

LIONSHEART

Number 48

July 1999

The Editor's Bit.

In this issue:- Details of **Lionsmeet** at Swansea; the **AGM Minutes**; a **welcome** to new members; **new faces** on the committee and some interesting news on **Lion's old tyres**.

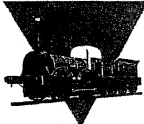
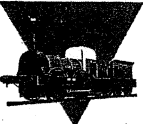
We had a good turnout for the AGM this year which saw the election of a new Secretary, new Newsletter Editor and new Modellers' Representative. I now stand down and wish them well in their new found tasks, which I hope they enjoy as much as I have during the past five years. I've learned a lot (Never hurry, never worry and certainly.. NEVER volunteer), met some interesting people and hope that I've helped OLCO just a little. My sincere thanks to those with whom I've enjoyed working for their supportive attitudes and depth of knowledge about Lion and all sorts of other things. I hope to forward the occasional contribution to the new Editor as time permits and provided of course, that I have something worthwhile to say!

The list of current serving officers now reads as follows:-

- Chairman - E F Clark Joint founder member of OLCO and great great grandson of James Kitson, of Todd, Kitson and Laird, Leeds, builders of Lion in 1838. E F has served as OLCO Chairman in the past and is a Past President of the Newcomen Society.
- Treasurer - Jon Swindlehurst Winner of 1995 LBSC Memorial Bowl and First Prize and of Lionsmeet 1997 in 5" gauge at Peterborough. Jon has carried out this duty for two years now and I would encourage him to continue for his full term.
- Secretary - Peter Mountford Peter is into steam hammers and forge work, being currently engaged in the construction of an 1/8th scale working model of the Massey 5cwt machine currently gracing his blacksmiths workshop in the Ellesmere Port Museum. He is also embarking on the construction of a 7 1/4" Lion.
- Editor - John Brandrick John is fairly new to OLCO. He works in Manchester, where Lion is now based and so has the enviable ability to visit her as often as he wishes. I will leave any further introductions for him to put into his first issue.
- Modellers' Representative - Edward Parrott Edward is just seventeen years of age but appears to be following in his late father Mike's footsteps in that he is all set to embark upon a career in Engineering. He already has several boilers to his credit and is due to start a new one for the Parrott family Lion, built by Mike whilst still at school, some 25 years ago.

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	<p style="text-align: center;">LIONSMEET '99 Presented by the Old Locomotive Committee Hosted by Swansea Society of Model Engineers Saturday 14th August Owners of models of LION and other prototypes up to 1851 are invited to the annual OLCO Rally, held this year at the Swansea Society of Model Engineers track at the rear of Gwerneinon House, Gwerneinon Road, Derwen Fawr, Swansea. 3 1/2" & 5" raised level tracks. Boiler Certificates required to run. Come and display, watch or just meet. Find out more about LION and OLCO Further information - John Hawley - tel: 01275 472023</p>	
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The notice of Lionsmeet, just to keep you posted. This display should also be appearing in Model Engineer about now.

We will be the guests of the Swansea Society of Model Engineers, to whom we extend our thanks for hosting the event. I would also like to say thanks to Alan Murfin - Hon. Sec. of the Swansea Society, for the map of how to get there, track details and other supporting information which is laid out below. An accommodation list is also available, which I can send on request. Ring 01275 472023.

The sketches of the track profile and coupling bar are by Edward Parrott.

As you arrive, please make yourself known to any member of the host club who may be present. They will then advise you how to unload, where to get coal, water, charcoal, blower connections, tea, coffee and cold drinks, etc. and generally make you feel at home. You may need to show your boiler certificate at this point and certainly for the competition. Car parking space is a bit limited, so I would advise you to try to get there early, though there is a public car park nearby.

The track will be open by 10.00am and practice is allowed from that time until as close as you wish to get to lunch, which is fairly flexible, but the actual competition will start no later than 2.00pm, to allow us to run all competitors, finish, collate results and do the presentations in time to vacate the premises completely by a reasonable closing time.

