



LIONSHEART



Number 87

Web Site: <http://www.lionlocomotive.org.uk/>

December 2016



Photo 1. Is it a plane? Is it a train? Is it a steaming Christmas pud? No, it's a Lion. Well, to be strictly accurate, it is Adrian Banks' Thunderbolt on a mission! I just hope that's a cloud of brandy fumes enveloping the driver. I'm not sure where, or when, nor who took the photo, but it was submitted by Adrian himself (I think). Or maybe not!

Index

Membership matters	2
Cover Story – Lionsmeet 2016, by Jan Ford.....	2
Chairman's Christmas Message, by John Brandrick	9
Loco Construction – Reversing Lever, by Dave Forrest...	9
Minutes of 31 st AGM (2016), by Peter Mountford.....	14
The Editor's Bit, by John Hawley	16
Dates for your Diary 2017	17
And to Whet your Appetites – Bristol 2016 Exhibition..	18
The Chairman gets Out & About	19
Also seen at Nottingham.....	19
Editor's Contact Details	20

**On behalf of the Executive Committee
may I wish all readers a
Merry Christmas
and a
Happy New Year**



Photo 2: A damaged fence? No, this was once a straight, level piece of railway track on the east coast of South Island, New Zealand. A recent 'quake has resulted in enormous damage to the infrastructure in the region. See bottom of page 16. Photo link sent by Peter Holdaway, Blenheim, New Zealand.

Membership Matters

We extend a warm welcome to the following new member:

Mr Chris Parsons, of Exeter. Welcome to OLCO Chris. I hope that your membership will bring you benefits and items of technical interest. Feel free to drop us a line about your latest model or any problems you may be experiencing. Do you have a model on the stocks at the moment?

Sadly, we have to report the passing of Justin Garside-Taylor of the Museum of Liverpool, who was instrumental in refurbishing Lion to her present display condition in the museum. He was a great help to me when I was measuring Lion at Juniper Street, whilst the refurb. was under way. He will be a hard act for the museum to replace.

Cover Story

Lionsmeet 2016

by Jan Ford

Every year, the Old Locomotive Committee (OLCO) organises a get-together, called 'Lionsmeet', for modellers of the 'Lion' locomotive (and similar models of designs from the early days of railways). On Saturday 27th August 2016, I attended the Old Locomotive Committee annual 'Lionsmeet' event which was held at the Nottingham Society of Model and Experimental Engineers Limited (Nottingham SMEE) site at Ruddington, occupying part of what was formerly called Nottingham Transport Heritage Centre.

Getting there

I travelled by train from Wolverhampton and there's a post describing the journey [here](#). After doing a quick survey of the station and its architecture, I took a taxi from Nottingham Station. As we drove through the city, it started to rain and then the driver had some difficulty locating the destination because the post code which had been advised was not the best one and left us, tantalisingly, a few hundred yards short of my goal. Fortunately, I spotted a brown 'tourist sign' in the distance and was able to direct the local driver the rest of the way! I afterwards discovered that a more helpful post code would have been NG11 6JS. We'd arrived at the large site, apparently originally an industrial complex. Part of the area had been redeveloped as modern commercial property whilst the remainder now provided accommodation not only for Nottingham SMEE, a preserved bus group and a model railway group but also serves as headquarters for the standard gauge-preserved Great Central Railway - Nottingham. Just inside the main gate I spotted a large sign directing visitors to the miniature railway so a few minutes trudge through the rain past the Bus Museum took me to my destination.

The Event

I found Andrew and David Neish in the Clubroom, sheltering from the rain and enjoying a warm drink. Soon, I'd also been provided with a beverage and the rain stopped, so things were looking far more promising. Activities transferred to the Steaming Bays as other attendees started to arrive by car.

Nottingham SMEE was first established in 1929 and has been on the present site for around 25 years. The original accommodation is a converted and extended industrial building providing a well-equipped workshop (including multiple Bridgeport manual milling machines), mess, kitchen, toilets and a spacious Clubroom with modern Audio-Visual facilities.



Photo 3: General view of the well-equipped workshop.

There is substantial purpose-built accommodation for 7.25" gauge locomotives and rolling stock. In one building, I admired a handsome 7.25" gauge model of a '2P' which was undergoing a boiler test.



Photo 4: 40662 undergoing a hydraulic test. Boiler Inspector John Lopez underneath checking the firebox foundation ring.

There are custom-built covered Steaming Bays for 3.5" and 5" gauges.



Photo 5: The Steaming Bays have three parallel raised tracks in a handsome building, topped by magnificent smoke louvres.

The original running track is 2270 feet in length, elevated, dumb-bell shaped, offering dual-gauge (3.5"/5") track using aluminium rails. There is now also an extensive 7.25" ground level system, roughly oval-shaped laid outside the elevated track. The 7.25" track also has a triangular junction serving a branch leading to a terminus called Parkgate nearer the site entrance

As at recent 'Lionsmeet' events, the format was 'free running', that is no competitive running, using only the elevated track since no 7.25" gauge models steamed this year. As the 'early steamers' (notably Andrew and David Neish with David's familiar 'Lion' and Adrian Banks with his 'Thunderbolt') moved their models onto the elevated running track, I obtained permission to walk around the circuit to familiarise myself with the facilities.

The elevated track is signalled with automatic 3-aspect colour-light signals for clockwise running, so I took this direction for my walk, starting at Little Ruddington station.



Photo 6: Little Ruddington Station with (L-R) elevated track, 7.25" gauge station, exhibits outside Bus Museum.

Immediately on leaving the station, there is the expected traverser to move locomotives from the steaming bays towards the running circuit but this involves crossing the ground-level 7.25" track. This hazard is protected by a proper level crossing with four gates with gate stops, power-operated from the adjacent signal box, Little Ruddington West, and interlocked with signals on the ground level track.



Photo 7: Traverser serving the steaming bays pictured next to the level crossing.

