The Oily Rag!



Tony Newberry surrounded by some of the locos he has built at a celebration of his achievements at Coate Water Miniature Railway Peter Nicholson and Joshua Brinsford report

Winter 2016 Issue No 128

The Taunton Model Engineers' magazine

1

Contents

| 3. | From the Editor | | |
|-----|--|--|--|
| 3. | Chairman's Notes | | |
| 5. | News from Creech | | |
| 7. | Report from Vivary Park | | |
| 9. | Steam powered aircraft | By William Pickering | |
| | Do you believe this? | | |
| 14. | Robin No. 6 | By Tim Griffiths | |
| | Would you like to be involved with rebuilding this loco? | | |
| 16. | "On the footplate" The art of stop | ping By Ray Rolt | |
| | Ray brings his experiences on the S&DR to a halt. | | |
| 20 | Tony Newberry honoured at Coat | erry honoured at Coate Miniature Railway | |
| 20. | A report by Peter Nicholson and J | loshua Brinsford | |
| 23 | "Tich 2 5" | Ry John Pickering | |
| 23. | A new take on a classic design. | Dy John I fekering | |
| 25 | I :ttle puffere wer | Dr. Tim Cuiffitha | |
| 23. | Tim's early days in South London | By 11m Grinnins | |
| | This curry duys in South London | | |
| 28. | Of ships and things | By Fireman M.N. retired | |
| | Clean clothes and black smoke | | |

From the Editor

Tony Newberry is probably our most prolific model engineer. On the weekend of the 13th and 14th August an event was held at the North Wilts Model Engineering Society's Coate Water Miniature Railway to celebrate his achievements. Peter Nicholson and Joshua Brinsford report on this event.

This issue has nostalgia with pieces from Tim Griffiths and fireman MN retd. Ray Rolt completes his series on driving on the S&DR. appropriately with the "art of stopping". To fill the pages I was able to call on a source from beyond the grave. I hope you enjoy my late father's article on steam powered aircraft. You cannot guess how long it took to take all that down with a ouija board!

I hope this issue will be with you before Christmas. So I would like to wish a Merry Christmas to all readers of "The Oily Rag".

John

Chairman's Notes

By Mike Johns

We have reached the end of yet another successful year for the Club which continues to provide members with regular opportunities to get together, either for sit down meetings, working parties, visits and running days. It is unlikely there are many clubs having two regular meetings each month, plus at least weekly working parties, running days in season, periodic visits to other attractions and ad hoc get togethers. Thank you all for your support in making it all happen. We were able to celebrate our 70th anniversary in style with an event that visitors are still talking about and asking when the next will be. Although we made a slight loss financially – having aimed to break even – this arose only from some one-off costs needed for the initial setting-up. Such costs should not arise again. All the main activities were contained within the TME fenced area at Creech to keep clear of public activities in the park and minimise any possible criticisms from the Parish Council. This was important as your committee is now considering what might be done this year for a club Gala event. Make a note in your diaries to keep the weekend of 24/5 June clear.

We have seen a gradual increase in TME membership during 2016 and as at 24 November have 131 paid up members. Welcome to those who have recently joined – we hope you enjoy being with us and are able to further your personal interests alongside existing members. The club contains a wide range of members with various skills and experience and we can usually find an answer and help for those having problems or difficulties. Don't hesitate to ask – the rest of us are not mind readers!

The two railways this year gave rides to 6345 passengers, 3942 at Vivary and 2403 at Creech plus an estimated 500 who rode during the Gala for whom we did not do a head count. Overall a better year than 2015 in spite of us not being able to run on Easter Monday at Creech owing to lack of members on site.

Our main problem now is the future of the pavilion in Vivary Park. Taunton Deane have formally given us notice to quit at the end of this year so TME use will finish effectively after the Santa running day. Although various alternatives have been discussed with the Borough Council no firm arrangements have yet been agreed for 2017. Meantime we have identified a site opposite the steaming bays for which we have submitted a planning application to locate a cabin – probably a steel container –

to act as our future base. We intend that this be camouflaged to fit in with the other park buildings. It remains to be seen when and whether we can open the railway as planned for 2 April next.

On a happier note I will take this opportunity to wish you all a Very Merry Xmas and a happy and healthy New Year. Here's to a successful 2017.