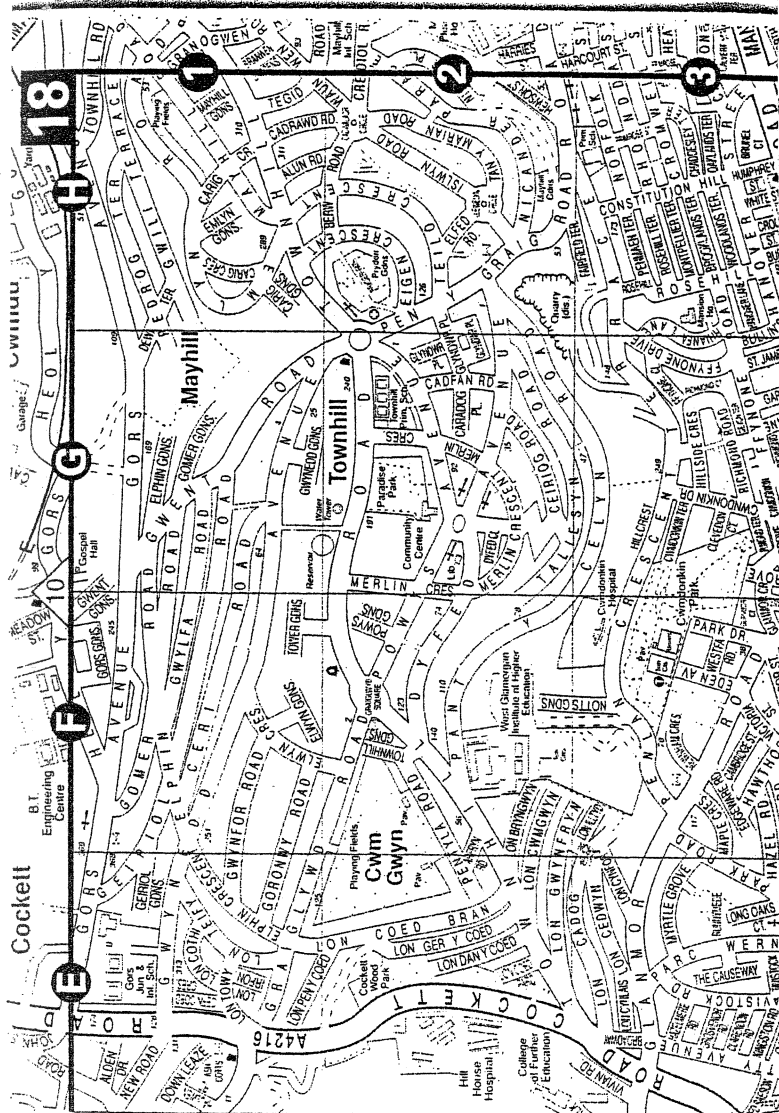
How to get there

Swansea is best approached along the M4, leaving at J42 onto the dual carriageway A483 towards Port Tennant. If you miss J42, J43 is very close, in which case take the B4290 through Jersey Marine to join up with the A483 at the roundabout. Continue West along the A483 across the River Tawe, past the Maritime and Industrial Museum and take the road to The Mumbles. At some point this road becomes the A4067 Oystermouth Road and you get onto the enclosed map.

