

# Association of Shrewsbury Railway Modellers



November 2020  
Newsletter

## Association of Shrewsbury Railway Modellers

Welcome to the November edition of the Association's newsletter. As you will see there has once again been no shortage of content put forward by members. The range of topics and the calibre of skills and expertise on display is a fantastic advert for such a relatively small group and I think we can all be very proud of what we are able to produce and I want to thank, most sincerely, everyone who has contributed to this and the last issue.

The cover image has changed again, and I thought it would be appropriate to end my two editions as editor with something of the real railway, by which I mean the real preserved railway. I was fortunate to travel on the North York Moors Railway towards the end of October, and although there are only two trains per day, running non-stop from Pickering to Whitby and back (with three hours in Whitby – time for excellent fish and chip lunch) it was a great day out. The loco seen is of course the SR Schools' class loco 926 Repton (although my former colleagues Peter and Michael might not be too happy to see that!) It is seen here, some way from home territory, at Pickering station – very much of course part of the North Eastern region – on Sunday 18<sup>th</sup> October.

Your committee are keen to keep the newsletter alive and fresh and so we are piloting a section in this edition which is intended to be something of a market place for items and ideas, reader feedback, letters or comments. All of which might add to the richness of what we are able to share. I have tentatively called it 'Workshop' but there may be better ideas out there. Do please make suggestions.

I very much hope we can continue to produce articles of interest and a number of new ideas are circulating to expand the scope of home-based modelling articles - although that shows no sign of drying up just yet but do keep them coming. If you are not working on something just now, don't be afraid to share stuff you have done in the past – see my piece on Shed Bashing for example.

As I was putting the finishing touches to this newsletter, news of another lockdown has been announced. Our monthly newsletter (*is it not more of a magazine? Ed*) is all we have to keep the Association alive at the moment, so I hope we can continue to enjoy all that it has to offer.

Dave Gotliffe is editor for the December newsletter so please keep those articles coming.

*A note for contributors – please just bear in mind the file size you submit; most email systems have a file size limit for emailing (my Gmail for example is 35Mb) and this is the effective limit for the entire newsletter. It would be very helpful to future editors if contributors could check the file size of their contribution before submitting it, and if necessary reduce the size of your photos (it is the photos that add the Mbs) down to around 300dpi which is perfectly good enough for on screen viewing.*

With best wishes, and keep safe.

Gordon  
3rd November 2020

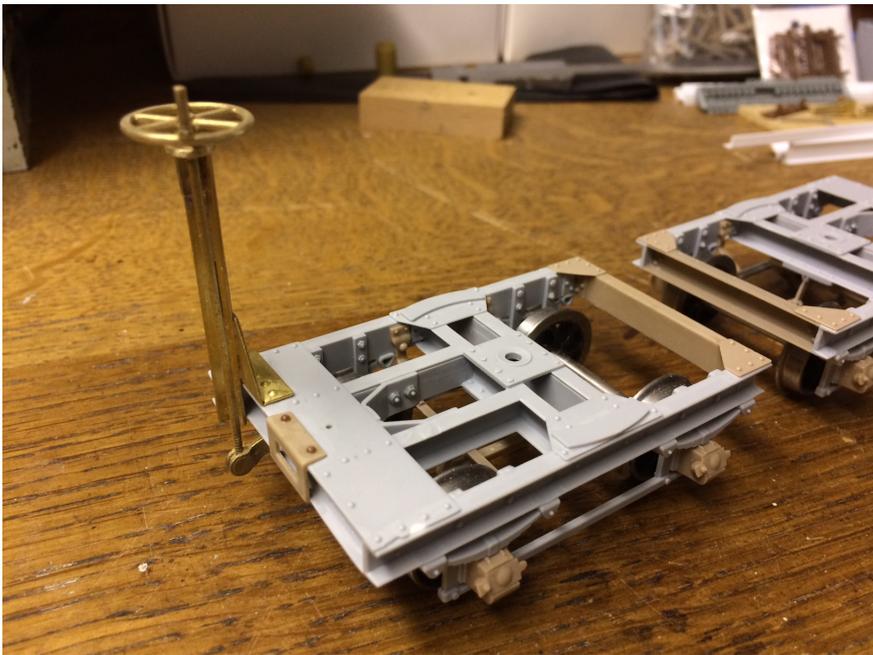
## War Department Field Gun Carrier #2

*Andy Vaughan*

Scale - 16mm : 1 foot Gauge - 32mm (represents 2 foot narrow gauge)

Following on from the plasticard project where I made a WW1 field gun carrier on a WDLR Class F wagon, I have now started on another type of carrier to add to my War Dept train.

