Association of Shrewsbury Railway Modellers

JOURNAL

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Editorial

Unfinished projects. Two words that when put together and mentioned to anyone even remotely interested in railway modelling can cause eyes to roll heavenward, quiet tutting, and the deepest of sighs. We all have them, don't we? For the lucky few it might only be a part-built kit, returned to the box when the instructions were too vague or the parts didn't fit. Perhaps something went horribly wrong (as it so easily does) and you just couldn't muster the courage to pick it apart and start again. For others it might be a baseboard, track laid, wired up, mind changed, and then the whole lot is set aside whilst something more inspiring is tackled. However, many of us, perhaps even most have more than our fair share of incomplete models and projects, ideas that looked good on paper, looked good in the box, were even going quite well but now remain unfinished for many different reasons.

I certainly fall into the latter category and it's a bit gloomy isn't it? It is so very easy to feel inspired to make a start on something with every intention of seeing it through to completion. We are bombarded on a daily basis with temptation, a new kit or a recently discovered book containing a wealth of period photographs of a charming little branch line that would 'make a lovely model'. I was going to write,' we've all been there' but I suspect we are all there right now. There would be little point in listing a few examples of some of my own half-finished, or half-started projects, it won't get them built, however a list can be a good thing, a very good thing.

The dissatisfaction of failing to finish a project is unpleasant to say the least but the satisfaction of ticking something off a list of things to do is a great feeling. I suggest you do not attempt to make a list of all the unfinished projects lurking in a cupboard, under the layout, or in a drawer, it will only make things worse. Instead, pull out one uncompleted model, nothing too ambitious just a small project, lay out all the parts and write a list not necessarily in order, of each small task required to bring that model to completion. It might be a long list but don't let that put you off, it simply means you have taken every small task into consideration and that's a good thing. Check that you have what you need to complete each small task and if there's something missing then a sub list will help you gather the bits, tools, paint, glue, whatever you need for the job.

Then set aside some time to make a start, ticking each job off the list as you go, remembering that most, if not all those tasks only ever require doing once. Before long you may well find you're in the home straight with the finish in sight and let's face it, there's nothing more satisfying than a completed model being introduced to the layout or the display case. Good luck!

As a footnote, the Coalbrookdale Modelling Day is a very useful opportunity to tackle an unfinished project in the company of like-minded souls who may also be in the same boat, the sharing of solutions to tricky modelling conundrums can help enormously. The next modelling day is Saturday 27th September, please do contact your editor/chairman if you would like to join us.

Thanks to all the contributors to this edition of the Journal, another bumper edition. This year's remaining Journal will be published in December 2025. Please ensure you have all contributions to me by the last week in November. Deadlines for Journals in 2026 will be the last week in February, May, August, and November. To assist with my task of editing, please could contributions be in the form of a simple email or an attached Word document with all images as separate jpegs (not embedded in the text). If you have a lot to send and/or the file size is large, then file transfer tools such as WeTransfer.com are free and easy to use and save clogging up the email system. Thank you.

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The Christmas quiz is fast approaching and if anyone has suggestions for questions that could be incorporated, please contact Stephen Duffell at sandgduffell7@gmail.com. asap.

Coalbrookdale Modelling Day

The June Coalbrookdale Modelling Day was a popular success. We were even treated to some very enjoyable live music from a small celebration happening across the road and the weather was roasting so all the doors and windows were open to ensure a good flow through of air. I can't promise the same for September, but it will be held on Saturday 27th 2025. The usual free tea, coffee, and cake will be available. Please contact your editor if you would like to take part.

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Coalbrookdale Modelling Day photos by Sam Ryan

A runaway train, a SPAD, and some idiots.

I had removed all the diesels and MU's from my [unfinished] N gauge layout and was progressively replacing these with eras 4 and 5 stock, albeit with a slightly poetic/artistic licence. The layout is based on a folded figure of eight configuration which necessitates the main lines to climb a 1 in 50 gradient. This did not prove to be a problem for either the heavy diesels or multiple units; in fact the Kato 12-car Eurostars with only one motor car found no problem with this, racing along at a scale speed of 186mph., but that is to be expected of Kato. Steam locomotives, however, vary considerably in their ability to handle inclines, and I was therefore actively engaged in conducting 'climbing trials', noting how many coaches or wagons each loco could pull without slipping. (As with Talerddig perhaps the sanders might have been blocked on some of the locomotives). As the train leaves the up platform it soon has to contend with a slight curve leading to the 1 in 50, and so slow speed trials were necessary, which was proving quite time-consuming adding or subtracting vehicles.

I had included in the manifest of locomotives the "Twins", the pioneering main-line diesel electric locomotives numbered 10000 and 10001. As a welcome break from the climbing trials, I was running no. 10000 hauling a 9 coach train on the down main. This had been running for an hour or so without a hiccough while I busied myself having fun shunting in the yard. It was nearing dinner time and so I

switched the train into the loop for platform 9. Fortunately, I had switched the points at each end, but the platform starter was on.

Fortunate, because as the train approached the loop I was unable to slow it. In fact, it continued on through the station at about 70mph. On reflection, I should have recorded a SPAD, but I was otherwise occupied. I tried to adjust the regulator on the ZTC handheld to see if I could match the speed and re-capture it, but without success. In desperation I continued to increase the speed in a hopeless effort to capture the train, but all this did was exactly that - increased the speed and making a worrying situation desperate. It was now travelling at well above line speed and although the road ahead was clear I feared disaster as it approached a crossover which led to where a team of painters was engaged in painting a footbridge. These idiots were working off ladders, completely ignoring Health and Safety, and they were lucky the wind generated by the passing train did not result in their downfall. Perhaps that is an unfair criticism, since, as the layout is now representing eras 4 and 5 (1948 to 1964), the standard working practices of the day were in blissful ignorance of the yet to be enacted 1974 Act.

Something had to be done, and quickly. As the regulator had no effect I moved the reverser to the closed position, but still without a result. Things were getting serious, although so far it had remained on the track. As we all know, just because a train negotiates a circuit once or twice without mishap, it does not mean it will continue as such ad infinitum. And so I slung it into reverse - this most certainly did have an effect! As per the CV4 deceleration setting, the train slowed to a brief stop, and then promptly accelerated in reverse, gathering momentum propelling the 9 coaches faster than should ever be contemplated.

At this point I pulled the plug!

I have had the odd runaway before, although nothing this dramatic, and had learned that the answer was to fit a 'snubber' in the DCC system. I had therefore fitted one at the end of each bus, and up to now there had been no further problems, but clearly they did not quite work as planned on this occasion. Why not? I have no idea. Answers on a postcard please.

Michael Bennet

Modelling Bodmer's balanced locomotive

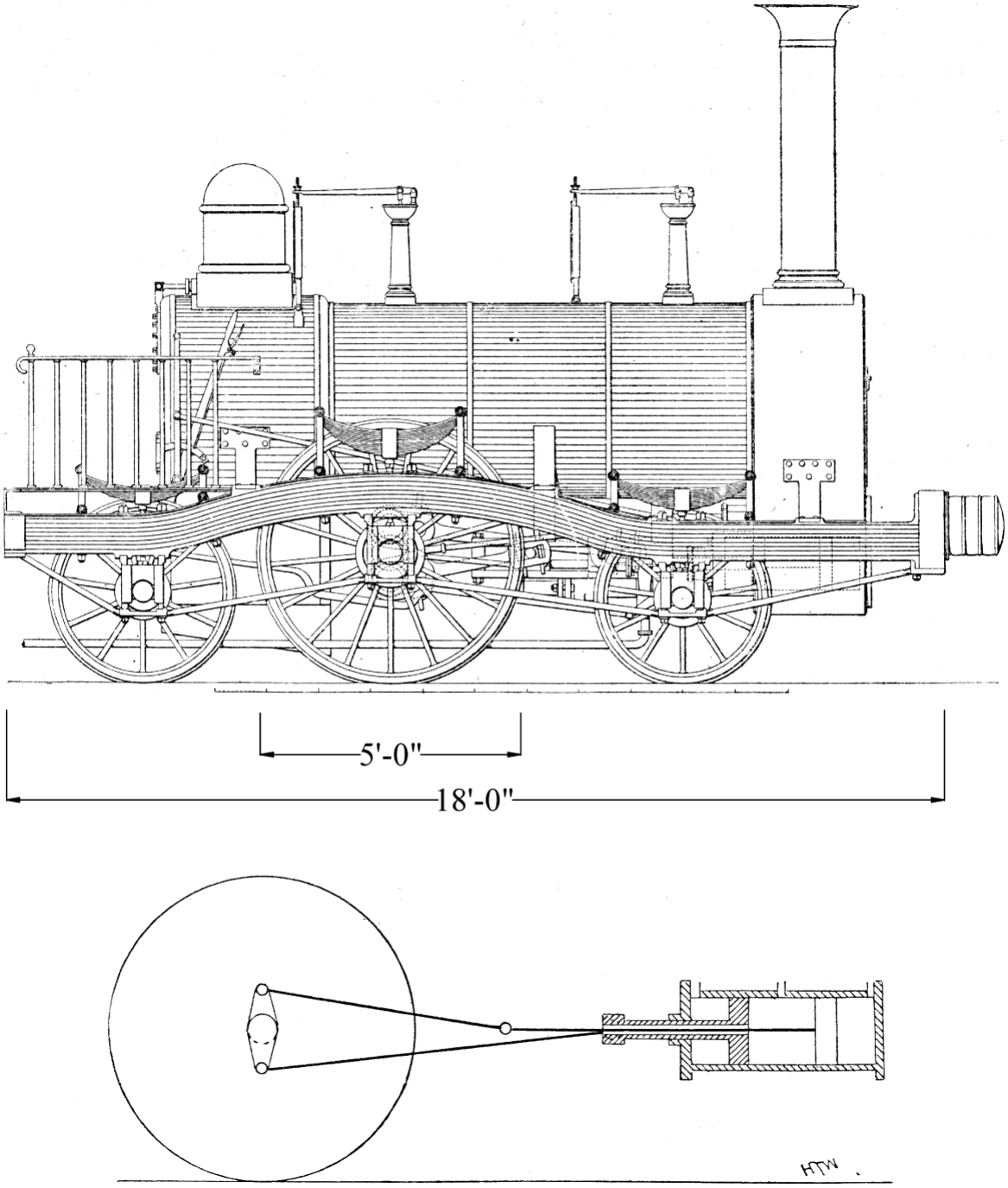
The following account is extracted from an article I co-authored with Ian White for the Historical Model Railway Society (HMRS) Journal several years ago. As well as producing a fine 4mm scale model of the locomotive 'Seaford' (the rebuilt form of my model), Ian provided a thorough study of Johann Georg Bodmer 1786-1864, a fascinating character born in Zurich, Switzerland.