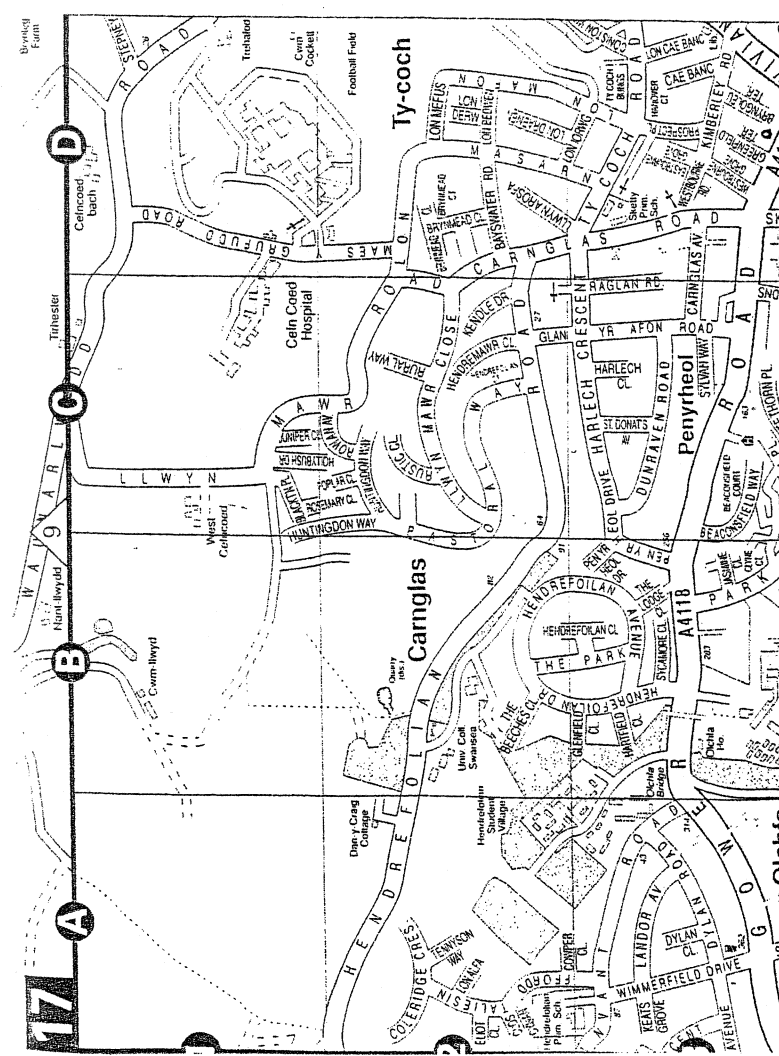
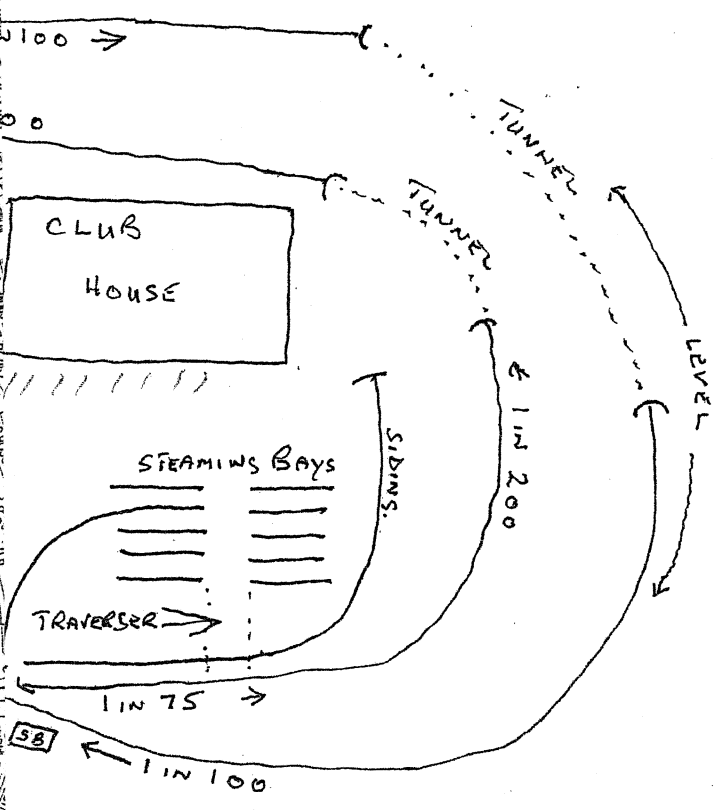
If however, you are coming from the Liverpool area, you may consider the A483 from Chester which is dual carriageway to Ruabon and appears to pass through few populated areas until Newtown. Here it gets a bit squiggly(not good for those with a heavy loco in the back) until Llandrindod Wells. At Llandovery the A40 takes you down to Llandeilo where you re-join the A483 for a mile or two, then at Ffairfach turn right onto the A476 as far as the dual carriageway A48. Turn left and continue to the M4 then stay on the M4 to Swansea, leaving at J47 where you join our old friend the A483 towards the Ferry Terminal. Turn right onto the A4216, which again is marked on the map.

