

The Oily Rag!



Winter 2012. Issue No 112.

**Phil Mortimer's Britannia at speed during
CLUBLEC.
Full report inside**

**The Taunton Model Engineers'
magazine**

Contents

- 3. From the Editor**
- 3. Chairman's Notes**
- 5. News from Creech**
- 6. Report from Vivary Park**
- 6. The Tickers — Horological Sub -Group**

- 7. Bristol Exhibition 2012.**
From our roving reporter By Tony Gosling

- 8. Holgate Mill.**
A Yorkshire windmill By Bill Edmondson

- 12. Clublec 2012.**
From another roving reporter By Bob Arlett

- 17. Club Locomotive Update November 2012.**
Latest on the "Hymek". By Steve Gosling

- 19. Restoration of a Railway, a progress report.**
More big stuff. By Mike Pinkney

- 24. Of Ships and Things.**
Christmas and beyond By Fireman M.N. (retd.)

- 26. "Polly" goes to the shops.**
Well it is Christmas! By John Pickering

- 30. Running Days**
- 31. Meetings Programme**

From the Editor

This is the last issue of the "Oily Rag" for 2012, a year which has been marred by a record breaking poor summer. However we did make the best of the good days. Bob Arlet has contributed a report on CLUBLEC, held on one of these rare days.

There is now quite a lot in the pipeline for future editions but some of this may take quite a while to materialise and there is always space for more. Let's hear something from the silent majority in 2013!

Best Wishes for Christmas and the New Year

John Pickering

Chairman's notes

By Andy Webb

Our first evening meeting held at Stoke St Mary after the summer break was a discussion entitled "The way ahead" - Exhibitions yes or no? I opened the discussion by giving a brief synopsis of the figures from the last few exhibitions that show a general decline in the numbers attending and a resultant reduction in the takings. A lively discussion ensued coming to the conclusion that if no one from the club was willing to manage the event that it might be best to rest it for a few years.

This suggestion was made that we should make more use of our excellent facilities at Creech and that the possibility of an open day or rally in the summer next year should be explored. If anyone has any ideas or would like to help please let me know.

One of the highlights of the past few months was Clublec, our in house locomotive efficiency competition held at Vivary Park. The event was a great success with five locomotives competing and many members turning out to take their turn doing the twenty minute stint as a passenger and helping with the organisation. Many congratulations to Phil Mortimer on his success and to the other competitors for their efforts. The old Clublec shield was awarded to Fred Dodden in perpetuity many years ago, in recognition of the huge number of times he won the event. Therefore the committee has agreed that a new trophy shall be purchased and named in his memory.

I should like to pass on my thanks to everyone who helped with the organisation that made the days such a success.

One thing I have been working on recently is collating an up to date list of e-mail addresses in order to make communication with the membership easier, and more efficient. The committee feel it would be a useful tool to have at their disposal. The list would be used solely by the committee to convey important notices which need to be announced urgently between club meetings and would not be available to anyone else. I hope you will be willing to be included on the list.

Nigel Gettings has kindly made some copies of the DVD of public running at Vivary Park in the 1980's, which was shown at a club meeting a few months ago. I have four copies available and they are on sale for £5.00 each, all proceeds to club funds.

Finally I would like to wish you and your families a very happy Christmas and prosperous New Year and hope all your workshop endeavours come to fruition.

News from Cræch

By Mike Johns

In spite of the best (worst?) attempts of the weather to defeat us progress has continued to be made on site and the 2 new station platforms have been completed on the far side of the track. This is a step towards giving our visitors an intermediate destination on fine days, possibly with picnic tables to enjoy the sunshine. We're open to offers for a suitable station name.

The weather has affected our running days and visitor numbers are down although those that have braved the elements have always enjoyed themselves and promised to come again. Our thanks must go to the hardy individuals who turn out regularly to support the railway, particularly those who bring their own locomotives as well to give our visitors some variety.

Work has continued with the realignment of tracks to the north of our site. The changes will result in the loss of part of the circular track originally laid to enable trains to be run in the early days before we had completed the main circuit. This link had received little use in recent times and was effectively redundant. The remainder of the loop is being retained as part of the realignment for continuous running on the main circuit if and when we run locomotive efficiency trials or similar.

