

LIONSHEART

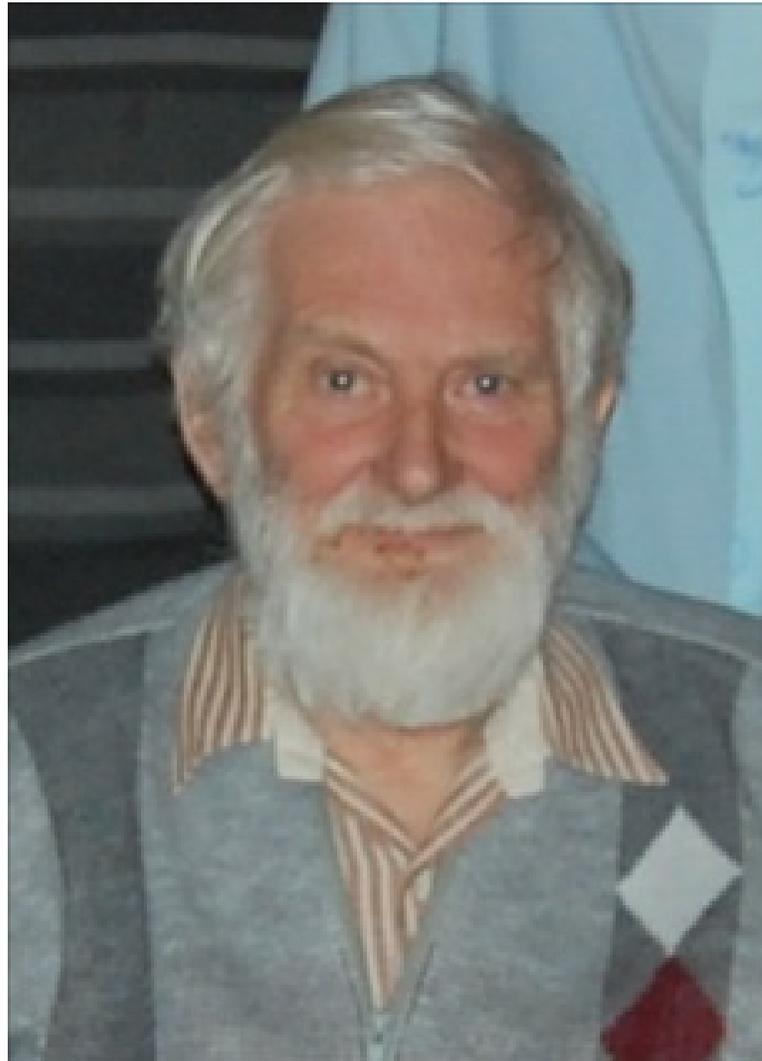


Photo 1. Charles Eric Taylor-Nobbs
(With acknowledgements to Keith Taylor-Nobbs)

Index

- Cover Story 2
- Editor's Bit 2
- Welcome to New Members 2
- Dates for your Diary 2
- Notice of AGM 2012 3
- Minutes of AGM 2011 4
- Models under Construction 6
- For Sale 9
- Exhibition Pictures 10
- Readers' Letters 11
- Chairman's Wanderings 14
- Lion Sketches 15
- How to get to the AGM 16
- Lion in Model Engineer 17
- List of OLCO Stock 18
- Editor's Contact Details 18

Photo 2, right. The business end of Lion's right side lower reverse Gab Rod, identified as R1. The straight sided Vee can be clearly seen. It is shown being lifted into engagement with the roller on the Rocking Arm (Wagging Banana) R1 is unique on Lion in that it has a turned 'neck' between the main

shaft and the fork end. Why? The photographer is to be congratulated for getting such a difficult shot. See also Fig 2 on page 16
Photo - Jan Ford



Cover Story

Readers will be saddened to hear of the death, on 15th March, of Charles Taylor-Nobbs, who has done so much for OLCO throughout the years. He was one of our founder members, at a meeting held at the Merseyside County Museum, on Sunday, 10th June, 1984. He edited our first newsletter (on a BBC micro, I believe - Ed) and carried on with that task until 27th May, 1989.

Charles was instrumental in carrying out many of the early measurements of Lion, along with OLCO member David Royle. He also submitted several articles on Lion to Model Engineer magazine (*see page 17 - Ed*). He took many photographs, most of which have been invaluable to me in my production of detailed drawings of Lion following my own measurements, which I have carried out spasmodically since 5th October, 1991.

The prize winning 5" gauge Lion built by Charles' son Keith was one of the first to reflect some of the oddities apparent on even the most cursory scrutiny of Lion. Certain bolts are hexagon headed on one side, but square headed on the other; the right hand crank axle hornplate is secured to the frame by ten bolts, whereas it's left side partner has only eight! Keith's model boiler is capped, correctly, by a round plate – the LBSC version is square and looks horrid. However, most of Keith's model is built to the LBSC design, partly, I suspect, because he had started work before Charles had found some of these discrepancies in uniformity.

Page 17 of this issue is included purely by chance, but it does give details of articles Charles had written on Lion. What I don't know, but would appreciate information on, is whether he wrote any other articles, on Lion or anything else for that matter and also, whether he wrote for other publications as well. I would welcome comments/contributions.

To date I have no further notes to add, but I hope to have more on Charles for the next issue.



The Editor's Bit

Not a great deal to say this time. I'll let the contents speak for themselves. I'm very pleased with the number of letters you've sent in (mostly via email, it has to be said. Apologies to those receiving this by email: at 4.45MB, it's a bit big, but not the largest I've sent so far) and we have three items for 'Models Under Construction'. I've been working hard on the Valve Gear drawings, but they're not finished yet. However, I thought you might like a peek at progress so far, so I've included the very basic valve gear layout and a close up of the business end of a Gab Rod (*see pg 15*). Measuring Lion has not been an easy or straightforward task. There are so many funny shapes and each time I measure a given item, the size I get differs from last time. I put this down partly to the fact that many of Lion's component parts are castings or hand forgings and are thus of a slightly less than uniform section. I also have to blame myself, to a larger extent – steel tape measures, lumps of metal hung on strings and B & Q spirit levels are never going to produce the accurate results one needs to sit down and draw Lion's bits with confidence. Then there's the problem of not knowing *that vital dimension*, due, not infrequently, to having forgotten to measure it in the first place! I've not taken many photographs, in the belief that it's almost impossible to measure a photographed image accurately.

Having said that, I am profoundly grateful to our current Secretary and erstwhile Editor, Jan Ford and also to the late Charles Taylor-Nobbs for the treasure trove of photographs they have taken over the decades and which they have allowed me to plunder for information. Though not providing dimensional information, those images have enabled me to tie up loose ends and to add certain features, such as chamfers, radii and stamped identification marks.



Welcome to New Members

We extend a warm welcome to the following new members:

David Fenner	- Tunbridge Wells;	John Moore	- Harborne;
Jon Homersham	- Ramsgate;	Philip Poole	- Cramlington;
David McCarthy	- Cardiff	Eric-Jan Stroetinga	- Eindhoven, The Netherlands
Jock Miller	- Christchurch, New Zealand;		

Welcome to OLCO and we hope that your membership will bring you benefits and items of technical interest. We look forward to meeting you (and current members) at forthcoming events – see Dates for your Diary, below.

Eric-Jan has a web site and very interesting it is too: <http://members.chello.nl/e.stroetinga>

Jock very generously took me on a day-long trip to see his old friends and some railway museums during my most recent trip to New Zealand. I'll try to write about it in a future issue, but I took only one picture all day, so I'll have to dig up some 'I made earlier'.



Dates for your diary - 2012

Event	Date(s)	Location
Harrogate Exhibition	Fri 11 th to Sun 13 th May	Great Yorkshire Showground, Harrogate, HG2 8PW.
OLCO AGM	Sat 19 th May	Liverpool Museum. L3 1DG.
Lionsmeet 2012	11th August	Newport, South Wales. (<i>No post code yet, but it's at Grid Ref ST319901. Internet users can key that into http://gridreferencefinder.com/ to see the track. Ed</i>).
Bristol Model and Hobbies Exhibition	Fri 17 th to Sun 19 th Aug	Thornbury Leisure Centre. BS35 3LG. (<i>Help & Models needed for this, the premier ME Exhibition in the south west. Ed</i>)

If you can help out at any of these events, please contact the Editor (details on back page) or OLCO Chairman John Brandrick at: jbrandrick@mail.com,

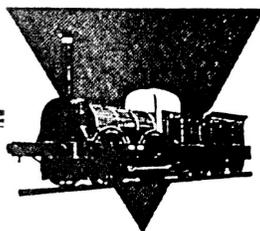
I would very strongly urge you to come to the AGM. Once again we'll be in the same building as Lion, but this time, we'll see her in all her splendour in place in the museum. There are so many other things to see there as well: the Liverpool Overhead Railway display, complete with carriage set at the relevant height, a Grand National area, Meccano, Dinky Toys, old bones, a steam lorry, lots of old Liverpool scenarios, stars of stage and screen, music makers, lots of interactive displays and so on. There are splendid views of the ferry terminal, the Three Graces, the river Mersey, the new canal and so much more! Then there is the nearby Maritime Museum, Tate Liverpool, shops, theatres, the Philharmonic, etc. So, lots to do, including things to interest the ladies whilst we sit and deliberate on Lion. I've included a couple of pages on how to get there, parking, walking, coming by train and so on. (*Better book my accommodation quickly, or it'll all be snapped up!* – Ed). But, whatever you do, **Do come and see Lion.**



Notice of OLCO AGM 2012

I emailed this Notice to most who receive the newsletter by such means, some weeks ago, along with details of the service for Charles. However, I only sent it out by post to those whom I thought within striking distance of that service. My apologies, therefore, if this is news to you:

OLCO



OLD LOCOMOTIVE
COMMITTEE

From:

THE SECRETARY
BREWOOD HALL
BREWOOD
STAFFORD ST19 9DB
ENGLAND

Tel: 01902 850095 (evening)
E-mail: jan.c.ford@gmail.com

OLCO ANNUAL GENERAL MEETING, LIVERPOOL, SATURDAY 19th MAY 2012

The 27th AGM will be held at the Museum of Liverpool, Pier Head, Liverpool Waterfront, Liverpool, L3 1DG (website: <http://www.liverpoolmuseums.org.uk/mol/>), where 'Lion' is now on public display in the 'Great Port' Gallery.