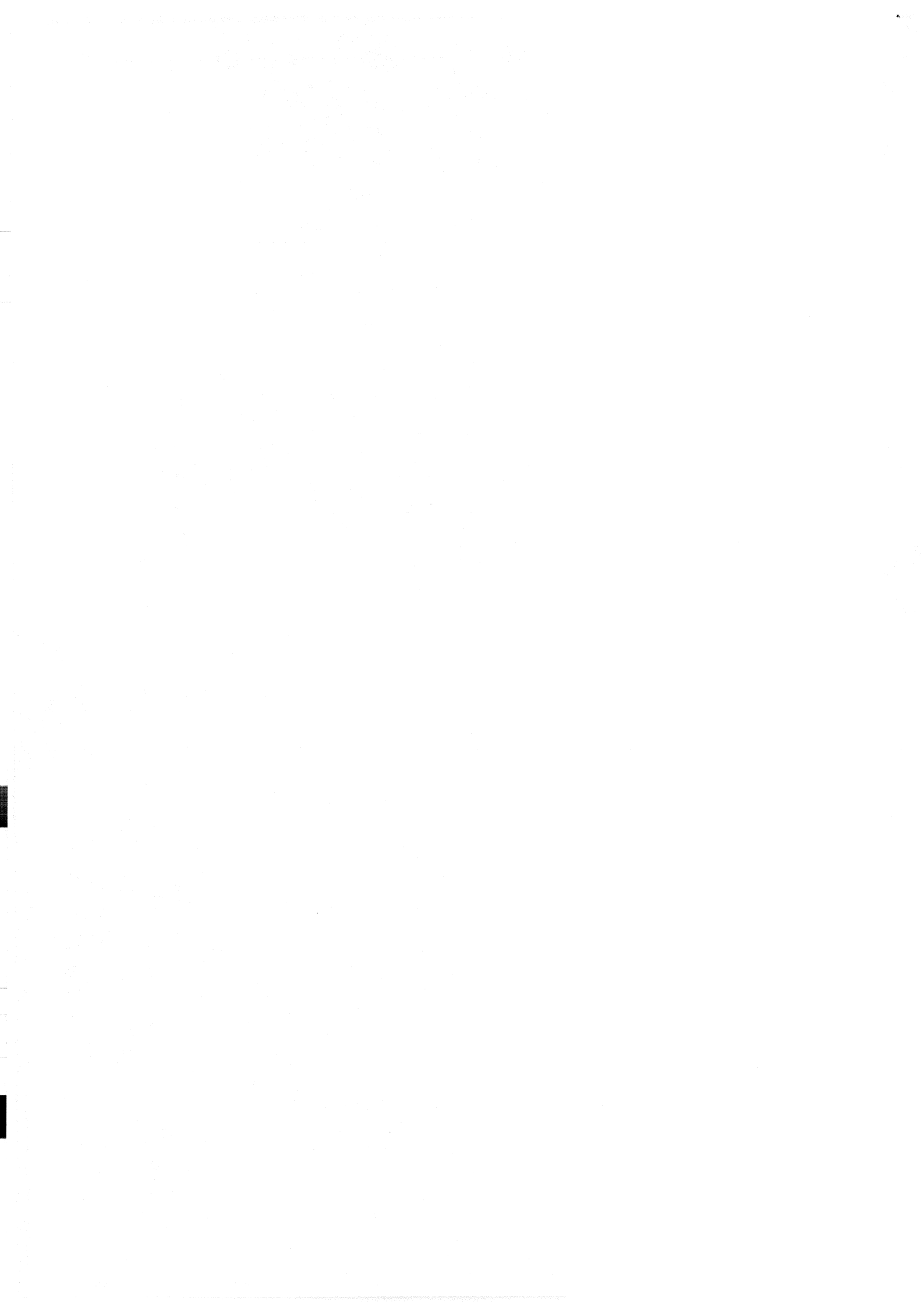
The Track

Raised track, steel rail, 3 1/2" and 5" gauges with minimum 10 1/2" ground clearance(Fig 2, Page 4). Maximum gradient 1 in 75. The track layout is inset into the map of the relevant area of Swansea.



MODEL ENGINEERS.
 NOT TO SCALE,
 GRADIENTS APPROX.
 LIGHT SIGNALING.
 INCHES.





Coupling Details

During the morning warm up and track familiarisation, you will be riding your driving trolley behind your Lion, with perhaps a passenger carriage behind you. To connect the carriage to your trolley you will need a coupling bar as in Edward's sketch. Edward tells me these will be supplied, but please make sure before you arrive that you can connect the bar to your trolley (See Fig 1). However, for the competition, you will be seated on the Guildford dynamometer car, kindly loaned by that club and transported to Swansea by David Neish. The tail of the dynamometer car carries the rearward facing instrumentation, which is monitored by the Observer, who sits on a passenger car connected directly behind the dynamometer car. David will ensure that the two cars can be coupled together. However, it is the driver's responsibility to ensure that his tender can connect to the dynamometer car, so be warned!