News from Creech

By Mike Johns

The contract repairs to the TME boundary fence have been carried out as planned. Apart from replacement of broken timbers many of the posts have been doubled up to reduce the likelihood of being pushed over as had happened previously in some sections. We have advised the Parish Council of the work we've done and reminded them that there are long outstanding repairs needed to the park boundary fence which we have previously reported as part of our risk assessment.

Maintenance work on the track has continued with few interruptions for the weather. Thanks to David Hartland the Thursday track gang is now equipped with a dedicated tool wagon together with a set of tools and a calibration trolley which is used to check track levels and twists. In addition he and John Pickering have devised and fitted to one steaming bay an adjustable rail section which enables vehicle suspension twists also to be measured. Use of these tools is identifying where trackwork needs attention and whether vehicles are fit to use, including identifying the adjustments needed to the three new vehicles which had been derailing. These have all now been modified. We have yet to sort out some springing problems that have appeared on the original three vehicles. John Pickering is continuing with the work needed to complete the two new locomotives for which the main outstanding items are the dummy fuel tanks between the bogies. The aim is for these to act as 'derailing bars' to protect the gearbox undersides should a locomotive derail. Robin has been taken off passenger duties and is now only used for the works train when this is required. It appears the hydraulic final drive needs replacing. Rather than incur this significant expenditure we are looking at the possibilities for fitting an electrical drive between petrol engine and wheels. Tim Griffiths is in the lead on this project and working with John Pickering to identify what needs to be done.

Unfortunately the milling machine suffered a failure of its table power traverse which has necessitated a new relay being fitted. Tim Griffiths and Andy Cooke identified the fault and stripped the machine while John Pickering obtained the spare required. Once this is completed both lathe and milling machine will be available for the training sessions we have talked about before. Dave Woods will be contacting those of you who were interested to get things moving and will be pleased to hear from anyone else who feels they would benefit from some tuition.

Thanks to Tim Hims the loading track is now equipped with a hydraulic lift to assist transfer of locomotives between road vehicles and track. Andy Cooke and Mike Johns are making a cabinet for the control gear which is battery operated. The range of lifting heights available will make loading / unloading easier. Other members of the Thursday gang have started the next stage in track alterations which will add an additional track alongside the departure platform for which they have dug out the track bed. In the process they have found one of the old gate post foundations right in the middle and now have to remove a very hard lump of Hartnell concrete before they can proceed! As ever there is always plenty to do around the site requiring a variety of skills and abilities. If you feel like joining in please contact David Hartland to be included on his weekly fnailing list.

Stop press

This year the money from the Creech Santa Special will go to Spiritual Garden Children's project at Creech St Michael Primary School

Report from Vivary Park

By Diana Fathers

The final Tuesday evening meeting and running at Vivary brought a good crowd of members to enjoy the fine weather, which has been remarkably good throughout the summer. I think rain stopped play only once – quite a rarity.

The Brean Steamers paid their very welcome annual visit on Thursday 22nd September. For those who may not know, these are people from other clubs all over the country who bring their locos to a holiday camp in Brean for one week and from there, visit half-adozen clubs in Somerset and Wales to run their locos. They are a very friendly crowd who we have got to know well over the years. This year we welcomed eight people from the following clubs: Erewash, Kinver, Northolt, West Huntspill and Wimborne, so just about all corners England were represented. They brought with them one electric loco, a Class 37 Warship, and five steamers – a Simplex, a QI (I don't know what this is but it sounds Quite Interesting!), a Lancashire & Yorkshire 0-8-0, a Conway and an Adams 02. The weather was good and we all had a very enjoyable day.

About three years ago, I was invited to drive one of their diesel electric locos around the track at Vivary. On I climbed,

accompanied by our faithful Club-hound Chloe – a well-known train addict – who sat in front of me as I drove. After stopping at the station I was told to carry on and apparently the smile on my face caused several of the visitors to tell Roy (my husband), "you'll have to make Diana her own loco". This year he finally completed my Charlatan. I chose the livery and, as I was born in Kent, named it Kentish Maid. Knowing that the loco was expected, there was a chorus of "where is it then?" Sadly, a last minute disaster with the varnish fighting with the paint meant that despite Roy's best efforts we could not take it after all. But there's always next year ...