Next year's programme is likely to include an 'open invitation' day

when we hope to host a number of visiting locomotives. As part of the preparations another 7¼" gauge steaming bay has been fabricated and awaits planting and the steel work is well advanced for a further 5" gauge bay to add to those existing. Inside the workshop additional storage is also needed which will involve a vehicle lift and shelved racking currently being designed.

For the past 12 months we have occupied the site without a formal agreement with the Parish Council who had queried the legal validity of the agreement we originally signed in 2003. A revised version had been agreed in principle in 2011 but the Parish has referred the matter to solicitors. We have received a draft lease to consider and will be discussing the contents both in Committee and with the Parish over the next few weeks with a view to agreement.

Report from Vivary Park

By David Spicer

Public running finished on the 21st October until the Santa Special. A very big thank you to all in whatever capacity you kept the show on the road. Many people came along way to ride on the trains. Very well done to all of you.

Here's to 2013 and maybe some sunshine!

The Ticklers (Horological Sub Group)

By David Spicer

The position remains the same as last time. Maybe some horological activity from the members in 2013.

Bristol Exhibition 2012

By Tony Gosling

We were again invited by our friends of the Bristol Society to have a Stand at their annual exhibition, last August, at the Thornbury Leisure Centre, in which we could advertise our Club and exhibit some of the work of our members.



As usual, our presence there was organised and masterminded by Phil Mortimer and David Spicer. The Show runs for three days and our Stand was manned by several of our members who took turns to be there – to talk to people and provide any security for our exhibits should that be necessary.

The exhibits were provided by Roy Fathers, Barney Evans, Dave Wood, Frank Turbitt, John Selby, David Spicer and Tom Dominey.

Wewerepleasedthatonceagain,theexhibitionwassuchan outstanding successforourBristolcolleaguesandverymuchlook forwardtohavingasimilarinvitationfromthemagain,nextyear especiallybearinginmindthatasthenextyear,therewillbe no exhibitionofourown.

HOLGATE WINDMILL

By Bill Edmondson

It's all my sister Margaret's fault. On our last family expedition to York, we had spied the cap of a windmill in the distance well within the built up outlying area of the city. "Oh, that's Holgate windmill, it's been restored". Well, a quick internet search and sure enough there it is. And what a project.

Whilst advance planning our last visit, I was disappointed to see that the mill was not open during our stay. Undaunted, a quick email to the "contact" resulted in a prompt reply that the mill can be opened up any time you like. So 9.30am Thursday 12 April the Edmondsons plus Margaret and husband Malcolm met with Jenny Hartland (who is now chair of the Holgate windmill committee), and she gave us over an hour of guided tour. Clearly very knowledgeable of all things windmills, she took us up each floor in turn, right into the cap on top with its large brake wheel and sack hoist mechanism. From her manner I wondered if she was an engineer, but no, she had been a special needs teacher – which explained her very capable quality as a guide (and keeping us rabble in order).

As with all complex and technically difficult restoration projects, be it a railway locomotive that has lain rusting for decades, or canals being brought back from utter dereliction, they all bring to mind the

saying attributed to one David Hutchings whom a master minded the restoration of the Stratford Canal: “Fortunately none of us were experts, or else we should have known it was impossible”.

The mill belongs to York City Council, but as a listed structure, they were apparently only too glad to give responsibility for it to the new Trust.



The team who came together to restore this windmill got going around 2001. With the help of Thompson Millwrights of Lincolnshire, they set to. But not until 2005 did work begin in earnest.

One problem which has recently been acknowledged is that of being able to involve all who expressed an interest in helping. Because of its

physical shape, it's impossible to have too many folk on site at any one time, and in any case the major works required special skills.

Built in the 1770s, the mill ceased working completely in 1933 – at that time wind power had been superseded by the electric motor. The sails had gone and a good deal of the machinery within was missing.