The height of the Traverser can be adjusted as necessary. The Traverser mounts a battery to power the height adjustment and the battery can be re-charged from a power lead mounted on one of the steaming bay roof supporting columns. This traverser does not deliver locomotives directly to the running line but to an intermediate siding. Next, I passed Little Ruddington West signal box which has a beautifully-engineered 50-lever frame in miniature which controls the power-operated points and signals on the ground-level track. This frame has a miniature level crossing gate wheel to control the level crossing gates and this requires around 12 turns in the appropriate direction before movement of the gates takes place!



Photo 8: Part of the miniature lever frame in Little Ruddington West signal box. Just visible left is the supporting frame carrying the level crossing gate wheel.

Just outside the signal box, a second traverser not only transfers locomotives from the intermediate siding to the elevated running line but also moves carriages between the carriage shed and the running line.



Photo 9: David Neish moving his 'Lion' onto the running line using the long traverser which also transfers carriages from the brick carriage shed (visible centre left) to the running line.



Photo 10: The 'wooded area'.

After this second traverser, the line then passes through a wooded area as it negotiates one end of the 'dumb bell'. The curvature and, on my visit, the dampness combined with 'leaves in the line' made this a tricky area for drivers. Emerging from the wooded area, the elevated track passes a garden area which includes an extensive 'Gauge 1' layout on a raised baseboard. The elevated track then runs to the rear of the signal box and, on a long 'back straight', passes the station area.



Photo 11: A Nottingham SMEE member undertakes permanent way maintenance (or prayer?) as Adrian Banks heads for the tunnel on 'Thunderbolt'.

Photo 12: The rail joints in the 3.5" and 5" gauge track are 'lapped' to allow expansion of the aluminium rail.

The elevated track next passes through the first 'bore' of a '2-bore' tunnel before reversing direction on the second 'dumb bell'. After traversing the second 'bore' of the tunnel the line arrives back at the station area.



Photo 13: Tunnel section, looking towards the station. Photo 14: Sophie and friend prepare for the 'off'.

A couple of diesel-outline petrol-engined models - a 2-car Diesel Multiple Unit and a 'Class 20' - gave rides to the public on the 7.25" gauge track.

Sophie Harris, a lady engineer who is a member of Nottingham SMEE, ran her 'Lion' on the elevated track. Her 'Lion' is one of three built some years ago (*circa 1980 – Ed.*) by Robert Clark, who was a respected member of Nottingham SMEE. Having sold one of the three (probably for display), the builder died when still quite young. The brother of the deceased gifted the second 'Lion' to a close friend of the builder. The remaining 'Lion' was offered to members of Nottingham SMEE and it was acquired by Sophie, who already had a number of loco building projects to her credit.

By this time, Jon Swindlehurst with his 'Lion' and a fifth 'Lion' were being prepared for demonstration running. I took one ride behind Jon (forgetting, despite years of being 'Official Observer' or 'Dynamometrix' during 'Lionsmeet' contests, what a 'fire thrower' his willing model can be - a real "Nor' Wessie" engine!) Demonstration running was suspended when a wide range of sandwiches was revealed for the visitors but after a leisurely break, some models continued to steam whilst other attendees either continued to chat or examined the part-built models on display.

John Hawley showed his 7.25" gauge 'Lion' boiler and the assembled driving wheelset for his 5" gauge 'Lion'. I foolishly originally described this as for his 7.25" 'Lion', forgetting that John had displayed his 5" 'Lion', started by Michael Lee, at the Guildford 'Lionsmeet' in 2015 ([described here](#)), when the driving wheelset was a 'kit of parts'.



Photo 15: Jon Swindlehurst prepares his 5" 'Lion' with another 'Lion' being steamed in the background.



Photo 16: Lionsmeet 2016, Nottingham: Jon Swindlehurst's 7.25" 'Modified Lion' - view from above showing expansions links and valve rods.

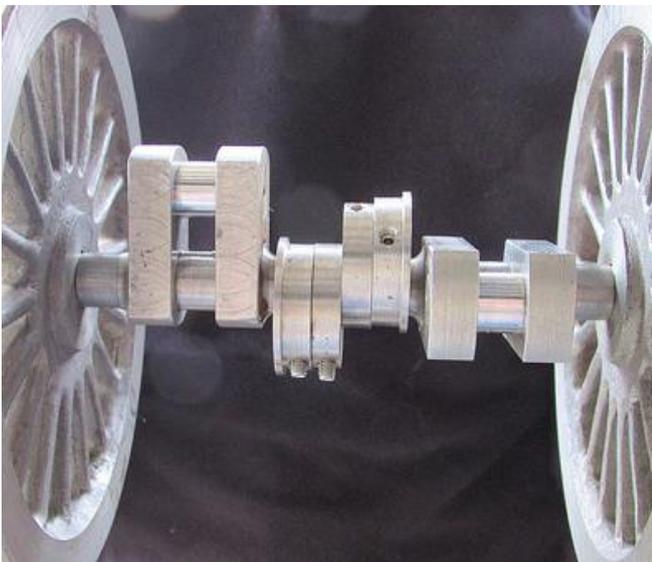


Photo 17: Part-assembled driving wheelset for John Hawley's 5" gauge 'Lion'.



Photo 18: OLCO Member David Wilson displayed this modified design of regulator.

Jon Swindlehurst showed progress on his remarkable 7.25" gauge 'Modified Lion', with Stephenson Link Motion and Balanced Slide Valves. Fabrications have replaced what would normally be castings.

OLCO member David Wilson displayed a modified design of regulator suitable for 'Lion' models. Chairman John Brandrick told me that it is based on the screw-down version described by Martin Evans for 'Simplex' (*ME Vol 134 Pg 650 – Ed.*) and that Jon Swindlehurst's 'Lion' employs a similar design, not unlike that in the full-size Lion. There's a little about the regulators employed on full-size locomotives, including 'Lion', [here](#).

The rain had held off during most of the day the day and there were some periods of bright sunshine allowing everybody to enjoy the event.

All photos in this article by Jan Ford



Photo 19: 27-8 Adrian talking to Jon Pierson, friend of OLCO member David Wilson from S Durham. Pity about the bump on Jon's head. How did he get that?



