

LIONSHEART

Number 74

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

July 2012



Photo 1.

Lion on Parade

Photo by: TBA

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Photo 2. (right). Gotcha! We know who you are, thanks to our friends at the Museum of Liverpool. Read more about it in Sharon's letter, pg 9.



Cover Story

This photo of Lion and a band of her admirers was sent in by an OLCO member, but, as yet, I will withhold that person's identity. Can anyone identify the occasion, location and any other relevant information. What about Lion herself? That forward boiler band looks a bit dodgy, but I'll leave further comment until our next issue, when all will be revealed. No prizes, I'm afraid, just a bit of fun.

Dates for your Diary - 2012

Event	Date(s)	Location
Lionsmeet 2012	11th August	Newport, South Wales. For details & route, see pgs 3 & 4.
Bristol Model and Hobbies Exhibition	Fri 17 th to Sun 19 th Aug	Thornbury Leisure Centre. BS35 3LG. See page 5.



Models under Construction

Just one this time, but I'm grateful to Barrie Larke for sending this in ...

From: Barrie Larke
By email

Latest picture of my Lion

Plealey
14 July 2012

You might like to see the current state of progress on my Lion. As this picture shows I have now added rear guides for the valve rods and yokes. They are made of gunmetal. This is my own idea and is an alternative to Tony Parsons shown in an earlier issue of OLCO newsletter (*LH69 Jan '11. – Ed*). There is nothing wrong with his but I have already made my rocker shafts to LBSC's design which wouldn't have suited the Tony's design. It is probably debatable which is best. They both involve a rear bush mounted on the cross frame. On balance maybe Tony Parsons idea is easier to make and avoids the little slipper block in the rocker arms. His design also means that the valve rod can be in one piece which has some merits. Let the world judge and take their pick. Regards, Barrie

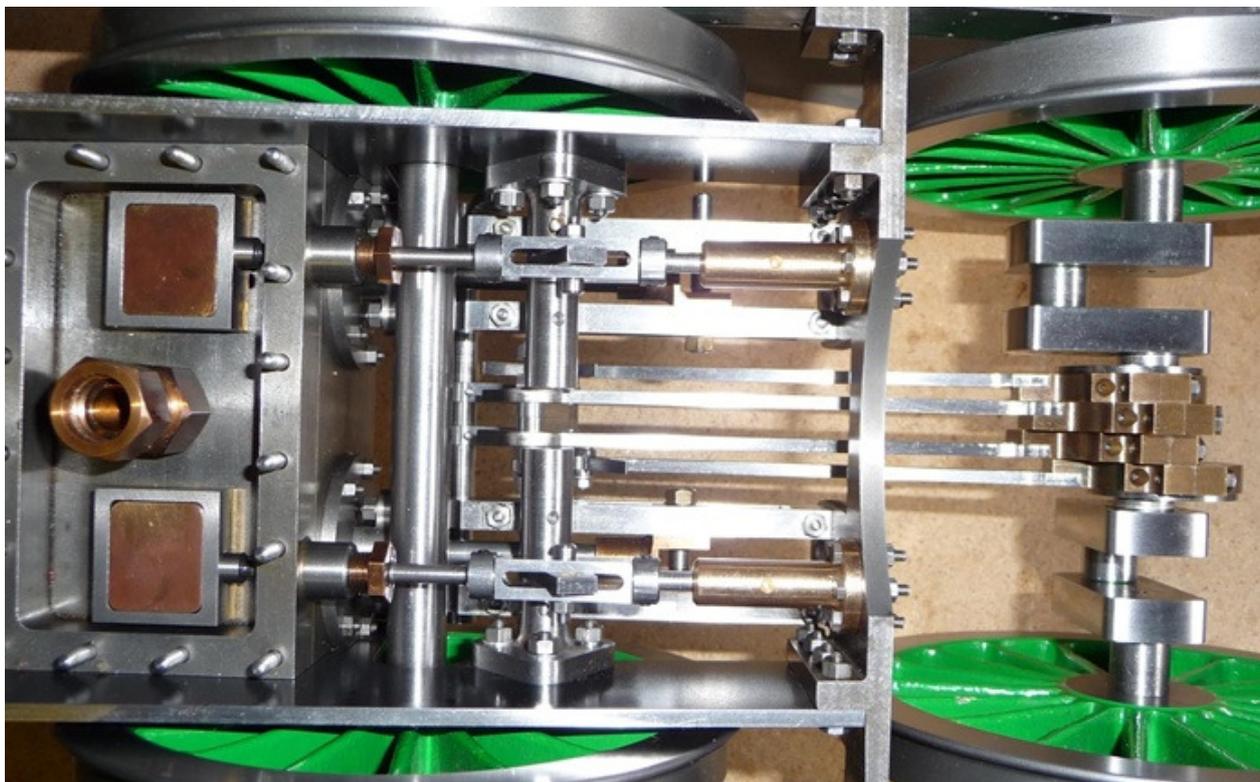


Photo 3. Barrie Larke's excellent workmanship is evident in this view. (*It's still spotless, Barrie. – Ed*) Photo by Barrie Larke

Barrie had, on 11th July, written ...

I am back again doing more to my Lion after a short break decorating our bedroom. As you might guess I would much rather be decorating?!?!?!?

Apart from the boiler drawing (which you dimensioned for a 7 1/4" Lion) the other drawings give the dimensions of the full size job. Could you give a multiplying factor to convert the latter sizes to a 5" gauge model. Is it simply $5/6.5=0.0885$ i.e model gauge divided by 4ft-8.5inches?