Apprenticed as a millwright, his inventions were many and varied, locomotives being only a small part of his repertoire. In the early 1820s the highly skilled engineer moved to Lancashire establishing works in Manchester and Bolton, anglicising his name to John George Bodmer. He travelled frequently between England and Switzerland and designed his first railway locomotive in 1834 although it is doubtful it was ever built. His extraordinary inventiveness is exemplified in his two locomotives constructed for the South Brighton, Croydon, and Dover Joint Committee in 1842 featuring twin piston cylinders, an extraordinary arrangement whereby the two connecting rods of each piston ran in the same direction, one passing through the centre of the other. This was an attempt to balance the reciprocating masses prior to the introduction by W. Fernihough in 1845 of driving wheel balance weights.

In 1842 the South Eastern and London & Croydon Railway (SER, LCR) companies had joined forces to pool their locomotive, carriage and wagon stock, and in 1844 they were joined by the London & Brighton Railway (LBR). In 1844 the Joint Committee placed an order for two of Bodmer's locomotives at £2,100 each, and they were his Nos 2 and 3, built in his own works in Manchester, and delivered in July and December of 1845. The Joint Committee allocated them Nos 123 and 124, but the Committee was also disbanded during 1845, which resulted in No.123 being allocated to the SER and No.124 to the LBR. The SER locomotive had a very short life, having been derailed at Pluckley while hauling a Dover train on 23rd May 1846, killing the driver. At the inquiry attempts were made to place the blame on the unusual construction of the locomotive, but it was found that the train had been deliberately derailed when blocks of stone had been placed on the tracks by a gang of boys. It had little or no subsequent use, there being one report that repair was refused [11] and another that it was set to work again after modifications by both Bodmer and the SER [2]. There is agreement that it went into store at Ashford soon after the accident and remained there until 1880 when it was

broken up. When the LBR and the LCR amalgamated in 1846 to form the London, Brighton and South Coast Railway (LB&SCR) No.124 would still have been identical to the SER locomotive with 5ft 6ins drivers and its original tender, which had a form of sledge brake that Bodmer had patented in 1942. It had a long life and went through a series of rebuilds.

For a more in depth look at Bodmer and his engineering I recommend readers seek out HMRS Journal Vol.23, Nos.11 and 12 which also contain a full explanation of Ian's excellent 'Seaford'. For now, I will focus on my own 4mm scale version, London & Brighton Railway No.124.

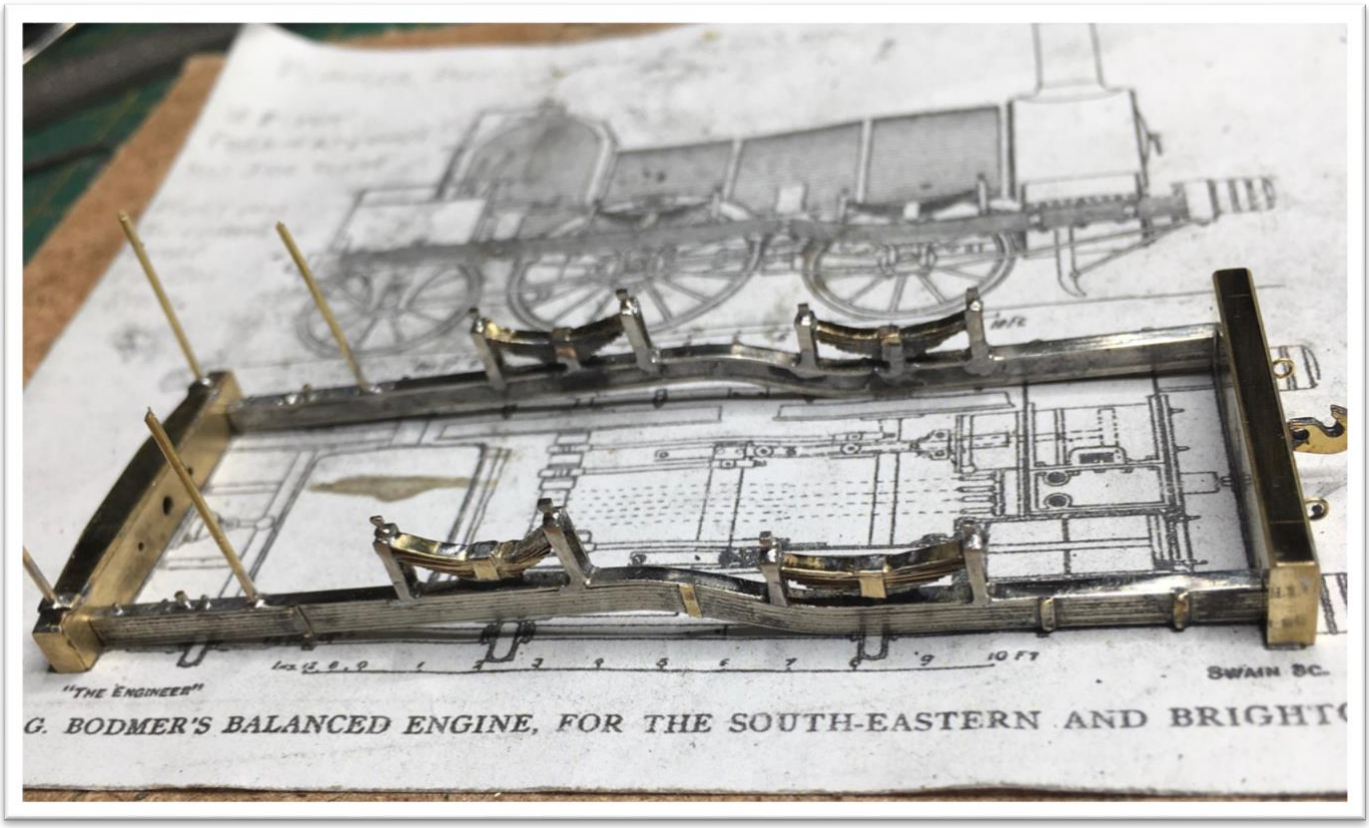


Bodmer's first locomotive design (probably not built) showing his distinctive horizontally laminated timber frames and the unusual double piston arrangement.

When one sets out to scratch build a locomotive, it is customary to start with the frames and if it is a coupled locomotive, the coupling rods, in order to ensure axle alignment. The following step is usually the footplate, a rectangular sheet with the centre removed and further cut outs to accommodate the wheels. From this sturdy foundation the rest of the locomotive can be built using this reliable datum point to ensure everything is square and true. However, modelling early locomotives, particularly those constructed in the late 1830 to mid 1840 period is far more complicated. There is usually no footplate to speak of other than the small area behind the firebox for

the crew. Inside frames are not always present and any outside frames are often complex or insubstantial. In the case of Bodmer's balanced locomotive further challenges arise from the fact that owing to their unusual if not unique construction of a series of horizontally laminated strips, the depth of these frames is minimal. Therefore, construction in model form presents difficulties before one has even begun. I am of the opinion that these frames were a week point and were replaced fairly early in the locomotive's life.