Holgate is a tower mill which means the cap carries in the sails is made to revolve and so always face into wind. The whole is carried on a substantial cast iron curb ring which incorporates teeth on its outer edge; these engage with a pinion driven by the fantail, so the cap can follow changes in wind direction automatically. The mill carries five sails; this number having been judged most efficient by John Smeaton.



At the heart of this mill are four sets of stones; three are French Burrs whilst the fourth is Derbyshire Peak Stone. The sails are now double shuttered which can be altered by an ingenious system of rods which interconnect all shutters on each sail, these are linked with

levers and rods that take the mechanism through a hole bored right through the main shaft on which the sails revolve. A chain hanging down outside allows the miller to alter the attack of the shutters so either “catching” or “spilling” the wind.

Within the building, it is surprising just how light it is. Windows on each floor (not set in a vertical line, which would otherwise weaken the structure), together with white washed walls, give a very pleasant bright workplace. The timber work is a delight, from the new stairs to the massive timber cap, which has two layers of planking – the interior is horizontal, whilst outside it is vertical. In our age it’s an easy matter to build this off site, and then bring in a telescopic crane to hoist it into place. How difficult was it to make a cap in situ before our modern technology?

Inevitably all this cost a good deal, but the resourceful team applied for grants wherever they could. One major volunteer contribution was in the home manufacture of the 200 individual shutters which go on the five sail arms. We came away feeling awed by what this relatively small team have achieved in a very short timescale.

One difficulty yet to be overcome is that the mill is in the middle of a 1930’s housing development. The road – Windmill Rise – is a normal width residential road, which nicely circles the mill. Ironically, at this stage the Trust are anxious not to encourage too many visitors – they simply couldn’t cater for all. But they have a plan! Biding their time, they are waiting for an appropriate house nearby to come on the market – this they will buy, then either demolish or considerably extend and alter, to create a visitor centre. So if you live in Windmill Rise, they might be coveting your home! As of spring 2012, the mill is on the verge of grinding flour by wind power for the first time since restoration.

Anyone fancy building a working replica here in Somerset?



JohnWillcockswiththebuffetcar.

Photo.RayYeo

CLUBLEC 2012

ByBobArlett

TheTauntonModelEngineersCLUBLEC Locomotiveefficiency competitionwasheldonthelastSundayofSeptemberinVivary Park. Thiscompetitionhadnottakenplaceforsomeyears. Onthe daytheweatherwasfairandthestagewassetforanexciting afternoonofcontinuouslocomotiverunning.

Thereweresome26clubmemberswhogracedtheparkwiththeir presencethroughout theafternoonmanyhardlyeverseenatVivary, soitwasgoodtoseesomany memberssupportingaclubevent. All participated insomewayeitherhelpingtoruntheeventorjustas passengerstoprovidethetrainswithaload. Thisalladdeduptoa goodclubdayandaverygoodatmosphere.

Five competitors entered all with 5 inch gauge locomotives. Phil Mortimer with his gold Britannia, Ian Grinter with his rebuilt Royal Scot, John Wilcox with a Sweet Pea, John Pickering with his modified Ruby, finally John Freeman driving Dave Wood's newly finished Polly 5. All of them had been seen running at Vivary in the past and most are the mainstay of the public running days.

The club Chairman Andy Webb turned up to adjudicate over the proceedings, and David Hartland to be the official recorder and timekeeper. Tokens were drawn from a hat to decide the running order, Phil was last to draw and still ended up first to run! The park was set, the coal bagged, the drivers and passengers weighed with some amusing comments at the scales, this included Chloë the dog as she is a regular passenger. So it was time for the competition to start.

Phil Mortimer was first to run with his fine model of a Britannia class locomotive. He had decided to run all 3 trolleys at a weight of 175 pounds each, and hauled an additional 10 passengers. The regulator was opened the wheels slipped on the rails and the train slowly started to inch forward. It was not long before he had the train up to a good speed and consistently lapping the track in a time of 1 minute 15 seconds. Disaster nearly struck in the middle of the run when there were 3 slow laps as Phil had let the fire get too hot in the firebox, the loco recovered and the run was successfully completed with 15¾ laps in the 20 minutes allowed.

