

MSSS

**MECCANO SOCIETY
of
SCOTLAND**

NEWSLETTER



No.77

AUGUST 2008

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DATES FOR YOUR DIARY

Society meeting, Smith's Museum, Stirling	24 th August
Annual Exhibition, Scone	13 th /14 th September
Cathcart	25 th /26 th October
Greenock	8 th /9 th November
NEMS annual exhibition, Darlington	9 th November

SHOWTIME!

Following upon comments in our last edition we confine ourselves this time to the following reminders:

ANNUAL EXHIBITION

To be held at the “Farming of Yesteryear” show at Scone Palace on September 8th and 9th. Very large audience guaranteed. Come for one day or two. Take part in judging of best models. Contact Alan Blair to let him know table space required and to get an exhibitors ticket.

CATHCART

Yes! We have been invited back. Maybe they really did miss us last year. Anyway it is scheduled for 25th/26th October. Always a busy exhibition and usually lots of interest in the Meccano exhibition. Contact Bert Hutchings if you want to exhibit on either day. Even if you do not want to exhibit, come along on either day and see us and the rest of the first class show that they always put on.

GREENOCK

The Society has been invited back again to this excellent exhibition. This will be our 4th year. Tim Edwards has always borne the major load with lots of models and could do with some support from other members of the Society. It is a two day show on 8th and 9th November. Unfortunately this clashes with the NEMS annual exhibition at Darlington. However, if you are not planning to go to Darlington, how about Greenock? Contact Tim for details.

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Club Meeting, 17 May 2008

The meeting was held during the Open Day in the Scout Hall at Menstrie, at 2.15 pm. Members present were Bert Hutchings (Secretary), Angus Plumb, Gordon Macmillan, Bill Jack, Robert Jones, Bob Middlemass, Alan Blair (Exhibition Manager), Alistair Nicoll (Newsletter Editor), Jackie Inglis, Douglas Carson, Alan McDonald (Treasurer), and Jim Wood. There were apologies from Jim Gregory, Desmond Smith, Ian Soutar, Ken Macdonald, Chris Shute, Jim Berrie, Tim Edwards, and Dick Martin.

Correspondence: the Secretary reported an invitation from the Henley Society of Meccano Engineers to take part in their annual Henley Gathering on Saturday 30 August.

Treasurer: after a little discussion, it was agreed that the Treasurer should proceed with club insurance through the Southern Federation of Model Engineering Societies, including public liability of up to £2 million. The cost is expected to be around £250 p.a.

Exhibitions: arrangements were reviewed for the annual exhibition in conjunction with “Farming Yesteryear” at the Scone Palace showground on 13 and 14 September. Angus Plumb proposed that the club should purchase a “gazebo”, a tent structure suitable for the children’s play table and/or an eye catching display model, to be erected outside the marquee, and this was readily agreed in the sum of about £60. To encourage as many members as

possible to participate, Alan Blair will circulate them all appropriately, prior to our August meeting.

Douglas Carson noted with regret that the turnout of exhibitors and models at Balado on 10th and 11th May had been only just adequate, and that greater participation by members would have been welcome.

The meeting closed with a vote of thanks to the treasurer, and to all involved with the catering, for their organisation of another very successful day.

Bert Hutchings, Secretary

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NEWS OF MEMBERS

This item can be misused to tell you why this rather slim edition of the Newsletter has been produced in advance of its normal date. Your editor plans to depart on holiday two days after the August meeting of the Society and will not have time before departure to produce the usual August edition. The holiday is a cruise to the Black Sea, an area of some unrest at the present time. However, assuming he is not immolated in Istanbul, shot in Sochi or obliterated in Odessa he should be in a position to produce a normal edition on November.