Photo 20: Tony Parsons poses happily with his Lion. Tony (and others) designed an improved support system for the valve spindle (LHs69, 70 & 80).



Photo 21: Jon Swindlehurst ready for the off ...



Photo 22: ... but is stuck behind David Neish, who is stuck behind ...?



Photo 23: Sophie's Lilliputian crew men. Now, where's that shovel?



Photo 24: Jan Ford & Adrian Banks in lively and (I'll wager) humorous conversation.



Photo 25: Interior details of David Wilson's Regulator. David also commented that Loctite 620 is good for 200°C.



Photo 26: I was the last to leave, in pouring rain, so I never found out what this layout was - Ed



Chairman's Christmas Message

by John Brandrick

The start to 2016 was disappointing as our attendance at Alexandra Palace in January had to be cancelled due to family reasons and in February attendance at the Manchester exhibition was cancelled at short notice due to illness. However, hopefully we made up for it with a good show at Doncaster and later at Bristol. Our AGM was very well supported, so thank you to all who took the trouble to attend. I like to think that our AGM is not completely dull and even enjoyable! There is always plenty to discuss and of course the opportunity to see Lion so please make a point of attending the next one if you can. Now we have the dates for Doncaster in May to work round, hopefully we can arrange the date for 2017.

Lionsmeet at Nottingham was a great success thanks to Andrew Neish for organising it, Nottingham SME for being excellent hosts and not forgetting the OLCO members who attended with or without Lions. Hopefully we can fix the venue and date for 2017 fairly soon.

Sadly, I have to finish off 2016 on a sad note and report the death of Justin Garside-Taylor. Justin was Lion's conservator at Liverpool and lavished much care on its restoration which was rewarded by the prestigious award from the Institution of Mechanical Engineers. He always supported OLCO's interest in Lion and will be greatly missed. We also lost member Bob Grimshaw, of Cheadle, whom I never had the pleasure of meeting but I understand he was involved with OLCO in its very early days.

I have to admit that I haven't managed to do all the things I intended for OLCO this year largely because I have been preoccupied with building my workshop, something I have waited for since moving up to Lancashire 27 years ago! Consequently intended articles for Lionsheart and progress with the two memorial projects for EF discussed at the AGM have had to take a back seat but next year should see some progress not only with these but I can also resume work on my own Lion!

Preparations are now well in hand for the trip down to Alexandra Palace in January (*See back page – Ed.*). It is almost frightening to think that 10 years have passed since we first had a stand there and, of course, John Hawley was even earlier with the stand at Bristol. But it has all been worth the effort. In 2007 we had a dwindling membership of around 45. According to the present Lionsheart circulation list, membership now stands at around 70. Not so long ago we were in the 80's. Not many societies of our sort can boast that sort of growth so OLCO seems to be in good shape.

Finally, may I thank everyone who has supported OLCO activities this year especially the exhibitions with loan of models and stewarding. I am aware that it often involves a great deal of time and travelling and is much appreciated.

I look forward to meeting as many of you as possible in 2017.

I hope you all have a Happy Christmas and a clear road ahead in the New Year.

John Brandrick



Locomotives under Construction

Reversing Lever

by Dave Forrest

Introduction

I definitely know I'm not the first to attempt a replica of the Reversing Lever, (e.g. the article by Jon Swindlehurst in "Lionsheart" No. 78 on his reversing lever for a 7 ¼ in. "Lion" and in "Lionsheart" No. 79 Alan Bibby's version for his 5 in. "Lion"). But I might be the first to do it without an external spring on the latch.

Gravity did the work of holding the latching lever in place on original "Lion", but on the smaller scale version many have incorporated an external spring. I wanted to avoid an external spring and my "eureka" moment came one night playing with my spectacles when I noticed the side frames were spring loaded with no visible signs of a spring. I managed to acquire some old spectacle frames and dismantled them to find out how they worked. My solution is a spring mechanism buried out of sight inside the main arm of the Reversing Lever itself.

I also deliberated over the ergonomics of the Reversing Lever. On original "Lion", the Reversing Lever moved forwards to engage REVERSE gear and backwards for FORWARD. I thought this could lead to problems when operating the locomotive so sought the advice of more experienced 'drivers' (this is my first model locomotive and I

have no driving experience). The consensus was for the ‘logical’ ergonomics - forward for FORWARD gear and backwards for REVERSE, which meant compromising fidelity to prototype.

Making a Start

Drawings of the ‘original’ reversing lever assembly are available from J P Hawley and were the starting point of the scaled-down design. As ever, some (small) compromises to scaling were necessary to ensure “manufacturability”. To give some idea of the sizes involved (see Photograph 27 below) the handle lifting pivot pin is 1.0 mm diameter and the latch rod lifting pivot pin, which is in a slot inside the handle, is 0.8 mm diameter. The spring buried in the arm of the reversing lever is only 1.3 mm diameter so there’s not a lot of room.



Photograph 27 – Reversing lever handle top



Photograph 28 – Forming the “ball” end on the lever

Making the Parts

Some experimentation was called for in making the various elements of the design – lever handle, lifting lever, etc. Prototyping the manufacture of these features before putting them all together in the final manufacture of the whole thing proved invaluable.

The lever handle (photograph 27) was made in three parts. The first part is the central “ball” which was made integral with the lever itself. Photograph 28 shows the “ball” formed on the end of a piece of ¼ in. x ¼ in. bright mild steel.

The ¼ in. x ¼ in. section was then machined down to a tapered section to replicate the prototype (Photograph 29). The spring is housed inside the lower part of this lever.



Photograph 29 – The lever taking shape

The other parts of the handle are depicted in Photograph 30 which shows the ‘ball end’ drilled and slotted ready to receive the lifting lever handle (left hand side of picture); the initial stages of making the lifting lever handle showing the 1.0 mm wide slot which receives the lifting lever (the 0.8 mm diameter pivot hole is at 90° to the slot) is in the centre of the picture and, finally, the Reversing Lever handle at the right hand side of the picture has been finished machined and is ready for assembly to the ‘ball end’.



