified the bearing from the original design to give increased stability, and it leaves sufficient space for a suitably sized 28lb weight to be fitted in the base. Other than the modified bearing the model is built largely as described in the 1963 patent. A very nice model that will look well in the Model Plan series.

Another splendid and seriously detailed model was the Liebherr Backhoe Excavator, Model Plan 119, built by **John Ozyer-Key**. John has been working on the model from time to time over the past three years or so, and recently made the effort to try and complete it. The model is built to the original plan except for the motors and a few modifications to make John's variant work. The motors he used are the standard 12v type as found in cordless drills and these replaced the geared motors used in the original. The supporting frame work was changed to accommodate the gearing required to drive the winding drums etc. The model incorporates six of these motors in total and they work together very well. Other modifications include doubling the number of pulleys on the main boom and stick actuating mechanism to reduce the strain on the cable and to prevent slip- ping on the drums. The stick posed a few problems with its linkages and guides were fitted to keep everything in line, which solved the problem. John fitted a small switch panel in the model to ease the construction process. Once it is finished it will connect up to an external control panel

as used on the original. This very fine looking model, constructed largely in zinc plated parts with some red components to set it off. Check it out next time you get the opportunity.

Tony Wakefield brought along his unfinished model of the automatic loom, built to the instructions by the late Keith Cameron published in GMM supermodel leaflet No.49. Having built this model myself I know just what a challenge it is to get the thing working, and to add to my difficulties I chose to include the pattern programmer as well, GMM supermodel leaflet No.50. Tony has mounted his model on a tilting base to facilitate adjustment and repair - a wise move! He has also modified the drive mechanism to the heald frames to improve stability - not quite sure what he means here. I wish him good luck with the project, it is most satisfying to get it working, but it is not easy. I once managed to get it running for a whole day at a meeting and it produced about 12" of patterned cloth in that time. Although the result was a bit rough, it does actually show the automatic weaving process very well. Keith Cameron was not best pleased with some of my derogatory comments about the difficulties of building his loom. We struck up a correspondence and he sent me a beautiful example of a small piece of cloth woven on one of his Meccano looms. So it is possible, and my advice to Tony would be not to give up too soon!

David Hobson usually manages to find the most unusual prototypes for his models, and we were not disappointed on this occasion. The first model he had on show was of the Fell's Patent centre rail adhesion locomotive No.2 built for the Mont Cenis Railway in 1864. The original trans alpine railway ran from France to Italy, and the track system involved a centre rail to assist on the gradients. Of particular interest is the centre rail mechanism as it involves a friction drive. The rubber tyred drive wheels are squeezed into contact with the centre rail in the same way that a brake calliper works. As always, David's very fine model was set up for demonstration on a short length of track, and in order to show the mechanics, the locomotive superstructure is removable.

As we know, David also builds in other systems, and his second model was constructed largely from Stokys parts. The model was of Crakehall Low Mill, a water mill restored to working order in 1980. David's family were millers working this mill and other mills in the area for at least seven generations. In David's usual style, the mill structure was modelled as a simple framework in order to reveal the working machinery within to its full extent. These are two very nice models which are very well suited to public demonstrations of Meccano modelling at its best.

Another member who also likes to build extremely well researched models of unusual prototypes is **Ken Senar**. He also likes to build big, so his new model on this occasion was rather modest in its proportions. Continuing his Australian engineering theme he chose to build a model of a 1916 light agricultural tractor, later to be called the 'Imperial Steel Horse' which was built in, in Melbourne, by A.H. McDonald & Co. The vehicle concept was derived from the early Ant- arctic snow mobile in which the rear wheels were replaced with a single central track, the front wheels being retained for steering.

Built to an approximate scale of 1:6.5, Ken's model is about 31" long, the front wheels are based around 7 1/2" diameter circular strips and it weighed in at a hefty 29Lbs. Each of the 55 track plates was made up of a single 3 1/2" strip, a narrow 3 1/2" strip for added strength, and a 1 1/2" x 1/2" double angle strip. The 55 track plates are connected with fish plates, rods, and collars. The drive and idler sprockets are 4" discs held apart with screwed rods, nuts and washers. The drive sprocket carries 16 1 1/2" narrow strips as teeth with a 133 tooth gear placed centrally to accept the drive. It was soon discovered that, using this system, engagement between sprocket and track was far from perfect.

It was some time into the build before a satisfactory solution was achieved, and this involved inserting two 3" Pulleys with tyres between the outer plates of the drive sprocket. These effectively increased the sprocket diameter to enable smooth trouble free running. Shock absorbers were added to complete the track assembly and these comprised shock absorber springs and the longer French compression springs, one inside the other and spaced with small plastic spacers. The engine detail included the prominent main bearing housings, air filter, carburettor, magneto, spark plug and ignition lead; oil filler; kerosene vaporiser, camshaft housings, push rod housing, flywheel, throttle, fuel tank and fuel changeover valve.

Motive power is provided by a Hectoperm motor, mounted vertically in the large cylindrical radiator, which drives through the engine and clutch to a simple gearbox. The gearbox only has forward and reverse gears, the latter running at half forward speed. The clutch is operated by the driver's right-side lever and the gears are selected by the left lever which is fitted with a ratchet to ensure positive engagement. The clutch mechanism is another novel feature of the model and Ken thinks his design might even be a Meccano "first". The operating principle relies on three hinges fixed to an Elektrikit small bush wheel which, when slid into a wheel flange, part No.137, expand and grip the inner corner of the wheel flange. An over-centre crank holds the clutch either in engagement or it releases the drive. All driving controls are grouped at the driver's position at the rear of the vehicle. The driver's view is obscured by the engine and radiator and to overcome this the seat is offset to the right, as are the steering wheel and throttle control which are mounted on an 'A' frame. I am indebted to Ken for this description which is an edited version of that provided in his little illustrated descriptive booklet. Those interested in this model should ask Ken for a copy of the booklet, which I am sure they will find as helpful as I have.

Swallowing up yards of table space was a large diesel locomotive model built by **Paul Hubbard**. The model comprised two coaches built mainly in yellow-zinc colours and having an overall length of about 6ft.

I did not check the gauge, but I think it was about $2\frac{1}{2}$ ". Paul had his head down every time I looked as he was busy constructing his next model which is one of the classic supermodels. All will be revealed next time I hope.

Moving on, next door was another classic model built by one of our road vehicle specialists **Terry Pettitt**. The model was a nicely detailed Bedford end tipping lorry, built in red and green colours and sporting all the usual mechanical detail which is Terry's trade mark.

Alongside was another nice model of comfortable size, a Foster LR class showman's' road locomotive. The model was built with great attention to detail by **Keith Way**. Mainly in yellow and zinc colours, the model scale was approximately 1:15 and it was built using the approach pioneered by Bert Love. This is a most attractive model and just shows that large is not always beautiful!

But large can be beautiful as well as impressive as we are regularly reminded by **Alan Covel**. His first model was an enormous half scale 1921 Bugatti Type 13 measuring 56" long and 26" wide. 'The' model sits on four small bicycle wheels, which at $13\frac{1}{2}$ " diameter set the scale for the model. The model is beautifully presented in pristine yellow-blue-zinc colours and yes, Alan insists that it is the belt off his best trousers holding the bon net down! The model was inspired by a photograph in "Bugatnics" magazine of a child's electrically powered Bugatti Type 13 from the U.S.A.

Alan's second model was of the 1909 Bleriot Type XI mono plane to celebrate the centenary of Bleriot's channel crossing in that year. Built mainly in zinc parts with a few pieces of yellow here and there, the scale is 1:5.5 to give a wing span of 62" and a length of 51". The main wheels are built up, strung with Meccano cord to represent spokes and fitted with homemade tyres. The model has an open structure, preferred by Alan for this type of early aircraft model, and the wings are covered in transparent plates to give the "see through" effect of the doped canvas on the full size machine. A non-Meccano motor drives the 3 cylinder Anzani engine and it is fitted with a $14\frac{1}{2}$ " diameter propeller built up from curved strips and narrow flexible plates.

Next to the Bleriot monoplane was a motor car chassis demonstration model built by **Roger Marriott**. The chassis is mechanically representative of the 1933 front wheel drive Alvis - an unusual alternative to the Meccano motor chassis of conventional layout. Following the success of the Meccano supermodel chassis SML1 and SML1A of 1928 and 1931 respectively, a further chassis design appeared in the MM in October 1933. This was described as "a motor car fitted with an Alvis type front wheel drive - fitted with a very compact three speed and reverse gearbox, a neat single plate clutch and internal expanding brakes on all four wheels". The prototype for the model may well have been the 1928 Alvis front wheel drive sports car. This was a revolutionary car design at the time, since propulsion was through the front wheels, the design of the chassis included vertical independent springing to all four wheels and features of the engine were quite unconventional. The MM chassis has been remodelled to more accurately represent the Alvis. The petrol tank is carried above the dash and the gear change mechanism is forward of the engine. The gearbox is the revised four speed and reverse version developed by Roger for use in his SML1A model, since it is more compact and functional than the MM three speed box. The revised design features an "H" pattern gear change, and clutch. The front wheel drive arrangements and suspension have been remodelled to give a more proto typical representation and the front axle has novel in-board brakes to each wheel. Roger gave me a conducted tour of the model to point out all the special features, of which there are lots. He has done a splendid job, as always, of creating an excellent representation of what must have been a most revolutionary vehicle when it first appeared on the streets.

I am a bit confused at what I can attribute to our regular contributors **Tom & Matthew McCallum**. As Meccano collectors they usually bring something of historical interest, with large nostalgia coefficient, and definitely presented in immaculate condition. The notes tell me that they brought two models, a factory built window display model of a small locomotive in yellow and zinc colours and a front loading steering shovel. I don't recall seeing either, but I did spot a Meccano motor chassis display model, presented in the 1950's colour scheme and which was running very smoothly when I saw it. I believe this model was also a part of their stable of factory built models.

As I had not seen him for some time, it was good to catch up with my good friend **Colin Reid** once again. He brought a collection of three or four early steam engines picked up at sales in his area. Some very desirable items I can tell you. He also brought along a small model of a steam lorry he built some while ago - I recall having seen it before. However, some smart wag pointed out that it was an electrically powered steam wagon! It is a pity that the quality of the jokes is not as good as the quality of the models at the meeting.

After a bit of sleuthing I managed to find out that the builder of a large AEC logging tractor and trailer, sometimes known as a Matador, was **Mark Rolston**. Built in assorted coloured parts, chosen to give a consistent appearance, the model is based on a Bill Charleson design first published in an early 1980s MM. The large tyres for the wheels set the scale. The tractor is about 3ft long, the trailer is about 2ft long and it is important to note that the trailer is complete with scale logs. The model was set up on a stand so that the mechanics of the tractor unit could be easily demonstrated.

As ever **John & Joyce Sleaford** brought along a fairish collection of smaller Meccano models built from an assortment of the most recent outfits. These always present a colourful and attractive display since they

are always in pristine condition and very carefully built by two experts. They also provide a good place to get an opinion about the success, or otherwise, of the latest Meccano offerings. For example, I managed to get the "Full Monty?" on the new IR control kit that now comes with some of these outfits. (Not as versatile as the old IR system for road vehicles, as only one function can be operated at a time)

The models on show included the Radio Controlled Car with MP3 player, outfit No.9950, and the small red model Radio Controlled Car, available as a special production from Marks and Spencer. Also from M&S was a small tractor built by John, but modified to enable it to function properly. His modifications included the addition of a 3:1 wheel hub reduction gear and a 19:1 reduction gear box in the drive train. This prevents it from becoming airborne when switched on! He also pointed out that this particular outfit does not include a steering wheel, exhaust pipe or air filter, which of course he added later. A second version of the tractor complete with muck spreader was also on show. The very latest item they had on show was the IR controlled crane model, outfit No.8541. John gave me a demonstration of this and it seemed to work well enough, but the model is a bit flimsy and the IR controlled functions each required their own combined receiver unit and battery box. The cost of batteries can be discouraging especially as the tiny hand held transmitter uses non-standard compact (relatively expensive) batteries.

John MacDonald's military modelling activities seem to have taken a back seat of late and he is now building models of more conventional road vehicles. He brought two models to the meeting the first was of a 1930 Hudson saloon car which was looking good in its dark blue coach work with black hood. His second, and equally impressive, model was of a 1910 Rolls Royce car finished in dark green with a black hood. Built to similar scales, the models were about 15" long and it goes without saying that the mechanical and electrical detail on both models was fully functional.

The most elusive model builder at the meeting must have been **Terry Wilkes** as it took me most of the meeting to find out who the builder of a very nice Mechanical Horse tractor and trailer vehicle was. The model was built to the late 1950's No.9 outfit instructions using yellow, blue and zinc coloured parts. Since the model was built from the contents of a period No.10 outfit Terry was able to incorporate considerable enhancements to his model. Very nicely presented, this fine model was very evocative of the 1950's to me as I can remember one of these vehicles operating out of the local railway goods yard. (In deepest rural Essex!)

Last, and by no means least as we shall see, **Trevor Frankling** brought along a couple of unusual mechanisms. He is well known for producing small but mechanically unconventional devices of one kind or another. His first offering was a demonstration model of an epicyclic gear arrangement with a large input to output ratio, based on a rather complicated gear arrangement patented by NASA. The patent describes a gear box comprising several annulus rings and sets of sun and planet gears all moulded in plastic. Trevor has recreated a Meccano replica comprising two gear rings, a planet gear meshing with both rings, One of which is fixed and the other is free to rotate. The fixed gear ring is a standard Meccano 95t ring and the free ring has only 92t, it is the same size as the Meccano ring, but was made by Trevor especially for this application. In his own words, "there is sufficient play in the Meccano 19t pinion to mesh both the 95t and 92t gear rings on the same pitch circle". The key component of the compact gear box is the assembly of these two gear rings with a common planet gear, and a number of 19t pinions operating as sun gears complete the arrangement. The overall input/output gear ratio is 122:1.

Trevor's second mechanism was a 12:1 ratio gear box for driving the hour and minute hands of a clock. However, the clever bit is that the arrangement uses only two gears rather than the more usual four gears. From the description, the gear train reads a bit like another epicyclic arrangement - a made up pinion operating eccentrically inside a made up crown wheel, and Trevor emphasizes that the gearing uses no standard gear wheels since his gears are made up from strips and other small parts. Unfortunately, my description is not too helpful without a supporting photo of the device - my visual imagination is not good enough! And that brought me to the end of my model tour.

It was good to see Mike Rhoades plying his trade at the meeting as usual but with the assistance of a "guest helper? Robin Throp. I must add that I am indebted to many members who provided me with a little write up of their models and many who took the time to explain their creations to me. It makes an interesting meeting for me as there is little that I do not get to see in reasonable detail. So remember, it really helps if you label your model appropriately, including your name, and to provide a brief write up, either on the attendance form or separately, is a real bonus for me.

I must thank Dave Bradley for his contribution too. Not only does he collect the attendance forms and pass them on to me, but he also typed up the model descriptions for me. I have incorporated his material into my report and I am very grateful to him for this as it saves me quite a lot of "composing" time. So there we have it, another very good meeting, bulging at the seams with a vast assortment of models, large and small. I look forward to repeating the experience in the autumn.

Mike Cook

85th Model Report at Baginton – 10th October 2009

The meeting was one of the best I have been to for some time. When I arrived mid-morning the hall was humming with members intent on renewing friendships and catching up on the latest news. The turnout of both members and models, including a few newcomers, was excellent. For the first time ever I had great difficulty getting around all the members and their models in the time available. Many were keen to tell me about, and in some cases demonstrate to me, their latest creations - all of which takes time. So for errors and omissions I apologise, but I did my best to get around everyone. It is on occasions like this that the short written account provided by the builder is so valuable, and I am grateful to all those who gave me a description however brief.

First on my model tour was **Richard Gilbert**, a member who has returned to the fold after some years away. Richard had brought along two models - a very nice version of the railway breakdown crane, SM30, modelled in a red and zinc colour scheme, and an old Meccano shop display model. The display model was of a windmill dating from 1926 and typical of the style of the period. No doubt cleaned up by Richard, the model was constructed in a carefully chosen combination of red, green and nickel parts. The windmill stood on the customary wooden base, about 1ft square, and measured about 2' 6" high I guess. It has an interesting history as Richard found it in a shop in Los Angeles and managed to get it back to the UK in one piece (presumably not as hand luggage!).

Once again, **Tony Knowles** brought along a pair of models made from alternative construction system sets. Firstly, a small modern looking fire engine made of MEK-STRUCT, a 1990's Meccano look-a-like from Hong Kong. The blue-yellow-red colours of the parts looked very much like Meccano. The model was motorised and also included light and sound which, according to Tony, sounds pretty awful. Secondly, Tony brought along a larger old fashioned fire engine made of STABIL, a German construction system in production from 1910 to 1972, and which included some rather unusual parts. The model definitely had a 1920's look about it as it was modelled exclusively in oldish looking nickel parts. STABIL could perhaps have been Meccano's first serious competitor since their origins date from the same period.

Ken Wright brought along his latest locomotive model, a Welsh Highland Beyer- Garrett 0-4-0 + 0-4-0 K1. The locomotive was one of a pair built in 1909 and supplied to the North East Dundas Tramway in Tasmania. It was brought back to the UK in 1947 for preservation and in 1966 it was transferred to the Ffestiniog railway. After a spell at the Railway Museum in York, where it was restored cosmetically, it was returned to Wales in 1995 for complete restoration. It was eventually returned to service on the Welsh Highland railway in 2007. Ken's model was built to an approximate scale of 1:12 to give it an overall length of about 30". Tatty old Meccano parts were used in its construction and the finished model was sprayed overall in black paint to give it an authentic finish. The look was enhanced by the addition of many polished brass fittings and trim to give the model a splendid appearance. The model is powered by ex-equipment 16V geared motors, one in each power unit which drive through a 3/4in pinion meshing with a contrate gear on the axle. The scale is roughly compatible with Ken's existing Welsh narrow gauge models all of which run on LGB track with two rail power pick up.

I found **Roy Whitehouse** busy producing beautiful and very colourful patterns with a superbly well-made example of a Meccanograph. He explained that his particular variant is known as the "Nightingale Meccanograph", the design of which was described in CQ about 10 years ago. This is a great model for showing off at exhibitions. True to form, Roy also brought along a completely restored Spanish No.0 outfit with box and label reproduced to a very high degree of realism. It certainly looked as good as, if not better than, the original outfit which Roy also had for comparison.

Very large and mechanically very complex military vehicles seem to be the preserve of **Richard Payn**. Once again he brought along his large model of an Oshkosh PLS military vehicle which is clearly intended for shifting large heavy loads. The model is built in his customary yellow and dark blue colour scheme, it is about 4' 6" long, and most of its chassis length is filled with all manner of complex gearing. A large part of the gearing is concerned with the transmission and steering to all 10 wheels, and the rest is required for auxiliary chassis mounted equipment - for example a very nice rendering of a small hydraulic crane. His other model at the meeting was a slightly less grand 8 x 4 truck built in a similar style and with an equally comprehensive complement of mechanical detail. Together the models are impressive and eye catching.

Alongside, and much more modest in scale was yet another very nicely modelled fire engine by **George Illingworth**. The model is based on a London taxicab conversion and is presented towing a trailer pump. Apparently, London taxis were commandeered by the AFS during WW2 and hastily pressed into use as rudimentary fire engines, hence the addition of the trailer pump. As always George has done a really good job on modelling the vehicle with sufficient and convincing detail. Size wise, the "taxi" is about 12" long and the trailer pump adds about another 6".

Next on my itinerary was a very nice model of a Bedford Pullmore Car Transporter, based on the well-known Dinky Pullmore, and at 4' overall it is rather bigger than the Dinky prototype! The model was designed and built by **Roger Marriott** to his customary very high standard with an eye to maximising display appeal. Scaled to about 1:16 the model was built within the confines of a No.10 set with a few common extra parts. The use of 2" pulleys and tyres sets the scale. The model is similar to a No.9 set model of the month featured in the MM but has been completely redesigned to improve the trailer and

tractor unit using No.10 set parts. The model is still in development and presently has steering and a differential but has yet to be fitted with a gearbox and transmission. Extremely well built using pristine light red and green parts, Roger has set the model up for display purposes to include several Meccano car models from an earlier period - very nice!

It appears that **John Reid** had done himself a bit of a mischief and was sporting a rather robust Meccano walking stick comprising a significant number of green girders - and it seemed to work pretty well! Otherwise, he brought along a small collection of aeroplane models constructed from pre-war outfits and parts. Firstly we had the high wing monoplane based on a model in the instruction book for "Special Outfits Nos. 1 and 2", and secondly, the biplane constructed from export outfit No 12, shown with Belgian markings. It is nice to see these increasingly rare models in such good condition.

John Molden is noted for building his models large - usually fairground rides and their associated transport. Extending his remit a bit, John brought along a very large Volvo F16 tractor unit together with its flatbed trailer. As ever, the model was built in 1950's red and green parts to a scale of 1:12, which gave it an overall length of about 5'. The model is constructed entirely from Meccano parts, including the wheels and tyres, and it has a working clutch, 3 speed and reverse gearbox and handbrake.

In the same vicinity was a very nice model of a 1950's favourite, the mechanical horse and trailer built by **Terry Wilkes**. The model was built in yellow, blue and zinc colours to the familiar model leaflet instructions 9.1, with a few extra parts for the usual improvements. Terry's other model really caught my eye because of the tyres on its rear wheels. The model was of a Massey Ferguson 135 tractor, built mainly in yellow and zinc parts, and scaled to give it an overall length of about 12". Now the tyres on the rear wheels are chunky looking items which I was informed are called "Pup Tread" and are really rubber items for dogs to chew on! Closer inspection revealed that the tread is represented by raised bone shaped elements and the central hole is a perfect fit for the standard Meccano 2" pulley. The resulting tractor wheels looked very good on the model. Who would have thought that the local pet store would be a source of authentic looking tyres? I was also informed that a larger size is available (for larger dogs I guess!) which fits nicely on the 3" pulley. I learn something new at every meeting!

I found **Paul Hubbard** busy beaver away on some new construction, which is how he often spends his time at the meetings. Paul brought along lots of the smallest standard kit models, including two red arrows aircraft models. He also had a larger modern buggy built from one of the newer outfits that I am not so familiar with. His main model was a substantial diesel electric locomotive comprising a two car unit. Built mainly from yellow and zinc coloured parts, his chosen scale set the gauge at 2 1/2" and the two cars together measured about 6' long. Paul also brought a part built trench digger, constructed in 1950's red and green parts from the No.10 set instruction leaflet 10.17 of the same period. This is a nice looking model, so I for one look forward to seeing it completed at the next meeting.

Alongside Paul's models was a really nice showman's traction engine built in pristine 1950's red and green parts by **Dave Phillips**. The engine was based on the small Bert Love design and includes working differential, winch drum, dynamo and exciter not to mention the 32 miniature lights around the canopy which set it off really well. The engine was displayed towing a drivers living van, a rather more splendid showman's' living van, complete with cat, broom, chair, etc. and a water bowser. Quite a train, even at the small scale it had an overall length of about 7'. Dave informed me that about 90% of the parts used in the models have been restored from poor quality second hand stuff. The entire display was a credit to his dedication.

Nearby, and forming a backdrop to several other models, was a sizeable bridge span built by **John Nuttall**. This classic model reproduced the familiar Meccano 1928 version and was superbly turned out in the correct period green colour scheme. The span was about 3' and the bridge carried a single length of OO gauge railway track to complete the picture.

As per usual, **Matthew McCallum** brought along a large eye catching display model - this time of an Orbiter fairground ride. A great looking model, constructed in pristine red and green parts, it is fully working and the complex motions are driven by 3 motors hidden away in the structure. The model base is about 4' square and an area of red and green that big can only be described as "eye catching"!

Sid Beckett did not know what model to bring to the meeting so he settled for his grand piano again. Quite a novelty this one! Built in yellow and zinc coloured parts the piano measures about 3' long by 18" wide by 18" high and was shown off with the lid raised to expose the internal workings. Although fitted with a dubious looking keyboard comprising lots of strips, I was disappointed that only one key worked to produce a pretty tuneless sound. So I guess it could be used to support a big band playing the One Note Samba! However, I am sure it makes a better sound than Sid's Meccano saxophone.

Keith Way brought along a nice looking model of a Chinook helicopter built mainly in yellow and zinc coloured parts, and which is based loosely on a model pictured in a French No. 6 outfit instructions. To give you some idea of scale, the fuselage is about 15" long and the two rotors are each about 16" in diameter.

Keeping close company with the helicopter I found a neat little army Multi-kit truck built by **John Evans** in appropriately coloured parts. Sadly, John is now suffering from seriously impaired vision, but this has not stopped him from model building. However, I am sure he gets lots of support and encouragement from his friend Terry Bullingham who also has a similar handicap that has not stopped his model building, as we all

know.

Crowded in alongside were two classical models of the 1950's. A railway breakdown crane and a dock crane, both built in mid red green coloured parts and both attributable to a No. 6 or 7 outfit I would think. Unfortunately, all I could find out about the builder was that his name is John. Could that have been **John Palmer**? I think I spotted him about but I did not get an opportunity to talk to him. My apologies if I have got it all wrong.

Superbly detailed locomotive-like models in the style of Rowland Emmett are forever associated with **John Bridger**. On this occasion we were once again treated to the whimsical sight of Nestal - "The afternoon tea train to Wisteria Hall". This is quite a large model, set up on its own base for display purposes and it definitely does demand another look! John also brought two rather more conventional models, both based on a modern showman's tractor unit. First was a model of a Scammell Pioneer tractor unit, built to a scale of 1:10, based on a heavy duty truck plan by Philip Bradley, but built as a Showman's Tractor. The model is electrically powered and the battery was extracted from an Aldi wireless hedge trimmer. The ingenuity of the Meccanoman knows no bounds!

John's second model was based on a rebuild of the Meccano Radio Controlled 6 wheel tractor (lorry) outfit. A spot of surgery on the power module enabled the output drive to be geared down to make it controllable otherwise, as we all know, the speed of the basic unit as it comes is unrealistically high. The model was also built in the form of a Showman's Tractor, making good use of red and zinc coloured parts to give it an appropriate and attractive appearance.

Then I came upon another Boeing Chinook helicopter, this version having been modelled in the inimitable style of **Brian Edwards**. The model was built in Brian's customary 1950's mid red and green parts and overall it is about 3' long. This produced a fuselage of about half that length, but large enough to facilitate the inclusion of a fair amount of detail and permitting the reproduction of the compound curves with a reasonable degree of realism.

Next door was a group of three superbly constructed road vehicles by the expert - **Terry Pettitt**. The MG Magna and Frazer Nash open topped sports cars have been shown off before, but it is always good to see such fine models. Both are about 18" long and both include lots of mechanical detail.

Also on show was Terry's rather larger Bedford end tipper lorry which is based on the Dinky toy model and is constructed to approximately 1:8 scale. Quite a chunky model this measuring up at over 2' long. It has a colourful appearance as the cab and chassis are modelled in standard red and green parts, but the tipper body is modelled in yellow and green parts. Naturally it also comprises the usual working mechanical detail.

New for this meeting, Terry brought along some mechanical hardware comprising a tracked vehicle transmission. This is an experimental assembly to provide an all mechanical means of giving stepless steering radii. It features a 4 speed and reverse gearbox with a high and low range box driving the tracks via two epicyclic gear units. This arrangement would drive both tracks at the same speed and in order to vary the relative track speeds a second input is made to the epicyclic gears from the steering mechanism. This consists of a friction drive in which a rubber faced 95t gear is pressed into contact at right angles with two 1.5 inch pulleys with tyres, between which is fitted a differential, the output of which drives, via two contrate gears, the second inputs to the epicyclic gears. The complete assembly of the 1.5 inch pulleys and differential are able to slide across the face of the 95t gear under the control of the steering wheel and when both pulleys are equidistant about the axis of the 95t gear they rotate at the same speed but in opposite directions, thus there is no rotation of the differential and no input to the epicyclic gears and thereby the tracks. A steering command causes the pulleys to move across the face of the 95t gear creating a difference in their rotational speed, and thereby an output from the differential which causes one track to slow down and the other to speed up. The relative track speeds are proportional to the movement of the steering wheel and by this novel means the desired steering characteristics are achieved. If you didn't follow that, have a look at the original model next time you get an opportunity. It is very compact and I am sure it could be useful in many different applications.

Now for something completely different; **Roger Burton** brought along his latest model of the Mars tractor as described by Dr Brett Gooden in CQ 84. The tractor concept was part of a manned expedition to Mars proposed by Dr Wernher von Braun as long ago as 1953. His proposal was to send ten huge spacecraft to the planet, seven for passengers and three for cargo, and three tractors comprised the ground vehicle complement of the cargo. The spherical-shaped living quarters on each tractor had a skin composed of nylon and plastic fabric and would be transported as folded bundles in the spacecraft. After the tractor was unloaded these living quarters were to be inflated with a breathable atmosphere and the internal fittings installed, such as bunks and storage compartments. Hydrogen peroxide was processed to provide steam and oxygen and this was mixed with diesel oil and burned in a combustion chamber. The superheated steam passed into a conventional steam turbine which provided the motive power. Spent steam from the turbine passed into two large cylindrical low pressure condensers mounted on either side of the tractor and which, along with the spherical crew module, are distinguishing features of the tractor. Readers wishing to know more about this remarkable vehicle are referred to the article in CQ 84.

To mark the 40th Anniversary of the Moon Landing, **Geoff Devlin** brought along two models built from

the 'Space Series' outfits. The space rocket and mobile gantry were constructed from the Space 2501 outfit, and the satellite transporter was constructed from the Hyper-Space outfit.

Geoff's other model at the meeting was somewhat larger and nicely modelled in his usual style using red and green parts. The model was of an Ottawa Electric Railway car number 25, built to a scale of about 1:17 to give it the following dimensions, length 22.5", width 6.5" and height - with tower down 10", and with tower up 15". The prototype tower wagon on which the model is based was built in the workshops of the O.E.R. in 1923. It had an entirely wooden framework; it was painted bright red and was constructed so that work could be carried out on live overhead wires. The railway system started in 1870 with horse drawn cars, electrified in 1891, and closed down in May 1959. In its early days a child was killed by a car bearing the number 37. Thomas Ahern the president of the company, a very superstitious person, forbade the use of the number 7 on any public car from then on, although one works car did retain the number 7.

In CQ28 **Tony Parmee** described his rebuild of the block setting crane, model 10.19 in the pre-war No.10 set manual. Tony has now modified and improved the model further as shown at the meeting. His variant is now longer in the boom, but shorter in the cab - remaining the same length over all - and such that the block can now be racked out further than previously. However, it does require some hefty ballast when demonstrating with house bricks! The model now has improved drives to the slew and travel functions, it can be built entirely within the constraints of a 1954 No.10 outfit and both Fiddlers and Friction Grip lifting tackle can be demonstrated. Unusually Tony has fitted the model with two power units such that it can be driven with a Meccano-Mamod steam engine (1965) or, alternatively, with an E20R electric motor.

Once again **Ken Senar** has started work on one of his substantial and seriously complex models. This time he has chosen to model a shuttle-less Rapier style loom complete with pattern programmer - a challenging subject as my good friend Colin Reid will testify. Ken has very wisely discussed the project with Colin already in order to benefit from his experience with the real thing. So far Ken has completed the essential mechanisms, which are now undergoing development, and he was good enough to show me the state of progress so far. It goes without saying that the model is bristling with the most ingenious use of Meccano parts to achieve the most effective solutions to the many mechanical design challenges. Having built a loom myself, I know just how difficult this subject is. So I was fascinated to see the mechanism demonstrated and I am sure that in due course Ken will achieve success, and that really will be something very special to look out for.

Must be something in the water since **Tony Wakefield** also brought along his model loom built from Keith Cameron's description in SML49 leaflet. This is the loom I built, along with the pattern programmer, SML50, and after enormous and tedious effort I did get it to weave a small piece of cloth about 6" long. My less than flattering comments got to Keith's ears with the result that we enjoyed an exchange of correspondence for a while, in which he was most helpful. So it can be made to work, but it is hard! Close inspection of Tony's loom revealed that he had made a rather better job of the mechanical detail than I managed to achieve. In particular, I was very impressed with the arrangement he had made to replace the beam in the original model, since that was one of the items that gave me so much trouble. I did not see the loom working, since by then I was really fast running out of time. However, there was a small section of woven material in the shuttle area and it looked very similar to my own effort, so I think that it probably works fine. I hope Tony will bring it to the next meeting so I for one can have a proper look at it.

Alan Covel produced yet another novelty model from his fertile imagination to celebrate Blackpool Tower, a Blackpool tram and the Red Arrows all rolled into one. The tower built in zinc parts and nicely proportioned at an approximate scale of 1:100 gives the model a height of 5' 5" and a base size of about 4' square. The tower incorporates a lift weighing in at about 9oz. The lift is the cunning means of driving the three arm rotor mounted horizontally at the top of the tower. Each arm of the rotor supports three diminutive Red Arrows aircraft and the aircraft rotate around the tower as the lift falls, one descent of the lift resulting in 30 revolutions of the aeroplanes. Careful selection of parts enabled a total weight of the 9 aircraft to be kept under 1lb. Around the tower base Alan had built a circular tramway track with a gauge of about 2 1/2", and an electric tram travels clockwise to complete the celebration. Unusually, the tram is banana shaped in plan to match the tight radius of the track and a NiCad battery provides power to a Meccano 6 speed motor which in turn drives the wheels by means of a rubber band. An interesting and very nicely presented display model, built using modern parts in the style that we can only associate with Alan.

For some time now, **Mike Edkins** has been developing fiendishly innovative clock mechanisms and the fruits of his labours were on display at the meeting in the form of a weight driven clock fitted with count wheel striking mechanism. The clock mechanism was mounted in a temporary frame to give it the proportions of a small grandfather clock and to give space for a reasonable fall of the driving weight. Having solved the problem of constructing an all Meccano rack striking system, Mike turned his attention to building a striking mechanism using a count wheel, also known as a locking plate, which was fitted to the earliest mechanical striking clocks. The mechanism remained in use in domestic clocks well into the nineteenth century despite the introduction of the superior rack striking system. The count wheel itself rotates once in twelve hours and has a series of notches around its edge. These are spaced at multiples of 1/n of the circumference of the disc. Adding the number of hours struck in a twelve hour period equals 78 i.e. 1+2+3...+ 12 = 78 and the space between these notches governs the number of blows to be struck

on the hour bell. Several Meccano clocks have been built over the years with a count wheel made from a disc of thin metal or plastic. In the Meccano No.2 Clock Kit, for example, the count wheel has in effect been inverted - the notches are converted into projections which arrest the striking train, and which puts them under considerable bending strain. Not a good design solution!

In clocks fitted with the count wheel strike, a hoop wheel carries out the arresting function and Mike has incorporated his mechanism into the clock. The inner construction of the count wheel consists of three 3" pulleys each fitted with a plastic motor tyre bolted together. Each of these has a loop of sprocket chain, of 78 links, fitted tightly around the circumference of the tyre, their links in alignment, and placed across these links are 78 x 2" axle rods. Sprocket chain and spring cord around the axle rods hold them firmly in place. To provide the gaps for the sensing lever to drop into at the appropriate spacing, 1" axle rods replace the 2" axle rods. Drive to the count wheel assembly is via a 14-tooth sprocket, that by good fortune meshes with the outer diameter of the 78 axle rods at a standard hole spacing. Admittedly this assembly is rather bulky, but it works very well, and is reliable. The hoop wheel consists of a 5 $\frac{1}{2}$ " flat girder bent to fit within the flange of a wheel flange, and is clamped between two of them. This provides a gap for the locking lever to drop into, to arrest the striking train. As shown at the meeting the clock runs for 26 hours per winding. A pendulum beating seconds is fitted allowing for the installation of a second's dial, the hand of which indicates true jump seconds. The escape wheel is a 36-tooth sprocket; its shaft fitted with a 60-tooth gear wheel, and is connected to the second's hand 50-tooth gear with sprocket chain providing a neat solution to the perceived lack in the Meccano system of a 30-tooth escape wheel. If you did not get all that have a look at Mike's clock next time you get the chance.

And now for something that is a little easier to comprehend. **Mark Rolston** brought along his large AEC Matador logging tractor for another outing. Since I described this model in my last meeting report, interested readers should refer back. New for this meeting Mark brought his latest substantial model of a JCB 712 articulated dumper truck. This is a beefy model, nicely turned out in yellow, blue and zinc coloured parts, and is scaled to be an approximate match to the Matador. Mark explained that he had jerry wangled the steering mechanism using a cord system, but that it was unsatisfactory and he has yet to find an alternative mechanisation.

Next I found my good friend **Colin Reid** who put on a splendid show comprising three vertical boiler steam engines he had "picked up" in auction sales for relatively little cash. Two were early examples of Meccano steam engines which predate the iconic 1929 model and which Colin has shown off at previous meetings. However, his latest acquisition was a rather larger steam engine. The leading particulars of the engine are that it is about 16" high, has a boiler diameter of about 4" and a flywheel diameter of about 7". Colin reported that he has not yet tried to steam it up, he believes it is of French origin and that is about all he knows of its parentage at present.

John Thorpe, one of our resident dealers, brought some heavy engineering which will eventually become a base stand for a model of the Eurofighter Typhoon aircraft, which will follow in the footsteps of his splendid Panavia Tornado model. This will be something to look forward to. John's other model on this occasion was a pristine lifting shovel, modelled in dark blue and yellow parts and built, I think, to the No.10 set instructions 10.6 although I could find no clue to confirm this.

As ever **John and Joyce Sleaford** produced their own little display comprising several models. Unfortunately I ran out of time before I could talk with them about the models. However, from the information provided, for which I am extremely grateful, the models included a Hindle Smart electric articulated lorry built from MP 181. The prototype vehicle had a distinctive battery box either side of the chassis behind the cab and they were used by the GPO and British Railways during the 1950's. Four little robots were built by Joyce from what I gather are small off the shelf kits of parts which, unusually, come in tins. Lastly, a bigger model of a snow plough built from the parts in a standard RC lorry outfit 8701 completed their display - something of interest for everyone.

I am really pleased that **John MacDonald** prepared a brief note for me describing the models he brought to the meeting, as I did not get time to have a proper look at these either. Not only that, the models he actually brought were not the same as those listed on his meeting notice form! According to John's description the first model was of a 1940/41 "White" tank transporter, built in the impeccable style to which we have become accustomed. As ever, it all worked, as per prototype including, 3 speed gear box, double drive rear axles, correct suspension, power winch and lights. Model number 2 was of a German Steyr Raupenschlepper general purpose military vehicle. Again the working mechanical detail includes suspension, steering and lights. And I think that brings me nicely to the end of my tour.

There we have it, another excellent meeting which seemed to be over all too soon. Some very fine models, some good company and the promise of some interesting constructions at the next meeting - what more could we ask for. My thanks to all those who prepared a brief note for me, it does make my job a lot easier. And for those who don't, it would be really helpful if you label your model and put your name on it. It is surprisingly difficult to track down the builders of anonymous models. Meanwhile, I look forward to reviewing the result of the winter model building season at the next meeting.

Mike Cook

86th Guild Meeting 27th March 2010

After a long and dreary winter the first signs of spring were evident as I drove to Baginton for the meeting. The air of spring-like optimism was also apparent at the meeting and it was clear that the Meccano fraternity had been very busy over the winter months – the activities of friendships being made and renewed, and lots of new models to investigate emphasized the promise of what turned out to be a “great” meeting. In my last report I commented that the October meeting was one of the best for a long time, but the present meeting was even better. Curiously this was a meeting of many unusual pairs of models:- looms, aerocars, ships, rope climbers, longcase clocks, road surfacing machines – to name a few of the more obvious exhibits. There were also rather more models present than usual so, without further delay I will get down to the business of reporting on what I saw. As always, my apologies to those I have missed or misrepresented. I rely greatly on my memory to produce the report and, sadly, it is not as good as it used to be!

The first group of models I reviewed were built by **Tony Brown** who kindly furnished me with some written information. **Tony** has been working on a long jib shovel based on the large mechanical shovels which were built in the period 1905-1925 by various companies. The design of his freelance model is largely influenced by the 1907 Grossmith machine and the mid-1920s Ruston 250 shovel, both of which were based at Stewartby brick works near Bedford. The model was constructed from the contents of outfit No.10 except for the addition of large quadrant sections and gear for slewing. An optional dragline front end is under construction as an interchangeable item with the current jib, bucket and racking arm. The model is driven by a Powerdrive motor with an on board battery pack. The controls operate primary and secondary winding drums, brakes for both drums, slewing and travel. An auxiliary winch is also fitted at the rear of the machine to lift the boom into working position from the ground. In its present configuration the primary winding drum raises and lowers the bucket and the secondary winding drum controls the chain drive to raise and lower the dipper arm. When configured as a dragline the secondary winding drum will drag the bucket towards the machine.

Tony has also been fortunate to acquire a substantial collection of Marklin and he brought along a part built fire engine model and a modern tractor model built from the collection. The fire engine was built from instructions in the 1950s manual for the set 1015, the largest set of the period. Numerous problems were encountered whilst building the model due to its poor design. The biggest problem is the weight of the ladder, described by one German ‘It is designed without due regard to gravity’, and the other problem is the bodywork. The Marklin designers specify sharp creases in the metal plates, which **Tony** was not keen to do especially when it involves the special shaped plates used on the bonnet. Included in the collection of parts were a quantity of bright orange pieces and two manuals. It seems that these items were from the 1980s Tractor, Lorry and Construction Machines outfits, although it was clear that some parts were missing. The tractor is an attractive model in its orange and black colour scheme and was built exactly as in the manual with the winch added as an optional extra.

Next, I came to the first road surfacing machine; a model built by **Geoff Devlin** built in his inimitable style from mid 1950s red and green parts. The prototype for the model was the Dynapac F181CS Paver Machine, the largest in the range of pavers built by Dynapac, part of the Atlas Copco Group. The F181CS is a “serious” road surfacing machine and can lay tarmac from as little as 8½ft, up to 48ft wide. The two independently controlled conveyor chains take hot tarmac from the front hoppers under the power unit to an auger, which is also in two independently controlled sections, which spreads the mix to the laying units. The laying units smooth the tarmac with vibrating steel plates driven by a high speed eccentric cam. At the trailing edge a tamper bar gives the final smooth finish ready for the road rollers. The tarmac under the boxes is kept hot with either gas or electric heaters. If gas heated, two gas cylinders are installed on the driving platform behind the seats. The caterpillar track (one foot wide in the model) has thirteen idler wheels, but only nine are fitted on the model. This unusual model is built to an approximate scale of 1:12 giving it a length of 25in, width 18in and height 13in.

For those who are seriously in to nostalgia, then **Roy Whitehouse** is your man. **Roy** usually brings some examples of his fully restored outfits and on this occasion he did not disappoint by bringing along three beautifully presented Dinky Builder outfits. Seen like this, it is easy to appreciate why Meccano products were so popular in the grey days of the 1950s. **Roy** is also in the habit of fetching along one of his models, often built using fully restored period parts which also presents such a nice image. His model was one of two rope climbers present at the meeting. **Roy** demonstrated the model to me and, needless to say, it worked perfectly and continuously once set in motion. The little man climbed to the top of rope and then climbed down again, the mechanical timing was perfect and the model could run unattended for long periods making it most suitable for demonstration purposes. Alongside was the second rope climber model built by **Keith Way**. The design of the model was very similar to that built by **Roy**. In **Keith’s** own words, his model was a plagiarised version of one displayed at the NMMG meeting by **Richard Bingham**, and was built primarily for exhibition purposes when it could be left to run unattended for long periods.

I never cease to be amazed at the model building ingenuity of **Terry Bullingham**. As I am sure everyone knows, **Terry** is seriously handicapped by impaired vision and under the circumstances it is truly remarkable what he achieves. Undaunted by complexity, **Terry** has started building the classic block setter

model to his own freelance design. He brought along the gantry to the meeting which is intended to be representational of the type and to support the cantilever frames he built last year. The gantry is constructed massively, principally using early nickel components (I think) to a scale of 1:12. The large scale was chosen in order to use standard handrail supports and ladder-work, and results in a relatively small crane with a 75in long jib, rather shorter than the frequently modelled 'Titan' giants. Bevel gears have been used to route the drive train through the gantry to the four driven railway wheels. In order to ease maintenance and to ensure that all shafting is appropriately supported 4-way collars are used to represent brass journals. The collars are clamped to the structure using narrow fishplates. **Terry** feels it is worth the effort as all the individual shafts may be removed by simply releasing the collars. Interestingly, **Terry** has used a motor car starter ring for the massive turntable bearing – rather more engineering like than the Meccano equivalent! The gantry is about the same size as that of SML4, although at 30Lbs it weighs rather more. Watch this space to see how the model develops!

John Nuttall brought along his model of a twin span bridge – "The Blue Bridge", Cumberland, Maryland, USA. The bridge is modelled in the same style as the classic early Meccano models using appropriate period nickel parts. The model represents a tied arch bridge with two arches made from 5½in curved strips. Each span is 18in long and the road way is 5½in wide. The model was built as a static advertising prop for Meccanuity 2010, the theme of which this year is, you've guessed it – Bridges! Tucked in alongside was a radio controlled rally car nicely built by **John Evans** from one of the current outfits.