Sunday ticket sales have been excellent, averaging 230 each time. At the penultimate running, a young lad showed great interest in not just the locomotives but he also asked many intelligent questions about the Club; his knowledge being far superior to mine (which isn't saying much, I know!). He stayed all afternoon and went away clutching an application for junior membership and I wondered if we would see him again. So it was a nice surprise to see him again on the last day, eager to help out. He had posted off his form and we were all very happy to welcome 11 year old Leo as a junior member of TME.

As it happened, another man, who has recently retired and is looking for something to do, also showed an interest in joining the Club and took away an application form. What a lovely way to end the season!

On behalf of all the regulars at Vivary, thank you Barney for keeping us plied with refreshments throughout the summer. Thanks also to the faithful few for all their hard work in setting up, clearing away and maintaining the good condition of the track each time so that everyone else can enjoy the day. And special thanks to Phil and the gang, for all their efforts to ensure that we actually have a railway to run!

Steam powered aircraft

By William Pickering

It all started two or three years ago. I was staying with my son in Devon and his tractor developed problems requiring some spares. The supplier was in Chard about ten miles away so off we went. The spares were acquired readily and we decided to have a look around the Museum. It is well worth a visit, should you be in the district. It has on show items which I played with as a child and cars I drove as a young man. So much for nostalgia! It was in the Museum that the whole thing started. The man who set me thinking was a one John Stringfellow who built a steam driven aircraft in 1848 - but more about him later.

Having been bitten by the steam aircraft bug I started to dig into the archives. I think the starting point should be Sir George Cayley 1773-1857. Cayley began his interest in aircraft about 1794 when about 21 years old. He built his first models in 1796 amongst them was a model helicopter with contra rotating blades and what is more it flew. To say the least forward thinking! He experimented with baloons, kites and gliders. Latterly concentrating on gliders. By the turn of the century he had established a reputation for experimenting with what we now call aircraft.

His glider experiments had established the importance of the centre of gravity (1804). To do this he had used models with moveable weights to allow the centre of gravity to be altered at will. One of his models was possibly the first glider to make a significant flight. His experiments had led him to appreciate the effect of dihedral as a method of stable flight. (1807) He studied the effect of wing sections on lift and established that the lift of a wing could be increased by curving the upper surface (1810). In the same year he wrote a three part treatise on "Aerial Navigation" in which he stated that the three requirements of flight were lift, propulsion and control. A statement which still holds good today.

By 1816 he turned his attention to lighter than air machines designing a streamlined airship with a semi rigid structure. He appreciated the fact that having one large gas bag was not the best idea. He used a number of smaller bags within the main envelope to limit the loss of lift due to loss of gas. In 1837 he designed a streamlined airship propelled by a steam power unit so I suppose we can say that this is where steam powered aircraft began!

Just for the record in 1849 he built several man carrying gliders more or less on the lines of his 1799 experiments. He tried the first one with a ten year old boy aboard. Followed a little later, in 1857, by one carrying his coachman. The coachman resigned on landing saying he drove coaches not gliders!

George Cayley 1 feel can be looked upon as the first man ever to investigate the theory of flight.

The next steam aviation candidate is William Samuel Henson 1813-1888. Henson was an engineer and an inventor. He was familiar with the of experiments and writings of Sir George Cayley and an associate of John Stringfellow 1799-1883 he designed and in 1842, patented a large steam powered passenger carrying monoplane. The patent specification shows a well thought out design with box section spars and built up ribs all held in place with wire bracing, a form of construction which was used well into the twentieth century. Along with Stringfellow and two others, Frederick Marriot and D. E. Columbine he formed the "Ariel Transit Company" in 1843. Between 1844 and 1847 the group experimented with various steam powered models but none were successful.



"Ariel" from the patent specification

The 150 foot span aircraft was to have been called the "Ariel" Marriot was the company's publicity man and produced pictures of the plane flying over the Pyramids and in India as well as the UK. He also produced a very ambitious scheme for an airport— complete

with launching ramp, landing strip and lighthouse! The Press just did not believe his publicity and gave him a hard time!

Having failed to produce a viable machine, Henson lost interest and left for the USA in 1848, Marriot, Columbine and Stringfeliow went their separate ways.