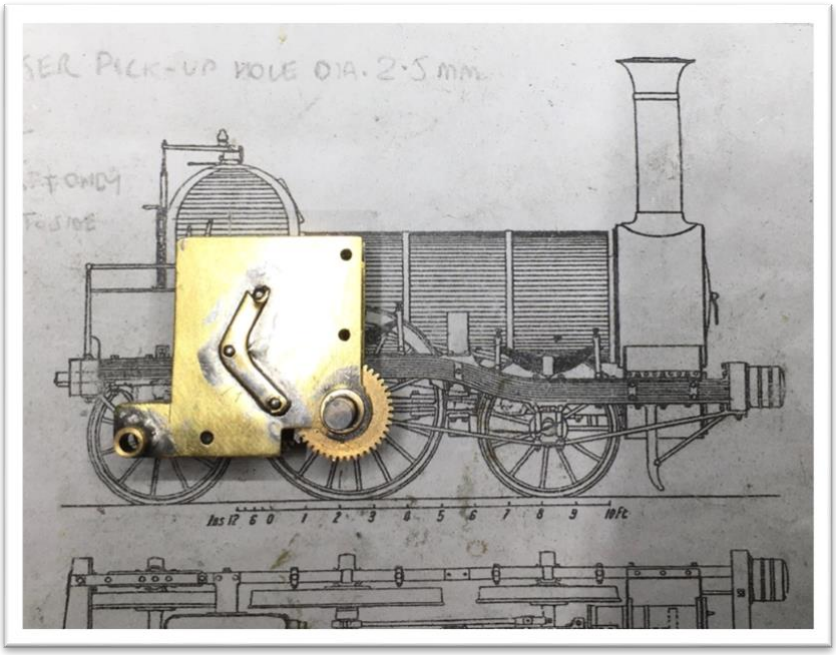
Having said that, I decided the only place to start had to be the outside frames. In order to best represent the laminations, I chose to make them in much the same way as Bodmer did. Strips of nickel silver were first soldered together at one end and then the 'bunch' of strips was carefully soldered and bent to follow the profile of the frames on a scaled drawing. The process was repeated for the opposite side and these two frames placed together and checked carefully to ensure they matched. Any discrepancy at this point would be impossible to surmount later on. The next stage was to fabricate and solder on all the springs, plates and bolt head details. Having the two frames separate at this point was very useful in determining the matching position of all the details, particularly of axleboxes and springs. The springs themselves were laminated together from fine strips of brass foil and contain twelve leaves each. The next step was to fabricate the buffer beam and drag beam. These were made as a fold-up unit, the front, top and rear plus two ends scored and cut from a sheet of 10thou brass in the manner of a flattened cardboard box. In both cases the underside was left open, and the ends flooded with solder forming a strong but essentially hollow unit to make life easier for drilling out and fitting. Assembly of the beams and frames followed, great care had to be taken to ensure everything was level and square, a process made difficult by the sweeping curve of the frames meaning the buffer beam and drag beam are at different heights.



The assembled frames overlaid on the scaled drawing. The laminations of the frames and springs can be seen clearly. The buffer beam appears hollow from the top, but this is merely a trick of the light. The upright cab side stanchions remain to be cut to length.

Considering the generous proportions of the tender it was tempting to fit an independent drive unit within, circumventing the complications of trying to shoehorn a motor and gearbox inside the locomotive. However, the boiler diameter was just about generous enough to accommodate a Portescap unit which I had 'in stock', so the gearbox was dismantled, and the gears rearranged to suit. A new gearbox was constructed to hold the driving and trailing axles, the leading wheelset being fixed in the frames. The gearbox/motor unit was then arranged to pivot on top creating a three-legged stool. Whilst this approach is unconventional, I find it a very effective way of keeping all the wheels in contact with the track and the load applied to the drive system can be very easily managed by

hanging the tender from the back of the loco and counterbalancing it by adding weight inside the smokebox.

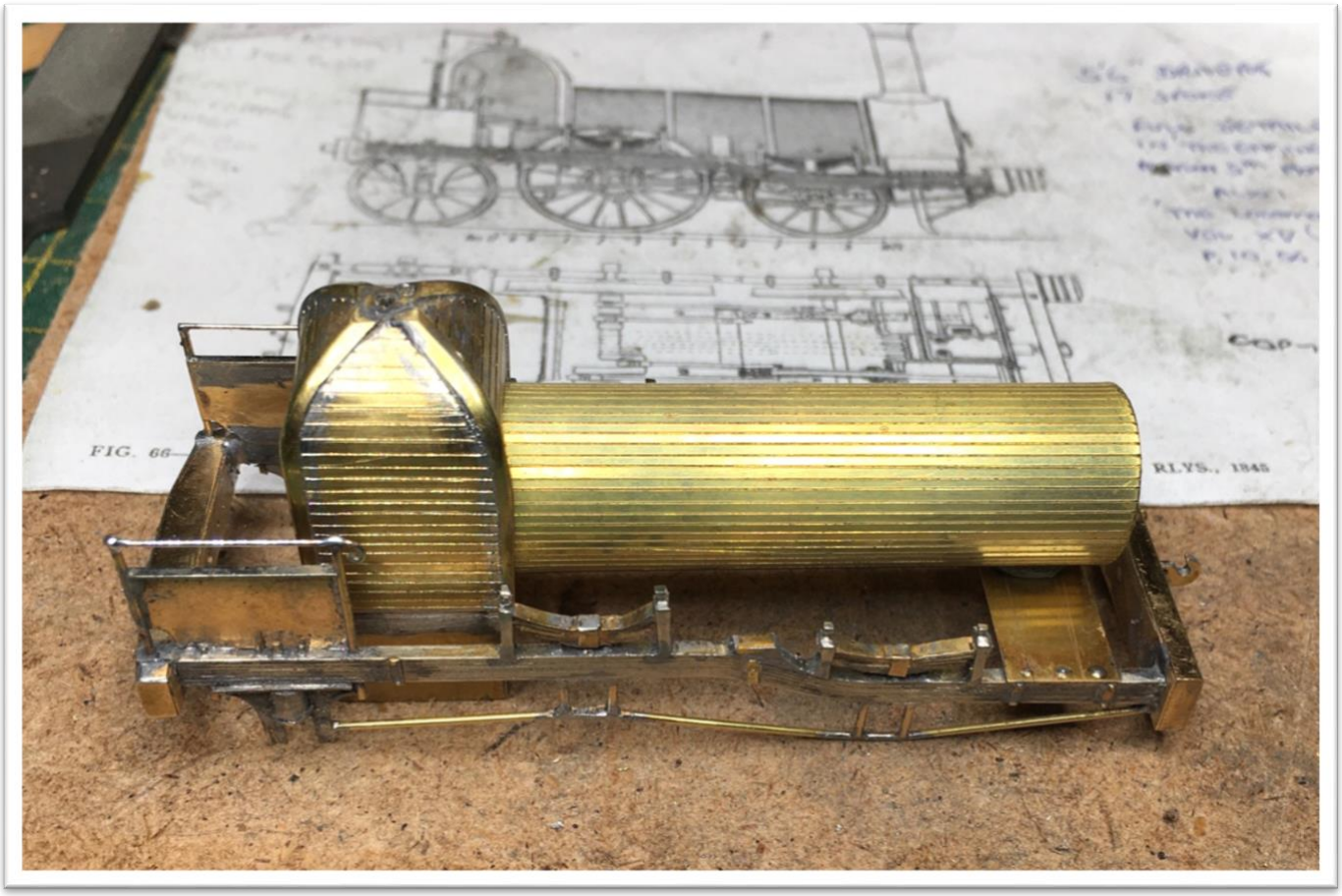


A new gearbox containing the Portescap gears. The L shaped strips on the side are retainers to keep the short gear shafts in place.

The boiler was cut from a sheet of brass, scored to represent the wooden lagging strips, annealed, rolled and the seam soldered. The same method was employed for the haycock firebox, but each side was cut as a pointed arch piece and the top half rolled over and soldered. Fine strips of 5thou brass were cut, creased and soldered to the corner seams of the haycock, starting at the base and working up to the top, continually rubbing and pressing the brass to the curve of the edge. This was by far the worst job of the entire build, a very difficult slow process for which there is no easy solution. Ian and I decided that the firebox backhead on both our models should be the same and following a little research we settled on an example from the GWR Broad Gauge: Lynx, a Sharp Roberts 2-2-2.

The exposed section of the firebox was cut away after assembly and a new piece of 10thou brass overlaid with brass foil pricked from the back to represent the many rivets was soldered in place.

A smokebox was formed from a layer of 10thou brass followed by a further layer of 5thou with rivets pressed out from the back and once soldered to the boiler, a chimney was lathe turned from copper and fitted. Since the boiler had to be removeable in order to access the motor I also soldered in a 12BA nut at the base which could take a bolt through the smokebox saddle. A tricky process followed in securing the firebox to the outside frames. At this stage it was only held in position by the two support brackets receiving a little help from the leading edge of the footplate. Getting it to sit square and perfectly upright with so little to go on was extremely trying. However once in position the locomotive structure was essentially complete.

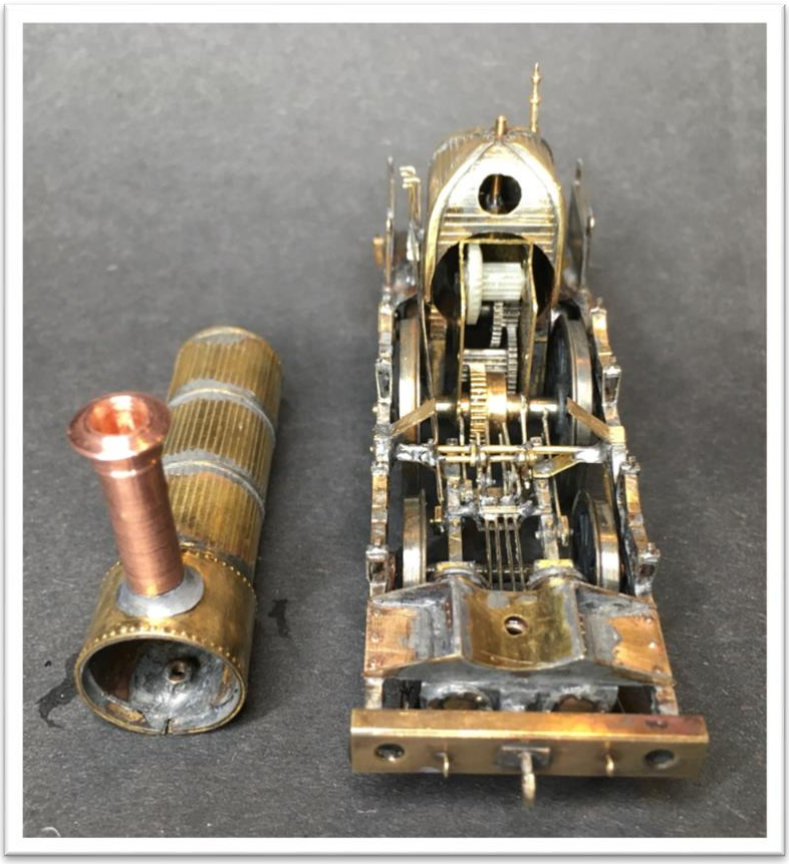


Above: A trial assembly with the newly rolled boiler.

