

Goodwin Park News

Summer 2024



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 £35, Junior £10. Workshop facilities available to members at 'Tor Bridge High', Plymouth, £35 per term (10 weeks), £4 per session and £2 per Apprentice (evenings).

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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. Plymouth Miniature Steam, a Company limited by guarantee, registered in England No. 3360128

Your committee for 2024

Ian Jefferson	Chairman
Nick Hill	Vice Chairman
Ursula Brown	Secretary
James Atkinson	Treasurer
Selwyn Brown	Track Marshal
Bob Sims	
Ti Daley	
Rob Hitchcock	
Phil Chant	
David Owen	

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.

Club Details

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Front Cover: Driver Steve and his smiling train load of passengers await departure behind club Class 20 “Jack” on the pleasantly warm and sunny public running day of Sunday 19th May 2024.

Editor’s note:

Welcome to the Summer 2024 issue of Goodwin Park News

The 2024 running season is off to a good start and is proving a busy one with good ride counts on the public running days along with some very well attended members days with locomotives visiting for boiler testing and then often taking a run around the track.

I have now been passed by Ian and Selwyn to be able to drive the club battery locomotives Jack and Bob, this will when the opportunity arises, make a nice change from my usual guard duties!

As always, any assistance with our running days will be gratefully received, including setting up, running the trains, putting everything away at the end of the day and of course with our very popular catering. *Phil Chant*

New Members

New Members:

We extend a warm welcome to the following new members:

Jill Lake

Koru O'Reilly

Marilyn Munro

Kevin Herbert

Welcome back to Roy Hawkins



Members' Day Sunday 9th June 2024, preparations underway for boiler testing and steaming.

From the Chair

From the Chair

The calendar says that May is already approaching its end, so I have once again to put finger to keyboard to write another little missive for our magazine. Having started our year with an Easter special, we are now well into our public running season for the current year and already, we have carried over 2,000 visitors, so we are potentially well on the way to getting back to pre Covid levels, we just need the weather and other variables to stay on our side. We have also hosted a visit from the local primary school (Oakwood) one Tuesday morning; this was thoroughly enjoyed by the children and the accompanying staff, whilst also giving us a bit of extra income. But of course, the public rides are only one aspect of our operations even if it does pay most of the bills, so it was good to have a very busy members' day in May, with no fewer than 5 steam locomotives present and 4 electric. It did however highlight one issue, so please can you avoid parking in the area between the clubhouse and the steaming bays on members' Sundays, to ensure that people can unload their locomotives.

Looking to the immediate future, obviously we are going to be busy with the public service, when as ever we need everyone who can spare some time to come along and lend a hand to keep things moving smoothly! We are also expecting a repeat visit from the 'Rock-a-Tots' nursery group on the morning of Tuesday July 2nd, they really enjoyed their morning last year, so we are looking forward to a similar day this year, but we could benefit from a few extra bodies to help ensure this all goes smoothly. Then we are anticipating a visit from a scout group later in the year for a fund-raising event. This is still to be confirmed but it is being planned for September 29th which is the 5th Sunday of the month so will potentially be an extra public day for us. Whilst these events are extra work for us, they do help with the public's perception

From the Chair

of us, as well as giving us a bit more income. Away from the public operation, I would hope to see a few more of you at the members' Sundays through the rest of the year and in particular our barbeque on July 14th when I hope we have a good day and some decent weather; it would also be good to see what you have all been busy on!

Away from Goodwin Park, our other main activity is our workshop sessions at Torbridge school. These continue through until early July, when we break for the 'summer holidays' and it is always interesting to see what comes along in the way of members' projects with the comments and discussions they can provoke. Remember that this is an ideal opportunity for you to get some quality workshop time and, if you need it, a bit of help or advice. What I have to do now is to make our booking, in order that we can continue this, through the next academic year, starting in September.