Next to run was Ian with his Royal Scot, again hauling 3 trolleys with 9 passengers and Chloë the dog. The train started effortlessly, ran smoothly and the run was successfully completed without incident. The time for the laps matched Phil's run very closely with a total of 15¾ laps completed in the allotted time.

Third to run was John Wilcox with his Sweet Pea, pulling 2 trolleys and 4 passengers. It was a good steady run for a small wheeled

locomotive. John completed $16\frac{3}{4}$ laps in his 20 minutes.

The penultimate run was John Pickering our “Oily Rag” editor, with his modified Ruby. This was the smallest and lightest loco in the competition but still put in an impressive performance. Pulling two trolleys and 3 passengers, and completing $12\frac{1}{2}$ laps.

John Freeman was the last to run driving Davewood's Polly 5. John pulled two trolleys and 7 passengers. He had a good run throughout and with some quick lap times, maintaining a minute a lap in the middle of the run. In the 20 minutes $18\frac{1}{2}$ laps were completed, which was a very impressive performance for a loco that has had little running. John made a comment before the competition that he would be taking it steady as it was no this loco!



The driving and the riding was now over and it was time to go and analyse the stats, compute the scores and declare a winner.

1stPlacewenttoPhilMortimerwithhisBritannia

WeightHauled(Lbs.)	:2615
DistanceTravelled(ft)	:10631
CoalBurnt(Oz)	:21
Score	:1324

2ndPlacewenttoJohnFreemandrivingaPolly.

WeightHauled(Lbs.)	:1859
DistanceTravelled(ft)	:12488
CoalBurnt(Oz)	:18
Score	:1290

3rdPlacewentto IanGrinterwithhisRoyalScot.

WeightHauled(Lbs.)	:2283
DistanceTravelled(ft)	:10294
CoalBurnt(Oz)	:21
Score	:1120

4thPlacewenttoJohnPickeringwithRuby.

WeightHauled(Lbs.)	:984
DistanceTravelled(ft)	:8438
CoalBurnt(Oz)	:8
Score	:1038

5thplacewenttoJohnWilcox withSweetPea.

WeightHauled(Lbs.)	:1244
DistanceTravelled(ft)	:11306
CoalBurnt(Oz)	:14
Score	:1005

Iwillleaveyoutoanalysetheresults,youcanseehowcloseitwas!

Another passenger on the Scotor Polly could have easily changed things.

The rules for the CLUBLEC competition and the method used to derive a score can be found in the Club Handbook.

Thank you to Dave Spicer for the loan of a pair of bathroom scales and a large dial clock to give an indication of time remaining to the competitors. Dave was unable to attend as he was away doing things with clocks. A thank you must also be given to Barney Evans for manning the kettle and keeping everyone refreshed throughout the afternoon.

The Chairman made a comment that it was many years since he had ridden behind a locoat at Vivary Park. So it seems more members supporting the public running days and enjoying a good afternoon in the park. A thank you must be given to everybody who attended and contributed to make this a very successful club event.



The Chairman congratulates the winner.

Photo Ray Yeo

Roll on next years TME CLUBLEC!

Club Locomotive Update November 2012

By Steve Gosling



Photo Steve Gosling

The Club Locomotive project has been gently pottering on for a while and, at last, there is some visible progress.

The bogie frames were all waterjet cut by LA Services near Leicester and then had all mounting faces machined true.

All parts had holes drilled in them using coordinates and the milling table lead screw to position them with the result that they were completely interchangeable. This was immensely satisfying as the

centre stay has eight rivets at each end which could be fed through both side plates and the spacer between with no drilling through. I can thoroughly recommend the process which is made even easier if you have a digital read out! The frames were all riveted after being squared up on the surface plate.



Photo Steve Gosling

They are quite substantial. The assembly, 27" long, is shown in the first photograph. A trial assembly ensued and I was pleased to find that the axle boxes are all interchangeable as well.

A torque reaction plate is provided to prevent the motor from rotating around the axle and this is soft mounted to the frame using rubber washers. Dummy centre springs have been fitted but no brake gear or steps. These may be added in future if a member decides that they are needed!