In his usual place at the end of the table run, **George Illingworth** was showing three more models in his 1:12 scale fire brigade series. Firstly, a Carmichael Cobra 2 Airfield Crash Tender built in 1990s French yellow parts, which is perfect for these vehicles. This model was built from GA drawings kindly supplied by Carmichael and runs on six Pup Tread tyres bought at a pet shop and which are scale size, and fit a pair of 2 in pulleys. Although hollow they are stiff enough to support the significant weight of the model. The Land Rover alongside has appeared before and is useful to illustrate the size of the vehicle. Secondly, a Mercedes Unimog U4000 Rescue Tender with crew cab and plain box body. This vehicle has an excellent cross-country performance and demonstrates that Unimog now produce quite large vehicles. Thirdly, an Austin K4 Escape Carrying Unit from 1943. These were hastily produced during the war to carry 50 foot wheeled escape ladders. They were designed with only a small hose reel pump and water tank and were intended to tow a trailer pump. However, to clear the escape, the towing eye had to be 9 feet behind the rear axle which was not satisfactory when cornering. The vehicles were subsequently modified by fitting a front-mounted Barton pump imported from the USA, where that was a common practice. The overall result was possibly the ugliest fire engine built in the UK, but some were taken into use by local authority brigades after the War, which is the excuse for the red colour scheme depicted by the model rather than the grey of the National Fire Service. Finally **George's** entry in the Spanner Christmas Competition incorporated side panels drawn in VirtualMec and printed out full size, which may not have been in the spirit of the rules, but overcame the limitation on number of parts.

Paul Brecknell has been working on his giant bucket wheel excavator for some time now and the fully assembled, but not yet fully working, model was on show at the meeting. This is a superbly well-constructed model making careful use of red and green parts to enhance the visual impact. It is big – I would guess that it is about 6ft long, 2ft wide and 4ft high and we know it is heavy as **Paul** explained some of the difficulties he has had with the previously inadequate supports for the rotating superstructure. He described to me his current difficulty, which is the arrangement for the slip rings to convey the switched power supplies to the various motors above the turntable. The problem is compounded by the fact that the centre of the turntable bearing is open to permit the transfer of spoil from the excavator arm to the disposal conveyor arm. However, with luck we should see the fully functional model at the next meeting.

Although by no means a small model, **John Bland's** 1933 Sentinel steam coach was dwarfed against **Paul's** excavator. The steam coach is based on a Southern Railway prototype, it was nicely modelled in red and green parts and scaled to run on 3½in gauge track. To give you some idea of size, the coach is about 30in long with a cross section of approximately 5½in × 5½in. Tucked in alongside were two smaller models to continue the railway theme. Described by the builder **Christopher Bond** as a toy breakdown train built to amuse his grandsons. Lucky young chaps! Very nicely built and presented in red and green colours the train comprised a little diesel hydraulic locomotive hauling a simple breakdown crane with match truck and a few accessories. The model was scaled to run on 2½in gauge track and very nice it looked too.

John Reid bowled up with a pair of very unusual models, which seems to be his Meccano modelling motivation. His first model, one of the two aerocar models at the meeting, was of a Sizaire Berwick WWI Armoured Aerocar as constructed by the Royal Naval Air Service in 1915. The model was built to an approximate scale of 1:8 using mainly army green coloured parts to give it an authentic appearance. Only one prototype was ever constructed and only three photographs of the original still exist, which **John** managed to obtain copies of courtesy of the Tank Museum at Bovington. All the vehicle details have been interpreted and scaled from the photos. The aero engine appears to be a Sunbeam 150hp V8 Crusader, details of which were obtained from the book "Sunbeam Aero Engines". In appearance the vehicle looks a little odd. The front end comprises a boxy armoured cabin and the rear end carries the aero engine and propeller which provides the motive thrust. It is notable that the propeller has no shrouding to prevent

personnel getting “minced”. (It is just as well the idea never really got going!) Size wise, **John’s** model is about 18in long and the propeller is about 10in diameter. **John’s** second, and most unusual, model was an approximately 1:10 scale rendering of the Captain Robert Falcon Scott 1912 Polar Sledging Party. The model was built to commemorate the event when, one hundred years ago on the 15th June 1910, Scott’s ship “Terra Nova” set sail from Cardiff for the Antarctic. The model depicts the five man polar party comprising Scott, Wilson, Gates, Bowers and PO Evans. They reached the South Pole on the 18th January 1912, one month after the Norwegian Amundsen who used dogs. Bowers was a small man and the navigator of the party. He is depicted at the rear of the sledge reading the log which was used to measure the distance travelled each day. Although the expedition did use tractors, ponies and dogs to haul the sledges, it was agreed right from the outset that the final push for the pole would be accomplished by “man-hauling” with a four man team, increased at the last minute to five with the inclusion of Bowers. The model figures, sledge and equipment are built on a Meccano base structure measuring about 4ft long by 15in wide. This most interesting and attractive model is a credit to the ingenuity of its builder and a very fine demonstration of the versatility of Meccano.

John Molden brought his fairground “fun house” model to the meeting – a large model built in the now familiar style with lots of working gizmos to present a most eye catching image to the viewer. The fun house sits on an 8x2 Foden lorry chassis which incorporates the usual mechanical detail; working clutch, three speed and reverse gear box and working handbrake. The entire model is powered by one 12 volt motor. The rear of the lorry builds into a two tier structure comprising the fun house. The fun house also includes lots of mechanical detail; a moving split stairway, moving floor sections, revolving drum, conveyor belt walkway and various ghosts, monsters and skeletons. **John** has constructed the model to make excellent use of the various colour schemes, it is fitted with lots of miniature lights and a few toy figures give the whole thing a most attractive appearance. Guessing, I would say the model is about 4ft long by 2ft 6in high by 2ft wide.

Both **Tony Parmee** and **Roger Marriott** brought along examples of the model cargo ship built from No.10 set instructions 10.4. Impressive models these, and displayed together they presented a rare sight. The model is over 7ft long, both were built in correct period red and green colours and both builders had made minor improvements to the design. So there were some visible differences of detail between the two. **Roger’s** model, of course, was constructed using the early sixties colour variant and was generally immaculate in its appearance. Whereas, **Tony’s** model used an earlier colour variant, was mounted up on his “rock and roll” sea motion system and sported a revolving radar to add some excitement to the presentation. In contrast the next model seemed diminutive against the ships. Another unusual model by **Dave Phillips** of a 1909 Hornsby steam crawler tractor built in immaculate red and green parts. The prototype was developed for use in the Yukon gold fields and it seemed suitably robust for the job. Superbly well-made and presented, the model is a credit to its builder especially as **Dave** informed me that it was built entirely from reclaimed Meccano parts which he has painstakingly restored. Model dimensions are approximately 15in long, 7½in wide and 12in high. The track is the standard Meccano plastic product, but the idler wheels are old metal road wheels sprayed black and it looks really good.

Once again **Tom** and **Matthew McCallum** brought along a pair of immaculately presented models built in pristine red and green parts from the early 1960s. **Tom’s** model was a reproduction of SML19, the electrically powered version of the steam shovel. Of particular interest **Tom** had based the model on the familiar version shown on a Meccano show card and in various literature as a cover illustration. Similarly presented to a very high standard was **Matthew’s** model of 4x4 face shovel digger. Rather bigger in scale at about 30in long, this model was also depicted in pristine red and green colours. I am not sure about the pedigree of this model, but I suspect that it was an original design by **Matthew** to make excellent use of standard parts throughout – in particular it made use of the large plastic road wheels which are rarely seen on a model and incorporated the usual mechanical detail. Dwarfed by all the “heavy machinery” around it was **Sid Beckett’s** little model. This time **Sid** brought along the standard No.8 outfit manual model (8.13) of a pair of fairground swing boats built in the colourful assortment of red, zinc, yellow and white parts. The model was manually driven by a small crank handle, no doubt for display purposes with children in mind.

As I reported at the last meeting **Ken Senar** has been working on a Rapier loom model for some time now, and he brought the latest development to the meeting. Again, coincidentally this was one of two looms at the meeting. In his own words **Ken** described this most challenging of subjects as an “Unfinished Experimental Project (as yet unsuccessful)!” It was clear that the machine works as it showed a length of patterned cloth about 6in wide *in situ*. However, **Ken** was far from satisfied with the performance, and the model on show was the fourth rebuild! The machine has a built-in pattern programmer which clearly works well, but the main problem he has encountered concerns the unsatisfactory finish of the outer edges (selvedges) of the woven fabric. **Ken** recognises that he lacks the knowledge to overcome this problem, even if it can be overcome using Meccano alone. So he is appealing to anyone with relevant experience who can offer proven practical advice.

A “Ding-Ding Tramcar” sounds a bit Chinese to me, which is about as far from the truth as it is possible to get in the present context. **Roger Burton** brought along this little tramcar model, designed by **Jim Gamble**, and originally described in an article in the Meccano Magazine Quarterly of October 1974. The

model was carefully constructed using green and yellow parts to give it a nice appearance, and it is about 15in long and runs on a short length of 1½in gauge track. The body was seen separated from the chassis at the meeting to reveal the drive and bell mechanism. A single bell warning indicates the tram is about to stop and shortly afterwards a cam pressing on the end of a rod disconnects the drive to the wheels. After a few seconds a ding-ding sounds and the drive re-engages and the tram continues its journey. The drive and bell mechanism runs through its complete sequence in about 60 seconds. In the model four home-made cams are used with the same profile as a Meccano cam. A quiet Faulhaber motor provides the power because a Meccano PDU proved to be too noisy and drowned the sound of the bell. Roger's other model at the meeting was an interesting differential gearbox, a demonstration model, constructed using only a few gears and capable of delivering a reduction of 10,830:1. It is not immediately obvious to me why anyone would want such a massive reduction in the typical Meccano model, except perhaps in an orrery. The design is attributed to one Pat Briggs and a description was published in the NMMG Newsmag No.115 of November 2009.

As always **Paul Hubbard** was surrounded by various models and spent most of his time at the meeting constructing his next model project, the second road surfacing machine at the meeting, and which he is building to the No.10 set instructions in leaflet 10.19. **Paul's** main model on show was a fairground big wheel ride, very 1950s in appearance and nicely modelled using red, green and zinc coloured parts. **Paul's** version is a copy of a Meccano shop display model which passed through his hands only briefly, but was originally in a shop in Coventry. He collected the model for **Rob Miller**, who passed it on to **Jim Gamble** who now has it in his collection. **Paul** gave us a working demonstration of the model during our Chairman's model tour.

Next, I came to a collection of road vehicle models constructed by **Terry Wilkes**. All of the models were consistent with the 1970s standard Meccano manual instructions, all were carefully modelled in yellow, blue and zinc colours and together they made a very nice display. First, there was the car transporter (9.7), modified to a certain extent to give it a more modern appearance. Second, was the breakdown lorry (9.10) with the addition of a winch to improve its detail and, thirdly, there was the side tipping lorry (8.5) also modified to incorporate a more reliable tipping mechanism. Close hauled alongside was the beginning of a new model by **Terry Pettitt**. **Terry** is well known for constructing vehicle models of all kinds, but with the common element of lots of clever mechanical design detail. His latest is no exception and he brought along the impressive chassis of a crawler tractor so we could appreciate the mechanics before it is buried in the model superstructure. The model is of fairly modest size into which is packed many interesting features including; a working clutch, four speed and reverse gear box, steering planetary gears controlled by steering clutches driven from the gear box output, thereby giving the model a large turn radius in top gear, a small turn radius in bottom gear and centre turns whilst in neutral. One to watch out for at the next meeting.

It took me a while to discover that the large vertical stationary engine nearby was built by **Howard Somerville** to an exacting standard of perfection. The model represents a vertical steam pumping engine I believe, since I do not have any other information about it. It sits on a Meccano base measuring about 2ft square, constructed using yellow and zinc coloured parts. The engine sits on the base and is modelled largely in red and green parts to provide a colourful contrast. This is a large model, approximately 30in high and having a massive flywheel of about 18in diameter by 4½in across the rim! It runs in a most convincing manner and is a fine exhibition model since it can be left running continuously.

The second loom at the meeting was the second outing for **Tony Wakefield's** model, which I commented on in my last report. The model has been carefully built from **Keith Cameron's** instructions in GMM super model leaflet No.49. Like **Ken Senar**, **Tony** has found this model a real challenge and has undertaken a part rebuild over the winter months, and he is still not satisfied with its performance. Although I did not see it running there was ample evidence in the form of some woven material to prove that it does work, but not as well as **Tony** would like. I understand his difficulty having built one myself in the past. He will do well if he can improve its performance.

John Ozyer-Key prefers highly complex mechanical detail in his models and his Liebherr Backhoe Excavator does not disappoint in this respect. This very fine model is based on Model Plan 119 by **Michel Adler** and **John's** model was constructed mainly in zinc parts with some in mid red to give it a most attractive appearance. **John** has been working on this model for quite some time and I reported on it last year. The model is built largely to the plan, but with a number of modifications to the mechanical detail. **John's** other model (I think) at the meeting was a small tipping truck built using his trademark colour scheme of dark blue and yellow parts.

He of the alternative construction systems, **Tony Knowles**, came to the meeting with an unusual small crane model made from the French *PYFYLY* system, which dates from the 1920s. It was sold in Britain as well as in France but seems not to have been very successful. The instructions in the manuals are rather complicated and many of the smaller models owe their attractiveness to decoration which is hard to reproduce in practice, and in any case probably did not have much appeal for boys. Of the three general purpose outfits, the crane is made from the No.3 set. In addition there were three theme sets, each for a roomful of elegant dolls' house furniture, but these are very rare indeed. The main *PYFYLY* parts are bamboo *Rods* joined by brass *Hubs*. The joints are adequately rigid by virtue of a nib on the end of most

of the *Hub* arms which engages with a cross slit at the end of the *Rods*, and is locked in place by a sliding *Collar*. Infill panels and decoration were to be provided by the builder although the sets did include some thin cardboard *Panels* covered in an (unsuitable) floral patterned cloth.

Also demonstrating very fine models built using alternative construction systems was **David Hobson**. On this occasion **David** brought along a model of the Eiffel tower built in pristine parts from the Eitech system. This model is about 4ft high and stands on a base about 18in square. The parts are very shiny nickel finish and the model was quite eye catching at the meeting. **David's** other model was a smallish 0-4-0 shunting style locomotive built using what looked like mint Trix parts. The model was built from (German) instructions in an equally mint Trix manual, which was also on show. The model was displayed on a short length of made up track and had a distinctly European appearance. However, altogether a very nice model and I don't think I have ever seen so many Trix parts altogether at the same time!

First away on my last lap of the model tour was yet another interesting military model built by **John MacDonald**. He told me that he currently has 64 models assembled and is getting short on ideas for new models, so he decided to build a Russian Ural 6×6 tractor unit together with trailer carrying a menacing looking rocket. The rocket was constructed to his own freelance design to suit the general scale of the tractor and trailer. The model incorporated lots of nice mechanical detail as always. The rocket, in particular, could be elevated on its trailer, it can be trained on target and traverses its supporting frame in the correct manner. Most importantly, the rocket also lights up to complete the spectacle!

Then I came to the familiar delightful display of smaller models built by **John and Joyce Sleaford**. Most members will be aware that, sadly, **John's** eyesight has deteriorated considerable, but it is most pleasing to see that it is not preventing the duo from continuing to produce their collections of models for display at every meeting. Most of their models are built from the new smaller sets and often incorporate improving modifications. **John's** models at the meeting included an early two seat car and a dragster, both built from the 0532 Mechanical Workshop outfits, a second dragster built from the parts in a M&S 6520 Helicopter outfit and two nice little Harrier aircraft, also built from a M&S outfit. **Joyce's** models included a black sports car built from the parts in the 8701 six wheel lorry outfit and several of the little Meccano robots that respond to voice commands. Unfortunately, the background noise in the room was too loud to permit a demonstration of these characters. Yet again, a nice little show which was a credit to them both.

Alongside was a pair of AEC Matador heavy truck models built by **Mark Rolston**. We have seen number one model on a number of occasions and I have described it in a previous report. However, number two model is still in construction and includes a substantial log carrying trailer. This model appears to have been built at the same scale and in the same style as the earlier model and would appear to be on the way to defining **Mark's** trademark model. I noted that **Mark** had a number of new large circular parts for sale which he told me were copies made by the engineering firm he works for. Closer inspection revealed that these are well made, and most importantly, well finished with a good quality paint job. Interested members would do well to contact **Mark** directly. Moving on I came to my good friend **Colin Reid** who had brought along his latest unusual acquisition. Pride of place was occupied by an American Erector model of a large 4-6-4 steam locomotive which **Colin** showed in a built up condition. He was fortunate enough to have obtained the special outfit in its original wooden box - complete with vintage woodworm holes! This very rare outfit dated from 1929 and was missing a number of parts. However, **Colin** had improvised in order to show the built up model. The locomotive and tender measure about 30in long and the track gauge is about 2½in. A nice find this one and most of the parts are in reasonably good condition.

Once again **Alan Covel** managed to design and build another pair of large road vehicles for the meeting. As always the chosen prototypes were most unusual. **Alan's** first model was the other aerocar at the meeting – his model was based on the 1913 Leyat "Helice" Aerocar of French origin. The model was constructed from an old photograph and is approximately 1:3 scale, as far as **Alan** could judge. The model is nicely built in yellow and zinc coloured parts, it is 41in long and the road wheels are 6in pulleys fitted with pram tyres. A shrouded airscrew is fitted at the front of the vehicle, in the model this is 14½in diameter and is driven by a powerful electric motor. **Alan** demonstrated that the propeller is capable of generating enough thrust to push the vehicle along nicely. He also discovered that his earliest version of the airscrew drive was too powerful and rather too dangerous for public consumption, so the current version has been tamed somewhat! **Alan's** second model was yet another illustration of his endearing eccentricity. A very large open framework racing car based loosely on the Railton Mobil Special in which John Cobb took the land speed record in 1947 at 394mph. The familiar impressionistic model building style is peculiarly **Alan's** own and has been used successfully in numerous of his earlier models. This model measures 7ft long by 2½ft wide and runs on four 13½in diameter cycle wheels. The body shell could be removed to admit the full scale **Alan** in a prone position as he demonstrated to the amusement of the membership.

Finally, my model tour concluded with a splendid pair of long case clocks. The first by **John Bridger** is in the style of Charles Rennie Mackintosh and is based on two separate clock designs by this famous Scottish architect/designer. The geometric design of the case lends itself admirably to construction in Meccano, likewise the face of another of his clocks can be built entirely in Meccano, without having to resort to any cheating at all! However, **John** omitted all the numbers from the face, preferring to keep it simple. The mechanism is based on the Meccano Super Model leaflet No. 14a, but **John** has not been able to achieve

reliable time keeping with that mechanism. The clock stands about 5ft high and the base of the case is about 15in square, to give you some idea of size. Quite an impressive model even it does not keep very good time!

The second clock was built by our resident expert **Mike Edkins**, and is very visibly based on the Meccano Grandfather Clock instructions SML 14A. However, **Mike** has managed to achieve a clock with good time keeping properties by making five very minor modifications to the mechanism;

Additional bracing to stiffen the mechanism framework on each side.

The number of bearings supporting the axle rod used for raising the driving weight is reduced from three to two.

Modifications to the method of engaging the sliding shaft used for adjusting the hour and minute hands to reduce the friction inherent in the original design.

The pendulum suspension rod is lengthened to allow the forks of the crutch a better engagement with the coupling fitted to the pendulum rod.

The obsolete pendulum connection is replaced by a flexible coupling unit, part No.175.

The instructions specify a very hefty weight of 18Lb to power the clock; this has been reduced to 9Lb, which has proved sufficient for the clock to operate reliably. The escape wheel is crude in comparison with a 28 or 36-tooth sprocket wheel, which would be used today. Its assembly requires the aid of a jig to ensure accuracy in the positioning of the eight ½in reversed angle brackets bolted to the faceplate. The result is very convincing and the model is about the same size as **John's** – it was really nice to see the two similar models standing majestically side by side at the meeting.

That concludes my tour of what was an outstanding and very inspirational meeting. However, I must not forget our resident dealers who provide us with the essential support we all need from time to time. It was good to see **Mike Rhoades**, and the relative newcomer **John Thorpe**, both of whom produced a substantial spread of desirable merchandise. In passing I must mention the new geared mains induction motors that **John** was offering for £5 each. I bought two and can confirm that they are of very high quality, very quiet in operation and deliver a useful power output. These might be of interest to those who like to make continuous running display models and are a snip at the price. It was also nice to see **Alan Scargill** again, who set up a trading stand out of the back of his car, and whenever I saw him he was busy wheeling and dealing with various members right through the day. Lastly, a plea to all members to identify their models at the meeting and also, if at all possible, to provide me with a brief written description as it makes my job so much easier and the report more accurate. I can scan typed copy into my computer and that really does save a lot of time. My grateful thanks to all who complied, it is very much appreciated. Meanwhile I look forward to an equally impressive array of models at the autumn meeting.

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John Macdonald brought a most realistic model of an AEC. Matador artillery tractor which featured clutch, 6 speed gearbox driving all 4 wheels via differentials working lights and steering and a winch powered via the gearbox. This would be used for towing John's next model, a 5.5" artillery piece incorporating the following features elevation, training, opening breech, manual recoil and working brakes; altogether a great display.

John and Joyce Sleaford's models included an excavator built by Joyce from the 6515 set actuated by cables John showed five small engines based on a No 5 set: a show-man's engine fitted with a motor and lights then followed a steam roller, a crane engine, a portable engine and a ploughing engine all to the same scale.

Richard Payn displayed his superb Crawler Tractor in blue and yellow, based on Eric Taylor's model from the 1970s but incorporating Richard's own design of drive, based on a main motor for driving with a second motor for steering. The two drives are combined by a double differential system which transmits the required drive speeds to the respective tracks Richard also showed a prototype track assembly incorporating 2.5" flat girders connected by standard hinges with angle brackets on the inside to provide drive and guidance, it will be interesting to see how this progresses.

Michael Walker brought a model of the L.N.W.R Locomotive Cornwall. This model was built in 1944 by Roger Meadowcroft in blue and gold and has been retrieved from a museum where it was on display since that time. The model won second prize in the MM 1944 summer model building contest and was recently featured in CQ (90). At that time there was clearly a shortage of Meccano parts causing the builder to fabricate many of the plates from tin cans! Frank Hornby would have approved. (I think I have also spotted this model on EBay. Editor) Michael also showed a realistic model of a Maserati car.

As usual **Alan Covel** managed to find another unusual subject: in this case an Art Deco style car based on an ornamental paper weight of a 1930s racer. The model was immaculately built in bright zinc strips, is approx 32" long and used 6.5" diameter non-Meccano wheels. Alan's other model was a 1933 Bugatti railcar 62" long x 9" wide in yellow. This model runs back and forth on a 14 ft. track powered by 2 power-drive motors Tony Wakefield had a most ingenious display model of a car race. Each car in turn is raised to the top of a pivoted ramp which tilts down under the weight of the car meanwhile the second car is being lifted from a position below the pivot end of the ramp by which time the first car has run off the bottom of the ramp which immediately lifts and allows the car to be conveyed back to the lift position whereupon the whole sequence is repeated.

It was good to **Stephen Wilson** again after his injuries and we can only congratulate him in making the effort to attend as I understand he had to come alone by rail. Stephen was also able to bring a model of an articulated lorry with load.

Mark Rolston was showing his very realistic A.E.C. Matador lorry somewhat larger than John MacDonald's and a traction engine.

Colin Reid brought a ball roller type clock and a Mamod traction engine and car.

Tony Knowles model was a very nicely built version of Michael Adler's Sinclair Harding Navigation Clock (model plan 139)

John Bland brought along a very nice realisation of Supermodel 19, the steam shovel, with some small alterations, always an impressive looking model. The other models were a small gas engine which ran merrily away throughout the meeting and a small prototype fairground ride.

David Hobson's deviant tendencies have taken him from Meccano to Stokys this time. He showed five very nice models: a potter's wheel, railway bridge supporting a railway breakdown crane, a rack and pinion railway incline in which a clockwork powered trolley successfully climbed to the summit and finally a Bell Boeing tilt rotor helicopter.

Terry Pettitt gave a repeat showing of the crawler tractor shown at the last meeting, The model is still incomplete, the main area of work has been devoted to the tracks. These are built using 2.5" flat girders hinged together with fishplates modified to form a hinge similar to the rod and strip connector. The fishplates are formed using a small Meccano forming tool which rolls the end around a Meccano rod and just requires squeezing with pliers to complete the process This enables them to be produced quickly and accurately. Angle brackets on the inside of each track plate engage with a sprocket fitted between the 4" circular plates that form the drive wheels.

Merion Jones brought an impressive display of cranes, one from each set from No 1 to No 10. These were built as an extension to Mei's Imagineering involvement at his local school and were first shown at the Simmer Fete.

Tony Parmee's models were a "Lovely Load of Balls" which consisted of three spheres built from 2.5" strips in geodetic form placed inside each other and rotated by epicyclic gearing a neat and pleasing display model. The second model the "Observation Coach" as shown in the 1954 manual as model No. 9.7. Tony first built this model 52 years ago. The model incorporates several pleasing features such as sliding door, folding steps sliding roof and opening boot providing a use at last for that part we all wanted as kids, the hinged plate. The steering provides a really good steering lock and altogether a very nice model.

Terry Wilkes models were a realistic representation of a Massey Ferguson 135 tractor and a breakdown

lorry.

Paul Hubbard had a very nice shop window display model of a Ferris wheel and also some small kit models including an excavator.

Dave Phillips showed his No 9 manual Triple Expansion Engine, much modified and running very smoothly. A nice model and always interesting to see working.

As always **Brian Edwards** produces a very neat and realistic model usually of an unusual object and in this case it was a Harley Davidson "Service" Motor Tricycle as used by the American Police forces. The model was built in red and green using 3" pulleys and tyres and incorporated a small motor housed in the body situated above the two rear wheels and then the motor drove straight down to the input to the differential.

John Reid showed his model of Scott's Antarctic Sledge party now equipped with a support caterpillar tractor and sledge. One hundred years ago on the 15th June 1910, Scott's ship "Terra Nova" set sail from Cardiff for the Antarctic and the South Pole. The sledges were to be hauled by men, ponies, dogs and motor tractors. Scott took with him three Wolsley motor sledges. One was lost immediately after being off-loaded from the ship when it went through the ice. The remaining two were used to assist in transferring stores from the ship to the base hut. The tractor was powered by 4 cylinder 12 HP in line air-cooled engine encased in a wooden box driving the rear sprockets. After the first winter when they were put into storage, they were used on the initial depot-laying parties. The tractors were plagued by carburettor and overheating problems. In the end, they both failed due to broken big ends. As repair facilities on the march were very limited, they had to be abandoned. No steering was built into the control of the tracks. Turning was achieved by means of pulling on ropes attached to the pole protruding from the front of the vehicle causing excessive wear on the track components.

Richard Gilbert appears to be cornering the market in rare parts as he displayed his realistic 8 wheel lorry loaded with no less than 9 digger buckets and several loaded sacks.

Trevor Pryce Jones had on display six nicely constructed models all built by children at a recent exhibit at the B.S.A. Science Festival at Millennium point.

Sid Beckett brought along a nicely built Dumper Truck from the Super Highway kit.

As always **John Ozyer-Key** had built a great model this time a County FC 1174 Tractor. This has 4 wheel drive and includes an 8 speed and 2 reverse gearbox, differential lock, power take-off, 3 point linkage, correct drive to all wheels and of course steering. The tractor was fitted with a double sided plough which could be rotated to the alternative position by power operation by a lever in the cab. All mechanisms are controlled from the cab and are driven by a single motor.

John had brought along his fellow SMG member: **Rob Mitchell** (visiting from Sheffield MG) brought along a large model of Servetti's Trolley Factory. I think this is the second time this model has been seen at MMG, the first one I believe was built by Ken Wright in the late 70s early 80s. It's always an intriguing model to watch and of course Rob's version is just as appealing as ever, an excellent model. (a bit more about this model will appear in the next bulletin!)

John Molden's model was an 8 wheel "T" cab Scania lorry which is used in conjunction with the Wild Mouse Roller Coaster. It is 8 x 4 with a 4 over 4, 8 speed and 2 reverse gearbox, clutch, double drive to rear axles via an interactive lockable differential with final drive via hub reductions. Also included are extending stabilizing jacks. As if the chassis was not enough John has then fitted it with a HI-AB crane which can extend to 6 ft. The workings and power to the crane are still to be completed. At present it has 3 swivel "up and out" sections but when complete will also have 4 telescopic sections plus the man hoist cable. Even without these it is a great model.

Tom and Matthew McCallum had a very nice display consisting of two motor car chassis in red and green and an Aero Constructor model.

Trevor Frankling built a small 4 cylinder petrol engine with all the cylinders represented by Meccano solenoids which resulted in a very quiet and smooth running model.

Roy Whitehouse's display consisted of two Dinky Builder sets and an immaculate version of Supermodel No 28 in blue and gold, a very pleasing collection.

Ken Wright provided us with a welcome return of his Beyer Garrett narrow gauge locomotive K1. This is a great looking model finished throughout in black and is most impressive when seen running at exhibitions.

Mike Edkins continues to show great ingenuity in getting as much detail as possible in his Birmingham Corporation Tramway truck bogies. Mike described the four wheel Preston truck bogies in MMGG21. He is now developing a model of the Burnley maximum traction bogie built to a scale of 1.125 inches to the foot. As is always the case with Mike's models everything must work, so far wheel brakes are operational however attempts to construct a magnetic track brake has not yet been successful. I am sure they will be and await the final version with much anticipation. The bogies will go under a model of the Birmingham tram.

Roger Burton had two models a simplicity concrete mixer making ingenious use of the Muzzle Brake from the Army Multikit as the rotating drum. The other model was a helicopter which together with two more helicopters will form part of a Fairground ride.

Mick Burgess brought two small but realistic lorries; a 6-wheel version very neatly motorised, the other

fitted with caterpillar tracks.

John Nuttall's model was a reproduction of "The Blue Bridge" in Maryland U.S.A. This was built in nickel and consists of two 18" arch spans constructed of 5.5" curved strips and fitted with abutments looked most realistic.

Hamish Ross (a welcome new member) has made a return to Meccano after 50 years and built the following manual models that he intended to build in his earlier days: model 6.20 from 1947 number 6 outfit, and from 1948 model 3.8 and model 7.1.

Geoff Devlin brought a collection of small model motorcycles and a model of a Hitachi TDH S60 Rubber Crawler Tractor.

Tony Homden's model of the BMW high speed bomber built from mechanised army parts supplemented by parts from the M&S spitfire kits exhibits his usual novel approach to Meccano modelling. An article on this interesting model will appear in the next edition of the bulletin.

Chairman **George Illingworth** brought two models the first a welcome return of H.M.S. Campanula, ploughing through a heavy sea actuated by a mechanism devised by Tony Parmee. The second model was a M.A.N. Hytrans high volume pump unit with demountable pods. This was a highly detailed and realistic model including many mechanical features and well worth another look.

Apologies to any who have been missed from the above report and for the concise but I hope reasonably accurate reporting.

Terry Pettitt

88th Guild Meeting at Baginton on 26th March 2011

Having missed the meeting last October, I was really looking forward to meeting up again with friends old and new, and to seeing the products of their model building labours over the winter months. After an uneventful journey, I arrived to find the hall buzzing with activity and packed with models such that finding space for those that continued to arrive was proving to be a challenge for the “management”. However, everyone managed to find, or make sufficient space for their models. I lost count of the number of models present for me to report on, but it was certainly rather more than I have been used to in the recent past. I hastily installed my own model and then made an immediate start on inspecting the models as I had lots to see and find out. As always, my apologies for those I have misreported or overlooked completely.

The very first model on my personal tour was built by our secretary **Roger Marriott**. Typically, his model was designed and built for display purposes and comprised an eye catching Meccano nativity - A penny (2p) in the slot automaton showing Mary and Joseph with Jesus being visited by the three kings, while an angel oversees the proceedings and shepherds tend their flocks in the fields. An “unusual visitor” looks on in awe. Once fed the mandatory coin, the assembled characters move and gyrate their way through an operational cycle accompanied by serious engineering noises from the gearbox within. Roger told me that this model had also been well received in his local church over the Christmas period.

Coincidentally, the second model on my tour was by your reporter **Mike Cook** and I must admit that it has been rare for me to bring a new model in recent years. However, in retirement I now have more time for model building (which is a complete myth by the way) so I tackled an American Avery 40 hp traction engine to go with my Fowler and Burrell engines. This model is based on the Avery 20hp traction engine model designed by Dr Keith Cameron and described in GMM supermodel leaflet No.25. The model was modified and slightly enlarged to accommodate a fully representative motion and two speed gear train, which presented quite a challenge given the complexity of the mechanisms and the small space available. The 40 hp version of the engine has a longer boiler and this provided the extra length necessary for the incorporation of a more detailed under-type engine and transmission. The model also incorporates an original Meccano infra-red remote controller for forward and reverse motion, and rather less than scale-like steering! The prototype steering utilises a nut on a coarse thread, but the Meccano screwed rod has a much finer thread requiring the driver to turn the wheel many times at high speed to effect adequate directional control. However, it seems to work well and the water tank and coal bunker provide perfect homes for the control unit and its 9v battery.

I was privileged to have not only Roger as a near neighbour on one side but also **Jim Gamble** on the other – this really puts things into perspective when sandwiched between two seriously accomplished Meccanomen! Jim brought along the classic Meccano motor car chassis display model, which is authentic in every detail and still in excellent running order. It was seen running more or less continuously for the entire day and was really appreciated by the nostalgia enthusiasts, which embraces most of the membership at a guess.

Next was one of our longest serving members, **Ken Wright** who brought along a small model, which was not a locomotive. His model was a nicely presented radio controlled towing truck assembled from a current Design radio control outfit.

However, when it comes to nostalgia, **Roy Whitehouse** takes some beating and he did not disappoint at the meeting. Roy is well known as a restorer of blue and gold period Meccano to an exceptionally high standard. On this occasion he brought along his beautiful steam shovel, built from SM19 leaflet instructions in a restored, pristine blue and gold colour scheme. He also showed two restored French blue and gold outfits, No. 7a and No. 8a, fully strung in what looked like original boxes. The presentation of these outfits is extremely attractive and it is not difficult to appreciate why Meccano became so popular and much copied. Roy also brought along some of his tool kit used in the parts restoration process but, unfortunately he was not given the opportunity to explain how he works his magic.

Giles Smith is a relatively new member and is busy accumulating Meccano in the time honoured way. Amongst his accumulation is a number of the very small single model outfits picked up here and there – I think he told me that he actually picked one up at a car boot sale on the way to the meeting! Having made up some of these small models he brought along a collection of six or more to show us how things are progressing. I think we can look forward to seeing more of Giles’ model building in the future.

Tom and Matthew McCallum completed the first row of Meccano models with some typical items from their collection. Firstly, a nice red and green display model of the Meccano gantry crane featured in much publicity material during the 1950’s, accompanied by a Meccano dealers show card featuring the very same model. For the enthusiast, a photograph of their model is shown on the front cover of CQ62. Their second item was a very nicely presented blue and gold No.9 outfit dating from 1938. The outfit was packed in the original green Meccano cabinet with a single lift out tray and, once again, served to emphasise that Meccano Ltd. completely understood the business of presentation in order to attract sales.

The next model on my tour was a sizeable railway bridge built by **Robin Schoolar**. His model is based on the Delftshavense Schie Bascule Rail Bridge which carries an important rail line over a primary inland waterway, the Delftshavense Schie, not far from Rotterdam in the Netherlands. Most bascule bridges are set at right angles to the feature they cross, which requires archways through the towers to allow traffic

to pass over the bridge. This crossing was already on a skew alignment which the designers had to accommodate. They turned the skew to their advantage with an innovative asymmetric design offsetting the tower to one side of the rails. Robin modelled the bridge largely in yellow parts to match the colour scheme of the bridge as originally constructed around 1990. It has since been repainted in white, but Robin has insufficient white parts to build it in that colour! The scale is around 7mm per foot (1:43) to suit the PECO O gauge track used in the model. The lifting sections of the bridge are balanced by a 7Lb lead counterweight such that the model takes minimal effort to operate. A small red plastic cased Meccano motor running on only three volts provides ample power. Although operational, the model is yet to be finished with the addition of much detailing - handrails, control room and enough spiral staircases to drive anyone round the twist! Interestingly the model incorporates a novel dual limit switch devised by Robin. He showed me an example of the compact switch which is built up from long bolts, hex nuts, compression springs and shiny nickel washers on a base comprising a SpeedPlay rectangular plate – but utilises no Elektrikit parts whatsoever! An interesting model and worth a close look next time you get a chance.

The diminutive and unusual model alongside was brought along by **David Goodman**. His model was of a scientific instrument – a magnetic stirrer, which could no doubt be used for real in a laboratory. A small metal bar is placed in the liquid to be stirred, all being contained in a suitable glass vessel. The vessel is placed on the flat surface of the device and a continuously rotating magnet under the surface causes the liquid to be stirred. Simple! I am aware that numerous scientific instruments built from Meccano have appeared over the years, and I have seen Meccano devices used in experimental wind tunnel facilities.

On a completely different scale, the next model was **Paul Brecknell's** giant bucket wheel excavator, brought along for another outing and progress report. There seemed to be some uncertainty regarding the state of completion of the model – Paul was not quite sure of the condition of the electrics. However, it looked superbly complete to me. The last major challenge for Paul was to devise a slip ring arrangement to convey power from the carriage to the superstructure through the rotating bearing, with the added complication that the bearing may be separated easily for transportation of the model. He eventually used four 4½” circular strips for the slip rings and the contacts were made up from four part no. 525 – core holders – as these are capable of retraction thereby allowing the upper and lower parts of the bearing to be separated. I don't think the model was fired up at the meeting so we will have to wait until October for a working demonstration. This is a very fine model with lots of innovative features which has taken Paul some six years to complete.

Next I came to **Terry Pettitt's** model, but first I must thank him for stepping in to write the model report after the last meeting. I was unable to attend the meeting due to a bad cold and had to withdraw at very short notice. Members will recall that Terry has built a very fine model of a Bedford tipper lorry, which he brought along to a number of previous meetings during its construction. Most recently he has replaced the tipping part with a fixed flat bed on which is mounted a snorkel type extending maintenance platform. This was the model on show at the meeting. The platform is powered by three small electric motors which drive parallel motion arms activated by rack strips within the arms. I saw it working briefly and, as might be expected from such an accomplished Meccano modeller, the platform arm extended and retracted very smoothly and very quietly.

Some members obviously enjoy a serious challenge in their Meccano modelling, and it would appear that **John Nuttall** is one of those members. He brought along a model which looked to me like a sphere of about 10” diameter the surface of which comprised a lattice of a very large number of Meccano strips. However, this is not any old lattice but a very clever arrangement described as a Snub Dodecahedron. In John's own words; this is a less well known Archimedian solid surface comprising 12 pentagons and 80 equilateral triangles. It has 150 edges, 60 vertices and is constructed from 150 2½” strips and 60 nuts and bolts. The large number of triangles in the construction make it very rigid.

Coming back down to earth again, next door I found a largish number of small aeroplanes built by **John Reid**. His first offering, set out on a board of about 2ft×2ft coloured to represent a grass airfield, was a diorama depicting a RFC/RAF Aerodrome somewhere in France around 1918. It all started as a result of an e-bay purchase of two M&S Sopwith Camel outfits and one thing led to another until he had created his little airfield. The model incorporates about six Sopwith Camels in various states of readiness together with several “props” to give the diorama authenticity. The carefully constructed hangar is based on the French Bessonneau tented hangar of the period and the Matchbox Crossley RAF tender just happens to be near enough the right scale, which is approximately 1:46 based on the fuselage length of the Sopwith Camel. The aircraft models have been modified with various improvements, but the red aeroplane, for comparison, was built straight from the box with no modifications. Alongside, John brought along examples built from five modern Meccano France aircraft outfits. All have been modified to improve accuracy and appearance. The models comprised the following aircraft types: Spitfire with strengthening strips under the wings and rear fuselage together with improved propeller and spinner. “Red Arrows” Hawk Trainer with a strengthening strip under the wings and deletion of the strip over cockpit, which is too wide and looks ugly. Concorde with internal strengthening strips in the fuselage and with the tail plane relocated correctly on centre line of fuselage. Harrier with revised undercarriage, the addition of tail plane anhedral and the deletion of the strip over the cockpit which is too wide. Sopwith Camel with replacement engine and

propeller (from the 1931-41 Aeroplane Constructor outfit), undercarriage, interplane struts, tail plane and with the addition of a pilot.

Dave Phillips brought along a very nicely presented model of a Minneapolis Prairie Tractor, the prototype dating from about 1910. The model is about 12" long and scaled approximately by the rear wheels which are made up from pairs of hub discs. The model layout is very similar to a steam traction engine, but the motive power is provided by a rudimentary water cooled four cylinder oil engine. The radiator, fan and water reservoir is mounted at the front of the chassis and is placed so as to obscure the drivers view – quite an impractical arrangement I would think. Dave's model is made entirely with fully restored parts finished in mid red and green to give it an attractive and pristine appearance. The model is mounted on a base and set up for demonstration and Dave kindly showed me the model running. The unusual choice of subject lends itself to Meccano modelling and Dave has done well since he only had two photographs from which to work.

Nearby was an articulated tipper lorry brought along by **Terry Wilkes**. This model was built from the 1970's No.9 outfit model, 9.5 in the instruction manual. A nicely constructed model in period yellow, blue and zinc colours and, as ever, modified by Terry so that the tipping mechanism actually works.

As most members will know both **David Hobson** and **Tony Knowles** are Meccano enthusiasts, but they also have a keen interest in alternative construction systems produced over the last 100 years or so, usually in competition with Meccano. Their collective display of models and items of interest at the meeting revealed some of the more curious alternatives. First item was a "Little Jim" no.5 construction outfit presented in a nice wooden box and brought along by David. The outfit was manufactured by the Meccano Company of America Inc. and dates from 1928 – otherwise known as A.C. Gilbert. The red and green parts looked familiar and were set out in the box much as we are used to seeing. David's second item was his model of the Liverpool Metropolitan Cathedral of Christ the King modelled entirely in Eitech parts. This is a bigish model, mounted on a base board for presentation purposes and measuring about 2ft×2ft×15" high. Apparently the design was first worked out and built by Tony, and David's version incorporates some changes – most notably internal lighting which shows the model off really well. Tony's offering at the meeting was a familiar model built using a most obscure alternative system, the Dutch Necobo system dating from the late 1940's to the early 1950's. The system is a Meccano/Marklin copy with parts presented in red, blue and dark green colours. Tony had built up the 1962 Meccano outfit model 8.8 – the conveyance – a gangly looking model of a utility vehicle for moving large objects about. A nice model which works well but, to me, somehow does not look quite right built from the parts in this obscure alternative system.

The large display of boxed small accessory outfits brought along by **Richard Gilbert** prompted the question – Why bring all these familiar small outfits to the meeting? The answer was not immediately obvious. The display comprised the six accessory outfits from No.1a to No.6a as produced by Meccano in the UK from 1964 to 1970. Members will recall that these outfits were packaged in a long non-descript box measuring approximately 3"×3"×13", the contents were just bagged, rolled up with the manual and stuffed in the box! Not too impressive given the earlier standard of presentation. Richard also brought along the same six accessory outfits as produced by Meccano France in the same period, but these outfits were packaged in the familiar shallow boxes with parts strung on cards to make a much more attractive presentation. The point of the exercise was to emphasise just how very much better the French outfits were at that time by direct comparison. The comparison was most convincing, I thought the French outfits looked altogether of better quality. There must be a message here!

It was rumoured at the meeting that **Ken Senar** has given up making very large models, so what does he bring? Nothing less than a massive 1:10 scale Westland Wessex helicopter in a fairly advanced state of construction. Most of the fuselage and the working controls to the main and tail rotors are now working and the partly completed model gave us all an opportunity to "inspect the plumbing", as it were. As always from such a skilled modeller, the presentation is superb and the attention to detail is second to none. The model is being built from photographs, some from the web, but most of which Ken took of an original in the Museum at RAF Cosford. He also has a very poor cut-away drawing with no scale and, together with a scrappy diagram, he has been able to guess a few key dimensions. Working features to be seen on the model so far include dual cyclic stick controls, working rudder pedals and tail rotor collective pitch, sliding cabin door and casualty rescue winch. Features planned for the near future include windscreen wipers, twin engine exhausts, the entire nose assembly, undercarriage and other embellishments. Both main and tail rotor controls can be operated from the cockpit. However, the main rotor blades are only vestigial so as eventually to demonstrate the workings of the rotor head swash plate mechanism. At scale size, the main rotor blades would be too heavy and would over-stress the Meccano system, not to mention the danger to anyone in the immediate vicinity of the model. This is definitely one to watch, and Ken is aiming to get it finished in time for Skegex in July.

In the shadow of the Wessex was a collection of smaller models made by **Christopher Bond** in response to a 30 part model building challenge. I know nothing of this, so you must forgive me if I manage to mangle the facts about the challenge. Christopher brought along three models to demonstrate his ingenious responses to the challenge. First, a typical horizontal milling machine of about 1914 vintage. The model is not powered, but the table, saddle and knee movements all operate by hand without too much

play. 29 parts were used in its construction not including the cutters, of which a variety would be available with the real machine.