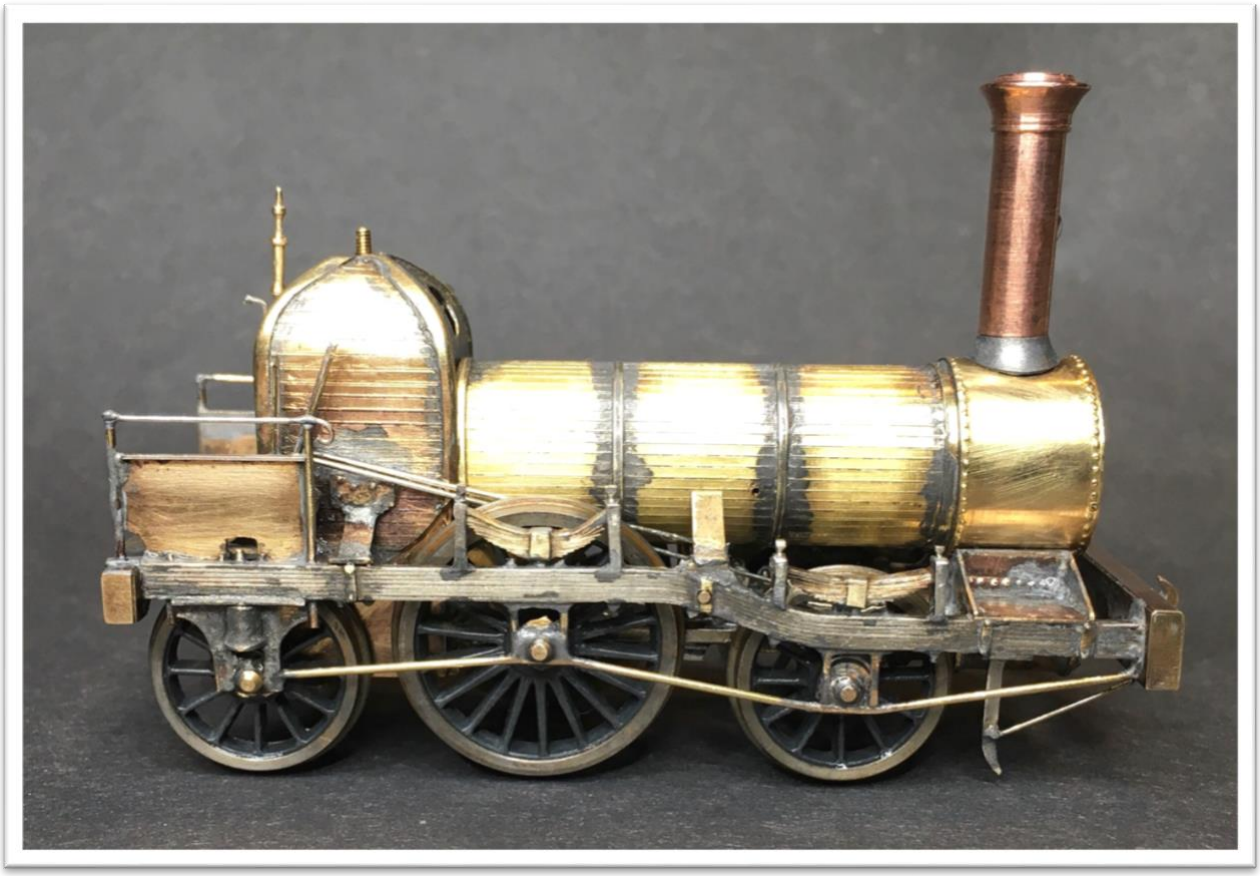
Right: The base of the turned copper chimney is a white metal casting which is easier to shape around the curve of the smokebox.

Although the area in between the frames is not immediately apparent to the viewer I decided to fabricate the motion as closely as was practicable to Bodmer's unique design. This involved a combination of nickel silver strip and rod, and elements of a useful generic inside motion etch provided by fellow Brighton Circle member Mike Waldron. A few compromises were required in order to allow for the driving axle and gearbox, but the visible parts give an impression of Bodmer's complex motion. Splashers for the leading and driving wheels were fabricated from thin styrene. The lack of space, particularly for the driving wheels meant that the choice of material was important to avoid any short circuit from the tyres occasionally contacting the splashers. These splashers were fitted after the loco had received its first coat of paint.

Left: An assortment of detail from the footplate. Whilst the locomotive appears to have two reversing levers, one was the control for the variable expansion gear.

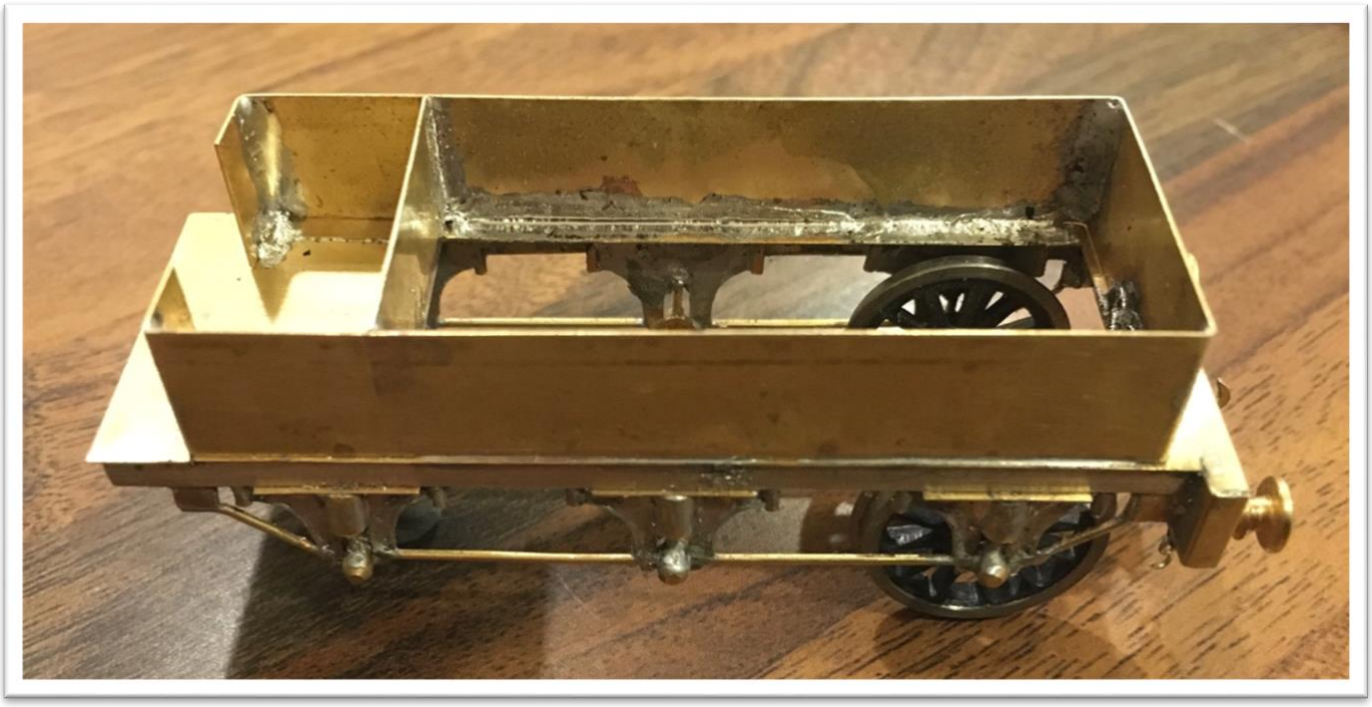


Right: The tight fit of the gearbox is apparent here. The inspection hole in the front of the haycock was covered by a turned brass disc shaped to the curve of the cladding.



The assembled loco awaiting a coat of primer.

After adding final details, the loco was washed and etch primed in preparation for painting. Attention was now turned to the tender. I had previously made a start on the frames since there was some economy to be had in cutting and shaping the hornguides as a set. The tender and the trailing axle of the loco share the same design which took some considerable effort to fabricate using brass sheet, tube, strip and rod. By contrast the body of the tender took shape satisfyingly quickly. This was cut from one long strip and folded appropriately. The curved valance was again formed from strip, annealed and bent around a hard stainless-steel rod to form the curve before cutting to length and soldering in place. A top of 10thou brass was added and at this point I had to consider whether I would add the control mechanism for the boiler feed pumps which were contained in the forward sections either side of the coke space. I am still undecided but since the model is now essentially complete, returning to add these at a later date seems highly unlikely. The rear axle is fixed and the front two float on a lightly weighted bogie. The majority of the tender therefore hangs from the back of the loco and its effect in providing extra traction can be adjusted by adding or removing the amount of white metal coke. The massive brake blocks were cut from black styrene and glued to the brass strip hangers. Despite being filed back for clearance they still seem to dominate the space between the wheels and underline the substantial, perhaps excessive breaking power of Bodmer's design. The tender was then made ready for etch priming followed by a coat of matt black, both from Halfords rattle cans which I find ideal for the purpose.



Once the outside frames of the tender had been assembled, the rest of the structure was very straightforward. One of the stubby turned brass buffers can just be seen.