Photo Steve Gosling

The complete assembly was displayed at the Midlands ME Exhibition and received some favourable comment. It was noticeably more robust than other 7 $\frac{1}{4}$ " gauge locomotive bogies present. With an 800W motor on each bogie the locomotives should be able to produce a continuous tractive effort of over 130lbs at 6mph. The complete locomotive is going to be quite a machine!

Tony Gosling is currently undertaking the paintwork and John Pickering has kindly stepped in to coordinate the bodywork. I am continuing with the chassis and will be fitting the buffers so kindly made by Alec Hadfield, very shortly.

Restoration of a railway A progress report

Mike Pinkney

Since I last put pen to paper on this subject more than six months has come and gone. It would be an understatement to say that the weather this last summer, in relation to the furtherance of outdoor activities, has been a disappointment. However, a start has been made on the rebuilding of my 10¼" railway – not a lot, but some.

I left off my article last time at a point where everything on my line needed either rebuilding or some serious TLC which was pretty much true. My Tinkerbell class loco, not steamed for several years, needed stripping down for a thorough boiler examination and test. The trackwork required re-laying and some serviceable rolling stock was required to give the loco something to do. Where to start?

I was determined that this year would see my loco back in running order or at the very least well on the way to doing so. Preparing it for its boiler test was my priority. For twenty years this sacred object had remained revered and untouched, in a condition as delivered from its maker. Only the main steam turret top plate and the boiler plug had ever been removed before, during previous inspections. Faced with a complete boiler strip down to reveal its surface beneath the lagging was a task in a different league to anything previously tackled.

So, after studying the loco's construction the main task to be performed seemed to be fairly straightforward: remove main steam valve lever shaft through spectacle plate, unbolt and remove spectacle plate from sides of tanks, remove side tanks, undo boiler bands, remove one piece cladding and slip off the lagging, job done.

Hmmmmmmmm! - if only things were that easy.

There were other complications in this saga of railway reconstruction. When I first built the railway there was only space for a small shed in one corner of the garden, no room to swing a large spanner. Since then all maintenance work on the loco has had to be done externally. A convenient place along the line was chosen where there was enough clear area to give good access and room to pitch a gazebo in bad weather. Then all that was required was to push the loco to this spot and get cracking - simple! Well yes, when there was a track leading to and from the shed! A couple of years previously the loco shed track had been removed pending the re-grading and re-laying of this section, thus trapping the loco inside. Therefore, my first task was to re-lay sixty feet or so of track in order to free the loco from its enforced incarceration. The strip down could then begin.

To the inexperienced model engineer this can be a bit daunting. It is not always obvious how various parts undo and there is a reluctance to force things for fear of causing some irreparable damage. And no Haynes manual to turn to either! By taking a bit at a time, a point was eventually reached where all that remained for me to do was remove the one piece cladding covering the boiler lagging. Flushed with success at having reached this final stage, I was even beginning to tell myself that maybe I was a bit more of an engineer than I thought. It is said that pride comes before a fall and so it was; I was about to meet my nemesis!

Only the removal of three boiler fittings were standing in the way of getting the cladding off and seeing the job complete.

This is the point at which things got somewhat tricky. Having first determined which way these fittings should unscrew, I set about

Problem Boiler Fittings



Clack valve turret

Steam valve to cylinders

Injector steam valves

trying to get them removed; without a great deal of success, well in fact none! Any confidence gained previously in my abilities were fast melting away. After consulting fellow members the consensus was to apply liberal amounts of thread-easing fluid around these fittings, over as long a period as possible, and keep trying. However, try as I may, nothing would budge. The boiler fittings on the Tinkerbell are relatively large, and were even too big for the jaws of the largest adjustable spanner in my toolbox. I just couldn't get enough leverage, either with mole grips or various other half-baked methods I tried, to get the damn thing to move. What I needed was a BIG spanner!

Local DIY and other tool outlets didn't stock anything man enough for the job. So a search of the internet was the next practical step. A search for 'large spanner' through the following little beauty and has become my secret weapon in defeating those seemingly unmovable and stubborn fittings. It weighs in at 5 kilos, is 24 inches long and has permitted me to do everything with relative ease and without giving myself a hernia in the process. Probably a tiny bit large for those of you with smaller gauges but for those larger size jobs it comes highly recommended!