The fact that we are even talking about dates in September, mean that we are also thinking about what we may have to do over the coming winter! Obviously, there will be the scheduled work, but as has become the norm for the last few years, we anticipate having to replace a portion of track and once again we are thinking that the most likely target will be a section about 50 metres long at the east end of the site, as it is showing serious signs of degradation. The plan is already being developed, but we will as ever, need a lot of help when the time comes for the work to be done, so please come along and help if you can, we do need you on this. There will also be a number of other jobs that will be identified, so there will be plenty of opportunity for you to help your club!

As for myself, I am still struggling with some of the demands of getting a 60 year old house back into a decent state and now I have the added task of keeping the garden under control, but that one fights back! So, my

From the Chair

opportunities for a bit of workshop time are limited and even it needs some attention! I have however forced myself to take a few hours out now and again, to prevent from going totally mad and instead, have gone mad trying to progress one of my projects, the current stage of which has meant a lot of slow turning with interrupted cuts! If all goes well, I would hope to have this piece completed by the time of the next magazine, so you may find out what it is and whether I succeeded!

Well, I suppose I had better get back to my current task, which is sizing and hanging 8 cupboard doors; they also need to be stained and varnished, so that will take a while! I just hope you are able to make some better progress. See you all soon.

Ian.



Boilers and Certificates

Boilers and Certificates – by Ian Jefferson

A recent situation, where a member presented a newly acquired locomotive model for inspection, highlighted a few issues that could be encountered in such a situation. It is therefore worthwhile to remind you all, of the current situation regarding boiler certification and some of the points to watch out for when acquiring a boiler, or model with a pressure vessel (principally a boiler) either new or used.

The current set of regulations came into effect in 2012 and any boiler made or in use since that date must abide by these regulations. Any that have been out of use since before 2012, will come under these regulations, when put back into service. Other regulations relating to other pressure vessels also came into effect at the same time and these principally affect the gas tanks found in smaller models. The full details of these regulations are covered in 3 documents which I can supply if required.

All boilers must be indelibly marked with a serial number. There is no standard format, but in default of any other there is a format used by clubs. This serial number is normally stamped onto the foundation ring area of the backhead and must be visible for inspection; attached plates are not truly indelible. All but very small boilers manufactured commercially since 2012 must also be CE marked (now UKCA).

Documentation comprises: -

- A 'Written Scheme of Examination', which describes the boiler and records the ownership; a new one is prepared on a change of ownership.
- An 'Examination Certificate', for each and every examination undertaken, this details the examination undertaken and the results thereof.
- All past documents must be retained as this records the history of the boiler and it should be possible to trace the history back to the original manufacture.

Boilers and Certificates

- Pre 2012 documentation should also be retained where appropriate.
- All documents must bear the serial number of the boiler.

When purchasing a new boiler from one of our regular suppliers, you should receive the correct, valid documentation, but it is still worth checking.

When looking to obtain a boiler from another source, then it is important that you thoroughly check the paperwork and ensure it is valid and does relate to the boiler in question. Do not rely on copies, but ensure you see the original documents. If in doubt, be prepared to walk away, otherwise you may just be buying scrap metal! If you have any questions, we may be able to help you.

A few quick checks to help you: -

- Find the serial number of the boiler, ensure it looks consistent with the age of the boiler, is it clean, dirty or 'fresh'. Has it been checked lately (scrapped clean).
- Look at any other marks with the serial. These may include CE/UKCA, manufacturer's ID or working pressure. Make a note of all of these.
- Ensure the serial number is correctly recorded on every Written Scheme and Examination Certificate; beware of any corrections or unclear entries.
- Ensure the Written Scheme correctly describes the boiler and any marks in addition to the serial number. Look for any changes between Written Schemes.
- With all documents in reverse date order, can you trace the history of the boiler including any changes of ownership or registered club. Beware of inexplicable gaps. This can help identify periods of maintenance and possible problems.

Remember that these are significant investments, so as with buying a car, a few checks can save you from big problems. And if you are in any doubt, get photographs and check with myself or Rob; we may be able to suggest checks that you can do. Above all, remember if it too good to be true, then it probably is!