Photograph 30 – Component parts of handle during manufacture

Photograph 31 is the lifting lever showing the formed end (1.0 mm wide with the 0.8 mm pivot hole) which fits inside the slot of the lifting handle.



Photograph 31 – Lifting lever during manufacture

Assembly

The completed Reversing Lever assembly is shown in Photograph 32. The ‘hole’ towards the bottom of the lifting lever is the screw holding the ‘tenon’ in place. The ‘tenon’ guides the latching end of the lifting lever in a slot in the Reversing Lever arm. Immediately above the slot is the ‘built-in’ spring housing with one end of the spring pressing against the top of the ‘tenon’ to hold the latch in place.

The Reversing Lever mounting stand is a good replica of the original which includes the square-headed mounting bolts.

The reach rod is pivoted as on the prototype (reach rod pivot above the reversing lever pivot – LBSC had the reach rod pivot BELOW the reversing lever pivot). The reach rod “sets off in the same direction” as on the prototype and intersects the driving wheel in roughly the same location. It is then cranked downwards (out of sight) to avoid a clash with the crosshead pump.



Photograph 32 – Completed Reversing Lever assembly

Locating the Reversing Lever Assembly

On the prototype, the Reversing Lever is located nearly half way along the “haystack” (firebox) which is about $2\frac{3}{8}$ in. further forward (on the 5” Lion) than shown on the LBSC drawings. If I followed the prototype, the handle of the Reversing Lever would be very close to the side of the firebox and could be quite “fiddly” to operate with, no doubt, a newly acquired vocabulary of expletives from burnt fingers!

Having never operated a model locomotive, I had no idea what I would be letting myself in for but I reasoned that “gear changing” would not be a frequent operation. I therefore decided to stick with the prototype position and will “suck it and see”.

Ergonomics of Reversing Lever Operation

On original “Lion”, the Reversing Lever moved forwards to engage REVERSE gear and backwards for FORWARD which didn’t seem very logical and could be confusing for drivers of different locomotives. The late Mike Parrott discussed this problem in “Lionsheart” No. 25 pages 7 and 8 and postulated that the “back-to-front” operation was probably a result of incorrect assembly after an overhaul.

The dichotomy therefore is to follow the prototype or adopt a more logical, ergonomic arrangement. There are probably hundreds of models made to LBSC’s design which go FORWARD when the lever is forward and vice versa. A diversion from a well-established precedent could be unwise. There is also a reasoned argument which seems to suggest that the “back-to front” operation of the prototype could be a mistake. It is for these two reasons that I opted to deviate from prototype and go for the ergonomic solution.

The following drawing (Figure1) is extracted from a series of articles by LBSC appearing in Volumes 108 – 111 of “The Model Engineer” between April 1953 and December 1954:-

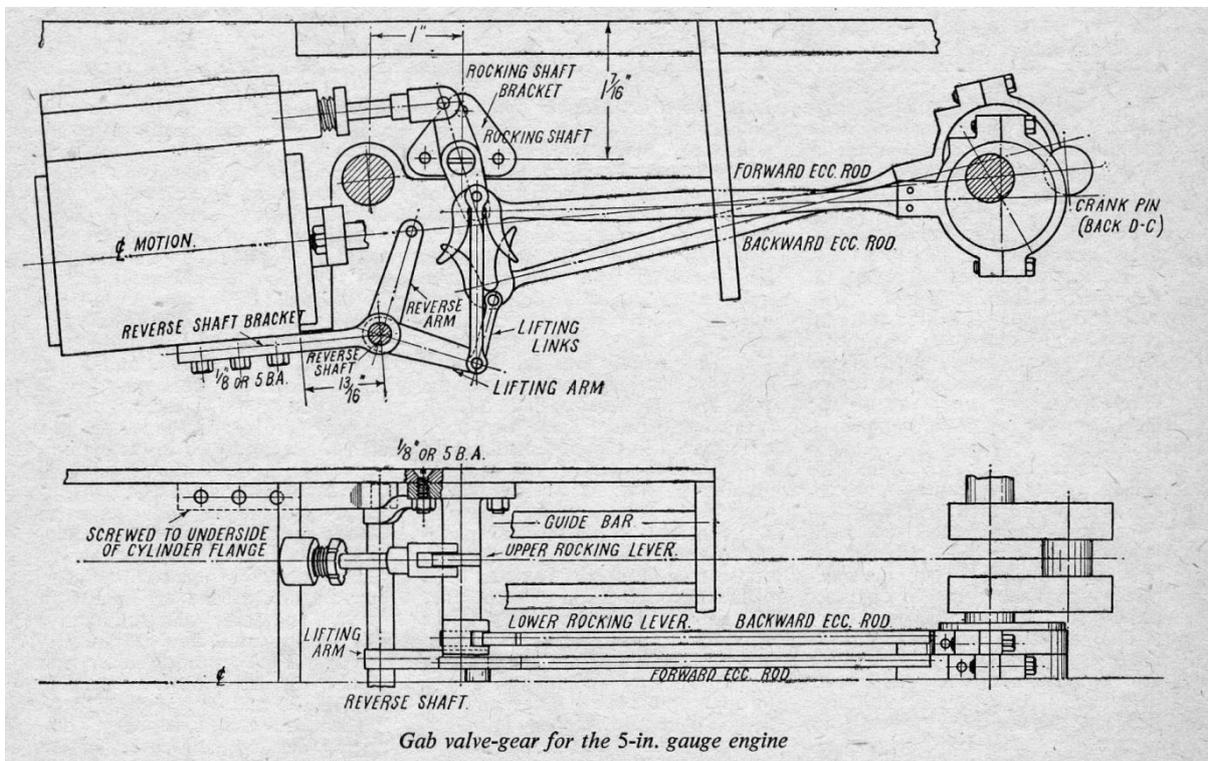


Figure 1 – “Lion” valve gear

Figure 1 shows the locomotive in FORWARD gear. The forward gab is engaged with the pin in the rocking shaft and is held in place by the lifting link connected to the lifting arm of the reversing shaft. The lifting arm is in its lowest position which corresponds to the reverse arm being at its right hand extremity of its travel (the lifting arm and the reverse arm are effectively a bell crank lever solidly attached to the reversing shaft).