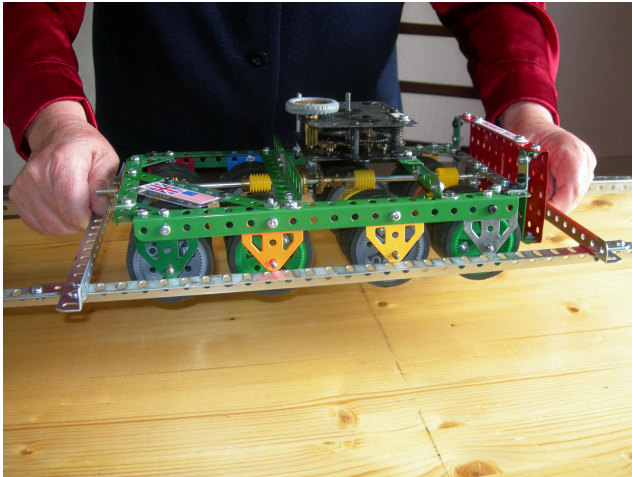
On a more sombre note, regular contributor Ron Frith has been in contact to say that further articles will not be forthcoming from that source for the foreseeable future. Ron's wife was diagnosed with lymphatic cancer a few weeks ago. All the signs and the scans showed this to be the problem . . . until they did a biopsy. Now it is diagnosed as "not lymphatic cancer" but as to what the trouble is . . .no word yet.

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THE MENSTRIE CHALLENGE – 2008

The Challenge this year was to construct a bulldozer, length less than 12½", breadth less than 6", weight less than 1.5kg, and powered by a No.1 Clockwork motor. Pairs of contestants were faced off on a line and the fully wound motors started simultaneously. When both motors had run down, the model that had crossed the line was deemed to have won. Every contestant played against every other contestant and a league table of results was drawn up on the basis of 3 points for a win, 1 for a draw.

There were seven entrants in all, including a proxy entry from David Lawrence which had crossed the Atlantic in order to take part and was operated by Alan MacDonald as Proxy Mechanic. All but two entries opted for tyred wheels, mostly small wheels (<1½" diameter). One entry had a single driving wheel made from a 3½" Sprocket wheel and one utilised Meccano caterpillar tracks.



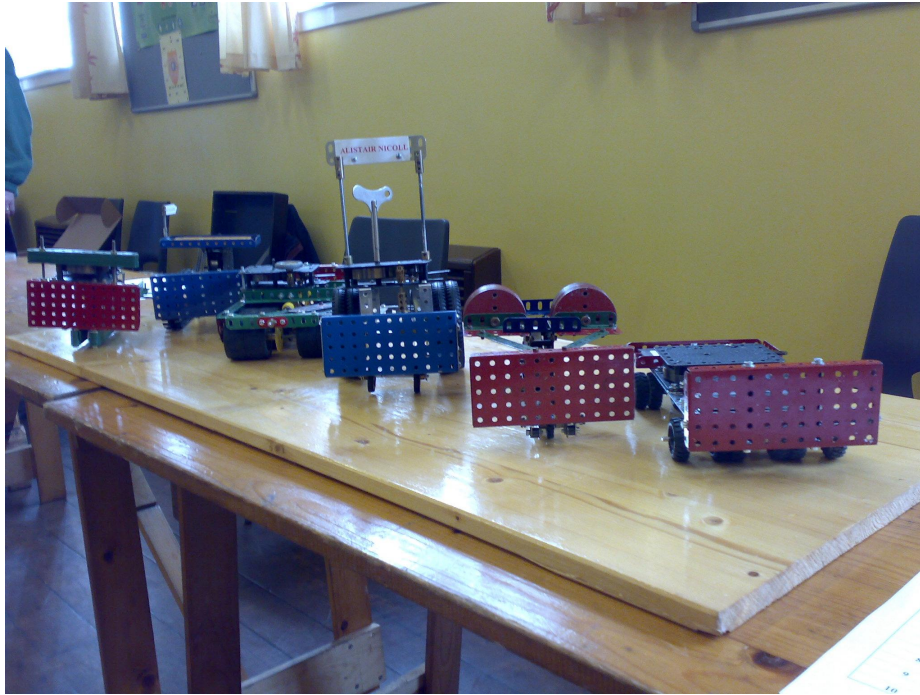
An entry is lifted by the gauge, thus failing the size criterion

Before the start all entries were weighted and measured. The weighing was carried out on a pair of ordinary kitchen scales and all met the published criterion being in the 1.4 – 1.5kg range. Size measurement was carried out using a gauge made of Meccano which had a rectangular aperture slightly bigger than the 12½" x 6" published length and breadth. Thus a 12½" Angle Girder would pass through lengthwise, even although it is in practice sometimes slightly over that length.