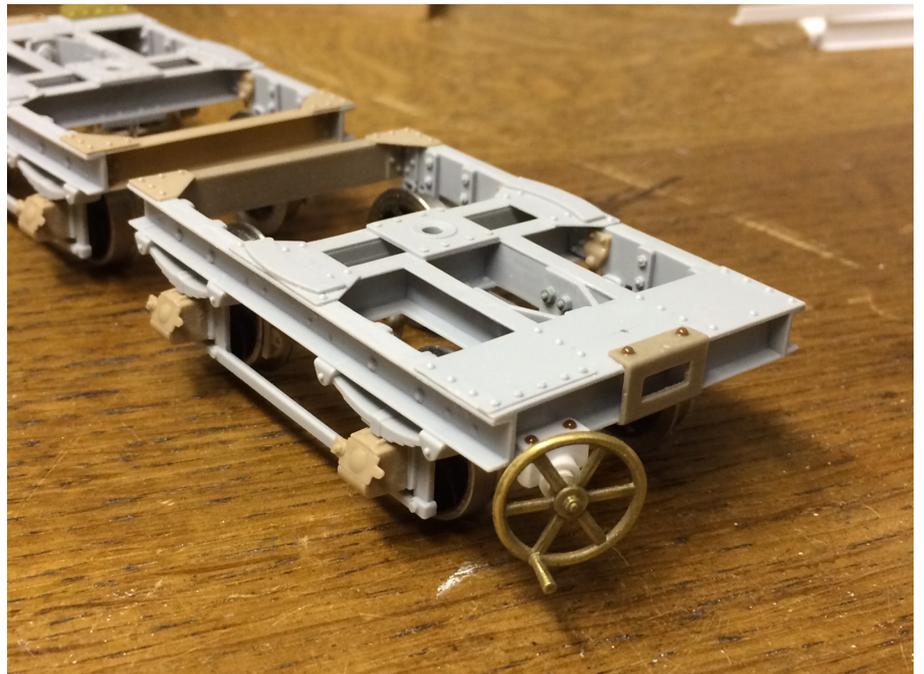
The next type consisted of a cradle fitted directly to a pair of bogies, instead of retro fitting to another wagon. The front bogie can be a normal one with the vertical brake stand, (below) but the back bogie must allow a field gun to be rolled up ramps onto the cradle. To do this they either removed the brake stand, or later on they used a new custom bogie with a horizontal brake control that was not in the way.



My bogies started out as a Slaters kit of mostly styrene, which I am modifying with brass bits and plasticard. The front bogie will have the brake stand, but I have upgraded the structure to be a brass one rather than the plastic one in the kit so it is stronger. The back bogie I have re-worked the brake components and made a new horizontal bracket based on photos in a WDLR book.

I am adding my own cast couplings rather than those supplied, as the Slaters ones require a 5BA nut to be visible in the finished article which I don't want to see! Normally that would be hidden under whatever wagon body was on the bogie, but in this case, they will be out in the open. I am also working on an alternate pivot for the cradle to bogie fixing so it has brass wear surfaces rather than styrene, for a bit more durability.

The next task is to make the cradle part and pivots, and then another field gun to carry on it.



## Howard Mainwaring

I saw a lovely photograph of a red telephone kiosk and this started me thinking of how I could build one for the garden.

Putting some thought into this idea, I soon came to the conclusion that to make a full size telephone kiosk, would be a problem in obtaining materials in the present circumstances. With this idea in mind, I then thought that perhaps a telephone kiosk would be a good idea for the railway station on our 'O' gauge layout. Building materials would be no problem, because I already had a supply of plastikard available. However, I would need to obtain the size and dimensions of a full size telephone kiosk in order to build an 'O' gauge unit.