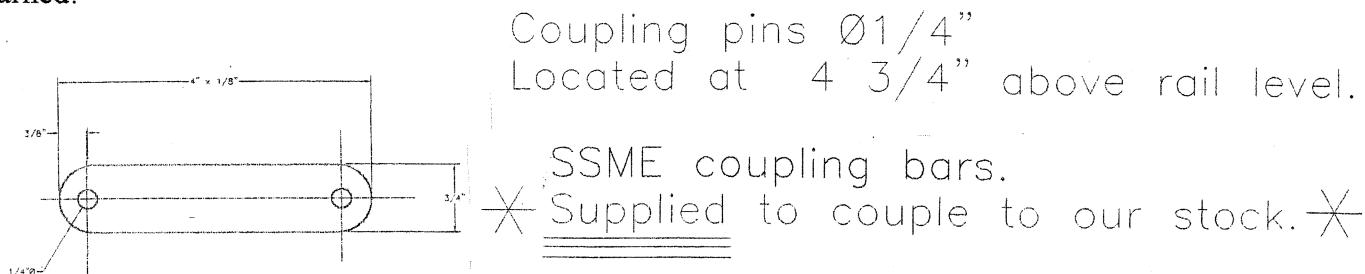


Fig 1. Edward's sketch of the Coupling Bar

Below are details of the dynamometer car and its method of coupling to the towing vehicle. This was sent me by David Neish last year, but is worth repeating now, especially for new members. **Please make sure your tender can connect to it**, to save embarrassing delays during the competition.

"The G M E S Dynamometer Car

The car is a 4-wheel truck, designed to carry the driver. It is coupled to the loco (*or tender..Ed*) at the front, and normally pulls a passenger trolley on which sits the Observer and any passengers.

The front of the dynamometer car has two large plastic blocks to act as buffers. These extend from 2" to 3 5/8" above the rail head, and over a width of 8" centred on the 5" track, with a gap of 2 3/4" in the centre.

For a 5" loco the coupling is a forked clevis 3/4" wide, with a vertical gap 1/4" wide in its centre and a horizontal hole 3/16" diameter (for a split pin) located 3 5/8" above rail head and 1/2" in front of the buffers when there is no pull. Coupling is usually by means of a strip, 3/16" thick, with a 90 degree twist so that it can couple to a horizontal clevis on the loco by means of a pin not more than 3/16" diameter. Strips with lengths of 1 1/2", 1 5/8", 2 3/4" & 2 7/8" are available.

For 3 1/2" locos, there is a smaller clevis, 1/2" wide with a 1/4" slot located 2 7/8" above rail head and 7/8" behind the line of the buffers. In use the slot in the small clevis is at 35 degrees from the vertical, and a coupling strip is available with a twist to fit a loco with a horizontal clevis. This strip is for tracks where the 3 1/2" running is towards the right of the 5" track; it is 3 1/2" long and 1/8" thick, with a 3/16" hole.

As a less-satisfactory alternative, small chain may be used in either clevis to couple to a loco with a hook. In this case arrangements should be made to prevent the chain from disengaging from the hook."

(Perhaps I should add that any chains used should have a minimum of slack to avoid snatching and impact as the loco changes speed. Ed).

If you have a Lion in the course of construction, bring it along as a display item. If you don't have one, come anyway. Enjoy the event, meet the people and determine to join in next time. By the way, we welcome as static or working models those whose prototypes were built before 1851, the year of the Great Exhibition, though they may not partake in the actual competition. Members who have witnessed this event in the past, or who bought the Lionsmeet '96 video will know how friendly an event it is. There is a cup to win for 5" gauge and there is usually something for the best performing 3 1/2" Lion driver.

To sum up

Saturday, 14th August - 10.00 am to early evening;

3 1/2" & 5" gauge raised steel tracks. There is no 7 1/4" gauge track;

There is a speed limit of 8 mph;

Coal will be made available, or you may bring your own;

There will be a table set up for those who may wish to exhibit static items.(ie, boilers, wheels, part completed models, etc)

An award for the winner in each gauge;

Boiler certificates for all engines in steam will be mandatory.

Swansea Society of Model Engineers. Trackbed profiles.
Worst case scenario.