Sir George Newnes

Sir George Newnes – by Ted Lawrence

W.G Bagnall No. 2819 - of 1945, a 4-4-0T, 2 ft Gauge Locomotive



It was originally built for the Tongaat Sugar Company of South Africa and entered service there in 1946. By 1963 it was in use as a stationary boiler. After a number of other uses it eventually found its way under private ownership to the Lynton & Barnstaple Railway at Woody Bay Station, carrying the name of Charles Wytock (as misspelt on the name plates), where it operated for a short time. It was then purchased by a consortium of L&BR members and has since undergone a major overhaul. On returning to service on the L&BR this summer it will be renamed Sir George Newnes, in honour of the benefactor who originally financed the building of the railway from Barnstaple to Lynton. The locomotive is seen here at Woody Bay in its new livery on Saturday 11th May, awaiting some final work to complete the overhaul and an official naming ceremony. It will provide a powerful addition to the L&BR locomotive stud, capable of hauling at least four coach trains up Woody Bay bank.

Members' Day – Sunday 14th April

Members' Day - Sunday 14th April - Selwyn Brown



Always a worrying time when a locomotive goes through the process of the annual boiler test. The owner, of this magnificent five-inch gauge LNER B1 looks on with apprehension whilst the boiler inspector carries out his duties. The locomotive is named after Mr Richard H N Hardy who was a premium apprentice at Doncaster on the LNER. He was known affectionately in his autumn years as 'the Grand Old Man of Steam', and widely regarded as the elder statesman of the heritage movement. He made a meteoric rise through the rail industry's hierarchy, becoming a shedmaster at the astonishingly young age of 22, running another five major depots before he was 35, and

Members' Day – Sunday 14th April

then overseeing the massive changeover from steam to modern traction on the busy Stratford district of the Eastern Region.



An interesting lamp head code in this photograph, Class F - Freight all unfitted stock. This was changed for subsequent runs to the more classic indication of two lamps on at the bottom, Class A - Express or breakdown train or snow plough enroute to a job.

Members' Day – Sunday 14th April



Literally straight out of the box ready to run five-inch gauge Kingscale 3F "Jinty" Class stops to take on essential supplies of water to the side tanks readying her for the maiden run under steam on the full circuit of the club's track. This model is based on the 425 full-size locomotives which were manufactured between 1924 and 1931. Mainly allocated to shunting and station pilot duties they also undertook occasional branch line work. The "Jinties" were frequently used for banking duties with up to three at a time seen assisting express passenger trains up the Lickey Incline on the Bristol-Birmingham line near Bromsgrove. They were frequently seen banking trains out of London Euston up to Camden - a particularly demanding task! Designed by Sir Henry Fowler for the London, Midland and Scottish Railway they were based on earlier designs by S&W. Johnson.

Members' Day – Sunday 14th April

Both of these five-inch gauge locomotives were the first to pull trains over the new track which has been re-laid between the level crossing and the trailing point for the cross over.

One member did comment that it looked like the B1 was flying around the track.

Also running on the members day which was blessed with dry weather were the clubs home fleet 7 ¼ inch gauge locomotives plus “Shirley” the shunting locomotive, pictured below with her owner.