The only drawings I have which give sizes for a 5" Lion are by LBSC and there are many incorrect things on them though I did start my Lion with those alone so what I have so far has to stand. I have virtually completed the valve gear except for making the reverser stand. I do have your drawing of that.

(Ah well now, Barrie. That's a problem I faced in LH57 (April 2004) with respect to the 7/4" Lion. The problem was with fitting the over-width model wheels into the scale splashers. Briefly, the standard back to back dimension for this gauge is 6.8" (but see para 6 of Harrye Frowen's letter on pg 10). The wheel thickness is 0.776", giving wheel width overall of 8.352". The distance between the full size splashers is 5 1/4" and they are 7 1/2" wide overall. Using the traditional scale of 1/8 would give distance between splashers of 6 15/32" and width of 15/16", giving 8 11/32" overall. Drawing that out shows a foul between the outer faces of the wheel and the splasher (and that's before taking material thickness into account!). And so I 'grew' the loco, arriving at a scale of 1/7.85. There has to be a compromise here somewhere: it's a horrid scale, but any bigger and you get trouble with the smokebox being too wide to fit between the wheels.

For 5" gauge, the wheel standards are 4.687 BTB and 0.535" W. Using a scale of 0.0885 gives inter-splasher distance of 4.58" and splasher width of 0.664", which looks pretty good, so you might get away with it. Smokebox is 5 1/2", scaling down to 4.55" wide. – Ed). PS. Standards quoted above are from Model Engineers Handbook, by Tubal Cain, ISBN 0-85242-715-8.



The Editor's Bit

This may be a fairly short issue – not that I'm short of copy, far from it. However, with Lionsmeet and the Bristol exhibition, I'm very short of time and need to get this out in a hurry to give you time to plan your visits to these events. I'm also trying to make a bit of swarf in the workshop. Tired of clocking the milling vice every time I use it, I've machined slots in the base and fitted tenons. Why didn't I do it years ago? I've also found it rather aggravating that I need to make several sizes of tee nut to fit milling table, round table and shaper, (the latter not used much, admittedly). Next job(s): fit sensitive drill head to vertical milling head on Harrison miller, so that, unlike my Alpine pillar drill, I'll have X & Y axis capability; consider whether to convert miller to have turning capability – the lathe is old, big and a bit rough. I'm also filling in a swimming pool and considering a house move and must face up to the fact that I may have less workshop space. Oh, and make a cutter grinder!

I must apologise for the lack of content on some recent readers' letters: my computer is failing to open most attachments. Any one else experiencing this problem? I've enough computer problems to open a separate heading, but for the time being, I'll just put up and shut up! I've also held back part, or all of some letters for future issues.

You may note that I've put **Models under Construction** on page two in this issue. My local postmaster charges for a double sided colour copy for pages one and two, so I may as well get proper value for money. Let's see how it goes.

Welcome to a New Member

Before I go any further, I would like to extend a very warm welcome to new member Professor Roger Breakwell, of Castle Douglas, Kirkcudbrightshire. Welcome to OLCO, Professor Breakwell, and we hope that your membership will bring you benefits and items of technical interest. We look forward to meeting you at one of our gatherings, but appreciate that you'd have a long way to come. Interesting to consider that our most northerly meeting of any sort was Lionsmeet 2009, held at York. What would it take for us to go to Scotland, I wonder, and how many would consider the trip?



Lionsmeet 2012

Alan Bibby

LIONSMEET: INFORMATION, 2012.

Lion, at its last steaming in 1988, was the oldest working steam locomotive in the world. Built by Todd Kitson and Laird in Leeds in 1838, it has had two major restorations and is now on permanent display in the new Museum of Liverpool. Sadly, it will never be steamed again if the present trustees have their way.

OLCO, the Old Locomotive Committee, is a group founded originally in 1925 by the Liverpool Engineering Society to rescue the Lion from the bowels of Princes Dock where it had served for 70 years as a pumping engine, and to secure its restoration for the centenary of the Liverpool and Manchester railway. OLCO was reconstituted in 1985 to support further restoration for Lion's sesquicentenary in 1988.

Lionsmeet is an informal annual gathering of all those with an interest in Lion in all its manifestations and gauges. All such persons are cordially invited to bring their locomotives, in any gauge, finished or not, and any Lion memorabilia they may have to the event for display or demonstration. There will be a competition, limited to 3½", 5", and 7¼" gauge engines, to establish the hardest working Lion(s) based on the measurement of work done by the engines during a ten minute run. The track will be open to those wishing to practise from 10.00 am and the competition will commence at 1.00pm or thereabouts. Period dress is optional. Prior application is unnecessary, but further information is available by emailed request to OLCO representative Alan P Bibby, email alnbby@yahoo.co.uk, tel 01254 812049.

VENUE AND ARRANGEMENTS

Lionsmeet is hosted this year by the **City of Newport Model Engineering Society** at their track site near junction 25 on the M4 motorway on 11th August, and we record our thanks to the club for making their track and services available for the event. The main **elevated track** is laid for 3½" and 5" gauges and is about 500 feet long in the form of a circle with no difficult gradients. A short length of ground level 7¼" gauge track is available also and this is being extended. The track is built on a WW1 munitions waste tip but recent investigations by the local council have found no trace of contaminants, so we don't need to worry too much about unexpected performance enhancements! The track is not signalled and there is no general speed limit, but any marked speed limits are to be observed and drivers are to proceed at a safe speed at all times both in the practice sessions and the competition. **Competition rules** will be posted up for the event, as will **any Notices to Enginemmen and or local rules** in force at the time, and it is each driver's responsibility to familiarize himself with these and to observe them. OLCO does not carry **insurance** cover of its own so all participants must be covered by their own club public liability insurance.