Both loco and tender were painted with Humbrol enamels with assorted shades of brown applied to the boiler and firebox to represent the polished mahogany lagging. Lining was applied using some transfers more suited to Stroudley locomotives and then there followed a significant upset. In his summary of early SER locomotive liveries in Invicta vol.33, Peter Tangye stated that the Bodmers were turned out in dark blue with red and white lining. I checked my copy of Bradley's Locomotives of the South Eastern Railway which confirmed dark blue but gave no details of the lining. I therefore pressed ahead with red and white lining which took several hours of immense concentration but gave very satisfactory results. With hindsight I should also have checked his book on the locomotives of the London, Brighton & South Coast Railway wherein he states that the lining was in fact red and gold. I must thank fellow Brighton Circle members Simon Turner for moral support and Ian White for coming to the rescue with a selection of gold lining transfers which were then trimmed and applied over the white lines. The final result is a representation of J. G. Bodmer's balanced locomotive no.124 as it might have appeared upon delivery. Personally I think I preferred the red and white lining but such is life.

With a pinch of artistic licence regarding dates, the completed loco with its fine 3D printed crew courtesy of ModelU has been captured near the Upper Grange Road Bridge on my own layout Bricklayers Arms set in the summer of 1845.

A vignette of the passing engine from the trackside.

Chris Cox

Why the Midland and South Western Junction railway?

What makes one chose a particular line to model? There is no one specific reason but a multiple series of events. I was brought up in Tooting, southwest London, where my affiliations were between the London & South Western Railway (LSWR) and the London Brighton and South Coast Railway (LBSCR). Model railways were care of Meccano Ltd, and I had a green Duchess of Monrose, whist my best friend had the red Duchess of Athol. The tin plate track was later replaced by 2 rail Wrenn track, massively overscale and there were not many successes in running 2 rail locos. There were the train spotting days with attempts to "bunk" Nine Elms and Stewarts Lane sheds amongst others, and not always successfully. Railways then took a back seat until I qualified as a vet and started my first job in a mixed country practice in Andover, Hampshire. Andover had a reputation for traffic jams, especially on summer weekends when it could take an hour to get through the town on the A303. The railway that ran from Andover Junction to Andover Town had closed a couple of years before my arrival, and when that was open, there was a level crossing to add to the delays. Travelling around the farms in the area there were various things that intrigued me about railways in the area. There was of course the level crossing at Andover town, but also the derelict station at Fullerton, south of Andover, with its junction heading north easterly to join the LSWR mainline at Whitchurch. Fullerton was on the Sprat & Winckle line, owned by the LSWR and running down to Southampton, and the Midland & South Western Railway (MSWJR) had running rights over the line. There was an extensive military presence on Salisbury Plain and this was served by a branch from Ludgershall to Tidworth. The MSWJR had a line that ran from Cheltenham to Andover Junction, it's trains continuing south at Andover to reach the coast at Southampton. For the most part it ran through sparsely populated areas, the major towns en-route were Swindon and Marlborough. In both these towns the MSWJR had to cross the Great Western Railway (GWR) and the GWR did all it could to hinder operations on the MSWJR. In it's attempt to avoid the GWR in Marlborough a new line was built through Savernake Forest, and only later did I realise why there were bridges in the forest when travelling south from Marlborough.

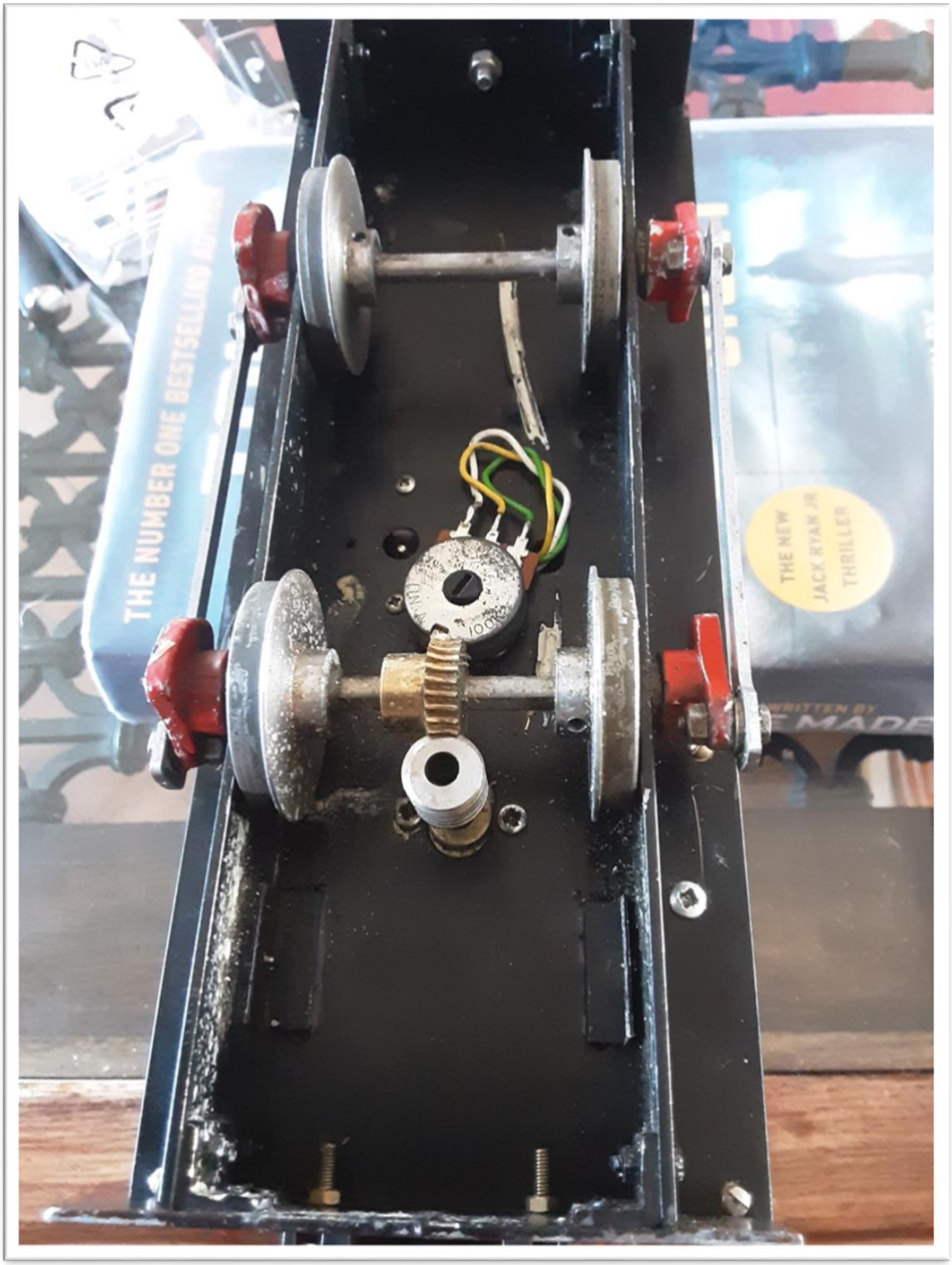
I was beginning to be hooked on creating something in model form and Colin Maggs book on the MSWJR was purchased in1967, and there was an Oakwood Press book by T B Sands that had appeared in 1959. I discovered there was a drawing in Model Railway News of MSWJR 0-6-0T number 13. A suitable candidate to try my hand at modelling. There was now a change of scene, and I was now working as a small animal vet in Auckland, New Zealand. It was around this time that the Model Railway Study group published their proposals for fine scale modelling called Protofour. They produced some wheels and other components sold by Studiolith, but their attitude to other modellers not agreeing to Protofour ideals led to the split and formation of Scalefour. I was not party to any of this and started construction using the wheels I had sent out from the UK of number 13. I started with a solid lump of brass and tried to drill 3 holes to take the axles, but with my limited equipment to hand this was a failure. Enter Mike Sharman with Flexichas, and here was a method of building a chassis that worked.

There now followed a gap year when we travelled through the Pacific and took the Overland route from Oz to Singapore, Malaysia, India, Nepal, Pakistan, Afghanistan, Iran, Turkey Greece and home. A brief spell in mixed veterinary practice convinced me that I was not suited to that life and I took a pathology job at Worcester Veterinary Investigation centre. Here in Worcester I fell in with a group of railway modellers, and they were working to EM standards. So, I changed gauge and my no 13 progressed slightly with an EM Flexichas chassis. In Worcester I started a layout based on the Tidworth branch from Ludgershall. The layout never got finished. There was limited time for railway modelling so I took advantage of weekend courses that provided instruction and the opportunity to do some modelling. Iain Rice operated in Dartmoor and Missenden Abbey had other weekends. Promotion followed to a senior research officers post at Weybridge Surrey, but living there was not to our liking so I ended up as a pathologist with ICI and lived in Macclesfield. The Macc club had a thriving P4 group so once again I changed track standards. Number 13 was still an UFO, and the original Studiolith wheels had cracked and were replaced by either Sharman or Alan Gibson. A house move to the Shrewsbury area followed and I continued working in Cheshire, but had time in a couple of evenings a week to do some modelling.

Finally after 40 years number 13 was finished.

Stephen Duffell.

Castell-y-Bere



I recently took my garden railway battery powered diesel locomotive back to its birth place in Friog, a suburb of Fairbourne. There, its original builder swapped the original nicad cells for more modern ni m hydride ones. The locomotive has recently benefitted at my own hands, careful adjustment of free play at the connecting rod to red axle counterweight bolts as shown above. Finally, I have been experimenting with lubricants for the worm drive to brass contrate gear. At present, I am using a ceramic based oil I also use on my bicycle chain.

The garden layout remains rudimentary, and any offers of advice would be warmly and gratefully accepted.