Second, a 1:120 scale model of the Russian Imperial Navy circular monitor ship "Novgorod", built in 1874. Armed with two 11inch, rifled, muzzle loading guns intended largely for shore bombardment, the idea was a shallow draft, stable gun platform. It is a pity that it was almost un-navigable – not helped by the difficulty of synchronising six separate engines and screws, and the fact that firing the guns caused the ship to move round in circles. A similar design for an imperial yacht intended to overcome the Tsarina's sea-sickness also failed – the hardy Scots who delivered it from Clydebank to Russia were all sea-sick for most of the voyage! The MM of August 1971 had plans and instructions for building a model of the Novgorod – but from a biscuit tin and balsa wood rather than from Meccano! The model consumed only 28 parts.

Third and last of Christopher's models was one of the guillotine stop-lock gates at Lifford Lane, King's Norton, on the Stratford canal. These date from 1814, and were intended to prevent loss of water between rival canal companies. They are no longer in regular use due to the amalgamation of the separate companies into British Waterways. The advantage of this type of gate, rare in the UK except for minor examples in East Anglia and a few in the North, is that they can hold back water from either direction. Again, only 28 parts were used in the construction of this model. As I said, these models collectively demonstrate considerable ingenuity in their use of such a small parts count.

Conveniently located next to Christopher's models was yet another collection of models built by **Sid Beckett**, also in response to the 30 part model challenge. Sid's four models included a children's playground slide, a fair-ground flying chairs roundabout, his mark 1 windmill complete with lousy roof and noisy mechanics and his mark 2 windmill with a much better roof and quieter band drive. Sid is a man of few words so I do not have any details about parts count for any of his models. However, once again, these models demonstrate the ingenuity of the dedicated Meccanoman

Terry Allen is a newish member, I believe, who has clearly "got the fumes" judging by the seriously ambitious model he brought to the meeting. His partly completed model was of a 1938 Bugatti 57SC Atlantic Coupé – so far the rolling chassis and engine have been completed. To give you an idea of size, the model is about 18" long, it is very carefully built up in zinc plated parts and it incorporates a lot of structural and mechanical detail. It is similar in size and layout to the standard Meccano motor car chassis as shown by Jim Gamble at the meeting. This is a superb model and will look even better when Terry has managed to fabricate the very "curvy" body from standard Meccano parts. This has got to be another splendid model to look out for in the future.

The next model I came to was also the work of another newish member, **Mei Jones**. His model was an improved version of SM30, the railway breakdown crane. The model was nicely engineered in yellow-zinc-black colours and the considerably revised match truck showed lots of innovative features devised by Mei. We can clearly expect lots of good things from this modeller in the future. Mei was accompanied by his grandson who brought along a couple of smaller models, a crane and an aeroplane.

Alongside, **Geoff Devlin** was showing his latest creation, a CAT 591 pipe layer built up from first principles in his favourite red and green colour scheme. This machine is the largest in the Caterpillar pipe layer range, working around the world installing pipe lines carrying gas, oil or water. For use in inhospitable regions an enclosed cab would be fitted. The prototype weighs in at 87 tons, is 22ft long, the jib is 32ft long and it is about 15ft high when rigged for work. When the machine is moved from one site to another, the jib is raised to a vertical position and the hydraulic piston attached to the jib is used to push start the jib from the vertical so the ropes can take over the load in the working configuration. The model is scaled at about 1:12 to give it an imposing presence and is yet another example of Geoff's knack for finding interesting subjects then constructing a fine model of the prototype.

Roger Burton brought two models to the meeting and the first was a small fairground ride of freelance design which he called "Helicopter patrol". The model is based on a three arm Octopus ride and each arm carries a little helicopter at its extremity. To give you some idea of size, this is a nice compact model having a diameter described by the arms of about 20" and an overall height of about 12". Never having built such a ride before, Roger consulted the instructions for a similar model in a 1950s No.7 outfit instruction manual and then set about making a more robust structure and drive train. A Monoperm motor is housed under the hinged 4½"x2½" plate in the base. The turntable sits on a 4" Meccano ball bearing and is belt driven by a multipurpose gear wheel driving a 6" pulley. To create the up and down motion of the three helicopters, he has used a throw of approximately ¾". Roger's other model was a very nice rendering of a drop stamp machine, the design of which was first made by Mike Brammer and which appeared in CQ5 in September 1989. Like the helicopter patrol, the model is constructed in red and green colours, it is about 15" high and stands on a base platform 12½" square. The operating mechanism is simple, yet very effective, in raising and dropping the tup. With careful control, the tup can be inched and held half way up the slides. When the tup drops and strikes the anvil, the model (as would the real machine) makes a considerable noise, so a cushion has been placed on the anvil.

Tony Parmee brought along two models including his General B" omnibus – an ancient vehicle appropriately modelled in early nickel parts. This is an attractive model, the original of which is attributed to one S. Wilson and featured in MM many moons ago. Tony's model has had numerous outings over

the years so I will not attempt a repeat description of it here. Tony's other model was the 1954 No.9 outfit manual model 9.1, the mechanical horse and trailer. Apparently, since acquiring his original No.8a outfit, it has taken him 53 years to get around to building the first model in the book! His excuse is that he wanted to see if the bonnet really is curved as in the illustration and if the trailer hitch actually works. It goes without saying that after Tony's inevitable modifications it did in fact look and work like the manual says. And it only took three improvements, although he reckons there is room for more. Built in mid red and green colours, the model is about 3ft long by about 9½" wide, and it looked very nice to me.

Fire engines galore can only mean one thing to MMG – watch out Chairman George is about! As just about every member will know, for quite a while our Chairman **George Illingworth** has been building models of just about every fire engine ever produced. There can't be too many left for him to ferret out and replicate in miniature! This time he brought along five models of fire engines representing 60 odd years of their development. All were built to approximately 1:12 scale and included the following: a 1936 Dennis Ace Light Fire Engine, a 1965 Thornycroft Mk VII Crash Tender, a 1971 Chubb Pathfinder Airfield Crash Tender, a 1976 Bedford TK Convoy Support Vehicle and a 1990 Volvo FL6 Water Tender Ladder. And this represents just the latest additions! Needless to say the models are very well presented since George is a very skilled Meccano modeller and he has had lots of practice on fire engines! Take a look next time you get a chance.

Equally dedicated and equally skilled is **Alan Covel** who always seems to manage to produce a different and abnormally large model of an unusual prototype vehicle for every meeting. It is also quite amazing that his models always look like they have just been built using mint parts. This time Alan's model was of a 1924 Bugatti type 35 "racing" car superbly well built in his customary yellow, blue and zinc coloured parts. Starting with a small Matchbox diecast Bugatti model of just over 3" long, Alan has built a very large copy, but still in the style of the standard "Dinky" vehicles – that is with fixed non-steering front wheels. The model incorporates a sturdy chassis, it runs on 16" diameter cycle wheels and it is big. The wheelbase is 52" and overall length is 80", which makes it about half scale! As before, Alan entertained the members by demonstrating that with the skill of a contortionist he was able to insert himself into the vehicle and, with a little more difficulty, he was also able to extricate himself safely afterwards! I also learned that this model is his fifth and largest Bugatti model to date.

It was a pleasure for me that one of the first people I should meet shortly after arrival at the meeting was **Mick Burgess**, a friend I have known for more years than I care to remember. However, it was not long before I heard a rumour that he had actually brought a model to the meeting and that I should make sure I did not miss it for my report since it was a very fine model and an extremely rare event. I was told that said model was parked on the piano and by the time I got there Mick and model had been, gone and went! However, with the aid of some verbal information and Bob Thompson's splendid photographic record of the meeting I was able to establish that the rumour was in fact true. The model is a freelance rendering of an LMS Stanier 5XP locomotive and tender. Scale is dictated by the choice of 3" diameter Meccano spoked wheels which determine the overall length of about 24" and width of 4". Beautifully presented in a red and black colour scheme, with zinc parts for the motion - the model represents a pre-war red Jubilee class locomotive. Not yet finished, so this is one to look out for in the future – but you will have to be quick as our man does not hang around for too long at the meetings!

Not content with one model, Mick actually brought along another nice little model of the Triumph TR3A sports car, modelled in yellow and zinc coloured parts and built to the design by Bernard Perrier published in CQ 77. He says it is built more or less as per description, but with the addition of rack and pinion steering. This must be a first for me – after many years of model reporting, I think this is the first time I have actually managed to track down and write about models built by this accomplished builder.

Next I came to a model by another extremely accomplished builder, **Mike Edkins**. Mike is well known for his modelling originality and many of his constructions incorporate innovative and complex mechanisms. He brought along his skeleton clock for another outing and this is a fine example of his ingenuity. Powered by a Magic motor it runs well and keeps very good time. The model was originally built in 1993 and building instructions have since been published as MP193.

Moving on to a familiar favourite, the twin cylinder stationary steam engine built by **Tony Wakefield** from SM32 leaflet instructions. This model was nicely constructed largely using red and green colour parts but, inevitably, Tony has introduced a number of his own improving modifications. Most of his modifications were devised to improve the running qualities of the engine and many elements of the motion were designed to be fully adjustable to facilitate smooth running for display purposes, and I can say that the model does in fact run very smoothly indeed.

A large model of a modern single deck bus seemed to be ownerless, but after some sleuthing around I managed to establish that it was built by **John Ozyer-Key**. Nicely made in red and green colours, John had built the model from the design originally made by the late Roger Wallis and described in MP63. This must have been an easy project for John, since we normally associate him with enormously complex heavy duty vehicles of which he is a master builder.

Keeping the bus company was what has become a classical model of mechanical boxers and boxing ring, originating from a 1930s MM and built for display by **Keith Way**. The boxing ring base is 12½" square

and has a roof canopy supported by pillars at each corner. The base houses the driving mechanisms for two boxers and a referee who hurl themselves around at the touch of a switch. Keith's colour scheme of red, green and gold set the model off nicely, but the addition of lights around the underside of the canopy is a really nice touch for display purposes.

I am always impressed and amazed at what **Terry Bullingham** manages to achieve given his serious visual handicap. It is no secret that he is working on a model of the classic block setter, and in the time honoured fashion is introducing many modifications of his own making. He brought along to the meeting a model of the twin cylinder steam engine used as the main source of power in the crane. The engine looks right and incorporates numerous features designed to enhance its appearance and its mechanical properties. It also runs very smoothly and is a tribute to its builder.

Keeping Terry company was my good friend **Colin Reid** who always manages to bring along an assortment of novelty items of interest to Meccano enthusiasts and often acquired at enviable prices in local sales. I spotted two vertical boiler steam engines of considerable age and a Hornby "O"-gauge locomotive amongst his stuff. However, his main item was a little device he has engineered from old Meccano parts for straightening out misshapen links in lengths of well used (and abused) chain. It comprises two rack strips bolted back to back on an old windmill sail, the latter enabling it to be mounted in a bench vice – teeth uppermost. The toothed edges of the rack strips are chamfered to allow the chain links to be 'forced' into the rack teeth. To help this process the tooth depth is increased with the aid of a small hacksaw. The old chain is then hammered into the tool using a wooden mallet, or similar. By this means the links are knocked into shape again. Very simple and very effective. Ask Colin to show you next time you see him.

Mark Rolston has been building a sizeable model of a Matador truck and which he has brought along to several meetings now. The model was on show again, and Mark informed me that the body work of his heavy duty vehicle is very nearly completed. I am not sure if I can mention this, but he also brought along a part built model of a tractor mounted crane. The model is approximately 12" long, the crane jib is about 18" long and it is based on a copy of a L-g- model!

I did not know that **John and Joyce Sleaford** have a Meccano modelling son, so I was pleasantly surprised to see that Peter Sleaford is an extremely accomplished model builder. Peter brought along a superb Foden steam lorry based on the description given in MP191. He explained to me that he has made considerable modification to the mechanical detail of the model to give it greater authenticity and the result really is very good. Alongside, John and Joyce had their typically colourful display of assorted smaller models, many built from the small modern Meccano outfits, and including a cement mixer lorry, a skip with truck as described in CQ49, a lorry mounted crane as described in CQ50, a cable operated dumper truck and a quad bike built from outfit 7530. Although, sadly, John is now handicapped by failing eyesight, this did not stop him from demonstrating the finer points of some of the models to me.

Their immediate neighbour, as usual, was **John MacDonald**, our very own military hardware modelling specialist. His models are usually bristling with working mechanical detail, so it was surprising to see something remarkably simple for a change. His model was of a WWI horse drawn ambulance sporting an appropriate level of detail including the horse. However, this is not a Meccano horse, or any other old hack, but a detailed plastic scale "Dobbin" which could have been made to measure. John kept the members amused with this horse, since manipulation of the animal caused it to make the most realistic clip-clopping sounds and an authentic sounding whinny as well! Once again, it is demonstrated that the ingenuity of the Meccanoman knows no bounds!

Somewhere along the way I seem to have missed out on some new stuff built by **Richard Payn**. He has commenced building what will obviously become a substantial and detailed model of a Scammell four wheel drive heavy vehicle. He has built up the front and rear axle assemblies and it is these that he brought to the meeting. The front wheel drive axle incorporates steering, what looks like a standard differential and hubs with internal ball races. The driven rear axle also incorporated a standard differential driving the wheels through 4:1 epicyclic reduction gearing buried within the hubs of the built up wheels.

Our only resident "trader" on this occasion was **John Thorpe** who had the usual abundance of genuine and replica Meccano items for the delectation of the members. And that was pretty much it! Another memorable and very well supported meeting, not to mention the vast array of models with something to cater for every taste – large or small, simple or complex and old or new – it was all there!

Some final thoughts. As ever I am grateful to those members who were good enough to give me some written facts about their models, it really does make my job easier. However, now that we have a nice new website and the means for filing meeting returns on line, the potential for improved reporting is all there. I urge all who can to use this facility and to write a little about their models as they might like to see it in my report. It is then very easy for me to "cut and paste" the material into the report without further ado. This will help enormously in reducing the effort required to produce the report and should enable me to get it completed rather quicker in future.

Terry Pettitt

89th Model report at Baginton on 8th October 2011

A crowded hall and plenty of excellent models set the tone for this memorable meeting of the Midlands Meccano Guild. In the absence of Mike Cook I was offered the privilege of preparing the model report, a job I was delighted to do. But where to begin in such a wonderland of Meccano excellence? The place I happened to be when I had sorted out my note paper was as good a starting point as anywhere else, so I began gathering the information I needed.

A veritable animated diorama was provided by **Tony Homden** with his continually improved "Q" ship and submarine display. A vessel sailing under a neutral flag would, when confronted by a surfaced U-Boat, suddenly transform itself into a fully armed merchantman flying the White Ensign. Ready loaded guns would appear and the hapless U-Boat would find itself under heavy attack and soon sinking to the bottom of the sea. Tony's model reproduced the firing guns, the changing of flags and even the sinking of the submarine into the void beneath the base.

The prototype A V Roe triplane known as "Bull's Eye" was described by Tony as "an exercise in frustration". Incorporating the necessary strength in the fuselage was a real challenge, using only rods and screwed rods with couplings and collars. Even so, the model showed many novel constructional ideas including the use of modern plastic kingpins to provide a flexible fitting for the wings.

"More of a design exercise than a fully worked-out unit" was **Mike Edkins'** description of his undercarriage for a mobile crane or excavator. All four wheels of this sturdily built unit were driven via an internal 5:1 hub reduction gear.

Also shown by Mike was a descending pendulum clock which he says falls into the "novelty class" as the time keeping is in the order of plus or minus five minutes over its 24-hour running period. In this design the driving weight is also the pendulum, requiring a special design of fusee as the period of the pendulum gets slower as it descends.

Mei Jones of Wales demonstrated two fine Railway Breakdown Cranes both powered by modern can motors and incorporating Mei's own efficient design of sprung buffers. One of the cranes was based on the model depicted on the mid-late 1950s accessory outfit covers, and the other on the famous Supermodel 30 leaflet.

Stephen Wilson of Huddersfield showed the beginnings of a prototype diesel electric locomotive, using a mixture of post-war Meccano parts. The model's notable features will include a propulsion unit employing no fewer than eight No. 1 Clockwork Motors (two of which were already in place), and traction wheels made up from modern tired wheels.

A crank-operated scrolling destination display was only one of the attractive features on **Terry Pettitt's** Bristol "Lodekka" double deck tour bus. Powered by a PDU via a three-speed and reverse gearbox, the model incorporated an opening bonnet and rear door, worm steering and a realistic-looking radiator made up from Meccano cord wrapped around a piece of card from a Meccano box.

Terry Walker displayed a Massey Ferguson 135 Tractor and a Breakdown Lorry based on the Outfit 9 model 10, but with added details.

I thought I was seeing double when I reached the impressive combined display by **Richard Payn** and **John Hornsby**. Both showed versions of the powerful Scammell Constructor heavy tractor. John's was of the standard unit whilst Richard based his version on the "Super Constructor" which had a bigger engine and radiator to suit. The design of both models had benefitted greatly from co-operation between these two highly experienced builders, the gearbox in particular being of a highly realistic and efficient design.

Based on an Octopus fairground ride, **Roger Burton's** "Helicopter Patrol" provided plenty of whirling action, with the original's passenger seats being replaced by helicopters.

Paul Hubbard displayed two large and colourful fairground models – a big wheel and a roundabout in a red, yellow and zinc colour scheme. This latter model made use of a great many semi-circular plates as decoration around the top of its awning.

George Illingworth brought three models. The first was based on a Dinky Streamlined Fire Engine, now rebuilt to more accurately represent the Merryweather/Albion Limousine pump supplied to Lancaster Corporation in 1934 and featured on page 79 of the February 1936 MM. The second model was of a 1959 Dennis F103 Emergency Tender. The prototype for this was fitted with twin bells, one hand, one electric, and it had orange rather than blue warning lights. The third model was a work in progress on the detailed interior of an NFS Mobile Repair Van.

The base of what will be a remodel of the Ruston No. 300 Dragline was shown by **Ken Senar**. True to form, Ken would have preferred to have constructed a model about 25% larger, but was restricted by the limited range of circular parts in the Meccano system. Even so, the newer range of Meccano parts now available will allow for many improvements and Ken is resolved to use only today's accepted parts without mutilation, filing or panel beating.

Christopher Bond displayed an unusual subject, the 1954 Rolls-Royce Flying Bedstead test rig. Research using this rig led to the Short SC1. Other, smaller, but no less attractive models by Christopher included a neat and realistic petrol tanker, utilising a Boiler for its tank.

Using 95% reclaimed Meccano, stripped completely and repainted, **Dave Phillips'** much-modified version of the SML 28 Twin Cylinder Steam Engine worked silently and smoothly throughout. Dave pointed

to the Flanged Rings as the main modification, being a substitute for the original Channel Segments, but mentioned that there were many smaller improvements also.

The April 1956 issue of Meccano Magazine featured a Bedford car transporter as its "Model of the Month", and **John Palmer** showed the nicely-contoured and realistic tractor unit from this; with the trailer definitely in prospect for a future model-building session. Also on display by John was a Set 5 lorry and breakdown truck.

A novel design of "City Concept Car", built by **Dave Bradley**, showed the three-wheel layout of the original plus a neat differential on the rear axle.

Terry Wilkes brought two models along; one was of a Massey Ferguson 135, claimed by some to have been one of the world's greatest ever agricultural tractors, and the other was the Breakdown Lorry model 9:10 from the 1970 manuals. Details were added to this model utilising unused remaining parts from the number 9 set.

The action of the Corliss Valve Gear on **Keith Way's** Mill Engine was seen to full advantage in his attractive model from the pre-war K outfit.

Merkur, the Czechoslovakian construction system, may be incompatible with Meccano but is no less eye-catching for that. **David Hobson** showed a fine Tractor built from this system, and also a large and capable block-setting crane.

A complete diorama of an RFC/RAF WW1 aerodrome formed an unusual contribution by **John Reid** of Warwick. The four types of WW1 fighter featured included a Sopwith Camel "puller" biplane, a Fokker Eindekker "puller" monoplane, a DH 2 "pusher" biplane and a Sopwith Tri-plane. John also showed a Combine Harvester built from the Set 10 leaflet 13, incorporating many improvements including a weight to keep the rear wheels on the ground.

Joseph Attard's design for an American ten-wheeled tractor as seen in Constructor Quarterly No. 76, was the inspiration for **Mark Rolston's** part-built chassis. Employing a combination of ash tray tyres and Watt's industrial tyres from Mike Rhoades, the chassis already looked most imposing. Mark was able to fit these tyres on some remarkably realistic spun metal wheel rims for which he had appropriate wheel centres made out of solid brass.

Reproduction narrow angle girders were employed to good effect in Mark's second model, a crawler tracked crane with full remote control.

John and Joyce Sleaford showed a brace of Harrier Jump Jets, an attractive rotating radar scanner built from a 2010 Marks & Spencer set, and a Scammell Show Tractor with opening rear doors, chain drive to the rear wheels and many other interesting features.

Colin Reid from Leyland showed a millionaire's wish list of antique steam engines. A rare "Bing" vertical steam engine was placed side by side with a 1914 Meccano version, and the two were found to be very similar - an early example of rebadging? Other goodies on display included Stuart Turner steam engines and a generator; a home-made hot air engine and a 1920s Falk steam engine.

Robert Moore, Stan Rigby and Clive Kingston provided a display of "Meccano through the ages" using a wide selection of models. These ranged from a battleship of the 1930s, through some red and green models of the 1950s, and up to the "Extreme" series of the present day.

Mostly 1950s red and green Meccano was used to construct the motor bike and sidecar combination, which was shown by **John Evans**. The sidecar was inspired by the Austin "Swallow" car and benefitted from torsion bar suspension. The motor bike had a shaft drive similar to the Sunbeam S7, with other parts based on the Douglas "Dragonfly".

"The Boxers" from the November 1935 Meccano Magazine were toughing it out again in the midst of **Tony Parmee's** display. Another MM inspired model - this time from June 1956 - was the "Merry Miller" wind vane. Other models on view included an automatic crane gear box built from the MM for October 1957 and a selection of "Spherical Solids" inspired by part 2 of the recent TV series "Code".

Richard Gilbert of Devizes in Wiltshire displayed a Railway Breakdown Crane based on number 30 of the Supermodel series, plus a Harrier Jump Jet from one of the more recent single-model sets.

The popular fork-lift truck (model 18) from the late 1950s Outfit 6 manual was demonstrated by **Mick Burgess**, along with a stylish sports car from page 115 of the March 1962 'MM', and the Articulated Tanker model no. 8.9 from the 1962-70 Outfit 7/8 manual.

Alan Covel's "Only Fools and Horses" Del Boy Reliant Regal Van in one-third scale was back on the road, this time towing a one-fourth scale matching yellow colour, USA design, 1954 Cardinal Travel Trailer (or 'caravan' to us Brits). The Reliant van runs on three hub discs fitted with Mothercare pram tyres and the scale of the trailer was dictated by the radius of the 5½" curved strips defining its contoured outline.

Painstakingly accurate detail was very much in evidence in **Terry Allen's** beautifully presented Brough Superior SS100. The 980cc twin cylinder engine was represented as was the three-speed gearbox and cable operated front brake.

John Bland's AEC Regent open-top tour bus derived its inspiration from the model shown on page 140 of the March 1954 MM. It incorporated many improvements including a staircase made up of semi-circular plates and was powered by an E15R motor. A novel sit-on lawn mower, following the design of one that John had seen being used on a French caravan site, used bowden cable parts to elevate the cutting gear.

The blades were connected to the wheels so they rotated as the model was pushed along.

John Nuttall displayed his Double Flyboats built from Supermodel leaflet 33A. Using only contemporary pre-war red/green period parts throughout, it gave an authentic impression of how the original would have appeared during the 1930s.

Geoff Devlin used predominantly red, green and shiny zinc parts to model his version of the Huddersfield Corporation Trams Double-Deck Single Truck Car. Originally supplied with open tops, the prevailing weather no doubt encouraged Huddersfield Corporation to add roofs to their examples. Among the many fine details reproduced in Geoff's model were the G.P.O. letter boxes fixed in front of the brake wheels.

As a footnote, Geoff adds that his mother, as a young girl, accidentally fell in front of a moving Southport tram. Luckily the driver was fully alert and was able "to operate the Life Guard Gate and the Drop Tray, which scooped her up. Fortunately, she only suffered scratches and bruises." A lucky escape to be sure!

The 'Grasshopper' design of Steam Engine was intended to bypass James Watt's parallel motion patent, and **Tony Wakefield's** model amply demonstrated the motion of this alternative configuration.

Geoff Wright made the trip from Henley to display an attractive example chosen from his range of buses and tramcars. The U.C.C. "Feltham" class tramcar that Geoff displayed was built to 1/16 scale and, despite being limited to the contents of a 1950s Outfit 9, was

highly realistic in outline with its contoured roof line and driver's controls.

Brian Compton of Nuneaton confessed to having misgivings as to whether his model would be well received at the meeting. Of course he need not have worried as his model of a rotary coal loader and unloader, based on the Oscar Fontan design, attracted much favourable attention throughout the day. Using electronics to actuate and time the various functions, the model smoothly and efficiently managed the flow of material via dredger buckets from a hopper, then down a chute into waiting railway trucks, then along the line to the tippler where the trucks were individually turned upside down, their loads falling back into the hopper. Brian's message to other club members is, "Give electronics a chance – they work very well with Meccano!"

The distinctive design of GWR Railcar shown by **Matthew McCallum** earned it the name "Flying Banana". The original on which the model is based, is on display at the 'STEAM' museum at Swindon.

Roy Whitehouse based his 1/5 scale model of a Vickers gas engine, with two flywheels, on a Terry Pettitt original. Also shown by Roy was a Supermodel Traction Engine, built totally to the original design in beautifully restored blue and glittering gold parts to dazzle the eye.

Pressure of space made it necessary for **Ken Wright** to position the G-gauge track against the wall, for his 1877 0-4-0 De-Winton quarry loco "Chaloner" to operate. Built in resplendent red, green and black parts, Ken's 1/12 scale model was a treat to see from any angle.

The Fairey "Gannet" of the 1950s was mostly employed by the Royal Navy for search and rescue plus anti-submarine rôles. When not undertaking these duties, they could be used for transporting VIPs such as Admirals. **Brian Edwards'** version of this aircraft, in red and green parts, accurately reproduced the distinctive fuselage shape, contra-rotating propellers and folding wings of the prototype. Also shown by Brian was a 1920 Garratt underframe steam wagon, with a differential situated in the gearbox and chain drives to the pivoted rear axles. Plans bought from Leiston Museum in Suffolk were most useful to Brian in the design of this model.

John MacDonald showed two fine tractor models, the first of which was based on a 1919 "Otaco" tractor which was specifically designed for the small farmer. Based on the mass-produced (and hence inexpensive) Ford Model "A", the tractor allowed many farmers to retire their horses from arduous work. John's version included such details as a three-speed & reverse gearbox, lights and a front power take-off. This model, finished in yellow overall, pulled a hay rake mounted on wheels from an Action Man bike.

John's second tractor was of a more freelance design powered by a non-Meccano motor, with four-wheel drive, differential, a three-speed & reverse gearbox plus lights and a powered winch.

John Molden brought a Volvo FH12 6x4 tractor unit with 6 speed & reverse gearbox with working clutch and handbrake. This was coupled to a tri-axle articulated trailer used for transporting sections of his "Wild Mouse" fairground roller coaster ride.

The "Time Goddess" clock built by new member **Tim Martin** from Leicester, attracted much attention. This employed a self-winding mechanism based on a differential for its two input sources (falling weight and a motor which switches itself on every twenty minutes to lift the weight). Other features included a fine-tuning device for the pendulum length and a unique extra "hours + minutes" hand, rotating 26 times a day, allowing the time to be read, as Tim says, "without the tedium of looking at two hands!"

As always, apologies are extended to anyone I missed in this model report, or for any inaccuracies in model details. I did try to make sure I included everyone, even to the extent of ringing the bell (which got me into hot water with the committee!) and asking if there was anyone I had not yet consulted. No replies were offered, so I felt able to conclude that I had gathered all the information necessary.

Model Report of the 90th Meeting Baginton, Saturday 31st March 2012 By Michael J. Walker

Cool, overcast but thankfully dry weather conditions prevailed throughout on the day of the Midlands Meccano Guild's 90th Meeting. The dry conditions allowed us to take a large model outside for photography, but more of that later. Despite concerns over petrol availability a large turnout of members made this another memorable meeting, and in this report I hope to cover most if not all of the fine models they brought along.

With "free" renewable energy in mind, wind turbines have become a familiar sight around the land. Whether we love them or hate them, they seem to be here for at least the foreseeable future. In what must be a first for a Meccano model, **Roger Burton** showed his version of one company's rooftop wind turbine, which demonstrates how the benefits of this technology can be installed on a regular pitched roof. Two types are available; a "clock tower" and the one Roger modelled, a "terracotta chimney pot."

Terry Pettitt's crawler bulldozer was "somewhat similar" to the Eric Taylor version but had a different transmission and track construction. The track plates are constructed from 2½" flat girders hinged together using fishplates with one end rolled over to form a hinge with a 2½" axle rod. The jig to form the fishplates was shown at a previous meeting.

If ever sculpture and Meccano came together, the result could not be more beautifully formed than the 1937/38 Bugatti Type 57SC chassis built by **Terry Allen**. Besides being resplendently presented in sparkling shiny parts, the model's contours were a fascination of complex compound curves, accurately representing the original's streamlined and gracious outline.

John MacDonald showed two models; the first was a 1950s Chaseside (Fordson) tractor in red, with lights, differential, an elevating bucket with trip, powered by a 12v motor via a two-speed gearbox; and a 1920 Rolls Royce armoured car with a clutch, three-speed and reverse gearbox, rear axle with torque tube, cantilever rear springs, semi-elliptic front springs, a training turret, elevating gun, lights and a remotely actuated opening radiator shutter. The whole model was beautifully finished in army green including the correct period disc wheel centres.

As we all know Meccano had to cease manufacture during WW2, but some outfits were able to be made up before the restrictions took hold. Of particular interest were the sets destined for export, which often consisted of a non-standard combination of colours. A set 9 Quayside Unloader built from one of these outfits, (a 1940 set 10) was shown by **Tony Brown**, along with a Jubb Trencher, "a machine almost – but not quite forgotten by history." Both models carried 1929 type Steam Engines for power but Tony has "still got the interesting things to do" with installing the two winding drums on the Trencher.

Robin Schoolar demonstrated his 1:43 scale Delftshavense Schie Bascule Rail Bridge, the original of which carries a trunk rail line over a primary inland waterway, not far from Rotterdam in the Netherlands. As the crossing is on a skew alignment the bridge accommodates this with an inspired asymmetric design, creating beauty with utility. In his notes, Robin asks, "Maybe this classic could be called a **Baskewle** Bridge?" This imposing model is so efficient in its operation that a small red-cased Meccano motor operating on only 3v provides adequate power.

Two window display Meccano models were shown by **Richard Gilbert** of Devizes. There was a Ferris Wheel (similar to model 5.9) from 1954/55 and an Elevated Jib Crane (similar to model 4.4) from 1953. Both models were originally illuminated in their bases so the Meccano transparency created a highlight, and both were powered by large mains motors.

From a century ago came **Dave Phillips'** inspiration for "The mighty 1911 Avery 40-120 undermount", a traction engine model constructed from photographs in "Old Glory". It had a differential built inside the offside drive wheel, a compound (two cylinder) steam engine and a governor which was only operated while driving static machinery.

I would feel uncomfortable driving a car with its petrol tank mounted above the dashboard, with its filler placed perilously close to the engine, but apparently owners of the 1928 Alvis front wheel drive sports car had no qualms about these matters. Other notable features included independent springing to all four wheels and various unconventional modifications to its engine. Based on the October 1933 Meccano Magazine design, **Roger Marriott's** version incorporated many improvements to enhance realism, being finally installed into a rotating window display mounting.

Although Roald Amundsen was the first man to reach the South Pole on December 14th 1911, it is the story of Captain Robert Falcon Scott's courageous but ultimately doomed expedition that captured the hearts and imaginations of generations thereafter. **John Reid** showed one-tenth scale dioramas depicting the various methods Scott employed to pull the sledges; tractors, ponies and dogs, but the final "push" for the Pole being by man-hauling. John also showed a work in progress consisting of a 1926 pattern Ransomes threshing machine, built to be complementary to the Meccano Set 10 leaflet 13 Combine Harvester.

Terry Bullingham of Smethwick showed his red and green steam driven alternator. As always with Terry's models, the fine detailing was of a very high standard with the various ladders, walkways and other details painstakingly reproduced. That Terry managed to get so much accurate mechanism into a compact 12½" by 5½" base is a testament to his modelling skill.

Tim Martin showed three fascinating and complex models, the first being "Time Goddess II" which

offered many enhancements on Tim's previous clock shown at the last meeting. This version was self-winding, with the nine AA batteries kept fully charged by a solar panel fitted to the side of the clock. Other features included a conventional clock face and a facility to automatically correct for fast/slow running by simply adjusting the minute hand – which also shortened or lengthened the pendulum. Tim's second model was a "Cool Show" in which a double spiral rotated to provide an optical illusion. Tim pointed out that the bearing for this had to be reinforced to maintain exact vertical alignment with no wobbling – otherwise the visual effect would be ruined. Finally, Tim showed a Gear Tooth Counter with which the number of teeth on any gear could be quickly and accurately counted. This was especially handy, Tim commented, for horologists. With gears from other systems, compatible and reproduction parts suppliers now easily available, I can imagine Tim's model having an increasing usefulness in the future.

Radio control is becoming an increasingly common feature these days and **Dave Bradley** has such ambitions for the M.A.N. TGM 15 ton flat bed lorry he showed. Built to one-sixth scale the model incorporated a realistically outlined cab in pristine yellow flexible plates with opening doors and plush-looking red seats.

Geoff Devlin's Cruden Bay Tramway model had a cardboard cut-out driver at the controls, and this attention to detail was carried right through the tram to include arched window frames and a two-level clerestory roof. In his notes Geoff states that there were two of these single-deck trams in use on the Cruden Bay tramway, with each tram carrying 16 passengers with their luggage, plus supplies for the hotel. Both trams were built in the GNSR's Kittybrewster works in 1898/99 to a track gauge of 3'6". The original for Geoff's model can be seen at the Grampian (NE Scotland) Transport Museum which opened for the season at the beginning of April.

Mike Cook brought along two traction engine models; one was based on the American Avery 20hp Traction Engine designed by Dr. Keith Cameron and described in GMM supermodel leaflet 25. Mike slightly enlarged and modified this to incorporate a fully representative motion and gear train, plus an original Meccano infra-red remote controller for forward/reverse motion plus steering. Mike's other model was loosely based on the showman's engine described in GMM supermodel leaflet 5. The Burrell "Gold Medal" steam tractor's 1:12 scale was set by the rear wheels and again, Meccano's infra-red remote control system was built in, for steering and travelling functions.

Jim Gamble provided an attractive display of "Black Meccano" parts which reflected the temporary shortage and hence high cost of brass and nickel during the Korean war of 1950-53. As an alternative to these finishes a process known as "Brunofixing" was employed, giving some 40 hitherto nickelled or brassed parts a black appearance. Common examples included Bush Wheels, 57t Gears, Flanged Wheels, 1" and 1½" Pulleys, Wheel Discs and clockwork motor keys. The good news was that after the Korean conflict had ended, there was a rapid return to normality, as was shown by two small Meccano cars also shown by Jim. The 1953 version had many Brunofixed parts in evidence, but the 1954 version of the same model sported shiny brass-finish 1" Pulleys, Nuts & Bolts and Bush Wheel.

Paul Brecknell showed a crawler track base modified from an Eric Taylor design. It employed a concentric drive using a 6½" Rod inside a Multikit plastic gun barrel. Although Paul is very reluctant to mutilate Meccano parts he did confess to shortening the gun barrel to better fit the space. Paul's improved version of the turntable using hook rollers will give better stability for the completed model.

"I have never seen so much Meccano Elektrikit assembled together" was the reaction from one onlooker when viewing **Stephen Jeavons'** 4-bit binary counter. As I know nothing of this sort of technology myself I refer to Stephen's own notes which state, "The primary objective of this model is to demonstrate the possibility of utilizing Elektrikit parts to make working multi-pole relays. Several different designs exist on the model." Everything was built from Elektrikit, Meccano Electronic and Meccano standard parts except for the telephone dial, the MW Models micro switch and a light-emitting diode.

A Shand Mason Twin Cylinder Vertical Steam Fire Engine dating from 1895 was the inspiration for **George Illingworth's** version in a scale of 1:6. This appliance was fitted with a shaft for two horses and the predominantly red and zinc colour scheme was offset by a vertical boiler in yellow. The driver's seat and foot rest were modelled in grey and the model abounded in exquisite little details including finely contoured handrails and pipework. George's other model moved us forward in time by almost 50 years to 1944, in the form of a 1:12 scale National Fire Service Mobile Repair Van on a GMC AFW 354 chassis. Presented in an overall wartime grey finish this left hand drive vehicle was fully up to George's usual high standards of detail and realism, and effectively captured the original's sense of purpose.

We can always rely on **Alan Covel** to spring a surprise, usually a big one, and his latest creation was no exception. Drawing heavily on Alan's good humour (and stock of pristine yellow Strip Plates) was his "Freelance Monoplane". This was big enough to seat its builder, although when pressed to actually sit inside, Alan declined, stating that although fitted with a seat, it had not been designed to actually take the weight of an adult pilot. However, with further encouragement, Alan did relent and posed for pictures whilst firmly ensconced in the plane. This photo opportunity was later repeated outdoors on the dry grass, when the propeller was set in motion via a 7.2v battery pack located in the cockpit. I wonder if, given a sufficiently strong push (say from an aircraft carrier's catapult), Alan could have been launched into history by being the first person ever to fly when seated inside his own Meccano model aeroplane, (only joking!)

How about this for international co-operation? Michael Adler, who lives in Israel, expressed the intention to attend this year's Skegness Exhibition, but his model was too big to bring along. To solve this problem, **Richard Payn** agreed to build another example of the model with his own parts, on Michael's behalf, and take it to the show where it will be united with its designer. And what a model it was – based on the German "Takraf" crane and built to Richard's usual high standard, employing beautiful dark blue strips and girders, with grey flexible plates for the cab, most of which can surely never have been used previously. Of the model's many outstanding features I must mention the double differential winding system. One of Richard's own designs, this allows for slight roving discrepancies between the dual hoists, to be automatically taken up and corrected even while the load is still being lifted or lowered.

Richard's other model was his completed Scammell Super Constructor heavy tractor, parked adjacent to **John Hornsby's** same scale version of the Scammell Constructor. John's version had benefitted from a number of enhancements since I last saw it, including a beautifully finished tarpaulin made by John's wife Elsie; a vertical winch with paying-on rollers to ensure even roving of the cables and a 200-ton trailer with two 16-wheel bogies and removable trailer bed. The steering mechanism on both bogies was seen in action, with the trailing bogie incorporating an ingenious mechanism allowing for its steering action to be controlled either manually or automatically by sensing the direction of the leading bogie. The numbers involved in these two bogies soon began to add up, with 16 wheels on each making 32 for the pair, and each wheel having two conical discs making 64 in all. Almost by serendipity, John found that the slight lip on the inside of Conical Discs, provided an ideal fitting for the wheel centre embellishments taken from the 1990s type rubber road wheels. The overall impression was that of uncompromising power and quality – a worthy recognition of the great name of Scammell.

Geoff Wright made the trip from Henley to show some small but fascinating constructions, the first of which was a demonstration of how a clock mechanism could be arranged from the contents of a "traditional" Meccano Outfit 9. This of course contradicts the assertion (in the instructions for the Mantle Clock model 9.8, page 21 in the 1955-61 Outfit 9 manual), that a 12:1 ratio could not be made between the hour and the minute hands, from the contents of that outfit.

Geoff's next contribution was certainly a surprise to me – "A Versatile Multi-Purpose Strip Rolling Tool" using only two parts! This requires only two Axle Rods – about 5" long. To quote from Geoff's own notes:- "These are placed in two adjacent holes and pulled apart to create the desired curve at that point, moving along the Strip to create a continuous curve where required. Using adjacent holes restricts the curvature to the space between them. 'S' curves can readily be formed. Thicker Strips present no problem and Double Angle Strips and Curved Strips can also be formed."

Geoff also showed a neat idea for centring a 216 Cylinder between two Faceplates, to form a winding drum. As the presently suggested idea of connecting the Face plates by four Screwed Rods inside the Cylinder, does not allow for exact centring, Geoff suggests placing four bolts in the holes around each of the Faceplates' bosses, and the Nuts inside on these Bolts' shanks, precisely centre the Cylinder when it is placed over them.

Mick Burgess showed a Canadian Pacific Locomotive which was slightly modified from the original Outfit 7 instructions. By adding ½" to the mainframes, Mick was able to use an extra pair of 187 Road Wheels instead of the pair of 20A 2" Pulleys. The bell came out of a Christmas cracker and certainly looked (and sounded) more realistic than the swinging pinion depicted in the original instructions.

Another locomotive from old Meccano literature was the basis for the second of Mick's contributions. This was the famous Midland Railway 4-2-2 'Spinner' as originally designed by Keith Cameron and featured in the April 1926 Meccano Magazine and later instructions manuals. Mick incorporated some modifications to his version, including Stepped Curved Strips to create a more correct rounded shape to the wheel splashers, and a third set of wheels to the tender.

Terry Wilkes' model 9.8 Conveyancer from the 1970 series Outfit 9 was not constructed exactly as per the instructions because, (Terry explained,) as shown, it didn't work or fit together! (Nothing new there, Terry!) His second model was based on a Massey Ferguson MF 135 Tractor with "Pup Treads" tyres for the rear wheels, and it pulled a "Rotaspreeder" manure spreader.

I am no expert on Dolly Varden so I made an online search to discover it was (among other things) a type of trout or a character from Dickens' novel, Barnaby Rudge. It was rumoured that the Dolly Varden Doll's House from Meccano Ltd. in the mid-1930s was named after a briefly famed starlet of the day, but I can find no evidence to back up this theory. So, I must assume that the Dolly Varden Doll's House was named after the Dickens' character. Whatever the provenance of the name, **Roy Whitehouse's** splendidly preserved example sat proudly in all its coloured cardboard splendour, among the lawns, flower borders and driveway of its own baseboard throughout the meeting. To complete the display, Roy brought along four sets of furniture available at that time, still in their original boxes.

Stephen Wilson showed his version, built 13 years ago, of the famous Revenge class battleship built from the F-L manual. Constructed in nickel parts, the model certainly conveyed the purposeful atmosphere of the original.

John Ozyer-Key demonstrated his version of Eric Taylor's Dockside Crane, with enhancements including full radio-control and an improved design of grab. His model was built using dark blue/yellow parts

and travelled on rails mounted on a wooden baseboard.

Tom & Matthew McCallum showed a Binns Road display model of rockets, in light red and green parts, dating from the 1960s.

Regular exhibitor **Paul Hubbard** showed his Fairground Roundabout which is so big that a full circle of 24 Flanged Sector Plates forms only the inside half of the total deck area. As with the original version, Paul's roundabout was well supplied with transport-related models including two Red Arrows' jets and quad bikes.

Mark Rolston's part-built chassis which was shown at the last meeting, was shown to have progressed into a nearly completed model. Based on a ten-wheeled tractor chassis, the model employs a combination of ash tray tyres and Watt's industrial tyres from Mike Rhoades. The wheel rims are of particular interest though, being spun metal and punched with holes around the centre, to which custom-made solid brass wheel centres were fitted.

Keith Way brought his "Catch Me Who Can" Trevithick type locomotive using blue/gold hatched plates for its boiler and utilising Spoked Wheels to good effect. Four Sleeve Pieces formed the chimney and the model demonstrated a realistic con rod motion to its vertical cylinder as it was pushed along.

Colin Reid proudly added to his millionaire's wish list of original steam engines (see the last meeting report) by recently purchasing a 1934 Falk (German) vertical steam engine. This was truly a magnificently engineered unit, displaying a standard of workmanship which is rarely seen in anything produced today.

"Farmer Tom and his son Jesse" were certainly not to be overlooked, as they walked their dogs "Mec" and "Mecca" to go and feed the sheep. The point of the exercise was to demonstrate what could be achieved with as few as 20 Meccano parts, and the results, by **Sid Beckett**, were certainly original, surprising – and eye-catching.

Brian Compton made so many modifications to his Coal Loader/Unloader model since the last meeting, that at first I thought it was a completely new construction. Basically, nearly all the modifications have had the effect of simplifying the mechanism without affecting the many operations. 'Getting the same job done, but with less', one could say. Other changes have been more concerned with the appearance of the model, including lights and a neatly executed walkway.

Mei Jones called his crane "The Model With No Name" in respect of the fact that it was given no title in the instructions manual from which it was built. It was in fact an elevated jib crane (from the Special Edition Set 7080 from 1998), standing firmly on four 'legs' formed out of 5½" Curved Strips.

Mei also showed a variation on Supermodel 19a Steam Excavator, but running on rails and with a compound curved roof reminiscent of the Grabbing Crane model 8.4 in the 1950 outfits 7/8 manual. The Lifting Shovel from leaflet 6 in the Set 10 series, completed Mei's display.

If I won the Lottery I would call in the dancing girls, that's for sure, but while I am waiting for Lady Luck to smile, I could content myself with **Tony Parmee's** "Dancing Girls" or more correctly, "Aunt Sally" automat machine as originally described in the Meccano Magazine for February 1961. A 2p piece (refundable – I haven't won the Lottery yet!) placed in the tray and inserted, resulted in an E20R motor powering up and the action beginning. The idea was to slide one of seven Wheel Discs down the slide so it knocked one of the levers attached to one of the six moving Aunt Sallys. The action was repeated until hopefully, all the Aunt Sallys had been knocked down.