Facilities will be provided for the **display of static models** and exhibits, which are cordially invited. Any pre 1850 material, not just Lion memorabilia, will be most welcome **Tea coffee** and sandwiches will be available.

Accommodation should be available at the **Premier Inn** on Newport Rd, Cardiff, CF3 2UQ, tel: 0871 527 8200. This is half way between Newport and Cardiff, where we have been invited to visit the **Cardiff Model Engineering Society** at their Heath Park track site on the Sunday. Well worth making a weekend of it!

The Old Locomotive Committee
has pleasure in announcing that

LIONSMEET

will be hosted this year by the
City of Newport
Model Engineering Society
at the Society's track
on Saturday 11th August 2012

Lionsmeet is an informal annual gathering of all those with an interest in the Liverpool and Manchester Railway locomotive Lion in all its manifestations and gauges. All such persons are invited to bring their locomotives, in any gauge, finished or not, and any Lion memorabilia, or indeed any pre-1850 material, they may have to the event for display or demonstration. There will be a competition, limited to 3½" 5" and 7¼" gauge Lion models, to establish the hardest working Lion based on the measurement of work done by the engine during a ten minute run.

The track will be open to those wishing to practise from 10.00am and the competition will start at 1.00pm. Period dress is optional. Prior application is unnecessary, but further information is available by emailed request to alnbbby@yahoo.co.uk or phone 01254 812049. The nearest postcode, for satellite navigators, is for the Boy Scout hut in the street leading to the traffic lights that control the bridge over the railway in the map below, NP19 7HF.



Follow the yellow brick road from Junction 25 on the M4
At the second right turn in the road (ie after passing the scout hut at postcode NP19 7HF and the hump backed bridge over the railway), head northwards towards the red blob, past the bowling centre (white box), over the kerb at the end and through the barrier (red blob), then follow the surfaced track alongside the motorway, then right under the motorway and right again following the surfaced track up to the club gates. The barrier is normally locked shut, but should be open or attended for our event. If not then park up and walk through to the club.

(I look forward to meeting many of you on the day. Ed)



BRISTOL MODEL ENGINEERING AND HOBBIES EXHIBITION

AUGUST 17TH, 18TH & 19TH 2012

THE LEISURE CENTRE - THORNBURY
NEAR BRISTOL - BS35 3JB

NEAR M4/M5
INTERCHANGE

FRI 10AM - 6PM SAT 10AM - 5PM SUN 10AM - 4PM
ADULT £9.00 SENIOR £8.50 JUNIOR £4.00 FAMILY £22.00 (2+3)

5 MILES FROM M5
JUNCTIONS 14 OR 16

3 DAY AND ADVANCE TICKETS ALSO AVAILABLE - SEE WEBSITE

FREE PARKING

**MODEL & MINIATURE LOCOMOTIVES, HANDICRAFTS
MARINE EXHIBITS, BOATING POOL
WORKSHOP DEMONSTRATIONS
WOODTURNING**



**CLOCKS
STATIONARY STEAM ENGINES
TRACTION ENGINES, HOT AIR ENGINES
MACHINE TOOLS, WORKSHOP EQUIPMENT
AEROPLANES & HELICOPTERS, RADIO CONTROLLED TRUCKS, PETROL AND DIESEL IC ENGINES**

ORGANISED BY THE BRISTOL SOCIETY OF MODEL & EXPERIMENTAL ENGINEERS
REGISTERED CHARITY NO. 1094274

FOR FURTHER INFORMATION PLEASE VISIT OUR WEBSITE:
www.bristolmodelengineers.co.uk OR CALL 0117 967 5878

ALL ATTRACTIONS CORRECT AT TIME OF GOING TO PRESS, BUT MAY BE SUBJECT TO CHANGE OR CANCELLATION



The Bristol Model Engineering and Hobbies Exhibition is acknowledged by one and all to be one of the prime events of its kind in the UK. Certainly there's nothing to approach it in the south west. It is worth noting that this show is the only major exhibition in the country covering model engineering which is organised and run by volunteers.

OLCO have had a stand there for some years and we have displayed a number of your locomotives and other items during that time. There is quite a lot of interest shown by visitors, not all of whom know much about the film 'Titfield Thunderbolt'. Fewer still have heard of OLCO and hardly anyone knows the film was shot in and around the Bath area. We do our best during the show to put people right, usually slipping a membership form into their hands as we do so!

This year we will be showing Harrye Frowen's 7 ¼" Lion, Jon Swindlehurst's part completed model of the same gauge, Alan Bibby's 3 ½" 'Little Lion' and various other items of interest. I would like a 5" Lion as well, if anyone's willing to loan. If you have a part completed Lion and would like to display it, then please get in touch, though hurry, since the deadline is approaching! Hopefully, there will be a bit more information on the valve gear, which has dogged me for so long. And then there's the rest of the show to see!

So, see you there? Set your sat nav for BS35 3JB: you'll find Thornbury Leisure Centre very close by. You'll likely see the signs long before you get there.



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

Have you looked at our Web Site lately? Well, have a look now. Click on the address above if you're reading this on the screen, or type it into your address line before you forget. If you have Lionsheart delivered as hard copy and don't have a computer, you may know someone who has, so have a look. You can even get Internet access at your local library.