Railway stations are at James Street (2 minutes walk), Moorfields (5 minutes walk) or Lime Street (20 minutes walk). Full details and details of buses are at <http://www.merseytravel.gov.uk/>. The Capital Car Park (<http://www.thecapitalcarpark.com/>) is nearest to the Museum.

By courtesy of Sharon Brown, Curator of Land Transport, a Meeting Room will be made available for OLCO Members from 10.00 a.m. Please enquire at the Information Desk in the Foyer for details of the Meeting Room. The Museum telephone number is 0151 478 4545.

The AGM itself will start at 1.30 pm.

Food is available at the Waterfront Café within the Museum. Alternatively, you may prefer to bring a packed lunch.

AGENDA

1. Welcome by Chairman
2. Apologies for Absence
3. Minutes of 26th AGM
4. Matters Arising
5. Chairman's Report
6. Treasurer's Report
7. Election of Officers
8. Lionsmeet 2012
9. Dynamometer
10. OLCO Website
11. Purchase of Laser Printer for 'Lionsheart'
12. Progress in distributing 'Lionsheart' by e-mail
13. Any other business

Jan Ford (Miss)

Secretary



Minutes of Old Locomotive Committee 26th Annual General Meeting

Venue: Liverpool Museum Store, Juniper Street, Bootle.

Date: Saturday, 7th May 2011

Members present:

John Brandrick (Chairman)

John Hawley (Magazine Editor)

John Owers

Alan Banks (Webmaster)

Alan P Bibby (Lionsmeet Co-ordinator)

Alfred Lloyd

John Archer

Jon Swindlehurst (Treasurer)

Jan Ford (Secretary)

Present as Observer: Sharon Brown, Curator of Land Transport, Liverpool Museum.

The Agenda had been circulated as part of the Notice of A.G. M. sent to Members.

- 1. Welcome by Chairman:** The Chairman formally opened the A.G.M. and welcomed those attending.
- 2. Apologies for Absence:** Apologies for absence were notified to the meeting: Geoff Brazendale; Mike Casey; Peter Featherstone; Harrye Frowen; Rich Garich; Bill Harrison; Barrie Larke and Mike Lee.
- 3. Minutes of the 25th A.G.M.:** The Minutes of the 25th A.G.M. were reviewed by the meeting and accepted as a proper record.
- 4. Matters Arising:** No matters arising required formal attention but the Chairman reminded those attending that 'Any Other Business' would offer an opportunity for wide-ranging discussions.

Chairman's Report:

The Chairman gave his report to Members, reviewing the year's activities. Largely due to the efforts of the stalwarts who organise an OLCO stand at various exhibitions for modellers (including Bristol and Alexandra Palace), it was pleasing to report that new members continue to join. The Chairman stated that Sharon Brown would outline the Museum's plans for the display of Lion later in the Meeting. He hoped to maintain the close links with the Museum in the future and develop OLCO's role as a source of information regarding 'Lion'. Alan Banks was to be congratulated for fulfilling the long-felt need for the OLCO website (<http://www.lionlocomotive.org.uk/>). Alan Bibby, for Lionsmeet organisation, Jan Ford, as Secretary, John Hawley, for 'Lionsheart' and Jon Swindlehurst, as Treasurer were all thanked for their continued excellent support. The full Report is included below.

- 6. Treasurer's Report:** The Treasurer's Report and Financial Statement were circulated to those attending. Membership is currently 73 and the overall Bank Balance shows an increase of £281.99 since last year to stand at £5,606.77 before adding what is currently only a small amount of interest. The full Report is included below.
- 7. Election of Officers:** The Chairman, Treasurer, Lionsmeet Co-ordinator, Lionsheart Editor and Secretary were eligible and willing to continue to serve. The Motion for re-election was proposed by Alan Banks and seconded by Alfred Lloyd and the candidates were re-elected unopposed. The Officers are thus:-

Chairman:	John Brandrick	Lionsheart Editor:	John Hawley
Treasurer:	Jon Swindlehurst	Secretary:	Jan Ford
Lionsmeet Co-ordinator:	Alan Bibby		
- 8. Lionsmeet 2011:** Alan Bibby confirmed that arrangements have been made for Lionsmeet to be held at Chelmsford Society of Model Engineers on Saturday 30th July 2011 and that publicity has been arranged by distributing details to interested parties and by notices in 'Engineering in Miniature' and 'Model Engineer'. It was explained that the Host Club Dynamometer Car would be used for the competition but that David Neish would be demonstrating his prototype simplified Dynamometer Car currently under development.
- 9. OLCO Website:** Alan Banks outlined the contents of the website. His aim had been to make it simple and suitable even for people using dial-up access. The website should give access to information about OLCO and 'Lion'. Alan Banks agreed to continue in his role as Webmaster.
- 10. Lionsheart by E-mail:** Currently, 28 copies of 'Lionsheart' are distributed by post and 47 by the preferred method, e-mail.
- 11. Any Other Business:** A number of topics were covered.

11a. Display of Lion: Sharon Brown informed the meeting that the Museum of Liverpool would open on 19th July 2011 and that OLCO Members keen to attend would be welcome. Lion will be displayed in the new museum building later in the year when the 'Great Port' gallery and the associated Audio-Visual Presentations are complete. Any film of 'Lion' held by OLCO Members would be useful. The Museum are considering what sale items would be appropriate – a reprint of the 'Yellow Book' is a possibility. The Chairman commented that he would like to see a high-quality technical book produced in the tradition of the 'Wild Swan' publications. Sharon Brown stated that the Museum would like to display models of 'Lion'. The Chairman stated that a model of 'Lion' during its incarceration in the Pump House would be particularly appropriate.

11b. Valve Gear: John Hawley showed a short video of a full size mock-up he has made of the Gab Motion fitted to 'Lion'.

11c. Thanks to Webmaster: As an expression of thanks to Alan Banks for his work as Webmaster, the Chairman proposed that he be given 5 years membership without charge. This motion was carried unanimously.

11d. Venue for Lionsmeet 2012: It was noted that Newport is proposed as venue.

11e. Venue for 2012 A.G.M.: Sharon Brown offered to make a Meeting Room available at the Museum of Liverpool as a venue for the 2012 A.G.M. The date is to be arranged later.

11f. Thanks to the Museum: A Vote of Thanks was unanimously agreed to the Museum and Sharon Brown for their hospitality.

There being no further business, the Chairman closed the Meeting.

Chairman's Report in Full:

I am pleased to report that this has been a year of progress for OLCO. We now have a website thanks to the initiative of Jon Swindlehurst but the real credit must go to our new member Dr Alan Banks who actually did the work of setting up the site and on behalf of the OLCO membership I would like to extend our grateful thanks to both for fulfilling this long felt need and also to welcome Alan to the Society.

We have an excellent newsletter thanks to John Hawley's skill and hard work. The editor's job is particularly onerous and John is to be congratulated in producing a first class and very readable newsletter that is a credit both to him and OLCO. The membership can surely feel they are getting value for money for their subscription. Furthermore, after years of discussing it, Lionsheart is now sent to most members by e-mail with a very significant financial saving to the Society.

We have had stands at three major Model Engineering exhibitions this year; Harrogate, Bristol and Alexandra Palace which have been very successful particularly in attracting new members, most of the nineteen members joining us this year being from the exhibitions including eight from Alexandra Palace which is the record. I hope that regular attendance at these events will become an established part of our activity along with Lionsmeet and the AGM. It is clearly beneficial to OLCO to fly the flag and advertise our existence and purpose. There is a clearly a great deal of interest in Lion and we are an important source of information. A less obvious benefit is the opportunity to meet members in person who cannot manage to get to our other functions. Besides this they are very enjoyable in their own right despite the effort involved and I wish to thank those members who have supported these both as stewards and with loan of Lions without which the stand would be rather meaningless.

Lionsmeet continues to flourish thanks to Alan Bibby's excellent organisation. Last year's event at Kinver was successful and

judging by the big effort being made by Chelmsford, our hosts this year, and especially by our member John Dalton we can expect another vintage occasion, so please do your utmost to come along and support it. Before leaving the subject of Lionsmeet, thanks are also due to Jan Ford for her expert dynamometry and also for taking on the important job of secretary.

As always, Jon Swindlehurst has very efficiently carried out his dual roles of Treasurer and Membership Secretary. It is very easy to take it for granted but your work is very much appreciated. Thank you, and thanks to all of you who have contributed to OLCO this year.

Well, that's the year in retrospect but someone said that if you are not going forward, you're going backward, so what of the future?

Firstly, we should maintain our close links with Liverpool Museum and give any assistance we can toward Lion.