Philip Hamson.

Remembrance – a day in the life of a trainspotter

In amongst my modest collection of Ian Allan 'Combined Volumes' remains one of my logbooks.

Much of my logbook(s) content was created by numerous visits to the south end of Shrewsbury platform 4, where, with many others of a similar age, I spent many happy hours, or days, sat on the relay cabinets carefully collecting the arrivals, departures and, standing next to the kid with the binoculars, the escapees over the loop line. There is however one day that stands out from the crowd in my logbook – Saturday 27 April 1963.

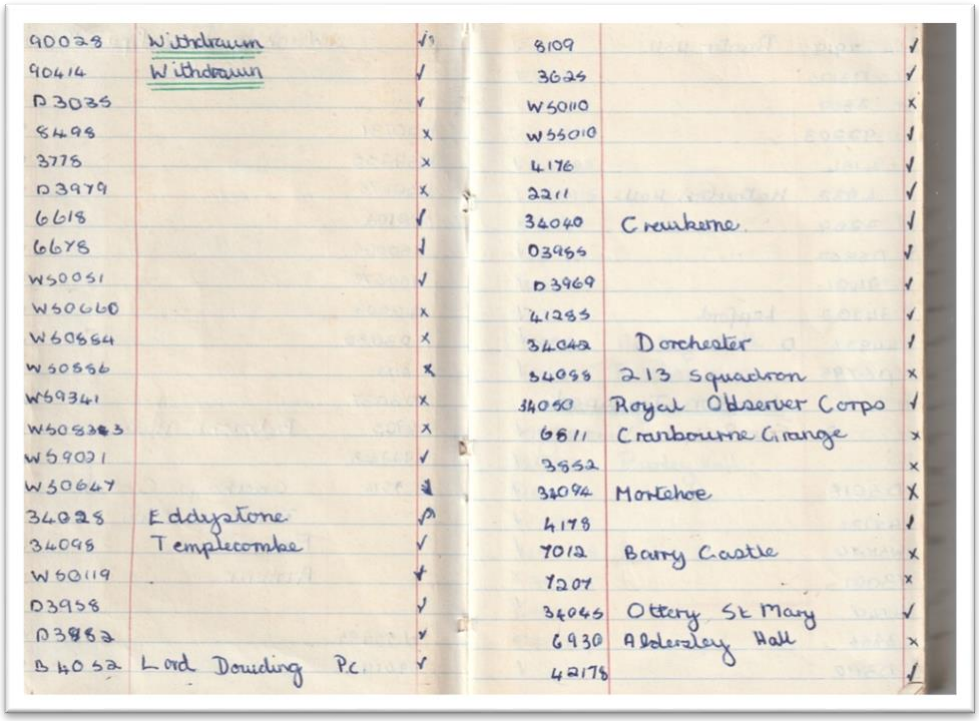
In those good old days, there was a practice of Shrewsbury schools chartering a train to take football mad kids to Wembley to watch one of that years 'Schoolboy Internationals', which on this day in 1963 was England vs Wales Schoolboys. Our route to Wembley was via Wolverhampton Low Level, Snow Hill, Moor Street and down the 'Chiltern Line' through Wycombe to Wembley. All was very normal until we passed through Moor Street, and hanging out of the window for a dose of soot and cinders, coming in the opposite direction was BR/SR WC Class 34028 Eddystone. What was this doing just south of Tyseley? By coincidence, there was an FA Cup Semi Final being held at Villa Park between Manchester United and Southampton. The Southern Region trains were carrying football supporters from Southampton.

Following the sight of Eddystone, others football specials passed, headed by the following:

34098 Templecombe
34052 Lord Dowding
34040 Crewkerne
34042 Dorchester
34088 213 Squadron
34050 Royal Observer Corps
34094 Mortehoe
34045 Ottery St Mary
34102 Lapford

All of these made the day exceptional for a 'rabid' trainspotter, and on reflection, what a tremendous service put on by BR/SR to have at least ten WC/BB Pacifics available for this service on this day.

Oh yes, the football result: England 4 Wales 1.



Graham Betts

A nice surprise

It was back in early January 1964 and yet another one of those unlovely dark, glum, damp cold and still days. It was really a day for staying cosy at home but the Christmas hols from School had become tedious and boring. My friend Tony, a train spotting pal, had come around to escape the tedium of his home and we plotted some spotting. Living in north London we had been spoilt, for the East Coast Main Line had been just a cycle ride away and all the great steeds like *Mallard* and *Scotsman* had been seen many times. Suddenly they had gone, diesels everywhere. Similarly, the equidistant Midland main line had lost all its main line steam so we had no choice but to do a London shed bash. This would involve buying a day Red Rover bus pass from the local tube station and then hang around freezing at bus stops till a bus came along. Dear mum saved the day when she surprised me and gave me some money and suggested we could go for a train ride and stay warm. Waterloo station was still a bastion for main line steam and on our local Northern Line, but we thought we would try Paddington. Steam in the shape of 84XX were still in charge of empty coaching stock and a Hall was on a parcel's trains. We had been to Paddington before and been very disappointed to see no main line steam trains and today seemed just the same. None the less thanks to mum we had enough to buy two child returns to Reading…for both of us it would be the very first time we had explored Great Western territory.

I bought our tickets and we boarded the first train that was fast to Reading which was conveniently waiting at Platform 1. Strolling through the carriages we finally reached the front end and since we still had a bit of time we stepped out to look what was on the front of our train…inevitably it was a *'diseasel',* as we called them. It was a diesel hydraulic, a Warship class my least favourite of them all. Back then there was still a sigma about anything to do with the 'Hun' and this contraption was a direct technological descendant from the DB V200 series….it even sounded nasty.

Being in the first carriage we were subject to a dose of diesel fumes as our Warship accelerated its steady path out past Royal Oak and Ladbroke Grove. Passing Old Oak and gaining speed we saw precious nothing from the main line as ECS coaching stock was in the way. The exit from London had been rapid, and looking back retrospectively was the Great Western the fastest route out of the Capital? Racing past Southall depot there was a glimpse of some steam but far too fast to grab numbers. It was all exciting stuff but all too soon we were slacking off at the far end of Sonning Cutting and minutes later the brakes were on for our stop at Reading. It was a railway hub and we were full of anticipation of what we might see here. It was a busy, dingy station and there were some other spotters about, no doubt local lads on school hols too. They seemed more interested in the diesels and had little to report about steam sightings. Coming into Reading I noticed a wisp of steam on the south of the station so we wandered over the Reading Southern station which was looking very tatty and deserted obviously seen better days and no trains in sight but the shape of a SR mogul in the distance. Time being precious we decided to bunk Reading shed and see what we could spot. It too seemed somewhat lifeless with no classes that we hadn't spotted on previous Red Rover trips to Old Oak and Southall except a couple of 43xx moguls which according to pics in magazines and books were usually associated with secondary routes in the far west. No super power steam to be seen anywhere and with the light fading rapidly we made our way back to the station.

If Reading station looked gloomy in daylight it was even bleaker at night. We made our way to the London bound platforms still hoping for something exciting to turn up. It was too dark and chilly to stand at the platform ends and we needed to think about getting back home for supper. There was a continuous flow of trains in both directions as the rush hour had begun. DMUs, Warships, Hymeks, the Ford Anglia of the rails, and some smart looking Westerns too, were in the railway bustle of the hour. A London express was due but we decided to give it a miss and sure enough another Warship grizzled by in front of us. There was another London train in twenty minutes so we decided to wait. We stood there under the canopy between retreats to the warmth of the waiting room. We hung on and when that following train arrived with yet another Warship I swayed Toni to just hang out for the next London express which wasn't too far behind. Finally the station tannoy heralded the imminent arrival of the express from Hereford and the train was for Paddington only. We peered into the west and could see some sort of train approaching us, but something was wrong. I couldn't see any diesel marker lights or head-code indicator and the cab light wasn't on. It grew bigger by the second and then confusion set in… just what's this? Suddenly there was a hissing and the dim station light caught on the copper chimney and elbow steam pipe and a large gleaming elegant nameplate announced the arrival of INCE CASTLE…. Wow! we just couldn't believe it. We hot footed it to the front of the train and bundled into the first carriage in sheer disbelief… we had only hoped to see a Castle, and now we were going ride behind one. The fireman stoked up the fire during the stop as we watched from the vestibule windows. The signal dropped to the 'off' position, the guard blew his shrill

whistle and waved his flag and the sharp shrill from the loco whistle pierced the sky. With a volcanic display of pyrotechnics 7034 gave the station a thrill of bravado … just look what steam can do. It was a very sure footed departure, none of that frantic slipping associated with Bulleid's Merchant Navys' and light Pacifics that were a regular source of amusement at London's Waterloo. On Brunel's flat as a billiard table Great Western our super Castle soon made forty, fifty and sixty then seventy as we raced into Sonning Cutting. In reality the Great Western isn't totally flat but a very gentle climb from London to Swindon and we were rolling downhill. Our heads were firmly fixed out of the window savouring every second. Now and again, we caught the firebox glow catching the trail of steam as the fireman checked his fire. Faster still we flashed through Twyford at a real rate of knots probably into the eighties and nineties. It must have looked awesome from the platform. Maidenhead, Taplow and Burnham flashed by in a glimpse and somewhere we overtook a DMU clattering along at speed on the slow. I wonder what passengers though when they saw the heads of two young boys leaning out the window on such a cold day. We had become immune to the blast of cold air …this was just too good to miss a second of it.