The reverse arm is operated by the reach rod running from the reversing lever alongside the firebox to the reverse arm. On the LBSC design, the connection of the reach rod to the reversing lever is below the pivot point of the reversing lever. This means that as the reversing lever is moved forward, the reach rod moves in the opposite direction i.e. to the right thus engaging FORWARD gear.

On our modified version of the reversing lever, the connection of the reach rod is above the pivot point so the movement of the reverse arm needs to be reversed. This was achieved by incorporating two small spur gears on the end of the reverse arm and reverse shaft as shown in Photograph 37 below. One of the support brackets was modified (right hand bracket in the photograph) but it fits neatly in the space occupied by the original LBSC-designed bracket. The gears were pinned to both shafts to prevent any unwanted ‘slip’.



Photograph 37 – Reverse shaft assembly



Minutes of the 31st Annual General Meeting of the Old Locomotive Committee held on 7th May 2016
by Peter Mountford.

Venue: Museum of Liverpool

Members present:

John Brandrick (Chairman) John Griffiths Mike Casey
John Hawley (Lionsheart editor) Dave Forrest Alan Bibby
Jon Swindlehurst (Treasurer) Sharon Brown Bob Hayter
Peter Mountford (Temporary Secretary) John Oliver

1. Welcome by Chairman:

The Chairman formally opened the meeting at 1.00pm and welcomed members attending. He informed the meeting that long time member Alfred Lloyd had died peacefully after a short illness on Dec 19th last. (See Obituary, LH85 Pg. 4. – Ed.). The meeting observed a minute's silence in Alfred's memory.

2. Apologies:

Jan Ford Alan Banks John Coop
Andrew Neish John Mills Rich Garich

3. Minutes of the 30th AGM:

The Minutes of the 30th AGM had been circulated to members and were accepted (Proposed John Hawley, Seconded John Griffiths)

4. Matters Arising:

There were no matters arising from the Minutes.

5. Chairman's Report:

It has been, disappointingly, a year of mixed fortunes. We have had OLCO stands at Bristol and Harrogate but unfortunately due to circumstances beyond my control, had to cancel our appearances at Alexandra Palace in January and also, at very short notice, at Middleton, Manchester, in February. This latter cancellation exposes the frailty of our exhibition arrangements as there were no contingency plans for someone else to take over in the event of indisposition and maybe that it something we need to look at.

On a more positive note, we will be at Doncaster later this month and at Bristol in August. We should be back at Alexandra Palace in 2017 and I understand there are plans for a further exhibition next year in the North West as Middleton proved to be a success. So, hopefully, we will be there too.

I do not think we can underestimate the value of an OLCO presence at the various exhibitions as a means of advertising our existence generally and for those interested in Lion and also as means of contact with our nationally distributed membership. I am convinced that OLCO would begin to decline without them and it might even be worth considering extending our activities beyond the Model Engineering community to other events of railway interest. Perhaps, however, three or four events a year are enough to cope with!

I would like to thank all those who support John Hawley and me with the OLCO stands and particularly the loan of Lion models. The very positive response I have had for the Doncaster show is much appreciated and I am aware that it often involves members in two trips and over long distances. As a result, I think we should have a very good stand at Doncaster. We also need to support John Hawley at Bristol so please help if you can with model loans or stewarding.

Lionsmeet

It is pleasing to report that Lionsmeet at Guildford was a great success, particularly as it was Lionsmeet's 30th Anniversary and appropriately as Guildford was where Lionsmeet first took place. Thanks are due to Guildford MES for hosting the event, for making us most welcome and for putting on an interesting exhibition in their clubhouse.

Thank you Andrew Neish for organising it and the dinner afterwards complete with Lionsmeet birthday cake!

Thank you all who supported, with or without Lions.

Finally, thank you Jan Ford for an excellent report in Lionsheart. I think everyone who read it but were not able to attend wished they had been there. It was a truly enjoyable day.

This year's Lionsmeet arrangements are still being finalised but it should be at Nottingham SME's track at Ruddington on Saturday 27th of August. This is an excellent venue with other attractions on site including the workshops of the Northern section of the Great Central Railway.

Lionsheart

Lionsheart continues its excellent standard thanks to John Hawley's superb editorship and it is gratifying that there is a flow of articles especially from members building Lion. It is also pleasing that our policy of sending copies to Model Engineer and Engineering in Miniature results in frequent mention in the club news sections. Thank you, John, for your indispensable service to OLCO.

Website

It is easy to take this for granted now it is well established, but on behalf of the OLCO membership I would like to express our appreciation to Alan Banks for his work behind the scenes. I do think we could do more to assist him especially in informing him in good time of dates of OLCO activities for inclusion. I have recently started reading through the early issues of Lionsheart on our archive and realise what an excellent and useful facility this is.

I think we could extend our website archive, for instances including the notes of Lion's extensive rebuild at Ruston Diesels in 1980 which could be of interest to Lion builders.

The Future

This year's AGM agenda includes discussion on the criteria for the Charles Taylor-Nobbs Trophy, a possible model of Lion as used to drive a stationary pump at Princes Dock and a new edition of the 'Yellow Book' about Lion.

These will properly be discussed later but with regard to the last mentioned, reading through some of the early contributions to Lionsheart in our archive, it is readily apparent that the present OLCO was intended, especially by Charles Taylor-Nobbs, as a study group for those interested in Lion. In the early days of OLCO members had the bonus of assisting with running Lion when it was in steam but we have now had to adapt our activities with the emphasis now on modelling. We should not, however, lose sight of our original purpose. I am constantly reminded of how little we really know about Lion's history and how much research remains to be done. This will become particularly relevant if we become involved in a new history of Lion.

There are plenty of challenges for OLCO in the future!

Thanks

It remains for me to thank all the officers of OLCO for their work on behalf of the general membership and to thank everyone who has supported our activities in one way or another.