We should develop our role as a source of information on Lion and for the benefit of modellers.

Related to this is the question of an archive. We have the beginnings of this in our store of past issues of Lionsheart but we might consider putting this on a more formal basis, perhaps even with an appointed Archive Officer.

This leads on to the next issue, which we have discussed in the past, of a history of Lion to replace the 'Yellow Book', either in cooperation with Liverpool Museum or of our own. It would undoubtedly be a major undertaking but one to which I feel we should give serious consideration.

We have had a very good year with much progress and OLCO is very much 'alive and well'

Thank you for your kind attention.

TREASURER'S REPORT 2011

Membership has grown well this year and now stands at 73, an increase of 19 on 2010. The increase was mainly achieved before the OLCO website was set up, so hopefully this too will increase membership in the future.

The overall balance now stands at £5606.77, an increase of £281.99 and does not include deposit account interest, which the bank has not yet notified me about. As interest rates are now extremely low this would only be a few pounds.

Jon Swindlehurst Treasurer/Membership secretary

OLCO FINANCIAL STATEMENT for year ending 31/03/2011

<u>INCOME</u>	<u>2011</u>	<u>2010</u>
Subscriptions	445.00	310.00
Deposit acc. interest	N/A	4.81
Sales receipts	0.00	0.00
Donations	115.00	20.00
TOTAL	560.00	334.81
<u>EXPENDITURE</u>		
Donation to Kinver MES	25.00	0.00
Donation to York MES	0.00	25.00
Cost of producing Lionsheart (67)	40.72	(LH65) 64.88
Cost of producing Lionsheart (68)	62.59	(LH66) 113.24
Cost of producing Lionsheart (69)	36.52	0.00
Website (2 years fees)	88.00	0.00
engraving 2009	0.00	6.50
AGM notification	16.00	0.00
Secretary's expenses	0.00	17.21
Treasurer's expenses	9.18	3.60
Dyno car insurance	0.00	25.00
TOTAL	278.01	77.31
<u>NET PROFIT</u>	<u>281.99</u>	<u>79.38</u>
<u>TRANSFER (cur. to depos.)</u>	<u>0.00</u>	<u>300.00</u>
<u>ASSETS AND LIABILITIES</u>		
Cash at bank: Current Acc.	490.98	223.09
Cash at bank: Deposit Acc.	5,064.59	5064.59
Cash in hand	51.20	37.10
TOTAL	5606.77	5324.78



Models Under Construction

From: Phil Robinson
By email

Bristol
22 December, 2011

Dear John,

I am currently building a 3 ½ inch gauge Lion. I took it along to the open table event at the BSMEE last night.

My back ground is a Electronic Instrument maker with Rolls Royce and took up model making as occupational therapy during shift / night work as I had full machine shop access. Unfortunately I lost this wonderful faculty when I moved job roles in the mid 90's, so the Lion has remained part built. I have now purchased a lathe (Super 7) and have started to kit out a home workshop.

As I pointed out last night I'm OK machining and producing bits, but I know nothing about setting up and plumbing steam engines.

At this year's Thornbury exhibition I spoke to someone about the Lion and he stated that there is an issue with the valve gear (Also indicated in the current newsletter) so any help would be gratefully received.

I have enclosed some pictures of work in progress.

Have a great Christmas and a Happy New Year

Best Regards, - Phil R



Photo 3. Phil Robinson's very neat LBSC style boiler ... from the top ...



Photo 4. ...and from the rear.

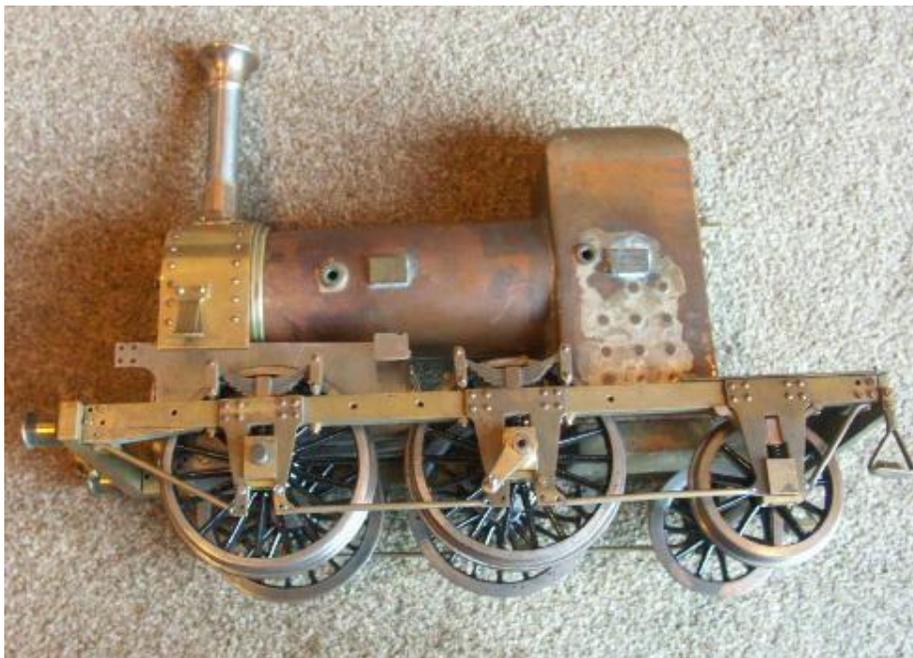


Photo 5. The loco's coming on well.

Photos - Phil Robinson

From: Barrie Larke
By email

Progress to Date

Plealey
29 January 2012

Hi John,

Jon Swindlehurst said you might like to see some pictures of my Lion as it stands at the moment. Far from finished but as you can see I am well on the way with the valve gear. Feel free to use any if you think they are of interest.

For those interested I have shortened the gab length 1/16" rearwards from LBSC's dimensions to clear the front axle having made the gabs to Saxby's modifications. This makes the length of the gab 4-9/16" from the centre of the fork to the end for the 5" gauge Lion. As a result the reverser shaft and the rocker shaft brackets have also moved rearwards by the same amount. This will probably mean slightly longer valve rods, but I intend to extend these to supports on the cross frame in a manner similar to that done by Tony Parsons.

The next thing is to fit the rocker shaft brackets and the rockers which are mostly finished. I also have to pin the various levers on the reverse shaft. The connecting rods are finished and have been fitted but are not shown here. Pistons and valves are also in place.

Regards, Barrie



Photo 6. This is Barrie's chassis back in January. Note the 'ready for fitting' rocking shafts and supports on the surface plate half way up on the right.

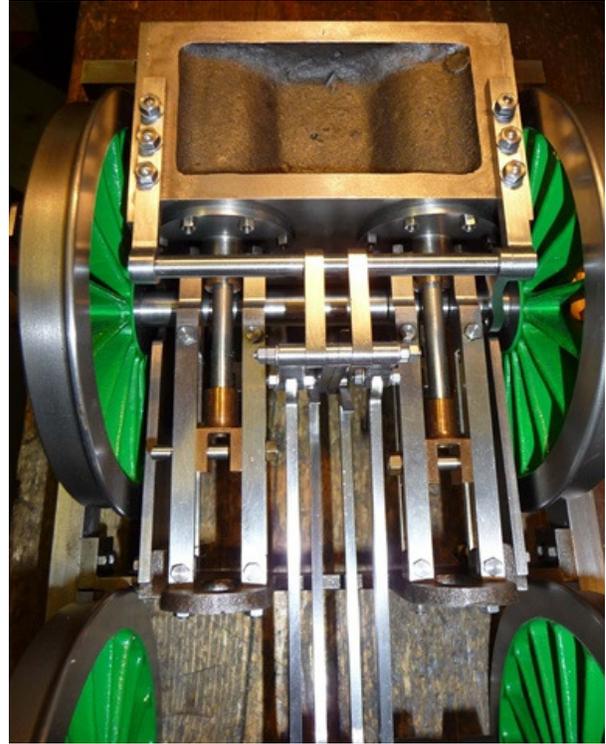


Photo 7. View of underside, looking forward. I once commented on the immaculate condition of this model, and Barrie replied "Well it's bound to be as it's never run yet. If only they stayed that way!"



Photo 8. Three quarter underside view. Note the sandwich filling between the two hornplates at lower left. On 'Big Lion, the 'bumps' accommodate through rivets holding all three items together.



Photo 9. Top view. It all looks a bit tight in there. Must be a nightmare to service/repair, with that front axle passing through.

Photos – Barrie Larke

Hello John,

I am not sure whether we have met or not - my memory is not as good as it should be!! As the editor of my own Club's magazine, I know that it is not easy to persuade people to write so thought the attached letter may be of interest. If you don't like it I shall not be offended if you bin it!! Most of my drawings are prepared in A2 format and I only have an A4 scanner so the assembly drawing attached is a bit scruffy. I hope you can do something with it.