The site is full of useful information, history, links to various like organisations, Liverpool museum's web site, videos, write ups about Lionsmeet, our Constitution, lists, photos and lots more. I feel that our WebMaster, Alan Banks, has done so much to make the site interesting and yet, since his work is delivered straight to our computers without as much as a thud on the doormat or an attachment to an email (as this newsletter is, in the majority of cases) his work often goes unnoticed and unsung. So, thank you Alan, for a very good and user-friendly web site.

Now Alan, while you're patting yourself on the back, please could you put the details of the Bristol ME exhibition on, under the 'Exhibitions' heading? Thanks.



Readers' Letters

(Letters are published in date order, as far as possible – Ed)

I must apologise for the delay in publishing the first two in this issue: somehow they slipped my net for LH73 and would now appear to be a little untropical. I do beg their authors' pardon.

From: Rich Garich *(On hearing I was flying to New Zealand via Los Angeles - Ed)* New Jersey, USA
By email 1st February 2012

Hi John,

Have an excellent and safe trip.

When descending into LA, look outside the window. Depending on the height, and wind pattern, you may be able to see the "smog" cloud which encompasses the LA basin. Quite an interesting sight the first time you see it.

Having lived in LA for a while, make sure to put your shoes under your bed when you go to sleep at night. In the event of an earthquake, you won't cut your feet on broken glass as you exit the area. A flashlight there, in the event of a power outage, isn't a bad idea either.

BR, - Rich

(Thank you for those tips, Rich. In fact I flew in late in the evening, as far as I recall, so it was dark. Not much in the way of facilities, I'm afraid and I was a bit nervous of the next leg: so far over nothing but water. The whole trip took about 25 hours and I suffered the indignity, on landing in Auckland, NZ, and being honest enough to declare an apple I was keeping for the next leg, of having that apple taken from me and binned, as 'a non native food item'. I could have eaten it whilst standing in the queue!

From E F Clark *(On 17th March news of the unveiling of a blue plaque to* Knotting Green
By email *Antarctic explorer Captain Lawrence Oates)* 18th March 2012

John,

I can guess that most of the time you scratch your head in the puzzle of how to fit everything you have available, into "Links". ("Lionsheart"? – Ed) Here is a nice piece of moderately irrelevant information to draw your attention to:

You will read over this w/e about a plaque being unveiled in "Meanwood Park" in Leeds to the Oates explorer who walked out of the tent in the Antarctic a century ago saying he "might be a little while" and was never seen again. The plaque is being unveiled in Leeds in what is now a public park.

(See: <http://www.bbc.co.uk/news/uk-england-leeds-17406132> - Ed)

However it was not always thus and I knew it as the happy home of my grandparents, the "Kitson Clarks". It was a magical place for children - 17 acres of fields, woods and a "beck" running the length of it. It was my grandparents' home on my father's side. That Grandfather was Col E. Kitson Clark, so you can see the connection. It was sold to the Corporation and became a park, not much altered, after my grandmother died in 1955. The major thing the Corporation did was to pull the house down on the pretext that it was "riddled with dry rot" - in fact, it wasn't. The trouble was that so many departments wanted to be there that the "Works and Bricks" took the easy way out, gave this unanswerable excuse and pulled it down a.s.a.p. But before that I stayed there often and it was a fixed point in an upbringing during which I had to travel about a good deal, including to Canada during the War. My grandfather died while we were out there. Kitsons as a Company was closed about the end of the war, but already even before the war broke out they had been forced to leave the loco business.

Why the Oates left the property, I do not know, but I do remember my Grandmother saying that they had left behind in the alcoves at one end of the drawing room a large collection of stuffed birds that were quite a problem to dispose of. My grandparents Christmas Card of 1905 shows that they were at M'side already by 1905, so the Oates had moved out at least 5 years before the Antarctic episode.

Whether my grandparents altered the name or it had been done earlier, I always knew it as "Meanwoodside". The house itself had been developed from a farm and I have photographs of one or two of the stages in the transition.

Changing the subject, ... seems a very long time since (*Charles Taylor-Nobbs*) suggested setting up OLCO, when he still lived in London - of which he had an encyclopaedic knowledge of shortcuts when driving through it.

Kindest regards from both of us – EFC

From: John Brandrick
By email

Bury
2nd May 2012

Well done John. Another excellent Lionsheart with lots of interest esp the construction articles. OLCO and Lion are obviously alive and thriving.

Looking forward to seeing you at the AGM

Kind regards John.

PS please save me a copy of Railways in England 1826 & 1827.

(Hope you enjoyed the read, John. – Ed)

From: David Royle
By email

Oadby
2nd May 2012

Hi John

Thanks for the newsletter it looks great. Look forward to reading it all tonight.

It was good to see Charles' Photo on the front, I will miss him, as we were good friends for more than 35 years. We were introduced to each other through Liverpool museum as Co-conspirators in the Lion's construction and worked together for many happy hours getting the Lion and its tender drawing down on double elephant paper. No such thing as CAD for us in those days.

I will always remember him and his family with deep affection.

David Royle

(David has sent me lots of useful info on Lion, which I intend to drip feed into future issues – Thanks, David. – Ed)

From: Jon Swindlehurst
By email

Wirral
2nd May 2012

Hi John,

‘ ... Thought Lionsheart 73 was of an even higher standard than normal, which is very difficult to achieve.....well done!!!! Good to see some good Lions under construction and hopefully this will result in more competitors at future Lionsmeets. The wheel patterns in the photos on page 10 look interesting.....any more info?

