



Goodwin Park News

Autumn 2020

Club Details

The newsletter of Plymouth Miniature Steam. Published quarterly (normally March, June, September & December) and issued free to members. **Cut-off date for submissions is 24th of the preceding month (i.e. Feb, May, Aug & Nov).**

We operate a ground level track of approximately half a mile in length at our site at Pendeen Crescent, Southway, Plymouth, with facilities for 3½, 5 and 7¼ inch gauges. Public running occurs on the first and third Sundays of each month, from April until the end of October.

For further details and membership information, please contact Ian Jefferson (01752-788862) or Rob Hitchcock (01822-852479).

Current Membership Rates - Adult £25, Junior £10.

Workshop facilities available to members at 'Tor Bridge High' (was Estover Community College), Plymouth, £25 per term (10 weeks) or £3 per session.

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We also operate an email message service within the membership; if you wish to join, please contact 'the membership secretary'

Please note that contributions reflect the views of the writer and are not necessarily endorsed by the Company.

Members' advertisements for models and other related items are published free.

Non-members and Trade, by arrangement. All items for inclusion to be sent to the Editor.

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Your committee for 2020

Ian Jefferson	Chairman
Nick Hill	Vice Chairman
Ursula Brown	Secretary
James Atkinson	Treasurer
Selwyn Brown	Track Marshal
Alan Smith	
Bob Sims	
Ti Daley	
Rob Hitchcock	

Please make sure that any change of address, email or mailing preference are notified to the membership secretary promptly in order that we can keep you informed. If you do not wish to receive communication by phone or email, please ask the membership secretary to delete that information.

Contents

Contents

Editor’s Ramblings:.....	3
From the Chair	4
The first concrete pour of 2020 - almost 8 tons	12
Machine vice alignment	13
Enforced Isolation 2020	14
Every Man Should Have One.....	16
Shed Roof	17
Track maintenance train	18
Drilling the ports on the Wren.....	20

Front Cover:

Having helped with the concrete pour, new member Mackenzie receives his reward - his first driving lesson. (Photo: Ian Jefferson)

Editor’s Ramblings:

*Really pleased to see two new contributors with very interesting articles – thanks!
Hopefully you will find it rewarding to see you efforts in print, as well as the pleasure of inspiring others.*

As an added bonus, the Model Engineering press & Southern Fed of MES keep an eye on our newsletter and occasionally ask to publish one of our articles (with the author’s consent). This provides a wider audience for their efforts and, in some cases, a financial incentive for the author!

From the Chair

2020 and we have survived to August, so what do we have to show for the last 3 months?

The committee have at long last managed to get together, albeit outside, in order to consider the current situation. We did however, have another situation to deal with, because after a few minutes the rain started and we had to adjourn in order to put up one of the gazebos so that we had a degree of protection. The main decision we had to take was whether we could safely and successfully open for the public this year. It did not take us long to agree that the difficulty in getting adequate distancing, not just on the train but around the entire site, meant that we could not do so safely. We have therefore updated the public facing signs on the site to reflect that we will remain closed for the rest of this year, but hope to open in April 2021! However, we agreed that there was nothing that would prevent members from making use of the track, we will not be holding formal “members’ days” but any time that the site is open (or by arrangement), you will be able to come and have some ‘fun’. Another topic that was dealt with was the membership fee applicable for next year; an agreement was reached at the AGM, to raise the membership fee for 2021, however considering the current situation we felt that it was inappropriate to bring this into effect, so next year’s renewal will be held at £25 for adults and £10 for juniors. We have also been monitoring the situation with regard to access to Torbridge and whilst this remains uncertain, I would not be surprised if we do not manage to get back there for several weeks yet. Enquiries have been made and I will ensure that as soon as we know, word will be passed on.