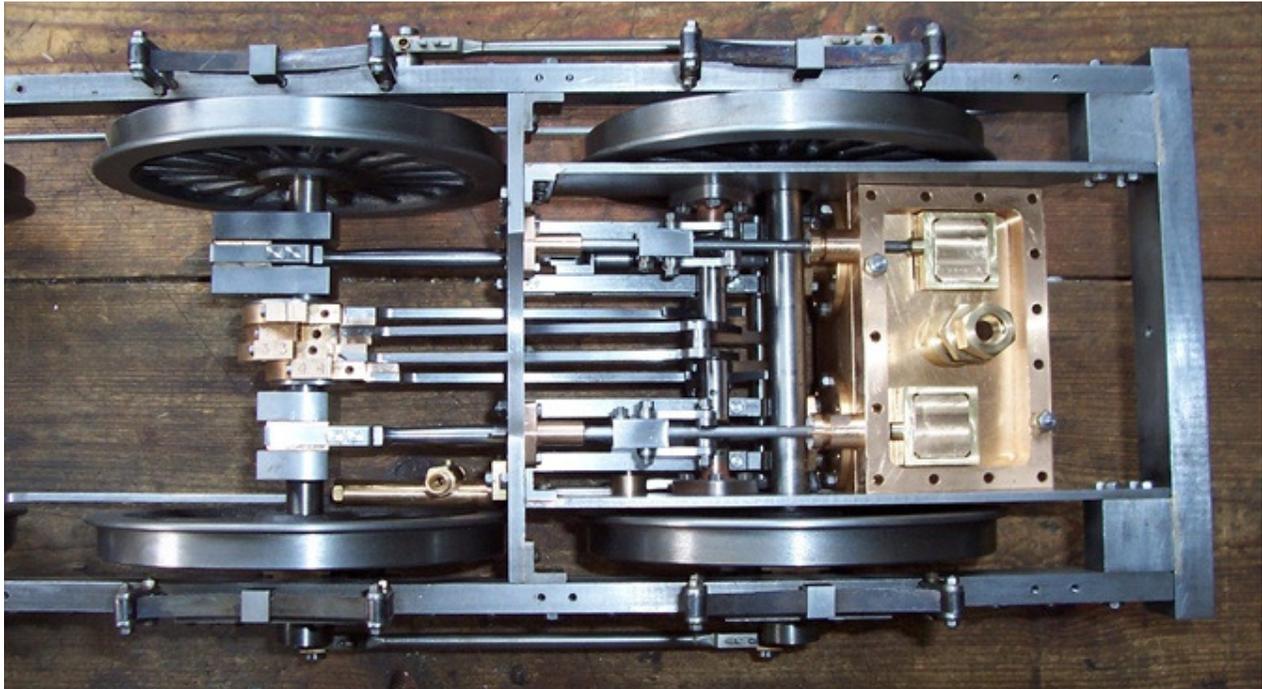


Photo 10. Norman Barber's valve gear. It incorporates a valve spindle support system similar to that submitted by Tony Parsons in LH70 See Norman's letter below. Photo - Norman Barber

I refer to the letter from Barrie Larke in the December 2011 edition of LIONHEART on the subject of Lion valve gear. My own version of Lion is now fairly well advanced and members may be interested in the work I have carried out on the valve gear design and performance. I have prepared my own drawings from those originally published in Model Engineer magazine and in the process have been able to "assemble" the engine on paper to check the details.

I have paid particular attention to the valve gear, which, with all due respect to LBSC, I consider to be of rather poor mechanical design. The slotted link / die block drive arrangement inevitably puts significant bending loads into the valve rod which is only supported over a short length in the steam chest and gland. I have modified the valve drive mechanism by extending the valve rod to pass through a guide on the motion plate. The drive from the rocker arm to the valve rod is via short links connected to a crosshead on the valve rod, the end of the rocker arm being bifurcated to embrace the rod. Hopefully the drawing herewith will make this clear. The transverse loads applied to the valve rod with this arrangement are negligible.

The length of the upper arm of the rocker is 21/32" providing a valve travel of 1/2 " and full steam port opening. The eccentric rod length has been reduced to 5 11/32" to improve the symmetry of the rocker arm movement either side of the mid position. Although this improves the situation the reverse gab horns still foul the front axle if made to the Saxby dimensions and 0.05 inch was removed from the front horn to eliminate the foul. It should also be noted that if the crown of the reverse gab is made to drawing the end of the lifting link fouls the end of the lower rocking arm and prevents full

engagement of the gab with the drive pin. The reverse gabs have therefore been modified as shown in the sketches herewith. The depth of the parallel part of the reverse gab mouth has also been modified from 1/8" to 9/64". This is necessary to avoid partial disengagement with the rocker arm drive pin at the extreme end of the forward movement. This problem arises due to the rather short lifting link.

The performance of the gear has been analysed in some detail. For previous locomotives with Stephenson link motion I have done this with the aid of Charles Dockstader's computer programmes but none of these are suitable for the Lion gab gear so the analysis was done in the old fashioned way on the drawing board. The starting point was to determine the angle of advance required. This was done using a standard Reuleaux diagram. This type of valve diagram does not provide very satisfactory prediction of valve movement or steam distribution but it does provide a good estimate of the angle of advance required for a given lead. In this case I adopted zero lead since I do not believe there is any advantage to be gained in our small sizes by opening the steam port before dead centre. The angle of advance adopted was 30 degrees and, with the valve gear geometry concerned, will be the same for both forward and reverse. The resulting valve diagram and steam distribution is shown in the accompanying diagram. The eccentrics have been set to the chosen angle of advance of 30 degrees and the valve motion observed is exactly as predicted.

If any member would like further details or drawings of the modifications I have made feel free to contact me through the editor who will, I am sure, be pleased to pass on my e-mail address.

Regards - Norman Barber

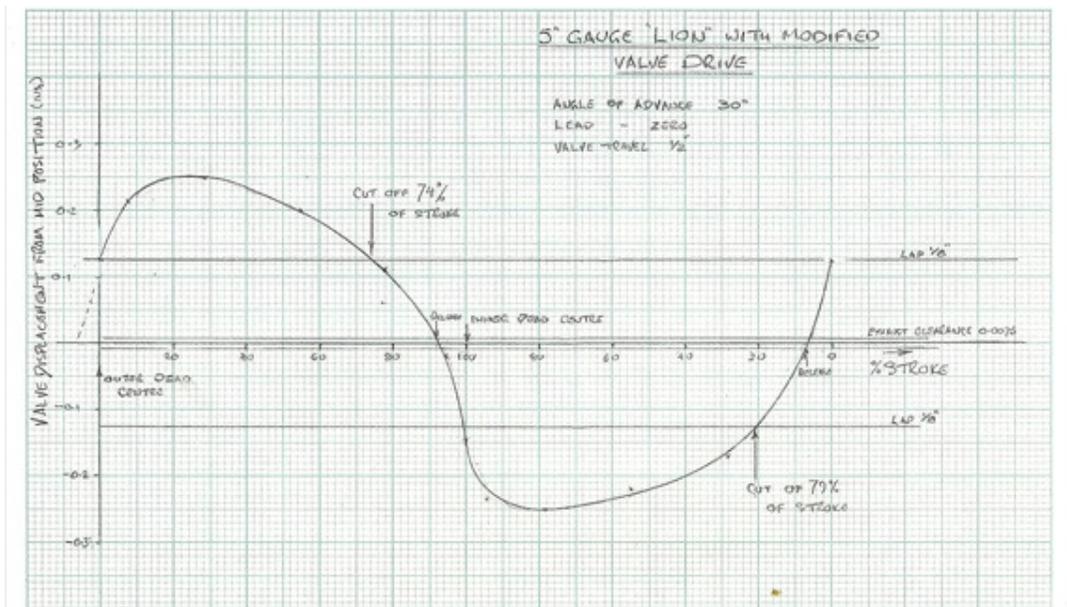


Fig 1. Norman Barber's graph of valve displacement per wheel revolution

From: Barrie Larke
By email

Progress to Date

Plealey
26 March 2012

Hi John, Here are more pictures of my Lion showing a bit more progress. The valve gear is more or less finished except that I intend to fit valve rod supports the other end of the yokes I've made. The valve timing is also correct now but will need final checks later.

Further progress is held up at present due to two things: I have almost finished a pair of building stands which have been more work that meets the eye but will enable me to lift the ever increasing weight of the model from the bench so that I can easily turn it upside down when required. The other impediment to progress is that dreaded word decorating which has become necessary in our bedroom.

I have been studying your drawing of the boiler which is fine but what looks easy on paper may not be so in practice. Jon tells me it's easier than LBSC's and I will take his word for that. I much prefer the original design in any case even though I bought all the copper and dome casting for LBSC some time ago.

Regards, Barrie

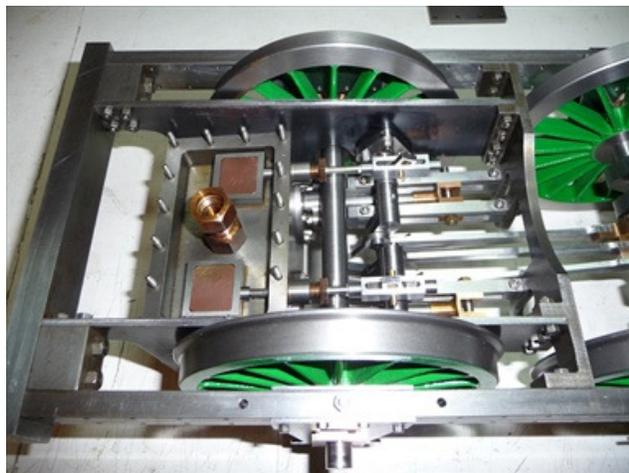


Photo 11. A later image than that shown in photo 9. Note the closed sliding fork.
Photos - Barrie Larke

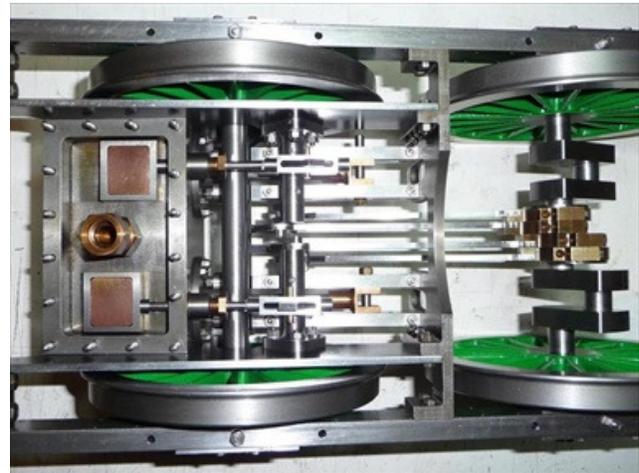


Photo 12. View from the top. The various methods of improving this area of Lion's valve gear were discussed in LH69 & LH70.