All too soon we arrived at Paddington and then we indulged in a bit of loco worship till Tony nudged me to remind me that we were over an hour late from the time we promised to be back. We thawed out on the warm tube train sort of elated by the experience and how lady luck had played her part in the day. It was the only time I was ever going to ride on a Great Western steam hauled express over GW metals… a treasured memory of a lifetime!

GWR Castle class No 7034 Ince Castle at Old Oak Common depot sometime in late 1964 and now looking rather unkempt. It was based at Gloucester Horton Road and was regarded by loco crews as the best of their Castles. It has lost its shed plate, and the number plate looks like a wooden substitute, however the nameplates and cabside plates still remain in situ. The Name of Ince Castle relates to a pseudo castle near Saltash in Cornwall. However, the name of Ince was regular featured in the railway press at the time as Ince Wagon Works near Wigan was breaking up steam locomotives including the LMS Duchess 46243 City of Lancaster. Ince Castle was withdrawn in 1965 and scrapped at Bird's Tremains of Bridgend.

Chris Kapolka

Operating 16mm Roundhouse Live Steam Locomotives in the Garden

One of the attractions of the model railway world is the multifarious areas covered in terms of scale, gauge, era, railway company, activity and skill set. The hobby is indeed a broad church catering for a wide range of interests and a notable development since the 1980s has been the growth of garden railways with the use of live steam locomotives promoted by the Association of 16mm Narrow Gauge Modellers. In this scale, where the use of 32mm track is most common, focus is predominantly on 2 foot gauge with modellers often building their own garden railways as well as constructing rolling stock from readily available kits. Most live steam locomotives, however, are purchased ready to run and much of the enjoyment of 16mm is actually operating live

steam in the garden which is both challenging but rewarding. This article explores techniques for the successful operation of three well known Roundhouse live steam locomotives in the garden.

A Doncaster based company, Roundhouse has gained an enviable reputation for producing UK manufactured locomotives which are very well built and run exceedingly well. The first locomotive to feature is a Lady Anne class locomotive which was my first purchase way back in 1988 and became a cornerstone of Roundhouse's success. An 0-6-0 freelance design it has plenty of weight at just over 3kg, a simplified Walschaerts valve gear as well as radio control operating direction and speed. The engine has been reboilered but the remainder is original, testimony to the longevity of live steam locos provided they are run properly and serviced as necessary.

0-6-0 Lady Anne locomotive with a train of Brandbright turn of the century style kit built coaches. The oily water on the engine is a result of the boiler being topped up whilst in steam but overfilled.

Before preparing to steam, I switch on the radio control transmitter and the loco receiver to check the controls are working. These can then be switched off until the engine is in steam. Lady Anne is a gas fired locomotive with a single fire tube through the boiler in which a gas burner is located. The first task is filling the gas tank and a standard butane cartridge with a special adapter is used. A full tank is quite obvious and denoted by escaping liquid gas. The engine is fitted with a displacement lubricator by which oil is taken to the cylinders by steam. A cap is removed from the top of the lubricator which is then filled with 220 grade steam oil, a drain screw at the bottom facilitating the process. Finally the boiler is filled completely with water by removing the safety valve but 30mm is then removed to allow space for steam raising. I use filtered water from a dehumidifier and filtered rainwater is also acceptable but not hard tap water. All working parts, including wheels and motion, need oiling for which motor oil is suitable.

Lighting involves turning the gas on low and putting a lighter to the chimney whereupon a pop should be heard as the gas ignites in the fire tube but these engines can be temperamental. It will not be long before the engine starts to become alive so watch the pressure gauge carefully. Roundhouse safety valves are set to blow at 40psi but their engines can run at a lower pressure such as 30psi so once that is reached, switch on the radio control

and attempts can be made to move the engine by gently opening the regulator and giving short bursts in forward and reverse gear. Hot water and oil can eject at this stage so a towel over the engine is useful and leaning over the locomotive is a no. Initially with a full boiler and water in the pipes and cylinders, priming can make the engine jerky, but soon the engine is moving smoothly and it is time to couple up to a train, these engines working best with a decent trailing load.

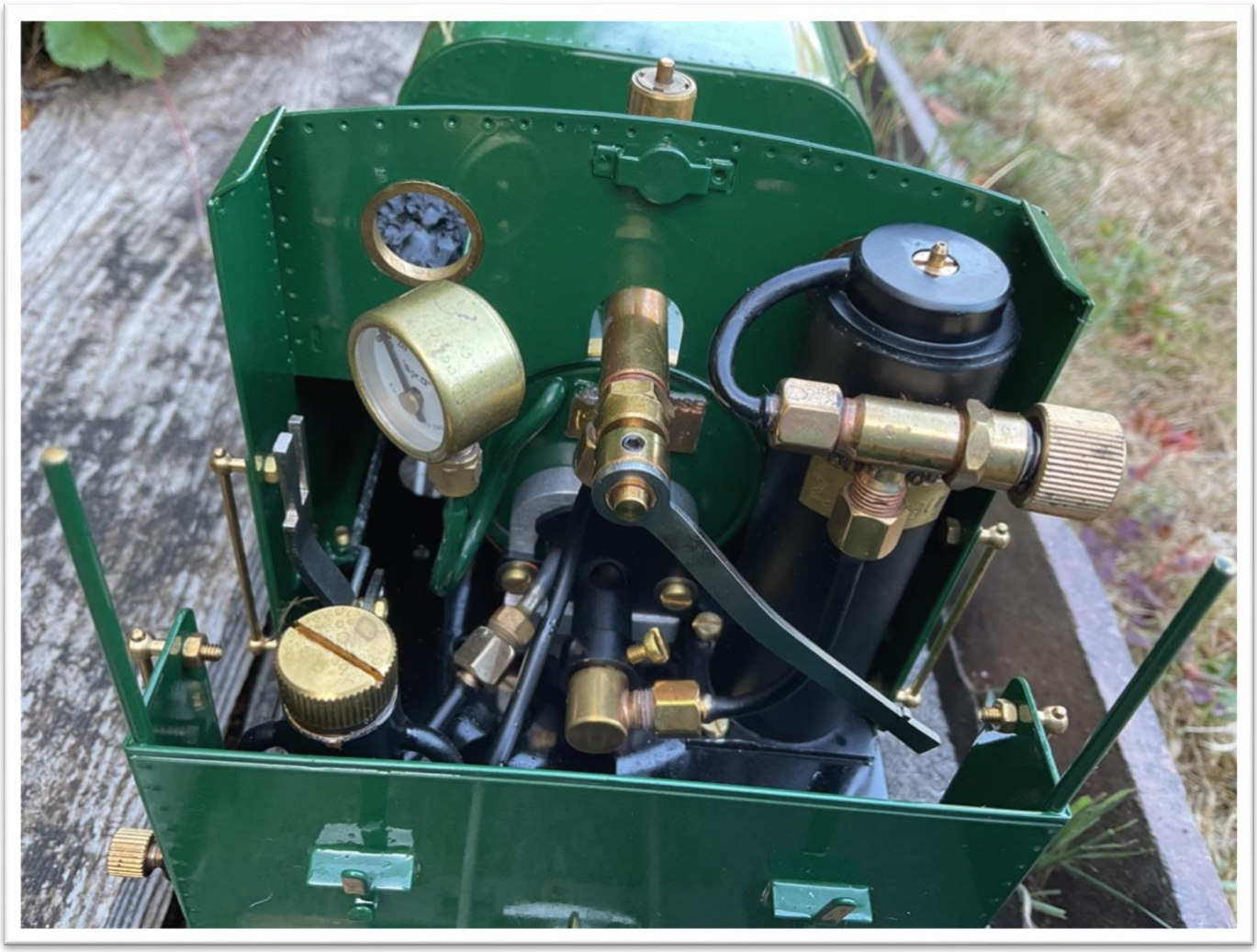
Careful gas control is crucial to effective 16mm live steam running. Keeping the gas control turned down helps to avoid the safety valve blowing off excessively which will reduce the engine's duration and also increase the chance of water running out before the gas. Another feature of good enginemanship at this level is to run at realistic speeds, imitating real narrow gauge engines which typically operate at say 10 to 25mph, Unfortunately 16mm locomotives can run very fast, so care is needed using the regulator. Lady Anne is generally a well behaved locomotive and can run round my 50 yard undulating circuit with little alteration to the regulator setting. Of course with radio control fitted there is a lot of flexibility, for example, in terms of acceleration and deceleration which allows authentic station stops and also shunting. Running time is about 20 minutes but the boiler can be topped up whilst in steam using a special water bottle and valve fitted under the dome. Although gas should run out before water, this is not necessarily the case. It is very important to monitor the locomotive, particularly towards the end of a run, as there is no water level gauge. If the locomotive slows, steam disappears and the pressure gauge drops whilst the fire can still be heard, turn off the gas!

The next locomotive to be looked at is Dylan which was made in 2023, a modernised version of a model which Roundhouse made alongside Lady Anne in the early 1980s. This saddle tank is an 0-4-0, a very good wheel arrangement for garden railways, being stable with plenty of weight on the wheels which can also cope with indifferent track. Preparations for steaming Dylan are similar to Lady Anne except that this is a manual version. Manual control does not have the versatility of radio but once set up and running at a suitable speed, there is more time to watch and enjoy the train instead of working the transmitter. For manual working, Dylan has a lever for forward and reverse and also a long regulator for speed but no notching up. These parts, like many on live steam locomotives get hot, so care is needed and gloves are useful.

Roundhouse's 40th Anniversary Limited Edition of their 0-4-0 Dylan locomotive. The wagons are all wooden built kits by Brandbright except the big box van which is Merlin and dates from the early 1980s.