Tony also showed a Watt's Beam Engine, slightly modified from Model 6.32 or K28 in the pre-war manuals, which gave, in his own words, "Lots of meaningful movement – a good exhibition model."

A 1/30th (approx) scale 1954 Rolls Royce "Flying Bedstead" was shown by **Christopher Bond**. The original research did not lead to the Harrier Jump Jet as is commonly supposed, but it did lead to the Short SC1. Christopher's model accurately conveyed the revolutionary outline of the two prototypes, both of which eventually crashed with one fatality. Christopher also brought a compact (2½" wide) but nicely detailed tanker lorry in red, zinc and green parts.

Tony Wakefield showed his version of the late Brian Rowe's Beam Engine, which looked resplendent in its red and green parts. A press button fitted to the model's wooden baseboard allowed onlookers to set the engine in motion.

Brian Edwards brought two finely-built models on a goods delivery theme, one of which was a Daimler Underfloor Engine Lorry based on an 1895 design. His other model was of a Bedford CA Type Van from around 1955. This latter model had sliding side doors and was constructed using, appropriately enough, parts in the 1950s red and green colour scheme.

91st Meeting held on 13th October 2012

Changeable weather greeted members as they arrived for the Autumn meeting of the Midlands Meccano Guild. However, the variety of different weather conditions outside was easily eclipsed by the range and scope of models inside Baginton Village Hall, as I hope to describe and illustrate in this model report.

It is always the case that the models deserve much more of my time and attention than I am able to give, owing to the pace I must adopt in order to cover everything on display. Therefore I apologise in advance if anyone feels my report does not do justice to their individual contribution. I trust you will agree that no report, of any length, can hope to adequately reflect such a magnificent showcase of Meccano modelling. Even so, I will do my best!

As usual it is never easy to decide on a starting point, so I took the path of least resistance and began my information gathering near to where I had unpacked my clipboard and pencil.

Although **Stephen Jeavons'** Quartz Clock was described as a work in progress, it had very much the appearance of a highly decorative and complete unit. Using a lid from a Tesco saucepan for its bezel and glass, the clock's attractively styled case accommodated a contented looking Meccanoman relaxing on a deck chair, complete with parasol. "It's time to relax", seemed to be the message!

Richard Payn once again demonstrated his painstaking approach to modelling with a rear single axle unit with walking beams, destined to be used in a future 1/10th scale model of a Scammell Explorer 6x6 Recovery Tractor. Smaller diameter pre-war wheel discs were employed in the walking beams and a non-standard spacing was achieved by crossed short strips. (Shown on the right in this photo)

Colin Reid's millionaire's wish list display of obsolete Meccano parts came housed in a wooden attaché style hinged case, which opened up to reveal the contents carefully arranged in two layers within. Among the goodies on show was a length of ladder chain reputed to have been supplied with the Water Motor; many MME parts and badges including a Meccano Guild Recruiting Campaign Medallion. Also to be seen was Colin's own design Sprocket Chain resetting tool and a base board carrying three small tinplate machine tools, comprising a drop hammer, a mortar mill and stamping hammers.

Inspired by Joe Attard's model featured in a 2007 Constructor Quarterly, **Mark Rolston's** American ten wheel tractor unit, based on a Peterbilt original, proudly carried a prizewinner's cup on its roof.

The cup was awarded for "Best Model in Show" at the Massam Steam Rally. Powered by an electric motor retrieved from an industrial conveyor belt, Mark's model featured a four-speed and reverse gearbox with splitter. The sleeper cab was accurately represented, looking quite spacious inside.

As we know, **John MacDonald's** models are always built to the most exacting standards, and his working searchlight, on a steerable tracked base, was no exception. Among the model's many attractive features was a Chinese cuisine stainless steel bowl bought from Wilco acting as the searchlight reflector. The searchlight could be rotated and elevated under power and two burly G.I.s grasping steering wheels, represented its operators.

The inventions devised by Wallace, the human half of the Wallace & Gromit duo, have provided a rich source of ideas for **Tony Homden**. Combining his sense of humour with modelling expertise, Tony showed two complex "Cracking Contraptions" from a Haynes book. The first of these was a "steam" powered Runabout Wheelchair with elevating seat. This allowed a Wallace soft toy to move about under power, and for its inventor to access a high shelf on which resided his favourite food – cheese. A 4" circular plate acted as a round tray, on which sat a goodly slice of Cheddar complete with knife, along with four Jacobs' Cream Crackers - represented by canary-yellow 1½" square plates.

Tony's second model was a "Bowl-O-Matic" which featured another Wallace soft toy, holding a shoulder-mounted bazooka-style device for launching cricket balls. A soft toy version of the ever-patient Gromit, complete with bat, awaited the inevitable googlies.

Now we know where all the yellow 12½" strip plates disappeared to! Many were used in **Alan**

Covel's large-scale version of the 1899 Renault Type A Voiturette. The original was powered by a 273cc De Dion air-cooled engine situated ahead of the totally enclosed cabin – an advanced feature for its time. Other features included twin carriage lamps, leaf spring suspension and a wire mesh radiator grille complete with Renault badge. There have been cars about this size, actually used on the roads – for example, the 1950s Peel P50.

A beautifully presented version of SML 19a Steam Shovel or Mechanical Digger was shown by **John Hornsby**. Although John's model featured a gleaming brass boilded Tyco reproduction of a Meccano pre-war vertical steam engine, the digger was not actually powered from this unit. Instead, to avoid using (and devaluing) this fine steam engine, John opted to install a small electric motor. This was so discreetly situated that it was by no means obvious to the casual onlooker, that it, rather than the Tyco steam engine, was powering the model. A flat battery held under the base of the steam engine, doubled up as a counterweight.

A firm favourite of Märklin model railway collectors, the Swiss Electric articulated loco named the "Krokodil" has long featured in their catalogues. This iconic design dates back to 1919 when 33 were built and delivered between then and 1922. A further 18 were delivered in 1927. Their "bendy" design was necessitated by the tight curves encountered on the St. Gotthard line. The "Krokodil" locomotives continued in service with Swiss railways until the 1970s. In his beautifully modelled 1/16th scale version, **John Rogers** used green Meccano parts from 1928-32 and earlier nickel plated parts, plus some black Märklin pieces from before 1930.

The expertly upholstered seat on **Geoff Devlin's** 1.5" to 1 foot scale "Suzuki TU 250X Super Classic Motor Cycle" looked so comfortable I could, if (a lot) smaller, have almost sat on it myself. Displayed to perfection on a plinth-mounted turntable consisting of a Geared Roller Bearing rotating once in 3½ minutes, the Motor Cycle with its chain drive, shock absorbers and 2" pulleys with tyres, was accompanied by a smaller scale 'simplicity' style version in yellow. Geoff's other model was constructed out of Meccano "Speedplay" components in grey and red, forming a menacing-looking and highly mobile robot powered by two motors with on-board battery boxes.

As Geoff explained in an email to me a few days after the meeting:- "Speed Play Meccano was on the market from 2005 until 2008. Set 9901, the Robot, was for ages 7+ and upwards. The moulding dies were produced late 2004 and early 2005. In September of that year the programme was put onto the internet, for modellers to download onto their computers and transfer to a control unit on the back of the Robot. This controlled the three electric motors giving 'Sound and Movements'. ie the arms and wheels moved, rushing round the floor.

The system used a type of 'Rawlplug' which held two or more plastic pieces together by putting in a self tapping screw. The main weakness was that many children tended to over tighten the screws which distorted the plugs. This made dismantling very difficult. The sets were withdrawn in 2008 and replaced by the 'SPYKEE' ready made Robots in 2008."

An attractive combination of blue and nickel (or zinc) colours next caught my eye, in the form of **Sid Beckett's** version of SML 17 Planing Machine. This was equipped for demonstration purposes with a small electric motor drawing its power from an adjacent battery pack.

Tim Martin showed a mini-exhibition of his own with a variety of seven very different models including a ship in a (milk) bottle. Tim suggested this could be called a 'Milk Float'?

The force of gravity was cleverly utilised in a "Gravity One-way Drive", in which the direction the handle was turned, determined whether sliding rods held in a cage on its shaft, engaged and drove the adjacent wheel, or did not.

Inspired by a popular puzzle and from calculations attributed to "Dudenay's equilateral triangle to square geometric dissection", the "Square Triangle" could be assembled in two ways to form either of the two shapes.

There is no doubt in my mind that "Meccano Rocks" and Tim's next model, carrying that proud title, amply demonstrated that fact. This consisted of a delicately balanced and constantly oscillating "pendulum" formed from a toolbox hammer and a 12" ruler, receiving intermittent re-energising 'kicks' from a 12v solenoid.

Ebenezer Scrooge would have been proud of this one; a toilet roll dispenser with an analogue decade counter, which keeps a running total of the sheets used. In these times of cutbacks, such

a device would find a ready market in homes and workplaces throughout the nation. The readings from the meter could be recorded at the end of each day, and entered into a spreadsheet. This would allow statistical analysis to take place, correlated to specific events such as family visits to the curry house the previous evening, or the office party during which those dodgy meat pies were served.

As a final gesture towards the ultimate lavatorial experience, Tim incorporated a Boiler End 'bell' which sounded its sonorous note whenever another sheet was dispensed; thus alerting one's colleagues or other family members as to who the heavy users are.

Moving on from the miserly to the hedonistic, Tim demonstrated a motorised 'Lazy Susan' Fruit Bowl Turntable which incorporated a three speed system to "ensure that the fruit bowl is positionally optimised to facilitate fruit removal." This being the de-luxe version, it had a twin-differential automatic-type gearbox with worm/nut control. The fruit bowl contained a selection of non-Meccano (real) fruit which looked so fresh that it could not possibly have been pre-war!

Tim's seventh model was a gear teeth counter. With the pointer zeroed, the number of teeth on any gear wheel can be counted by mounting it on the axle behind the dial. The motor is then started and when it stops, the needle points to the appropriate number.

Tom McCallum showed a board-mounted Horizontal Steam Engine in red/green parts. This model could be actuated pressing a button on the front, thereby making it ideal for exhibition purposes.

Hugh Doody showed a small Gantry Crane made largely from yellow/zinc parts, and a neatly constructed "Red Arrows" plane,

Sir Hiram Maxim invented the 'Captive Flying Machine' amusement park ride for which he is recognised in Meccano literature. However, the same man also invented the machine gun which also has been represented, for example as model 6:12 in the 1928 outfits 4-7 manual. Another larger version was described as a set 7 model in the 1938 Outfits 7/8 manual, and this formed the basis for **Clive Kingston's** version in the blue/gold colour scheme of that time. Using Spring Clips as 'ammunition' the model could be rapid-fired by turning a crank. As these clips are rarely all recovered afterwards, a plentiful supply would be helpful in maintaining a constant 'rate of fire'.

Meccano's window display models have always attracted attention due to their movement and colour. In this respect **Jim Gamble's** restored Helicopter scored highly on both counts, all the more for being recently and carefully restored from a rather battered and care-worn original. With its gleaming red and green parts, shiny brassware and eye-catching illuminated base, the helicopter's now working rotor and stabiliser added the finishing touches to a fine restoration.

Howard Somerville showed a model of the complex Tumbling-Beam Engine, in red/green/zinc and standing on a yellow base. The original was patented by Norman Wheeler in 1867 and offered an advantage in size compared to other engines offering similar power. However, it was never put into production owing to its greater complexity increasing manufacturing costs, and its non-compound cylinders and slide valves being less efficient than conventional designs.

In operation, Howard's model was a delight to behold, with its complex linkages operating smoothly and offering a glimpse into what might have been, if Norman Wheeler's design had been produced.

A large scale version, in red and green parts, of a WW2 Canadian Military Pattern 4WD Army Truck was shown by **Geoff Burgess**. Among the model's many features were a clutch, 4-speed & reverse gearbox, a two-speed transfer box, internal expanding brakes at the rear operated by handbrake or foot pedal, and an additional 4:1 reduction in both axles using 13 and 26 tooth gears. Exterior features included opening cab doors and roof, big heavy-duty tyres on built-up hubs, a two-part split hinged windscreen, a beautifully crafted radiator grille and a host of details including windscreen wipers, rear view mirrors and even mudflaps. A small electric motor concealed within the engine unit, provided ample power for demonstration purposes.

It's not often we see two articulated locomotives displayed at the same time by the same modeller, but **David Hobson** did just that with his Shay narrow-gauge loco built with Stokys, and a Climax Class "A" loco in Meccano. Both models had notable levels of detail resulting in an imposing and realistic appearance. The brass and aluminium Stokys parts lent the Shay an impression

of machine-like efficiency, while the red and green parts of the Climax gave it that intangible 'Je ne sais quoi' quality of all similarly finished Meccano constructions.

A brace of Meccanographs were shown by John Bland. The first was inspired by an Eric Baldwin design which was featured in the April 1991 Midlands Meccano Guild Gazette. This was described by John as, "Very complicated with various hole settings." The second Meccanograph came from a 1932 design which John had built many years ago, and described by him as, "Simple but works."

Meccano's infra-red system has its limitations when used with wheeled models, as I have discovered for myself; but for stationary models it offers many advantages, as was proven by Brian Compton's rail-carriage mounted version of Bert Love's Level Luffing Crane, which was featured in his 'Meccano Constructor's Guide'. Four 12v DC motors separately controlled the movements of the crane, with three being programmed to use a 'soft-start/stop' feature to minimise juddering. As it must always be in line of sight with the (TV remote-control) transmitter, the infra-red receiver was installed into the non-rotating carriage of the crane, with slip rings carrying the electrical control up to the rotating column. Operating with watch-like precision, the crane amply demonstrated the advantages of level-luffing whilst requiring Brian only to press a few buttons on his TV remote. "This is its final incarnation!" said John Reid, while I was examining his 1/10 scale version of a 1926 Threshing Machine. Accordingly, it was worth all the closer a look as it must be one of the best of its type I've seen. Built to complement the Meccano outfit 10 Combine Harvester, the Threshing Machine was powered by an electric motor concealed in the Number 1 fan, located between the main frames just forward of the rear axle. The model is to remain in skeletal form to show the relationship and workings of the many individual components which go to make up a threshing machine. Standing nearby and to the same 1/10 scale, was a 'Man with Flail' described as 'The forerunner of the threshing machine and the combined harvester.' The flail, consisting of two pieces of wood fastened loosely together, was used to separate the grains or seeds from their husks or pods, in a labour-intensive operation of 30 to 40 blows per minute. John's highly detailed version depicted a well-built Meccanoman with stout arms made from couplings, a flail made from two loosely joined axle rods and ... fashionable patterned socks, formed from blue/gold hatched flexible plates!

John also showed a large scale version of a 7"/7 tons R.M.L. Gun on Moncrieff Carriage – 1888. This gun was intended for shore-based defensive installations and its design allowed for the force of the gun's recoil to be stored by raising a counterweight, which is then used for raising the gun from its lowered (loading) position under a solid protective parapet, back up to its elevated firing position. John's model, although stated to be a work in progress, was substantially complete with only a few minor details yet to be added.

Regular exhibitor Paul Hubbard showed his 48" diameter Fairground Roundabout which is so big that a full circle of 24 Flanged Sector Plates forms only the inside half of the total deck area. As with the original version, Paul's roundabout was well supplied with kit-based transport-related models including Red Arrows' jets and quad bikes.

"I've spotted the Meccano part!" exclaimed Richard Payn, with a note of triumph, after examining the radiator grille of the American style car I (Michael Walker) had on display. Of course I had to laugh, as its body shell was made up largely of Märklin and Metallus, plus a few repro and compatible parts. As such it was very much a product of today's wide range of parts sources. Radio-controlled and powered by a brushless motor, the car can travel at a high speed, free of trailing wires, where conditions permit. Other features include ten LED lights, soft wallowy suspension, tyres of realistic profile and tread pattern, and a redesigned floor pan allowing for a deeper passenger compartment whilst retaining the car's low profile. The post-war series of Meccano manuals have long been a favourite on account of the quality and variety of models described, and John Palmer displayed a slightly less well-known model from the Set 6 book, the Electric Articulated Lorry, model 6:12. John's version was in the mid red and green colour scheme of the time, with flexible plates having round end-holes.

Roger Burton's 0-4-0 Narrow Gauge Loco was described in an article by Mike Beadman in the Sheffield Meccano Guild Circular of September 1988. It was a delight to the eye with its neat red

and green parts, except for the smokebox which was in black. With details such as bright brass couplings for the tall smoke stack and conveniently located handrails, the model traversed a short length of track, powered by an electric motor.

Roger Marriott's 'O' Gauge version of the Fishguard 40-ton Block-Setting Titan Crane more accurately represented the dimensions of the prototype, than the model described in Super Model Leaflet 4. This was achieved by careful reference to the engineering drawings from the contemporary publication, "Engineering". Roger's model travelled in prototypical fashion on 32 flanged wheels on two sets of rails, with slewing effected by pinion gearing to a large circular rack/ring allowing for one revolution in three minutes. Two hoist speeds are provided as in the prototype. A third set of Hornby rails carried a fine Hornby 4-4-4 tank locomotive, which gave a good impression of the overall scale of Roger's model.

A "Snow Cat" or, more precisely, a Swedish design Hagglunds BV206 based on an original by Stefan Tokarski, was shown by Dave Phillips. This two-part vehicle looked as though it was made of new components, but in fact all the red and green pieces had been refurbished to a very high standard by Dave. Powered by a Marx Hectaperm motor drawing 4 amps on full load, the model was powered by a rechargeable battery and incorporated spur gear differentials in both units. The Ruston Hornsby No. 300 Dragline by Ken Senar was among the larger models on display, and was a rebuild of SML27; a "rather spindly" model of the original, depicted in the pre-war Meccano Book of Engineering. Use of the wider range of parts presently available allowed Ken to incorporate an increased level of detail in an altogether more soundly constructed version. Ken also pointed out that apart from electrical items, cord, and the use of two large axle system components just for appearance, only today's accepted parts had been used without mutilation, filing or panel beating. For further details of this model please refer to the comprehensive write-up in the MMG Bulletin Supplement published September 2012.

Ken's other large construction was a French Knitting Machine, reflecting his other long-standing hobby.

This had been designed, constructed and brought to its present state since April 2012. The only non-Meccano parts in this machine were the four latch hooks, the electrics and the wool. The output of this complex and beautifully presented machine was a seemingly endless knitted 'rope' which could then be formed into useful items including place mats, tea cosies and even clothing accessories.

In my distant past I seem to recall making a similar product using a wooden bobbin with four headless pins around the hole at one end. We called it 'corkwork', (I think).

Terry Wilkes succeeded where, many years ago, I had failed. This was in building the Outfit 8 Conveyancer, the design of which I could never translate into a finished model, largely because I could not make sense of what it was, or even what it did. There were of course no accompanying written instructions so, like everyone else, I was left to scratch my head in puzzlement. Of course since then I have been able to discover more about this container-handling machine, and although Terry's wasn't the first completed model I'd seen, it was very well built in yellow and blue parts.

Terry's next model again emanated from the Set 8 model book, and this was the Breakdown Lorry. Again in predominantly blue and yellow parts, this effectively captured the imposing appearance of the original.

Another model from the set 8 manual, but this time from the earlier post-war series, was the Road Sweeper. This example was built in correct period red and green parts by Michael Bent. With its short wheelbase creating quite a long 'overhang' at the front, this must be one of the most distinctively shaped wheeled models of that era.

One of my favourite pictures of any Meccano model, is that of the Tower Crane from the 1950s Models of the Month (M.O.M.) series, depicted on the front cover of a 1961 products leaflet. Mei Jones' version was all the more authentic for being presented in red and green which was the colour scheme at that time. Mei also showed a 'Road Roller with a difference' from the July 1969 MM, plus another model from the same magazine, a commuter mini car, and "Something for the Coronation Year for the over 60s Club"; the Sports Car model 4:17 from 1953. This well-proportioned

model has become something of a classic and Mei's version was indeed resplendent, with its flawless red and green bodywork and the correct tinplate road wheels, part 187.

Terry Pettitt's models always demonstrate a high standard of modelling expertise, and his AEC Mammoth Major lorry, originally built 15 years ago, was no exception. This four-axle 12 wheel flatbed was notable for many reasons, including its red and green colour scheme and a beautifully made radiator grill with two pawls without boss forming the AEC motif at the top. Terry's second construction was of a Walking Beam Rear Axle, as used on Scammell and Thorneycroft vehicles. Imagine a Trevithick loco but without wheels, mounted on a plinth, and you have Brian Edwards' version of the Trevithick High Pressure Steam Dredger Engine of 1806. As with the locomotive, this engine was a delight to see in operation, with its large flywheel deeply inset into the base of the unit.

Moving on some 130 years brings us to the heyday of Brian's second large construction, a Handley Page Hannibal 4-engined air liner of the 1930s. This large unequal-span biplane could carry 38 passengers and was the first air liner to have a totally enclosed crew compartment.

Tony Knowles showed three models from "other constructional systems", the first of which was a Tractor in yellow and red made from 1990s German Trix.

The second was of a threshing Machine made from red and green Tekno, a Danish system compatible with Trix, which continued into the 1970s.

The third was a 'Golden Hind' sailing ship made from pre-war Australian "Ezy-Bilt" parts. This last system was very similar to Meccano and the 'Golden Hind' could easily have passed for a Meccano model. To add to the 'Hind's' evocative appearance, Tony rigged up some sails, each carrying motifs from that great age of discovery.

Geoff and Elizabeth Wright came to the meeting, travelling for the most part by rail, carrying Geoff's model of the 'Thames Valley' Leyland TD1 double-deck bus. Built from the contents of a Set 9, the bus is one of a series built by Geoff, all with highly realistic proportions and to the highest standards of modelling. This particular type, the TD1, was noteworthy for its lower overall height, making it possible for the prototypes to go under bridges that were too low for other, taller types. Roger Auger brought a selection of wheeled models including a blue/gold Set 7 Amey Lorry Stake Truck built from a fire-damaged outfit 9/9a. Other models included an improved 8701 kit radio-controlled 6-wheel truck; the 8700 kit 4x4 and the 8950 'Tuning' kit car.

Roy Whitehouse's blue/gold Fire Engine from the Set 8 manual was one more demonstration of how good that colour scheme looks when the parts are in good condition, or restored. With a design very redolent of its time, having prominent mudguards, running boards and no roof, the model created an authentic impression of its prototype. Also shown by Roy was a beautifully restored outfit 8 of the same vintage. This had two trays of parts in perfect condition and carried a very high 'maybe one day' factor – at least so far as I was concerned!

George Illingworth can always be relied upon to represent the fire-fighting profession, and on this occasion a charmingly executed 1/12 scale 1929 Morris Eight Fire Engine did sterling service. The prototype, a heavily adapted but still recognisably a Morris car, was used by the Morris Motors Cowley Works Fire Brigade. This was augmented by a 1928 Dennis No. 1 Trailer Pump, to the same scale, carrying a wealth of detail and running on 1½" pulleys with tyres.

Purposeful' and 'impressive', were two words which immediately came to mind when viewing Terry Allen's Fowler 'Superba' Type 30 Ploughing Engine in gleaming nickel/brass finish. With exquisitely-wrought detailing throughout, this was surely one of the most accurate models of its type I have seen.

The Touring Coach, Model 8 from the post-war outfit 9 book, was shown by Mike Burgess. In the contemporary red/green finish, the bus sported seats made instead from blue/gold hatched flexible plates, lending that luxury look to a finelyproportioned outline.

Mike had three other small models including a superb Simplicity Dragline.

Three boxed and strung French Sets 0, 3 & 7 were shown by Richard Gilbert, and

Ken Wright brought his “TinTin” Float Plane in yellow parts, derived from the recent movie.

A simple Martian Lunarium was displayed by John Armstrong. Based on a design using only seven gears, by John Nuttall and Pat Briggs, the model demonstrated the motion of Mars’ two moons, Phobos and Deimos, in their near-circular orbits around ‘the red planet’. Several other orreries were shown by John as well as two Decimal counters.

With a meeting as choc-full of goodies as this was, any report can only attempt to do justice to the quality and variety of Meccano excellence on display. Therefore, as always, I apologise to members for any of their models I may have overlooked.

92nd Meeting held on 30th March 2013

It is two years since I last wrote the model report, so I am a little out of practice. I am also most grateful to Mike Walker who took over the task in my absence. My difficulty arose when my publisher asked me for a third edition of my book on Flight Dynamics – a huge task which I had definitely not planned for in retirement! That is now behind me I am pleased to say, so I think I can now move on from where I left off. Comparing notes, I find that in those two years, sadly, we have lost some members, a few have moved on and some new faces have joined. The good news is that things seem to be as industrious as ever judging by the number and variety of models at the meeting. The remedy for the prolonged cold winter has obviously been to get on with some model building! The day of the meeting was also cold and grey, so what better way to spend our time on such a day – in a warm hall, in good company and with lots of interesting models to investigate. As always, my apologies to those I have misrepresented or overlooked in some way.

So without further ado, the first models on my tour were two clocks built by the late Jack Partridge. The first, now owned and presented by **Roger Marriott** was the familiar Electric Chiming Mantle Clock, published as MP112. The second was Jack’s rather more substantial Arnfield Clock, now owned and presented by **Tim Martin**. This splendid example was originally derived from a model designed by Michael Adler. The fundamental principles on which the design is based are the traditional Huygens chain drive mechanism, which automatically rewinds every 15 minutes, and the modern and highly efficient Arnfield escapement mechanism. Since acquiring the clock, Tim has included a number of additional functions and has “prettied up” the case to result in a fine looking and useful model.

Next, was a nice little fire engine built by **George Illingworth**. I have long since lost count of the number of fire engines George has built over the past few years! (36?) The model is representative of the Dennis 30cwt General Purpose Fire Tender together with a matching trailer pump. The scale is in keeping with George’s other models, this example having an overall length of about 15”, no doubt determined by the use of two inch wheels with tyres. A carefully chosen colour scheme utilising red, black and silver parts made for an attractive model – the removable ladder was made up from ancient gold coloured strips. Alongside was the usual most attractive display of Meccano items presented by **Roy Whitehouse**. First, a splendid 1939 No.10 outfit originally owned by John Pentney. This outfit is in superb condition, comprising red, blue and gold parts fully strung and set out in the original green storage cabinet. Serious nostalgia stuff this! Roy also brought along a small (working) mains electric clock, the type with a rotating pendulum, which was originally built by the late Les Gines. It was nice to see Les remembered in this way.

Ken Wright brought along a nice little model constructed from one of the newer single model outfits recently given to him as a present. The model is from the TinTin “Unicorn” Sailing Ship outfit. The hull and stand are attractively coloured, brownish below the water line, white and blue above the water line. Three masts carry a full set of sails made from flexible white plastic material. The model measures about ~18” long by ~18” high by ~3” wide. This is an attractive and unconventional model for Meccano and of course, it goes without saying that it was expertly assembled by Ken. Next were some historical Meccano display items brought along by **Jim Gamble**. Described as two very rare dealers display cabinets, and both are in fine condition. One cabinet relates to the early nickel period and it is nice to see a representative range of parts from this period

fully strung for display. The second cabinet was to the same standard pattern, but includes parts from the later blue-red-gold period. Needless to say, this presentation is extremely enticing when shown off in this way. Meccano certainly knew how to promote their goods in the early days! The next big dose of nostalgia was set up next door by **Tom and Matthew McCallum**. Their collection included an early display card and a fascinating full page advert from the Daily Mail dating from 4 December 1920 – just a few days before Christmas! In today's world it is unusual to see the front page of a newspaper given over in its entirety to advertising a single product. It must have had a big impact at the time. The page is in remarkably good condition and was framed to keep it that way. A major feature of the advert was a model of a tower crane and to complete the picture Tom and Matthew had built the model in the appropriate period parts and which was standing alongside the advert – a nice touch. Now, fast-forward to the 1960s, the period from which their other model originates. This was the dealers display model of a twin cylinder marine engine immaculately presented in a pristine light red and green colour scheme. The model was running very smoothly too. Full marks to Jim, Tom and Matthew for a colourful corner of the hall.

Paul Hubbard is, perhaps, the only member who actually brings his constructional projects to the meeting and works on them during the meeting. On this occasion I found him busy on the structure of a Terror Tower fairground ride model, his latest Meccano project. He also brought along a large Fairground Roundabout model set up to run continuously for display. Built mainly from red, yellow and nickel parts the model is about 30" diameter by about 18" high. A collection of smaller models from current outfits completed Paul's presentation. Notable were several small models of the Red Arrows Hawk aircraft, a pair of which were included in his large roundabout model. Continuing the aircraft theme, **Sid Beckett** brought along a small model of the Westland Lysander, an aircraft favoured by the wartime SOE for clandestine operations, and Sid had painted his model with the night time camouflage scheme. The Lysander model has a wingspan of about 24" and Sid showed me that the propeller was driven by a small electric motor through an unreliable drive arrangement. Inspiration for the model came from a 1940s book on military topics which Sid also had on show as evidence!

Then for something rather different. **Brian Compton's** model was of an Automated Rolling Bridge Road Coal Loader and Un-Loader. The model was inspired by the Coal Loader and Un-loader described in the CQ special publication by Oscar Fontan and Keith Cameron. This is a large model sitting on a base about 2ft square and Brian's version looked splendid in its immaculate mid red and green colour scheme. The model relied entirely on its electronics for its automated cycle of loading, unloading and shifting "coal" around continuously. A fascinating model to watch in action – as many did for some time. The next model was even larger – a continental "Star Flyer" fairground ride in construction by **John Molden**. So far, John has built the lower base support comprising two wheeled chassis' which couple together to form the base on which the ride is assembled. The model is built using mainly mid red and green parts, it is typically mechanically complex and it is big – about 4ft 6" overall length by about 10" wide. When surmounted by the ride as well, the model will be very large indeed, but that is what John does so well as we all know. This will certainly be a model to look out for in the future – it will be difficult to miss for sure!

Getting back to more typical Meccano models, **John Reid's** offering on this occasion was a pair of interesting military models. First a model of a 7-inch/7 tons R.M.L. gun on a Moncrieff carriage. The concept was originated by Capt. Moncrieff of the Edinburgh Military Artillery and dates from about 1858. The gun which John has modelled, at a scale of approximately 1:12, dates from 1888. The main principles of the idea are; to obtain cover for the gun detachments by enabling it to recoil below a solid parapet for loading, and to store the recoil energy for raising the gun from the loading to firing position. To achieve this, the gun is mounted in a carriage attached to an elevator or, in some applications, in an elevator direct. In either case, the gun recoil raises a counterweight. The elevator arrangement is such that it rolls back along the top of the platform on recoil, the counterweight producing an opposing force to halt the recoil. The gun is held in the lowered position for re-loading by racks and brake gear, and is raised from the loading to firing position by the force of gravity acting on the counterweight, when the brake is released. John's second model was his interpretation of the Meccano Super Model SM37, Howitzer, Limber and Tractor. Changes to the

howitzer include a re-designed firing mechanism, wheel brakes and wheel girdles for operations in muddy conditions. The limber was completely re-designed to be more representative of those used in the first world war. Modifications to the tractor resulted in what John called “a house brick with rounded ends”! Instead he produced a six horse team which he thought would be more representative of the period.

Dave Phillips brought along another of his lovely models constructed entirely from restored parts. The model was of a Garrett Steam Wagon dating from about 1901. The model was looking really good in its mid red and green colour scheme and was mounted on a wooden base plate for display purposes. Dave has produced 4~5 fine models in this way over the last few years, but he has recently sold them all as he is about to move from a decent sized house to a rather smaller retirement flat. Whilst chatting to Dave, and true to his word, Matthew McCallum appeared to take delivery of the steam wagon. Matthew explained that he has acquired all of Dave's models so I hope we will get to see them again from time to time. The good news is that Dave has kept his Meccano collection and will be building models in the future, but they will be dismantled rather than stored.

Curiously, I then came upon a second coal loader and un-loader model, but this pristine example was built by **Roger Marriott**. Also based on the CQ special publication and much of the technical detail was provided by Brian Compton. Mechanically and electronically, Roger's model is very much the same as Brian's model. The obvious difference is the arrangement of the large mechanical sub-assemblies comprising the model. However, this model too was set up to run continuously for display purposes and apart from the reluctance of the “coal” to what it was told to do, its operation was pretty much faultless. Another very fine example of the model builders art, also constructed in immaculate red and green parts and fascinating to watch in action. The adjacent model was also another supreme example of the mechanical complexity that can be achieved with clever use of Meccano. I refer of course to **Ken Senar's** French Knitting Machine, or Automatic Tubular Knitting Machine – I am not sure which is the correct description. Ken has perfected the machine such that it will now run continuously, with little attention, to produce a knitted tube of consistently fine quality. No mean achievement that! The latest machine has eight needles, rather than four as in the earlier version, it is powered by a single motor, a cop feed directs the wool to the knitting head and the output spills down a chute at the front of the machine. The performance of the machine is almost at a commercial scale as it can produce feet of output in a very short space of time. Another splendid display model which is also fascinating to watch in action.

And now for something rather more traditional – the Combine Harvester built by **Richard Gilbert** from the No.10.13 instruction leaflet. This attractive model was nicely made, using correct period mid red and green parts and was mounted on a base board for display purposes. I think most members agree that this is one of the more successful models in the No.10 outfit leaflet series. Next, I came to a pair of smaller models built by **Tony Knowles**. First was the diminutive Tommy Tortoise, designed and described by Mike Hooper in CQ 98. Tommy was towing a small trailer filled with sweets, no doubt to attract youngsters (and the not so young!), and could shuffle along at a steady pace or, at the flick of a switch, he could move at a most un-tortoise like pace. Tony's second exhibit was a small beam type pumping engine constructed from Technico, a 50 part Swiss system dating from 1933. The system was never developed and it had faded into obscurity by the mid 1950s. Hole spacing is 11mm and the tiny nuts and bolts are approximately 3/32” BSW, or similar. Technico had two patented features. First, struts of different lengths could be made up from U-girders which slide inside one another, and are then bolted to slightly larger slotted U-girders. Secondly, it has three circular parts which could be used on their own or in combination to make up drums and wheels of various types. The only parts not used in this model are a 75mm diameter flanged disc, a rod coupling and a small loose pulley. Since Technico never had a compatible motor, Tony fitted his pumping engine with a small geared commercial motor for display purposes. As I recall, most of the parts are painted black or left unpainted.

In my last report I described a superb model of a 1932 Bugatti Atlantic Coupé in the course of construction by **Terry Allen**. At that time only the rolling chassis and engine had been completed. Two years later, and the model is now at an advanced stage of construction. In order to replicate

the extreme compound curves of the prototype, Terry has modelled the structure almost entirely in polished zinc plated strips which have been carefully shaped and fitted. The model is about 24" long and it incorporates a lot of mechanical and structural detail, and is a supreme example of the patience required to build such an ambitious model. We have all seen cars modelled in Meccano in the past, but I do not think I have ever seen a model with such dramatic styling as this which has been so successfully reproduced. This has definitely got to be a model to look out for in the future, and by the next meeting it should be pretty much completed. By way of contrast, **John Palmer** usually brings along rather smaller simpler transport models. On this occasion, he brought along the Electric Articulated Lorry built from the 1950s No.6 outfit instructions 6.12. Quite an attractive little model built in period red and green parts. John also brought his part completed model of the Electric Mobile Crane built from super model instructions SM20. This is an interesting model which rarely gets an airing these days.

Tony Wakefield has been busy over the winter months building a 1:4.4 scale model of the 1275s Austin Mini Cooper car. This is a carefully crafted space frame type model set up on a stand in order to display the mechanical detail. The model is quite large, perhaps ~24" long by about 12" wide – big enough to accommodate representative working mechanics. A novel feature was demonstrated by Tony; with the bonnet up, the engine can be lifted out to reveal the gearbox underneath and where he pointed out the difficulty of getting all the gearing in to the available space. Not quite completed, this is a nice display model to which many of us can relate. Also on the transport theme, the next model was the large Double Deck Bus built from the No.10 outfit instruction leaflet 10.5 by **Dave Bradley**. This large attractive model of a modern bus was made up from yellow and zinc plated parts with a few modifications. Most appropriately Dave fitted the model with large tyre wheels, which look so much more authentic, and he had improved the interior floor and seat fittings. As with some of his previous models, the bus was also fitted with a radio control system and when I saw it, Dave was taking it for a run around the hall. Hours of fun to be had there!

I haven't seen a Ping-Pong Ball Roller for a while, but **Roger Burton** obliged by bringing along a simple example built from instructions by Alan Partridge and first published in CQ56. Nicely presented in red and green colours the model quietly went about its business by shifting some curiously coloured orange-pink ping-pong balls through the endless cycle of rotation. To add to the entertainment, balls frequently escaped from the machine only to be rounded up and returned to the machine at regular intervals. On an entirely unconnected theme, Roger found that the Treadle-Driven Sewing Machine model by Margaret Massingham as published in CQ99, stirred past memories of the clothing factories in the Manchester area. So he was motivated sufficiently to build one, which was also doing its stuff at the meeting. This is a nice compact novelty model which performs well and certainly conveys the correct impression of the lady treading away at her sewing machine.

Another very fine vehicle chassis model has been constructed by the expert **Terry Pettitt**. His new model is of the 1950s Leyland Martian heavy vehicle, originally developed for military use, but later used in civilian applications. The model was built to a scale of 1:9 and was presented as the bare chassis only. Terry had some difficulty obtaining information about the vehicle and is indebted to John MacDonald and to Bob Thompson, both of whom were able to help. The model incorporates a dummy engine, hiding an electric motor, which drives via a clutch to a four speed and reverse gearbox which, in turn, drives into a three speed gear box having step up, 1:1 and step down ratios as per the prototype. The drive from the final gearbox is then taken to the front and rear axle assemblies. The front axle is pivoted and incorporates a differential, with lock, driving through constant velocity (CV) joints to the wheels via 4:1 hub reduction gearing. Terry later discovered that the drive to the front wheels in the prototype used bevel gearing concentric with the king pin rather than CV joints. So in the model these are built up from a large flanged wheel fitted with four short threaded pins mounted on the differential half shaft, the output consisting of a collar with two bolts, each supporting a plastic collar, which then engage with the threaded pins. The entire assembly is quite compact and works very smoothly. The rear axle assembly incorporates a lockable differential driving through half shafts to a concentric pivot point for the walking beam

assemblies. Each wheel is driven by a train of 57 tooth gears and a 4:1 hub reduction gear. All that remains to complete the model, is to fit the control for the differential locks, and Terry is hopeful that he will be able to use the new Bowden cable parts for this.

Terry Wilkes brought along an up-dated and improved version of the Railway Service Crane built from the No.10 outfit instruction leaflet 10.1. The model incorporates quite a number of modifications and improvements including a neat homemade swivel hook which is rather more in keeping than the standard Meccano offering. Carefully constructed using yellow, blue and zinc coloured parts this is an attractive well presented model. The next model was also a railway subject; a 1920s Steeple Cab Bo-Bo shunting engine built to an approximate scale of 1:12 by **Brian Edwards**. Brian informs us that the prototype was built by Hawthorn-Leslie and Co. of Newcastle for the Lancashire Electric Power Corporation. The model was built in Brian's trademark colour scheme of mid red and green parts. This is a substantial and nice looking model, with lots of detailing and having an overall length of about 24". It was obviously a good meeting for railway subjects as the very next model was yet another Railway Service Crane based on the No.10 outfit instruction leaflet 10.1. This variant was built in mid red green colours, it had also been substantially modified and the builder was **Tony Brown**. Motive power for the model was a restored 1929 Meccano steam engine which Tony told me could be run as a steam engine or powered up with compressed air – either way it produces enough power to drive the model. Tony's write up gave me some idea of his modifications. The gearbox was redesigned to allow the engine to run in one direction only, and reverse was separately engineered into each movement. The main slew bearing was replaced with the smaller (and quite rare) post-war GRB, of which only a small number were ever produced. As a result of these changes the slew drive was significantly modified in order to get it into the space available. The base truck on which the crane is mounted was also modified to improve the deployable support arms as the original model design was inadequate to properly support the crane in action. All in all, quite an interesting variation on the standard model.

The next model on my tour was a very large railway bridge built by **Robin Schoolar**, a model that I reported on two years ago during its earliest stages of construction. The model is now more or less completed and is based on the Delftshavense Schie Bascule Rail Bridge, which is not far from Rotterdam in the Netherlands. Most bascule bridges are set at right angles to the feature they cross, which requires archways though the towers to allow traffic to pass over the bridge. This crossing was already on a skew alignment which the designers had to accommodate. The Dutch turned the skew to their advantage with an innovative asymmetric design offsetting the tower to one side of the rails. Robin has developed the model to a "Double Dutch Bridge" with two opposed lifting spans, each carrying two parallel tracks to match the prototype. The model now has a fixed span on one side to give an enhanced appreciation of its scale and scope, and one side also has handrails and a spiral staircase. The model has consumed vast numbers of flanged sector plates (134) and even more fishplates! Robin modelled the bridge largely in yellow parts to match the colour scheme of the bridge as originally constructed around 1990. It has since been repainted in white, but Robin has insufficient white parts to build it in that colour scheme! The scale is around 7mm per foot (1:43) to suit the PECO O gauge track used in the model. The lifting sections of the bridge are balanced by a 7Lb lead counterweight such that the model takes minimal effort to operate. A small red plastic cased Meccano motor running on only three volts provides ample power to lift the bascules.

Mick Burgess seems to have made the upright piano in the corner of the hall his own for the purposes of showing off the smaller models he usually brings to the meetings. This is an ideal location for his models, since most are relatively small and are often constructed from standard outfit instructions or other well known sources, such as the Meccano Magazine. On this occasion, he brought along no less than four attractive, familiar models for our delectation. His first model was the Racing Car, model No.4.20 from the 1954 series manuals, although variations of this model can be traced back to 1937. The model was constructed using 1954 series parts with, then new, slotted holes. The back end has been modified to use four triangular plates and a flat trunnion, and the drivers' seat has a flat trunnion added to give more legroom. Built following a discussion about the model on the New Zealand forum. The model is not too difficult to construct but much plate

bending is required and the rear axle is overly complicated. Mick's second model was the Sports Car, model NM12 from the More New Models leaflet No.6. This model was built more or less as described using 1960s light red and green coloured parts. Minor changes made include a lowered windscreen height, the addition of a spare wheel and the model does have working steering. The third model was the lovely little representation of Sir Malcolm Campbells Bluebird car. The prototype achieved a world record speed of 301.15 mph in 1935. The model was originally designed by Bernard Périer as featured in CQ59, and the original model was built using yellow and zinc coloured parts, which somehow do not look right. So Mick built the model using reversed blue-gold plates in conjunction with 1978 period dark blue strips and girders, plus a few "specials" cannibalised from damaged parts. To improve the fidelity of the model, Mick made a number of modifications and additions including air brakes over the rear wheel arches, an air intake ahead of the engine, exhaust stubs, a shaped fairing over the front wheels and a part glazed windscreen. The model is not powered but does have working steering. The union jack stickers on the tail fin were obtained from the 1979 Army Combat set. To set the model off properly, Sir Malcolm is represented by a figure from a current plastic Meccano outfit. And finally, Mick's fourth model was the Motor Coach, model No.9.8 in the 1949-53 No.9 outfit instruction manual. The model was constructed using the correct period mid red and green coloured parts with a few modifications to enhance its appearance. For example, the seats were made from blue-gold flexible plates and the hub caps were recovered from rusty wheel discs polished to a bright metal finish. The coach body of the original model was made up from perforated flat plates and Mick has replaced these with flexible plates to reduce the perforated appearance of the model. The model has working steering, opening door and boot lid and the rear wheels have some articulation to enable the model to negotiate uneven ground. This is a heavy model, but the No.1 clockwork motor has sufficient power to propel it over a smooth surface. Mick found the original instructions to be quite accurate for a change, but the tricky areas of construction were the roof corners and boot panelling. This is a really nice looking model and is most evocative of the coach I went to school on in the early 1950s!

Alan Covel is still building supersize vehicle models in immaculately presented yellow and zinc coloured parts. He brought his fourth, and largest to date, Morgan three wheeler to this meeting. The prototype for the model was the 1930s Morgan Super Sports car. Alan chose a scale of 5:8 for his model, a little over half scale, no doubt determined by the 16" diameter bicycle wheels he uses for these large models. This latest model is impressively large, measuring about 6ft long by 33" wide, and the detailing, especially around the V-twin air cooled engine is very good indeed. Since Alan is fairly slight of build, he entertained us in the now familiar way by just squeezing into the model, which could easily carry his weight. This must prove something, but I am not sure what it is! Alan must have had a few parts left over as I found a diminutive little box truck nearby, which I was told was made by him – but I am not sure about this either.

It appears that **Paul Brecknell** has been working rather slowly on a model of a Bucyrus Excavator for some time now. He brought along the crawler base and turntable, which looked to be reasonably complete to me. The tracked base measures about 12" long by ~10" wide and has tracks made up from 2½" flat girders. The turntable is the fairly standard 5½" diameter construction. All in all, a well made and pretty robust construction for the super-structure when it arrives. Paul also brought along the extending digger arm for the excavator, which I regret to say I did not have a proper look at. Made up from girders and flat girders this required considerable patience and skill to set up in order to achieve the essential precision for correct operation. This is definitely a model full of engineering promise, and one to look out for next time. Alongside, was the beginning of another earth moving machine, this time by John Hornsby. John has started work on the Dragline model, SM27, and so far he has built up the undercarriage. I always think this is an interesting model and we have seen a few examples over recent years, so I look forward to seeing another interpretation in due course.