I did mention in the last magazine that we had been granted a significant amount of money because of the current crisis. The implication of this had to be quickly assessed and it was established that we had to spend it in the current financial year. We were able to use it to source an amount of PPE, either for immediate use or at some date in the future, needless to say, some was hard to find and suppliers were asking apparently ridiculous prices! The opportunity was also taken to obtain some ‘spares’ for the locomotives in order that we could have them available for ‘immediate’ use when required. This has however only accounted for about 10% of the grant so we had a lot still to spend. As we had not spent all the money that was approved for last

From the Chair

winter's work and we had approval for work to be carried out this coming winter, we could now bring these together with the remainder of the grant money and make a start on getting something done. Plans were therefore rapidly developed to tackle what was one of the most challenging track repairs on the site. Almost since the site opened there have been problems with the bridge over the car park access, with there being a significant gradient across the deck and photographic evidence that the deck has been lowered on the abutments. Those of us who drive the public trains are well aware of the gradient on the approach and over the bridge, with the accompanying 'drop off' on

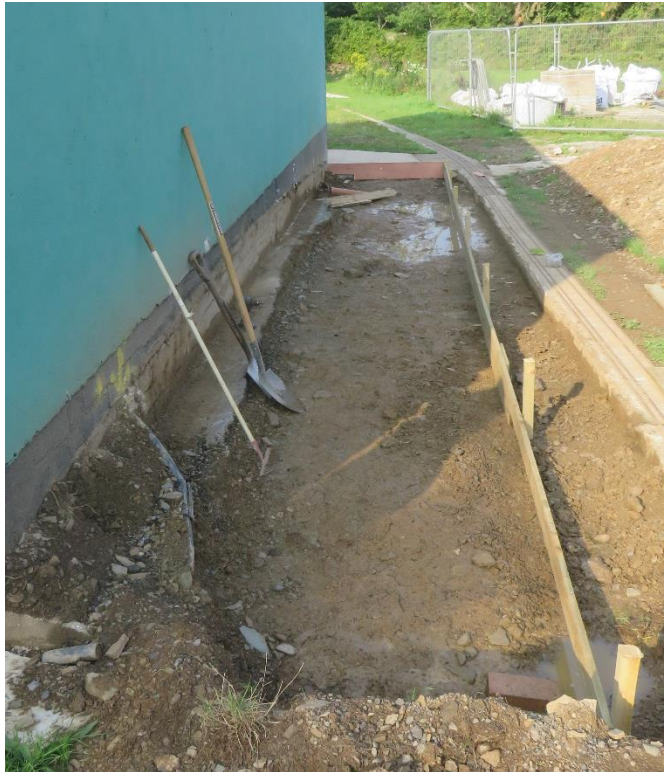
the other side. We had been wondering when we could deal with this, as it was clearly more work than could be handled in a normal 'off season', but this is not a normal off season. So with a digger hired for a week, the bridge approach track was lifted and a couple of other small jobs dealt with, including fully removing the bank on the north wall of the clubhouse, as we dug down it became clear because of the ground layers, that this bank was never intended to exist. In the short term this will become a hardstand area, but ultimately a more secure storage facility for long material, principally steel.



Bob the digger back in action

From the Chair

Meanwhile, work started on addressing the bridge itself. Whilst it would be good to improve the headroom underneath, this would make both the approach and departure gradients unacceptably steep. The compromise was therefore to attempt to bring the deck back to level, based upon the higher side. Having broken out the surrounding concrete, lifting the bridge was relatively easy, but establishing a level proved challenging; however a compromise was



The earth bank removed

found and the necessary new supporting block and concrete work was installed. We will all have to learn the characteristics of the new approach gradient as the level is now somewhat higher! As to why we continue to have problems here is doubtless due to many factors, including the size and shape of the embankments, but another that will undoubtedly have some effect is the amount of water that comes down the approach road and ends up under the bridge. Some work was done several years ago to alleviate flooding outside our site by routing water in pipes under the bridge and across our car park area, the intention being that it would also collect water from under the bridge. This has however never been successful and the pipes are choked and apparently inappropriate for the purpose. We have therefore arranged with a local

From the Chair

contractor to replace these pipes and create a separator sump under the bridge, so that we can hopefully reduce the amount of water collecting under the bridge and getting to the wrong place, by collecting it and routing it away safely. Alas we are unlikely ever to be able to stop the water coming down the hill!