My rail consists of a heavy duty aluminium flat bottomed rail section type, as supplied by the late Don Fifer, which is supported on 4"x3"x20" wooden sleepers, set apart at 12" centres. This distance shortens slightly at each end of a rail section before the rail joints. After several years of experimentation, I have decided to adopt the following standard when re-laying my trackwork. Four self tapping 1" screws with 1" penny washers will be used to clamp the rail base to a sleeper. This will give a total of 136 screws when using 17 sleepers per rail length of 16'.

Pre-drilling jig and Sample track



I have made a simple jig for pre-drilling each sleeper with 8 guide holes; thus making screwing down rails a doddle. My track gauges consist of five carefully cut pieces of timber 3"x2"x10 1/4". All screws, washers, nuts and bolts will be of stainless steel.

I shall continue to use fish plates made from 8" long metal strip, some of brass and some of steel, although brass is the preferred material. The track sub-base will consist of plastic woven landscaping material replacing the fibre type of material used originally which seemed to act more as a ready growing medium rather than an effective barrier to weed growth! My original supply of sleepers has almost been completely used up. When ordering the next batch I shall have to give serious consideration to reducing the size of the sleeper dimensions both from an ecological point of view and one of cost reduction. If you are happy to make online purchases of your screws/nuts/bolt set c. in hundreds rather than in smaller amounts then, I have found www.fix8.co.uk a good reliable company to order from, offering competitive prices even when factoring in postage costs, usual disclaimer applies.



A Heap of Old Chairs

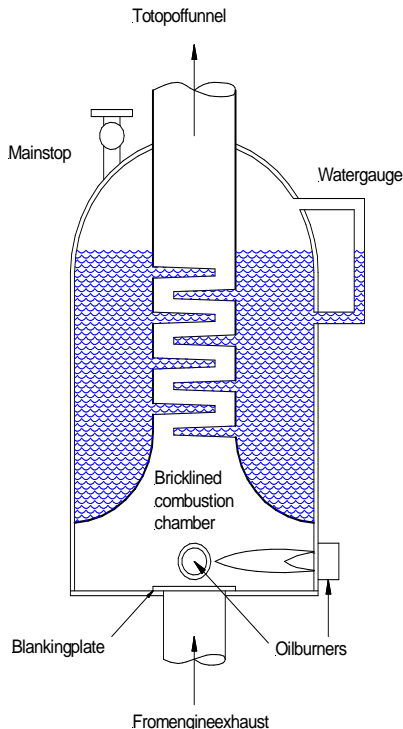
Why would anyone want some old metal framed chairs which are surplus to requirements? I guess most would think that a trip down to the recycling centre was in the offing. But to us miniature railway buffs that would be an unforgivable waste of a resource. Wouldn't it?

Yes! The making of a fine coach. This will be a railway project for next year. At long last there is the prospect of at least one coach for my railway. Two would be nice but you have to start somewhere. Best start drawing up some plans!

Of Ships and Things

BY FIREMAN M. N. RETIRED

Back to work with a bump and the excesses of Christmas had to be paid for. The two donkey boilers were Clarkson vertical, thimble



tubetype, about 7 ft in diameter. The centre uptake being 3 ft diameter which leaves 2 ft of water space all around. The water tubes rather like thimbles were 2 ft long by 3 inches diameter about 250 of them. Taking out the leaking ones entailed swinging down into the water space on a "bosun's chair" removing the ferrule from inside the tube with a hammer and chisel, thoroughly cleaning the inside of the hole with a taper reamer, then fitting a new tube and ferrule and then expanding it with a ratchet expanding tool.

Sound simple, just try it!!
The other job is removing the

scale from inside, again sitting on a bosun's chair and using tried and tested technology, chipping hammer and scraper, there was particularly a belt scale of about 1 ft at the water line which was extra hard.