Now for an assortment of heavy duty vehicles of various kinds. First, I came upon a nice heavy duty chassis built by **Richard Payn**. I have little information on this model other than it is a Scammell Explorer, measuring about 15" long by about 7½" wide, and it has a single pair of driven front wheels and four driven rear wheels. The mechanical components all work of course and it

has a relatively “simple” gear box and clutch. Since this model is still in construction, I am sure we will see it again at the next meeting. Next was a very much bigger model chassis of the Tatra 8x8 Pipe Carrier, under construction by **John Ozyer-Key**. This chassis measures about 3ft long, or more, and everything about it is very detailed and massive. This is a seriously heavy weight vehicle which carries a rear mounted crane for shifting large pipes around. John gave me a brief run through some of the chassis mechanical details which include; a six forward and reverse speed gearbox, 8x8 drive through seven differentials, of which two are lockable, and the wheel hubs each have 2:1 reduction gearing. The axle and inter-axle differentials are of the in-line Tatra type, steering is on the front four wheels and all eight wheels have independent swing arm suspension. The steering is power assisted by means of a cord operated ram. The stabilising outriggers will eventually be powered in and out, and up and down, but will be controlled manually. The model is being fitted with radio control, in common with John’s earlier models, so just about everything in this complex model will be remotely controlled. John still has some way to go, so this is yet another impressive model to look out for at future meetings. The last of the large and mechanically detailed vehicle models was an American logging tractor with trailer constructed by **Mark Rolson**. This model was nicely presented having made use of a consistent yellow and green colour scheme, but most impressively, the model has a total of 18 large tyre wheels! Size wise, the tractor unit is about 18” long and the trailer adds another 4ft or so. Mark also brought along a rather more compact model of a Ford County tractor based on a design by John Ozyer-Key published in the Sheffield MG magazine. As might be expected, this model also bristles with mechanical detail. Of particular interest is the way in which the hydraulic functions have been mimicked mechanically – when powered the model runs very quietly and the “hydraulics” operate very smoothly.

I think **John Rix** is a new(ish) member, however, he certainly “knows his stuff” as he brought along a very nice Fire Engine, which was originally published as model of the month in MM for July 1956. The model was designed to be within the scope of a No.8 outfit and John had constructed it using correct period mid red and green parts and, typically, he has also made some modifications and improvements. Few Meccano modellers can resist this temptation! The overall size of the model was approximately 18” long by about 7½” wide. Lastly, it was nice to see **John and Cynthia MacDonald** again in their familiar corner. Unusually perhaps, John brought along a non-military model for a change. A modest Skip Truck was his offering on this occasion, and it had been built with the usual skill from, what appeared to be largely restored parts in a red and black colour scheme. The model measured approximately 18” long by about 6” wide and as ever all of the mechanical detail works, right down to the lights! And that, my friends, concluded another very successful and interesting meeting.

However, I must not forget our resident traders, **John and Linda Thorpe** and **Mike Rhoades** who manage to keep the supply lines moving for those of us who like to buy a few more parts and other items whenever we get the chance. I must also mention **Bob Thompson**, “Bob the Photographer”, who was very busy throughout the meeting sitting behind a wall of computer electronics and who managed to get a photographic record of the meeting onto the New Zealand Meccano website before the day was out. Quite an achievement I think. Not only that, but by the end of the meeting he had also made a start on cataloguing the builders and their models from the photo archives of previous meetings maintained by some of our members. In due course this will become a splendid resource as well as historical record, but I hate to think how much of Bob’s time will be taken up doing this. As ever, I am grateful to those members who were good enough to give me some written facts about their models, it really does make my job easier and it makes the report more interesting for my readers.

93rd Meeting held on 12th October 2013

Autumn weather had definitely set in as members’ cars and vans rolled into the car park at Baginton Village Hall, for the Guild’s 93rd Meeting. Precious Meccano models were shielded against the light but persistent rain, as they were carefully transferred from the many vehicles and on to the black cloth-covered tables in the warm and well lit hall. Thankfully, any disappointment felt with the weather outside, was as usual dispelled inside, with the rapidly expanding array of delights on

view as covers were removed one by one from an increasingly splendid show of Meccano constructions.

One of the early arrivals was **Tony Homden** with his first ever rail or tramway model. Displaying Tony's usual 'off the beaten track' choice of subject, this was indeed a good example. Many of our generation will, as children, have read the famous 'Thomas the Tank Engine' books by the Revd. W. Audrey, in which a sweet character by the name of Toby is rescued from an uncertain fate. Although having the outward appearance of a short electric tramcar, with its cowcatchers and totally enclosed firebox and running gear, the prototype was in fact a steam locomotive in disguise. Part of the 1887 Wisbech Tramway which operated along the branch line to the village of Upwell, the train ran alongside public roads with mostly horse drawn traffic, so the 'disguise' was part of measures taken to avoid frightening the animals. Besides the Toby locomotive, Tony's display included some of the quirky rolling stock it pulled, including a parcel van (containing the model's 12v battery); a passenger coach with open platforms at each end, and a luggage/brake van with hand operated four wheel braking. The whole train ran happily back and forth all day on a short length of track, with automatic reversing switches acting upon the Decaperm motor providing the motive power, concealed inside the loco.

At first glance appearing identical, the two Scammell recovery tractors built in gleaming red and green parts by John Hornsby and red and zinc by **Richard Payn**, differed very much in detail. Richard's was based on the Scammell Explorer with 6 wheel drive. Powered by two small 6v Faulhaber motors, it featured a vertical winch, the cable of which could be fed out through the front or rear of the chassis. The famous walking beam suspension on the rear axle was accurately reproduced, with no loading on the half shaft. The extending jib recovery crane was equipped with its own separate forward & reverse gearbox for the winding drum.

John Hornsby's Scammell was based on the 6x4 Pioneer, and proudly carried his late father's REME cap badge on its fully detailed radiator, where in my estimation, it looked very appropriate. Scammell's three-point suspension arrangement was accurately modelled, with a u-shaped yoke at the front to accommodate the sump of the prototype's engine. The vertical winch was equipped with a laying-on mechanism, to enable neat reeving and hence optimum capacity of the cable. A novel detail was the use of 4mm welding rods (easily curved) to support the front mudguards. The action and detail of both these Scammell models was a joy to behold, a testament to the skills of their builders who co-operated throughout by exchanging plans and ideas, to their mutual benefit.

A further insight into Scammell's rugged chassis design was provided by **Geoffrey Burgess**, with his partly constructed model of a post-war civilian use Scammell 'Mountaineer'. Massive 1½" x ½" 'U' section girders forming the main chassis members supported a finely detailed radiator, the all-important winch drum, and both axles with their heavy duty differentials, sturdy suspension arrangements and all-terrain tyres. There is no doubt that "the Scammell legend lives on" in the work of these three Meccano modellers!

Richard Gilbert provided much interest with his display of two 1932 Meccano 2A sets; except that one of them was not made in 1932, but twenty years later, in 1952. Almost identical to its 1932 equivalent, the 1952 version was made in Spain, and was apparently available in very similar form right up until 1964. The range extended to other outfits, with the implication that the second hand market in Spain, could be a veritable time-warp of fascination for anyone interested in obtaining original outfits with the equivalent of pre-war contents.

Paul Hubbard is so keen on Meccano modelling that he routinely brings his partly built constructions in order to continue working on them, right in the middle of the hall. On this occasion he could be seen busily progressing with his SML Warehouse model, allowing others to observe it being assembled in expert fashion.

Brian Compton's Coal Loader/Unloader was one of the 'greatest hits' at the 2012 Midlands Model Engineering Exhibition, attracting a great deal of attention from fascinated onlookers. On this occasion the model performed just as smoothly, with its many handling procedures proving an irresistible draw.

Mark Rolston's American Peterbilt 10 wheel tractor made an impressive showing, with its re-

cently completed log trailer in tow. The sleeper cab is now equipped with comfortable furnishings, which in the prototype includes a wall mounted TV – making it quite a home from home on those long road trips. Its compact but powerful 12v motor had formerly been employed on a ‘Colgate’ production line but had been discarded during routine maintenance. It was still full of life though, and had found a new function concealed inside the simulated engine block, under the ‘hood’ of Mark’s Peterbilt.

At the forefront of modern exploration is NASA’s ‘Curiosity Rover’, which was successfully landed on the surface of Mars in August 2012. The mobile laboratory has since then, trundled considerable distances across the red planet’s rocky surface, in a painstaking study of its geology and climate. The prototype’s 29 separate motors were not reproduced in **Keith Way’s** detailed model, but most of the other features were. These included various antennae, sensors, scoops, and a complex interlinked six-wheel suspension arrangement, enabling ‘Curiosity’ to make steady progress, even over quite formidable obstacles.

Aircraft have traditionally provided a rich source of inspiration for Meccano models, and many fine constructions have graced the history of our hobby. One of the early Meccano versions of the 1909 Blériot Type XI monoplane was shown by **Roger Marriott**. In authentic nickel plated parts, and with an attractive stringing layout also lending structural strength, the model accurately emulated the version depicted on the cover of many early Meccano manuals. Continuing the aircraft theme, Roger showed a rotating aeroplanes dealer display model. Four biplanes in different colour schemes, all built from the pre-war No. 1 Aeroplane Constructor sets, provided a visual treat as they ‘flew’ alternately ascending and descending, around the central tower. An illuminated base attracted more attention and the whole structure was finished in blue plates and gleaming gold girders and strips.

Dave Phillips’ Steam Crawler in red and green displayed many authentic details, including finely proportioned coal pieces in the hopper and a flywheel made from a Mamod steam roller back wheel. Bearing the respected name of Hornsby, the prototype’s crawler tracks enabled it to proceed over difficult terrain, and steering could be effected by stopping one or the other track independently. Dave’s version incorporated a powerful 12v motor, which was purchased from Mike Rhoades.

“One of the most basic designs I have ever built!” was one of **George Illingworth’s** comments, when referring to his RAF Crossley Q-type Foam/CO₂ Tender from 1941. Built to 1/12 scale, George’s model displayed his usual attention to detail and innovative use of recently introduced Meccano parts. The prototype’s basic outline was obvious, with its drab army green colour scheme, no roof, hardly any bodywork and only enough chassis to carry the large canister of foam or CO₂, quickly to the fire. Still, it did the job back in those dark days of WW2, and no doubt many a brave flier trapped in a crashed aircraft, owed his life to its prompt arrival on the scene. Moving on in time to 1969, George’s second model was based on the Merryweather Marquis Pump Unit, which was available in a Dinky Toys version during the 1970s. Again to 1/12 scale, the model sported a bright yellow livery which contrasted well with the gleaming zinc plated ladders, radiator grille, bumpers and other fittings. The cab interior had a matt grey engine cover which again looked well alongside the yellow bodywork.

Meccano enthusiasts aim for the highest possible standard of construction in all their models, and it was this sense of peerless build quality which characterised the output of the former Bristol Tramways and Carriage Company, which was taken over by British Leyland in 1983. Dating from 1950, the prototype for **Brian Edwards’** 31 seat coach exemplified the finest traditions of craftsmanship in its construction, with its ash frame being labour intensively and exactly contoured, much in the way that Morgan sports cars are today. No less painstaking in his own pursuit of excellence, Brian’s model, despite using (in his own words) “all orthodox stuff!”, displayed much of his own advanced skill. This was seen in the model’s beautifully smooth outline, sliding side door, neatly engineered mechanicals and cleverly executed details, such as the use of pawls without boss to finish the curve of the coachline on each side, parallel to the ‘dip’ in the front side windows.

Geoff Wright brought along his fine Leyland TD1 double deck bus, which was the deserving subject of a full constructional feature in the recent special 100th issue of Constructor Quarterly.

A lifelong bus enthusiast, Geoff has built many excellent examples of these hard-worked vehicles, with every one capturing the unique atmosphere of the prototype. Now in the process of construction is his 1:14 scale London Transport Interstation 'C' motor coach, with its distinctive elevated rear observation deck, hinged rear luggage doors and a sliding side door. The central portion of a crank shaft part 134, neatly forms the handle for this sliding door.

Roger Auger showed three models which looked as though they had just been made out of shiny, brand new parts. In fact all the parts had been recovered from a blue/gold No. 10 set which was damaged in a fire, and reconditioned to such a high standard they were indistinguishable from new. A testament indeed to Roger's skill. The models themselves comprised a London Taxi in black/silver from the 1954-61 Outfit 7 instructions manual, a Steam Wagon from the earlier Outfit 8 manual, and a set 7 Army Lorry towing a trailer loaded with beer kegs; enough (says Roger) even for an Aussie BBQ!

Michael Bent brought two models in red and green; an airfield tractor and a red/green version of the Taxi from the 1954-61 Outfit 7 manual.

Sid Beckett exhibited his version of Pat Briggs' Nuremberg Clock, in an eye-catching colour combination of Binns Road dark blue, mustard yellow and zinc. Accompanying this was his version of Bert Love's Dentist's chair, in yellow and zinc parts. A boiler end with a 142c rim made a convincing rinse bowl, and a length of spring cord represented the dreaded drill!

A comparatively recent returnee to his childhood Meccano hobby, **Hamish Ross** chose to build the attractive Liner model from the 1938 Outfit 6 manual. As many may already be aware, the original manual version was not equipped with a motor or even wheels, and so constituted a static display model when completed. Not content with this state of affairs, Hamish incorporated not just wheels, motor and a battery, but infra red control also. To retain the outline of the original, Hamish decided that all this equipment would have to fit within the model's 3½" wide hull. As one can imagine, this was a considerable challenge, but Hamish succeeded so well that, from the outside, it is impossible to tell that the model is motorised, let alone carrying its own battery and controlled by infra-red. The sensor for the infra-red control is so discreetly hidden under the overhanging bridge superstructure, that it can only be seen by the most determined observer. At a touch of the remote control, the Liner makes stately progress, evoking memories from a long-lost age of glamorous transportation.

As if all this wasn't enough, Hamish arranged to photograph his model so the resulting picture would be identical in angle and perspective, to the original manual illustration. For many technological reasons this must have been difficult, not least when taking into account the likely disparity in focal length of lenses used between the original camera in the 1930s, and Hamish's modern equipment. Nevertheless, success was achieved, and Hamish proudly printed a photograph of his Liner model to stand comparison with the original manual illustration. So confident was he that the two pictures were in every particular the same, (apart from the new one being in colour, of course), that he confidently asked a friend, Jane Young, to search in vain for any discrepancy. Guess what? She pointed out that the two 2½" strips at the prow of the deck, were in Hamish's model, overlapped the wrong way! Sorry about that Hamish, but all Meccanomen know we can't ever win when the ladies get involved!

John and Cynthia MacDonald did not bring a model with them on this occasion, but of course they were no less welcome for that. Their keen interest in all the models, plus their cheery demeanour and a smile for everyone, were as well received as any supermodel would have been.

It's not often I get drawn into discussions about art, but **Terry Allen's** progress with his Bugatti is like watching Leonardo working on the Mona Lisa, it just gets better all the time! Reminiscent of motoring's golden era when the roads were empty and cars had personality, Terry's partly built Type 57 SC Atlantic takes Meccano modelling into the realm of sculpture, with its exquisitely rendered sweeping outline suggesting the very summit of style, elegance and speed. Recent additions include windscreen wipers, which actually work and are mounted at the top of the windscreen. Apparently only three Bugatti Atlantics were built, of which only one survives today. Terry Pettitt brought along a beautifully made model of a Showman's Traction Engine which was built by the late Dennis Perkins. Displaying the highest standards of construction, the model

looked so realistic that when I first saw it I wondered if it was actually made of Meccano. Terry's own Leyland Martian front and rear axle assemblies were no less impressive though, as his usual top quality modelling standards were evident throughout.

Michael Walker (that's me) brought along a rebuild of a Maserati Khamsin model which was originally constructed in 1979. The rebuild incorporates a number of improvements including proportional radio control, allowing the car to be steered, and run at any speed, even from the other end of the hall. The rebuild originally incorporated Meccano infra-red control components, but these proved to be impractical in a fast-travelling model and so had to be replaced. From this experience I concluded that infra-red control is better suited to static or slow-moving models.

Supermodel 11a Horizontal Steam Engine was given a modern interpretation by **David Hobson**, who modified it for pneumatic operation using components from the German Orsta Modelltechnik system. Two more horizontal steam engines were shown by David, one of which was built from brilliantly shiny Eitech components. As a complete contrast David also showed his early Japanese clock with double verge and foliot escapements. The fascinating mechanism in the clock allowed for the different lengths of daytime and night time hours, which were a feature of Japanese time keeping before 1874.

Colin Reid brought some of his original Meccano, Märklin and Bing vertical steam engines, which made a distinctive display with their gleaming cylinders and tall chimneys. The earlier examples showed high standards of workmanship which must have made them very expensive toys in the early 20th century, and of course no less valuable today as collectors' items.

Jim Gamble showed a beautifully restored and smoothly operating dealer's window display model on an illuminated plinth. The subject was one not often seen; a platen printing press similar to the one featured on page 560 of the October 1955 Meccano Magazine. Capable of actual printing using rubber type from the former 'John Bull' outfits or similar, its action was compact yet entertaining, but in a less overtly showy way than some other dealer models. Continuing the printing theme, Jim displayed a collection of advertising blocks which were loaned out from Binns Road in support of dealers' local newspaper publicity initiatives.

Scoring a very high rarity and 'envy' factor was **Tom McCallum's** Outfit 9, which looked as if it had just arrived through a time warp from 70 years ago. The blue and gold finish looks stunning in good condition, and this outfit had everything needed to make it perfect, including original instructions manuals and small parts boxes. Even the clockwork motor had a cardboard ring around its winding shaft, and the whole kit was stored most elegantly in its original green painted wooden chest. The 'wow' factor continued with Tom's Lifting Shovel in gleaming mid-red and green from the Set 10 leaflet 6, incorporating subtle modifications which improved the model's operation without detracting from its original purposeful appearance.

"No-one knows more than Ken about Welsh railways!" was the well justified accolade bestowed during the model tour upon **Ken Wright**, who brought along his fine 1:12 scale model of "Blanche"; a distinctive Hunslet 0-4-0 locomotive from the Festiniog Railway. Running smoothly on realistic 'G' gauge track, the loco was crewed by two highly competent-looking engineers suitably clad in blue overalls. Made from factory mint condition red and green parts, the model displayed exquisite detailing including decoratively edged porthole windows, finely crafted handrails and a gleaming brass dome.

To find **Mick Burgess'** models we never have to look further than the top of the piano, because this is the space that Mick has made very much his own, and why not? Among the goodies on show this time were the Lorry, model 6.8 from the 1954-61 series. Probably based on the Leyland Comet, it carried a blue/gold Sports Car from the pre-war Outfit 4. This latter model differed from the manual version in having working steering and being powered by a 'Magic' motor. Shorter and lower than the original version, the car was partly constructed from pre-used damaged flexible plates that were cleaned, cut up and shaped as required. This was certainly preferable to scrapping the parts, which would otherwise have been their fate. Mick's improved Double Deck Bus, model 22 from the 1954-61 outfit 7 manual, looked very much the part with its detailed interior including seats and a stairway. The forward elevation of the bus was also modified to give less of an incline to the upper deck frontage, increasing realism. Other models by Mick included an

Army Lorry inspired by a 1940 Meccano Magazine project, and a Searchlight which was originally featured in the October 1938 MM and again in December 1957. Both these military models were built using 1970s Army and Combat Multikit parts.

Alan Covel impressed his audience once again, this time with a 1:2 scale model of the Dutch 'Pal-V', Flying Car. The prototype is a two-seat hybrid car and gyroplane, using a non-powered auto-rotating rotor to generate lift. A foldable push propeller on the back gives an air speed of up to 110 mph, with a range of up to 315 miles. On land, drive to the two rear wheels allows for a similar top speed and up to 750 miles range. Alan's 60" x 19" version of this innovative vehicle incorporated the long rotor and push propeller blades of the original, and the cockpit outline showed Alan's usual attention to detail.

Tony Wakefield's 1:4.4 version of the iconic Mini 1275 S looked almost ready to drive away, such was the level of detail built in to his much admired model. With hinged foot pedals for the clutch, brake and accelerator, a realistically modelled unitary body and transversely mounted engine, the plinth-mounted construction reproduced every complex curve of the original's instantly recognisable outline. Recent enhancements include a cooling fan that now spins, and the engine can now be quickly removed in order to better show the additional engine bay detail.

Mid-red/green parts were used to tasteful visual effect in **Roy Whitehouse's** model of a single-cylinder Metropolitan Vickers Gas Engine, built from an original design by Terry Pettitt. Curved strips resprayed in red were employed as the spokes in the two flywheels, making for an elegant colour contrast with the resprayed green plates used in the main structure and cylinder. Intriguing detail in plenty was to be found, including 'grease cups' made from Chimney Adaptors sitting neatly upside down inside $\frac{3}{4}$ " Flanged Wheels, highly effective gold lettering on the blue base plinth and one of the smallest centrifugal governors I've seen.

Like many Meccano modellers I have little knowledge of Meccano's 1964-67 'Cliki' brick building toy, so it was all the more interesting to see **Geoff Devlin's** construction of a small house, made with plastic snap-together parts from the smallest set, the C1. Competing with Airfix's 'Betta Bilda' and the rapidly expanding Lego system, 'Cliki' had an uphill struggle from the start with its half-hearted marketing; reflecting perhaps, Meccano's own pessimistic outlook for Bayko's successor. Nevertheless, Geoff's display gave us all an idea of what was on offer at the time, making for an interesting sideline in the Binns Road story. Two 'Speedplay' models consisting of a motorcycle and a crane, developed and updated Geoff's 'plastic from Meccano' theme.

The ever-popular Railway Service Crane from the Outfit 10.1 leaflet was given a welcome showing by its builder, **Terry Wilkes**. Although at first intending to build the model exactly according to the instructions, Terry identified certain flaws in the design as he progressed, and made discreet modifications to address them without changing the model's unique character. One of the changes was to the front of the cab roof, which in Terry's version has an aperture or 'cutout' into which the jib and hoist ropes can descend when the crane is being configured for its travelling mode. Despite this and other modifications, Terry assured me that the model is still within the scope of a 1970s Set 10 – except for the motors, wheels and a home-made hook.

Alan Scargill has a lot of flanged sector plates, or rather, he did have a lot, because he used fifty of them to make his eye-catching Water Wheel 'fun' model, with forty eight of them, painted black, making up the wheel itself. The supersized list of parts continued with eighty stepped curved strips, forty eight semi-circular plates and twenty four $3\frac{1}{2}$ " x $2\frac{1}{2}$ " flanged plates being required to complete the wheel alone. This revolved in a stately manner, driving a pair of flour grinding wheels at the base below. The overall red, green and black colour combination, plus the wheel's almost sunflower appearance, combined to create a unique visual effect that could not be overlooked.

HMS Windsor, or Destroyer D42, was launched in 1918 and not broken up until 1949. During the latter part of its life the gallant ship built up a long and proud service record on convoy and other arduous duties during WW2. It was this particular vessel that formed the subject for model 20 in the pre-war Outfit 9 instructions manual, and which **John Rogers** reproduced in original blue and gold parts of the period. In his notes John commented that "the model represents the profile quite well, but the tapered design of the plan view of the hull differs from the prototype. However,

it is a model which is unusually accurate - from any period of Meccano." I am sure all would agree that his model captured the grim and purposeful outline of the original very well indeed.

10 mm hole pitch systems seem more prevalent these days, with Eitech, Merkur, Nuts & Bolts and other brands offering cheap kits in pound stores and other outlets. It was not until I saw the unpowered 1:16 scale Axion 850 Tractor built using German Tronico components and brought in by **Tony Knowles**, that I became aware of that system's innovation – square holes! The model itself was of a modern outline tractor with big chunky wheels and a roofed cab, and well detailed too, especially considering its size.

I conclude my report with the usual apology for anything that I may have missed, on account of the large number of models on display, and as always, too little time in which to gather the details.

94th meeting held on 29th March 2014 by Mike Cook

What an uplifting day! The prospect of spending the day in the company of Meccano enthusiasts and their many and varied models is good enough for most of us. However, the bonus this time was the superb weather – The last day of winter was bright, sunny and warm heading for ~20°C in the afternoon. Let us hope that it continues through the spring and into summer. It was announced by Paul Brecknell, who knows about these things, that spring had officially arrived since a migrant avian visitor, a warbler of some kind, was heard warbling away in the hedge behind the hall. After my long, but otherwise easy journey, I too knew how the bird felt on arrival at Bagington village hall!

Having missed the October meeting, it has been a year since my last attendance and I can report that on arrival the hall was buzzing with activity as always. However, a few regular attendees were conspicuous by their absence, sadly permanently in some cases. The better news is that a sprinkling of enthusiastic new members and a few guests ensured that there was plenty for me to do in the reporting department. As always, my apologies to those I have misrepresented or overlooked in some way.

First on my personal tour was a group of three small models by our Chairman **George Illingworth**. In his, approximately 1:12 scale, fire engine series of instruction manual models was a 1909 Merryweather Motor Pump, very nicely presented in a careful mix of pristine red and zinc coloured parts. His second model, also to 1:12 scale, was a 1956 Dennis F23 break down lorry constructed in the appropriate period red and green colour scheme. George informed us that the prototype for this model was a unique one-off of the type. Lastly, and having been given a well used collection of blue and gold Meccano, George presented his version of the fire engine model described in the early post war No.8 outfit manual constructed from the blue and gold collection of parts. He then went on to explain that this completes his marathon programme to build every single fire engine model described in the Meccano instruction manuals from the beginning of time. George now has a collection of 50 fire engine models, all built to an approximate scale of 1:12, and pretty much representative of the history of the development of the fire engine. Tucked in alongside George's models was a little lorry mounted crane built from the current Revolution Set Truck Crane by Ken Wright. This model is about 14" long and looks extremely attractive in its black and yellow colour scheme and exhibits a good level of mechanical detail. Needless to say it was carefully assembled by Ken with the appropriate attention to detail in its construction.

Next was "several yards" of mint 1970's No.9 outfits in their wooden cases and brought along by **Richard Payn**. Four sets in total, all in the yellow and dark blue colour scheme and some of which still have shrink wrapped contents. It was pointed out that although these sets were all issued within a two year period, the purists were kept busy spotting the minor differences between the contents and the layout of parts within the box. This was a really eye catching display, with a fairly high nostalgia coefficient for the Meccano historians amongst our members. Next door was an even more eye catching display of pre-war Aeroplane Constructor outfits and models from the collection of Roger Marriott. The display comprised several boxed outfits showing various colour schemes of strung parts together with several built up examples of aeroplane models. Of particular interest was, not one, but two contemporary Meccano hangars complete with their packing boxes. These are rare items indeed, but the rarest of the two included the strung contents of one of the

smaller aeroplane outfits as well. Centre piece of Roger's collection was a restored dealer display model in the form of a rotating tower with four radial arms at the top from each of which was suspended an aeroplane model. The base and rotating tower was constructed using blue and gold parts whereas the aircraft models showed four different, but equally attractive colour schemes of the period. I don't think I have ever seen so much Aeroplane Constructor nostalgia collected together in the same place – quite a show! And there was even more nostalgia alongside brought to the meeting by Tom and Matthew McCallum. Their display was centred on the pre-war Mechanised Army outfit No.MA. The outfit was shown strung in its box together with instruction manual and several examples of built up models to illustrate the capability of the outfit. The display was completed with an example of Meccano advertising compatible with the period of the Mechanised Army outfit.

Brian Edward's usually brings a new model to every meeting. His models are consistent in as much as they are original designs, they are built to a high standard using mid 1950's red and green parts and they are usually of a manageable size. On this occasion his model was of a 1960's Scammel Highwayman Heavy Tractor pulling a large flat bed machinery trailer. To add interest, the trailer load was his model of a 1929 Sentinel vertical boiler, twin cylinder, 3ft 6" gauge steam locomotive. Built to a scale of approximately 1:10 the overall length of the tractor with trailer is about 3ft 6". Brian informs us that the prototypes for the models were all used by the London Brick Company. In contrast, Sid Becket was travelling light on this day having brought along his compact model of the Meccanograph built to the design of Eric Baldwin. Although fairly familiar in appearance Sid's Meccanograph is capable of serious work if the vast number of example patterns is anything to go by. The machine produces new patterns at a fairly rapid rate and the amazing number of variations in pattern is very impressive. A great way of keeping the crowds interested!

Like Brian Edwards, **Geoff Devlin** also brings a new model to every meeting. His models are also consistent since they are original designs, they are built to a high standard using mid 1950's red and green parts and they are typically the kind of construction associated with the classical No.10 outfit. His model was of a modern Fendt 936 Vario Tractor fitted with Soucy tracks. The prototype is a powerful diesel agricultural tractor manufactured in Germany. Particular features highlighted by Geoff include; electrically controlled mechanical/hydraulic systems, one lever to control forward and reverse travel, and automatic cruise control. This particular model has the unusual arrangement of being fitted with Soucy rubber tracks in place of conventional wheels, it has 4x4 power transmission and normal front wheel steering. The Soucy rubber track system is made in Canada and its benefits are quoted; "A modern retrofit track system which allows farmers operating mid size tractors to get the benefits of reduced ground pressure and high level traction without creating a bulkier, less manoeuvrable machine." The model is built to an approximate scale of 1:8 giving it a length of 27", width 15" and height 17". Nicely made as ever and worth close inspection if you get the chance.

Michael Bent brought along his original design model of a 1901 Leyland Tower Platform lorry. The prototype is a simple early lorry with a vertically extending tower construction mounted behind the cab, and the extending section is surmounted by a small flat service platform. Extension of the tower is by means of a cable and pulley arrangement. The prototype was used for servicing overhead cables, etc and Michael developed his design from the original vehicle which is in the Leicester Museum. The model is what I would call about No.8 outfit size, it is nicely constructed using mid 1950's red and green parts and basic travelling motion is by means of an E20 electric motor. The model is a convenient size with approximate statistics; 24" long by 8½" wide by 18" high.

2014 being the centenary of the start of WWI, **John Reid** had created the most imaginative Meccano diorama of the front line to remind us all of the primitive horrors of that war. The diorama comprised an SE5A biplane, a 6" Howitzer artillery piece and a model of a section of front line trench, all carefully built to an approximate scale of 1:20. The SE5A was introduced into the Royal Flying Corps in March 1917. It was the mount of many of the Allied Aces including Billy Bishop, Edward Mannock, James McCudden and Albert Ball, and they flew from aerodromes situated some miles behind the lines. The model is based on the contents of an Aeroplane Constructor

Outfit, which was last produced about 70 years ago. John tells us that the rear fuselage decking in white is not quite right and will be replaced with a red example when he can find one at the right price. The Howitzer model is derived from the special instruction leaflet SML 6.47 with redesigned and improved firing mechanism, wheel brakes and wheel “girdles” to assist in manoeuvring the gun in muddy conditions. The Artillery Batteries which included Howitzers and other artillery pieces were situated some distance to the rear of the front line trench system. The centre piece of John’s display was his model of a section of front line fire trench, measuring about 3ft wide by about 18” deep. Modelled mainly in dark red and green colours, it was populated with many soldiers, with rifles and equipment, and also a few fat rats, represented by couplings with string tails! John’s description of the model follows: Front line trenches were usually about seven feet deep and six feet wide. The front of the trench was known as the parapet. The top two or three feet of the parapet and the paradoss (the rear side of the trench) consisted of sandbags to absorb any bullets or shell fragments. In a trench of this depth it was impossible to see over the top, so a two or three-foot ledge known as a fire-step, was added. Trenches were not dug in straight lines, otherwise, if the enemy got into your trenches, he could shoot straight along the line. Each trench was dug with alternate fire bays and traverses. Duck boards were placed at the bottom of the trenches to protect soldiers from problems such as trench foot. Soldiers also made dugouts and bunk holes in the side of the trenches to give them some protection from the weather and enemy fire. The front line trenches were also protected by barbed wire entanglements and machine gun posts. Short trenches called saps were dug from the front-trench forward into no mans land. The sap-heads, usually about 30 yards forward of the front-line, were used as listening posts. Behind the front line trenches were support and reserve trenches. The three rows of trenches covered between 200 and 500 yards of ground. Communication trenches were dug at an angle to the frontline trench and were used to transport men, equipment and food supplies.

Roy Whitehouse brought along several small models of aircraft propeller mechanisms, dating from the WWII period. The first, and perhaps the most interesting model was of a working variable pitch mechanism based on an illustrated article in The Aeroplane magazine for June 1941. The model incorporated a planetary gearing system through which propeller blade pitch could be adjusted from a lever in the cockpit. His second model showed a simple reduction gear arrangement for use with a radial engine and his third model showed a contra-rotating propeller drive system. Although quite simple, both of these models could be set in motion by turning a handle. As an aeronautical engineer, this little collection appealed to me a lot. Alongside was a very nice model of a 1920 Foden steam wagon brought along by Dave Phillips. The overall length of the model was about 18”, to give some idea of its size, and it was set up on a display board for working demonstration. The model is notable for its careful construction using pristine red and green parts from the 1950’s. However, even more notable is the fact that Dave had reclaimed and restored all the parts from pretty shabby Meccano picked up from here and there over a period of time. It shows just what can be achieved given the time and enthusiasm.

Roger Burton brought along two unusual models. Roger’s local church has a side entrance which is used occasionally for the congregation to leave when the main entrance is temporarily blocked with other activities, such as a wedding, for example. However, the side entrance is narrow and opens directly on to a stone flag bridging a drainage channel adjacent to the church wall. The church authorities wish to install safety railings either side of the stone flag such that they are not fixed to the church wall, do not require planning permission and are removable when not required. Roger and his friend were invited to take on the design challenge and, following approval, to install the railings. The first of his little Meccano models was built to demonstrate their solution. Colour coding was used to enhance the information – yellow parts represented the church wall, doorway, drainage channel and flag stone bridge. Green parts were used to portray the grassy areas. The simple solution to the problem was for the removable railings to plug into sockets securely attached to the ground, thereby easily meeting the requirement. Roger’s second model was of a small printing machine inspired by a similar model demonstrated by Jim Gamble to the South Birmingham Meccano Club. Those interested in the model will find building instructions in MM for October 1955.

Then I came to an area crowded out with a striking assortment of red and green vehicle models. What may well be a first was a model of a modern wheelie bin refuse collecting lorry, together with a couple of wheelie bins. This model was carefully built by **Tony Wakefield** with considerable attention to detail, especially the bin emptying mechanism at the rear of the model. The model was of a good size, measuring about 36" long by about 15" high by about 12" wide, and was constructed mainly in mid 1950's red and green coloured parts. To give you an idea of size, the wheelie bins were about 5½" high and their lids were represented by 2½" square flat plates. In my opinion, it would be nice to see this model written up in the Model Plan series of building instructions. The next pair of models alongside were built by our President **Geoff Wright**. Since it is well known that Geoff likes modelling public transport vehicles, it came as no surprise to find that his models were a tram and a sightseeing bus. His model of a UCC "Feltham" class tramcar was representative of a type used in London from 1933 until 1951. The model was nicely constructed, using mid 1950's red and green parts, to a scale of 1:16. The model is about 27" long and runs on 3½" gauge track, and Geoff struggled to construct the model from the parts content of a 1950's No.9 outfit. The model does not have as many featured details as Geoff would have liked since there were simply insufficient parts left and every single nut and bolt had been used. Geoff's second model was really work in progress, a part built London Transport "Interstation C" bus. This model too is being built within the constraints of the No.9 outfit and after a bit of "jerry wangling" Geoff has managed to achieve a practical 1:14 scale – this enables the use of 2" pulleys with tyres to model the main wheels. Late in the day Geoff managed to obtain considerably detailed information on the prototype and as a result he hopes to include a high level of detail in the model. So watch this space!

And now for something entirely original from the fertile imagination of **Ken Senar** entitled "A vars of flars!" Three uncharacteristically small, but never the less very carefully produced models, were competing for space with the adjacent large vehicle models. First, a very simple letter rack modelled from three early nickel flat plates and a few additional small parts – a typical early 1920's model in fact. Secondly, a splendid vase of flowers convincingly modelled entirely from colourful modern Meccano parts. The very shapely vase was a work of art in itself as it made very clever use of the modern "memory metal" flexible strips. Aeroplane and motor car modellers should note that this model demonstrates that compound curves can successfully be reproduced in Meccano. Thirdly, and lastly, a model of a "square faced" decanter with stopper, modelled in modern zinc coloured parts. The question everyone was asking was; "How did he get his hands into the enclosed structures to fasten the nuts and bolts?"

Dwarfing Ken Senar's models was a large model of a Volkswagen T25 vehicle built by **Dave Bradley**. In typical style the model is quite large, about 2ft long, and is fitted out with standard radio control equipment. Dave likes to drive his models around, but I did not see his model working on this occasion. The VW T25 is an "estate" style vehicle and as per usual Dave had modelled the vehicle using yellow, blue and zinc coloured parts. Then I nearly missed some initial component constructions for a new crane model that John Hornsby is working on. Early indications were that this will be a mechanically interesting model in the fullness of time. Moving on I came to the industrious Paul Hubbard who was just starting work on a large new construction which I was informed would eventually become a model of a dredger. Paul's other models included a large fairground swing boat ride, measuring about 2ft long, 10" wide by 20" high, and a lift based on SML 31. The swing boat ride, built to Paul's own design, is interesting as it is set up for manual actuation with small people in mind. Small hands can turn the handle to put the model into motion with little chance of damaging either themselves or the model.

John Rix might be a newish member, but he is clearly an accomplished model builder. The model he brought to the meeting was the New Meccano Model as described in MM for September 1955 – The Articulated Tank Lorry. This fine model was carefully constructed using pristine light red and green parts, which started to appear around that time. In the "flesh" this is a very attractive model. Once again Tony Knowles brought along an outfit and model representative of alternative contemporary construction systems. Ever heard of a Greek EPA Outfit? No – neither had I! Tony brought along a nice example of such an outfit attractively presented in a two tray box, much in the style of larger Meccano outfits. His description will bring it to life: This set probably dates from the

1950's or 1960's. Many parts are missing including two 5×11 hole flanged plates, most of its 25 hole girders and, sadly, its manual. EPA's most notable feature is its bizarre colour scheme, and of the half dozen sets seen, each has a different combination of colours, including some colours not in the present set. The parts are mediocre in quality with poor detailed design, thin metal, and insecure bosses. The thread is the same as Meccano (5/32" Whitworth) and the holes are at more or less ½" pitch. Some of the parts are similar to Märklin and the lid label is very like pre-war Märklin. Interesting parts are a gun and shield for use in a field gun, while aeroplane wings and tail parts were included with another set. Tony's alternative model was a French Trix marine diesel engine, a nice looking model dating from the 1950's and based on a Trix shop demonstration model. Unusually the strips are coloured light blue or red, which gave the model a colourful appearance. The model was set up for display and seen running, driven by an unusual French 110v motor. Although the model was running very smoothly, it is curious that the piston rods were represented by screwed rods – presumably suitably "smooth" rods are not available within the system. Tony also explained that the manual description of the model is unsatisfactory as no lower guides for the piston rods are shown!

Richard Gilbert, on the other hand, brought along some interesting examples of the Meccano Elektrikit dating from the early 1960's. The first such item was a boxed and strung French electrical outfit dating from 1963 which looked very nice in its unused condition. The second outfit was also mint and was representative of the French "Meccano(FR) Pieces Electriques A" outfit. A small boxed electrical outfit, being otherwise equivalent to the Liverpool Elektrikit A outfit dating from about 1970. The Giant Walking Dragline next to Richard's display was built by Terry Wilkes and with which he is not too impressed. The model building instructions may be found in the 1960's No.9 outfit manual and Terry built the model as described in yellow, blue and zinc coloured parts. He chose to use a PDU to motivate the model, but it appears that this may not be man enough for the job. It seems that Terry was not entirely happy with the mechanical detail of the model – a common complaint among Meccano enthusiasts building from Meccano instruction manuals. Otherwise, the model looked nice in every respect.

Then I came upon an assortment of models constructed by three guests from the Bristol area who were brought along to the meeting by **Phillip Drew**. It was nice to see Phillip again after what I believe has been quite a long absence. **Richard Smith** brought along a very carefully constructed wing panel for a Canberra aircraft model – yet to be completed. The wing panel has a root chord of about 20" corresponding with a semi-span of about 20". Maximum thickness of the wing is about 1" and it is constructed mainly from carefully shaped flexible plates sprayed with silver paint overall. At this stage of construction it was possible to appreciate the internal construction and the mechanical provision for the flap and aileron. This is most definitely a model to look out for in the future. The next model was a very small, nicely constructed and presented recovery crane built by Neil Bedford. The prototype was a version of the AEC Matador configured for use by the RAF. Accordingly, Neil had sprayed the parts an RAF grey colour to create a good looking model which was unmistakably a Matador in appearance. A credit to its builder, it shows that even small models can be most successful. The last model of the assortment was a similarly diminutive version of the Fokker DR1 triplane constructed by **Peter Evans**. The model was most carefully put together to emulate the version used by the Red Baron. Peter contrived to use red Aeroplane Constructor parts supplemented with standard red parts to create his very convincing model. I do hope these guests will be persuaded to become members and that we will see further examples of their undoubted modelling skills in the future.

Christopher Bond often turns up with unusual models of complex mechanical constructions and, true to form he brought along a most interesting example to the meeting. The model was designed and built to demonstrate the Leyland eight valve mechanism and has, in fact, had outings to both Henley and the South Birmingham Meccano Club in the past. The mechanism was designed by Parry Thomas, the Leyland Chief Designer, for incorporation into motor car engines and was intended to "out-Rolls" the Rolls-Royce. Since the mechanism was costly to make, only 18 were ever made. For quietness gears or chains were eliminated from the camshaft drive. Instead, two sets of three eccentrics were used. To compensate for differential expansion in the hot engine

the upper set were mounted on a short shaft in a swinging cradle, and drove the camshaft proper via an Oldham coupling. Both inlet and exhaust valves on each cylinder were operated by a single cam, and closed by a single semi-floating leaf spring. In the model the Oldham coupling is built up using angle girders attached to bush wheels and mounted on the shafts, the central member consisting of two "channels" of two girders at right angles. The valve spring is a flexible strip extended by one fish-plate, and the cam employs a "fan" of fishplates as the nose, sandwiched between two small bush wheels. The rockers have rollers bearing on the cam, and the handrail supports which operate the valve stems are adjustable for clearance. To fully appreciate the ingenuity and complexity of Christopher's model you really need to spend a little time watching it at work. I am sure Frank Hornby would have been impressed by this application of Meccano!

The ship models that then hove into view comprised a most interesting pair of late Victorian battleships constructed by **Tony Homden**. The first model was of the Imperial Russian Ship "Vice Admiral Popov" which is quite unusual since it has an entirely circular planform and the guns are mounted in a central fixed turret. The model is quite small having a diameter of approximately 8~9". Tony's note explains that the unusual design resulted from a Russian requirement in the 1870's for a shallow draft vessel mounting heavy guns which could operate in the inshore waters of the Black Sea. Two circular vessels were built to this requirement, the first being the Novgorod followed by the Popov, which was slightly bigger. Both ships owe their circular layout to the American Monitor design used in the civil war. The ships were not a resounding success and proved difficult to steer – it would appear that they had no directional stability! It is said that when firing the guns whilst underway, the recoil caused the vessel to spin on its axis. Tony's second, and rather more substantial model was of the British battleship HMS Devastation. Devastation was launched in 1871 and was one of the first of a radical new design of battleship built without sails. The ship was highly controversial at the time, especially among the old diehards who believed that the superiority of the British Navy lay in its sail drill. The ship was in fact a very successful design. With a low freeboard, heavy armour and two revolving gun turrets she set the style for battleships for many years to come. Previously, battleships had their main armament firing broadsides from fixed positions, very much as in Nelson's day. The new layout in which revolving gun turrets on a raft like low freeboard hull was also derived from the American Monitor designs of the Civil War. Devastation was originally fitted with four twelve inch muzzle loading guns. She was later refitted with ten inch breech loaders which had double the range of the old guns and could be fired four times as fast. She served in the Mediterranean and the Channel Fleet for many years and was finally broken up in 1908. Construction of the model in Meccano was quite straightforward, the decision having been taken to make this a waterline model. The main hull and superstructure are made from "silver" plates on a girder frame backing. The two gun turrets revolve from straight ahead to ninety degrees on the starboard beam. A PDU drives a cam fitted under the front turret which overcomes the need to reverse the motor, while a simple bevel gear drive connects the rear turret to the front one. There is a full complement of ships boats, both on davits and stored on the boat deck. White metal strips being largely used in their construction. Warships of this period housed their anchors on deck with the anchor chains running forward through a hawse pipe and then back to the capstans. This arrangement is represented using Meccano chain. The indented part of the superstructure at the stern was known as the cul-de-sac and was intended to give some natural light to the officers' cabins that were situated inboard. I am especially indebted to Tony for providing me with the informative notes on both models.