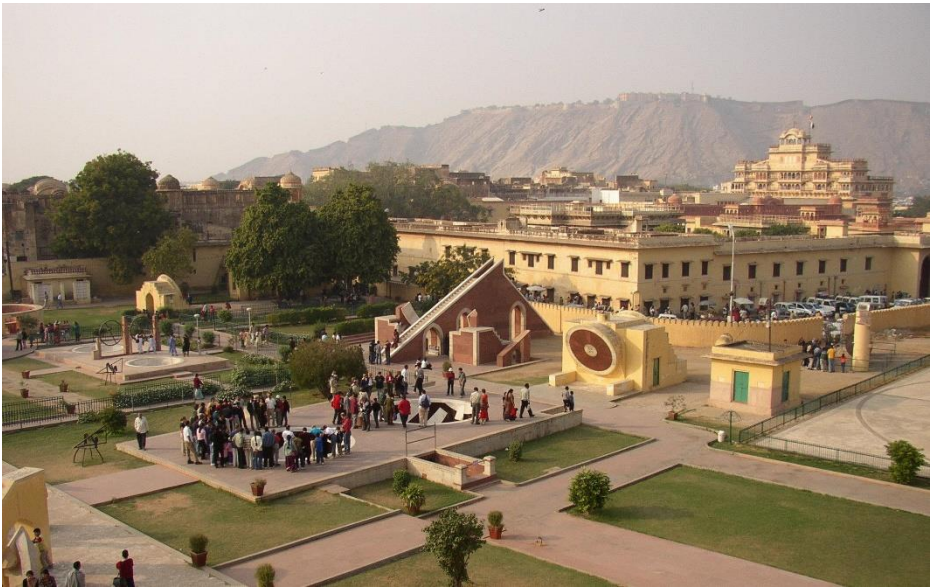
Let's hope that the weather is kind on the remaining members days of the year, held on the second Sunday of each month.

The Jantar Mantar and Kalka to Shimla

The Jantar Mantar and Kalka to Shimla – David Bishop

The Jantar Mantar

Some of you will know that I have a passing interest in sun dials. Last month my wife and I were on a trip to India. Part of the trip was a visit to Jaipur and the UNESCO World Heritage Site of the Jantar Mantar.



It is the site of one of five observatories built by the Maharaja Jai Singh 2nd. Building had begun by 1728 and completed by 1734. There are 19 different types of astronomical instruments within the walls, built mainly to track the location of major stars as the earth orbits the sun (astrology is very important in India, even to the extent of finding out the best date to get married or hold another special event). Other uses included determining celestial altitudes, the

The Jantar Mantar and Kalka to Shimla

declinations of the planets and predicting eclipses. The observatory is a complicated scientific site – perhaps beyond the scope of this magazine!

However, Jantar Mantar means ‘instrument of calculation’. The instruments are built in stone, marble and metal. The largest, in terms of height, the gnomon, is 88ft high, 114 ft long and is known as the Vrihat Samrat Yantra (great king of instruments), set at 27 degrees. It will show local time accurate to 2 seconds. The smaller ‘dial’ is accurate to 20 seconds. The time is shown on the curved sides, each divided into hours, quarters, minutes and seconds. This should be obvious from the enlarged photograph below.



The Jantar Mantar and Kalka to Shimla

Nowadays, there has been some subsidence detected. The stone masons, nearly 300 years ago, were not very experienced in such great accuracy so now there is some slight misalignment. The site is still a magnificent achievement and well worth a visit even if you know nothing about astronomy.

Kalka to Shimla



Still on the same trip to India, we wanted to experience the train ride From Kalka to Shimla, a distance of about 96 km, in the state of Himachal Pradesh, central northern India.

The Jantar Mantar and Kalka to Shimla



Back in the days of the British Raj, it was widely known that during the long hot summer season down in the capital city of Calcutta, now Kolkata, there was no air conditioning. Working 'in the office' wearing a starched wing collar and

The Jantar Mantar and Kalka to Shimla

waistcoat was not conducive to a hard days' work. The solution was to move the whole seat of government, lock, stock and barrel, to higher ground where the air was cooler.

In 1822 the new British political officer for the Hill States, Charle Kennedy, built himself a cottage in Shimla. From then on, in a space of 42 years, Shimla grew to be the Summer Capital

In 1864 Simla, as it was spelled then, became the summer capital. The town was situated at 6,800 ft asl. All the trappings of government had to be loaded on to an ox cart or horse back and trundled up to Simla, a distance of about 1000 miles, and, at walking speed, about a month on the road!

The plan for a railway line was first mooted in 1847. Work finally started in 1898 under the chief engineer Mr H.S. Harrington and was finished in 1903. The line was opened by the then Viceroy, Lord Curzon.

