Reading Society of Model Engineers www.prospectpark railway.co.uk

Charity Number 1163244



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Free to members

The Prospectus April 2021



English Electric Type 3 37884 at Twyford with redundant Class 321 EMUs from Greater Anglia, on 5 March. These were going to the Sims scrap yard at Newport Docks (and were half the age of the 37). Photo John Billard

> IMPORTANT NEWS p2 DAWSON'S DIARY HAVE A HANDLE TRIANG MINIC MOTORWAYS MENDING A MAMOD WINDOWS 21 MAKING A PATTERN

DAWSON'S DIARY

Just a few lines to say the March Prospectus arrived on the doormat. Our editor has made a very good job of the layout of the contributions sent in by the membership each month like John Spokes, Alasdair Milne, Alan Thatcher, Mike Manners, David Scott just to name a few, makes our mag a very good read.

The planned opening of the club in two months' time will be good for us all in the RSME. If all goes well, we might see some locos running again before the summer! So do not forget to get your locos ready for testing and bring all your certs etc so the boiler inspector can do his job and get you steaming!

I must again thank the Parks and Gardens team for doing a grand job. I hear the blooms are looking very good. Well done everybody.

A VIEW FROM THE CHAIR

by John Billard

The trustees were able to meet at last on 15 March. It was a very good meeting albeit all sitting at home on our screens! There was quite a bit of catching up to do. The finances remain healthy even though income has been severely restricted over the past year and our fixed costs, rent, utilities, insurance etc have all to be paid and represent a deficit for this period.

Despite this it has been possible to carry out valuable works particularly in the club house and keeping the site tidy as far as possible. The tracks and signals have been inspected and I am told that there are no significant problems. We are ready to consider some re-openings subject to government advice. It might be possible to commence Wednesday Warriors after 12 April, club running after 12 June and public running after 4 July. All subject to the rules that apply at the time.

Looking slightly further ahead we are thinking that the 2021 AGM might take place in October or November. In addition, before that, we have agreed with the Southern Federation of Model Engineering Societies to hold their annual rally at our site on 25 September.

Most significantly, Peter Harrison has decided to stand down as secretary pending a house move next year away from our area. Peter has been a tower of strength in his time in the job and I am sure that you will wish to add to my heartfelt thanks to him. Stuart Kidd immediately stepped up to volunteer for the job and the trustees were very pleased to appoint him. A hand over will be agreed between Peter and Stuart.

It was decided to commence our 2021 membership year without delay and forms are being sent out. Please renew your membership and encourage others to join. There will be no better way to thank all those who have kept the club literally "on the rails" during the last year.

kept by the President

YOU CAN'T ALWAYS GET WHAT YOU WANT by Mike Manners

Much of the work that I do in my workshop is on the tiny side. It is unusual for me to need to cut threads bigger than $\frac{1}{4}$ and usually more like 8, 10 or 12 BA

When cutting threads in the lathe, using taps or dies, it is a great advantage to be able to turn the lathe chuck by hand. When I first got my lathe, I made a very crude winding handle that would allow me to do this. The big disadvantage with it was that I had to remove the gear cover door on the lathe to fit it. It was always a hassle fitting it and removing it and was something I avoided using if at all possible. I also very rapidly found out that it was not a good idea to turn the lathe on with the handle fitted! An out of balance weight spinning at 500 RPM is quite a learning experience! I now always turn the lathe off at the main circuit breaker if I ever fit the handle. I still occasionally forget to remove the handle and try to turn the lathe on but having turned it off at the main breaker saves the day.



Recently I had reason to cut a number of small threads in the lathe and thought it was about time I did something about the lathe handle problem. I have learned a lot over the years I have had my lathe and what looked a daunting job when I first got my lathe now did not look so difficult. A few minutes thought and measuring and a couple of hours machining and the problem was solved. I now have a lathe handle that is easy to fit and remove and I no longer avoid fitting it to the lathe.