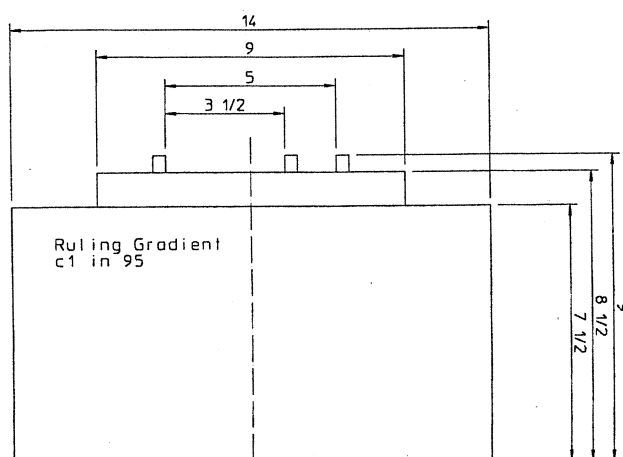


Fig 2. The Swansea Track Profile

Other Attractions at Swansea

I can't imagine why, but some of the alternative attractions that Swansea and area has to offer may be worth mentioning here. The Tourist Information Centre, Swansea, SA1 3QG, on 01792 468321 will supply brochures, maps and other details. Just for a few ideas though, there is the Gower Peninsula, the UK's first Designated Area of Outstanding Natural Beauty; The Mumbles, a 'Victorian' seaside resort; the Vale of Neath boasts some good waterfalls; there is the Maritime and Industrial Museum; the Maritime Quarter; the nearby Dylan Thomas Centre; coastal walks; the Oxwich Nature Reserve and the Boathouse at Larne; the Dan Yr-ogof caves; the covered market; Italian ice cream parlours and so on. Now, that's enough, or no one will be left for the competition.

If you have any queries, please don't hesitate to ask me(details on back page). Alan Murfin has kindly supplied his telephone number as well, in case you would like to put a query to him directly on 01792 413668. By the way, if you are staying in the area overnight, Alan tells me you are welcome to run on the track on the Sunday as well. He also tells me that there may be a train available during morning lulls, if any, for non participants who may wish to see the track, since it is a bit difficult to walk around.

THE OLD LOCOMOTIVE COMMITTEE

MINUTES OF THE FIFTEENTH ANNUAL GENERAL MEETING

The 1999 OLCO AGM was held in the 1830 Warehouse at the Museum of Science and Technology, Manchester on Saturday, 14th June. This date had been chosen as being the weekend closest to Lion's arrival on a low loader from Liverpool Museum, where, following that Museum's successful lottery bid, the decks are being cleared to carry out a major refurbishment.

Members had been busily engaged on the cleaning of Lion in the nearby Power Hall from opening time until shortly before the meeting commenced. This looks set to becoming an annual event and is a good opportunity to build relationships with the museum as well as for members to get close to their 'raison d'etre'.

Present:- E F Clark - Chairman;
 Jon Swindlehurst - Treasurer;
 John Hawley - Secretary;
 Charles Taylor-Nobbs;
 Peter Mountford;
 John Brandrick;
 Bernard Champness;
 Alan Bibby;
 David Laffin.

The Chairman opened the meeting at 2.00pm by thanking members for their attendance and the museum for their work in preparing for the meeting and for allowing the use of the 1830 warehouse.

Before the meeting got down to business, the Chairman introduced Dr Paul W Shelton of the School of Science and Technology at the University of Teesside who spoke on the subject of mechanical tests on material cut from the wrought iron tyre removed from one of Lion's front wheels in May 1998. A brief report is given below.

Apologies

Apologies for absence were received from David Neish; Geoff Wright, Susy Parrott, Edward Parrott, Alan McKirdy, Keith Hickton, Don Bowerman, Vernon Smallwood, Lionel Waldrige and Ivan Fletton.

Minutes of Fourteenth AGM

The following amendments to the 'OLCO FINANCIAL STATEMENT for the year ending 31/03/98' (see Lionsheart No 45, Page Nine) were put forward by the Treasurer:-

Against 'Advert in M.E. re Lionsmeet' in the column headed '1998', the figure of '45.53' to be added.

In the same column the figures of '£319.15' and '£36.04' to be amended to '£364.68' and (£9.49) respectively. The word '(LOSS)' to be appended to 'NET PROFIT'.