For Sale

A quantity of aircraft quality duraluminium plate and sheet. North Somerset area. Buyer collects

Contact Eddie Trevelyan on 01934 838522.

Exhibition Pictures (1) - Bristol August 2011



Photo 11. An early-in-the-day general view of the OLCO stand. On the right Harrye Frowen (left) talks to a visitor before the place got too crowded. From left we see David Neish's 5" Lion, John Martin's 7 ¼" and my 7 ¼" boiler. On the brick pillar is a photograph of the Mike Parrott Memorial Cup above a picture of Susy Parrott's embroidered list (see LH 43) of Lionsmeet winners. The Cup is presented to the 5" gauge winner of the Lionsmeet competition, to be held this year in Newport, south Wales. (See Dates for Your Diary, pg 2). For this, the 2011 Bristol show, we had taken two bays of display space, which worked out quite well. Photo - Dave McCarthy



Photo 12. A better view of David Neish's 5" Lion. On and beside the tender are items from David's electronic dynamometer, described in LH 71. Photo - Dave McCarthy



Photo 13. Alan Bibby's 3 ½" Lion. This is a regular attendee at the Bristol show and I'm very grateful to Alan for his kindness. Photo-Dave McCarthy



Photo 14. Another view of 'Harrye's Stand'. From left is Alan's Lion, Harrye's Puffing Billy tender, Harrye's 7 ¼" Lion. Photo - Tony Bird



Photo 15. "No," says Harrye. "You don't have to push it. It's driven by steam! But you have to hang on!" Photo - Dave McCarthy



Photo 16. This was 'my' table. Another view of David's 5", John's 7 ¼" and my 7 ¼" boiler.
Photo Tony - Bird



Photo 17. A final overall view. John Martin (left, by the GA), and Harrye (central on right beneath our 'OLCO - We're Getting Bigger' banner).
Photo - Tony Bird

Exhibition Pictures (2) - Alexandra Palace January 2012



Photo 18. An interested onlooker views the three ascending scale Lions.



Photo 19. Another view of the three Lions. Photos - Adrian Banks



Readers' Letters

From: Jon Swindlehurst
By email

Wirral
23 November, 2011

... have managed to get the eccentrics and straps machined. I've also made a 'dummy' crank axle with only one throw so that I can observe the valve timings before they are permanently fixed in the proper axle. Then in the likely event that I have to make adjustments, it's still possible.....I hope?

From: Michael Rowan
By email

Wickford
22 December, 2011

Thank you for Lionsheart. I would like to wish you the compliments of the season. My wife is desperate to know the date of the OLCO AGM, as the date of her choirs' next concert is being held in abeyance till we know, and I don't want to miss the OLCO AGM again, if I can help it. I am making slow but good progress on my 7 ¼" gauge tender. Would it be OK if I call my engine Tiger, if I get that far, as I would rather not have the brass cover over the firebox?. What was the name of the third member of the class? Could you please remind me of the name etc of the chap that builds the boilers. *(Can anyone help with this other name? Ed)*

(The Bristol based boiler maker is:

*Pete Carr, of:
Kingswood Boilers
Unit 21
Hanham Business Park
Hanham Business Park
Memorial Road
Bristol
Avon
BS15 3JE
Telephone: 0117 949 2555*

*Another local one is:
Cheddar Valley Steam,
Unit 4,
Castle Mills Industrial Estate,
Biddisham,
Somerset,
BS26 2RH
Phone Tim or Claire
on 01934 751285*

*And another:
Devon Steam Boilers
10 Burch Close
Exmouth
Devon
EX8 4BR*

*Ring John Gaunt
on 01395 269150. Or email
devonsteamboilers@btinternet.com*

(Also, Helen Verel, of Western Steam, etc, etc. There must be some local to your area though, Michael - Ed)

(Late news: In the time it's taken me to get this issue out, Michael tells me he's got a very good deal from Devon Steam Boilers - Ed)

From: Peter Webb
By email

Machining Lion Coupling Rods

Runcorn
22 December, 2011

John,

Re the correspondence in Lionsheart no 72 I would refer your builders to the Workshop Practice Series no 28 Simple Workshop Devices by Tubal Cain

In Section 3 there is a 2 ½ page article "Turning Fish-Bellied Rods" based on the principle that a tailstock offset used with a catenary i.e. with half the coupling rod in the chuck and the other in an offset centre will bend the rod in the arc of a circle. The power feed is then used to machine the rod to a fish bellied shape. The same treatment to the other end leaves only the centre to be cleaned up-again simple and adequately defined using finger pressure.

The book is available from Model Engineer at £6.95. Amazon appear to be out of stock at the moment.

I borrowed it from Widnes Library and found I already had the previous Argus Books printing of this useful book.

If your lathe cannot offset such as my Hobbymat, November's Model Engineers Workshop has a simple device for a mini lathe, which are a devil of a job to offset, fixed to the tailstock nose allowing an offset without touching the lathe's offset system.

Since using Windows 7 my scanner is no longer supported otherwise I could have sent a copy of the article but maybe Copyright issues would then arise.

I visited Lion at Liverpool last week - what a truly handsome locomotive!

From: Jon Swindlehurst
By email

Wirral
22 December, 2011

Thanks for LH 72....yet another excellent edition. And thanks for the up dated address list. Sorry we missed you at the museum. The breakfast was a bit better this time....that is, if you like a curly sausage in a bun! I thought Lion looked OK but not special and if you viewed her from the gallery above she looked quite scruffy. Were they trying to create an impression of speed by putting the regulator in the 'full speed ahead' position? Also, I was a bit suspicious that they had put the chimney on back to front as some of the fixing bolts were missing. Unfortunately, due to the low light level, I couldn't see whether the brazed joint in the copper top was at the back or not. I'll have to take a torch with me next time I go.

I've made a few parts for the valve gear in the past few weeks. Balanced slide valves are now complete, as are the eccentrics, expansion links and rockers. I've made a dummy one sided crankaxle so I can test all the valve gear and check it works OK before fixing the eccentrics permanently on the crank. You can see I have little confidence in my ability to get it right first time. There's nothing like being able to make a few adjustments. When (if?) it works I'll send you some photos.

Hoping you have a merry Swarfmas and plenty of turning in the New Year

From: Erik-Jan Stroetinga
By email

Eindhoven, The Netherlands
26 January 2012

Hello John,

I'm a teacher in CAD at our Fontys university of applied science (dept. of Mechanical Engineering) and we use Solidworks. I will also make the 7/4" gauge drawings of the Lion in Solidworks, as I already did with my T3. This way I can check the assembly layout, valve gear in 3D and it is easy to generate 2D drawings for the workshop.

Solidworks, SolidEdge and Inventor are all software packages that do the same thing on about the same level (Midrange CAD-software, also used in industry)

Files can be partly inter changed, but this is not always with so called full history of CAD data.

We use Solidworks, because there is very good training material in Dutch available and the software is very user friendly. I've used Inventor in the past and made some drawings with SolidEdge. There is some difference, but each year they all bring out a new version, and each year they look more and more like each other.

Kind regards and have a good trip to New Zealand.

Erik-Jan

There has been some interesting discussion going on between David Neish and Alan Bibby, possibly others. We may hear more at the AGM.

From: Alan Banks
By email

Revised Forms for OLCO Website

Sandbach
31 January 2012

Hi John I'm redrawing the website in a different software package. I'll upload the pages for Index, AGM and Exhibitions. I've already linked to the museum, video and how to get there. The rest I'll get to over the next few days. Have got the builders in and just finished and posted my latest newsletter for Wirral MES.

Cheers – Alan. enjoy New Zealand

From: Jon Swindlehurst
By email

Wirral
17 April, 2011

Hi John,

It's an interesting coincidence you emailing me today as I have been in Liverpool carrying out special research, just for you! What's that? I hear you ask. Christine and I were meeting up with a well known local historian who knows all that anyone would ever want to know about Liverpool, so I asked him about your man with the axe on the pub roof. And you guessed it....he didn't know. But he was pretty sure it was a whaler as they used to hang around that part of the town.

Have run my Lion for the last two Sundays after its winter lay off and annual fettle. Although initial steaming was a bit sluggish after a few laps she went well for a couple of hours each time. Probably the driver not up to scratch after his winter layoff!!!

See you at the AGM

Regards – Jon

(Thank you, Jon., I'm a bit sad that this is the only reply I've had so far. Someone must have more info, surely? - Ed)

From: Erik-Jan Stroetinga
By email

Eindhoven, The Netherlands
1 February 2012

Hello John, Thanks for the news letter. Very interesting to read indeed. If you have one or two older digital volumes available I would be most obliged. For a one-man organisation you do a fantastic job. I didn't know that this is such an active club.