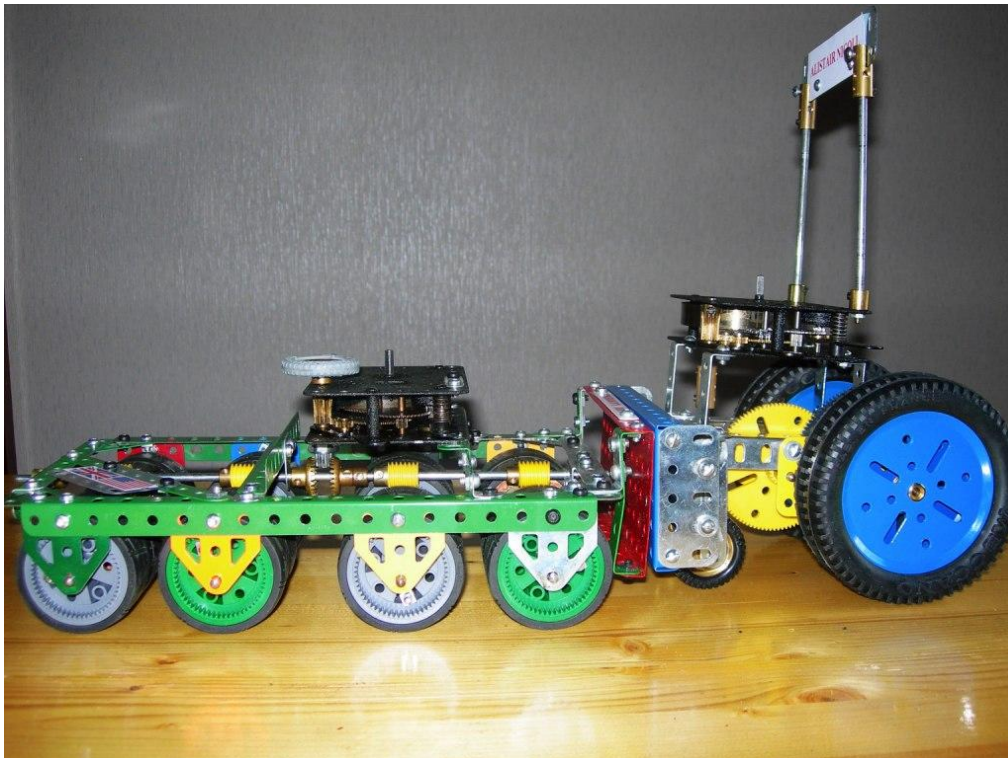
The 6" breadth criterion proved to be quite challenging to meet and at least one contestant had to do some last minute re-design as a 5½" Double Angle Strip with a 6" Rod journalled in the bent ends and two Bush Wheels affixed outside the ends (no washers) failed. David Lawrence's entry failed this criterion as it had rods sticking out on each side beyond the 6" limit

The site of all the contests was a varnished wooden board and several close contests occurred with at least two where an apparently winning entry was pushed back late in the run and eventually lost.

The winning entry had a Worm Wheel driving a 2½" Gear Wheel, the shaft of which also bore a ½" Pinion which drove a 3½" Gear Wheel on the shaft bearing the driving wheels. These were 3" Pulleys with French tyres. The tyres were softer than those on the 2" Pulleys used as the driving wheels on Bill Jack's model and it seems to have been the combination of the softer tyres, a comparatively unused motor and the very high reduction ratio which combined to give this model its success. It also seems that a small number of large wheels with a large reduction ratio was a more successful formula than a large number of smaller wheels.



*The contestants lined up on the battleground.
All bar one with their pusher plate to the front.*



Winner (right) and runner-up go head to head

The results are shown in the table below which includes the Lawrence model.

NAME	PLAYED	WON	DRAWN	LOST	POINTS
Alistair Nicoll	6	6	0	0	18
David Lawrence	6	5	1	0	16
Bill Jack	6	4	0	2	12
Alan Blair	6	3	0	3	9
Bert Hutchings	6	1	1	4	4
Bobby Middlemass	6	0	2	4	2
Douglas Carson	6	0	1	5	1

An unofficial challenge match took place in private after the main event. The owners of the machine activated by a 3" Sprocket Wheel (Alan Blair) and Douglas Carson, whose model had been activated by caterpillar tracks, both maintained that at least part of their failure in the main event was due to the smooth hard surface of the board on which the contest took place. Each of these machines was pitted against the winning entry outside the hall, firstly on an asphalt pavement surface, and then on a hard dirt surface. Both were overcome again by the winning entry.