The irrepressible **Alan Covel** has done it again! He brought along yet another original very large scale model, this time of Stephenson's Rocket locomotive dating from 1829. At approximately one third scale this is a big model. Very nicely made as ever using his customary pristine yellow, blue and zinc parts, the model measured up at approximately 53" long, 30" wide and over 5ft high to the top of the chimney! As usual Alan's choice of wheels set the scale. The front wheels were recycled from a wheel chair and the rear wheels were smaller pram wheels, but of a very similar compatible style. Alan's models always have a colourful presence, but the Rocket was unmissable simply due to its size and its proximity to the doors to the lawn outside. Whatever next I wonder?

Paul Brecknell confessed that he has been rather too busy lately and his Meccano model

building has had to take a back seat. Never the less he did bring several constructions to the meeting being the initial stages of what promises to be an interesting excavator model. The items on show comprised the crawler chassis with turn table, initial work on the gearbox and a trial construction of the jib racking mechanism. So, we can look forward with anticipation to the development of this model. Then next door I came to my good friend **Colin Reid** who, as always, brought along an interesting collection of Meccano items most of which had been secured at auctions for enviable prices. Of particular interest among his many bits and pieces, Colin displayed a rather nice synchronous mantle clock in a prominent position together with a nice example of a Märklin vertical steam engine. Other auction acquisitions included some boxes crammed full of mint Meccano parts – the box I had a good look at contained a very large number of yellow girders in all of the shorter lengths up to about 9½". A really nice find for the serious model builders, you just have to know where to look!

For some years now I have been reporting on **Mark Rolson's** Meccano vehicle models, and every time he manages to create something bigger, better, more colourful or just more interesting than before. I thought his current model, which was not quite finished, was an especially interesting variation on the theme. The model is of an articulated coal wagon, which featured in MM for September 1965 I think. This model is an unusual and very attractive prototype, especially as Mark's build made full use of pristine red and green coloured parts contemporary with the period. Mark explained that he had made some modifications to the mechanical detail in order to improve the model running. For those searching for something a bit different to build have a look at this model. Mark is also a bit of a salesman! What every Meccano parts restorer needs is a tube of "Peek" which, of course, Mark will be happy to sell to him. It does work, and it appears to work well. It can be used on jaded zinc, nickel and brass parts to bring them back to a very presentable condition as Mark showed me. The procedure is to immerse the parts in a vinegar solution to remove the worst tarnish, then to rinse and finally to polish with a spot of Peek. It works really well on oxidised modern zinc parts which seem to be readily obtained at boot sales and the like.

After all that excitement I found myself looking at a really nice model of a vertical steam engine brought along by **Hamish Ross**. The entire model was built entirely from 1920's nickel parts from the instructions for Model No.614 in the 1926 manual. The model was powered for demonstration purposes by a contemporary 4 volt nickel side plate motor. Since all of the nickel and brass parts are in very good condition the overall presentation was very attractive indeed. Unfortunately the model was not running, but I was assured by Hamish that it does work very well – that is until the motor developed some kind of electrical fault. In keeping with the 1920's theme, the next model was SML33a Double Flyboats built by **John Nuttall**. This is an imposing model at the best of times but John's model was especially eye catching as it was built using late 1920's red and green coloured parts, all of which are still in very good condition. The model was modified for display purposes to be operated by a mechanical indexing unit, housed separately alongside. The unit causes the wheels to stop with a pair of cars at the bottom for loading and unloading. After a short pause it indexes the wheels one eighth of a turn to bring the next pair of cars to the bottom and then pauses again for loading and unloading. This repeats until all eight pairs of cars have paused at the bottom. It then runs continuously for five full turns, after which the indexing sequence is repeated.

The last model on my personal tour was a large Scammell tractor unit built by **Geoff Burgess**. The model was built to the familiar pattern, the scale being determined by the choice of very large tyres, and Geoff made no secret of the fact that he had borrowed lots of ideas from various other builders of similar models. The effort was repaid with a nice clean model, resplendent in shiny new red and green colours and bristling with the usual mechanical detail. It was interesting to learn that most of the parts used had been reclaimed and restored from old derelict stock. And that was pretty much "it". However, my apologies to **Mick Burgess** who left with his models before I had the chance to catch up with him. My apologies also to **Jim Gamble** who, according to the meeting return, brought along a model of a vintage style bus designed by the late Chris Beckett. I missed this model too, probably not paying attention, but building instructions can be found in a recent edition of the NMMG Newsmag.

It was good to see our resident traders again, **John and Linda Thorpe** and **Mike Rhoades** who still manage to provide the essential supplies to the fraternity. What would we do without them? Probably for the first time ever, I did not acquire any new stuff at this meeting and have regretted that since arriving back home. The moral of that story is that you should buy it when you see it as you probably will not find it when you need it! As always, **Bob Thompson** was very busy throughout the meeting seeking out photographic material from those who have pictorial records of meetings long gone. He informed me that the collection now exceeds 7,000 photographs and continues to grow. His project has now taken on the status of a pictorial history of MMG and it can be accessed from the Guild website. Once again, many thanks to those members who gave me some written information about their models, it really does make reporting easier and I hope that it makes for a more interesting report for my readers.

95th Meeting held on 11th October 2014

The 95th meeting was well attended with many superb models. Unfortunately neither of our regular model reporters was able to make the meeting and so your editor had to step up. I knew it to be a difficult job but just how hard it is, was apparent at this busy meeting. Getting round everyone was not easy and the task is made more difficult where models are not identified. I apologise for any I have missed.

Many pictures will be found on the website (nzmeccano.com) thanks to **Bob Thompson** who spent most of the meeting taking photographs. I am really grateful for all those who have sent me emails and provided written descriptions which I hope I have done justice to in this report. At this meeting we held the AGM but to save valuable bulletin space we will not include a full written report, this can be found on the website. A summary of the main decisions is on page 22.

The model of the day for me was **Terry Wilkes'** dragline (shown above) which he has built within a No.10 set except for a few minor parts and extra nuts and bolts.

The dragline is shown on the covers of the new main set manuals introduced in 1954 replacing the famous block-setting crane. No instructions were ever issued for the model but Jim Gamble managed to rescue some original photographs from the factory and these were used by Ian Stoney to rebuild the model and produce Model plan 87(still available from MWMO). Ian's rebuild requires considerably more parts than in a No10 set and without being critical has a complex set of mechanisms.

Terry's model is very true to the cover model but uses four power-drive motors, simplifying the gearing to the operational functions of the dragline: bucket lift and drag, boom elevation, slew and walk. Terry demonstrated that the model works very well, including walking. The motors and 8 x part no 90a and 10 x part no23 are the only extra parts (to a 1970's set 10) of significance. We hope to be able to provide detailed building instructions for this model in future bulletins.

I began my tour of the models with **Mick Burgess** who I know usually leaves early and is often missed. He had set up four small models on the piano including a model of the clockwork 4-6-2 Pacific tank loco from the 1929 MM built in very nice blue/gold livery (very hard to get these days) and an example of a modern "DIY metal construction model kit" , which builds four styles of model, and showed a JCB type digger (not Meccano as we know it).

Alan Covel, who always builds on a human scale had turned out a motorised tricycle two man 1912 fire engine. His model was almost full size but power was supplied by Alan's legs alone.

Tony Wakefield showed us his Austin Healey 3000 still in development but looking very well proportioned using the 'skeleton' strip approach seen in his Mini. It is similar to another Meccano Austin Healey 3000, built by Les Megget (New Zealand), which appeared in a recent edition of the Sheffield Meccano Guild Journal No. 120 June 2014 P28-31. Scaled 4.5:1, using a diecast model as a guide and drawings from the AH website, the model includes a wealth of detail: steering gear, suspension and a removable engine and gearbox which enables the detail of the driver/passenger area to be seen.

New member **Paul Merrick** had a very neatly completed JCB Loadall possibly based on a model plan.

John Hornsby, Richard Payn and Geoff Burgess were in the Scammell corner admiring Geoff's Scammell mountaineer. Now these models are far too complex for me to describe so Geoff has supplied a detailed account of his model with pictures both of which I intend to feature in the next issue. Details will also be featured in CQ. Here is Geoff's introduction to the model: "The Scammell 'Mountaineer' was a vehicle produced post WW2, and followed on from the Scammell Pioneer used as gun tractors and tank transporters throughout WW2. Intended mainly for civilian heavy haulage, it was powered by either, Meadows, Gardner or latterly Leyland diesel engines, had four-wheel drive, and could be fitted with a winch. I have modelled a version fitted with a crew cab and a vertical spindle winch. As usual the diameter of the available wheels set the scale, in this case ashtray tyres with a diameter of 6". To arrive at the models dimensions I used my usual method of numerous photos of the prototype downloaded from the internet and some scale technical drawings kindly sent to me by John Hornsby. I measure the whole vehicle in wheel diameters or fractions thereof, transferring these measurements into ashtray tyres, this method does not of course give an accurate scale model but does give what I feel is a model of acceptable proportions." In addition to the Clutch, Gear box, Winch and double reduction differential units operating in a similar manner to the original vehicles, a lever next to the winch operators seat operates the main engine clutch. Brakes are operated by both foot pedal and hand lever. Geoff has used novel approaches to realise these functions and created a model with lots of detail that certainly gives it the feel of the real thing. More details will appear in the next bulletin.

Howard Somerville showed his 1895 Davy Hathorn Horizontal Tandem compound pumping engine which we saw at Skegness and was described in the last bulletin.

Terry Allen showed his superb 1936 BUGATTI TYPE 57SC , which has, deservedly, won awards everywhere it has been displayed including the Issigonis Shield at Skegness. Pictures of the model were

also included in the last bulletin but Terry has provided some further notes on the model. The prototype, called 'The Aerolithe', first appeared completed in 1935 on a lowered standard Type 57 chassis fitted with a magnesium body. The unique raised and riveted seams that gave The Atlantic its identity grew out of the difficulty in welding magnesium. Only three more Atlantics were built and the bodywork of these cars was constructed in aluminium to overcome welding difficulties but retained the distinctive raised seams for design purposes. Two of the three cars were delivered as Type 57 SC (supercharged) models which are capable of 120 to 125 m.p.h. with a 0 to 60 m.p.h. time of less than 10 seconds. For some years Terry admired the look of this car and about 14 years ago bought a 1:24 scale model with an idea of perhaps one day building it in Meccano. This resulted in an approach to the Bugatti club who were able to supply general arrangement drawings. Terry relates "They also expressed an interest in seeing the completed model. They have had a long wait!"

The model is built to a scale of 1:5 and includes the following features: 3 speed and reverse gearbox with foot operated clutch and prop shaft to rear axle differential; Lights, scuttle ventilators, trafficators and windscreen wipers all operated by switches on dashboard; Foot brake and brake cables to all four wheels. Terry states "The chassis construction was reasonably straightforward being built off the scale drawings obtained from The Bugatti Club. The completed chassis plus ancillaries was designed to be a model in its own right should I find that the various constructional problems of the bodywork proved beyond my ability to solve. The finished model testifies that it was possible to complete the bodywork, but not without taking certain liberties with some of the parts. During the shaping of the bodywork I found that the two dimensional drawings were not much help in forming the various contours and I found the 1/24 scale model provided the answers. I have enjoyed building this model (well most of it!) and especially the interest and encouragement of my fellow Meccano builders over the long building process." I am sure the Bugatti club agree the wait was worth it! (Editor).

Still on the Bugatti theme your secretary (**Roger Marriott**) bought along a rather more elementary model of a Bugatti type 35 copied from a model shown by Richard Smith at Henley. John Hornsby kindly sent me a picture of the real thing that he was lucky enough to get to sit in. My Bugatti does not as yet have any mechanics apart from steering.

Chairman **George Illingworth's** model (no prizes for guessing) the familiar 1957 Dennis water tender, bought back memories of these well-proportioned appliances and also to me of building the No. 5 set manual model of the fire engine in about 1960. Parked beside George's appliance is my Bugatti.

Dave Phillips always brings something unusual and interesting - this meeting it was a model of a Canadian log hauler, the 1903 Pheonix centipede which was capable of pulling up to 30 sledges loaded with logs. The model has been constructed, in reclaimed parts, from photographs in the Old Glory magazine. The prototype is steam driven by four Shay type cylinders mounted in pairs either side of the boiler. Dave comments 'there does not appear to be differential and it is thought the steering is by controlling the steam to the cylinders by the steersman sitting up front. This must have been a freezing job as the machine was used mainly in snow and ice of Canada.'

Christopher Bond (who declared it to be his birthday) is building a universal milling machine and had brought along a neatly made dividing head for the machine. Chris reported "as so often in Meccano, it's a compromise between reasonably authentic appearance and functionality. Prototypically the spindle drive would normally be by a worm and 40-tooth worm-wheel. This would not fit in the model, so a 20-tooth wheel is used, which gives effectively the same multiples of 2, 4, 5, and 10 per full turn of the handle. Dummy alternative dividing plates will be added representing a wide choice of other intervals. Not yet finalised, I look forward to the final design, and a demonstration of the dividing head.

Next to Chris, **John Palmer** showed a neatly modelled version of the mobile crane SML7.15 placing a load in an articulated lorry(6.12) from the 1950's manual.

Terry Bullingham who never ceases to impress with his modelling skills which were again clear from his 5inch scale flatbed railway wagon. The truck carried a load of two genuine granite scale 10.5 ton blocks used with his block-setting crane. Looking splendid in bright steel, it was enhanced by wheels and scale buffers turned by Terry on his lathe

Mark Rolston showed the 'Peterbuilt' 10 wheel American tractor unit (also seen at Skegness I believe when I didn't have chance to take photographs so I am pleased Mark showed it at Baginton). Based on the model by Joseph Attard, featured in CQ (2007), it includes working gearbox and clutch, reduction pinion differential units on the rear wheels and a sixth wheel to lock onto the trailer unit.

Colin Reid continues his research into the development of the early Meccano steam engines displaying a variety of vertical model steam engines by Meccano, Bing, mamod and Marklin and demonstrating that the 1914 Meccano version was a direct copy of the Bing engine. However a possible explanation is that Hornby, like other manufacturers (W.Bassett-Lowke) and other products e.g. the butter churn from Marklin,

may well have brought in the Bing engine and simply badged it with the Meccano trade mark. This was not an uncommon practice before the 1914-18 war as German manufacturing was of high quality and much sought after in Britain.

Tony Homden is clearly a Wallace and Gromit expert, with his developing cornucopia of models built from the “spoof” Haynes manual “Cracking Contraptions!” (It’s a W&G picture book.) There were four displays - ‘Wallace in the wrong trousers’; the soccomatic machine which fires footballs (well ping pong balls) at Gromit in goal, a runabout steam car and a Jumbo generator (don’t ask it’s too bizarre!)

In the Wallace and Gromit film, *The Wrong Trousers*, a mechanical pair of trousers get taken over by master criminal Feathers Macraw. The Trousers are claimed to have been made by NASA for the use of astronauts. Tony’s model is non powered (shame on you Tony - call for Gromit!), and shows them with the control panel fitted before the hijack.

In the film Feathers removes the controls and substitutes a radio device which gives him remote control. Tony tells us the first problem was how to reproduce the legs which were supposed to be rubber covered and which varied in size from top to bottom. Fortunately there is now a wide range of tyres available, some genuine Meccano and some compatibles so after a few experiments a pair of passable legs emerged. The body of the machine which is bowl shaped is made from small flexible plates joined to a circular strip . The legs are then attached by rods and brackets. Tony has big plans for these trousers – “The intention is to demonstrate the super magnets and high vacuum devices built into the shoes which enable vertical walls and ceilings to be traversed ; so the model will eventually occupy an upside down position within a frame work and will be seen to “walk “ across the ceiling.”

The Soccomatic machine, also featured in The “spoof” Haynes manual “Cracking Contraptions!” is fully operational. The book shows a wheeled box like vehicle on which is mounted a rotating four armed device on which are fixed football boots. A hopper on the top feeds a succession of footballs down a chute into the path of the rotating boots . A magazine holding twenty balls stored in five tubes containing four each, is fitted at the rear of the machine and can be swung down to feed more balls into the hopper. There is a seat to one side for Wallace . The angle at which the balls are delivered is altered by steering the whole machine left or right. The machine of course never existed as a working entity, all apparent movement was achieved by stop motion filming techniques.

Tony tells about the challenges in making a working version. “The first problem was what to use as the boots. Several attempts were made to produce pure Meccano versions , but they all looked too clumsy. Then I recalled seeing cars driven by football supporters with pairs of miniature boots hanging in the windows. A quick trawl of Ebay found many for sale in all popular team colours. I bought two pairs with Aston Villa logos and found that they were perfect for the job. The scale of the model was set by the twelve inch high Wallace doll . The boots are slightly too big. (I am sure Wallace doesn’t mind but Gromit might (Ed)). The rear wheels are independently mounted while the front wheels are fitted with Ackerman steering controlled by a lever in front of Wallace. The hopper is fabricated from small flexible plates and a hole in the bottom allows balls to roll into the delivery tube. A toggle mechanism operated from the driving position allows one ball at a time to drop into the delivery chute where they roll down to the ground. Four balls can be delivered before reloading. The boots are mounted on four arms and rotate at speed so that as a ball rolls in front it receives a powerful “kick” which sends it towards the goal. The angle at which the ball fires off is somewhat random depending on the exact moment at which a boot strikes it. The boots are driven by a PDU.”(Great fun - even Gromit seemed to enjoy it! – Other contraptions will certainly follow and I leave them and Tony’s other models for another occasion- you can see them on the web).

And now for something totally different : a very well presented 1:10 model, by **David Shirt**, of the 30” reflecting telescope being built at the Hanwell Community Observatory (HCO) near Banbury. It is the largest telescope to have been built in Britain primarily for public use, and despite weighing 3 tons it can be pushed around by a little finger. HCO members manning the stand at public astronomical shows decided photos and diagrams were inadequate to describe the telescope so David was asked to make a Meccano model to demonstrate its function. The prototype rotates on a rail in a pit below ground level and after several experiments David used a GRB for the azimuth axis. The rest of the model is very close to the prototype, including two ball thrust bearings on the altitude axis.

New member, **Greg Worwood**, has clearly been busy building, producing a large scale model of Brunel’s atmospheric railway. Built to a scale of 1:10 , the piston carriage is shown on a length of track (7’ ¼”) complete with vacuum pipe. Unlike Brunel’s prototype, which was abandoned in 1848 as unworkable, I believe Greg used the versatile ‘Henry’ vacuum cleaner to demo that the concept (at least on 1/10 scale model) does work .(Dyson eat your heart out!).

Roger Auger showed 3 models including the rarely seen No.10 set Automatic snow loader in yellow and zinc livery. Roger had encountered the usual problems with manual models – requiring many rebuilds and

redesigns due to the rear conveyer binding the drive mechanism. Roger also had a well presented No.6 set armoured scout car made with very much used (VMU) refurbished parts.

Phil Rhoades (no relation to Mike), also a new member, had an interesting collection of non Meccano construction sets including a Vogue build of the (horrid in my view!) No. 5 Meccano manual crane, and a very attractive box for the Primus No.1 set.

It was good to see **John Bland** again after his absence for a few meetings. He had the well known 1928 steam wagon (model 4.60) carrying a smaller version to his own design.

Sid Beckett had the Diesel Loco from the October 1953MM.

Paul Hubbard doesn't like to waste time and gets on with building his models at our meetings, currently in process are large Dumper and a Coles Crane.

Brian Edwards models are always a delight, full of detail and expertly puttogether with novel use of parts resulting in models that really do look like the real thing. At this meeting it was a Dennis Lancet used in 1933/34, trailing a producer gas unit as used in the 1939-45 war.

John Reid continues to develop the arctic exploration theme, this time a model based on the Ferguson TE20 tractors driven to the South Pole from the Ross Sea by Sir Edmund Hillary and his team in 1958 in support of the 1957/58 TransAntarctic Expedition. The petrol engined tractors were built in Coventry to the standard specification but modified for the Antarctic conditions. The actual vehicles had canvas coverings over the cockpit and rear engine area to protect the drivers from the harsh Antarctic conditions. The covering had no roof or back allowing the driver a rapid exit if the machine fell into a crevasse. In poor visibility, it also enabled him to stand on the seat and look out over the top of the canvas. He then steered the machine with his feet via extension rods on the differential brake pedals. There was no steering wheel. To enable the vehicle to be recovered from a crevasse, a front mounted A-frame was fitted just below the radiator. The rear half of the bonnet was removed to make the frequent refuelling easier – an eight gallon tank with, at worst, just over 1 mile/gallon. John always provides an attractive presentation of his models which are of unusual subjects very cleverly modelled.

Geoff Devlin displayed a model from the modern 'speed play' Meccano sets and a mystery car built using only captive nuts. 'Spinmaster', now the owners of the 'Meccano' brand, are of the view that they need to attract younger children to buy Meccano and recognise that the dexterity to use bolts and nuts is clearly beyond youngsters- this may be realistic but in my view is a sad end to Hornby's vision where even the cheapest and smallest sets still required the same dextrous approaches to construction.

John Rodgers showed us his LNER10000 experimental 'hush hush' loco in resplendent nickel – I am amazed that so much nickel has survived in such good condition, clearly a testament to its quality. I fear that the modern Meccano will not be around in 100 years!

Colin Bull (and his wife) joined us from southern shores, coming the long distance from Southampton, and now most welcome as new members, had brought a Liebherr 1500T telescopic mobile crane based on the Evolution set models but much developed to include triple axle front, and twin axle rear steering, stabiliser jacks and two section telescopic jib and fly jib using erector parts. The crane cab rotates 180 degrees from its travel position for crane operation. Colin also showed a Maudsley Table Engine from a model by David Whitmore which appeared in CQ in 1992, and which worked smoothly throughout the meeting.

Tom McCallum showed his Mont Blanc fairground 'waltzer' seen at Skegness and pictured in the last bulletin.

In the collectors corner **Roy Whitehouse** presented a fabulous collection of Dinky aircraft, all boxed, and combined with Richard Gilbert to present a display of pristine French Meccano sets 6, 7 and 8 from 1953-4 including accessory sets 7a and 8a.

Dave Bradley showed his one sixth scale Volkswagon 1980's T3 radio controlled 'people carrier' complete with driver and passengers.

John Molden is constructing a new 'fairground model' and showed us the control/paybox for a 'haunted mansion' ghost train. This section shows a man who tips his head and top hat as the punters enter the roller coaster ride(yet to be built).

Terry Pettitt presented two models, his well known and excellent Brough Superior motorcycle and side-car and a recently designed and developed 1934, 3-wheel Aero Morgan. The 1934 Aero Morgan features a 3 speed and reverse gearbox instead of the usual 2 speed chain drive. Terry's Morgan is a triumph of modelling: it follows closely the actual construction of the prototype and incorporates a V twin engine with working valve gear, a clutch and a 3 speed and reverse gearbox with final chain drive to the rear wheel. The chassis is a cruciform subframe at the front supporting the engine and includes two supports made up from bent crank handles. The model is driven by a crane motor without casing which is sufficient to work the engine but not move the car, however this is to be modified to include a greater reduction ratio. Terry has supplied a more detailed description of the model which will be featured as a constructor project in

future bulletins.

It is not often that we have the company of three presidents of the guild: our current President **Geoff Wright**; also with us was **Ken Wright**, a much welcome past president who continues to show a great interest in the Guild, and brought along an evolution set crane truck; and in spirit if not in person, **Ernie Chandler**, one of the founder members of the guild, sadly no longer with us in body but present in spirit through his lovely Traction engine which he left to the guild. We are grateful to Tim Martin for offering to look after this model on behalf of the guild.

Geoff Wright has now completed, all but the bonnet, his London Transport 'Interstation C'. This bus, currently under construction, follows its predecessors in being made from the contents of a mid 1950s No.9 Outfit. Up to now, a scale of 1/16 full size has been followed. A benefit of this is that the resulting model of a 7'6" wide bus becomes the popular Meccano width of 5 1/2". However, this scale does give rise to some problems. It precludes the use of 2" Pulleys and Tyres which are somewhat overscale, forcing the use of the less attractive 187 Road Wheels; also as there are only four of these in the outfit, twin rear wheels are not possible. Previous models have been double deckers, very demanding of parts and so it has not been possible to fit them with seats. By choosing a much smaller prototype with fewer seats, this is now possible. Using 2 1/2" wide plates as seats in 1/16 scale, however, results in centre gangways only 1/2" wide. The decision was therefore made to make the model to 1/14 scale which gives a width of 6 1/2" with a 1 1/2" gangway and incidentally allows the use of 2" Pulleys and Tyres and double rears.

Next came the choice of prototype. Leylands have always been favourite of mine, and their pre-war modestly sized 'Cub' suggested itself. However, a very fine model of this exists already, but I don't recall seeing a model of its specialised companion which is the one I have chosen. In 1936, newly formed London Transport bought a unique fleet of eight 'Cubs' with Park Royal bodies incorporating a raised rear passenger deck over a large luggage compartment which operated a circular route linking London's main line railway stations at a flat fare of 1/-.

Having decided to include seats, a problem arose; I could not find a seating plan in any of my books, or on the internet, so initial construction of the model involved a deal of guesswork. I happened to mention my problem to a great friend in the bus publishing world (like me, a great enthusiast for Alexander's buses) who possesses a vast file of information of buses of all sorts, and the next day a fully detailed scale drawing of the 'Interstation C' arrived in the post. So now I had all the information I needed – but – a lot of my construction so far was wrong – and much more detail than I had originally intended was now possible, so it was very much a case of back to the drawing board!

As the model is far from finished, I have decided to exhibit it as 'work in progress'. I have particularly enjoyed scheming out the sliding door with grab handle, and the rear luggage compartment doors with working catches.

96th Meeting held on 28th March 2015

After a long, damp and grey journey (from deepest Essex!) it was still raining a bit when I arrived. Although it was just after 10.30 am the car park was full and I was lucky to find a space. Not surprisingly I found the hall packed to the rafters with members and their models, and the atmosphere was positively buzzing with the measured excitement known to occur when Meccano enthusiasts "swarm". Those lucky enough to be "in the know" may witness this phenomenon twice per year in the midlands area. The turn out of members was considerably larger than usual and may even have been a record. Since a number of long standing members were absent on this occasion, it was clear that the total membership has grown in recent times and, indeed, some new members were signed up at the meeting. Thus the challenge facing your reporter was considerable and I did struggle to get around all the models in the time available. As always, my apologies to those I have missed or misrepresented in any way.

Since **Mick Burgess** usually leaves the meeting at lunchtime, I often fail to report on his models as they have gone by the time I get around to them. So, to make up for previous omissions I decided to start my tour with his collection of small models. As usual Mick brought along a collection of smaller models built from manual instructions covering many years of Meccano development. The earliest model was of a field gun nicely constructed in nickel parts and based on 24.3 in the 1916 manual. The next model was of a 6" naval gun, resplendent in pristine nickel, and built from instructions dating from 1928. The model also featured in the book of New Meccano Models dating from the same period. Next up was a saloon car nicely presented in mid red/green colours and featured as model 4.35 in the 1954-1961 series of instruction manuals. The next pair of models completed the collection and both were built from instructions in the 1962-1969 series of manuals. First a sports car, model 4.15, and lastly, a shooting brake, model 5.2. Both models looked very attractive in a yellow/zinc colour scheme.

How do you change gear and control the direction of rotation of a Powerdrive motor when it is not direct-

ly accessible inside a model? Faced with this problem **Christopher Bond** has engineered a neat solution and he brought along his "PDU puzzle" to demonstrate the solution.

The key to his successful solution was found when he noticed the similarity between the black gear select ring on a PDU and a plastic milk bottle top. A V-shape was cut in the side of a top, the end cut out, a slit made in the side opposite the V, and the resulting "female" face-cam slipped on to the PDU in place of the black ring. A "male" cam was made from a different, deeper plastic tube top, and a four-legged spider of obtuse brackets built up on a 57-tooth gear ring, 3/8" bolts gripping the female cam. The gap between the cams slides one plunger in and one out of mesh as the cams are rotated through a sixth of a turn by a pinion in mesh with the 57-tooth gear. To overcome the property of PDUs to change direction of rotation with each gear change a crosshead was arranged to operate the reversing switch with each gear change. An indicator shows which ratio is engaged. For a more detailed description members may e-mail Christopher on cwmcbond@btinternet.com.

Roger Marriott brought along some typical display models with a transport theme. First was a superb rendition of a 1931 Bugatti type 54 sports saloon, looking very attractive in a blue/zinc colour scheme. Second was the chassis of the Aero Morgan 3 wheel car nicely set out in red/zinc colours and built to the current Terry Pettitt design, more of which later. Roger has undertaken to photograph the model in various stages of construction for the building instructions, currently being serialised in the MMG Bulletin. Central to this group of models was a rotating display in the Meccano factory style showing off a splendid model of a Norton motorcycle carefully modelled in a red/green/zinc colour scheme. Although not an official Meccano display model, the design looks very convincing.

Alan Covel has a long and distinguished track record for building very large Meccano models in his trade mark yellow/blue/zinc colour scheme. On this occasion he brought along a "small" model, by his standards, of a 0-4-0 narrow gauge tank engine with integral tender called "Nina". Modelled very nicely as ever using pristine yellow/zinc parts, the model dimensions are 50" long, 15" wide and 26" high. The wheels for the model were made up from 4" diameter Meccano components and shod with 6" diameter ashtray tyres. Model engineers among the membership will undoubtedly be familiar with this type and style of locomotive.

Nearby, I came to a pair of fine transport models built by **Brian Edwards**. Brian always manages to produce something new, or different, for each meeting and this time we were presented first with a Bedford OXC tractor unit with "Queen Mary" trailer as used by the RAF in the 1940s-1950s. This model was nicely detailed in mid red/green colours and measured about 40" long. His second model was of a 1950s Bristol K-type open top double deck bus. In an attempt to recall the Eastern National livery of the period the model was finished mainly in yellow parts with green trim. The result was most evocative of the period, and I should know as I grew up in the region and went to school on yellow/green Eastern National buses.

Ken Wright brought along a new helicopter model built from the "Rescue helicopter" Evolution series outfit. As might be expected of a model builder with Ken's experience, the model was very carefully put together and looked extremely attractive in its orange/white colour scheme. To give you some idea of scale, the rotor blades are moulded in black plastic to give the model a "proper" appearance, and the rotor diameter is about 18". It looked suspiciously similar to the Aerospatiale Puma to me.

Then I came to my good friend **Colin Reid** who had brought along the familiar collection of enviable stuff that he manages to acquire for quite modest outlay. No less than four Meccano steam engines, two early Marklin type vertical engines, the Meccano 1929 vertical engine and the modern Mamod type. He also had a hot air engine of unknown parentage. Other interesting goodies included a 1934 Spanish No.4 Meccano outfit in original wooden box and a modern Tuning radio control car outfit.

The next model I looked at was a superb version of the 1931, 4½ litre Blower Bentley beautifully modelled in mid red/green parts by **Tony Wakefield**. The model was built to a scale of 1:6, it has wheels based around the familiar ash-tray tyres, it is raised on a plinth for display purposes and measures about 18" overall length. Tony informed me that the model is not quite complete so, watch this space!

Mark Rolston has become a bit of a specialist in large heavy duty tractor vehicles which can be coupled with a variety of trailer units. Mark brought along a pair of his model tractor units, both built to quite large scale as determined by his choice of ash-tray tyres for the wheels. Both models represented typically rugged North American heavy equipment and were of similar size at about 3ft overall length. One model was of a 10 wheel tractor and was a replication by Mark, of a model designed originally by Joseph Attard and appropriately modelled using a yellow/green colour scheme. The second model was to a design by the late Dr Keith Cameron and published as Canadian Special Model No. 11. The prototype for this model was the Kenworth W-900 tractor and Mark had given his version an attractive yellow and dark blue colour scheme.

Then I got waylaid by **Geoff Burgess** and **John Hornsby** who wanted to tell me about their models. But, too much talking and not enough noting means that I do not have much to report here. Geoff's model

was of a 1940s Foden Timber Tractor chassis which looked very businesslike in the works department. The model measured about 2ft overall length, made good use of medium red and green parts and was scaled, yet again, by an appropriate set of ash-tray tyres. John's model, on the other hand, could easily have been missed as it was a relatively small construction, being part of a much larger model still in development. The "model" was one of eight trailer bogies which embody some clever mechanics in their diminutive works. John showed me that not only is the bogie steerable but it can also be adjusted in height by means of the internal mechanism. Those who like to build large heavy machinery involving bogies would do well to look at John's compact design next time the opportunity arises.

Manchester Corporation operated a "same day" parcel delivery service using tramways parcel vans from 1905 until the early 1930s, when motor delivery vans took over the service. Morning shoppers in the city centre could have parcels delivered in the afternoon via the tramway system, on a 'cash on delivery' basis. It was most evident that **Geoff Devlin** had undertaken a lot of research into the subject and brought along to the meeting his excellent model of a tramways parcel van. The prototype for his model was the typical Parcels Department parcel van No. 6 operating about 1925. The large capacity van body was built on the frame of a scrapped passenger car and was powered by Brill 22e maximum traction type bogie trucks. Manchester trams were painted scarlet red, they had a route mileage of about one hundred miles and the track gauge was four feet eight and a half inches. Geoff's model was built to a scale of approximately 1:16 which translates into a rail gauge of 3½". The model parcel van was completed in a mid red colour scheme, which is quite in-keeping with the prototype and was set up to run on a short length of track for demonstration purposes. To give an idea of scale, the overall length of the van was 24", width 6" and height 9½". For the tram fanatics, Geoff pointed out the unusual position of the main running light and the two small red lights, fitted on the bulkhead behind the driver. Geoff's other model on this occasion was the helicopter built from the Speed Play outfit No.7901 which he had acquired recently at a car boot sale.

Alongside Geoff's fine model, I came to yet another splendid model, a marine steam engine built by **Paul Brecknell**. The model was based on the 1950's No. 9 outfit model (9.18), but heavily modified and built without the limitations of outfit contents. It was constructed in pristine light red and bright zinc parts with the flywheel (2× part No.137) and feed pump cylinders (2× part No.216) in matching blue. The careful construction, attention to detail and choice of colour scheme made this a very attractive model, and it runs very well too. Paul provided me with a very detailed breakdown of the main modifications to the published design, which is really too detailed to reproduce here. However, some general modifications include a lot of brassware not featured in the original model, a concealed Powerdrive motor and gear train to provide motive power and, to remain within the spirit of the original model design, the handscrew driven motor reversing mechanism (although it is much quicker to use the reversing switch on the transformer!).

Nearby was an equally nostalgic factory produced display model brought along by **Tom McCallum**. As might be expected the model was superbly restored and presented in pristine condition. Dating from the early 1960s the model was a squarish looking estate car, typical of the period, and constructed in light red and green parts. Interestingly, the whole body of the car was hinged to the chassis so that it could be lifted up to reveal the interior detail. Judging by the interest in this exhibit, I picked up the message that it was quite a rare find. We have seen quite an assortment of display models over the years, but I have never seen this example before.

Next I came to a fairground model attributed to **Michael Bent**: a familiar looking fairground ride of about 3ft diameter and powered by an ER20 electric motor. The design looked very much like a No.8 outfit model but, as far as I am aware, the model was an original and colourful design by Michael.

Tim Martin showed a model of a familiar showman's engine of about 2ft overall length. I was told that this was the late Ernie Chandler's model, which is why it was familiar, and it was good to see that it still exists and was brought out for an airing – a really nice way to remember past friends.

It is not often that **Mike Cook**, your model reporter, brings a model to a meeting. However, after several years in the making, I brought along my latest model of a Foster Thrashing Machine. Based loosely on the Foster's of Lincoln standard thrashing machine, the model was built to an approximate scale of 1:12 and makes extensive use of my most pristine light red/green parts. Most of the internal machinery is represented although lacking in detail because of the difficulty of fitting it all in such a small model. However, the visible parts of the machinery provide a reasonably convincing representation of the prototype. Without a doubt, the most difficult construction was the crank shaft which operates the straw shakers – it required no less than eight accurately drilled couplings (part No.63), a very rare component indeed in the Meccano parts inventory! The model is fully working but unpowered. It is intended to drive the thrasher from a suitably powered traction engine in due course. An attractive and distinctive feature of the steam driven thrashing machine is the external belting connecting the many driven shafts. Even my best Meccano driving bands were just not up to the job, so I resorted to making up my own drive belts using Polymax NBR Nitrile

cord. This is a synthetic rubber product which can be made up easily into flexible, low tension drive bands and they work really well. To keep the thrashing machine company, I also brought along my elderly Fowler ploughing engine, which the observant will realise they have seen on a number of occasions in the past.

Next to my models was "collectors corner" where some interesting historical stuff was displayed. **Jim Gamble** brought along about 20 early instruction manuals and each one was in a different language. This made not only an interesting and attractive display of nostalgia, but the very strong point that in its heyday Meccano was a truly global product inspiring the young would be engineers of tomorrow all around the developed world.

The **Rob and Wendy Miller**, (members of NMMG and welcome guests at our meeting) are well known for their educational work with youngsters involving the use of Meccano but, as far as I can recall, I have not reported on their activities before. Not surprisingly, the model they brought to the meeting was a simple mathematical calculating device involving an educated monkey! Lots of young person appeal here as the device can be used to make simple additions and multiplications. They told me that the model has its origins as far back as 1916, but their version was based on that described by Graham Jost in CQ for December 2005.

Moving on to a large assortment of small models brought along by **Colin Bull**. Four small models were constructed from the Evolution series outfits. However, one of the models was Colin's interpretation of a photograph of a prototype model for the series which has never actually seen the light of day. Colin had done well to emulate the red and black colour scheme of the original. His second collection of models was from the Meccano "Gears of War" series dating from 2011~12. These comprised a "King Raven" helicopter, a "Centaur" light tank, the "Silverback" machine gunner, an "armadillo" vehicle and numerous support items. This series was new to me and involved a large amount of moulded grey plastic and very little Meccano – not something I would go out of my way to find. In my view Colin's star model was the compact grasshopper beam engine built to the design by the late Bob Ford in the yellow/blue/zinc colour scheme.

Brian Compton brought along his model of an Automated Rolling Bridge Road Coal Loader and Un-Loader for another outing. The model was inspired by the Coal Loader and Un-loader described in the CQ special publication by Oscar Fontan and Keith Cameron. This is a large model sitting on a base about 2ft square and Brian's version looks splendid in its immaculate mid red and green colour scheme. The model relies entirely on its electronics for its automated cycle of loading, unloading and shifting "coal" around aimlessly. Nearby was a small construction of a joystick switch device which I believe was another example of Brian's electromechanical handiwork. (a description of how to build this neat joystick will appear in a future bulletin.).

Next, I came to a model of the Hindle Smart electric articulated lorry nicely presented by **John Rix**. The model was carefully constructed using mid red/green coloured parts from the instructions in MP183 by Tony James. The model was designed to be built from the contents of the No.10 outfit and included some mechanical detail consistent with models at that level of complexity.

Alongside was a pair of military tracked vehicles built by **David Hobson**. As is customary for David, the models were built to a high standard of fidelity using Meccano Army coloured parts, the scale being determined by the use of plastic Meccano track components. The first model was of the WW1 British medium tank mkA "Whippet". In reality, it was a fairly mobile machine gun. Interestingly the prototype was produced by the steam machinery manufacturers Foster's of Lincoln. The second model was of the companion WW1 French St-Chalmond tank, the chassis only being shown as it is still in construction. I do not know the scale of the models, but both measured about 16" long overall.

Moving on to **Richard Howard's** Meccanograph, which he said was inspired by having seen one of Sid Beckett's models drawing away recently. Richard's model was a rebuild of a fairly standard Meccanograph design. However, he had modified the gearbox to suit his own requirements. The model was working when I saw it and was clearly capable of producing a wide variety of the typically intricate drawing designs.

Those of you familiar with MM for June and July 1939 will have seen the articles on Britain's Fighting Forces in Meccano showing photographs and minimal building information for a whole series of small military models reflecting the period just before the outbreak of WW2. **John Reid** has built all of these models to his usual high standard and the collection was the basis for his attractive presentation at the meeting. The model of HMS Hood was originally reproduced from the photograph and the scant details given in the article in MM for June 1939. However, on obtaining more detailed information of the ship, it was apparent that a more realistic "simplicity" model could be constructed using parts consistent with the spirit of the time with the following exceptions – John's preference for the use of Allen bolts, hex nuts, Allen grub screws and metric and BA washers. From the article in MM for July 1939 John reproduced six aircraft models from the photographs and the limited information given in the article. The aircraft models comprised the Hawker

Hart, Supermarine Walrus, Handley Page Hampden, Armstrong Whitworth Whitley, Gloster Gladiator and Avro/Cierva autogyro. As before John endeavoured to use parts consistent with the period and with the following overall exceptions; his preference for Allen bolts, hex nuts, Allen grub screws, metric and BA washers, the addition of tyres to the pulleys/wheels of the undercarriages and RAF roundels on all models obtained from recent Red Arrows outfits. No self respecting Meccanoman would undertake a project like this without making some changes to the models. John is no exception and the degree of modification to the aircraft varied from very little to a complete rework – because of the small scale some of the models were quite difficult to modify. In general, most of the changes were attempts to improve the scale appearance of the models in terms of dimensions, reasonably representative colour schemes and mechanical improvements facilitated by the use of modern parts not available in 1939.

Newish member **Phil Rhoades** brought along an assemblage of interesting models not often seen at our meetings. First was his mechanical digger, nicely made in mid red/green parts from the 1951 No.8 outfit manual model 8.17. Second was a pair of Aeroplane Constructor models, a large biplane and a rather smaller biplane, both of which were quite typical in every respect. His third model caused a bit of a stir as it is rarely seen these days. The model was the “Penny-in-the-slot” Theatre built from instructions in the early 1950s No.9 outfit manual, model 9.10. Phil bought the model in a sale as a restoration project. Maybe it will be restored enough to relieve you of your small change at the next meeting!

Then I found a couple of interlopers from the Bristol area, namely **Pete Evans** and **Richard Smith**, (both of whom are now welcomed as new members.) Pete Evans’ model was of a 1931 MG F2 Magna sports car previously owned and restored by himself. Some photographs of the original car during restoration showed the basic construction of the car well. The model represents the actual car, registration number MG 1410, and was superbly presented in a carefully chosen pristine red and green colour scheme. To give you some idea of scale, the overall length of the model is about 15”, and utilises repainted 3” diameter spoked wheels fitted with modified 4” diameter tyres. For demonstration purposes the model was presented on a rolling road dynamometer so that it could be shown in action. Pete started building the model over a year ago and has tried to follow the prototype as closely as possible and it was clear that his patience has paid off handsomely.

Pete’s mate **Richard Smith** baffled the crowds with his unusual model called “The Octomecc”. The model was inspired when Richard saw a late 1950s Meccano Mechanisms Display board and decided to integrate that design with his burning desire to build a model of an Octopus fairground ride. The model looks like the eight arm fairground ride with the passenger cars removed and replaced with eight different demonstration mechanisms. It has a diameter of about 30”. The model incorporates a variety of drive methods, utilises large amounts of gearing and, in his own words, provided a significant study in finding the sources of, and reducing, friction. A primary objective of the model was to create a visually attractive display model that might appeal to young minds. The eight demonstration mechanisms comprise an NMMG Meccanic waving, an automatic forwardreverse drive, a two speed drive, a crown wheel and pinion differential, an NMMG Meccman with jack hammer, an intermittent drive, an out-of-line drive and a pinion differential. Whatever next?

Our chairman **George Illingworth** has more than a passing interest in fire engines and has built a vast number (well into double figures!) over the last few years and I have previously reported on a fair few of these. George brought along another four fire engine models to the meeting which may, or may not, have been “new stock”.

The theme for this small collection was that the prototypes were all designed for operation over rough terrain. The models represented a 1926~27 Morris FD, a 1942 WOT1 Foden crash tender on a Ford chassis, a 1955 “Green Goddess” 4x4 pump and a 1960 Alvis Salamander Mk6 RAF crash tender. As always these models were nicely presented; carefully built with a sympathetic approach to choice of colour scheme, and with an appropriate attention to detail sufficient to give a convincing representation of the originals.

Having suffered the “slings and arrows” of the public transportation system our president **Geoff Wright** arrived at Bagington just as the afternoon festivities were kicking off. To his credit he also carried one of his models with him which was quickly stationed alongside George’s fire engines. Geoff’s model was of an Inter-station Omnibus built in mid red/green colours whilst remaining within the constraints of the 1950s No.9 outfit. I have reported on this model during the course of its construction and I know that Geoff had a bit of a challenge getting his design looking and working correctly whilst remaining within his chosen limits. This is a nice looking model and he did well to get it out of the No.9 outfit.

Without a doubt, the biggest and most eye catching model at the meeting was brought along by **Gregg Worwood**. The model was a 1:5.7 scale version of Stephenson’s Rocket locomotive together with its tender, a first class carriage and a third class carriage. The scale was determined by the large flanged rings

(part No.167b) used to make up the driving wheels, and this made the whole train about 7~8ft long overall. The model was very well built using predominantly light red/green parts, with some yellow and blue parts for variety and for trim. In all, a very attractive and nicely presented model.

Next, I came to another large and unusual model brought along by **Sid Beckett**. Regular readers of the report will know that Sid often bowls up with an unlikely model made in Meccano, for example, do you remember his saxophone of some years ago? At this meeting his model was of a lighthouse complete with working light. The model measured about 3ft high with a nominal diameter of about 12in and was constructed largely using red and yellow plating. With the lantern of the lighthouse removed the revolving light arrangement was open to inspection and comprised a pair of lenses mounted on a rotating base with the lamp at its centre and it worked pretty much as per prototype.