If I can arrange it (work and family), I would like to visit the Liverpool museum at 19th May. Thanks for the tip.

Although I'm still working on the T3, it is very tempting to start to make a 3D model of the loco in CAD.

Kind regards - Erik-Jan

(Thank you for your kind comments, Erik-Jan. But I have to confess - I'm not the only one running this show. I just happen to be the one who makes contact via the newsletter. I hope you are able to get to the AGM, where you'll meet the rest of the team. – Ed)

From: Jan Ford
By email

The Titfield Thunderbolt

Brewood
14 January, 2012

I thought you might be interested in this amateur production. It's also in my blog at <http://janfordsworld.blogspot.com/2012/01/titfield-thunderbolt.html>.

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

THEATRE REVIEW

by our occasional drama critic, Jan Ford. (This review was first published in LH62 and the play rolls on – this one at Southport. Ed)

No, there's not been much call for a drama critic in OLCO. But when 'The Titfield Thunderbolt' is adapted for the theatre, we had to check it out.

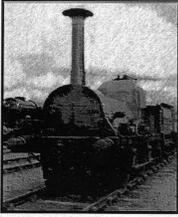
How can you adapt one of the best of the Ealing Comedy Films for the stage? Well, the 'Telegraph' drama critic Charles Spencer, having seen the production at Hornchurch, commented "You can't, but you can have a lot of fun in trying". His review encouraged me to see the staging in Coventry.

It's a strange mixture of the familiar and the new. Chunks of dialogue taken straight from the screenplay, interspersed with all sorts of plotlines not in the original, yet all done with such apparent affection that it remains true to the spirit of the original.

The original John Gregson role, Squire Chesterford, is transformed into Lady Edna Chesterford, played in "jolly hockeysticks" mode by Kate O'Mara. The Reverend Weech becomes much younger, as played by Steven Pinder and the Union Representative at the Enquiry, Mr. Coggett becomes Miss Coggett. A number of these changes are predicated by the multiple roles adopted by the actors – five actors cope with fourteen roles, involving some amusing on-stage quick-changes. The sheer gusto and good nature of the cast soon dispels any thoughts of wobbly sets or improbable plotting.

The short season (Hornchurch, Coventry, Windsor and Eastbourne) is now finished but, if there is another season, and I certainly hope that there will be, I strongly recommend that you check it out for yourselves.

I've just learnt that Southport Dramatic Club have a production running from 27th January 2012 to 4th February 2012 and I'm delighted to copy their playbill below:-

	Southport Dramatic Club News & Views	
December 2011		
Diary	The Titfield Thunderbolt	
21st December – 8th January Cinderella 27th January	27th January - 4th February 2012 7.45pm	
	IMPORTANT NOTICE The passenger train service between Titfield Station and Mallingford Junction will be permanently withdrawn on and from Sunday, the 1st June, 1951, and accordingly the public is hereby given notice of closure.	A play by Philip Goulding Based on the original Ealing comedy screenplay by T.E.B. Clarke Directed by Les Gomersall
4th February The Titfield Thunderbolt	VERY IMPORTANT NOTICE An alternative Passenger Cleverton Service will be operated by Crump and Son Road Transport Company (incorporating the Titfield Transport Company) servicing the area normally covered by the railway.	
Contributions to Editor: Eric Chadwick	LITTLE THEATRE Home of the Southport Dramatic Club	Box Office Opens: 20th January 2012 at 11am
Email (preferred): johnd@titfieldtheatre.co.uk johnd@titfieldtheatre.co.uk Telephone for Newsletter subscribers only: 01704 531062	Box Office Tel: (01704) 530521/530460 www.littletheatresouthport.co.uk Highton Street, Southport PR9 0PA	
Chris Ruckliffe (Chairman) 01704 534887 07779 241906 (mobile) www.littletheatre-southport.co.uk	Our first play of 2012 is Philip Goulding's delightful Ealing style comedy Titfield Thunderbolt. It brings a little piece of 'Old England' to the stage. With only five actors playing several parts, it manages to weave social status, bureaucracy and economics into the hilarious characterizations and engaging plot. The play tells the story of a band of enthusiastic amateurs battling against governmental red tape to retain their village railway line during the days of 1950's steam rail. The branch line between Mallingford and Titfield is losing money and British Rail is intent on closing it down. In desperation the villagers exploit the 1947 Transport Act and decide to take charge and run it themselves – with a train resurrected from a local museum! As well as convincing the railway authorities that they are competent to work the line, they have to face problems from Vernon Crump who is set on providing a competitive bus service. All aboard for a rollicking evening of hilarious nostalgia! The play is under the skilled direction of one of our most accomplished actors, Les Gomersall and runs from 27th January until 4th February 2012.	
LITTLE THEATRE Home of the Southport Dramatic Club		

The Chairman's Wanderings

Did the denizens of Monkton Combe or Freshford, I wonder, view with amusement or perhaps even suspicion, the sight of a gentleman of fairly mature years wandering round those locations inquisitively with a small purple book in hand? Was he just the latest of several sightings? The 'gentleman' in question was your Chairman and the book that admirable little volume 'The Titfield Thunderbolt-Now and Then' by Oliver Fosker. After a general introduction it contains a series of stills from the film next to pictures of the scene as it appears now and is invaluable for those wishing to indulge themselves unashamedly in nostalgia, not just for the film and Lion, but also for a vanished way of life.

Opportunity was taken to break our journey on holiday to Devon last summer and stay overnight in Monkton Combe and a thorough search of the film locations was made before breakfast. The site of Titfield station was only a hundred yards from the pub down the lane that saw an excited crowd on its way to the station under Ealing Studios cameras sixty years ago. I wonder if they were amused by the old village lockup they would pass on the left down the lane? Of the station, sadly, only the GWR cast iron gateposts survive. Between them is a garage symbolising the ultimate triumph of the motorcar over the rural railway. The rest of the station is now buried under a bank of earth forming an extension of the Monkton School's tennis court. The track bed west of the station is still traceable but the bank alongside the line has been levelled. I was unable to venture eastwards to Dan's carriage home but continuing down the lane towards the stream the remains of the mill are visible which I took to be the one used by the film crew to show the day's filming after a generator had been installed and which they christened 'The Hydrodeon'. Once over the stream I was impressed at how close everything was. Beal's farm is just up in the hill to the left as you face west, the scene of the borrowed utensils to fill 1401's empty water tanks and the site of the footbridge over the stream (an Ealing studios prop) is just about discernible. I was surprised that the lineside water tank, sabotaged by Harry Hawkins, (and also an Ealing prop) was only a hundred yards beyond the Dutch barn used as an engine shed.

Retracing my steps, I returned bathed in nostalgia and paused briefly to look at the site of the mill siding alongside the station where Lion lay in repose between filming sessions. Freshford, the other bit of Titfield in the film, is a delight and worth a visit. It has changed very little in the sixty years which have passed, a reassuring timelessness. The house and its gateway where Mr Valentine paused to place a rose in his buttonhole is easily recognised and viewed from the top of the lane it was as if everything had come to life again. To my left was the churchyard where Sam Weech and the Squire viewed with dismay Pearce and Crumps 'Amateuritis' tableau passing by on their lorry. The three-legged dog seen in the film has long gone but pleasingly the lane was devoid of parked cars.

There is of course, much else to see. The remains of Midford viaduct, Brassknocker Hill where Pearce and Crump viewed Lion waiting for the Inspector from their bus and the line curving into Limpley Stoke station. The fish dock platform at Bristol Temple Meads (Mallingford) the site of Thunderbolt's final triumph is now filled in and the loco sheds, which were in the background, have gone as, sadly, the locomotives who sounded their chorus of whistles.

Other locations, further afield, are still recognisable, Woodstock, Berkeley Square and Richmond Park, but the magnificent archway of Imperial college which framed Lion wooden replica being manhandled out of the museum is no more, being demolished shortly after the filming.

Are there many other films which have generated such 'location archaeology' I wonder? If you wish to indulge in Titfield Thunderbolt nostalgia you will find Oliver Fosker's little book indispensable (Up Main Publishing ISBN 978-0-9561041-0-6) and we OLCO folk are by no means alone. The North Norfolk Railway are holding a Titfield Thunderbolt weekend on the 23rd and 24th of June this year (not of course featuring Lion) so there a lot of us out there. Sadly I will not be able to attend as I will be on my way to Devon again, perhaps with my little book.

OLCO continues its presence at various exhibitions. This year we will have been at Alexandra Palace, Manchester, Harrogate and Bristol. Four in a year is a fair undertaking which is sustainable only with support and I would like to thank all those who have supported OLCO in this, not only with the loan of models and stewarding but also for their company. OLCO is a national society with a widely distributed membership and so it is nice when members can get together other than the AGM or Lionsmeet. We have steadily increased our membership (Adrian Banks' sales talk has to be seen to be believed), now approaching eighty, have advertised our existence in the Model Engineering world (photo of OLCO stand in EIM this month) and even earned some money. What is nice about the exhibitions is meeting and talking to people, especially our own members who come and say hello but strangers too. We decided at the outset we would be pro-active and talk to the visiting public rather than a lot of societies whose stewards seem to hide behind their stand and talk among themselves. Often people will respond to being accosted with the reply that they are just admiring our Lions but so often they will go on to mention something interesting such as they started building a 3.5 inch Lion years ago or their uncle drove or fired Lion on one of the Heritage Railways in the 1980s.