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AMONG THE MODEL BUILDERS

Alan Blair

When building with Meccano, modellers occasionally find it necessary to bend perforated strips or flexible plates to give added realism to a model. My experiences of attempting to bend parts by hand has frequently resulted in an uneven curve due to the Meccano holes weakening the part at that point and hence offering less resistance to bending. The boiler bending tool which is offered by model railway suppliers is excellent for forming cylinders but it cannot be used to form, say, a 90 degree curve part way along a flexible plate.

I am presently designing a Ferris Wheel of similar scale to my Four Abreast Gallopers and I thought that it would be nice to have chairs with backs that had rounded corners instead of square corners. As the Ferris Wheel is going to have 18 chairs each with a back formed from an 11hx3h flexible plate incorporating two 90 degree bends. That means 36 curves to be formed... and the bodies of the Meccano horses on the Gallopers which also had to be formed... and there are 36 of those. That is a serious amount of bending and as all of these curves will be highly visible they needed to be well formed and I felt that the best way to achieve this was by making some sort of bending jig.

So, necessity being the mother of invention

Flexible Plate Bending Jig.

Standard Meccano plates and perforated strips have corners and ends which have a ¼ in radius and a jig which could smoothly bend a flexible plate to this radius in order that it could be 'wrapped' around these corners seemed to be what was called for.

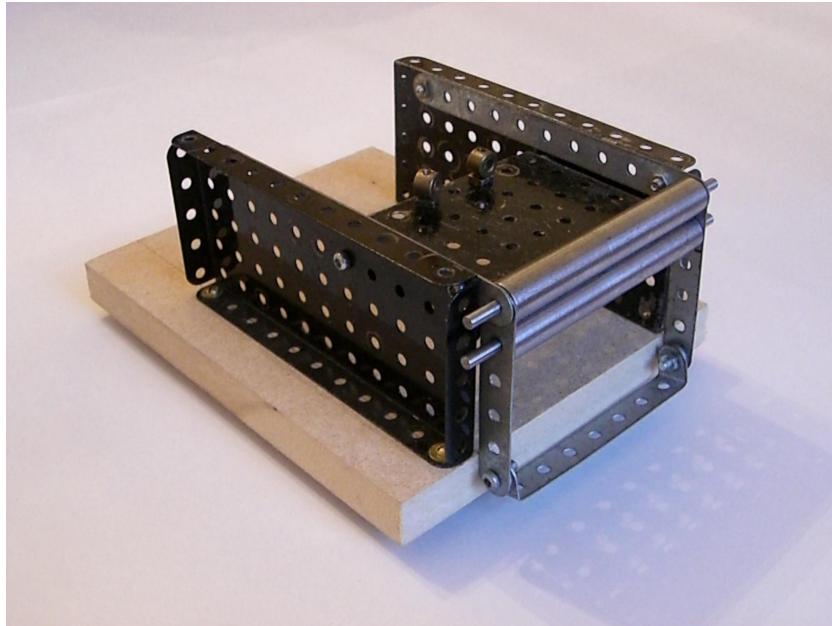


Fig.1 General view of the bending jig

The bending jig that I have devised is shown in Fig 1 above.

It comprises two 11h x 5h flanged plates spaced apart by a 7h x 5h flanged plate. The spacing was further increased by including a washer between each of the joints between the flanged plates. Two 11h strips bolted to each flanged plate such that they overhang by 1 hole provide the journals for one of the rollers.

The rollers are ½" diameter with standard 4mm stub axles and were made by Stuart Borrill from stainless steel. A 6h strip is threaded by its end hole onto each of the stub axles of one of the rollers before it is journalled between the 11h strips mentioned earlier. The 6h strips are joined at their other end by a 7h double angle strip and washers (to provide additional spacing) to form the handle of the bending jig. The other roller is journalled in the adjacent holes of the 6h strip to the first roller and is free to turn.

The whole assembly is mounted on a piece of 18mm MDF to provide additional rigidity.