When the cleaning was finished and the rubbish all cleared out



Oiling the top piston guides

Photo John Selby

it was time to refit the mud doors round the bottom and the access doors at the top, then fill up with water and do a hydraulic test. Just a few minor weeps which should take up when hot. Replace the burner carriers and the air inlet register flaps, then “flashup”. Open the air flap slightly and poke a lighted wad of cotton waste soaked in paraffin along a rod through the hole below the burner and turn on the oil, then stand well clear because when the oil catches most of the flame and smoke tries to go the way it goes in, as the uptake is too cold to produce much of a draught.

Once the fire has settled down on its lowest setting, light the other burner and slowly raise the steam pressure to 150 lbs per square inch to test the safety valves, then shut off the fires and let things settle down.

Meanwhile the last few jobs on the generators were being carried out to make sure they were in tip top order. When homeward bound 3 were running at any one time on a rotating basis. There was a huge demand for electric power, for heating, lighting and hundreds of pumps and fans but most importantly the refrigeration plant, for with close on 12,000 tons of lamb, butter and cheese to be kept at the right temperature this has priority.

WetookinfourmoreportsandfinishedupatWellington.Thenoff,
6,500milestoPanamawhichtookthreeweeks,thisiswhere those
bookscameinhandy.ThroughthecanalandontoCuracaototake
onfueloil.



Thenanother15daystoLondongettingbackonthe5thMarch,a
tripofnearly5months

Polly goes to the shops

ByJohnPickering

WellwhatdoyouexpectwithChristmasonlyafewweeksaway!
ButthisPollyisa5inchgauge0 -6-0sidetankbuiltaround1993
andactuallythereisonlyoneshop ----myworkshop.

“Polly”waspurchasedbymylateFathersometimeinthe1990's.It
became obviousfairlyearlyonthattherewassomethingwrong.The
valvegearwasstiffandnoisyandtheenginedidnotruntoowell.
So"Polly"madeherfirsttriptothe“shops”.Removingtheboilerto
getabetterlookatthevalvegearmadetheproblemclear .



Father with his "Polly"

The engine had clearly had a major accident. The frames were bent and when the cast front buffer beam was removed it came off in two pieces. The stiffness was due principally to bent eccentric rods and then noise to excessive wear caused by the misalignment. The whole assembly was stripped down, many of the pins and bushes replaced and other pieces straightened. The most interesting part of the job was how to correct the wear in the eccentric straps.

Having decided that it was worth trying anything since we could not make matters worse, the following method was used. The straps were removed from the eccentrics and bolted back together. They were then put into a vice with the mating face in line with the lead screw and crushed so that the holes ended up elliptical with the minor dimension a little smaller than that of the eccentric. The two halves were then separated and the mating faces milled to reduce the larger dimension of the ellipses so as to end up with a roughly circular hole. The two halves were then bolted together, put into the four jaw and bored to size. For what seems like an outrageous bodge this has worked well and the straps are still a good fit after over 15 years of regular use.

Sometimes later the boiler blowdown valve became cross threaded. Father then tried to cut the thread but got the thread size wrong and ended up with a blowdown valve which simply fell out of the boiler. So "Polly" made another trip to the "shops". There was not

enough of the bush left to tap it out to a larger size so a new bush had to be fitted. The old one was removed by milling the projecting part off to leave the firebox wrapper clean copper, the rest of the bush was drilled out. A new bush was made up then went onto the difficult bit. The boiler was buried in a bed of charcoal with only the part of the wrapper where the new bush was to be fitted visible. We then got to work with two blow lamps and a hot air gun. It seemed to take forever but eventually the silver soldered flashed around the joint. The boiler was left to cool down in the charcoal so that any other joints which had been softened could fuse back together. Then came the moment of truth, the hydraulic test.

The pressure was taken to twice the working pressure and the boiler carefully inspected for leaks. What a relief - it was as dry as bone! The boiler has steamed for many hours since and passed several boiler tests so we must have got something right!

The Polly locomotives use cast iron cylinders. "Polly's" next trip to the "shops" happened after condensate, left in the cylinders over the winter, rusted the bottom of the bores, resulting in shredding of the "O" rings and a dramatic fall off in performance.