John Stringfellow the chap who started this story lived in Chard his family were carriage builders and lace makers. John had a thing for

steam he had designed and built a number of steam powerplants and had shown an ability to design and build very lightweight steam engines. He continued to experiment after the compny broke up and in 1848 he built a 10 foot span aircraft



Stringfellow's 1848 monoplane

powered by a light weight steam engine driving two contra rotating propellers. The first attempt to fly the machine was in a warehouse in Chard but resulted in damage to the machine. The second attempt was more successful, the aircraft lifted off its guide wire and flew for about 30 feet. Stringfellow continued to experiment now aided by his son Frederick. Both exhibited machines at an exhibition held at the Crystal Palace in 1868. The engine from their triplane won the first prize. The complete model survives to this day and is in The National Air and Space Museum, Washington D.C. The son showed a tandem



Stringfellow's 1848 engine and boiler

winged monoplane, also steam powered with twin propellers. John Stringfellow had intended to build a full size machine based on the



The 1868 triplane

models but failing health meant this never happened.

Other pioneers such as Thomas Moy in England and Felix du Temple de la Croix in France also experimented with steam powered flight. A particullarly impressive attempt to fly using steam was made by Hiram Maxim 1840-1916. He had started to experiment in the 1880s and in 1893 constructed an enormous biplane powered by two 180hp steam engines and weighing 7000lbs. This was intended as a test bed and ran along a track at Baldwyns Park which was designed to prevent it lifting by more than 2 feet. During a test on July 31st 1894 it broke the restraining rail and careered for around 200 yards during which it is said to have reached a height of 2 to 3 feet.

In 1874 Gustav Weisskopf was born in Leutershausen in Germany. In 1895 he moved to the USA and anglicised his name to Gustave Whitehead. He built and flew Lilienthal type gliders with some success around 1896. By 1898 he was settled in Pittsburgh. There is no doubt he built a steam powered aeroplane but there is a lot of doubt about his claims to have flown it. Dubious early claims mean his later claims are also suspect despite being widely reported, but by now he was using an "explosion motor" running on acetylene generated from calcium carbide, so they are outside the scope of this article.

After the Wright brothers flights you may assume that any thoughts of steam power for aircraft were dead but as late as the 1960s steam power was being considered for aircraft propulsion. During the second world war engineers in Germeny considered building a steam powered version of the Messerschmitt Me 264A Amerika Bomber to take advantage of the improved performance at high altitude which was theoretically possible with steam engines. In the 1960s conceptual drawings were made of an engine. to be in installed in a Hughes 300 helicopter. But neither of these flew.

However there is one well documented case of practical steam powered flight. On 12th April 1933 William Bessler demonstrated a steam powered version of a Travel Air 2000 biplane using a variant of one of Abner Doble's steam car engines. The aircraft, which had a range of 400 miles on 10 gallons of water, burnt cheap fuel oil enough for a 100 mile round trip costing only 1s 8d in 1933 It was probably the first aircraft to use reverse thrust on landing resulting in a very short landing run. The engine was a compound "V" twin fed with steam at 1200 psi and 800 degrees F. from a



The Bessler brother's aircraft

flash steam generator, the power unit was rated at 150 bhp.

If you think this article should be taken with a large pinch of salt take a look at this link

https://www.youtube.com/watch?v=nw6NFmcnW-8

Robin No. 6

By Tim Griffiths

The Club Loco Robin No. 6 has been a stalwart of the Club operations at Creech St. Michael for most of the Creech Miniature Railway's life, and has given sterling service to that end.

It is now showing serious signs of old age. Two or three years ago the hydraulics were given some attention but now it gives a great deal of concern when hauling passengers. There is still potential life and usage in Robin, if we give it an overhaul or a rebuild in true railway fashion.

So I proposed to the committee that rather than leave it to rot away in a corner we should consider what should be done with it. I suggested that a small interested and dedicated team should be set up not only to come up with ideas for the rebuild but also to carry the chosen solution to fruition. This would allow "Robin" to be returned to service and used for such things as driver training



"Robin" No. 6

and use by "junior members". I have had fun driving this loco at different times, so why not others?