The bottom line figure of £2869.18 was correct and needed no change

The amendments were made in manuscript and initialled by the Chairman, who then asked that the minutes be taken as amended. Charles Taylor-Nobbs proposed acceptance and was seconded by Peter Mountford. When put to the vote the motion was carried unanimously. The amended minutes were duly signed by the Chairman.

Note - In the Minutes of the Fourteenth Annual General Meeting which were published in Lionsheart no 45 on Page Six, the previous year's minutes were referred to as those of the 'Twelfth' AGM. This should of course, have read the 'Thirteenth'. This anomaly was due to a typing error by the Secretary and was not repeated in the official, signed copy.

Matters Arising

There were no matters arising.

Chairman's Report

E F Clark opened his report by recalling last year's Lionsmeet and the success it had been, despite the dramatic seizure of one particular competing engine! He looked forward to this year's meeting in Swansea and expressed his wish that all who were able should come and support the event.

He welcomed the influx of new members, including Aster Models, who have announced the imminent issue of a gauge One Lion. (See Lionsheart No 47 Page Two).

Regarding the recent move of Lion to Manchester, he expressed OLCO's thanks to Alison Taubman, Curator of Energy and Land Transport at the Museum of Science and Technology in Manchester for her hospitality in enabling the AGM to be held in the interesting 1830 Warehouse and said that OLCO looked forward to a happy and mutually beneficial relationship during the next five years, adding that it would be nice to see Lion in steam in the future on special occasions.

The results of mechanical tests on material taken from the wrought iron tyre removed from one of Lion's front wheels were finally available(see below). It was not easy to apply modern tests to old materials such as this, especially since there was not enough material to produce a radial specimen. EF remarked in passing that the indicator test readings taken recently on the Crofton beam pumping engine were due to be published in December this year.

The 1999 Lionsmeet is to be held at Swansea, in memory of Mike Parrott, for whom this had been the local track. Mike had been Chairman of Swansea Society of Model Engineers and a strong, active member of OLCO.

The Chairman stated that he and Jon Swindlehurst had each a further three years of office to fulfil, membership willing, but now that John Hawley had completed his five year term the Executive Committee were faced with the need to appoint Secretary, Editor and Modellers' Representative. He added that self nomination was allowed, if anyone present felt inclined to put themselves forward for any or all of these posts.

Treasurer's Report

Jon Swindlehurst gave the following account of OLCO's financial activities during the year ending 31st March 1999

I am pleased to report that OLCO's finances continue to do well. From March 1998 to March 1999 membership rose from 27 to 32 and so far this year membership stands at 30.

Income shows a good increase, mainly due to many members opting for the 5 year membership. Sales also show an increase, £51 of which was for sale of drawings and £5 for sale of stock hence the value of "Stock in hand" reduced by a similar amount under current assets.

Deposit account interest also shows an increase mainly due to £500 being transferred from the current account, after discussion at last year's AGM.

With the healthy state of our finances I am happy to recommend that membership fees for OLCO should remain as they are for the present.

OLCO FINANCIAL STATEMENT for the year ending 31/03/99

<u>INCOME</u>	1999	1998
Subscriptions	£360.00	£273.00
Deposit account interest	90.25	73.19
Donations	-----	5.00
A.G.M . Dinner	-----	-----
Sales receipts	56.00	4.00
	<u>£506.25</u>	<u>£355.19</u>
 <u>EXPENDITURE</u>		
Advert in M.E. re: Lionsmeet	45.53	45.53
Cost of Archive copies of scale model trains	-----	-----
A.G.M Dinner	13.00	
Costs of producing Lionsheart	43.02	55.70
Donation to Thorpe Hall	-----	25.00
New Trophy	-----	183.45
Engraving	31.43	47.00
Treasurers expenses	4.00	8.00
	<u>£136.98</u>	<u>£364.68</u>
 <u>NET PROFIT</u>	 <u>£ 369.27</u>	 <u>-£9.49</u>

ASSETS AND LIABILITIES

CURRENT ASSETS

Cash at Bank ----	Current Account	£526.07	£750.05
Cash at Bank ----	Deposit Account	2529.93	1939.68
Stock in hand		168.45	173.45
Cash in hand		9.00	6.00
		<u>£3233.45</u>	<u>£2869.18</u>

John Brandrick proposed that the Treasurer's report be accepted as is and Peter Mountford seconded. The motion was carried unanimously.

Election of Officers

E F Clark and Jon Swindlehurst agreed to stand for a further year, provided there were no other nominations. There weren't.