Hope to see you at the AGM

Cheers - Jon

(Yes: Those patterns are pretty old and a bit battered. Keith Taylor-Nobbs has since given me the aluminium versions, though they are for 1/8 scale, not 1/7.85, (the scale discussed on page two). The difference in diameter is just over 1/8"! - Ed)

From: John Smith
By email

Stoke-on-Trent
4th May 2012

‘ ... May I take this opportunity to say how much I enjoy reading the Newsletter. In fact I get more reading and pleasure from it than from M.E., M.E.W. & E.I.M. Your good work is appreciated!

Kind regards – John (J. Q. Smith)

From: Rich Garich
By email

New Jersey, USA
7 May 2012

Hi John,

Hope this finds you well.

The newsletter arrived early AM last week and, as usual, thanks for your efforts. I found the contents of enough interest to cause me to be late for my commute to work! Seems to be a pattern developing...

Regrets, won't be able to attend the AGM.

Regards to all. Still would like to see all previous newsletters available on the web site.

BR to you, - Rich

(Yes, we did discuss archiving of newsletters on the web site at the AGM. We're looking into it. Oh, and I'm sorry to have contributed to any downturn in the US economy! – Ed)

From: Alan Bibby
By email

Blackburn
7th May 2012

‘ ... John, I would be very interested in a copy of Simon Castens book, if you would care to bring one.

(Ah now. I'm so sorry to all who requested copies of this booklet. In fact the few I had went like hot cakes. Have spoken to Simon and he can't help! Wishes he'd printed more! – Ed)

Regarding your list of articles in Model Engineer, John, I did mention previously my articles on Lionsmeet of some years ago; maybe you feel that all articles listed should be specifically about construction of the model and that Lionsmeet would be of no interest in that context? In passing, I also did an article for ME on spark arrestors and oil separators giving details of the arrangements on my own Lion:- when was the last time you saw me with a spotty face after a run? I did another article for EIM on Lionsmeet. Both are on our website, ... ‘

Kind regards, AlanB (*See also Alan's letter half way down page10. – Ed*)

From: Jan Ford
By email

Brewood
8th May 2012

A friend gave me a link to this clip of Lion at Wavertree. You may have seen it but I hadn't so I'm passing it on. It's at <http://www.youtube.com/watch?v=oSOvd-yYQWY>

Kind regards, - Jan Ford - Website: <http://janfordsworld.blogspot.com/>

From: David Royle
By post

Oadby
8th May 2012

‘ ... can you make the font larger and clearer, and line spacing 1.5 on the newsletter, as I found it a devil to read ... ’

Sincerely, David Royle

(Yes, I fear LH73 was a bit of a bumper issue. I had to tighten up the text in places. These notes are in 10pt Times New Roman, with 1.2 line spacing. Not quite what you wanted, David, but I hope it helps. More from this letter in a future issue. – Ed)

From: Sharon Brown
By email

Curator of Land Transport & Industry, National Museums Liverpool
9th May 2012

Hi John

Thanks - lots of great information as usual.

In reply to Michael Rowan (*LH73, Letters, Pg11. – Ed*) I believe the third loco along with Lion and Tiger was called Elephant (No.65).

I was rather disappointed with the comments from Jon about Lion appearing scruffy as an awful lot of hard work and dedication went into the prep of Lion for display – but I guess everyone is entitled to their opinion! ... ‘

All the best - Sharon

(Well, we all wondered why the footplate wasn't painted. To my mind no blame attaches to any of the refurbishment team: they suddenly had to prepare Lion in no time flat! I know – I couldn't get in to do any measuring – Ed)

From Keith Taylor-Nobbs
By post

(Keith sent me a huge box)

Chesterfield
10th May 2012

Dear John,

You will find in the box a lot of Lion stuff that was dad's which I think OLCO can make good use of. Also there are the patterns for 7 1/4 gauge Lion which I think it would be better if OLCO had and did something useful with them.

Marketed with working drawings I think there is a good market for this size of loco, you only have to look at the GWR Collet 0-6-0 currently being done in EIM. Dad always wanted to produce drawings of the actual Lion then let people scale them to what they wanted and then build from them ... ‘

If the enclosed helps OLCO to produce working drawings for a 7 1/4 lion then this would be something that would benefit a lot of people.

I am in London on the 19 May and wish you all a Good AGM. Please thank everyone for their thoughts and prayers for Dad over the last few weeks, OLCO meant a lot to him,

Lion was a very big part of his life, he never get to build a loco but I think he built many in his head and helped many others in building theirs. He knew every nut and bolt and on each side.

Perhaps we could meet up and have a beer sometime.

The family would like to do something for OLCO in memory of DAD. They were good years and he enjoyed your company.

PS : I would like to have the blue book with all the LBSC articles in back, (for old time's sake. I thought it had been lent out years ago but found it at the back of the garage). Len Morris at Ruston Diesels put this together for me when they were restoring lion for the 150 celebrations, but only after it has been copied for the benefit of other loco builders.

Thank you – Keith

(Keith had sent me a huge parcel full of Lionshearts, railway magazines featuring Lion connections, 7 1/4" patterns and copious notes by his late father, Charles. Thank you, Keith, for your very nice letter and generous donation of items to OLCO. I will bring up the matter at the AGM and see what people's thoughts are. Yes, let's get that beer set up and soon. – Ed)

From E F Clark

Lionsmeet 2012

Knotting Green

By email

31st May 2012

Thank you for the information about this year's Lionsmeet at the track in Newport on 11 August. It sounds as if it will be the usual well organised event, but I'm afraid with the passing years and the distance I don't think I shall plan to make it, but am sure it will go well without my being there and send best wishes for the event - not least for good weather.