One solution would be to convert it to a battery electric loco, another would be to keep the petrol engine but driving a generator to charge batteries as a serial hybrid. I am sure some of you may have other ideas, so lets hear them.

The whole aim of this potential project is to include those of us that do not have our own locos, to allow us to share in the fun of giving rides to the public and to feel included in the Club's activities away from running days.

Let's hear from you, I have found that the Thursday gang are an inclusive bunch no one gets left out of the fun, hard work, nor the glory oh and I almost forgot the Pub.

"On the footplate"

The art of stopping!

By Ray Rolt

Apart from a few exceptions, in steam days the vacuum brake was universal. All vacuum braked vehicles had vacuum cylinders in communication with the train pipe. A non return valve connected the top and the bottom of the cylinders and pistons operated the brakes via piston rods passing through seals.



With a vacuum in the train pipe which runs the length of the train, both sides of the piston are evacuated and the piston drops releasing the brake. When air is admitted into the train pipe, this acts on the underside of the piston but is prevented from entering the top of the vacuum cylinder by the non return valve. With a vacuum above the piston it is pushed up and applies the brake. As soon as a full vacuum is restored to the train pipe the piston falls and the brake is released again. This met all the requirements for a continuous braking system as it could be operated by the guard using a simple valve to admit air to the train pipe, and in the event of the train parting would cause all the brakes to come on automatically, bringing the main train and the separated portion to a stop.

With one exception, the vacuum was maintained in the train pipe by



A hall class loco showing the cross head vacuum pump

a small ejector which was in continuous operation using steam to create the vacuum. The one exception was the Great Western Railway which used a vacuum pump operated by one of the cylinder crossheads to maintain the vacuum. Both systems used a large steam ejector to create the initial vacuum in the train pipe for starting

The advantages of the GWR system were a greater vacuum, due to the positive displacement of the piston and a saving of steam. Whereas the standard vacuum used was 21", which was deemed to be the maximum without using an excessive amount of steam, a vacuum of 25" was used by the GWR. This made the braking more effective. However there were two disadvantages, mechanical wear and the loss of vacuum as the train slowed down! Another problem was the difference of vacuum when engines were changed from another company, which meant that the stored vacuum in the train cylinders had to be destroyed manually on all the vehicles to release the brakes.

On locos fitted with steam brakes, a combination brake valve was used which gave a proportional application of the steam brake to match the application of the vacuum brake. When the loco was stopped with small ejector turned off between operating turns, the steam plunger could be pressed in and retained by a hook to cut off the steam supply to the steam brake. Having described the braking systems, we will now look at how they were used.

With the small ejector turned on, particularly with the short trains that I was normally on, with the brake valve in the "running" position the vacuum in the train pipe would slowly recover. Where the train was on a slight gradient, this would cause it to move. For this reason the brake would be left on in such a situation.

To start the train, the large ejector is used to recover the vacuum in the train pipe. When the vacuum gauge shows a recovery of vacuum, the regulator is opened and the train is started. Where the train is on a gradient, the regulator can be partially opened before the vacuum is fully restored to stop the train running back and as the train starts to move forwards the regulator can be opened more fully. The large ejector is shut off, with the small ejector or vacuum pump maintaining the vacuum.

When the train is being stopped, after the regulator has been closed a light brake application is made to test the brakes. The train is then allowed to run with further applications being made, as required, to slow down and finally stop. There was a slight falling gradient through the station at Evercreech Junction which I used to full effect! Making repeated light applications of the brake to bring the train to a stop, I finally made a full application and immediately released the brake again. Just as the brake shoes were biting into the wheels, this was eased as the vacuum started to recover and the train came to a smooth stop, when a full application was then made to hold the train on the gradient. Non of your sudden stop here!

All train / loco movements at Evercreech and on the mainline to Templecombe, when the train continued to there, were under the full control of Ron. At no time was there any risk as I was under constant supervision by him and he would immediately have taken over in the event of a problem occurring, while driving on the branch. I am very much indebted to him for the trust he placed in me. My progression was spread over a period of time as would have applied to a trainee fireman.

When the West Coast electrification was completed, the Western Region line from London to Birmingham lost a lot of its prestigious express trains and it was given the line from Bath to Templecombe to compensate! This resulted in the "Pines Express", which ran from Bradford to Bournemouth during the summer, being rerouted via Reading! The loss of this helped to accelerate the demise of the "S & D". This also resulted in the appearance on the line of a couple of G.W.R. "2251" 0.6.0.s and some pannier tanks.