As ever, thank you to Sharon Brown, Curator of Land Transport, Liverpool Museum and OLCO member, for her support particularly for her courtesy in providing us with a venue for our meeting and not least to Sharon and her staff for looking after Lion. It is much appreciated. **Thank you.**

6. Treasurer's Report:

The Treasurer's Report was circulated to members. Jon Swindlehurst pointed out the higher interest earned this past year.

The report was accepted (Proposed John Griffiths, Seconded Alan Bibby)

7. Election of Office Bearers:

There being no candidates for the positions and the serving Officers having expressed willingness to continue serving their re-appointment was agreed (proposed John Griffiths, Seconded Alan Bibby)

8. Lionsmeet 2016:

Final details were not yet available but the Chairman felt that the provisional date of Saturday, 27th August 2016 in Nottingham would be confirmed.

9. Criteria for the award of the Charles Taylor-Nobbs Trophy:

Considerable debate took place and various suggestions made.

- a. the entry should be a working model (and this category was added to the schedule)
- b. points from 0 to 5 could be allocated for each of the categories
- c. judging should take place at Lionsmeet.
- d. 3 judges selected from members present and best qualified at Lionsmeet would judge the exhibits
- e. the same model could only be entered once unless significant modifications had been made.
- f. members from abroad could submit detailed photographs of their models for considerations. Additional checks would probably have to be added.

It was also agreed that a trial would be done at the 2016 Lionsmeet and then the matter would be finalised at the next AGM

10. Proposed new book on LION to replace the 'Yellow Book':

Opening this item the Chairman said that a decision must be made on what type of publication should be produced as a replacement - a simple version with general appeal or more detailed to cater for the locomotive enthusiast.

The Yellow Book could be used with updated information, bigger and better illustrations and additional items e.g. items from Model Engineer dealing with LION, and drawings. He also felt that the book should be dedicated to Charles Taylor-Nobbs and E F Clark.

The Chairman mentioned that he had met a Simon Castens who ran Wild Swan Publications and who may be interested in publishing a replacement to the Yellow Book.

A general discussion ensued and it was then agreed that the Chairman would meet with Simon Castens and discuss the matter with him.

Model of LION in the Prince's Dock Pumphouse:

The Chairman mentioned that this had been an idea of EF's as LION had spent most of its working life in the pumphouse. It was suggested that OLCO try and acquire an 'abandoned' 3 1/2" gauge LION that could be used in the display.

It was agreed that the Chairman would write to Model Engineer about the project and that OLCO would like to hear from anyone who may have such a locomotive available for sale or donation. An article would also appear in Lionsheart.

12. Any other Business:

a. John Hawley asked for guidance on future productions of paper copies of Lionsheart.

At present the A4 version with 2 pages in colour cost £33.20, while an A5 (*Folded A4 – Ed.*) version with all pages in colour would be £41.80 and an A4 (*Folded A3 – Ed.*) version all in colour would be £79 (together with the acquisition of a suitable stapler!)

17 paper copies were sent to members by post while the other members received theirs by email.

It was agreed that the A5 version be produced on a trial basis. (** See below – Ed.*)

b. John Hawley advised that he was finding it difficult to continue producing Lionsheart and requested that a new editor be elected in the future.

c. John Hawley mentioned that he had reserved space at the Bristol Exhibition and asked for the loan of suitable models (part or fully completed) for display. Alan Bibby and Jon Swindlehurst offered models and the Chairman undertook to collect and deliver them to Bristol. The exhibition is to take place from 19-21 August 2016.

d. Bob Hayter mentioned that he did proof reading and that he was available to assist with any books, newsletters etc. Electronic format was preferable.

13. Meeting Closure:

There being no further business the meeting closed at 3.30pm

*(*However, on reflection, I've decided to stay with A4, since A5 would double the complexities of spacing items on each sheet. Also, the temptation to use a smaller font would create difficulties for some readers. Furthermore, a folded format increases the fitting of a whole document into a given number of pages, since I have to work in multiples of 4 pages. – Ed.)*



The Editor's Bit

John Hawley

Bit of a bumper issue this time folks. Serves me right for leaving it so long, I suppose. Thank you all for your contributions, though. Without them this newsletter would be nothing. I thought I had a lot to say, but now I can't think of anything. No doubt, as I fly to New Zealand in the not too distant future, I'll think of all sorts. NZ's had a rough time of it lately; big earthquakes in 2010, 2011 (I wuz there!) and a pretty massive one a few weeks ago. My contacts send me information as & when they can. Apparently the main road (SH1) and the only railway north from Christchurch have been severed by multiple landslips. For some impressive photos, go to: <http://fishnet.co.nz/ted/SundayCycleTrip/>. For more information, see: <http://www.christchurchquakemap.co.nz/>, an interactive map. Repairs will take months, if not years. Meanwhile heavy goods go by sea. I travelled that railway some years ago, (see LHs 70 & 72) and it was one of the most scenic it's ever been my pleasure to experience.

Computer Problems

When I get letters & articles from readers I invariably have to adapt the format to fit them into the newsletter. Easy! Except that when I try to justify text to align it neatly at left & right margins, it often doesn't behave as I wish. So I turn on the Show/Hide button: ¶. I then find funny circles & arrows in the text. The circles look like a degree symbol: ° and appear to be extra spaces, easily deleted, one by one. The arrows seem to be a form of 'carriage return' and look like this: ↵ and really cause me grief. Is it because I'm using an 'old' word processing package. I doubt it, since I'm on Windows 7 using Word Starter 2010 and had this problem even with good old XP. I do have a quick way to overcome some problems, like lack of spaces after commas and full stops. I use Find/Replace. But I can't with these circles and arrows, because I have no way to call them into the Find/Replace windows. So, help, please. Will no-one rid me of these troublesome features?

And Another Thing ...

I recently came into possession of a large locomotive (3½" Big Boy) built by the late Mr Jones, of Cheltenham. (Anyone know him?) He started it in 1949 and put in some 3000 hours of work before he died in 1982, since when the loco has been sitting in a workshop. I've tried to run the engine on compressed air, but all I get is a lot of hissing, from all over the place, but no movement. So, I thought I'd better have a look at the heart of things. I began by removing the cylinder & valve chest covers from just one cylinder. I then removed the piston. The cylinders are of bronze, but so, it seems, is the piston. Is that a good match? I would have thought not. The piston is just a Ø1¾ x ½ thick lump, with one central groove filled with what looks like a leather seal. I don't know anything of the history of 'O' rings or other piston packings, but there must be better seals around now. What should I use for the piston and rings, please?