The effect of levelling the bridge

From the Chair



The likely cause of sinking bridge abutments

steel shutter over this window with something more manageable and hence safer. Meanwhile, as the Tuesday gang has got back into their stride, the grass is being kept under better control and the undergrowth has been cut back.



The new window frame

As has now become the norm, we will be replacing the track on this repaired section, so in preparation a number of panels have been welded up, utilising laser cut jigs to speed the process. Hopefully this means that once the concrete bed is ready, the rails can be laid fairly quickly. A lot of other work has also been going on around the site, with a little bit of progress on the retaining wall opposite the station but more significantly the new window frames have been fitted in the clubhouse, whilst not yet fully glazed or finished off, this piece of work was started some time ago and is now nearing completion. One of the main incentives for carrying out this work was to allow us to replace the heavy

From the Chair

We do have to remember that the vast majority of this work has been done by a very small group of members, with many hours of work having been freely given. The assistance of a few more members would make this and other jobs around the site a little easier.

Over in the mechanical workshop, I have just completed the refurbishment of 2 of the passenger bodies. This has involved quite a lot of structural repairs and reinforcement as well as a full repaint, so hopefully these are now fit for a number of years further service, this set may also be more appreciated by the drivers as it now has the bonus of a holder for a drinks tin or bottle! A few days ago, before finally moving them to the running shed, they went out on a proving run with Bob, which gave us the opportunity to check them and the track and ensure that the brakes were correctly adjusted. With a few months before their being required 'in anger' the opportunity will be taken to look at the next passenger bodies as well as the locomotives, so hopefully things will look better and be more reliable when we do get to restart. Meanwhile, in deepest Cornwall, I hear that the machining of the cylinders for the new locomotive are nearing completion, so more progress is being made than just the visible.



Bob with the refurbished passenger set

From the Chair



Bob

Some other news, is that after a number of years working in Bangkok, my daughter has returned and has taken on an update of our website. Some removal of old information and inclusion of more current has been completed, before a little more tidying and reformatting is done. Please help us by having a look at the site and passing any comments back to me for onward transmission.

With this magazine, you will also find an updated list of the remaining items retrieved from Colin's workshop; please remember that I am open to offers on any items and a time will come when I have to consider alternative routes of 'disposal' so get it while you have the chance!

Talking of chances, we have 2 leaf blowers for disposal in return for a donation, neither is in good condition and there is no guarantee of operability, likewise there is a small dehumidifier for disposal, if someone wants it for experimentation, or as a source of a small self-contained compressor; all can be seen at the clubhouse.

As for myself, I have managed to get a small amount of time for myself and have in the last few days managed to complete the wagon that I mentioned in the last magazine. Despite a few problems with the paint job, I think it represents a reasonable depiction of the prototype, even though it was a bit of 'kit bashing'. However the finished item looked a bit bare, so I had to find a load for it; then I remembered the cylinder castings in the bits I had from Colin. So after a few minutes thought, a couple of dummy flanges

From the Chair

and a smokebox saddle were 3D printed and the whole lot glued together with epoxy, the result, the 4 cylinder assembly for a fictitious metre gauge locomotive. With some



My latest project ready for its first revenue earning trip

small chain and turnbuckles (7BA left & right hand threads) the whole lot was chained down, ready for the road; a light load for a wagon rated at 20 tons capacity. Now I just have to see how well it rides!

So as we come back to the present, we look around at how Covid-19 and other epidemics have been handled. Another publication that I receive included a short item on the smallpox epidemic of 1962 and how the railways dealt with the decontamination of infected and infested coaching stock. This referenced the facility at Swindon and a building called 'the bughouse'. A photograph was included and this showed a brick building, with large steel door that could be rolled across the end. A complete coach could be placed in this building which was essentially a huge autoclave, which could be heated and evacuated to kill bugs and vermin, there was no indication of the degree of success it achieved. What intrigued me was the fact that the huge steel door would clearly withstand the pressure differential, I am not sure how what appear to be the original casement windows withstood it! If you are interested, a copy of the article and photograph can be found at <https://www.nrmfriends.org.uk/post/virus-control-on-the-gwr-from-an-fnrm-member-who-was-there-at-the-time>

On this 'happy note' I will simply wish you well and hope to see you all soon. Ian.