Notable encounters include a man who was a cleaner at Watford shed who cleaned Lion when she was there for filming in 1951. He recited the names of all the drivers and firemen involved, a most impressive feat of memory. At Bristol we met a retired loco fireman who recalled that he and his mate had the job of driving Lion from Temple Meads station to St Philip's Marsh shed after the filming. Although Lion was in steam for the final scene, it was in fact pushed into the station by a tank engine out of sight separated by some flat trucks. When Lion was due to depart for the shed it was necessary to phone all the signal boxes en route to ensure there would be no adverse signals because there was no way of stopping. On arrival at St Philip's Marsh, Lion was housed in the railcar shed approached down an incline for which it was necessary to attach to another loco to prevent it running away and leaving through the other end of the shed. The railcars, blessed with poor brakes, often did this apparently.

Another visitor excitedly recounted that he had been a film extra in the cricket scene in the film. A lady proudly said she had a biscuit tin with a picture of Lion on it, obviously a treasured possession. A very elderly gentleman who had worked for some years as a restorer for the late Sir Mortimer Wheeler engaged me in a lengthy but intriguing conversation regarding his views on what Lion originally looked like and many other observations on early railway practice and went to the trouble and expense of sending me several drawings. There are many more. One of the problems is our title, many visitors assuming we are an authority on all 'Old Locomotives' and several times I have had to delve into my own sources and send people material about North Star, Catch Me Who Can, and Benjamin Conner Caledonian Railway singles to name but a few.

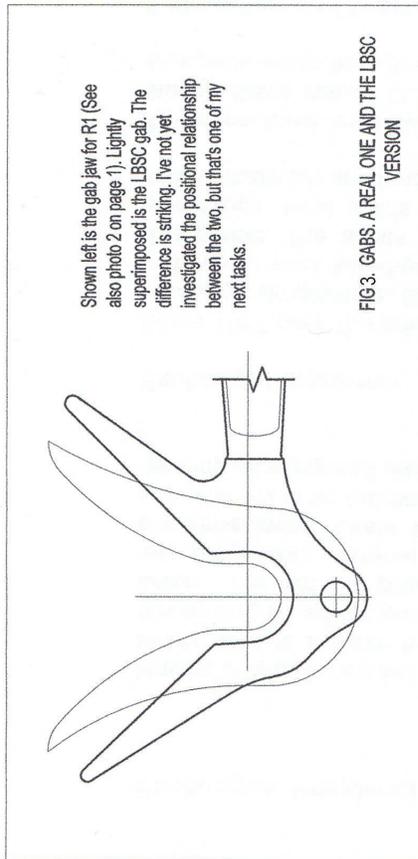
So participating in the shows has its compensations (apart from getting in free!) and has much to commend it so why not get involved-it really is quite enjoyable and there is the satisfaction of being 'part of it'.

Have you ever wanted your own copy of Daniel Kinnear Clark' monumental 1855 work 'Railway Machinery' or Zerah Colburn's 'The Locomotive Engine' of 1851? Original copies will cost you hundreds of pounds but you can now get photocopies at affordable prices. Several American organisations are busily scanning many interesting old books in University libraries and printing them on demand. You can access these through Abe Books or Amazon through the Internet. You will be surprised at what is available, George Hughes' The Construction of the Modern Locomotive for example. If you are checking out Zerah Colburn, an American engineer who came to England and was associated with The Engineer journal until he got the sack for marrying bigamously, by the way, do not get confused with his uncle of the same name who was a child mathematical prodigy (like G. P. Bidder - Biographer our president EF Clark). When asked the square of 53,053 he replied immediately and correctly 2,814,620,809.

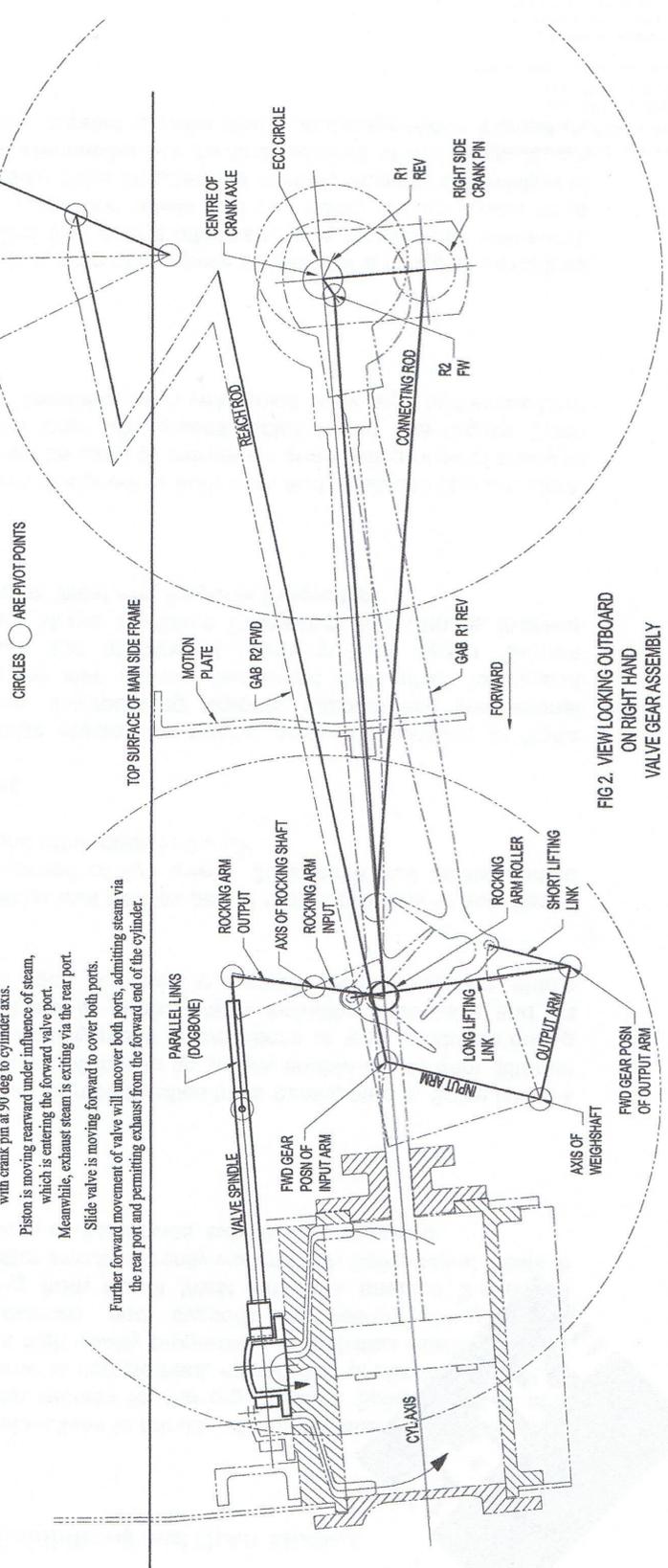
Hope to see as many as possible of you at the AGM and Harrogate. Best wishes - John Brandrick 

Lion Sketches

You've seen Jan's picture of a gab fork-end (Photo 2 on page 1). Fig 3 (below, inset) is a sketch of that item. Fig 2 is a simple line diagram of Lion's valve gear. More meat on the bones, perhaps, next time. We're getting there! My knowledge of valve gear geometry and operation is pretty scanty, so if you see anything wrong with it, please let me know.



Notes: Lion is shown below in forward gear (reversing lever pulled back), with crank pin at 90 deg to cylinder axis.
 Piston is moving rearward under influence of steam, which is entering the forward valve port.
 Meanwhile, exhaust steam is exiting via the rear port.
 Slide valve is moving forward to cover both ports.
 Further forward movement of valve will uncover both ports, admitting steam via the rear port and permitting exhaust from the forward end of the cylinder.



To get to the Museum of Liverpool

Post Code: L3 1DG

By train

James Street station is the closest and is only a couple of minutes walk away. This station is served by the Wirral Line trains only.

Moorfields station, which is served by the Northern and Wirral Lines, is about 5 minutes walk away.

The museum is about a 20 minute walk from Liverpool Lime Street station - Liverpool's mainline train station.

Full details of local train services are on the [Merseytravel website](#).

By bus

The nearest bus station is at Paradise Street, near the Liverpool One complex. Some bus services also drop off at the Pier Head, right by the museum.

Full details of bus services are on the [Merseytravel website](#).

By ferry

The [Mersey Ferries](#) terminal is right next to the museum at the Pier Head. An hourly service runs throughout the day from Seacombe and Woodside on the Wirral, with a more frequent commuter service before 10am and after 4pm.

By road

The Pier Head is on the waterfront close to Liverpool city centre and the Liverpool One complex. Follow signposts for the Albert Dock from the motorway and other main routes into the city centre. You may want to use AA Route Planner to plan your journey.

By coach

The [National Express](#) coach station is at Norton Street, about a 25 minute walk away.

Coaches bringing private groups can drop off at the Pier Head, close to the entrance to the museum.

By bicycle

There are lots of bicycle bays opposite the entrance to the museum, by the Great Western Railway building.

Parking

The [Capital car park](#) is only a couple of minutes walk from the museum. It has two entrances situated on The Strand and just off Old Hall Street and has more than 1,000 undercover spaces.

There are also car parks in the nearby Liverpool ONE complex opposite the entrance to the Albert Dock. Q-Park Strand Street has 2000 underground spaces, Q-Park Gradwell Street has 560 multi-storey spaces and Q-Park John Lewis has 580 multi-storey spaces. The entrance to the Strand Street car park is opposite the Albert Dock and is accessible from the centre of the road in both directions. The Gradwell Street car park is opposite BBC Radio Merseyside and the John Lewis car park is located opposite the Paradise Street bus interchange and the police station.