Quite often we find **Paul Hubbard** using his time at our meetings either building a new model or dismantling an old one. This time he brought along a structurally complete model of a 300 ton gantry crane of the kind found in heavy engineering works. This particular model was based on one previously built by Rob Mitchell. Paul's model measured about 3ft by 12½in and comprised a very substantial structure as might be expected for a heavy duty crane. At the time I saw the model Paul was busy working at getting the internal electrics organised.

Then moving on, the large space next door was occupied by the Giant Walking Dragline model as featured on the cover of the 1950s instruction manuals. The model was built utilising yellow/zinc parts by **Terry Wilkes**. Terry did well to build the model from the contents of outfit No.10 plus a few extra parts and some modifications. I found this model very interesting as it was remarkably similar in appearance and size to a Ransomes and Rapier W300 I built about 30 years ago, and it took me two attempts before I achieved a satisfactory result! Terry managed to achieve a fully working model with much simpler internal machinery and, he explained to me how he had managed to get it walk satisfactorily, which is always a challenge with this particular machine.

Whilst on the subject of cranes, the Welsh contingent represented by **Mei Jones** brought along a pair of crane models made up from the cranes Super Construction outfit. The models had been put together with obvious care and looked rather small and neat alongside their giant cousin.

Over the years **Terry Pettitt** has deservedly grown a reputation for designing and building scale models of all kinds of vehicle within the constraints of the Meccano system. That he has been remarkably successful at this is borne out by the steady production of a new model for nearly every meeting. His latest creation is a very fine model of the 1934 Aero Morgan three wheel sports car. The model is about 2ft long, the scale being set by the use of nickel 3½in pulleys with tyres to represent the spoked wheels of the prototype. An appropriate colour scheme of red platework with bright zinc to represent the mechanical aspects looked the part completely. The model boasts a staggering amount of detail including the V-twin engine with working valve gear, clutch, three speed and reverse gearbox, and a chain drive to the rear wheel. It is fortunate that building instructions for the model are being serialised in the MMG Bulletin so we can all benefit from knowledge of Terry's model building skill. Terry's other model at the meeting was his familiar Fordson tractor with trailer.

This part of my tour circuit is usually quite busy with many bits and pieces jostling for space with Meccano models of all sizes. Amongst the clutter I came upon two small models brought along by **John Bland**. Firstly a diminutive classical windmill modelled in mid red/green parts and, secondly, a rather good looking model of a London taxi, well made and nicely presented in a blue/zinc colour scheme.

In similar vein, **Roger Auger** brought along the Spitfire aeroplane made up from the recent outfit, but with the inevitable minor modifications to improve its appearance, which he described to me. Roger also brought his little Tin-Tin model float plane which looked rather like the float plane version of the DH Beaver to me.

It is well known that **Tony Knowles** is a collector of alternative model construction systems, so it came as no surprise to see some new examples from his collection. Unmissable was his splendid model of Salisbury's Poultry Cross, a familiar landmark to all those who know central Salisbury. The model was made from Construction system parts plus a few "foreigners", in particular, grub screws were introduced in several lengths up to 12mm to improve the neatness of the model. The original medieval cross was basically as we see it today but with fewer decorative details, and without any of the top structure. The "improvements" were made in the mid-1850s. Tony's second exhibit was firmly based on the Tronico range of construction sets, a name I am not familiar with and I have no idea from where they originate. Tronico produce sets to make specific models in a range of scales from 1:16 to the recently launched micro range at 1:64 scale. The holes are 2mm diameter set at 5mm pitch, axles are 2mm diameter and the nuts and bolts have a metric M2 thread. At present, ten sets are available to build 5 different tractors and trailers, either as static models or as powered models complete with infra-red control. The example on display was the working version of the New Holland tractor. The 1:64 scale model was shown alongside one of Tronico's 1:16 scale tractors.

Tony's third construction system brought to the meeting was a small outfit in the "EL IMECHANIKI HDITH" (The Model Mechanic) system. The set was made, probably in the 1970s, at Factory No.10 of the Egyptian Public Association for Army/Industrial Manufacturing at Abu Qyr, near Alexandria. Most of the parts are a good match with German TRIX, but the inclusion of a long strip in such a small set is unusual. Many of the models, although probably inspired by pre-war Trix, have been redesigned and the long strips are used to advantage in some of the models.

Richard Gilbert brought along his latest acquisition in his collection, a Meccano dealer cabinet in nice condition dating from 1928. The display card appeared to be in good order and was still strung with the original parts. Then, to complete my tour, I had a brief look at **Dave Bradley's** model of a VW Camper van modelled in yellow/zinc colours. Typical of Dave, the model was quite large at about 2ft long by 12in wide by 12in high, the scale being determined by the large ash-tray tyres on the wheels, and in his trade mark style the model was kitted out with radio control.

An interesting and successful meeting with rather more members and models present than usual. So many new faces and models that I did not get around all those present before it was time to leave. It makes my job very much easier if you label your models with a few descriptive facts and the name of the builder, and I am grateful to those members who were good enough to give me some written facts about their models.

Without that information I frequently find myself "making it up as I go along". Be warned! I must, of course, mention our traders, John and Linda Thorpe and Mike Rhoades who do a sterling job keeping us stocked with the essentials of life. I must also mention Bob Thompson who works hard to capture our meetings in photographs and, who on this occasion, had his daughter taking photo's as well. Lastly, I must say that I was really saddened when I learned of John MacDonald's untimely passing, and I missed the chat that I invariably had with him and Cynthia as I toured around the meeting. He was always very positive, cheerful and helpful and will be greatly missed by all of those who knew him. (ED. I have taken the liberty of emphasising Mike's point about naming your models as I know how hard this job is = please make it easier).

97th Meeting - 10th October 2015

It was raining on the east coast just before I left for Baginton, but by the time I was on the road the weather had settled down to a bright autumn day. After an uneventful journey I arrived at Baginton village hall to find the familiar buzz of an MMG meeting in full swing. After greeting friends old and new it was down to business as usual – the interesting business of reviewing the large number of Meccano models brought by members to the meeting. There seemed to be a lot of members present and a cursory look around confirmed my observation at the last meeting that our membership has grown in recent times and, once again, some new members were signed up at the meeting. As at the last meeting, the large number of models on display slowed my progress and I struggled to get around in the time available. I know I missed one or two so, as always, my apologies to those I have missed or misrepresented in any way.

I started my personal model tour with the MMG “Establishment” and first off was the splendid model brought along by our chairman **George Illingworth**. It will come as no surprise to learn that the model was of an Iveco fire engine, or to be precise an Iveco/Emergency One light rescue pump of the Warwickshire fire service. The model measured about 18in overall length, it was carefully constructed using mainly red and nickel parts to give an appropriate and impressive appearance. It was nice to see the model displayed together with an original works drawing from which George had scaled his model.

Next was the “Splendid” motor car chassis display model presented by our secretary **Roger Marriott**. The model was based on the Model of the Month instructions in the MM for August 1956 and does not appear to be based on any particular prototype but resembles his old 1936 Morris 8 and the post-war Morris Minor. Those familiar with Roger’s model building skills will appreciate the meticulous care taken in building the model, the use of the correct period red and green colour scheme and the evident attention to detail. The controls are mounted on the front of the display base and enable operation of the two speed and reverse gearbox, the clutch and the brake. The original design has been modified to place the chassis on a rolling road enabling all four wheels to rotate at the same speed and to respond to changes of gear. The pedal and gear change linkages in the original model were provided by cord (!) and these have been modified to provide more positive operation.

Moving on to the next model I found a three cylinder marine steam engine built by our treasurer **Paul Brecknell**. Since this model was described in some detail in my last report, I will not repeat myself here. However, to remind those who may have forgotten, the model was based on the 1950’s No. 9 outfit model (9.18), but heavily modified and built without the limitations of outfit contents. This eye catching model was constructed in pristine light red and bright zinc parts with the flywheel and feed pump cylinders in blue. In Paul’s usual style, the model includes considerably more mechanical detail than shown in the original building instructions.

Then I came to a diminutive mechanical digging machine built from the contents of a modern Evolution outfit by our past president **Ken Wright**. This nice little model was about 12in long and I believe it is a free lance design by Ken and built from the contents of a standard outfit.

Roy Whitehouse is a long standing member who is well known for his impeccable collections of all things Meccano. On this occasion he brought along a small assortment of interesting items including an unusual Dinky Toys Aeroplane set, comprising several restored aeroplanes, in a reproduction box, and a Hornby 0 gauge Palethorpes sausage van mounted in a Palethorpes dispatch box as sent by LMS. And for those with longish memories, Roy also brought along a small clock model built by the late **Les Gines** – it is nice that the memory of some of our enthusiastic late members is kept alive in this way.

Then I came to a collection of six Dinky Builder outfits brought to the meeting by **Colin Bull**. Nicely presented, all of the outfits had been restored to an extent and were restrung as per the originals. Two outfits were early pre-war issue and of the remainder, Colin had painstakingly reconstructed the boxes and the labels to a very good standard.

Tim Martin brought along a small collection of unusual models which suggested that an obtuse sense of humour was lurking quietly in the background. First was a novelty mantel clock constructed in blue and yellow parts and fitted with a cheap quartz clock movement.

His next model was very unusual and rather amusing – a Konkoly Meccano Sailor built in mid red and green colours. The model is basically a pillar about 24in high and down which the sailor, made from a pair of short axle rods and a coupling, rattles when released at the top. Tim used this device as a ten second timer switch to activate his third model which was a small reading lamp constructed in Eitech parts. The idea being to set this contrivance up at the bottom of the stairs such that the lamp lights the stair well. On retiring for the night the “sailor” is released giving Tim just ten seconds to get upstairs before the light is switched off! His final model was a Masterbuilder oil drilling rig; about 18in high, motorised and built entirely in black coloured parts.

Now the next display was the stuff of which health and safety nightmares are made! **Tom and Matthew McCallum** brought along what must be a very rare collection of early Meccano high voltage motors and

ancillary equipment. I counted five motors dating from the early 1920's, at least one of which was low voltage and run from an accumulator. The rest were designed to run directly from the mains supply with various types of rheostat controller. The controllers are visually interesting since they incorporate an early incandescent bulb which acts as a voltage dropping device to the motor. Nothing was shielded and nothing was earthed so the potential for a shocking experience was all there! I found this lovely display all very interesting and caught myself pondering on the longevity of early Meccano enthusiasts!

Probably one of the biggest models we have seen for some time was brought along by **Gregg Worwood** and it dominated the rear wall of the hall. The model comprised a two span viaduct measuring about 12ft long and carrying a railway track of, I think, 4½in, or possibly 5½in gauge. Sitting on the track was a substantial Shay locomotive coupled up to a skeleton log car and a caboose; all very American in style. To give you some idea of size, the rolling stock wheels were made up from a 6in diameter plate and a 5½in diameter circular girder to represent the flange. The standard of construction was pretty good, with a fair attention to detail, and the intelligent use of various coloured parts made for an eye catching display.

Nearby was another large model, a coal loader, built and brought along by **Paul Merrick**. Built largely from red and green parts, the structural aspects of the model were based on various successful designs by Oscar Fontain, Keith Cameron and Brian Compton. However, Paul's strength is in digital systems and he had developed and programmed his own electronic controller for the model. When I saw the model Paul was grumbling that the digital controller sequencing worked perfectly, but some of the mechanical precision was a bit short of the mark! He did also explain that the model is still in development.

Next door were three typical models by **Sid Beckett**. He is a past master at devising models attractive to youngsters and this time he brought a BMX bike, a very small helicopter and colourful rendition of Thomas the Tank Engine. The BMX frame was built up using cleverly adjoined sleeve pieces to represent the frame and the wheels were 3in pulleys with tyres; overall it was about 12in long.

The loco was somewhat larger having a track gauge of 5½in, coupled wheels based on 3in pulleys and an overall length of about 15in. The boiler and cab lifted off the chassis as a complete unit to enable access to the running gear – I know this as when I saw the model Sid and helper were busily trying to banish some gremlins from the interior works. Sid had also done a very good job utilising Meccano part colours to represent the colourful prototype and I am sure his grandchildren have enjoyed playing with this model.

Once again **Tony Knowles** brought along some examples of alternative construction systems from what must be a very large collection by now. First of all a “nodding donkey” oil well pump built from a small Konstrux outfit. Konstrux was a German system dating from soon after WW2 and known to have been produced from 1946 to 1950. The basic hole pitch of the parts is 12.0mm, all parts are finished in matt black and the nuts and bolts have an M4 thread. The model is made from a Deuteron outfit, the second of the five sizes produced. It has 40 different parts, and it is assumed that there were probably more in the larger sets, but no details are available. The nuts and bolts used in the model are substitutes for those missing from the outfit, likewise some of the angle brackets. The motor is of course a commercial item since no Konstrux motor is known to exist.

Tony's next model was of a small dockside crane built from a South African Maakeets construction outfit. Maakeets means ‘make something’ in Afrikaans, and it was the only known South African system which competed with Meccano from the mid 1950s to the early 1970s. But it suffered from poor quality parts for some of that time. The Maakeets system had 86 different parts including strips, angle girders, flexible plates and gears. The hole spacing and screw thread of the parts are the same as Meccano, but some, especially the gears, look similar to those in the German Mekanik system. Other parts are obviously unique to the system, for example, a one-piece crane jib side frame and various corrugated sheets for making crane cabs. Outfits 0 to 6 and a similar range intended for schools were produced and the crane model shown was made from a number 3 outfit, it is complete except for its brackets nuts and bolts. Tony's final model was made from The Empire Educational Kit and is also believed to date from soon after WW2. Curiously the hole spacing along the strips, and plates is 5/8in, but in the cross-wise sense the holes are spaced at 7/16in. Holes are 3.9mm in diameter, the original nuts and bolts were probably 4BA and axles are 2.7mm in diameter. Only one size outfit is known and loose parts are almost equally rare – the lifting bridge model is made from all the parts that Tony has been able to find in over 25 years of searching. In the absence of any genuine nuts and bolts substitutes are used in the model.

Keeping Tony Company was **David Hobson**, also an enthusiastic collector of alternative construction systems. David's contribution to the meeting was a very colourful display of late Trix outfits and models. In the late 1960s and in to the 1970s, Trix started to produce their outfits using coloured parts – blue, yellow, red and green being common colours and this resulted in rather more attractive models, typical examples of which were brought along by David. Three boxed outfits were displayed to show the variety of colour schemes available at that time. The built up models shown included four Trix racing cars made up in dif-

ferent colour schemes, a splendid model of a four cylinder marine diesel engine built from pristine red and green coloured parts and a larger "Gigant" racing car in a fetching blue but, surprisingly made from twice normal size parts.

Moving on, I found myself inspecting a superb model of a 1920s/30s V8 aero engine built from first principles by **Terry Allen**. The engine is destined for a Piccard racing car of which some photo's were shown at the meeting. The engine is a work of art, very compact at about 7½in long, and incorporating a lot of Meccano brassware. Each cylinder appears to be represented by a sleeve piece surmounted by twin overhead valves. The exposed valve gear is an impressive feature of the engine and it is all working, being driven from the crankshaft as per prototype. Small polished cooper pipe is used to represent the inlet and exhaust manifolds, and altogether it is a very fine example of modelling skill. This is definitely not one to be missed, so watch this space.

According to my notes, the next models I came to were built from standard modern outfits collected by **Geoff Devlin**. The models comprised; the helicopter from Crazy Inventor outfit 7650, the motor car with powered drive from Xtreme outfit 6820, the motor car with powered drive and the bug with flapping wings, both from Speedplay outfit 7901. Geoff gave me his notes on these models and all suffered from various deficiencies which made their construction less than straight forward. In some instances he needed additional nuts and bolts and in others the parts just did not fit together as intended. I got a strong sense here that all of the models could have been better designed.

In the past I have enjoyed several conversations with **John Reid** on the topic of his steam threshing machine that he has been chipping away at for time. So it was good to see the finished article at the meeting. The following description was decanted from the note John kindly gave me at the meeting. The model was based on a Ransomes 1926 pattern threshing machine and was built to an approximate scale of 1:10. The source material for the model came from a series of articles in the Model Engineer magazine in 1982/3. The scale of the model was chosen to complement that of the combine harvester described in Meccano outfit 10, leaflet 10.13. The model was deliberately constructed with an open framework to show the internal workings and functions of the many individual components that go to make up a threshing machine. The full scale machines were driven by a steam engine or tractor via a longish belt. The model is powered by an electric motor concealed in the number 1 fan, which is located between the lower main frames just forward of the rear axle, and I can testify that it runs very smoothly and is most interesting to see in motion.

Ken Senar needs no introduction as a builder of exceptional large scale models, so it was sad to learn that his most recent big model, the prize winning Orlyonok, a Russian Ekranoplan wing in ground effect air vehicle is to be his last such model. In future he will concentrate on smaller more manageable models, although I am sure the high quality will remain a principal feature. However, Ken brought along the front fuselage and cockpit section of Orlyonok as a reminder of the outstanding success of this model. In addition we were each given a Bulletin supplement containing a description and photos of Orlyonok prepared by Ken.

He also brought along what might well be the first of his smaller models – an excellent model of a 1920s steam crane built by Grafton & Co. of Bedford. The prototype for this model is in store at Blists Hill Victorian village, Ironbridge. The model has a vertical boiler, appears to run on rail track and is about 18in long, in fact typical of the period. The model is still in construction and is awaiting its jib and rope work, so watch this space for the next instalment on its progress. Ken also showed me a very small aeroplane model built by a young seven year old lady of his acquaintance. He was obviously impressed that the model utilised only four nuts and bolts and few parts, but the result was clearly a well proportioned aeroplane.

Dave Bradley brought along a "minibus delivery van" constructed from Meccano using blue and green parts set off with red wheels to imitate the original Marklin model. Dave downloaded the instructions from the Girders and Gears web site – a useful resource for those not in the know. The van is model number 101 in the Marklin 1014 outfit instruction manual. The model is about 15in long to give you some idea of size and is rather smaller than the models we usually associate with Dave.

However, the van was quite over burdened by the most unusual model alongside which was brought along by **Richard Smith**. The model was called "Jamie and his trike" and represented a young lad on his little three wheeled tricycle, constructed at a scale close to full size. If you did not see the original of this model you will probably need a photo to appreciate what I am trying to describe. The trike was modelled from mid red and green coloured parts, the rear wheels being built up using 5½in circular girders and circular plates, and the single front wheel was built up in a similar way to give a substantial finished wheel of about 7½in diameter. Jamie was represented by his skeleton, comprising strips, girders and brassware all finished in a pale blue colour. The whole construction was then placed on a rotating turntable based on a very nice red and green geared roller bearing for display purposes. I think Richard must be commended for his imaginative choice of model, the high standard of his modelling skills and the excellent degree of finish

he managed to obtain.

As an aeronautical engineer the next model I came to was very firmly in my “ball park”. **Neil Bedford** brought along his very nice model of a German Hannover CLIII ground attack aircraft, a biplane dating from WW1. This model was very nicely put together utilising a convincing mix of yellow and zinc parts, and appropriately set off by the addition of German aircraft markings. The model was about 15in long with a wing span of about 18in and set up on a stand for display purposes. I have often been tempted to build aircraft models, but I usually give up when considerations of the construction of a small cambered wing section come to the fore. I am most encouraged by Neil’s excellent work, as he managed most successfully to build a twin skinned cambered wing section with a chord of about 3in only – no mean achievement that!

And now for some road vehicles, the first of which was built by **Peter Evans**. The model is an accurate scale model of a MG L type Magna Salonette Sports Saloon produced in the 1930s. The car is a four seat, two door sports saloon. The model was constructed using parts painted to match the typical MG green and with the trim modelled with zinc parts to represent the original chrome finish. The overall length of the model is about 15in. Features of the original car which have been incorporated in this model are, a sliding roof, a rear luggage compartment boot and bucket seats which tilt forwards to allow access to the rear seats. When the boot lid is open, a trunk or picnic hamper could be carried with straps to secure for the journey. A foot well provided extra leg room for the rear passengers. The spare wheel is carried in the front wing on the passenger side. I am grateful to Peter for that brief description of his very fine model.

Next door was two trucks built by **Michael Bent**. What I found was a pair of similar open back trucks constructed to about outfit No.8 size in mid red and green coloured parts. They were obviously variations on a theme as Michael described one as a Bedford truck and the other as an Austin truck, and as far as I was able to see, one of the trucks incorporated a tipping mechanism. Both trucks were about 15in long and provided a nice comparison which served to indicate their differences and similarities.

Coming to the end of the row I found **Paul Hubbard** engaged as always in the construction of his latest model project. He had just started the construction of a heavy lift railway breakdown crane. The original model design was by Tom McCallum and appeared in CQ71 some time ago. At the meeting the crane chassis was at a fairly advanced stage of completion and Paul was working on the cab and match truck. When completed this model will be about 3ft long and we can look forward to seeing it at the next meeting.

On the next adjacent corner was the undercarriage of a very large crane in the course of construction, brought along to the meeting by **Richard Payn**. The prototype was a Sobemai balance crane; a very large modern version of a dockside crane and of which Richard showed me some photo’s. The massive undercarriage measures about 2ft wide by 2ft 6in long and stands on three large tracked bogies. It is built in a red and green colour scheme and incorporates a substantial amount of mechanical detail typical of Richard’s models. Each bogie is about 9in long and the track comprises many 2½in flat girder sections hinged together – the total number of hinges used for the three bogies totalled 204, which represents a considerable investment! So far this is an impressive achievement, but the superstructure is even more massive, the finished crane will be quite enormous and will incorporate a lot of complex mechanical detail. One to look out for next time although I expect that it will be difficult to miss!

I was then “buttonholed” by **John Hornsby** who wanted to tell me about his new model of an equally massive crane, currently in construction. The prototype for the model was a Gottwald AK680-2 mobile crane and John’s model will be built at approximately 1:16 scale. To put things into context have a look at this crane on the internet – it is very large and the mobile chassis has no less than 10 pairs of steerable wheels! (You will also find it enlightening to check out **Richard Payn’s** Sobemai crane on the internet whilst you are at it.) So far John has made the massive 650 ton 14 sheave block, the 325 ton 7 sheave block and the 90 ton single sheave block all fitted with “rams horn” hooks. Also on display was a rather smaller 30 ton single hook block and one of the two trestles used to support the boom whilst rigging. All he has left to make is the crane, and this will take a very substantial amount of Meccano parts to complete. Another one to look out for next time which will also be difficult to miss!

Continuing with the crane theme, I then came to a much smaller model built by **Roger Burton**. The model was the “Jumbo” mobile crane, built from the correct period red and green colours, and for which building instructions are given in the No.8 outfit manual from the 1950s. Roger provided us with his appreciation of the model as follows; parts of the crane were easy to build but others were somewhat difficult because of the lack of detail in the instructions. The steering linkage was rather crude, being a long arm attached to the steering column and protruding through a side window of the cab. This was then attached to a long rod which ran alongside the body before disappearing inside the rear part of the crane body. His modification is not very pretty but at least it is hidden underneath the crane. The jib side frame structures are fairly flimsy and the separation between the frames is critical where they come together at the front. Having said all that, it was an interesting model to build and is somewhat different from the mobile cranes we see today.

The last point was very well made given the company he was keeping at the meeting!

Having had my fill of cranes, it was then a pleasure to look at a smaller model of a Yorkshire steam wagon built by **Dave Phillips** in his usual pristine style. For those who don't know, Dave's models are always scaled for easy transportation and they are pristine since he restores and repaints all of his parts, which others might simply reject. Dave explained that the model is his freelance interpretation of a steam wagon having the less common layout in which the boiler is mounted horizontally across the width of the cab. It looked very attractive in its predominantly red and green colour scheme and measured about 15in long.

Next door it was good to catch up with **John Palmer** again who I had not seen for some time. It was no surprise to see that John brought two small trucks to the meeting. The first was the Leyland truck built from the No.6 outfit instruction manual from the 1950s. This is a fairly basic model, but never the less, it looked nice when put together carefully using the correct period mid red and green coloured parts.

John's other model was his own interpretation of a breakdown recovery truck built using the same approach as for the Leyland truck and at a compatible scale. This model made very good use of blue plates and zinc coloured strips and girders to give a most attractive reproduction of the original prototype, a photo of which was shown next to the model.

Next on my tour I came upon a collection of assorted smallish models brought along by **Phil Rhoades**. The small models comprised an excavator and a traction engine made up from various smaller outfits. He also had a No.1 clock kit, shown built up but not running. Of particular interest, Phil had a No.7901 modern Meccano outfit which he picked up at a car boot sale and which builds a futuristic looking grey plastic sports car. What caught Phil's eye was the electric screw driver provided in the outfit for assembling the model. However, the screw driver is subsequently used as the motorising pack for the car. Since this unit has a geared output and self contained batteries, it could make a useful power source for lots of smaller models without the problem of trailing wires. Neat!

We usually associate **Terry Pettitt** with compact but mechanically very detailed road vehicle models built to an exceptionally high standard. However, on this occasion he brought along an equally fine model of a Metropolitan Vickers single cylinder horizontal gas engine. Terry informed me that the model has made an appearance on a number of past occasions, so it is not new. As always, the model was very carefully constructed, it measured about 12" long and was running quietly and smoothly when I saw it.

The same display space was also occupied by two transport models brought along by **Brian Edwards**. Brian needs no introduction as a builder of compact models, always in mid red and green colours and usually within the scope of a No.10 outfit. His first model was of a 1950s Sentinel lorry, with under floor engine and configured for use by the British Oxygen Co. for the bulk transportation of liquid oxygen. In this format, the rear chassis carried a large insulated flask of unmistakeable shape – quite a feat in itself to get that shape right in a small model. Typically for Brian, the model was about 15in long and very nicely presented in his trade mark colour scheme. Brian also brought along a model of a 1950s BSA motor cycle and side car in the distinctive style of the AA. I wonder how many members can remember seeing those out and about on the roads?

Some time ago **Mei Jones** built the sports car model 4.17 from the 1950s No.4 outfit, resplendent in the correct mid red and green colour scheme. This model was reported on after the October MMG meeting in 2012. Encouraged by the complimentary comments about that model Mei decided to build another version in an imaginative alternative colour scheme, so he re-painted some surplus strips black, hence the black, yellow and zinc presentation of the new model. This model also includes the addition of an external spare wheel and there is no doubt that, seeing the two models together, the new colour scheme is an eye catching success. Whilst on the nostalgia trip, Mei also brought along the forge crane model 6.16 from the 1950s No.6 outfit instructions. However, his choice of parts was for blue, yellow and zinc colours fixed together using allen head bolts. The model also incorporates several alternative parts to improve it in general. In particular Mei chose to use angle girders to replace strips and the composite strips have been replaced by ones of the correct length. The use of the 'narrow' version of some brackets helped with the alignment of the running rails. So it seems that there is still plenty of mileage yet in those popular 1950s models built from the standard outfit instruction manuals.

The next model I came to was the "Giant Dragline Excavator" as featured on the covers of many Meccano instruction manuals from the 1950s and built by **Terry Wilkes**. I do not know if Terry made use of MP87 building instructions, or whether he simply "eyeballed" the model directly from an instruction manual cover. The model looked very authentic to me having been modelled very nicely using yellow, blue and zinc coloured parts. The information provided by Terry tells us that he managed to build the model from the contents of a late No.10 outfit together with a few extra parts and the motors to drive it.

Tony Homden often comes up with some novel ideas for his models and on this occasion his focus was clearly on the Spitfire aircraft as built from the Meccano single model outfit. Firstly, he is of the opinion that

the Spitfire model was poorly designed, particularly the engine cowling which bears little resemblance to the actual aircraft. The use of the special banana shaped flexible plate, part number B709, seemed to be the problem.

Tony rebuilt the spitfire model and by substituting a two and a half inch square flexible plate for the “banana” plate achieved a much more realistic result. An extra half an inch was added to the length of the nose which gives a more realistic appearance. He also lengthened the rear fuselage and rebuilt the wing to a more authentic outline. Other modifications included the addition of 5½in strips fitted across the fuselage to join the wing panels together, a much simplified propeller attachment, improved cockpit glazing using a long transparent plate curved to fit, minor changes to the tailplane, fin and rudder, and the addition of white invasion stripes.

Secondly, using a similar Spitfire model, Tony mounted it into a suspension structure so that it could be activated by a control stick and hence demonstrate the motion of the aircraft. The model is mounted on a vertical rod in the suspension frame such that it can roll, pitch and yaw in response to the control stick and rudder bar, via a complex interconnecting mechanical arrangement. An electric motor drives the propeller, which is loose on the motor shaft and spins due to friction, this is a safety feature to prevent injury. The wing mounted “cannon” are represented by red LEDs fitted into rod and strip connectors. The propeller is started by operating the “ignition” switch to the “on” position and depressing the start button briefly. The motor receives a starting voltage of ten volts which spins the propeller up to a very high speed. Releasing the button causes the motor voltage to drop to about three volts for continuous running. Another interesting feature is gun firing, activated by a push switch at the top of the control stick. Depressing the button activates a PDU in a separate control box, which drives a standard Elekritik commutator to supply intermittent power to the red LEDs in the wing mounted cannons. All together rather interesting – it is surprising what can be achieved with a small model Spitfire and a lot of imagination.

And now for something entirely different; a superb model of a Tandem Compound Mill Engine built by Howard Somerville. Howard’s note informs us that the model is based on the 1894 Roberts “Peace” engine in Queen Street Cotton Mill Museum, Burnley. Running at 68 RPM, this 500 HP engine powered the whole mill, simultaneously driving over 1,100 looms and other machines via belts, pulleys and 2,250 feet of shafting. The model was built to an approximate scale of 1:10 measuring about 3ft long, 1ft wide and having a flywheel of 12in diameter. The model was built to the very high standard that characterises Howard’s models together with an exacting attention to detail in the valve gear, which is complicated by the fact that the engine is a horizontal tandem cylinder type. The model is ideal for display purposes and runs continuously and quietly for as long as required. Every 25 seconds, it demonstrates the action of the centrifugal governor regulating the engine’s speed by adjusting the Dobson trip gear on the Corliss valves of the HP cylinder. A superb model which performs as good as it looks.

Continuing my model tour, at the other end of the hall I came to our president **Geoff Wright** who had brought along his Grandfather Clock for our delectation. Since I was running out of time I am grateful to him for producing a decent write up for me, most of which follows. Since the clock was built some years ago, some of Geoff’s information is not as good as he would have liked. However, it gives us a good overview of the problems associated with Meccano clock building. The clock was designed and built from the contents of a mid 1950s medium red and green No.9 Meccano outfit with the following additions:- Nuts, bolts, washers and spring clips in particular. To provide the critical 60:1 gear ratio for the second hand drive, an obsolete 20 tooth pinion was substituted for a 19 tooth pinion and zinc plated parts were used for the clock hands to improve their visibility. When first built the clock had some problems achieving reliable operation of the escapement which employed a 36 tooth sprocket as an escape wheel. This year Geoff decided to have another attempt at completing the model, after reading a constructional article in CQ describing a Meccano clock by Dr. John Stark, who had a similar problem with its Meccano Sprocket escapement. This he cured by substituting an Ashok replica sprocket. Dave Taylor stocks these, which finally enabled Geoff to achieve successful continuous running. At this time Geoff carried out several other modifications to the clock to enable easier dismantling and re-assembly for transport and, among other items, he fitted adjustable feet to allow levelling. Since so much time has elapsed since the start of this project Geoff can no longer be sure that the clock can be constructed from a No.9 outfit. Features of the clock include a single hourly strike, a days of the month dial and, following a challenge by Frank Paine of SELMC, another dial shows the phases of the moon. These two secondary dials employ driving band reduction drives which give a reasonable approximation to the required ratios. A few additional bands were required for this modification. Taking the long view, Geoff reckons that this model has been the most challenging and complex model he has ever attempted, and it will be a relief to return to his usual transport modelling.

Unfortunately I ran out of time before I had quite finished my tour and I missed **John Ozyer-Key**, so I did not get a proper look at the heavy engineering which is his undisputed domain. He brought a model of a

Tatra 8×8 pipe carrier vehicle. The prototype is a seriously heavy duty vehicle which can be configured for various roles and is manufactured in Czechoslovakia. The pipes this vehicle shifts are about 3ft diameter and about 30ft long. The vehicle is sufficiently robust that it can be used in all terrain operations as well as on normal roads. Needless to say it is also used by various military forces around the world. I would recommend that you check this vehicle out on the internet and I am sure, like me, you will be impressed that John tackled such a project. However, he has an exemplary record for building big Meccano road vehicles which incorporate a lot of fine mechanical detail and I am sorry I missed the opportunity to inspect this one. For the same reasons I also missed the models brought along by **Geoff Burgess**. His listed vehicle models were also equally muscle bound but dating from an earlier and mechanically simpler age. His first model was of a Foden Timber Tractor.

His second model was of an ex-RAF Thorneycroft mobile crane, the kind of crane frequently seen on RAF airfields not so long ago. Unfortunately, that is all I can tell you about these models.

Whilst in the heavy duty vehicle domain, I almost missed **Mark Rolson**. However, I did catch him for long enough to have a brief look at his latest engineering masterpiece. If I got it right, the prototype for his model was a Ford Doe 4wd articulated tractor – the kind with two engines, one forward and one aft of the chassis articulation joint. As ever Mark has made an excellent interpretation of the original, taking care to model the mechanical detail correctly. His choice of colour scheme favours the prototype really well, being blue and yellow. To give you an idea of size, the 4in diameter built up wheels are fitted with the familiar large scale “ashtray” tyres and the overall length of the model is about 24in. I must have proper look at this model whenever I next get the chance.

Then I got as far as my good friend **Colin Reid** who brought along a typical assortment of Meccano miscellanea, most of which he had acquired at ridiculously low prices at auction. Several steam engines were in pride of place and included a 1914-22 Meccano (Bing) vertical boiler engine, the classic 1929-34 Meccano vertical boiler engine, a 1970s Meccano/Mamod engine and a small 1950s SEL Minor engine. He also reported that a few days earlier he had acquired a 1966 Meccano No.10 outfit in a four drawer cabinet, all in very clean condition for the paltry sum of £300. I don't know how he does it! Nearly every time I see Colin he has a similar enviable story to tell.

Apart from himself and his latest photo material, **Bob Thompson** also brought along a new Meccanoid G15 programmable robot. Once set up, the robot is set in motion by spoken commands. Unfortunately, like most of my experience with speech recognition software, the receiver frequently fails to recognise the command correctly. Bob tried to get the robot working for me but it had a few problems of misunderstanding and either ignored the command or did something else. I don't think this Meccanoid is ready to take over the world just yet!

Bob also brought along some hardbound collections of his excellent Meccano photography produced to a superb standard. I did not have enough time to find out more about these collections, but I believe they can be produced online provided the material is edited into shape first. As ever Bob was kept busy working hard on his photo record of the meeting.

His new model title cards seem to have worked well for the first time at this meeting. However, we all need to be more rigorous in their use in future. The cards helped me quite a bit, they helped George on his model tour and they also helped Bob with his photo records.

The next model I looked at was a fine version of the 1931, 4½ litre Blower Bentley beautifully modelled in mid red and green parts by **Tony Wakefield**. You will remember that I reported on this model at the last meeting when it was not yet complete. Tony was anxious to show me that he has now finished the model and in particular he has managed to fit it with a folding hood which he demonstrated to me. He also pointed out one or two other refinements and I can recommend that that you look out for this evocative model in the future.

The last model I looked at very briefly was an astronomical clock in the style of a grandfather clock, brought along by **Richard Howard**. The clock is GSM6 by Pat Briggs in the GMM modern supermodel series. The model is not yet complete although I believe the clock is working. In Richard's words, “the astronomical functions are to follow”! I hope we will be given the chance to see the further development at the next meeting.

Having arrived at the piano corner I realised, once again, that I had missed the models brought along by **Mick Burgess**, which usually adorn the piano. Since he leaves at lunch time I often fail to get to his models in time to report back. However, Bob's little title card saved the day as Mick had listed his models on one of these cards. So all I can give you is the list of the models: Model 8.14 – streamlined open top sports car, model 7.4 - giant articulated lorry comprising tractor unit and low loader trailer and model 7.8 – side tipping wagon. All of these models are described in the mid 1950s outfit 7/8 instruction manual. Mick's fourth model was another car built from a description in MM, presumably also of 1950's vintage. And that concluded my

own personal model tour.

It would not be appropriate for me to sign off before acknowledging the presence of our resident “wheel-er dealers”. It was good to see **Mike Rhoades** again with his familiar orderly selection Meccano parts, items and literature. The back room was about half full with a vast array of Meccano parts, outfits and literature under the watchful eye of **John and Linda Thorpe**, some even spilled out of the building onto the back lawn. As always, Tom and Matthew McCallum brought along a very modest assortment of parts for disposal at knock-down prices. Quite a lot of stuff was also being sold by MMG on behalf of the widow of the late Mike Brammer. So, there was plenty of scope for those enthusiasts seeking to boost their Meccano collections – unfortunately I did not have enough time to spare to browse.

Finally, you should be aware by now that, once again, I ran out of time before I could note all of the models and builders present at the meeting. This is due to the fact that over the last two years or so, the number of models and modellers has increased by nearly 50% and the number giving me a brief written description of their models has declined. If you would like to see a decent write up of your models in the report then it would be extremely helpful if you would give me a brief written description (200~300 words) of your models at the meeting. I can scan printed text into the report very easily, but hand written is OK too. If nothing else, please complete one of Bob's new title cards on the day. A last word if I may. There was a large number of models at the meeting and all, with one or two exceptions, were of a modest size. However, the general quality of a large percentage of the models was of a very high order such that it was pleasure to have a closer look – it would seem a pity if these models were not properly recorded for want of some essential information.

98th MMG Meeting - Saturday 26th March 2016

I am not so sure whether a miserable, damp, grey Easter Saturday is a good day to hold our meeting or not. However, as always, the atmosphere in the hall was as warm and busy as ever. I personally thought this to be an excellent meeting since we had a good variety of new models present and overall their general standard of presentation and quality of construction was very good.

Also, I managed to get a good look at most before it was time for me to leave. So, after many conversations with acquaintances old and new I went home with enough material to write this report. However, it would help considerably if every model was labelled with the builders name and I would appreciate more short model descriptions as this enables me to keep things relevant. My thanks to those who did provide me with some written material and, as ever, my apologies to those I have missed or misrepresented in some way.

On this occasion my model tour started with our Chairman **George Illingworth** who showed two of his (many) fire engine models. The first was based on the Ford AA motor pump dating from 1935 and made imaginative use of red, zinc and gold coloured parts.

The second rather larger model was based on the 1970s Thornycroft Nubian airfield crash tender which was constructed mainly using yellow and zinc coloured parts. Both models were built to approximately 1:12 scale and represent a small part of George's collection of 49 fire engine models, so far!

Alongside, our Secretary **Roger Marriott** who brought along a pair of railway breakdown cranes. Both were built using correct period blue and gold parts, the smaller model from the 1937 outfit 5.11 instructions and the larger model built by **Roy Whitehouse** in restored parts from SML 30, and purchased by Roger in Roy's recent sale. It is interesting to see how Meccano really made the best of a successful model design and this particular prototype may be found in the instruction manuals of many outfits in addition to the pair shown here.

I was pleased to see **Charles Catt**, a member of MMG since the beginning of time but, as far as I can recall, this is the first time I have seen Charles or one of his models for over 20 years! The model he brought along was built from a small modern French outfit – the Mountain Rallye 25 rally car. This small model measured about 12in long and comprised mainly black parts with some features picked out in "dayglo" green. Quite an attractive little model.

Michael Bent also decided to join the fire brigade for this meeting and brought along his fire engine model built from the 1938 No.8 outfit instructions, also nicely modelled in the correct period blue and gold colour scheme.

Next, **Richard Payn** brought along his substantial model of the Jones KL66 mobile crane built mainly in yellow and dark blue coloured parts from MP101. The original model design is attributed to the late Hugh Henry, rebuilt by Mike Edkins and written up for the model plan by Tony Brown. Richard's model was a trial run for a revised version with some improved mechanical detail. I was also most interested to see some mechanical constructions built by the late Rod Rich who had a reputation for manufacturing his own "Meccano" parts, in particular black anodised structural parts and a wide variety of non-standard brass gears.

Mei Jones brought along a collection of smaller models, being favourites from his more youthful days - a trip down memory lane as he put it. All of the models were well made using pristine parts to make a very nice presentation. The collection of models included a mobile crane from 1953 No.6 outfit instructions, the fork lift truck model No.6.18 of 1954, the windmill model No.6.3 of 1954 and the sports car from the 1953 No.4 outfit instruction manual.

As always **Tom and Matthew McCallum** brought along some extremely rare items from their extensive Meccano collection. These interesting items comprised a 1913 windmill outfit together with the little windmill made up using the correct nickel plated parts, an early Scientific Series outfit and a prototype 000A outfit, the latter is believed to be a one off dating from about 1930.

Tom and Matthew also brought along a mechanical man constructed using mainly red and green parts, but I failed to establish his pedigree!

Nearby **Pete Evans** was showing off his very nice model of the 1931 MG Ex120 C type Montlhery Midget sports car. The model is about 15in long, very carefully put together using red parts and with a fair amount of attention to detail – altogether a very nice job.

Pete also succeeded in confusing the cognoscenti by bringing along his substantial model of a Ruston Bucyrus Erie 150 excavating machine and failing to put his name on it! This too is a very nice model but was temporarily out of action at the meeting.

Moving on I came to a pair of small neat models built by **Neil Bedford**, firstly a yellow lorry crane built from a modern Meccano Evolution outfit and secondly, at a similar scale, a model of the AEC Matador chassis, mounting a Coles crane and painted overall in RAF blue to represent WWII RAF issue.

Now for something rather different; Meccano models of musical instruments have not been “top of the pops” in the past for obvious reasons. However, **Richard Smith** is about to change all that with his full scale 12 string acoustic guitar, and what we saw at the meeting was the not quite finished instrument. He hopes that in due course it will be playable, but I fear that might just be wishful thinking as it takes most of a No.10 outfit to construct and only the very strongest of musicians will be able to lift it! Listen out for it at the next meeting and we might just be impressed.

Greg Worwood is a relatively new member of MMG but already he has made his presence felt by bringing along his very large models. At this meeting his chosen subject was the Land Rover Defender vehicle to commemorate its recent passing, having been in continuous production since 1948. The model was fitted with suitably authentic large diameter wheels and tyres. At approximately one quarter scale this is a big model measuring about 40in long.

Greg also brought along his very own authentic “Blue Plaque” - a present from his niece in thanks for his officiating at her wedding !

Nearby was a rather smaller model by **Terry Wilkes** – a Massey Ferguson tractor together with its rotary muck spreading attachment. Both items were very nicely constructed to include some realistic mechanical detail, and coupled up ready for action measured about 20in over all.

The next model on my tour was unmissable and its very large colourful presence dominated the room. It was the Isle of Man Laxey water wheel superbly constructed and presented by **Colin Bull**. His careful construction and choice of colour scheme, predominantly red, yellow and zinc, resulted in a very attractive model indeed. Colin started building from the GMM No.8 model plan, which he soon abandoned as being inadequate. He then did his research and built his much more accurate rendering of the original. The model measures up at about 9ft 6in long, 18in wide and 33in high. The wheel is 26in diameter. The viaduct is a shortened version as the prototype is about 600ft long with many arches. The model is powered by a non Meccano electric motor and breaks down into three sections for transportation. (Ed: the model will be at Gaydon– so look out for photos in the September MMGB)

Alongside I found some alternative system models built by **David Hobson**. First was a superb model of the Chichester market cross modelled entirely in zinc plated parts from the modern Eitech construction system. The model embraced a considerable amount of structural detail and measured about 12in wide and about 18in high.

David's next model was a 1916 WW1 tank made from an earlier Primus system outfit – model No.362. The model looked very good since the tracks were effectively modelled using fabric strips with short “grip- per rods” attached transversely every 1½in, or so, along the track fabric.

Not to be outdone, Meccano produced a special model No.403 in 1917 to a similar scale and David also brought along this model for comparison. Interesting to see two rivals together and in my opinion I think the Primus model is the better looking of the two.

Our other specialist collector of alternative construction systems, **Tony Knowles**, brought along a very nice model of a riverboat engine assembled entirely in the nickel plated parts from an American Model Builder (AMB) outfit. The AMB system was introduced in 1912, it was more or less a direct copy of Meccano and was its first serious competitor. Production of AMB ceased in 1921 after Hornby's lengthy but successful legal action for copyright infringement. The initial range of 62 parts was similar to Meccano, with the addition of sprockets, a rack strip and eccentric wheel. All relevant parts had bosses tapped 6/32 which, curiously, was smaller than the 5/32 thread of the nuts and bolts. By 1914 the range of parts had grown to include electric motors, gears, spoked wheels and other familiar small parts. Seven AMB outfits were produced, all included an electric motor and the largest was bigger than the largest No.6 Meccano outfit of the time. The model is of an early riverboat engine developed in America in the 1820s.

Although they were regarded as being rather crude they were very successful and remained in use into the 20th century. The main structural parts were originally wooden but by the end of their long life some of these were replaced with metal parts. The early valve gear was also improved to include two eccentrics to give better engine control.

Then it was back to some more traditional offerings, starting with a very nice model of the AEC Ranger touring coach of 1935~1936 vintage constructed by **Brian Edwards**. Obvious features of this model include the sunshine folding roof and the effective attempt by Brian to use red and yellow parts to reproduce the livery of Westcliffon-Sea Motor Services. The model measures about 20in long and about 6in wide.