I only drove them twice, once on a goods train and once on a passenger train, which had a couple of 'Utility Vans' next to the engine. Apparently on the larger tender locos of the G.W.R. a small ejector was fitted to supplement the vacuum pump. This must have applied to these as the brake valve had a central "running position". As with all brake valves, movement to the right applied the brake but it could also be moved to the left. This operated the small ejector to create a vacuum and would appear to be intended to overcome the loss of vacuum at low speed, already mentioned.

As we entered Glastonbury station, I was anxious about the loss of vacuum. After initial light applications of the brake, Ron said " Let 'err run, let err run" which I did. Then he told me to make a full brake application which I did but an attempt to operate the small ejector to smooth the stop was frustrated as it was too stiff.

We came to a juddering stop. What made it worse, was the fact that the porters had neatly lined up the platform trolleys full of boxes at right angles to the platform edge ready to push forward in line with the van doors! Obviously they had full confidence in Ron's driving! Where the train actually stopped meant they had to reposition the trolleys. This resulted in my dislike of the G.W.R. System! It would not have happened with the normal vacuum brake system, as I would have made repeated applications of the brake to ensure a more accurate stop.

Tony Newberry honoured at Coate Water Miniature Railway

By Peter Nicholson and Joshua Brinsford

Our long-time member Tony Newberry can frequently be seen at Creech Miniature Railway with one of his superb 7¹/₄in gauge GWR locos, as well as hosting an evening visit by the club every summer.

He also often visits the Ashton Court Miniature Railway and the North Wilts Model Engineering Society's Coate Water Miniature Railway at Swindon. Here a special event was laid on over the weekend of August 13/14 as a celebration of Tony's achievement in producing so many fine examples of GWR motive power in miniature over the years. The "Tony Newberry Locomotive Gathering" brought together as many examples as could be mustered, including those owned by NWMES members, invited visitors and locos built by Tony and still in his possession. The total was an incredible ten engines, nine classic GWR tender types and one tank loco.

Just how many such locos Tony has built in total is not exactly known, but I understand this to be at least 20 including ones in 5in gauge and traction engines. His current project is a 4200 class 2-8-0T. as seen in his tiny workshop during the club visit on June 7.

Various photo opportunities were made available throughout the day on Saturday including a grand line-up at the railway's main station, Lakeside, followed by a cavalcade. This was in fact all ten locos

coupled together (initially), which made one circuit of part of this extensive and complex railway. It was decided not to go around a second time as not all locos were in steam and it was feared there could be lubrication problem if they were hauled much further The only tank loco, 'Prairie' No. 5517, was also the only



Simon prepares No. 3834.

loco with a separate riding truck and was attached to the rear of the convoy. However, about half-way round it decided to detach itself from the others and hurry along close behind. Because of the twists and turns in the line and the extensive lineside shrubbery it was difficult to find any viewing spots where such a long line of motive



power could be seen in its entirety. A unique occasion celebrating the achievements of a remarkable model engineer. Thanks go to Tony for his invitation to the event and to NWMES Chairman Ken Parker and

Stuart Duncan getting up steam on No 4706

members for making myself and grandson Joshua Brinsford most welcome, and allowing

full access for photography.

Locos present – all built by Tony Newberry:

| 1004 County of Somerset | 4-6-0 |
|-------------------------|--------------------|
| 1028 County of Warwick | 4-6-0 |
| 3834 | 2-8-0 |
| 3850 | 2-8-0 black livery |
| 4701 | 2-8-0 |
| 4706 | 2-8-0 |
| 5517 | 2-6-2T |
| 6026 King John | 4-6-0 |
| 6343 | 2-6-0 |
| 6868 Penrhos Grange | 4-6-0 |
| - | |

More pictures on the front and back covers.

Tich two point five.