I seem to remember coming away from a much earlier OLCO visit to South Wales with very pleasant memories of a much maligned part of the world that also laid on good weather for us, so I hope it will do the same for this time round for OLCO!

Kindest regards to all – EFC

(Thank you for your kind words and best wishes, EF. We'll miss you. Yes, I remember that meeting: Swansea 1999 – won by the late Geoff Wright on David Neish's Lion. I seem to recall that David stoked the fire, Geoff just sat on the trolley, opened the regulator... and won the trophy – no stoking, no wheelspin, no sweat! – Ed)

From: Sharon Brown

Curator of Land Transport & Industry, National Museums Liverpool

By email

18 June 2012

Hi John

Hope you are well. We have published your photo from the Dominion Pub on our Intranet and I have had several responses all with similar theories:

The person on top of the Dominion Public House is a Lumberjack, complete with axe and a dog. It probably relates to the timber imports into the Huskisson and Canada Docks (Canada was originally named The Dominion of Canada). Some people think he may be a Settler off to new lands, but the Lumberjack idea is also mentioned in "Liverpool, walks through history" by David Lewis. *(ISBN 978-1-78091-120-5. – Ed)*

If I get any more/different response I will let you know!

All the best – Sharon

(Thank you, Sharon. And so, perhaps, another mystery bites the dust. Wonder if he features in any of the Liverpool Overhead Railway photos. – Ed)

From: Harrye Frowen

Cardiff

By email

22nd June 2012

Dear John,

' ... I have attached an article pointing out some of the areas for consideration regarding our Lion, should you decide to use it in your next Lionsheart.

John and I have started to make up the new patterns in aluminium for the trailing, and tender wheels, the 8 inch driving wheels we will have a look at when I see you at the Bristol show as these are out side the capacity of John's CNC mill.

Have made contact with the foundry I used at the start of the build of our Lion and they are quite happy to do any casting for us in Gun metal, Cast iron, aluminium and Steel.

Best wishes to you, Pat and Harrye.

Harrye's attachment reads:

Dear Ed,

Thank you for the latest news letter.

I have received a number of enquiries regarding the building of our 7.25 gauge Lion. The castings are now available, cylinders, steam chest, front cylinder covers, boiler support bracket, rear inner frame bracket, eccentric straps, rocking shafts lost wax cast also rocking shafts sand box cast.

It was in May of 2004 when I started this build with the help of our editor John Hawley. (Here are the areas for thought)

(1) I don't think it would be possible to make or order a boiler with out first giving some thought to the expansion of the boiler as it expands forward being fixed at the fire box end bracket and inner frame bracket only.

(2) Record the drilled holes at the rear of the inner frame; they will be required later when the holes are drilled in the rear bracket that fits on to the boiler.

(3) The ram type regulator failed to seal due to scaling from full size, my second attempt was to use an O ring on the ram this idea lasted only a few laps of the track. The best way here is to use LBSC disc type, a modification will have to be made to the regulator bush on the back head. On my build, I only found out on the first steam up that the regulator disc and housing were too small.

(4) Modification will also be needed if the builder of this Lion is not fitting the brass haystack dome, a bush at the base of the boiler back head will be required to take water from the tender, here again I only found out after the boiler had been finished and fitted to the loco, however John Hawley's boiler drawing has two blow down fittings, I have used the left hand side blow down for the tender hand pump feed.

(5) A blower will need to be fitted. I have used one of the four dummy stays for this, simple to make up using a hollow tube and needle valve.

(6) The back to back dimension of the wheels scales to 6.875 this dimension will be needed for clearance of the reach rod. The 7 1/4" society recommends 6.812 inches; the same applies to the distance through the wheels 0.812, this dimension will spoil the appearance of the loco, so it will be up to the builder to decide what to do for the best regarding multi gauge tracks.

(7) The rocking shaft lower link will need to be keyed; then the taper pin can be fitted to scale size, this modification is to prevent shearing.

I trust these notes will be of assistance to you all, but should you need any further help you can always contact me on the website at: <http://www.lionlocomotive.co.uk/>.

Regards - Harrye Frowen, builder of the only true Lion model built from photos, sketches, and full size drawings by John Hawley.

From: Jon Swindlehurst
By email
Hi John,

Wirral
2nd July 2012

' .. Just got back from 3 days in London ...' We stayed in the Docklands where they were doing lots of work for the Olympics. I was quite impressed with the DLR (Docklands Light Railway)....lots of tight curves and up and down steep gradients.....a bit like a roller coaster.

In spite of the bad weather I've managed to steam Lion a few times so far this year. Although she steamed OK there did not seem to be the usual vigour and I suspected the blower was not as powerful as in the past and towards the end of each run the problem seemed to be getting worse. On inspection, the blower nozzle seemed fine so I decided to delve into the boiler, where the steam is taken off through a miniature screw down valve and check for blockages. Left to soak in vinegar and a good poke with some fine wire seems to have done the trick as last Sunday and yesterday she was restored to warp factor 10 and shouted 'bring on Lionsmeet!'

