

**Reading Society
of Model
Engineers
Charity Number
1163244**



**President
John Billard**

**Secretary
Stuart Kidd**
07966 278968

**Editor
John Billard**
john@jegbillard
.plus.com
01189 340381
07834 998971

Free to members

The Prospectus

August 2023



Wednesday Workers digging the trench to wire up a lamp post last month. Heavy work and plenty of unknowns underground! Photo Nigel Penford

**CLUB NEWS
THE LION
A NEW LOADING TROLLEY
BUTTERFLIES
LOCO FOR SALE
DIARY DATES**

THE VIEW FROM THE CHAIR

John Billard

We have had another busy month including birthday parties a public running clubhouse meetings and talks and of course a trustees meeting.

All the efforts we have put in to have public running and birthday parties have been rewarded by a useful income to the club. At the same time our new subscription system is attracting new members. All in all we are in a pretty good state. But I must not forget all the efforts that go on in the background to maintain and improve the club. I won't name names to avoid missing someone else. The next issue of Prospectus will set out some of the jobs that have been undertaken in the last few years and this is an impressive list. All down to some very clever and enthusiastic members who work for the club rain and shine.

Back to the trustees meeting in July, we noted our good financial state and the recruitment of new members. Most visible on our site is the erection of two new street lights. Now has come the even more arduous job of trench digging for the electrics. Previous site history as a council yard means that we don't quite know what lies underground. A future project is to refurbish our workshop to make it more fit for use and an attractive place to be. Questions are where to store the existing equipment while the total clean out and redecoration takes place. And that does not include insulating the ceiling inside and out. *Et cetera*.

We have had an issue to improve our circulation list and this is being done. I'm conscious that some new members do not receive their prospectus as early as I would like and I hope this is being addressed.

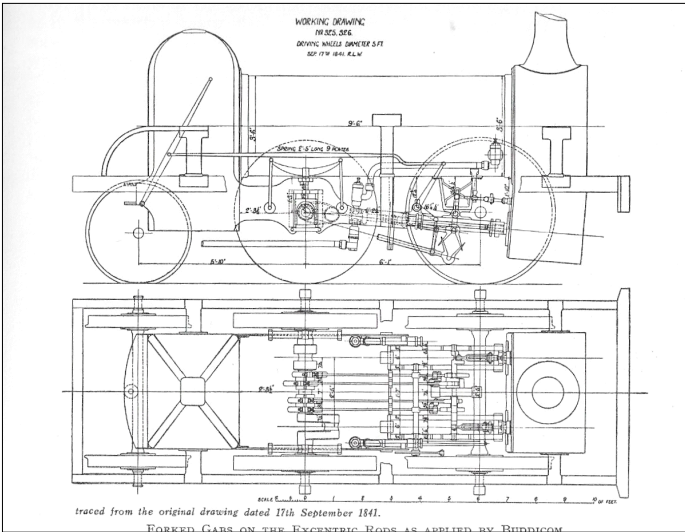
Whilst our summer continues, mostly wet at present, we are already making plans for our AGM. The month is October and day to be settled. Other than the usual cyclical trustee retirements there is a vacancy to be filled. However please set aside that date. It is it is always an encouragement to those who run the club to see a good attendance. More details will follow.

Importantly, we are in discussion with our legal advisers and Reading Borough Council on setting up the first 10 year lease for our site. Whilst this involves some legal costs to us it will give us security of tenure that many clubs will envy.

There are wide interests in our membership. We have the Wednesday gang, the 00 gauge group, the live steamers, the birthday party organisers, the public running supervisors, the engineers, the inspectors, the treasurers, the administrators, the technicians, the plumbers, the painters, and others that I am bound to have forgotten. We are in a sound financial position and occupy a lovely parkland site with good space for visitors. What is there not to like?

But also we have to consider what next. It could be that our harder workers are the older. If we look back and say "this was the golden age", then perhaps we will have failed for the future.

Members, please let me know what you think.