By John Pickering

In the late 1940s and the 1950s model engineers migrated en masse from 2.5" gauge, which had been the gauge of choice for most model engineers in the 1920s and 1930s, to larger gauges. This was a time of post war austerity and materials, particularly special items such as castings, were in short supply. In response to reader requests, LBSC designed a small contractors loco in 3.5" gauge using left over 2.5" gauge bits. The result was "Tich". At the time this made some sense and my father was one of those seduced by the logic. He started to build one but shortly after we moved to the seaside, he caught the sailing bug and the bits ended up in a war surplus wooden box stacked with other identical boxes containing other projects in the corner of his workshop.

When he died I became the owner of a part built "Tich". A close examination revealed it was far less complete than I remembered. There are several 3.5" gauge designs I like but I am afraid "Tich" is not one. I cannot see the point today in building a relatively complex minimal performance freelance loco in the gauge. So it could have ended on Ebay, but it was just put back in the same box it had inhabited for most of my life cluttering my workshop rather than his!

As a member of the National 2.5" Gauge Association I would rather like to have something to run at their rallies and the idea of building a "quicky" quite appealed. I considered building a "Toby" to Steve Eaton's design. It then struck me that it may be possible to re-gauge "Tich" to make something suitable. A few quick calculations showed a straight re-gauge would not work but moving the wheels



inside the frame would. I drew an outline GA.of the original design on CAD and converted it on the screen. The result looked rather out of proportion, so time for a rethink. The motion on the standard engine is inclined at 4.35 degrees. I rotated the motion to make it

horizontal. This left clearance above the cylinders which allowed the frame height to be cut down to give a more sensible height for the buffer beam. Within a very short time two outline GAs. had



evolved. One version had the small boiler and looked vaguely like something which could have worked in the slate quarries of North Wales. The other, with the large boiler, which looked a bit like the kind of 3' 6" gauge locos we used to export to the colonies.

Whilst my father was alive we had chatted about using the "Tich" bits to produce something closer to a scale model and we did a little research on suitable prototypes, he was in favour of the project. So although it never went any further I felt he would not have objected to what I now planned.

The "copper smithing" on the small boiler my father was making was fairly advanced, so I decided that if this was useable I would take the project a bit further. The parts were shown to one of our boiler inspectors who passed them fit for purpose. I was placing an order for some laser cut bits, so I drew up the frames and added them to the order. Work started a few days before Christmas last year. 24



I had decided to keep things simple and use slip eccentric valve gear, a decision I now regret since although unfinished the components my father had made for the Walschearts valve gear could

have been completed and used with no more effort.

The frames

The basic rolling chassis was shown at the Trophy Night Meeting after which I moved to working on other things. Recently I have spent a bit more time on the project and now have the chassis running on air. Moving the frames outside the wheels means that there is space for a larger boiler on the 2.5" gauge version than any of the three designs produced by LBSC. So I considered building a



The frames with the part built boiler

larger boiler and even bought the materials. The Belpaire boiler LBSC. designed for his own loco had a larger firebox than the two earlier versions and also a longer barrel so perhaps he was having second thoughts about the boiler size. The larger boiler would have made the engine a bit less fussy to drive and if larger cylinder bores had been used would have made the loco more powerful than it's 3.5" gauge cousins. But nostalgia prevailed and the engine will almost certainly be fitted with my fathers boiler which is nearing completion.

The Little Puffers Way !

By Tim Griffiths

Between Boutflower Road and Battersea Rise, there is a short footpath, which runs alongside the railway just to the west of Clapham Junction, as the London Brighton and South Coast Railway diverges from the London and South Western Railway. This offers a magnificent view of the railway, even from a push chair. This was some of my early recollections of Trains, never a dull moment. My mother told me I was amused for hours, I have no real recollection of how long we stayed there, until later in life at about three years old, and always wanting to go there.

The years went by (all of two or three) and I was able to get there by myself, this included crossing a main road, using the traffic lights of course, something not taught to the youngsters of today. I would stand there waiting for the Brighton Belle, a most magnificent train, some would argue not really a train as there was no Steam Engine, but I was used to seeing electric trains as these were the majority of what we saw from the back of our house. Whatever the time of the day many trains of different vintages would pass by, latterly some good books have come onto the market, which have rekindled my memories of the various forms these trains took, and their heritage, much of which has been lost, mostly in favour of building replica or New Build steam locos. I do not disapprove of this where a significant omission in preservation has been missed, as this can be good for posterity. There is more to a train than the locomotive, as wonderful as it may be, I still get a thrill when I see a preserved loco I have not seen before, but there is a massive lack of preserved rolling stock from before 1947, that can be viewed easily by the public.