Cheers for now – Jon

From: Alan Bibby
By email
Hello John

Blackburn
4th July 2012

The articles I wrote are on the OLCO Web Site: <http://www.lionlocomotive.org.uk/>, Lionsmeet 2003 at Erewash Valley appeared in EIM of Feb 2004 and Lionsmeet 2005 at Brighthouse appeared in Model Engineer of 6th January 2006. I also wrote an article for Model Engineer of 9th Feb 2001 ((Vol 186 No 4139) on 'Emissions Control', ie spark arrestors and oil separators, describing the arrangements on my Lion (on the second page of the article). .. '

Alan

(In response to the 'Lion in Model Engineer' page in LH73, Alan wrote to remind me that he too has written articles on Lion. I'll get these incorporated into the list when I can, but in the meantime, here's the info. If any reader has written articles on Lion for the Press, then I should be pleased to consider them for inclusion. – Ed)

From: Harrye Frowen
By email
Dear John,

Lion rocking shaft

Cardiff
4th July 2012

Hope you are keeping well, I have now sent some information to you in answer to enquiries from people contacting me through my web site. Can you and Jan shed some light on this problem with the taper pins in the rocking shaft as they are still shearing the left one more than the right during steaming up?. I have spent the last two days modifying the rocking shafts and have now fitted 2mm taper pins and have also double pinned the shafts to the drop link. My fear now is will the cross head pins shear in the valve spindle. The problem seems to be the lack of a drain tap at the rear of the cylinders. I have been through all the photos and can't find a drain cock at the rear of the cylinders on the full size Lion. During your many years of studying this loco did you find any evidence of drain cocks at the rear of the cylinders.

Will now see if I can modify the cross head to take taper wedges these will be easier to replace should they shear. I would recommend any builder after having this problem to fit two self drain taps at the rear of the cylinders.

Fond regards Harrye with hugs from Pat. *(Thanks Pat – Ed)*

(Well, over to you Jan, to consider any response you may feel is relevant.

In reply to this appeal from Harrye, I hurriedly wrote:

I can definitely state that there are no drain cocks on the rear of the cylinders, nor is there any sign that there ever have been. (See photo 4). Perhaps in those early days they assumed that condensate would leak downhill through the hemp piston packing and be expelled through the cocks at the front. The steam was not superheated of course and the cylinders were kept warm within the smokebox, so there would be less condensate.

As for the shearing taper pin problem, it may help to have LH73 handy and refer to Fig 2 on page 15:

Firstly, water lock at the rear of the cylinder would not affect the valve gear. That water would only prevent the piston from reaching the rear end of its stroke and would therefore tend to push the rear cover off or damage the piston rod, con rod or crank axle.

Secondly, I always thought that you were having problems with the taper pins in the weighshaft shearing off, not the rocking shaft (or arm). Also, I was under the impression that, though your loco runs well in forward gear, you can't get it into reverse. If the pins are shearing on the weighshaft, it may be that the long lifting link is too long. This would therefore push the slide valve too far forward, such that it clouts the forward end of the valve chest, as you push the reversing lever forward. Thinking about it though, that would only happen if the slide valve were already at the forward end of its stroke. So, will it go into reverse with both slide valves well away from the front of the valve chest, (ie, with both rocking arms leaning back)? Will it go into reverse if the slide valve mechanism on one side or the other is disconnected?

The full size short and long links measure 7 3/8" & 19 1/2" respectively.

On Big Lion, the input and output arms are taper pinned and keyed to the weighshaft, indicating that it's a pretty highly loaded area.

If the pins are shearing on the rocking lever, (See photo 5) that sounds as though the slide valve or spindle are not free to move back and forth (but they are ok in forward gear?). I've looked hard at what photos I have and see that the right side rocking arm has a taper pin to lock it to the input arm (the arm dropping down from the rocking shaft to take motion from the gab fork). I will try to ascertain whether or not there are keys in this area as well. I can see no sign of pin or key on the left side. So, I'm sorry Harrye. I can't solve the problem remotely unless the above notes are any help to you. Let me know how you get on. ... '