Photo 38. Big Boy cylinder cover removed

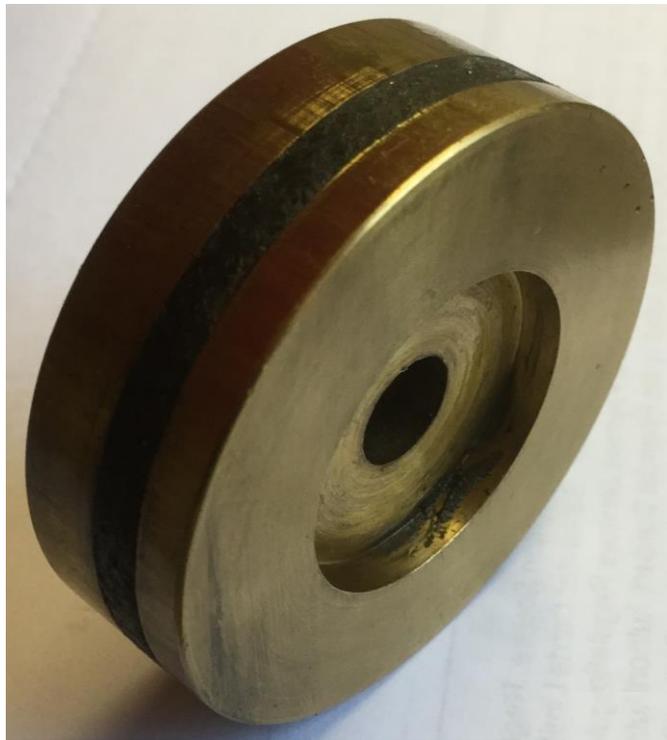


Photo 39. Piston & ring.

Photos John Hawley



Dates for your Diary 2017

The dates of the various exhibitions at which there will be an OLCO stand are:

London Model Engineering Exhibition.

Fri 20 - Sun 22 Jan.

Great Hall, Alexandra Palace, Alexandra Palace Way, London, **N22 7AY**. <http://londonmodelengineering.co.uk/>

Manchester Model Engineering Exhibition.

Sat 18 - Sun 19 Feb.

Queen Elizabeth Hall, Oldham, **OL1 1NL**. <http://www.mmex.co.uk/index.html>

The Northern Model Engineering Exhibition.

Fri 12 - Sun 14 May.

Doncaster Racecourse, DN2 6BB. <http://www.thedoncastershow.com/page3.html>

Bristol Model Engineering & Model Making Exhibition.

Fri 18 - Sun 20 Aug.

Thornbury Leisure Centre, **BS35 3JB**. <http://www.bristolmodelengineers.co.uk/Exhibition/exhib.htm>



And to Whet your Appetites ...



Photo 39. OLCO stand before the crowds arrived



Photo 41. Mike Goom's trebuchet. The winning answer to the Bristol club Chairman's Challenge. It will hurl a tennis ball 65ft 6ins.

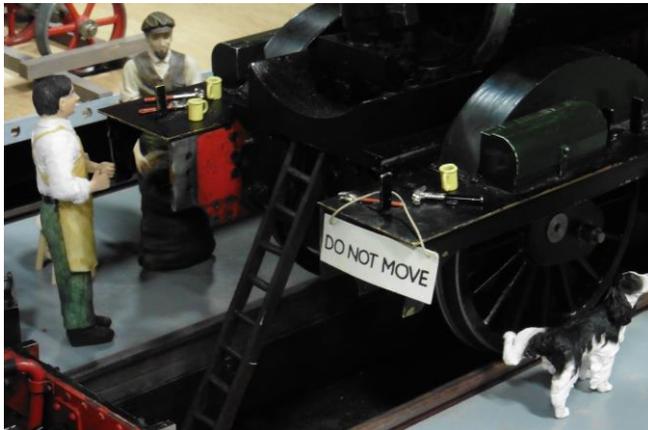


Photo 43. ... the figures were created by Harold Scrace. Note the cups of tea above the loco's buffer beam. But what's that dog up to?



Photo 45. Brunel's Other Bridge – the prototype is an almost forgotten structure in Bristol's dockland, currently undergoing refurbishment by a few dedicated volunteers.

... The Bristol 2016 Exhibition



Photo 40. The host club stand



Photo 42. Part of the Bristol club's stand was a railway workshop ...



Photo 44. There was plenty to interest all model engineers. Jet engines, 3D printing, radio control. Oh, and boats of course!



Photo 46. Best model in show – Bob Huntley's 4" Garrett



Photo 47. Another traction engine, but this one's built almost entirely of wood ...

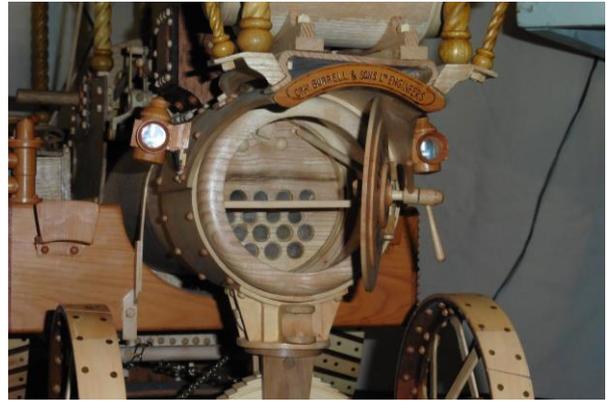


Photo 48. ... even down to the boiler tubes. A magnificent model by George

Photos by John Hawley

The Chairman gets out and about



Photos 49 & 50. OLCO Chairman John Brandrick attends to his Glen at the Illshaw Heath (Bham SME) September Rally on a rather wet day. In the background is Andrew Reynolds' Caledonian 4-4-0 (actually a Don Young Glen in disguise). Andrew is seen on the left of the right picture.