A Robert Stephenson drawing of 1841 which resembles the Thunderbolt "Lion" rather well.

Regrettably undimensioned

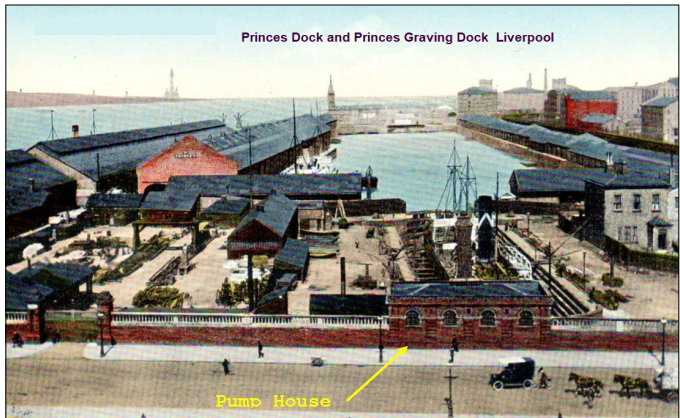
...but who is this star of the film? Lion was a goods loco (a “baggage locomotive”) built by Todd, Kitson and Laird, and was delivered to the Liverpool and Manchester Railway (L&M) in Summer 1838 at a cost of £1100 (equivalent to £98,000 in March 2023). Lion regularly worked four return trips of 75-ton goods trains between Liverpool and Manchester, but she was derailed in 1840, probably as the result of a broken axle, which caused a lot of damage. In the Spring of 1841, Lion and her sister Tiger were rebuilt at the L&M’s Edge Hill railway works, to provide some uniformity of valve gear and boiler design across the whole L&M fleet: Lion received new “gab” valve gear at this time. In January 1857, Lion was transferred to permanent way duties as “ballast Engine No. 14”, and it was in this guise that she was sold to the Mersey Docks and Harbour Board (MD&HB) in May 1859 for £400 (£40,000 today). Here the documented trail for Lion goes cold, but she likely worked – perhaps as a tank locomotive - for the MD&HB from 1859.

In January 1875, a pump was needed for the new Princes Graving Dock, the most southerly of the Northern part of Liverpool Docks (that is, near to the Liver Building). An 0-4-2 locomotive of 1840-ish vintage was installed in the pumphouse, and a bevel gear wheel attached to her driving axle. Her carrying wheels were removed, but the rest of the locomotive was left more-or-less intact: 14 by 18 inch cylinders and 5ft wheels. According to one old employee of the MD&HB, this locomotive was called Lion and had come from the LNWR – and it is only this oral report from a single source that

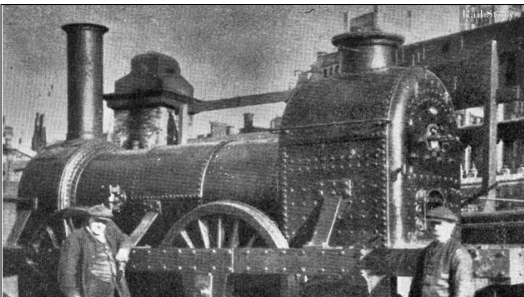
links the Titfield Thunderbolt to the Lion locomotive of the Liverpool and Manchester Railway.

It is possible that the locomotive in the pump house was one of two 0-4-2 locomotives that were the very first ones bought by the MD&HB in October 1858 to work the Birkenhead docks: these were second-hand locos built early 1840 by Thomson and Cole, originally for the North Midland Railway, and were likely to have been similar to locomotives built for the L&M, which by 1839 had standard dimensions for cylinders and specified the use of gab valve gear. Advertisements placed by Thomson and Cole for the right date show that they had two 0-4-2 "Stephenson -type" (patent) "large Samson" class locomotives for sale with 50 p.s.i boilers, 14 by 18 inch cylinders and 5ft wheels for sale at the same sort of price as the MD&HB board paid for those two locomotives in October 1858 for £500 each - and the dimensions of these locomotives are identical to the preserved loco we know as Lion. Further, the name Lion may not have been unique to the L&M 0-4-2 loco - and that loco had lost its name by 1857 (maybe A Lion, not THE Lion!).