Best wishes to you both – John

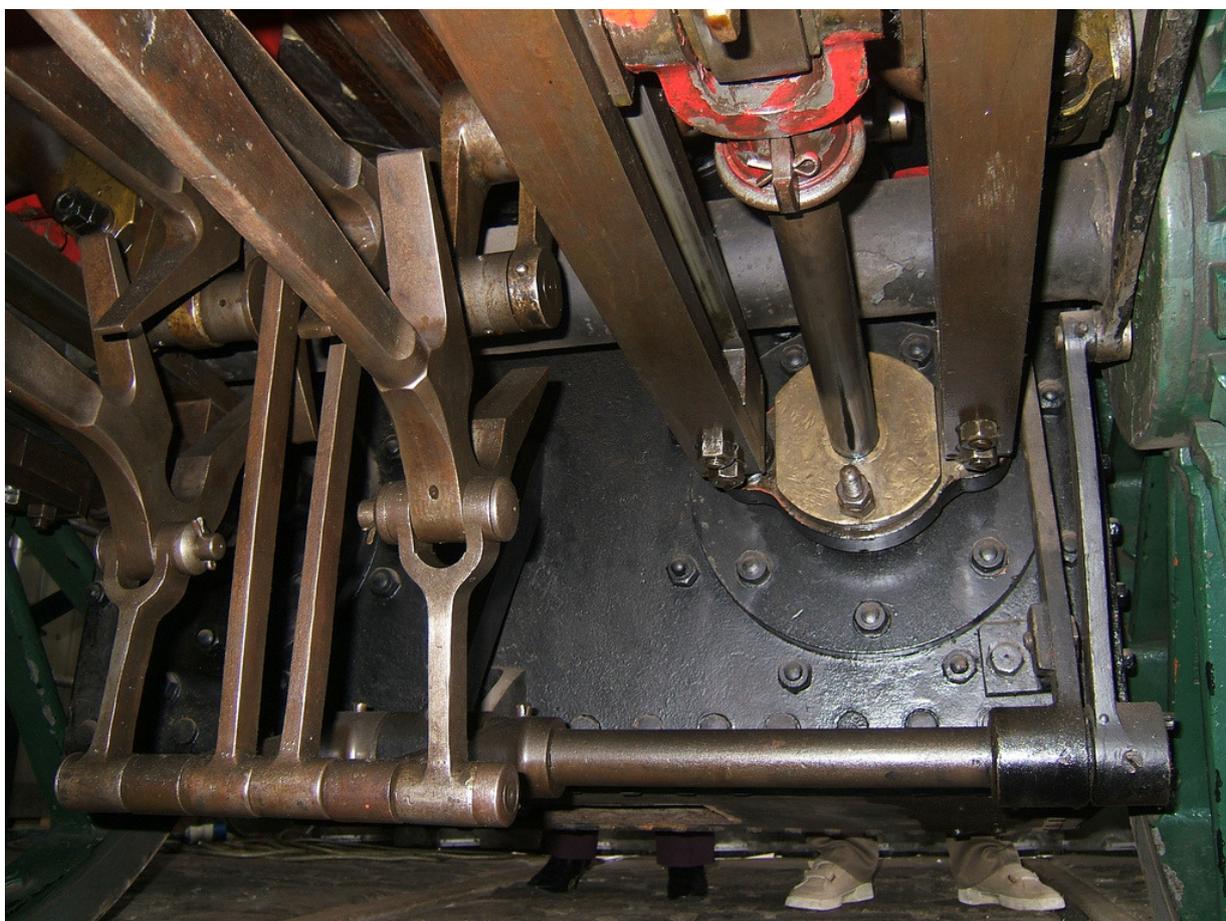


Photo 4. No, definitely no taps on rear covers. The weighshaft is at lower right, the long and short lifting levers on the left. They lift the lower (reverse) gabs into engagement with the rocking arms, while lifting the upper (forward) gabs out of engagement. Just visible left of top centre is the drop arm of the right rocking lever. The reach rod is at top right, disappearing out of shot to the cab reversing lever. Note how close this, and the weighshaft input arm, are to the forward wheel hub. Lion is in forward gear. Whose feet? Photo: Jan Ford

From: Harrye Frowen
Dear John,

Lion rocking shaft

Cardiff, 5th July 2012

Thank you for your excellent reply, will need to speak to you on this matter as it's really a bit of a mystery. The valves are clear in both forward and reverse, the only thing I can think of now is it could be water trapped in the steam chest.

Kind regards Harrye.

From: Harrye Frowen
Dear John,

Lion Cross Head

Cardiff, 8th July 2012

Have found a error in the build, I have an early drawing of the dog legs (*Dog bones*. – Ed) and cross head for the valve spindle and looking at the drawing I have taken what should be the locking wedge in the valve spindle to be a screw. This is why I used a 10 BA screw instead of a wedge which is not on the drawing. By now you would have drawn the wedge, if not you will need to measure up and add to the drawing. (See photo 6. – Ed)

Kind regards Harrye.

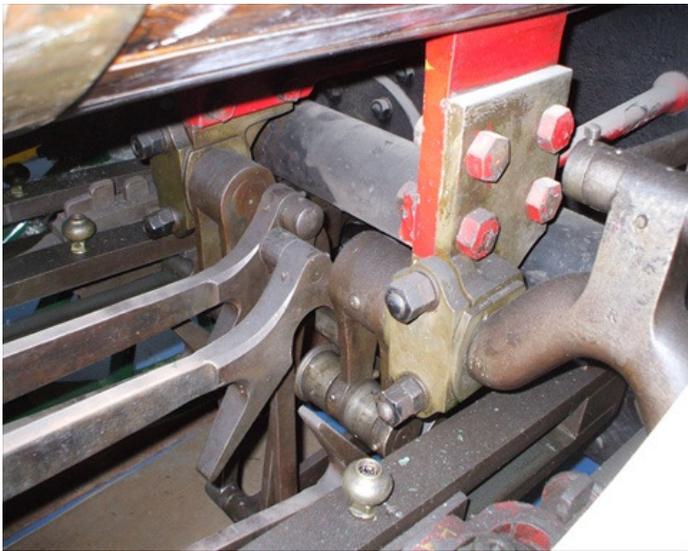


Photo 5. The mechanism from above right. The left and right upper (fwd) gabs are very clear, as is the right side rocking lever. Just visible, leading off the top of the rocking lever, near photo top right, is one of the parallel 'dog bones'. The right drop (input) arm is pinned to its shaft, but the left appears not to be so.



Photo 6. The right side 'dog bones'. Just visible at photo centre left is the top of the right side rocking lever. Note the valve spindle bearing and support bracket. The leading axle passes beneath.

I'm not sure to whom I should credit these two photos, so if it's you, please let me know. (may even have taken them myself)

From: Harrye Frowen

Lion Repairs

Cardiff, 10th July 2012

Dear John,

Just an update to say Lion repairs going well hoping to complete by the end of the week. ...'

Kind regards Harrye.

(Good luck, Harrye. – Ed)

I've also received a long letter from Jock Miller, of New Zealand, but I'll weave a story around that for a later issue. In the meantime, I hope you enjoy this issue, Jock. Look forward to seeing you again ere long



Editor's Contact Details

First, please don't send any attachments until I get this computer problem solved. Most text can be sent within the body of an email. However ...

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.

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