Dylan and Lady Anne both have a form of superheating, the steam circuit going from the regulator valve to the lubricator and then through the fire tube to the cylinders. Starting Dylan is similar to Lady Anne, involving setting the loco in forward then reverse gear whilst opening the regulator a little to clear the cylinders of water. Keeping the gas control low and opening the regulator only a little way is again the key to success. On the first circuit of the line adjustments might need to be made but soon the engine will be moving smoothly and there is perhaps time to sit down and watch the train pass by but alertness is needed at all times. As the engine warms

up, so too does the pressure of the gas which needs to be turned down to avoid too much blowing off at the safety valve. An engine like Dylan is quite powerful and will thrive with reasonably heavy trains of rolling stock. The final focus is on a Roundhouse Millie locomotive, one of the company's lower cost products. I purchased additional parts including pressure gauge, cylinder covers, safety valve bonnet, buffer beam overlays and dummy valve gear which enhanced the appearance of the basic model. The superstructure was dismantled and sent off for lining in a simplified Penrhyn Railway livery, whilst painting the wheels, eccentric rod and buffers made a surprising difference. With its open cab and plethora of brass work it was transformed into a visually attractive locomotive. Again this is an 0-4-0. but it is significantly different to both Lady Anne and Dylan in that it is externally fired with a gas burner below the boiler but in a very well protected firebox. Traditionally known as a pot boiler, this is how most early 16mm steam locomotives were constructed in the early 1980s when meths firing was commonplace. The other feature of the loco is that it has slip eccentric valve gear and the travel direction of the loco is simply achieved by pushing it either forwards or backwards.



A view of Dylan's footplate showing the displacement lubricator, forward and reverse lever, pressure gauge, steam circuit pipework, gas burner, regulator and gas tank.

Lighting the engine involves applying a lighter to the side of the boiler to ignite the gas, although from experience this might take a few attempts. When the loco's pressure has risen sufficiently, pushing the engine forwards and backwards, again with a bit of regulator, will soon have Millie running. Good advice again is not to open the regulator too far and to keep the gas turned down. An advantage of the pot boiler is that it has no fire tube, so it is all water space making a longer run possible which makes for good viewing. As with full size locomotives, 16mm versions still require disposal time at the end of the run. Boilers need to be emptied, water needs draining from the lubricator and I tend to loosen off items such as the safety valve. Wheels and motion need a good cleaning down to remove excessive oil and any grit which can lead to wear.

0-4-0 Millie locomotive in a Penrhyn Railway livery hauling quarrymen's coaches and Lord Penrhyn's saloon, all made from IP Engineering kits. Figures are by Rob Bennett.

In conclusion, 16mm outdoor garden railway modelling provides much reward in seeing live steam locomotives in operation. Safety is of course a priority and the 16mm Association has drawn up procedures for annual steam testing including producing a written record. Hydraulic testing can also be undertaken periodically. This article has focussed on three freelance engine designs but Roundhouse, and indeed Accucraft, also produce prototypical locomotives of English and Welsh narrow gauge lines such as the Ffestiniog and Lynton and Barnstaple and with suitable rolling stock available most tastes are catered for.

Paul Bowen

'Trainsitioning'

No it's not a spelling mistake and I'm not undergoing Hormone Therapy either, but I do think I'm about to undergo a model railway gauge transition, or 'Trainsitioning' for short.

Since enthusing about a recent acquisition in the last ASRM Journal (an O gauge Class 15 purchased purely to adorn a shelf) O gauge wagons started to appear behind it and another shelf was soon requisitioned in order to accommodate the O gauge Gresley, Thompson, and Mk1. coaches that also started to appear.

Truth be told, having spent the last 60 or more years modelling in OO gauge, O gauge now seems to better suit my age related dexterity and eyesight issues. I've recently been confirmed as having Arthritis in both hands, which in turn is causing restricted movement in my Carpal Tunnels. Therefore the C.T. operation I had on my left hand, hasn't really done much to improve things.

For me now, the good thing about O gauge is its size and weight, you really know when you've got an item of rolling stock in your hands. The down side of course is the cost. For a new, ready to run brass

O gauge Britannia locomotive, built to a good standard, you're looking at upwards of £3,000. Therefore, if I'm going to fully Trainsition, in order to help fund it, I'll need to sell a heck of a lot of my OO gauge 1950's and 60's outline Eastern and Midland region stock. All of which is in either mint, or excellent condition, so if you're interested in such things, watch this space.

Back on the subject of misspelling and most probably the unwary victims of predictive text. I recently received a quote for a new side gate and in order to help prolong its life, it was to be made from 'Tantalised Wood'. I also watched with great interest a locomotive on ebay, said to have had 'Stimulated Coal' in its tender!

Andy Butler

Shedding some light on it

Let there be light …. And yes. there was some light; but not sunlight, some of the time, and copious quantities of rain for the best part of two years. My original plans for a model railway shed involved a planning application but tempus fugit, and life being too short I decided to skip my original plan and go for a smaller maximum permitted development which allows for 30 Square Metres of usable floor space. Finding this information was a veritable bureaucratic challenge with every other consideration finding preference to maximum floor space. Maximum height allowed is 4 metres only for a hipped roof and any building must be a minimum of 2 metres from a boundary. With experience from a previous but smaller build at my home in Finchley, London N3 I had taken this on board and searching for suitable properties on my escape from '*The Smoke'* I had to have a garden large enough to build a new shed without it becoming an overwhelming feature. My chosen spot was a former Bed & Breakfast establishment in Whitchurch, it ticked enough of the boxes. My previous had gone, she wasn't tolerant of my model train hobby and being of an impecunious nature I had been spending on her instead of my hobby, thus I was now in a win - win situation on my own to make own choices and mistakes. I sold the house in London in the depth of Covid restrictions which was a serious challenge and bought my new house which I regarded as all part of a great new adventure.

The new house had a fabulous mature garden but the top corner was a hotch-potch of very rickety sheds, green house and even a corrugated tin garage that I sold. That corner of the garden had been a dumping ground and was a real mess but a great spot for a new mega shed. On my deeds I learnt that my house formerly owned all the land down to the railway, the former Cambrian main line from Whitchurch to Oswestery and beyond. As all Cambrian mileages were measured from the Cambrian Junction signal box at the south end of Whitchurch station, the adjacent footpath next to my land which is a historical right of way crossed the railway close to mile post number 1. In the dead of night I could almost hear the ghostly bark of Dukedogs, Manors and Moguls, which at one time the original owners would have seen before a housing estate was developed. I have the legal right use the motor vehicles over the adjacent footpath. It is not wide enough to take a cement lorry but could take all the small diggers and dumpers I needed to clear and prepare my site for the solid concrete base I needed. Soak away channels were also dug to manage the water drainage from the roof area.

In London I had the concrete base pumped through my garage down to the bottom of my garden but here in Whitchurch the concrete had to go uphill the same distance. The guy I entrusted with my ground works assured me that it could be done, and sure enough over a five hour period the large base was laid and they left the area where the lorries were parked spotless and finally I had a base for my new shed… positive progress. After a curing period of several months over winter I employed a local 'bricky' to construct a dwarf wall with class B red engineering bricks which are waterproof, blue engineering bricks were used as an architectural feature on the corners.

The brickwork features cavity walls and damp courses. Leaving the bricks to set for a couple of months I took over on site and bolted base timber to the brick wall. All the woodwork for the main carcass is tanalised timber and I wear a mask when cutting. When securely fixed painted with primer to seal it from rain ingress and making for easy marking out. I find the extra work involved very much worth it…it also helps to prevent splinters and in the past many of my modelling tools have been used to extract bits from within! The uprights and roof beams are of 3inch x 4inch timbers to provide a sturdy rigid carcass. Progress has been slow due to illness and searing summer heat and some periods of serious laziness.

To be continued … hopefully

Chris Kapolka

Tales from the dining room table

These last couple of months have seen your editor head bowed at the untidy end of the dining room table, measuring, cutting, sticking, cursing, unsticking, recutting, and generally trying again until it's right. The Gordian Knot of Aitchison senior's unnecessarily complicated grand arrival and departure staircase has been keeping my grey matter churning like an overloaded washing machine. In terms of source material there is a drawing, or rather a rough sketch by Samuel Brees from which the great Sherlock Holmes would deduce he must have smoked as it is clearly from, and deserves to remain on, the back of a fag packet. The only other clue is the illustration in Osbourne's guide to the London & Birmingham Railway, my inspiration for the Coventry 1839 project. I have concluded that this is good and therefore the best reference however, in modelling terms it is woefully inadequate. Despite all this I think I have finally arrived at the most accurate guesstimate I can manage. Scratchbuilt using Slaters Plastikard plain and embossed, a lamp fabricated from brass scraps and a lovely etched railing from Mainly Trains (remember them?).

Tasks such as the balustrades on the stairs and a few oil lamps remain to be completed but by the time you read this I will hopefully have made a start. Constructing the forecourt between the stairs and the station building is next and should be relatively straightforward, ha, ha, ha…

And finally…

Those of you who have seen your editor's Coventry 1839 layout will know that the transition from road travel via stagecoach to rail travel in the 1830s is a subject that fascinates me. This delightful, coloured print by the Leighton Brothers entitled *Past and Present* captures that period perfectly, the disused Mail coach now a decaying hen house whilst in the background the new steam locomotive gracefully leads its smart carriages past the fields, a grand station and carriage shed standing proudly above it.

George, Steven, and Charles Leighton established their business in 1849, developing a means of producing coloured prints from wood engravings of which this is an example. The partnership produced some of the largest and finest colour prints of the time, in 1858 George became the printer and publisher of the *Illustrated London News*, remaining in that position until 1883.

'Past and Present', Leighton Brothers c.1860, author's collection.