Further track works

The first concrete pour of 2020 - almost 8 tons



Alignment

Machine vice alignment

John Perry

Here is a workshop method that I have used for many years. As an entirely self-taught machine operator I started using this method to align a machine vice very soon after I first used a milling machine. I had read somewhere that the way to align a machine vice on a milling table is to mount a test dial indicator from the spindle and run the table back and forth with the tdi feeling the edge of a straight bar clamped in the vice jaws, meanwhile making fine adjustments to the bolts holding down the vice until the tdi gives a steady reading. I found this rather a fiddly procedure, especially since I needed to repeat it rather frequently as I kept changing from holding workpieces in the vice to bolting them directly to the table or using an indexing head. So I came up with the illustrated method which I am sure is not novel, perhaps other members do something similar or maybe you do something even better? One picture shows the setup on the toy milling machine that I have in what was originally meant to be our dining room. Mind you, this should really be done with everything clear of swarf, not as in my picture! Two vertical slotted plates fix to the front of the table, these are also useful when aligning workpieces that are clamped directly to the table. A plate is clamped in the vice jaws and this plate carries two equal length pillars that bear against the tops of the slotted plates, the vice holding bolts are then tightened and the vice should be aligned. The second picture shows just the plate with the two pillars. To ensure the pillars were reasonably similar in length I mounted them together in the milling machine and took light finishing cuts across both ends of both pillars in a single pass for each pair of ends, I think this is probably easier than trying to get the lengths equal by facing in the lathe or whatever. All the plates are ground flat stock, I think 10mm thick, or maybe 3/8".

I once mentioned this to a professional machine operator and he somewhat scoffed at me saying that method would never be accurate but I don't see why not, at least as long as your milling machine table has the front edge reasonably parallel with the longitudinal slide, if it doesn't that is probably something to investigate. Maybe he was just a bit jealous!



Enforced Isolation 2020

Dave Bishop

As Ian wanted information about what we'd all been up to during the Covid 19 shut down, I thought I'd better put pen to paper, so to speak, and cobble up an article for the Goodwin Park News, - saves him having to think up something!

Some of you knew that my wife and I downsized in 2018 and we now live in a small bungalow on the sunny side of the valley.

We wanted a three- bedroom place but they are hard to find in Plympton. This house has a magnificent view from the back, looking almost due south, just right for my wife as she is a very competent gardener. That was the location decider!

Now, where to put a workshop that was anywhere near as big as my last one, as well as gaining a third bedroom?

The answer was to extend the garage, raise the roof a couple of feet and join it to the house. That gave us enough space for a utility room as well. My wife's car had to take its last journey to the great car park in the sky so we didn't really need the garage any more. Finally, a decision.

Very kindly, the lady next door said I could use her empty shed to store all my bits and pieces. Our dividing fence had to be removed for a short distance to allow building access, and so it made life much easier to transfer all the boxes etc.

Now then, how to wrap up everything and protect tools etc? Our builder had given us an estimate of ten to twelve weeks build time and, as we were working towards the summer, (they started in June '19), I thought that as the weather would be getting warmer I wouldn't need to worry too much about condensation in the shed. To cut short a long story, building work finished in December '19. The building inspector signed us off in the last week of Jan'20.

Meanwhile, in the shed next door, hot sun and cold nights, a damp and humid atmosphere was helping to promote a build- up of rust, silently, in the dark ...

A good job I had plenty of wire wool and emery cloth to clean it all.

If anyone wants some good advice on the subject of metal preservation during a house move, have a look at Model Engineers' Workshop, vol 293, 'A Storage Story' by Robin King. I'm sure he won't mind my mentioning his article.

Now comes the good bit!

The one outside wall of my new workshop needed insulation.

Two- inch solid foam insulation, battens and a Sterling board inner lining made the room a bit warmer. Draught strip under and round the doors should keep it

Dave's Workshop

warmer still. A coat of white emulsion made the place much brighter, aided by a splendid LED strip light. A vast improvement.