Electric stock is what I was brought up on out of the bedroom window first thing in the morning, to the Little Puffers Way. This name probably came from my mother's childhood, when electric trains were in their infancy. (She grew up with two older brothers, in this area). There were however still quite a few steam trains in my childhood, mostly on the South Western, bearing in mind we are talking about 1947 onward. Some goods still managed to get along the Brighton Line even during the day. The line behind our house was the line to Reading and Windsor and Eton, this included the transfer freights from Feltham to Hither Green transfer goods. It was only fairly recently that I realised which locos I had been seeing and on occasions heard. These being Class 700, otherwise known as Black Motors, I do not know where this name came from, however I do remember hearing this tremendous clanking noise from time to time, I now appreciate this would have been a big end, quite recognisable to the trained ear. Then of course there was the signal stop, the clanking of the buffers as the train reversed to close the couplings ready for the off, and when the stick was "OFF", the occasional non-pegged hand brake bouncing along merrily. Of course the signals were colour light, 4 aspect, I did not see the front regularly until I went to secondary school. Here my journey was supposed to be by bus, the most direct route, but I was not eligible for free travel by about 100 yards. However the buses were full by the time they got to the stop I was trying to use, so an alternative route had to be found. By bus this meant going into Putney and getting a bus up Putney Hill, since the train fare could be purchased at Privilege Rate, as my father worked on the railway, it would be cheaper than the bus fare.

So to Clapham Junction every school day morning, Platform 6 and off to Putney, via Wandsworth Town to Putney, up Putney Hill by bus, the return journey in the afternoon.

There were some clowns that travelled this way, causing the odd

incident, like opening a door on the wrong side into the path of the fast train passing as our train was about to leave, not a pretty sight, we now understand why sliding doors are safer. I did feel for the Driver of the fast train, as this could well have been a person as well as the door.

So much more to tell Oh I'll save it for another day.

OF SHIPS AND THINGS BY FIREMAN M.N. RETIRED

The company was known as Zip French Cleaners, I don't think it was French but that was the name. There were about 200 shops in London and a 60-mile radius also another 150 shops in the midlands with a buffer depot at Luton. There was a fleet of vans on the go all day bringing dirty garments (a smart name for clothes) in and taking cleaned ones back to the shops, at all hours of the day and night with bigger lorries doing the same from Luton.

Apart from some specialized processes the main cleaning was done in big machines like giant washing machines using white spirit, which was pumped through them. This liquid was then passed through a centrifuge, which cleaned it up. The end product of this was a thick black sludge. A night shift did the bulk of this work. The black sludge was tipped onto the coal heap at the back of the stokehold along with all sorts of rubbish from the cleaning gangs.

The lighting was very dim, this was so that when the fire doors were opened you had a good sight of the fire, this was fine except for one thing, the black sludge set into hard lumps and disguised itself as coal, so by not being able to see it properly you shovelled a fair amount of it onto the fire which then produced a lot of thick black smoke. The down side of this was that the Borough of Wembley was one of the newfangled clean air zones and I was only allowed to make smoke for 5 minutes in any hour. This wasn't helped by the fact that the coal! (for the want of a better description) was 20,000 tons they had bought from a British Railways dump near Southampton, which explained the stones I had found in it, track ballast.

One other thing to make life a bed of roses, the boiler man before me had left under a cloud, I never found out what, but he was not a happy man and he lived just across the road from the works and having time on his hands he kept watch on the top of the chimney, he timed any smoke and if it added up to more than five minutes in the hour he phoned the council, As the council had had a complaint from a member of the public they were bound by law to investigate and so about three times a day a van drew up and I had a visit from the inspector. This was fine, for the chap was an ex royal navy stoker and he understood the problem and also what matey across the road was up to, so we sat down and put the world to rights over a cup of tea and a fag and as he said, it got him out of the office.

I found out what the problem was with the injector, the smoke watcher had sabotaged it by hammering a 6 inch nail down into the body. I can just imagine what he was like to live with.

29



The cavalcade



A GWR Prairie tank No 5517 built by Tony Newberry at Coate Water Miniature Railway