A second little workshop problem also took just a couple of hours to fix. All taps for cutting threads have either conical ends or centres drilled in the ends. The bigger taps usually have drilled centres. The smaller taps have conical end because there is insufficient metal to

form a drilled centre.

When using a tap in the lathe I frequently use a sprung tap guide. When I bought it it had a pointed end to fit taps with drilled centres. Not a lot of use with most of my tiny taps with conical ends. It was only a couple of hours lathe work to produce a new end for my tap guide with a drilled centre that would fit my tiny taps.

I now feel much happier cutting tiny threads in the lathe by hand. I have a much better and more convenient method of turning the lathe chuck and have a much better feel for how the tap is cutting. With any



luck it will all help preserve the very tiny 10 and 12 BA taps.

Alec Bray remembers.....

The March PROSPECTUS included a piece by Graham Bilbe "...July 1954 issue of MRN, with a view showing 'Wallis-under-Neath' station on a RSME 'collective' layout, at the time "working in a Reading Department store as part of the pre-Christmas attractions", and photographed there by well-known local camera-man Maurice W Earley. It doesn't specify the gauge..."

The '00' gauge Model Railway was for many years a Christmas attraction at Heelas in Reading (now John Lewis). This was, of course, before the store was rebuilt, and the layout was reached by an almost hidden narrowish staircase towards the rear of the old building. Visitors had to pay for entry. It was always a fascinating layout and was different each year.



One year, there wasn't a model railway layout - it was a ROAD system. As far as I recall, it was a Triang Minic Motorways based road system with cars, buses and lorries running around a complex road system. Minic Motorways included points - road junctions - as well as crossovers, so you could build a roadway in a similar manner to building a railway layout. I remember that one lorry on the Heelas roadway had an amusing feature - a man running after it. (The model man had - instead of legs - a wheel with printed legs. The wheel turned and it looked like the

man was running.)

It was a very ambitious road layout, even at this time when Minic Motorways was enjoying some popularity. There is not very much about Minic Motorways nowadays!

I used to go and visit the "Heelas" (RSMEE) Christmas model railway layout on my way back from school for most of the years that I was at secondary school (and it was running - it was a great disappointment when it stopped). I remember one particular layout that included a beautiful branch line station towards the left-hand side of the lout (as





viewed) with - of course - a Great Western branch line train...

Jim Brown adds that the fees paid by Heelas to the Society were sufficient to be put away towards our present club house. He has more memories that I hope he will share with us in a future issue of PROSPECTUS. Ed.



The terrific realism that can be obtained with the Minic Motorways system is well shown in this very atmospheric photograph. Both commercial vehicles and cars are available, and the system can be used to great effect in conjunction with a model railway. Rall sets are the latest thing, and they introduce real 'purpose' to the slot scene.

ATTENTION ALL CONTRIBUTORS!

I am pleased that the February PROSPECTUS was a great success and I have had good appreciation from many members. This is all due to our contributors for which thank you. Please keep it coming!

Just a note about formats. I try to keep up to date but I have had several pieces submitted recently by e mail or phone text. Please don't! Unfortunately these will not convert properly to the Microsoft Publisher program. To keep things going I have been known to retype articles and I would rather not. So... please keep text and photographs apart and submit in separate files. I prefer Times New Roman 11 point with 14pt Arial Narrow for headings, single spaced with no space between paragraphs.

John Billard, Editor.

p.s. I still take handwriting; it's often less trouble!

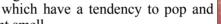
RESTORING AN OLD MAMOD ENGINE

by Terry Wood



After watching various videos by Keith Appleton during lockdown I remembered that someone gave me a Mamod steam engine and I'd used it a couple of times and then put it on a shelf and forgot about it as you do while you concentrate on some-

thing more urgent. After getting it out of its rather tatty box I realised that it was a showman's engine not only that but it had a meths burner in it which I much prefer than having to use those solid fuel tablets which have a tendency to non and



give off an unpleasant smell.