Moving on to **Ken Senar** who brought along a pair of model cranes derived from his visits to Blists Hill Museum at Ironbridge. The first model was an accurate version of a Grafton 5 ton travelling steam crane. Superbly well made to a scale of about 1:10, all the mechanical functions of the crane are correctly reproduced and it looks splendid in its red and zinc colour scheme. Ken's second model was a much more modest affair – a hand operated canal side crane, which was also reproduced with the care and precision that

we associate with this modeller.

It is well known that **John Palmer** likes to make smallish models of every day road vehicles, so it came as no surprise to see the two new models he brought to the meeting. The first was a typical breakdown truck, built in his familiar style, to his own design and resplendent in blue and zinc colours. His second model of an articulated vehicle with a long low loader trailer and also featured a blue and zinc colour scheme, but was built to a smaller scale. So both models were of a similar size each measuring about 12in long.

Equally well known is **Dave Bradley's** preference for radio controlled models of VW vehicles built to a substantial size. Dave brought a model to this meeting that I have not seen before, namely a VW T26 pick-up truck with a matching two axle trailer. Presumably this model is representative of the kind of kit the chaps who mend pot holes might use since Dave had furnished the trailer with an assortment of tools appropriate for that task. Built using mainly yellow and zinc parts, incorporating the usual RC control gear and measuring up at about 30in long by about 12in wide.

Jim Gamble is probably best known as the pre-eminent Meccano collector and historian and usually brings some interesting items to the meetings. This time his "exhibit" was rather more topical than usual – the flat bed truck and trailer built from the 1949 No.9 outfit instructions in the correct mid red and green colour scheme. The important point of interest is that the model was constructed by that scruffy TV "celebrity" James May in his very public bid to recapture his youth. I guess we can all identify with that worthy aspiration!

Coincidentally, the next model I came to was **Geoff Wright's** new Routemaster London bus, also constructed from a 1950s No.9 outfit. In 2008 Boris Johnson promised a new Routemaster bus for London, to replace the single deck articulated 'Bendy Buses' if he was elected mayor. One feature he was most keen to incorporate was the open rear platform. Duly elected, his pledge was developed into a bus no less than four years into his time as mayor. The new bus is most attractive and is distinctly different from the traditional rather box like designs. Geoff has designed and built the model to a scale of 1:14 so as to use 2" Pulleys and tyres, similar to his 'Interstation C' Leyland Cub model, which was also present at the meeting. Like all of his recent projects the model is limited to the contents of a mid fifties' red and green No. 9 outfit. The outfit does not incorporate sufficient parts to model much of the interior, especially the upper deck floor. However, the remaining parts will be used to incorporate further detail in due course.

George Sayell is also a tethered model car racing enthusiast and has built an experimental working Meccano car – the "Binns Road Special". He explained that tethered model car racing was a popular sport in this country from just after WW2 until the 1960s. The model runs around in a circle tethered to a central pole and is timed over a set number of laps. Traditionally model cars are made from wood and metal and are powered by an internal combustion engine but there is now interest in the use of electric power. The 'Binns Road Special' is a prototype using a model boat motor, battery and redundant Meccano parts. George also brought along a mobile crane built from instructions in MM for October 1954 and a sports car built from the modern 7700N outfit.

Next, I came to a familiar looking model built by **Dave Phillips** – a Robey Express Steam Tractor. Dave's models are usually built to a "comfortable" scale, giving the model a length of about 15in, they are mounted on a baseboard for display and notably, they are built from restored parts painted red and green. The quality of the restoration and construction is excellent and Dave's models make for a very attractive presentation.

Top marks to Dave too for bringing his young grandson **James** along to the meeting together with three of his small models (seen left); a biplane, a digger and a Skidoo. (whatever that is!)

A great introduction for James and I hope we will see more of him and his models in the future.

New member **Carl Gill** got off to a good start with MMG by bringing two examples of his accomplished model building skills. Firstly, a double deck bus equipped with the Meccano infra-red controller for remote operation. To give you some idea of size, the bus measured about 15in long by about 5½in wide. Carl's second model was a substantial interpretation of the Blackpool tower, built in mid red and green colours it stood about 3ft high. It looked like a typical dealers display model to me, but I failed to obtain any further information about the model.

John Bland also brought along a model of a bus to a similar scale and size. However, John's model was of an open topped touring bus, very nicely constructed in mid red and green parts. John also brought along a steam wagon, but when I saw it, it was lying on its back whilst the internal works were receiving attention.

Next door **Tony Brown** was showing off several large trucks of some historical interest. The flat bed Transport Lorry and Trailer were built from the pre-war No.10 Meccano outfit instructions. It is an attractive model which is impressively large, at about 6ft long, but mechanically it is something of a let down, being underpowered with a weak and not particularly effective clutch. Also, it is almost impossible to access the motor once the model is complete making it difficult to operate. It is evident that this model incorpo-

rates an unusual combination of coloured parts and one which would probably not have been seen in this country. The combination of green strips with blue and gold flexible plates was the export colour scheme used for certain countries within the Empire and South America at the time. Tony is currently restoring this outfit which dates from around May 1940 and should have gone to South America. However, presumably because of the export restrictions applying at the time, the set was never delivered and remained in this country.

Tony's other trucks were Gilbert Erector "White" Trucks so called after the company which manufactured the prototypes. Gilbert Erector introduced these models in the late 1920s and they remained in the range for several years. Two of the models are based on instructions in the 1927 manual and one of the two sets used is one which was marketed in the UK in the early 1930s. A number of special parts were included to improve the fidelity of the models. The third truck was built from one of the last outfits to contain any of these special parts, a simple bonnet and radiator pressing in particular, and is an outfit from the early 1950s for the Danish market.

Another of our collectors, **Richard Gilbert**, brought along some small 1960s Meccano accessory outfits. For the purpose of comparison, the outfits on display included No's. 0A, 1A and 2A as manufactured for the UK market, and No's. 0A, 1A and 2A as manufactured for the Spanish market. Together they made a very colourful display with plenty of opportunity for the eagle eyed to spot the differences.

Terry Pettitt brought along his latest model of a Fowler/Field Marshal Tractor which was a tracked version of the more common wheeled model. I am indebted to Terry for the following description of his model. The tractor was powered by a single cylinder two stroke engine of 6" bore by 9" stroke installed such that the cylinder was mounted longitudinally at the front of the frame with the crankshaft and transmission shafts mounted across the frame behind the engine. Steering was by means of brakes on the differential output shafts. The model follows the original as closely as possible and uses standard Meccano plastic tracks. A non Meccano motor is fitted at the front of the frame in the position occupied by the cylinder on the prototype but a powerdrive motor could probably be used. The motor drives the flywheel shaft by means of a contrate gear. A complex gearbox arrangement is driven from the flywheel shaft to give three forward speeds and reverse, followed by a high and low ratio drive to the tracks. The differential output shafts are fitted with hand operated brakes and at the outer ends a 25t pinion engages a 60t gear attached to the track drive sprockets. Track suspension was by torsion bars but a transverse leaf spring is used on the model. The plastic tracks work well and can produce a substantial pull, their main drawback is that they are rather too narrow.

After the last meeting I reported on a version of Brian Compton's Coal Loader constructed by **Paul Merrick**. At that time Paul was having a number of problems with the electro-mechanical functions of the machine. I am now pleased to report that he has resolved the difficulties and the machine was working perfectly when I saw it at work.

Alongside was yet another example of **Brian Compton's** wizardry in the form of an electro mechanical device which beavers away and achieves nothing! The machine comprises a crane grab suspended from a gantry and a small truck on rails below the gantry. The truck and grab bogie can move from side to side under the control of some programmable electronics. In operation with the grab and truck at one side of the machine, the grab takes a mouthful of dried lentils from the truck, both the grab and truck then move to the other side of the machine when the grab puts the lentils back in the truck.

A very good demonstration of the power of electronic controllers and also of an "exercise in futility!". (I hope I got this description right.) It is worth taking the time to have a good look at this machine as it makes interesting use of the rack strip and rack segment parts.

Paul Hubbard had acquired three of the small Red Arrows aircraft outfits and decided to create a display model to show them off. His model comprised a powered turntable mounted on a raised base and the turntable carried three radial arms to carry each of the aircraft models at their extremities. The overall effect was much in the style of a fairground ride and the display was seen operating for most of the time at the meeting. Paul also brought along a number of small models made up from the Meccano single model outfits.

And finally, on this leg of my tour I came to **Sid Beckett** who brought along a typical example of his smaller child friendly models – an Octopus fairground ride. The original building instructions for this model were written by Dr Keith Cameron and published in MM in 1981. The model was designed within the scope of a No.4 outfit and the original ride had four arms with cars. Sid's version is a development of the basic design to eight arms with cars, otherwise it all looks familiar.

Mick Burgess brought along a very colourful display of small road vehicles built from 1950s/60s No.4 and No.7 outfits. The Jumbo mobile crane in blue, yellow and zinc was built from instructions in the July 1985 Airfix magazine. An outfit No.4 model, it has recently been confirmed as an original Bert Love design.

The light red and green Streamlined Sports Car, nominally model 4.11 (1962-69), was modified to improve the match between the front end and the rear end. The second light red and green Sports Car was built from outfit instructions 4.15 (1962-69). The mid red and green Saloon Car was built from instructions published in MM for April 1948. The model is powered by a Magic Motor and it is believed that it was probably developed to become model 4.35 in the 1954-61 instruction manual for outfit No.4. Mick's last model was the Land Rover with trailer, constructed in mid red and green parts from instructions in MM for June 1955. The model is a little underpowered with a No.1 clockwork motor under the bonnet, so Mick incorporated a Magic Motor into the trailer as well. The other modification was to fit the trailer with 2in pulleys with rubber tyres to improve traction and appearance. This model was probably the inspiration for the later outfit No.7 building instructions 7.10 for the Police Patrol Car which featured in the 1962-69 manuals.

Tony Wakefield has built a number of models of cars in recent years. All to his own design and all measuring a manageable length of about 18in over all. His latest model (see front cover) is a Ford Model T of 1926 vintage, it is built in a green and black colour scheme and, in his own inimitable way, the body work is represented by a skeleton structure in order to reveal the internal detail. As is often the case, the scale is set by the wheels and these comprise spoked wheels fitted with 3½in pulley tyres.

It has been quite a while since I last saw Mike Edkins, so it was good to catch up with him again, especially as he brought some models to the meeting. Firstly, Mike brought along a bogie and the lower deck brake rigging for his Birmingham Corporation 672-811 class tram built to an approximate scale of 1:11. This model has been in construction for some considerable time, so it was interesting to see some progress. Two bogies will go under the body of the tram and both bogies are equipped with a traction motor and fitted with fully compensated wheel brakes to both the driving and pony wheels to take into account the different axle loadings. The Burnley bogie is of the maximum traction variety having its pivot pin directly above the driving axle. By this arrangement 80% of the weight is carried by the driving wheels and 20% by the pony wheels. Each bogie is also fitted with track brakes and dummy magnetic rakes. Both the wheel and track brakes were air operated in this class of car; the model will use electric servo motors to actuate these braking systems. The two sets of brake rigging needed to actuate the wheel and track brakes are installed below the lower deck floor. Each pull rod is taken to the centre of the floor and split via an equalising lever so that each bogie receives the same amount of applied braking force. And there will be more to come on this very complex model. Ever heard of a Diddley Bow? Well, Mike's second model was an example of this primitive stringed instrument. Sometimes known as a cigar box guitar, it is a one string musical instrument. They were popular with African Americans in the southern states of America from about 1860 onwards. Most were constructed from a broom handle and cigar box, the latter acting as a resonator to amplify the sound produced. A length of fencing wire, later a guitar string, was attached to the ends of the broom handle with the string passing over a raised bridge on top of the cigar box. It was played by plucking the string whilst sliding a bottle neck along it to produce the distinctive wailing sounds associated with blues music. It was primarily a percussion instrument for accompanying songs, but was also capable of playing a melody. The only non Meccano parts used in construction of the model are M4 Metric washers and a guitar string.

Those in the know will be aware that **John Hornsby** is building a 1:16 scale Gottwald heavy lift crane. This is a very large piece of kit at any scale and at the last meeting he produced several lifting blocks, which were quite massive, without giving too much away about the ultimate size of the model. At this meeting he brought an example of a four axle dolly, being the rear supporting carriage on which the crane stands and with which it is manoeuvred. This item was also quite manageable in size, but it is only one of many components of the crane. It also includes some clever mechanics to facilitate moving the crane. Assuming that John does not run out of nuts and bolts in the interim we will eventually be up for a "Big" surprise when he brings the finished crane to our meeting, but this may be some time away.

After the last meeting I reported on a superb model of a 1920s/30s V8 aero engine built from first principles by **Terry Allen**. Information provided at that meeting explained that the engine is destined for a 1914 Piccard racing car. At this meeting the engine was shown fixed to the racing car chassis although still lacking wheels and transmission. Bearing in mind Terry's superb Bugatti, this new model is definitely not to be missed as it progresses to completion.

To see an updated view of Terry's Piccard Racing Car click on the link below
www.nzmeccano.com/image-104196

Then I came to **Colin Reid** who always brings along a collection of Meccano related artefacts that had inevitably been acquired at enviable cost in sales that only he seems to know about. The collection on this occasion included a medium sized display case containing some rare Meccano items, in particular, not one but three K-type oil cans. The case also contained some "genetically modified parts", in Colin's words and which I would call mutilated! For example, a hub disc cut into four parts and a fan and lineshaft standard with bored out bosses. Other modern Meccano items included a radio controlled car a space vehicle, some

mint New Cavendish books and other ephemera.

Keeping Colin company was **Mark Rolston**, who brought along his models of a Kenworth 900 tractor and a Doe articulated Tractor. Both of these excellent heavy duty tractors have featured recently in my previous reports. (Ed: however the incorrect photo appeared in the last MMGB— now the correct photo is shown on the next page!)

Lastly, to conclude my model tour I found myself looking at two grandfather size clocks. **John Reid** had been considering building a clock for some time and was sufficiently inspired by the Demonstration Clock Movement designed by Mike Edkins to get cracking. Instructions for building the clock have been published as MP221. The model has been built more or less to the instructions with one or two small modifications. The only tricky part was the calibration and installation of the escapement anchors and John is grateful for Mike's assistance with this. John reports that he enjoyed the different challenge and was pleased that, for the first time, he found a use for the circular strip, part No.145, which has never before seen the light of day!

The second clock was built by **Richard Howard**, and was seen at the last meeting at an earlier stage of its development. Richard's clock was built from GMM instructions No.6 – an astronomical clock designed by Pat Briggs. Its authentic appearance indicated that it is now completed although I don't know if it is in full running order.

Visitor **Ian Corlett** brought along a large JCB 712 articulated dump truck built from the instructions in MP117. The model was designed by Tony James, with a scale of 1:8 such that it can be constructed from the contents of a No.10 outfit plus one or two extra parts. This is a big fully functional model being about 30in long over all. The model was carefully put together by Ian using predominantly yellow parts to give the model a very authentic appearance.

The last model that I was made aware of was a bit of an enigma, called "work in progress" by its builder **Howard Somerville**. I have no idea what the model will eventually be, but I am sure that it will be a fine example of Howard's craftsmanship. And that was it! Another excellent meeting with a large number of good quality models sufficient to please even the most critical of Meccano enthusiasts.

As ever our resident trader was **Mike Rhoades** who seemed to be doing good business with the influx of new members who had the good sense to join MMG. Unfortunately **John and Linda Thorpe** were not present at the meeting as it was reported that John has not been too well. I wish John well and hope that we might see him fully recovered with Linda at the next meeting. I also noted with some personal concern that half a dozen, or so, well known names were conspicuous by their absence. I hope that this is a consequence of holding the meeting at Easter rather than ill health. I look forward to seeing a new crop of models at the next meeting and remember that if you wish to see your model reported in detail it helps if you provide a short write up for the reporter.

99th MMG Meeting - Saturday 8th October 2016

Mike Cook is occupied with writing the last 25 years of the guilds history and so has relinquished the model reporting role having been our main scribe for most of that period. In future reporting the meetings will be shared by two reporters at each meeting. This time it was the turn of Colin Bull and Richard Smith – many thanks to both for stepping up to the plate. I hope you enjoy their summaries – please make the job of reporters easier by doing a write up of your models and preferably emailing to the secretary.

The first modeller on Colin Bull's round was **Mark Rolston** with an American 10 wheel Tractor Unit based on CQ No. 76 2007. He has put his own stamp on the model with many improvements, including a fifth wheel coupling plate, and chain drive as opposed to the original belt drive, a new style front bumper and tow hitches front and rear. Mark also showed a Mack artic Tractor Unit.

Geoff Burgess is next in line with a Thorneycroft Amazon /Coles Mobile Crane of WW2 Airfield Vintage in red & Green and a Leyland Martian chassis.

Moving on down the line is **Colin Reid** with two 1913, 5 ton Yorkshire Steam Wagons built in Nickel parts and operated by remote control at a Scale 15:1. Not satisfied with one he built a second steam wagon almost a copy using a modern Meccano car R/C unit which also plays some annoying (to me) music.

George Sayell's model is under development, based on the 1955 No.7 manual Octopus Roundabout. The manual showed only six arms. George is redesigning his model to carry the correct eight arms. The arms will be designed to be easily removed for transport and storage, much to the relief of his patient and tolerant wife, (his words not mine.)

Roger Burton showed an automatic four movement forward & reverse gearbox: the whole sequence takes about 2½ minutes. The timing can be changed by changing the positions of the ¾" pinions on the output shafts. The model is described in detail in the Meccanoman's Journal from about 50 years ago. Roger also showed a Remagnetising Permanent Magnet Machine used on his Hornby Dublo railway locos.

Mick Burgess showed six small vehicle's from 1950's and 60's MMs: including a Momentum Tractor from August 1953; Motorcycle & Sidecar - July 1952; Saloon Car April 1948 and a Delivery Van from November 1964.

John Rogers takes the next space with two Andreas Konkoly models: the Picador Knight and secondly, the Spanish Bull constructed in red & green. These models are featured in the Runnymede collection of Konkoly models published by Nick Rodgers and RMG.

SML 19a Steam Excavator is **John R Hornsby's** model using a 'Tyco' replica 1929 Steam Engine that has never been used. Built in red & green, the motions are driven by a small electric motor that drives the engine crankshaft. Power is supplied from batteries hidden in the underslung water tank.

Now a surprise, from **Gregg Worwood**; I would have expected to see some large model or least one under construction. But no! a small model. What's up Gregg, run out of parts? It is called a Stronach-Dutton Railroad System Traction. Work is still in progress, in what I think is going to be another great model. It seems that after transport by rail it then becomes a road vehicle to continue to its destination. Large rear road wheels, smaller wheels at the front, rail wheels represented by plastic road wheels Part No.A537 bolted to faceplates and on a short, yes! a short length of track.

Mei Jones had built the Railway Breakdown Crane (shown above) featured on the cover of the early 50's accessory manuals. No instructions were ever published for this model which was first built (Ed.) by Tom McCallum some years ago and described in CQ. Mei has created his own variation, in red & green which looked very convincing. An interesting historical model that deserves greater attention.

David Hobson is a modeller who shows many other systems as well as Meccano. This time we see a display of permanent magnet 4-8V DC Trix Motors manufactured in Germany from 1933-1940, and post war from 1949-1971. These latter ones were much improved from there pre-war counterparts. A further improvement, a 12V DC motor on a plastic base, was produced from 1972 until Trix ceased trading in Germany in 1998. David also showed a 0-4-0 Trix Loco and a 'Tronico' systems Junkers aircraft.

Colin Bull displayed his Winning model of the Laxey Waterwheel as described in the last MMG magazine, complete with 'The John Linder Memorial Shield' and the Runnymede Award for 'Excellence Shield' it also came second at Skegex2016. **Pauline Bull** also showed a cross-stitch of the Laxey Waterwheel.

(Richard Smith takes over the couch) **Sid Beckett** bought along his Countryman Traction Engine, a model that Sid built about 30 years ago. It has been a great hit at so many shows that Sid has supported over the years. It will pull a youngster on a trailer and Sid demonstrated it in the garden at the meeting.

Pete Evans' masterpiece 1930s Brooklands Garage got a lot of attention at our meeting as it has all through this summer. The model is of a typical 1930s motor racing garage at Brooklands in Surrey. Pete has built four complete and one partial 1930s MG cars and one Type 35 Bugatti. Each one being a work of art in itself. The garage building is adorned with most of the garage equipment typical to that period.

Two 1960's Binns Road built Shop Models were displayed by **Tom and Matthew McCallum**. Both the

Traction/Showmans Engine and a Windpump and associated ephemera for these models, although many years old were in lovely condition. An unusual feature of the wind pump was the wind sail containing eight propeller blades. (Maybe the model room/factory had a surfeit of these redundant parts.)

Tony Wakefield's signature strip built motor cars are now a feature of our meet-ings – this Jaguar E-Type Series 1 Coupe was to a 1:6.5 scale car mounted on a medium red/green plinth. The body of the car was built in skeletal form with narrow strips but very closely achieved the beautiful shape of the actual car. Tony had incorporated an engine, gearbox and differential and although these did not run, the captivating surprise of this model is that it had a power lift bonnet.

There was very little Nickel Meccano in evidence at this meeting, **Richard Smith's** nickel lorry was an exception. This lorry is similar to that shown in the New Cavendish Vol 6 by Bert Love and Jim Gamble on plate 4. It has added steering and leaf springs but is a model still in development.

Still under construction **Dave Bradley** bought along his ¼ scale Lamborghini Espada inspired by Pete Wood's (RMG) Lamborghini Contach. The model is at the rolling chassis stage and has gearbox/differential and steering wheel and seats. It will be great to see the two 'Lambos' side by side when the Espada is complete.

Returning to his more traditional (better Ed.?) modelling skills set (but not leaving his plastic dragons at home) **Geoff Devlin** revisited an old theme with an 1896 Internal combustion Tram . This very early internal combustion powered tram ran on coal gas and is built to a scale of 1:17. This is a well built model in red and green and runs along a tramway line. Geoff also showed a Speed Play 9902 Dragon which looked impressive but was difficult to build for its' intended 7 year plus modelers. Geoff pointed out several shortcomings with this model system.

George Illingworth left his fire engines at home and showed a model of the 1972 RAF Truck Aircraft Crash Rescue vehicle built in Army green Meccano. One of a huge number of this type of vehicle expertly modeled by George over the years.

Roger Marriott bought along another Meccano Dealer Display , built by the Meccano factory around 1965, it was designed as an eye catching way to advertise Meccano. It consists of rotating signs rather like TV "screens" and four demonstration mechanisms operated by a chain and gear drive assembly all driven from a FRACMO motor enabling four rotating "screens" with various Meccano advertising slogans – such as "a new toy every day". At some time in its life the model had been "improved" by the addition, to the rotating signs, of illustrations taken from Meccano advertising leaflets. Roger thinks this was probably done by a bored shop assistant for amusement. (Also seen on the model is the 50th anniversary metal Meccano sign we will be providing to each member as a memento of our 100th meeting in March 2017).

Brian Edwards displayed his 1960 Ford Thames Trader tractor unit with Carrimore Car Transporter Trailer modeled in medium green/red. All the character of the period is achieved in this model. The tractor contains an electric drive and the trailer has a motorized upper deck raise and lower.

John Reid and **Dave Phillips** are making brave attempts at Terry Pettitt's 1934 Aero Morgan Super Sport (featured in the MWMO MMG series). Both are work in progress but fairly advanced with a rolling chassis that looks more or less complete. The model has a direct drive transmission to the back wheel and will have steering. Dave's model, slightly more complete, incorporates homemade aeroscreens and a revised motor drive. The model is built from a mixture of Meccano colours/periods but has a nice predominantly red and zinc body which looks finished. John added a diorama with a workshop scene that he says is his wife's idea.

Dave's Grandson **James Philips** was the youngest (9 years) modeler on the day and showed a selection of six models which he has built. They include a racing car, helicopter and digger. All the models had been finished to a good standard of build.

Another masterpiece from **Terry Allen** is his 1914 Swiss Piccard Racing Car. Terry's has now got to the rolling chassis stage with this model. We all marveled at the quality of the V8 engine a year ago and now the rolling chassis is of equal quality. The model is to a 1:5 scale. The engine was turning with all 16 push-rods doing their stuff. The back wheels were turning as was the clutch and gearbox. The spoked wheels are to Terry's design and manufacture and we are sure to see this design emulated in the future.

John Molden always arrives early, with his wife, and gives much valued help in set-ting out tables and also clearing away at the end. This is a chore and more help would be very welcome both clearing and setting up for the meeting – it doesn't happen by magic! John showed his Volvo FH12 Tractor Unit and trailer front axles unit - a beautifully built and complex model having a 6 speed gearbox, clutch and working Hi-ab crane unit.

A model that is a lot more complicated than at first glance is **Christopher Bond's** Universal Milling Machine. Chris has built the cross slide with a Dividing Head with spiral pasta to represent a helical component being machined. The milling cutter being a Meccano Helical Gear. The miller as shown was built in

the Horizontal mill-ing machine format but also included were the vertical head and the slotter head attachments.

Relatively new member **Carl Gill** had developed the SML Goods Warehouse with Elevators to provide a model built in Yellow/zinc from a Meccano instructions but including some personal touches such as a table and crane.

John Palmer gave very helpful assistance to our outgoing treasurer in collecting subs and so did not have much time for discussion about his model. Built using Army green parts, John's 6 x 4 Lorry is a free-lance model using ex John McDonald wheels.

Terry Pettitt, unfortunately suffering from an eye injury never-the-less managed to attend and show his exceptional Crawler Tractor. Based on a Fowler/Field Marshall Tractor. It is his own design using the Meccano plastic track links and incorporates motorized 3-speed drive with brakes either side used to operate the steering. This model looks really good fun to play with.

"Busman" **Michael Bent** showed Double Decker Bus built from red and green. The model based on a No.8 Manual model has a direct drive for forward motion and has working steering.

The Routemaster LT2 'Boris's Bus is another lovely bus built by **Geoff Wright** from a No.9 red/green set. This bus is the double-decker promised by Boris Johnson to replace the hated 'bendy buses' in London. Built to a 1:14 scale which allowed the use of 2" pulleys for the wheels. How this model is built from a No.9 set is amazing. If we have missed you apologies but.....

100th Meeting held on Saturday 25th March 2017

MMG entered its 50th year with the March club meeting at our usual venue, near Coventry, on a lovely spring day, bright sunshine and a good turnout of members. The large number of members attending the 100th meeting resulted in the usual high number of splendid models and historical displays. Over the years MMG members have produced an outstanding selection of models and at every club meeting there are models to be admired from those relatively small in scale to those that we wonder how they can find house-room at home.

The meeting was supported again by our hard working kitchen brigade who produced an excellent lunch. We also enjoyed a special celebration cake. Bob Thompson was supported by his daughter, Jenny and friend Richard Kenyon, together providing an excellent photographic team to record the meeting and the models. The MMG is unusual in that chairman George Illingworth still conducts a model tour in which he draws attention to the particular features of each model. This is quite a challenge, not only to ensure all models are covered but in the short time available to get to grips with the intricate mechanics of some models. We welcomed new members: Chris Dove who showed an impressive model of a Land Rover (described later), and Peter Austin from Henley. It was a pleasure to see Stephen Wilson, who has been unable to attend for a number of years due to a long term illness and is no longer able to drive. Stephen was accompanied by his wife, Valerie, who took the brave step of joining: saying : “ I might as well as I will be bringing him anyway”. We look forward to seeing them both at future meetings.

We were also delighted to be visited by David Goodman. David a founder member of MMG and indeed the only living member of Esmond Roden's initial house group meeting which pre-dated the formation of the MMG in 1967 was welcomed to the meeting during the afternoon session. As always reporting on the models is a challenge and inevitably there is not enough time to record all the details, so the report gives only an overview of what is presented. However some members have helpfully provided comprehensive descriptions of their models, which are included in later sections of the bulletin. The secretary is always pleased to receive material to augment the meeting report.

David Goodman was seen with his son Matt looking through Bob Thompson's photo album of MMG models over the last 50 years. Matt displayed his showman's engine model and alongside it he had bought along his father's model – the Electric Mantle Clock based on a design by Ron Fail and was I believe first displayed by David at the meeting in March 1969.

John Nuttall, in a key corner position, presented his impressive Oil Tanker model which seemed almost exactly as detailed in the original December 1956 Meccano Magazine article. This is a very attractive design with a clear representation of the length and proportions of the original. The layout of the super structure and the stern has many elegant details. John used his favourite light red green and had taken great care with selection of the parts. He said that finding good quality and identical appearance rods, to be laid out on the deck, was challenging. As with a number of the other modellers, I had not spoken with our Treasurer in detail previously. John explained that he has been a MMG member since 1972 – 45 years. Another of my questions – “how long did it take you to make the model”? John said about 2 weeks. Quite formidable!

Next to John was **Terry Allen** with his 1914 Swiss Piccard Racing Car. As described last time, this model is of course a masterpiece. Terry explained that since its last appearance he has updated the radiator and bulkhead and has started the bodywork. The engine has been completed. We are fortunate that Terry continues to exhibit this model so that we can enjoy the complexity of its design and build.

Ken Senar. Garbo Truck. This represents a typical Australian garbage collection vehicle for which the driver is the sole operator controlling the automated lifting from the road side of the wheelie bins and all other operations. This monster model weighs 32kg and is a most imposing sight. Nine electric motors drive the full range of functions including bin raising and emptying, opening tail section, tipping body with internal paddle as well as two forward and one reverse gear. Ken explains that modelling took 12 months and all functions can be demonstrated.

Colin Bull featured a very new model from Meccano – the 787 Dreamliner. Colin had to purchase this from the USA as it is not yet available in the UK. The full cost including delivery and duty was £50. He feels that the model is fair / ok but he would not buy another. The scale is the same as the very nice Concorde model he also displayed. The almost entirely plastic body of the 787 and slightly strange colour of white is obviously quite unlike conventional Meccano. But to build a jet aircraft in classic Meccano would result in a pretty large model. Colin also had the latest Chinook Helicopter model which he was very pleased with. It includes new very tiny contrate gears which drive the two rotors in opposing directions. Finally, Colin had modelled the Bruce Geange 1939 Leyland Fire Engine which was published in September 2016 CQ. This is an attractive small model which has a really cute detachable ladder.

Philip Drew displayed his model “Just a matter of Time”. It is built upon 37 pairs of 1:3 gears (19/57)

which are turned by a 60rpm motor. This final shaft is therefore set at the age of the Universe. Also on display was his MECCControl computer controlled crane. The software enables multiple movements to be controlled in an ordered way. The movement of each part can be controlled by micro switches and monitored by potentiometers. Stopping and starting can be smoothed and precise.

Paul Merrick ran his Ball Roller all through the entire meeting. This is closely based on Guy Kind's design which was displayed at Skegness and described in CQ 112 June 2016. There is also a You Tube of this model. Guy Kind writes that "ball rollers are very difficult to describe in writing" and, indeed, this is correct. It is a really spectacular model which has many moving parts and has many actions which are very unusual in their function. George Illingworth in his afternoon talk accurately described this model as "mesmerising". Paul explains that there are at least 10 major functions, one of which, the Theo Jansen mechanism, is hard to even understand what it is doing. The model has at least 30 steel balls which ran almost faultlessly. Traditional Meccano designs used Table Tennis balls for such machines but Paul considers that because they are so light they often do not run very reliably. Paul explained that he has only been building Meccano models for three years.

John Reid displayed his submarine which he had completed as part of the Spanner Christmas competition. It presents a clear sense of the size and appearance of these vessels. It is developed from the 1940 manual and includes several enhancements. Previously seen was his 1934 Aero Morgan developed from MWMP 224. John has improved the gear change mechanism but is still working on the gearbox and engine valve cams. He also had a new display of Meccano Animals and Insects. John sometimes works on simple models as a contrast to current work he may have on challenging models.

David Hobson. Model T Ford in medium red / green. David has created a clear demonstration of all the mechanisms and their controls with excellent detailing. He says that the car was simple to drive and that pressing any of the three pedals or pulling the lever would slow or stop the car. It has a two speed and reverse epicyclic gearbox. Many aspects of the design, which are presented very clearly in the model, seem very strange to modern eyes. David again brought his Tronico Junkers 52 but, since the last meeting, he has acquired two further Ju52 kits from which he has modelled a very authentic looking Lancaster to the same 1/50th scale. He has scratch built a cockpit structure on similar lines to the Ju52. The two models compare very well and have a very striking appearance. David feels that some of the Tronico wing parts are particularly effectively designed and it would not be possible to build credible Meccano models to such a small scale.

Mei Jones brought a Floating Crane in medium red / green developed from the 1954 to 1961 Number 9 set model 9.2. Mei has enhanced the appearance of some key parts of the model with some yellow and black parts from later eras. Mei explained that he has been modelling since about 2009 and he commenced building his Floating Crane in about November 2016.

Brian Edwards. 1913 Morgan Quadricycle is a very nice small model developed by Brian of a 4 wheel car. It has detachable bodywork and the full chassis and mechanism layout are very clear. The authentic looking wheels have thin black repro tyres. Brian is one of the longest serving members having joined MMG in 1969 at its third meeting.

Pete Evans. Two blue / gold models from the 1939 Manual – 8.6 Fire Engine and 8.11 Tipping Motor Lorry. Both models are a similar size at 1/12th scale and together are a very handsome sight. Pete built these models during 2016. He explained that blue / gold is his favourite colour and this was the colour of his first Meccano. He recollects that when he was aged 12 he would earn money for small jobs for his family so that he could save up to buy Meccano parts.

Neil Bedford demonstrated his remote controlled Camel Trophy Land Rover which he built for Skegness 2016. Neil is very much an expert at remote control handling. It was a delight to see this powerful small model performing with its tight turning circles, fast speed, bright lights and generally rugged appearance.

Richard Howard. Mars Orrery from Michael Whiting's 2005 Model Plan 163. The model shows the movement of the two moons Phobos and Deimos around Mars. Richard found that the model plan was clear and very good and the model was fairly quick to build. The relative speeds of the two moons are set quite accurately.

Terry Wilkes is currently working on a 50 parts model for the anniversary 50 part competition, he calls it simply - a Walking Object. It has a clockwork motor driving a leg mechanism which he has designed. The relatively heavy weight of the model, some friction and short duration of the motor because of the significant step down in the driving speed has resulted in several problems which Terry promises he will sort by July.

Carl Gill displayed a Big Wheel modelled in medium red / green. The wheel has eight cabins.

Dave Bradley had a very large display of yellow / blue models from the 1974 outfits. Dave has made for an exhibition a model from each outfit - from Pocket Meccano to set 9 and he is intending to build a model from the Number 10 set. All the models are exactly per the instructions and, apart from the very smallest,

they are of road vehicles.

Greg Worwood bravely displayed his plastic Meccano Windmill which is based on the 300 / 400 set. Greg confirms this "to be a typical Binns Road model that is structurally unsound and does not work. I find it difficult to believe this was intended to be assembled by a young child". Greg spent much time modifying the design. The model is indeed something of a horror. The colours are crude and many of the parts are ugly. Noticeably, of the 201 images of the MMG 100th meeting posted at the date of writing on the NZ site, nobody had included Greg's model. (There are 2 photos of this model now added to the NZ site, also now a total of 310 images from the meeting posted by Bob Thompson).

Stephen Wilson. Stephen, brought Oil Tanker from a 1922 No.5 set, and also a Naval Frigate from a 1949 No. 6 set. These models made from well used, and some might say distressed, Meccano parts were never-theless well made and interesting to see made up.

John Palmer displayed his Army Truck built with Army green parts seen at the last meeting. John was also displaying his latest model which is not yet completed, the chassis of a Thames Trader Lorry.

Roger Marriott has now completed the model of Terry Pettitt's 1934 Aero Morgan, as described in his model plan (MWMP 224). This lovely three wheeled sports car is now available as a model plan and is clearly proving extremely popular. With simulated valve gear, working tappets, realistic bodywork and a host of mechanical intricacies, it really is a superb piece of work. The model was recently displayed at a local club meeting where Roger was approached by a member of the Morgan Three Wheeler club. After admiring the model he commented the he did not think it was the "super sports aero" as this version, offered 1922-32 has a two speed gearbox, "beetle" back and low level exhaust pipes, without the spare wheel mounted on the rear. The version most like the model is the 1933-39 three speed "super sports".

David Shirt displayed a fine example of the first 'coloured' Meccano with a 1926 Set 6a – perhaps the rarest example of the pre-war 'big sets'.

Dave Phillips. Aero Morgan Super Sport which is closely based on the Terry Pettitt 224 model plan. Dave is very pleased with the result although the model was very hard to build. The model now completed has been enhanced with a cam which Dave obtained from Stuart Borrill. The cam provides a very efficient demonstration of the entire push rod mechanism which the model features. Dave runs his model from a 12 volt battery from Maplin.

James Phillips. Dave's grandson was again displaying his collection of small set models. James enthusiastically discussed some of his experiences in building these models which, as always, can have unexpected complications. He found the lock nuts were a difficulty.

Towering over everything else was **Richard Payn's** very impressive Sobemai balance crane in red & green. (The crane is seen on the upper left side of the picture above). The caterpillar tracks, with each tread linked to the next by Meccano hinges, were especially interesting. Richard has used modern parts in the grab, has now got the drive, steering and slewing actions working and will soon crack the luffing of the beautifully balanced jib.

Richard Smith brought along a small but charming rendition of a Wingit dump-truck in late seventies dark blue & yellow parts, inspired by childhood memories of these vehicles and the chance find of a pair of chunky nonMeccano wheels which look perfect on this model.

Geoff Devlin showed his fine model of a Birmingham single-deck tram in red & green parts with a scale of 1" to the foot. The prototype began life in 1903 as a double-decker, was then converted in 1917 to a single-decker and finally converted back to a double-decker in 1926! Geoff also brought us another tram, this time a clever use of parts in readiness for the '50 part challenge' which will be held at the next MMG meeting. Geoff also showed some doll's house furniture which must rank as two of the simplest Meccano models ever seen – the piano stool using just 4 pieces!

A variety of orientation-agnostic southseeking chariots were shown by **Robin Schoolar**, along with his excellent 'Ping-Pong Peripherator' which was created in response to a challenge by the Runnymede Meccano Guild to build a 30 piece model for its recent 30th anniversary meeting.

New member **Pete Austin** delighted us with his version of Eric Baldwin's Meccanograph (as shown in the April 1991 MMG gazette). Pete also brought models of a Sopwith Camel, Red Arrows jet and an 'O' gauge train built by his father.

Just for a change, **George Illingworth** had a pair of fire engines on display. This time we were treated to a 1904 Merryweather Fire King and an early self-propelled steam pump, both modelled very effectively in red & zinc parts.

Geoff Wright delighted us with his curvaceous model of the 'Boris Bus' built strictly from the contents of a No.9 Set, once again showing his characteristically clever choice of parts.

Tom and Matthew McCallum delved into their collection of rare items to give us all a fascinating history lesson, beginning with a pair of No.1 Constructor Cars, one English and one French. Close inspection

showed a great range of minor differences between the two versions, confirming that they must have been made using quite distinct tooling. A boxed GRB from 1945/46 was a real rarity, produced in the medium red colour as a special order by Binns Road. As if this was not enough, the lads also showed an original 7 ½" roller bearing which never reached full production. A pair of clockwork speedboats was next, in quite astonishing condition. One was the 'Gleam' in civilian colours and the other was the same model, but rebadged as the 'X46' and sporting a naval paint-job. Still on the military theme, Tom and Matthew finished with a pair of 00 Aeroplane Constructor kits from 1939 and 1941 in two different camouflage schemes. Both had their packaging (of course!), one of which was the original 'austerity' box and represented the last things made at Binns Road before the factory was turned over to munitions production.

Continuing the early Meccano rarities, **Jim Gamble** displayed a No.1 and No2 wooden storage cabinet, in very good condition and as advertised in Meccano Magazine No.2 in 1916.

A tidy 4 tracked tractor with towing drill, also a flying planes model (seen left) was shown by **Michael Bent**.

Richard Gilbert showed us two contrasting No.6 Sets, an English version from 1963 and a Spanish version from 1964. Whilst both were essentially red & green, the shades differed, the various wheels in the Spanish set were painted blue and there was a noticeable difference in the overall quality of the finish – naturally with the English set being superior!

A range of models was brought along by **Trevor Batten**, including a Piano Player, a Cakewalk funfair ride and a YBZ Marine Engine (model 6.12). Tony Horton has built an impressive container crane and 'ship alongside' to his own design in red & green parts.

A range of very cleanly constructed vehicles were displayed by **Peter Hardingham**, including a furniture van in dark blue and yellow (model 6.6), an articulated lorry in red and green (model 9.2), a crane lorry in English red and zinc and a timber lorry in French red and zinc parts.

Another member with a fine range of models was **Mick Burgess**, who showed us a motor breakdown crane (model 7.6 of 1930), a horizontal steam engine (model 3.56 of 1931), a tractor with manure spreader (model 6.12 of 1962), 'performing musicians' from the Meccano Magazine for March 1950, a very neat TR3A sports car and finally a streamlined petrol tank lorry (model 7.1).

A lovely model of a 2-10-4 American steam locomotive, 'The Santa Fe', was displayed by **Terry Pettitt** with a great deal of detail packed into it. Terry who is another long serving member (joined in 1972) has had this gem tucked away for around thirty years and it certainly deserved a trip out.

A delightful steam wagon (model 4.60 of 1930) and a modified version of model 7.11, the London Taxi, were shown by **John Bland**. Both models captured the spirit of their prototypes very well indeed.

Model 7.6 of 1955 appealed to **George Sayell**. This was the fairground 'Octopus' ride but with several valuable improvements, not least of which was that George had made this an eight-legged octopus instead of the original six-legged one! George has provided a write up of this model describing the modifications – see Bulletin Issue 70)

Colin Reid was next, with an Erector model of the Tyne Bridge, a Nikko r/c car and a marvellous 5 ton Yorkshire steam wagon to his own design. This was a very nice looking model but was further enhanced by being shown alongside the original handbook for the prototype vehicle, found at a car boot sale for 50p – amazing!

A more modern lorry was the large 'Peterbilt' tractor unit built by **Mark Rolston** and based on a similar build by Joe Attard. This fine model, in the unusual colour scheme of yellow and green, features a huge amount of detail including working clutch and gearbox, three differentials, sleeping compartment with bed, television and so on. Mark also showed a very nice No.9 Set from 1947 with a very skilfully reproduced box.

Charles Catt showed a frame for embroidery but we didn't manage to catch Charles to talk to him about the model.

John Hornsby has another crane under construction – a Liebherr tower crane featuring a roller bearing using 'Delrin' balls in place of metal ones, which avoids all wear and tear to the rotating parts (as described in the last MMGB). John also took a rare diversion from cranes with a tidy pair of Ducatti 1200 motorcycles built from modern kits.

One of the largest models shown was a Series 2 Landrover on 6" wheels by **Christopher Dove**, at his first meeting as a new member. This model featured a fully detailed engine and interior, working clutch and gearbox and was very neatly clad using zinc strips. Chris has provided the following details: The model is inspired by a Series 2 Land Rover from the early 60's. It is built to approximately 5th scale, this being determined predominantly by available tyre size and the need to accommodate the driveline within the standard Land Rover 88" wheelbase. The model has deviated from standard just a little as I have installed a larger V8 engine as future plans are to make it look more like an off-road 19 competition vehicle complete with roll cage etc. The Chassis closely follows the real thing being of box section construction with various cross-

members and outriggers and includes conventional multileaf springs with shock absorbers. The Steering incorporates a miniature version of the real steering box which transfers movement to a drag link, steering idler and track rod; an almost exact representation of the real thing. The engine is a Rover SD1 lookalike with a Meccano 6 speed motor inside. The motor speed is controlled by the throttle pedal. Drive is then passed through a conventional spring type pedal operated clutch. The gearbox is 5 speed and reverse with a spring loaded gate change gear lever. Drive is then passed through a 2 speed transfer box with selectable front wheel drive. The rear output of the transfer box carries an expanding drum brake operated by a ratchet hand brake lever with push button release and also the footbrake pedal. From the transfer box, drive is passed to front and rear axles incorporating conventional crown wheel and pinion differentials. The front axle incorporates small universal couplings in the steering swivels. Dashboard mounted switches are included for headlights, sidelights and functional flashers. Brake lights are also included with some electronics to allow the single tail light bulbs to increase in intensity when the brake pedal is pushed. The button on the steering wheel boss also operates a horn. The Bodywork is built almost entirely from Meccano strips, although some have been cut to non-standard lengths due to construction limitations, and a couple of special parts have been fabricated to fill in the unsightly gaps at the front wing corners. The interior has been modelled to follow as closely as possible the standard layout for the dashboard and controls. The model incorporates a removable handmade canvas tilt cover secured by string ties 20 over a steel frame made from old bent Meccano axles. The model weighs 15kg and has dimensions 750mm, long x350mm, wide and 380mm high.

Alan Scargill has completed the chassis of a '4x4x4' vehicle – that is, four roadwheels, four-wheel drive and four-wheel steering, based on an American 'Hummer' style prototype. This is Alan's own design and has some clever features.

AND finally the cake cutting was ceremoniously done by the president Geoff Wright, supported by the committee and attended by the two founding members present, David Goodman and Jim Gamble. However the really hard work was done by our kitchen ladies supported by Alan Scargill in his professional capacity as head cake cutter.