The pumping locomotive was reboilered in 1865 at a cost of £300 (£30,000 today), and this may be the boiler still carried by the Thunderbolt locomotive: another oral report (by a



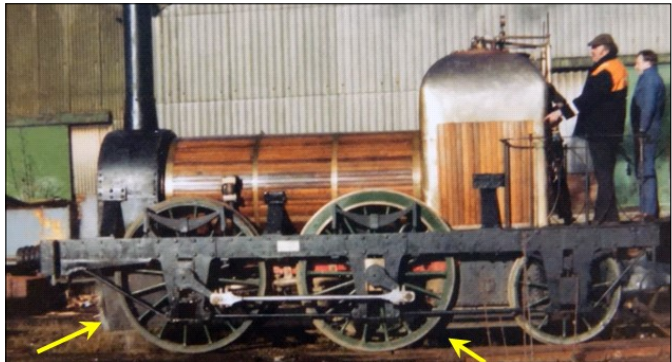
former GWR fireman) suggests that sometime around 1900 the boiler had been swapped out for another typical mid-nineteenth century boiler. Boiler 192 is the one she currently carries. But it was an article in "The Locomotive Magazine" (15 January 1923) which first alerted the wider world to the presence of "... an interesting old locomotive that certainly dates back to the 'forties' ..." and which was identified as Lion by E. L. Ahrons in November 1923, based on that oral tradition alone. Finally, in September



1928, Lion was released from her pumping duties and the Old Locomotive Committee (OLCO) of the Liverpool Engineering Society set about raising funds for Lion's restoration: in March 1929, Sir Henry Fowler (CME of the LMS) basically gave Crewe Works free rein to restore the locomotive to a supposed 1840s' appearance. Lion eventually emerged as the then oldest locomotive in steam, taking part in celebrations for the centenary of the opening of the L&M. But no retirement for the old girl, as she took part in the film "Victoria the Great", then starred in a publicity film for the LMS before her role as "The Titfield Thunderbolt".

Like many a feature films, there are errors of continuity throughout the "The Titfield Thunderbolt", but it is perhaps famous for the best "this shot should have been retaken" shot. The scene shows the batsman at the crease being distracted as the Thunderbolt and her train appears in the distance, and being clean bowled as a result. However, although the bails on the wicket fall to the ground, the ball bowled by the bowler clearly sails more than a foot above the wicket.

This year "The Titfield Thunderbolt" film celebrates its 70th year anniversary, and endures as a record of an English way of life. The star is a locomotive which, most likely, was built in the early 1840s and was later reboilered. Whichever



locomotive was rescued from Princes Graving Dock, she is a magnificent locomotive. How wonderful it was to see her, in person, in steam at Didcot when she was able to travel round the country! In 1994 the Board of Trustees



of Liverpool Museum decided that Lion would not be restored to steam, as such restoration would potentially destroy much of the historic material in the fabric of the locomotive. After a further inspection in 2006, Lion underwent a £6000 plus

cosmetic renovation: they've given her a matched set of coupled driving wheels!! Thunderbolt's Lion now resides in magnificent splendour in the Museum of Liverpool on the Mersey Waterfront.



Left New matched wheels as part of the 2006 restoration

Below Lion in the Museum of Liverpool



All illustrations courtesy of Alec Bray

Illustrations for this article

Page 4 top The Princes Graving Dock, Liverpool, showing the pump House

Page 4 Bottom Lion in the Pump House

Page 5 Top Lion showing unequal wheels

Page 5 Bottom Lion at Didcot in the 1970s. Ignore the “steam dome!”