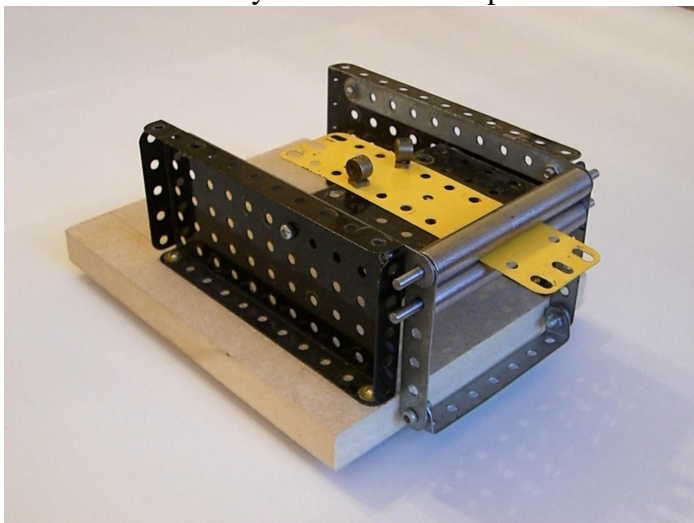


Fig 2 shows an 11h x 3h flexible plate in position in the bending jig ready for bending and it will be seen that the flexible plate is held in the required position by two threaded pins (collars have been screwed onto them for greater clarity in the photograph.) to prevent it being drawn through the rollers by the bending action..

Fig 3 shows the flexible plate having had a 90 degree bend formed towards each end.



Fig.3 Curves to die for

Fig 4 shows this formed flexible plate incorporated into the construction of one of the chairs of the Ferris Wheel and it will be seen how the curved flexible plate has been used to form the back and sides of the chair to realistic effect.

The bending jig can form very smooth bends in flexible plates up to 180 degrees and the maximum width of flexible plate that can be bent by the jig, as built, is 7h but clearly this could be increased if the flanged plates were spaced further apart.

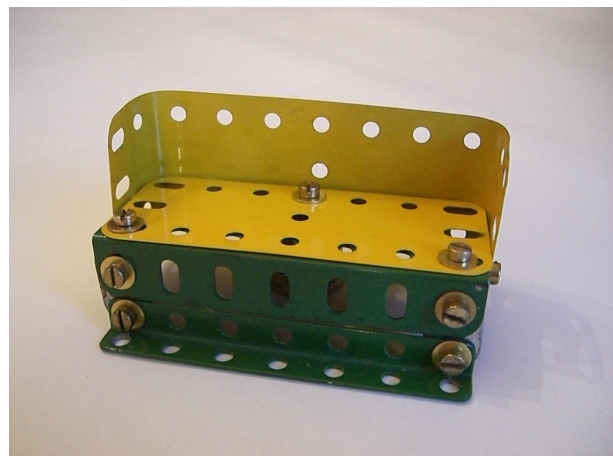


Fig 4 Completed chair using the bent plate

If anyone would like either a drawing of the rollers so that they can make their own jig or to borrow mine please give me a call.

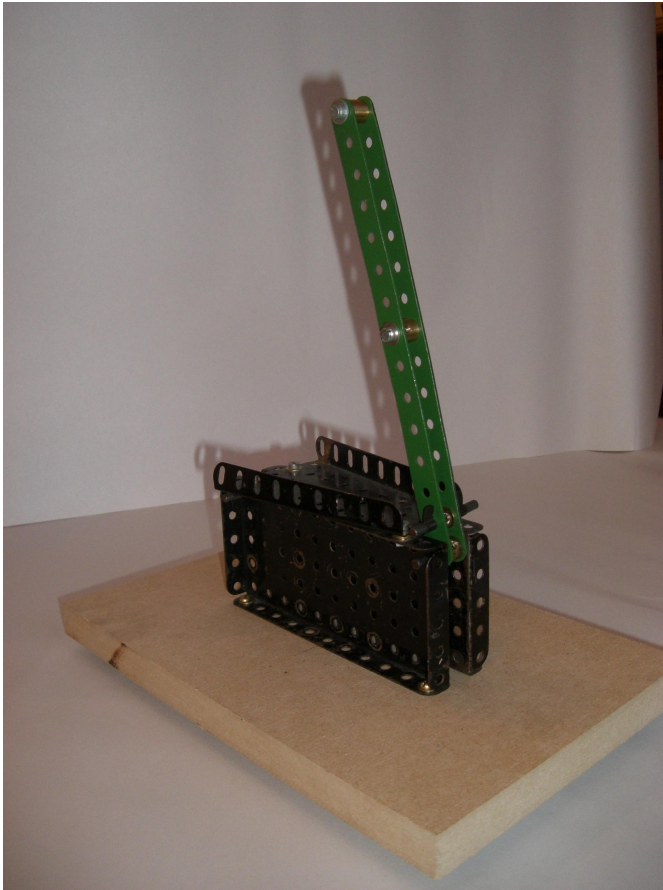
I am also in the process of making a similar jig for forming smooth curves in perforated strips using the same principle.