Blue badge parking spaces

There are six blue badge parking spaces directly opposite the museum entrance, by the Great Western Railway building. These are about 30 metres from the entrance and need to be pre-booked. To book a space call 0151 478 4545.

Riverfront walkway

The riverside walkway past the Museum of Liverpool that connects the Pier Head to the Albert Dock reopened for good on 29 April 2011. The 600 metre path had been shut during the construction of the museum. National Museums Liverpool agreed to open the walkway earlier than planned after successful talks with Liverpool City Council and the Albert Dock Tenants Association.



Lion in Model Engineer

About once a year OLCO publish a list of the articles detailing the construction of 3 1/2" and 5" gauge Lions which were published in Model Engineer way back in 1953-4. Written by the immortal LBSC, the articles contain the drawings, the procedures and of course the various wrinkles which, collectively, formed the 'words and music' for which he was famous. A word of warning, though. He never built the engine, so there were a few mistakes which those who followed his instructions found to their cost. We therefore include in the list the letters and articles sent in by builders and which it would be wise to read first. Each entry covers both gauges, unless specified.

We are unable to supply copies of these articles for copyright reasons. However, back numbers of Model Engineer and many other publications may be obtained from TEE Publishing, Tel:01926 614101. See also Note below.

This is an updated version of a previously issued list, being more accurately targeted at the topics covered. It is to be hoped that it is of interest and use to our readers.

Date	Vol/Issue	Pages	Class'n	Title
16/04/53	108/2708	469	--	The Titfield Thunderbolt (Just a brief Introduction)
11/06/53	" /2716	698-701	1.	GA, Photo & Frames
02/07/53	109/2719	2-5, 8	2.	Motion Plate, Inside Frame, Wheels, Plain Axles
23/07/53	" /2722	95-99	3.	Cranks, Eccentrics, Coupling Rods, Springs
13/08/53	" /2725	186-190	4.	Cylinders, Valves, (3 1/2")
20/08/53	" /2726	224-226, 232	5.	Cylinders, Valves, (5")
10/09/53	" /2729 *	311-315	6.	Cross Heads - Connecting Rods
01/10/53	" /2732	403-405, 409	7.	Feed Pumps
22/10/53	" /2735	492-495	8.	Valve Gear (Loose Eccentrics)
12/11/53	" /2738	578-582	9.	Gab Gear (5")
03/12/53	" /2741 **	656-659, 662	10.	Gab Gear, (3 1/2")
17/12/53	" /2743	726	Letter.	M H Cox - Why? (5" Appearance and Wheels)
24/12/53	" /2744	758-762	11.	Reversing Lever, Reach Rod - Lubricator for 5"
14/01/54	110/2747	28-31, 34	12.	Boiler, (3 1/2")
04/02/54	" /2750	124-127, 131	13.	Boiler, (5")
11/02/54	" /2751	160	Letter.	R F J Pounds - Out of Scale Wheels. (Wheels; Hornplates)
25/02/54	" /2753	214-217	14.	Boiler, Tubes, Rivets, Assembly
18/03/54	" /2756	291-293, 296	15.	Dome, Lubricator for 3 1/2"
08/04/54	" /2759	381-383, 392	16.	Blower Valve, Boiler Stays, Pressure Test
29/04/54	" /2762	470-472, 474	17.	Smokebox, Chimney
20/05/54	" /2765	551-553	18.	Blower, Regulator, Superheater (all 3 1/2"). Snifter (Both)
10/06/54	" /2768	653-656	19.	Blower, Regulator, Superheater, (5")
01/07/54	111/2771	16-18, 20	20.	Safety Valves
22/07/54	" /2774	98-100	21.	Boiler Fittings
12/08/54	" 2777	198-200, 203	22.	Boiler Details (Grate, Ashpan, Side Support Brackets)
02/09/54	" /2780	274-276	23.	The Plumbing Job
23/09/54	" /2783	358-360	24.	Injector - Handpump - Clack
14/10/54	" 2786	450-452	25.	Finishing Touches (Splashes, Steps, Railings, Buffers, Couplings)
04/11/54	" /2789	534-536, 544	26.	Details of the Tender
25/11/54	" /2792	630-633	27.	Tender - Horns, Axle Boxes, Water Valve (all 5").Plumbing (Both)
23/12/54	" /2796	744-747	28.	Tender Brake Gear
30/12/54	" /2797	758-759	Article.	LB Parkin's "Lion" (5")
15/05/58	118/2973	638-641	Article.	A Lion is Born by F F Few
02/10/70	136/3402	948-951, 978	Article.	A Prize Winning Model "Lion" by L A Saxby (5")
21/12/73	139/3479	1222-1224	Article.	Modifications to a 5" G "Lion" by L A Saxby (Valve Gear)
06/07/79	145/3612	784-787	Article.	A Lubricator for "Lion" by D A Neish (5")
01/04/83	150/3702	430	Letter.	N Smith - "Lion" in 5" G - Information Required
20/05/83	" /3705	620-621	Letter.	C E Taylor-Nobbs - 5" G. Information (Wheels; Lagging; Gabs)
17/06/83	" /3707	714-718	Article.	Modifications to a 5" G "Lion" by K C Miller (Various items)
01/07/83	151/3708	48	Letter.	R F Austin - Titfield Thunderbolt (Lion) Troubles (3 1/2" Gabs, etc)
05/08/83	" /3710	137-139	Article.	Some Historical Notes about "Lion" by C E Taylor-Nobbs. (Valve
Spindle Support)				
21/10/83	" /3715	476	Letter.	M Smithers - "Lion", More Details (Prototype Boiler)
17/02/84	152/3723	190-193	Article.	"Lion's" Crown by K C Miller (5" Haycock)
03/08/84	153/3734	130-132	Article.	"Lion" The Questionable Origin of her Boiler by C E Taylor-Nobbs
19/04/85	154/3751	439-442	Article.	"Lion" The Whys & Wherefores of her Tender by C E Taylor-Nobbs
(Drawing, etc)				
02/08/85	155/3758 ***	150-151	Review.	Scale Wooden Boiler Lagging **
03/06/88	160/3826	657-660	Article.	A Century of Progress 50 Years Ago by C E Taylor-Nobbs. The Story of a Painting.

* Note 'SOS' apology at end of page 315 for dimensional error on 5" Motion Plate at top left of page 4.

** See also photo on front cover and 'Cover Picture' note inside.

*** This review is now for information only. Sadly, the maker of this lagging, Alan McKirdy, has passed away. See obituary in LH65, pg 11.

Note: OLCO have in preparation a set of drawings measured from Big Lion herself. For further details, please contact John Hawley. Details below.

If you know of any other articles which are worthy of inclusion here, please advise John Hawley, contact details below. 

List of OLCO Stock

OLCO carries a stock of interesting 'items for sale', which is published from time to time, space permitting. If anything catches your eye and you would like to order, please write, ring or email and I will bring it along to our next event, be it the AGM or Lionsmeet. I can post things, of course, but that will incur charges which I will advise at the time of order. **Items ordered within the next few days can be brought to the AGM.**

Item	Title & Details (Note: Item 1 – 'The Yellow Book' no longer available)	Author, etc	Price each (£)
Books:			
2	Railways in England 1826 & 1827 (Hard cover 89pp) A fascinating account at a bargain price. See pp 43 for an account of the Liverpool & Manchester Railway.	Oeynhausen & Dechen	5.00
3	Railways Began Here (Soft cover 17pp) Stations of the Liverpool & Manchester Railway on Merseyside. (‘the world’s first real railway’),	Paul Rees	0.50
4	George Parker Bidder (Hard cover 518pp) Describes the life of OLCO President E F Clark’s Great Great Grandfather. Bidder and James Kitson (of Todd, Kitson & Laird, builders of Lion), were contemporaries and knew each other. Kitson is mentioned in the book. Bidder had connections with Crewe in that he was Engineer to the North Staffordshire Railway which had a branch to Crewe from Kidsgrove.	E F Clark	21.00 *
5	A Short Account of George Bidder (Soft cover 36pp) A challenge to all who believe in their powers of mental arithmetic.	1995 facsimile	1.95 *
6	On the Trail of the Titfield Thunderbolt (Soft cover 36pp) A detailed guide to locations used in the film. Anecdotes and brief biographies of key personalities. A useful companion to the film	Simon Castens	4.95
Badges:			
7	Lion, with train (rectangular 1.35” x 0.8”, enamelled)		1.00
8	OLCO, with logo (round 1” dia, enamelled) -		1.00
Images:			
9	Poster – Lion at Edge Hill circa 1840 – 14.5” x 19”	From J W Petrie painting	1.00
10	Postcard – Scene as item 9-		0.15
11	Postcard – Lion Restored at Ruston Diesels Ltd – 1980-		0.15
12	Christmas Card – Edward Bawden’s “Titfield Thunderbolt”- With envelope 4 ¼” x 3 ½”.		0.31

All items are available from John Hawley, (tel: 01275 472023), with the exception of the Christmas Card, which is available from E F Clark (tel: 01234 781224). Please make cheques payable to OLCO, except where shown thus *, in which case cheques to be made payable to KSL Publications.



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:

- typed on a computer and emailed;
- typed on a computer then printed and sent by post;
- typed on a typewriter and sent by post, or
- 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