Nominations for the posts of Secretary, Editor and Modellers' Representative were invited. One nomination had been received for the Modellers' Representative in the shape of Edward Parrott, supported by mother Susy. Charles Taylor-Nobbs proposed Peter Mountford and John Brandrick respectively for Secretary and Editor

The Chairman paid tribute to John Hawley, the retiring Secretary, Editor and Modellers' Representative.

The Executive Committee for 1999 now stands as follows:-

Chairman	- E F Clark;
Treasurer	- Jon Swindlehurst;
Secretary	- Peter Mountford;
Editor	- John Brandrick;
Modellers' Representative	- Edward Parrott.

Any Other Business

It was suggested that a further transfer be made from the current to the deposit account in view of the likely low level of expenditure during the forthcoming year. This will attract more interest. The Treasurer agreed to look into this.

Various topics were raised on the subject of getting Lion more into the public mind, including the setting up of some sort of display beside Lion in the Power Hall, complete with OLCO membership application forms and perhaps, a rolling film programme. However, no firm decisions could be made, since the Museum would have to be consulted on such matters.

Jon Swindlehurst put forward the idea that we should explore the possibility of developing an OLCO web site. It was agreed that the new Secretary should look into the matter.

There being no other formal business, the Chairman thanked everyone for their attendance and the Museum for the use of their facilities, especially for the overhead projector used during the talk on Lion's tyres. The meeting was declared closed at 4.30 pm.

Lion's Tyre Tests

Prior to the AGM, members were given a fascinating illustrated talk by Dr Paul W Shelton of the School of Science and Technology at the University of Teesside. The subject was on mechanical tests carried out on material cut from the wrought iron tyre removed from one of Lion's front wheels in May 1998. The tests were carried out by Phillip Heward, one of Dr Shelton's students. Due to the rather limited radial thickness of the tyre, it was not possible to produce test pieces in all three directions. However, some interesting results were obtained, though they were difficult to compare with modern materials. This particular material, though probably not original equipment on Lion in 1838, was almost certainly produced prior to 1859, when Lion was sold 'Out of Service' to the Mersey Harbour Board.

Dr Shelton had brought several slides showing the grain structure of the wrought iron along with a polished, (though not etched), section of the tyre. Having heard in the past that the material was far from homogenous, I had feared that it would be full of laminations, slag inclusions, obvious discontinuities and almost ready to fall apart in my hands. However, the section appeared to be remarkably whole, though I suspect that under the microscope it would not look so good. A substantial document accompanied the talk, but since I don't have a copy, I am unable to go into detail.

EF has been the driving force behind getting these tests done ever since the tyres were removed from their wheel centres at the Hunslet Engine Company's works in Leeds. The tyre removal was necessitated by the excessive left hand flange wear incurred as a result of driving Lion around a circular track at Wavertree in 1930, combined with the sideways forces generated at the front wheels by placing the towing eye on the rear end of Lion's frame, as opposed to the more sensible position as close as possible to the centre of traction. The tyres were replaced by modern steel items manufactured by Krupps and shrunk on, again at Hunslet. Sad to think that we were unable to obtain them from home sources. Mind you, the first set sent by Krupps were oversize, so even they can get it wrong sometimes!

I cannot give a fuller report at this time, since I do not have access to the report. Perhaps another time...

Welcome to New Members

We would like to extend a warm welcome to new members:- Mr A Pullen; Mr A Bibby and Mr D Laffin. I look forward to seeing you all at some time in the near future, Lionsmeet for example?

Boilermaker seeks work

As I mentioned earlier, Edward Parrott has several boilers to his credit. He is shortly to start work on a new boiler for the Parrott family Lion. He is willing to take on commissions for new boilers. I know nothing of his rates, but am confident in his abilities. If you are looking for a new boiler, give him a ring on 07880 607932. He will build to your design, LBSC's or to mine, which will be on display at Swansea.

That's all, folks

Lionsheart is published by the Old Locomotive Committee

Addresses for correspondence:-

Editor:-

Mr J T Brandrick,
Hawthorns,
45 Bury New Road,
Ramsbottom,
Bury,
Lancs.,
BL0 0AR. Tel: 01706 822473.

Secretary:-

Mr P Mountford,
63 Grove Road,
Rock Ferry,
Wirral,
Merseyside,
L42 3XT. Tel: 0151 6452861.