Having shortened the list of 'other jobs to do for the house and garden' I could now get on with sorting out where to put up the shelves, some of which would have to carry several heavy items. I decided that the Sterling board might not carry a heavy load, so I had to use 100mm concrete screws, straight into the concrete. In places though, I could screw into the battens – also on concrete screws.

Two shelf units were hauled in to place, then a wheeled drawer unit, followed by two fifteen metal drawer units. Next to them went the bench, which left just enough room for a step ladder.

On the opposite wall I had enough room for a cupboard mounted milling machine and the lathe. That left a space for a wall mounted ex kitchen cupboard for various odds and bits.

Levelling the lathe needed some extra attention as I didn't want the levelling bolts to vibrate themselves into the concrete floor after a year or so. I bought a length of inch by inch angle iron to go under the bolts. As the floor concrete was a bit bumpy in just the wrong place, the angle iron had to be packed as well!

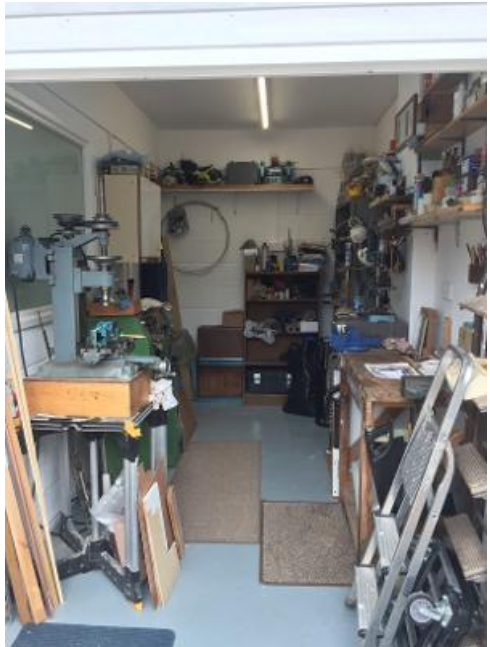
I now have a lathe bed level to an accuracy of .03 of a degree. I've yet to try turning a parallel bar!

The next job is to restart work on the clock I started a good few years ago. All the parts were put in a box before we moved and I hope that the ghosts of Tompion or Harrison haven't been in there, throwing out all the parts not up to their standards?

Now you all know what I've been up to these past three months. There is still more to do – apart from cleaning all the gutters and fitting new kitchen lights etc.. Will it never end?

I've nearly forgotten what the sound of Phil's hammering is like!

My new workshop measures approx. 13ft x 6ft 11ins or, for our younger viewers, 2.11m x 3.96m.



Workshop Poem

Every Man Should Have One.

A poem by David Prowse (Supplied by John Briggs)

Every man needs a shed in their garden
Just as roses need sunshine and rain,
It's a desert oasis when quarrelsome faces
Bedevil his body and brain.

For there's something in cobwebs and clutter
And the smell of a lubricant can
And sockets and spanners and hacksaws and hammers
That makes him feel more like a man.

While imports and exports change places
And the stock market dithers and fails,
He shuns such enjoyment for the gainful employment
Of sorting his washers and nails.

Some would say it was less than important
But there's more to his mission, you'll find,
In his shuffling and shifting, he's sorting and sifting
Through the nonsense that muddles his mind.

It sidesteps the need for physicians
To appease one's executive stress,
No globe-trotting rambles, just the briefest of ambles
To a homely, adjacent address.

Politicians should heed his example
And allow themselves time in the day
For alternative choices to the sound of their voices
When their words have so little to say.

But we'd best keep the secret from Gordon
In the cause of remaining relaxed
Or a back garden treasure which offers us pleasure
Will surely be licensed and taxed.

Mine is nothing resplendent or regal,
Held together with pinions and pegs,
Its floorboards are dusty, its hinges are rusty
And its chair has more cushions than legs.

But I'm king of these humble surroundings
Where more is considered than said,
With his chisels and chattels and a toolbox that rattles,
Oh, a man is a man in his shed.