The cylinders were stripped, rebored and new pistons made. At the same time the valves were replaced, not because of wear but because the cast cavities did not line up with the outsides of the valves!

Holes were drilled and tapped in the front of the steam chest to take plugs which could be removed to allow soluble oil to be squirted into the valve chest after a run.

So donot worry if you see "Polly" with a white fluid issuing from the draincocks.

These draincocks have always been a problem. They get wrecked every time the locomotive comes off the track or is put onto the rails without the greatest of care. So the "Polly's" next visit to the "shops" was for new draincocks and a bar across the front to protect them.

When my Father died his will was very simple everything was to be divided among the family with one exception. I was to get the locomotive. So "Polly" came to live in Devon.

Up to this point I had never driven a miniature steam locomotive. So I had to learn how. Fortunately for me this was just after the new track extension had been built at Vivary Park but before it was connected to the "mainline" So I was able to learn the basics by driving to and from Sunday afternoons, with several TME members to help when I got things wrong. After a while it became obvious that there was a problem with the boiler feed. So the next trip to the "shops" was to sort out the axle driven feed pump, some leaking clacks and the injector. The "Polly" feed pump is on a pump stay which is secured by countersink screws behind the cylinder mounting faces. So removal of the pump involves a fairly complete strip down. A new pump was made which mounts onto a new frame stay and which can be removed in minutes. At the same time I replaced the standard screw reverser with a pole reverser which works well and to my mind looks a lot better.

At Dalwood Fair this year I ran the club's portable track. My modified Ruby was steamed and "Polly" now looking distinctly sad and old was put on one side as a static display. After a couple of runs to warm the engine up I noticed the footplate was covered in water. A banjo bolt on the hand pump had failed and it was clear the engine was not fit for service.

The fire was dropped and "Polly" came to the rescue and performed

perfectly. Ifeltratherguiltyabouttherpersonalappearance. Italso
struckmethatvirtuallyeverythingwhichhadbeendoneo verthe
yearshadbeenjusttofixacurrentproblem. Whatwasneednow
wasaproperoverhaul.

Soonceagain"Pollywenttothe shops". Whatisabitoddisthis
“Polly”iscalled“SirJonathan”.

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Vivary Park Running Days

**Sunday16thDecember2012SantaSpecial
12noon**

Cræch Running Days

**Sunday23rdDecember2012SantaSpecial
12noon**

Meetings Programme

2012

Tues 4th December **Scenic Railway of the S.W.**
Peter Triggs

Tues 18th December **Mince Pies and Natter**

2013

Tues 1st January No meeting

Tues 15th January Commercial Trailers Tom Dominey

Tues 5th February Bits and Pieces – Work in Progress

Tues 19th February The “County” Project -GWS

Tues 5th March “Historic Records of Railway Staff”
David Hawkings

Tues 19th March Time Machines – Michael Lee

Tues 2nd April AGM

Tues 16th April Trophy Night

Tues 7th May Visit Visit Willit on Railway Works -WSR

Tues 21st May Anevening at Creech

Tues 4th June Visit Newberry Rail

Tues 18th June Vis it Shute Railway

Tues 2nd July Barbecue at Creech

Tues 16th July Anevening at Vivary Park

Tues 6th August

Tues 20th August

Tues 3rd September

Tues 17th September

Tues 1st October	Re -building “Dennis” Steve Gosling
Tues 15th October	A “David Hartland Spectacular”
Tues 5th November	Auction Night Mark Davis
Tues 19th November	Quiz Night David Eaton
Tues 3rd December	
Tues 17th December	Mince Pies and Natter

Meetings will be held at the Village Hall, Stoke St. Mary, Taunton, commencing at 7.30 p.m. unless otherwise indicated.

Working Parties at Creech meet on site on Thursdays & Sundays from 9.30 a.m..

Working Parties at Vivary Park on occasion are by advice from Phil Mortimer — if you would like to become involved with these, then contact him — details inside the Front Cover.

The views and articles featured in this magazine do not necessarily represent the views of all the Committee, Officers and Members.

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PhotoPaulOrrells

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PhotoDonHancock

EndoftheseasonatVivary