Having described the construction of the flexible plate bending machine I thought that whilst I was at my laptop I would also describe the construction of the rod bending jig that I have built.

Rod Bending Jig.

The appearance of many Meccano models can benefit from using axle rods that have been bent in some way, eg to form handrails, the exhaust pipes for vehicles, etc.

The standard Meccano steel axle rod is difficult to bend but 4mm aluminium rod (obtainable at B & Q or you can use No 8 knitting needles) can be readily bent. By using a jig to bend the rod it is possible to form any number of rods with the same degree of bend in the same place and the same bend radius.



The rod bending machine that I use is shown in Fig 5. It comprises two 11h x 5h flanged plates spaced $\frac{1}{2}$ " apart by a sector plate and mounted on a piece of 18mm MDF. The sector plate is spaced from the flanged plate by a washer at each corner. A $1\frac{1}{2}$ " axle rod which carries two 15h perforated strips separated by a loose collar is journalled in one of the sets of corner holes of the flanged plates as shown and held in place with spring clips. A further $1\frac{1}{2}$ " axle rod is journalled in the adjacent holes of the 15h strips. This axle rod carries an aero collar and is also held in place by spring clips. A further $1\frac{1}{2}$ " axle rod carrying a standard collar and washers is journalled in the set of holes at the other end of the flanged plate and is held in place by spring clips. The two 15h strips are spaced apart along their length by threaded collars to form the bending lever for the jig.

Fig.5 Rod Bending Machine

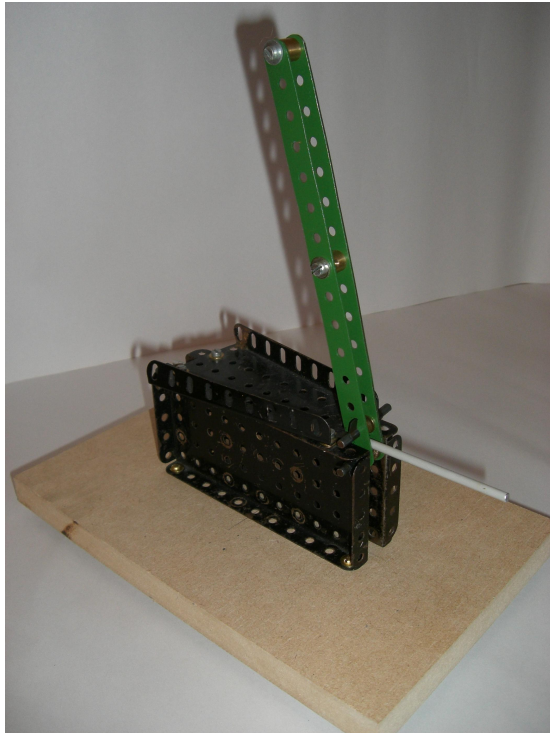


Fig.6 A rod in place ready to be bent

Fig 6 shows a length of 4mm aluminium rod in place in the bending machine ready for bending and by moving the bending lever anticlockwise the aluminium rod is bent around the collar by the action of the aero collar.



Fig.7 Detail of a model marine engine showing the use of 4mm aluminium rod

Fig 7 shows the bends that have been formed in the handrails of the model of a marine propulsion engine and illustrates the added realism that can be achieved.

A demonstration of the bending capabilities of the flexible plate and axle rod bending jigs was given during the Constructor's Day meeting at Menstrie in May and they attracted a lot of interest.

More later, till then, happy Meccanoing

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BALADO 2008

Never having been to Balado before your editor set out on Sunday May 11th to have a look at this unique event. First impression was that it was a long way. You drive through Menstrie and keep going . . . and keep going . . . and keep going. Eventually you do get there and the site is quite well sign posted off the main road. Once entrance money is paid you get to park in a large field. The exhibition itself is on the site of an old airfield, the still extant runway providing a track for the traction engines to drive up and down on – not that any of them did during our visit. They are however the first thing you come upon – not that they would be easily missed. They were all fired up when we were there and the pollution was a reminder of 1940's Glasgow. It was as though the Clean Air Act had never reached the statute book.