The 96 km route must have presented some difficult ground to be covered. One hundred and seven tunnels had to be dug out and 864 bridges had to be constructed. Landslides are a constant problem. The track was first laid to a gauge of 2 ft but the Indian army thought that was too narrow for military requirement. The government was petitioned and changed it to 2ft 6 ins. The land was given free of charge by the government. The railway was declared a UNESCO World Heritage Site in July 2008.

Some facts: Single track with a passing loop half way along.

Average gradient 1 in 33.

60 lb/yd rails.

Journey time 5 hours, depending on the type of train.

The Jantar Mantar and Kalka to Shimla

15 trains a day.

Only 2 ½ hours by road.

18 stations.

Ticket prices start at R210, currently £1 = R100.

The first locomotives were steam driven 0-4-0 ST of class B. They turned out to be too small so in 1902 ten new 0-4-2 T's were bought. They had 30" driving wheels, 12" x 16" cylinders and weighed 21.8 tons and manufactured by Sharp Stewart & Coy. Two years later, 1904, thirty new locos were ordered from the Hunslett works and the North British Locomotive Coy. They were 2-6-2T's, again with 30" driving wheels but with larger cylinders – 14" x 16".

In 1928 Kitson-Meyer supplied two more steam engines. This time they were 2-6-2+2-6-2 articulated locos but they were not very popular as they were expensive to run. With that, and too many lineside fires, steam was eventually withdrawn in 1971. Anyway, Diesel was already in use from 1955. The first diesels were ZDM 1s from the works of Arnold Jung Locomotivfabrik. Those locos were moved to another hill railway during the 1970s and were replaced with ZDM 3 diesel-hydraulics, made by the Chittaranjan Locomotive Works and are still in service.

The coaches are mounted on conventional four-wheel bogie frames of 33 ft x 7 ft., steel frames and, to save weight, aluminium roofs and sliding window frames. As such, 6 coaches could then be hauled. Seating could be described as 'friendly'. Only a thin foam filled cushion on a stainless-steel seat. Passengers sit 'hip to hip' and 'knee to knee'! After 5 hours of intimate travel, it was a joy to get off – though you could walk up and down in your coach.

Toilets? – some other time!

Walschaert's Valve Gear

Walschaerts' Valve Gear – by Ted Lawrence

RESTORATION OF SECTIONED MODEL OF WALSCHAERTS VALVE GEAR FOR STEAM LOCOMOTIVES

My latest restoration for the L&BR is this sectioned model of how the Walschaerts' Valve Gear works. It was delivered to me in a highly corroded state and completely seized up, as shown below.



The initial job was to photograph each part of the mechanism before any dismantling. The first part to be dismantled was the forward/reverse lever and its operating link. Completely seized, so it had to be dismantled into the individual parts. Each part was wire brushed to remove all of the flaking nickel plate, followed by the vigorous use of emery cloth. A coat of anti-corrosion fluid was applied to the bare metal areas. The bare metal areas were then given a coat of red oxide paint to be followed by two coats of stainless-steel paint all over each part that was a good match for the nickel plating. On completion it was reassembled using new B.A. nuts and screws. This process was carried out for the whole model by just dismantling an individual section

Walschaert's Valve Gear

of the mechanism at a time. All new fastenings were used mainly in B.A. sizes or B.S.F. or B.S.W.