A 7 1/4 " Loading Trolley

by Terry Wood

After completing the loco and successfully trying it out I needed some form of loading trolley to get it in the car. A hydraulic trolley would be nice but too expensive plus it would have to negotiate all the uneven ground between the workshop and the driveway (concrete slabs). Some form of long wheelbarrow would be ok but due to the heavy weight could become unstable and topple over so it would have to have two independent wheels in order to be stable and go around corners.

I just so happened to have an old wheel chair that I found in a skip with two small wheels and two large wheels so I removed the smaller ones and then removed all the seat fittings and replaced them with two 5 foot lengths of 1 inch angle iron spaced at 7 1/4 inches apart so that they acted like rails in order for me to slide the loco up a ramp and then secure it with a removable piece of angle iron front and back, this would then make it easier to lift the loco and move it about, it looks very



strange but it works also because you lay it down by the car the front of it rises so it's fairly easy to roll into the back of the car and being a ex wheel chair it also has brakes on each wheel so you can steady it whilst loading into the car.

Because it is high up it also makes a useful work bench for working on the loco and the driving tender instead of getting on your hands and knees to work on it when its on the floor or taking the loco all apart and putting it on the workmate and then reassembling it all back together so with this in mind I also decided to make a stand that can be bolted to the other end of it.



This I carried out using some angle iron I had left over and decide to build a "H" section by welding the pieces of angle iron together at least that was the intention but when I switched the MIG welder on and set it up I discovered that the large bottle of CO2 that has lasted me for years had finally run out! Fortunately, I managed to hunt around the work shop and I found a small bottle of Argon/co2 still in its wrapping and there was enough to do the job. After welding up the "H" section I then cut up two strips of angle



iron using the angle grinder and then drilled two 6mm holes in the end of the trolley, I then drilled two 6 mm holes with slots in them in the stand uprights so that the stand uprights could be slotted on and bolted into place once welded. Once that was done I fixed two M6 bolts and nuts to the end of the trolley and then bolted the uprights to it and with the weight of the loco and trolley lined the uprights up and tack welded

them to the base which was a bit tricky because I had to weld on my hands and knees and try not to burn my legs or the wooden floor of the workshop. Once that was done, I could weld the stand up fully and try it out.

to be continued

7 ¼" LOCO FOR SALE

Cliff Perry writes

I wonder if Prospectus can help me get the word around that my "Jessie" 0-4-0 is for sale complete with riding truck.. Working injector fed from tank in riding truck. Hand pump also in riding truck plus axle pump fed from saddle tank. All working as is vacuum ejector. (Riding Truck through piped) Hydraulic ticket to 2027, steam July 24, nice runner - previous owner Dave Jerome of the club.

Reason for sale is "Adjusting fleet". It was my starter loco for 71/4" and has done me proud. I am looking for an 0-6-0 tender loco replacement.
£5750 ono

Please contact Cliff Perry on Clifford.Perry@btopenworld.com or the Editor (who thinks that it would be nice if it stays in the club.)



More pictures
on p9

RSME Lepidoptera by Mike Manners

Over the last few years there have been efforts to improve the natural environment at the club with area of grass being left to go wild and the planting of areas of wild flowers. This summer has been notable for a number of changes in the number and types of butterflies observed around our site. The variety of different types has significantly improved but some of the old favourites have shown significant reductions.

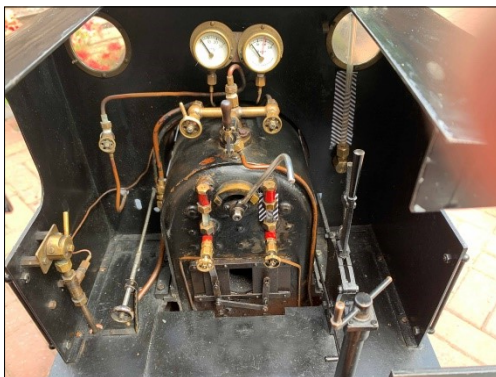
I will start with the bad news. I have persuaded the garden department to leave some significant patches of stinging nettles around the site. These are the food plants for the caterpillar stages of Tortoiseshell, Peacock and Red Admiral butterflies. In past years it was not uncommon to find several colonies of the caterpillars munching away on the nettles and many of the butterflies flitting around the site. Over the last couple of years there has been a steady decline in Tortoiseshell butterflies. This year I have not seen a single one. Peacock butterflies have seen a similar decline but I have seen a couple of them around the buddleia this year.