Two of the many traction engines on display

Beyond the runway, on which not only traction engines but also steam lorries and steam road rollers were on display, there was a tented village – very like Scone but with less of an agricultural emphasis. Right at the back of this we eventually found the Meccano tent. It was well advertised with a large board outside. However the display inside was disappointing in terms of the number of exhibitors. The individual displays were very interesting and Bert Hutchings, Angus Plumb, Jim Berrie, Douglas Carson and Ian Soutar are to be congratulated

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MECCANO ON THE INTERNET

Under this heading this time we reproduce the home page of our own Meccano society of Scotland website. Over the summer the site has been completely re-designed by Webmaster, Tim Edwards. As well as this home page it contains lots of other pages, largely of photographs of models displayed at various meetings and exhibitions. Many of these also feature the model builder so your photograph could well be on the web! It is easy to check. Just Google your name and see what comes up!

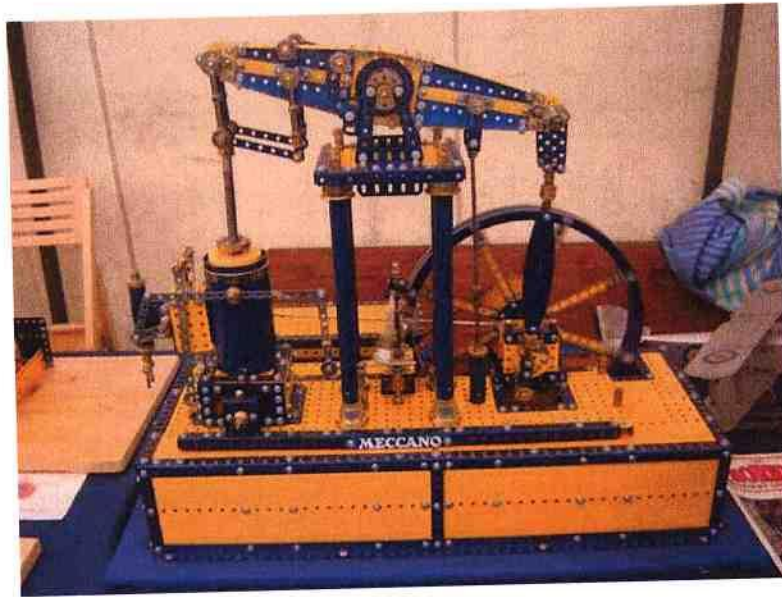
To access the site as a whole, starting with the home page, you can either Google “Meccano Society of Scotland” or go to the Meccano Web Ring, click on Index and run down till you find it.

The home page does not look exactly as printed here. There are links to other pages on screen on the left of the home page. This makes it easy to move around the site. With 15802 visitors to date, the site is attracting a fair amount of interest – even if six of these “hits” have been your editor in preparing this article!

THE MECCANO SOCIETY OF SCOTLAND

Welcome to the web pages of the Meccano Society of Scotland.

The Meccano system was invented by Frank Hornby in 1901 and first appeared on sale as a constructional toy called "Mechanics Made Easy". This was renamed Meccano in 1907.



The Meccano Society of Scotland was formed in 1984 by a group of like minded enthusiasts interested in Meccano. We cater for a variety of interests. Some of our members are builders and others are collectors, but all are interested in Meccano.

We have around five club meetings a year, usually held in Stirling together with an annual exhibition.

We publish a club Newsletter about three times a year.

Membership of the Society is open to any person interested in Meccano and new members are always welcome.

The website contains photographs from our various exhibitions and meetings.



There is now a page with links to various Meccano clubs, Dealers and other sites of interest.

The website also contains photographs of models by club members - The first of these shows models by Bobby Middlemass.

There is also a section in which club members can advertise surplus Meccano items for sale.

"Factory of Dreams"

A new book - "Factory of Dreams" - on Meccano Ltd. has recently been published. See the review of the book.

Meccano Volume of MCS available on CD

A CD of the Meccano Volume of MCS (Metal Constructional Systems) is now available. This gives comprehensive details of Meccano throughout the world. This CD is produced by one of the society members - Tim Edwards [Click here for details.](#)

Meccano Set Part Lists

Meccano Set Parts Lists for most sets from 1901 - 2004 plus old style Plastic Meccano Set contents have been produced by one of the society members - Tim Edwards [Click here for details](#)

If anyone has any comments or suggestions for content of this site, please contact the Webmaster (Tim Edwards).

015772 Visitors since 8 Jan 2002

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ELECTRONIC CONTACT ADDRESSES

The Society's web site address is:-

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