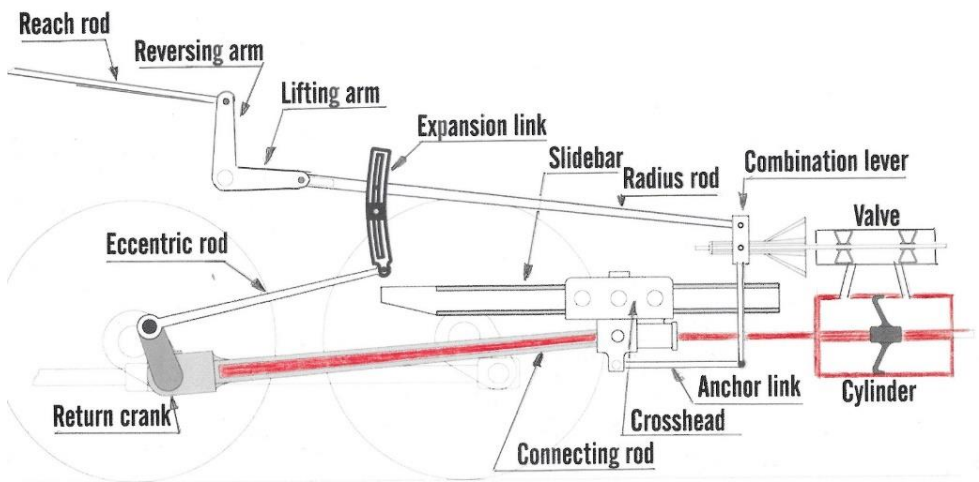
The operating hand wheel operates the chain drive to the mechanism, so that the function of the valve gear and steam piston can be seen working. A new wood and Perspex guard for the chain drive was made and fitted to the rear of mechanism mounting plate, secured by two brass screws accessed at the front of the mounting plate. The red flywheel in the upper photo turned out to be brass with a lead balance weight. After stripping the paint off, it was polished and the lead weights painted with a matching brass paint. The brass operating knob was replaced with a handwheel (purchased from Hong Kong) for easier operation. The two wooden bases were scrubbed clean with detergent and then sanded down. When dry, a finish of several coats of Yacht Varnish was applied.

The lower photo shows it restored and in full working order, as delivered to Woody Bay Station on 31st January, where it is planned to be used for footplate staff training and demonstrating to visiting parties. The hand wheel on the left lower operates the valve gear and steam piston to show how it works. The lever top left operates the forward and reverse of the piston valve and steam 'cut off'.



Walschaert's Valve Gear

The sectioned model is to demonstrate how steam from the boiler is controlled via a piston valve to the steam cylinder and at the same time control the exhaust steam. The forward and reverse lever controls the flow of steam to create directional travel of the locomotive. When a locomotive is first started the lever will be in full forward position. As the locomotive gathers speed the lever is moved in steps towards the mid position 45 and then 25 per cent cut-off to achieve the maximum efficient use of the steam by the steam cylinder, very much like the purpose of a gearbox in a motor vehicle.



WALSCHAERTS VALVE GEAR FOR STEAM LOCOMOTIVES

Club Diary Dates 2024

Club Diary Dates- 2024

30/06/2024	Committee Meeting
02/07/2024	Rock-a-Tots special running morning
04/07/2024	End of Summer Term – TorBridge High
07/07/2024	Public Running Sunday
14/07/2024	Committee meeting and members' Sunday
14/07/2024 *	Summer Barbeque
21/07/2024	Public Running Sunday
04/08/2024	Public Running Sunday
11/08/2024	Members' Sunday
18/08/2024	Public Running Sunday
24/08/2024	Autumn Magazine press date
01/09/2024	Public Running Sunday
08/09/2024	Committee meeting and members' Sunday
15/09/2024	Public Running Sunday
06/10/2024	Public Running Sunday
13/10/2024	Members' Sunday
20/10/2024	Public Running Sunday
17/11/2024	Committee meeting
24/11/2024	Winter Magazine press date
01/01/2025	Members' day

Dates marked * are TBA / subject to confirmation.

The "Tuesday Gang"

Meet weekly at the track from 9:30 to Midday. The jobs tackled include mowing, DIY on the building, maintenance of locos and rolling stock, painting bridges etc.

Workshop Evenings

Workshop facilities available to members at 'Tor Bridge High', Plymouth.

£35 per term (10 weeks), £4 per session and £2 per Apprentice. Thursday evenings (6:30-8:30pm) during term time