The first thing I noticed was there was no safety valve, front axle spring, or water level plug. and the steering ferrule was missing so I ordered them on eBay. The





next thing to do was take the back wheels apart because they needed cleaning this was easier said than done because they were very secured to the axle and it was very easy to dent the firebox if you weren't careful. The

paintwork by the water level plug was also in a state so I removed it all then resprayed it all using heat proof paint. The thread on the front axle was also stripped in one place which I repaired using silver solder then filing round and retapping. After cleaning the rear

wheels up I re assembled the back end by which time the missing parts had arrived and were fitted so l could concentrate on the front which had a missing steering

spring arm across the axle and a missing spring in the





steering stem. I also repainted some areas of the boiler with Humbrol Green number 2 which looks like a perfect match for the rest of the boiler. I also cleaned up the canopy with T cut I didn't want to re paint that because it had transfers along the side.

After cleaning up the front wheels the whole front end was assembled and the new ferrule was attached to the steering rod, then the boiler was filled up with water, burner filled up with meths and then



the engine was ran without being connected to the drive wheels the reason for this was to check the engine ran OK plus the drive spring was broken so had to order a new one. Once the new drive spring arrived, I ran the engine down the garden path and it ran fine I also noticed that hardly any steam comes out of the slide valve when its running unlike the larger one that I built from scratch must be something that I've overlooked.

A message from Mark Kirton

Hi John,

I hope you are well. I had my first vaccine jab yesterday at the Steam museum in Swindon. Very apt I thought! Anyway, I saw these 08 wheel sets outside and thought of you and the conversation we had. You can see the quartering of the cranks clearly here. So, that's that question resolved.

I have started my second loco. Based on my first but simpler and freelance so expect another article shortly!

With best regards, Mark.



Photos Mark Kirton



The conversation that first arose during one of Thursday Zoom meetings was whether to quarter the wheels on an 08 shunter. Here is the answer! Ed.

MORE WORKSHOP BUILD by David and Lily Scott OR A DARING RAID on the house for WORKSHOP WINDOWS.

This was planned down to the hour over several weeks and several looks up into the sky led it to be abandoned more than once or twice. Deep breath and we were on. Then there is instant regret as I had put these in donating the sliding ones to the original summerhouse section of the workshop. This was also the main entrance. They were in solidly. Meticulous measuring meant that the new ones (made to measure this time) were going to be a tight fit in the space. Previous cleaning of the brickwork also paid off done to enhance during warmer times.



the new width so the bit too small. Yes, dug mess in the kitchen but at was in. I even had the wedges ready so that it would be solid overnight Yes, we did a dry run. Which told of keeping the assembly upright and sliding it on boards carefully arranged. Sliding boards to keep it on as well. Yes, this time the assembly came with the doors fitted and it was Very Heavy! And it is in...



NO The one measurement I had not taken was block work inside was a out in moments making a least with a few bangs it

up against the lintel. The unforeseen delay got us taping up some multi-foil just in case the rain or next doors cats would do a wonder.





Once the dust and the last block had settled the real rea-

son that the kitchen had always been so very cold was revealed. 46 years without a whole section of insulation. Look on the bright side making the kitchen useless for converting into a workshop. I hit the Grip-fill all round from the inside and the evenings cold slowly stopped.

Almost!

This is what Windows 2020 looks like and the raid on the house is paying off. Yes, the second or main opening door is returning as a door. Now we could fix the window frame in place and fit some timber under to make up



the wall. This is so cheating on measurements but a wonderful way of getting it done quickly. The boards were done in two sections upright so that the pattern of sprinkles would match all round.

Yes, even if it was going under the eventual bench. A quick cut out and push in place of insulation saw another wall done. Lily armed with gloves and goggles and ear defenders helped lift the glass in position. The

getting in of the beading is not for the faint hearted and requires quite a thump from a rubber mallet. Top one first which gives you a difficult practice. Yes, it is loud hence the next day approach for fitting the glass in the house. Yes, the luxury of lighting at last and quiet fitting of the last bit of the white insulating stuff.