Also seen at Nottingham

I can't leave a blank rear page, so I thought I'd just add a few of the pictures I took at Nottingham. That was a wet day too! Someone up there not like miniature railways?

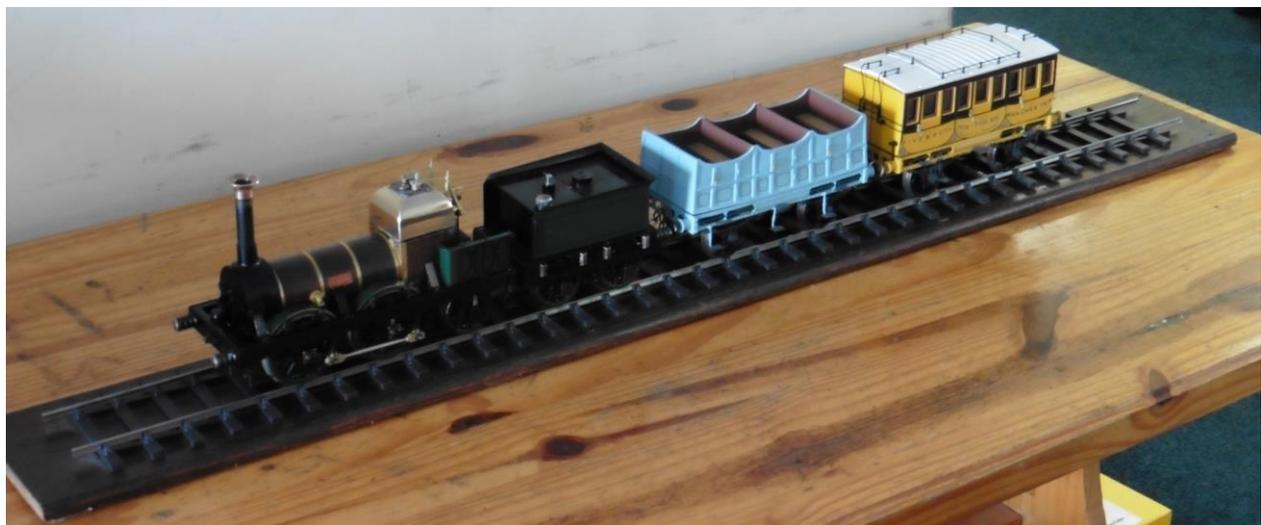


Photo 51. David Neish's gauge One Aster Lion, with 2nd and 1st class carriages these are obtainable from The Wagon and Carriage Works

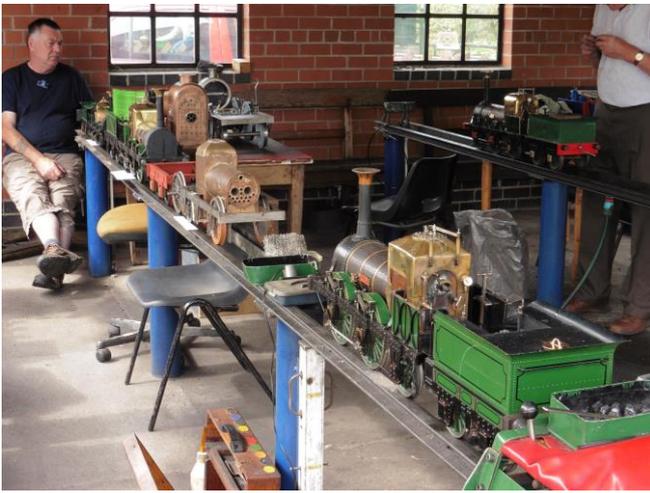


Photo 51. The steaming bay. I can't recall all the locos and their owners now, but no doubt each will recognise his own. I was rather mortified to find that two locos I'd brought in my car had become a little rusty, even though safely ensconced in their travelling boxes. Should we have silica gel packets in our boxes? Where does one obtain the stuff?

Photo 52. This rather smart Green Arrow was parked nearby, suffering great issues of water from within. I think the boiler tubes were past their best

Photo 53 (Right). I meant to take a picture of the loose bits of my crank axle before I assembled it, but I forgot! The front axle is at left, the crank axle at right. I wasn't sure about being able to follow LBSC's 'Words & Music' sufficiently well to produce a good assembly, so the axle is in one piece, to be sawn through when the assembly is complete. I'll keep you posted. Next time I'll machine from solid.



Editor's Contact Details

If you would like to contact the Editor on any issues raised in this newsletter, or for any other reason, the details are below: I'm always glad to receive your notes, comments, articles, pictures, etc. Please consider that all or part may be published, although I reserve the right to edit them. In descending order of preference they should be:

- a) typed on a computer and emailed;
- b) typed on a computer then printed and sent by post;
- c) typed on a typewriter and sent by post, or
- d) if you want to find out how desperate I am, try a good old fashioned handwritten letter.

Just run a spell checker over your computer work first though and always read through what you're sending, even if hand written, to avoid subsequent mis-understandings. I am not keen to receive contributions via floppy or CD

As for photos, the advantage of sending them by email is overwhelming – I can put them straight into the document, scale them, crop them and all sorts, getting a 'first generation' print. If you send a photo by post, then I have to scan it (losing quality) and possibly send it back, which I cannot guarantee. Photos which have been printed onto plain paper and sent to me don't really work, especially via the scanning process. When sending pictures, please include the photographers name, or details of the publication from which it was taken, so that I can bestow the proper accreditation.

Also, please, if you change postal or email address, don't forget to let me know. *Ed.*

Thank you for the many kind comments regarding LH. I'm sorry if I've not replied if you wanted one, but perhaps you could send me a reminder. If you've missed any recent issues, let me know. I may be able to reprint.

I wish you all a warm and peaceful Christmas and a happy and prosperous New Year. The world's gone through some pretty sticky bits lately, but let us all look forward to better times in the not too distant future.

John Hawley, Rock House, Downside, Backwell, Bristol, BS48 3DH. Tel: 01275 472023. Email: ringjph@talk21.com