The Red Admiral is bucking the trend with a significant increase in numbers. In fact I have seen more Red Admirals around this year than I have ever seen before.

My theory about the reduced numbers of Tortoiseshells and Peacocks is that they form big colonies of caterpillars during their development and this makes them an easy and obvious target for birds and the many parasitic wasps and flies. We have also recently seen a new parasitic fly arrive in the country from mainland Europe. An unfortunate consequence of global warming.

The Red Admiral has been lucky. At one time it was not a resident in this country and flew in from over the channel. I suspect the huge increase in numbers this year is because it is now a resident in this country and is surviving our warmer winters. It also differs from the Tortoiseshell and Peacock butterflies in that the caterpillars are solitary and build themselves protective nettle leaf shelters. This helps protect them from birds and the parasitic insects.

On the good news side, the variety of butterflies on the site has increased significantly. So far this year I have seen Red Admiral, Peacock, Comma, Large and Small White, Brimstone, Orange Tip, Gatekeeper, Copper, Skipper, Meadow Brown, Speckled Wood, Holly and Common Blue, Brown Argus and most unexpectedly a White Letter Hairstreak.



NOTICES TO MEMBERS

CLUB TALK Thursday 24 August 8.00 pm

Simon Bowden from the Welshpool and Llanfair Light Railway is giving a talk on the restoration of Beyer Peacock 823 *The Countess*.

(An invitation is extended to members of the Thames Valley 16mm group.)

NEW MEMBERS

RSME welcomes Keith Pauline from Calcot, Ben Wait from Lower Earley and Karl Harris from Shinfield. (Others to follow).

SUBSCRIPTIONS

Please note that subscriptions were due from 1 April. These have been reduced to £20. We have had many renewals and a good number of new members but if you are not one of them please contact Mike Manners on michael.manners2@ntlworld.com or 07817 271981.

Mike has sent reminders to the remaining non-payers. We are pleased that some have responded positively but others most regrettably are now facing termination of membership.



Left

Brown Argus

Photos Mike Manners



Right

Copper



Left

Rose Chaffer Beetle



Right

White Letter Hairstreak

DIARY

AUGUST 2023

Sunday	6th	Public running Setting up from 09.30	12.00-16.00
Thursday	10th	On the Bench Night Club House	19.30
Saturday	12th	Club running	10.30 onwards
Monday	14th	Trustees meeting	19.30
Monday	21st	Special Needs	13.30– 16.00
Tuesday	22nd	Club running	10.30 onwards
Thursday	24th	Club Talk Simon Bowden The restoration of W & L No 823	20.00

SEPTEMBER 2023

Sunday	3rd	Public running Setting up from 09.30	12.00—16.00
Saturday	9th	Club running	10.30 onwards
Monday	11th	Trustees meeting	19.30
Thursday	14th	On the Bench Night Club House	19.30
Tuesday	19th	Club running	10.30 onwards
Thursday	21st	Richard Coleman's Film Night Club House	20.00

Note from the Editor. Please provide photographs as separate files and not embedded into the text. No pdf files please.

Opinions expressed in PROSPECTUS are the personal views of the contributor and cannot be taken as reflecting the views of the trustees or editor.

The deadline for the September is 20 August

Contributions may be submitted in had or soft copy to the editor.

John Billard Old Station House Twyford Reading RG10 9NA
01189 340381 or 07834 998971 john@jegbillard.plus.com

*Please write for Prospectus. Photos welcomed.
Comments by RSME members on any subject appearing in
Prospectus are welcomed by the editor.*