A photo shows the crowning glory of a bench which saves much bending down to pick things out of boxes. Plus the cut off saw which again has cut time taken on trimming things to fit nicely. The insulation left over from the new garage roof being put to good use here. No doubt its final resting place will be in the kitchen wall at last.

A new camera began relieving all the cold spots left in the house by showing up as the hot bits escaping. Then when it snowed, we did a wander to see the horrors of the neighbours houses. My latest use for it was when the milling machine motor decided to melt. A new one arrived I opened up the holes in the bottom. Ran it on a job and in the screen a bright yellow glow with the horrifying temperature displayed. Yes, a thermal camera has many uses

round the house, and in moments you have all the electrics checked for hotspots! Tea is preferred at 47 degrees! Lily gets a check on suitable outdoor clothing. And she does not have a temperature! Coldness of toes does surprise me also fingers.

On the mill motor I decided to fit an extractor fan which just propped up on top shows wonderful results. And yes, on a cold day we set of for a big



milling job and it also heats the workshop.

Smile. The Brooks motor on the Dore Westbury has not missed a beat in

IN SHOPS THIS MONTH BUILDING A SUPER CLAUD by John Billard

(continued) One of the challenges has been to locate suitable driving wheel castings to take account of the full size 7 feet diameter. A search of the usual suppliers for this size, about 7.5 inches, and the correct number of spokes, produced no result. So I set about making a pattern for casting. This was an old technique that I picked up long ago in a 1978 MODEL ENGINEER.

Rather than use a close grained hardwood (mahogany was typical back in the day) I was fortunate to be given some chunks of moulding board suitable for the purpose. This is a compressed material, easy to machine and a good choice for patternmaking. The pattern had to be made for shrinkage allowance and a draft angle of 2 degrees was adopted. So here is the sequence, *overleaf*.



1. *Left*, Take a big saw! The size was roughed out of the moulding board sheet that then had to be cut to width.

2. *Right,* This was then bolted to the faceplate with spacers and machined to external diameter.



All photos John Billard

3. *Left*, the centre is chain drilled and removed, then, step 4, ma-chined to include the flange diameter, *below*.





5. It is now reversed on the faceplate and the tread and tyre machined.

6. *Below left,* Three stages here. First the completed rim is glued to a plywood backing made to fit the faceplate. Then the hub and crank is prepared and glued in place and finally the individual spokes are added. I used high viscosity cyanoacrylate that has a slower grab factor. Car body filler was used to fill gaps and to make fillets.





8. *Left*..... and reduce the backing to swarf leaving the wheel pattern complete ... *right*.

The resulting wheels were cast successfully at the Bridport foundry. 7. *left*, Nearly there! The final step is to mount the assembled pattern on the faceplate with the backing board outwards.....





An example of the often hidden work undertaken by trustee members, in this case Alf Cusworth and Nigel Penford. This is a new floor going down in the club house loft. At the same time, Peter Culham has started to lay a new kitchen floor, and new wood for the station footbridge is arriving shortly. Please support these efforts by renewing your membership for 2021 now. Photos Nigel Penford.

2021 subscriptions are now due

Rates are unchanged.

Membership forms are being issued.

Please respond promptly!

DIARY

It is hoped that various openings may now be possible as the year progresses. See page 2 for further details.

Steam locomotives must have a valid boiler certificate. Please contact Les Dawson or Nigel Penford to make arrangements in advance.

All members are invited to join our virtual meetings on Thursdays from 7.30 till 9 pm. Contact Peter Harrison for connection details. These are discussion evenings and are proving popular.

Once a month we have a more formal presentation. On 25th April John Billard will be relating his experiences as a schoolboy cleaner at Willesden 1A, 1961-2.



Please write for Prospectus. Photos welcomed. Comments by RSME members on any subject appearing in Prospectus are welcomed by the editor.

Opinions expressed in PROSPECTUS are the personal views of the contributor and cannot be taken as reflecting the views of the trustees or editor. **The deadline for the May issue is 18 April** Contributions may be submitted in hard or soft copy to the editor. John Billard Old Station House Twyford Reading RG10 9NA

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