David Prowse's third book,
'Call of the Wild' can be
obtained by ringing 01736
740396

Shed Roof

John Briggs

I set up the shed about thirty years ago, buying a Marley building of concrete panel construction and siting it in a corner of the garden. Marley buildings were popular then for use as garages. I opted for a door and a window in place of the 'up & over' garage doors that are very draughty, and the building faces north and west to reduce temperature variation and condensation. I soon found that damp was a real problem for a hobbyist, so lined the walls with plaster board and fitted a ceiling. This was a great improvement and also a mistake, as plaster board is cheap but useless for attaching anything to it.



Overall the building proved to be a success - until the roof started to leak. Roof panels are grey corrugated fibre, widely assumed to contain asbestos. I tried filling the cracks with thick roof paint, also containing fibres, but after two attempts and properly priming the surface, it only lasted two years before fresh cracks appeared.

The asbestos roof has been replaced with a box section metal roof shown in the photo. The panels and fixings were supplied by Cladco (www.cladco.co.uk), a family run company established in Okehampton in 1972, and now occupying a large modern site in Okehampton Business Park. I opted for the PVC plastisol coated surface with a flock type finish to the underside that prevents condensation, which they describe as "drip stop". Including profiled end fillers, it all came to about £450, however that does not include timber for purlins/rafters etc. to score the panels in place. The building is 3M x 5M in size.

Having tried avoiding all this disruption for years, I am pleased with the service provided by Cladco and the end result. One cautionary note regarding asbestos panels, as I soon found that they broke up very easily and had to be double bagged in heavy duty bags for acceptance at the tip in a lockable sealed skip with a deposit cost of £10.50 a bag, coming to almost £200. Apparently all the asbestos ends up in deep landfill on a farm near Honiton.

Track maintenance train

Selwyn Brown



The railway maintenance train waits for the departure from the main station line on the hottest day of the year, hence the cup of tea waiting for the driver to return. The train, one of about ten journeys made during the day was to convey the essential heavy building materials to the top of the bridge, ready for the bridge abutment repairs. The new concrete was mixed on site on top of the bridge.

This is the first revenue earning service this locomotive has been employed with since being converted from 12 volt to 24 volt drive. The conversion was achieved using a controller brought on eBay for £11.20 and inevitable made in China. The new controller does not have user adjustable acceleration or deceleration and does not

support regeneration (dynamic braking). But is capable of controlling up to 60 amps. It certainly needed the extra power transporting all the suppliers up gradient, reversing at the cross over points and reversing back over the level crossing on to the bridge top, the highest point of the railway. The electric drive motor did get quite warm. It was allowed to cool down whilst the drivers cup of tea was consumed.

This work is part of the track maintenance project to renew the track and base from the top of the tunnel to the end of the bridge.

Those who study the photographs closely, may see that the Locomotive and driving truck are 5 inch gauge, but the flat wagon is 7 1/4 gauge. This makes the driving truck a convertor wagon, something akin to the OO gauge Triang coupling convertor wagon, allowing the Hornby Dublo style coupling to be used with the Triang tension lock

Works Train



coupling. This comparison to Triang got me thinking about a lot of OO gauge wagons I was very kindly given by another member recently, as amongst the many items was an early Triang operating ore wagon. An item of OO gauge equipment I have never owned before. This wagon

can be loaded up with scale ore and it will automatically unload triggered by the lineside apparatus. Now where can we incorporate a similar feature on the 7 1/4 gauge railway?

Most of the new track rails have already been manufactured ready to be laid down. The next activity is to mark out and lay the new concrete track bed foundations.....More to follow.



Drilling the ports on the Wren.

John Briggs

The ports are offset from the bore centreline and are of different lengths. This makes the longitudinal angle 28 degrees for the rear ports and 24 degrees for the front ports; laterally there needs to be another angle of 10.5 degrees to cater for the offset. Setting up both of these angles is shown in the two photos - the packing pieces are positioned using a strong magnet before the clamps are applied.



With all four cylinders brought to size and the ports drilled, the next task is the cylinder end covers. Unhelpfully, the patterns for the end covers have been lost, so four of them will have to be found from round bar stock.