On looking into the history of the telephone kiosk it says that in 1921 the first standard kiosk appeared, the K1. The K1 was intended for rural areas and was made of concrete. In the late 1920's the Royal Fine Arts Commission, on behalf of the GPO, invited people to design a new kiosk. In 1926 the chosen design appeared, Giles Gilbert Scott's K2. The K2 was of cast iron construction and a few hundred remain today. The K2 was too big and expensive for mass production; the GPO wanted a new design and asked Sir Giles to produce this. In 1929 the K3 appeared, a smaller concrete version of the K2. In 1927, the K4 was intended to be a 24-hour post office with a stamp machine and letterbox added to the back. It was nicknamed the Vermilion Giant and was a fantastic failure, with only 50 produced! In 1934, a K5 was produced, made of plywood, as a temporary kiosk for use at exhibitions and fairs etc. With problems occurring with the K3, a new cast iron box was needed and in 1936 the K6 appeared for the first time on the streets.

The K6 kiosk was perfect, it had all the good points of the K1 and K3 mixed with the solidness of the K2 and most importantly, the small size and elegance was what the Post Office was looking for. The K6 also known as the "Jubilee kiosk" was widely used to replace K1's and K3's. This history of the telephone kiosk was what I was looking for and now I needed some physical dimensions of a kiosk to get started to produce an 'O' gauge kiosk. The red K2 and K6 kiosks were my choice and the main dimensions were as follows:

The K2 was 9ft. high and 3ft. 4ins square.

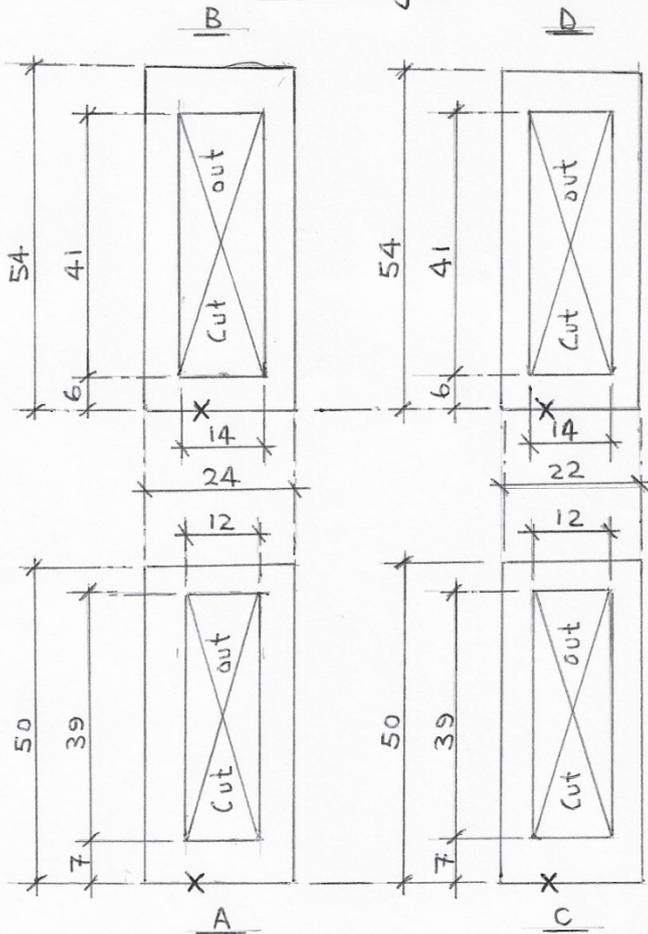
The K6 was 8ft. high and 3ft. square.

My choice now was to decide which kiosk to go for, considering 'O' gauge scale is 7mm to 1 foot. The K2 won the day, seeing that it would be 63mm high, against the K6 which would be 56mm high. The decision was to go for the taller K2 telephone kiosk and I commenced the design to produce this.

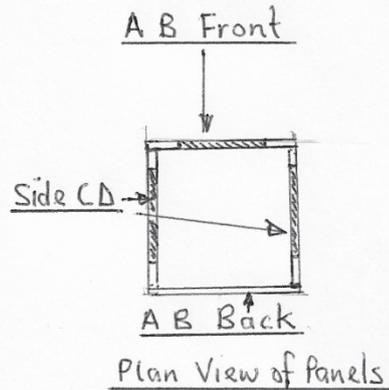
**Here is a question to those who have used the old red telephone kiosks in the past. How was the call started? What were the purpose of two push buttons A and B, and what was the coinage that could be used for a call? No prizes, but a good test of memory.**

The drawing shows how I sized various items, and how I was going to glue them together to hopefully make a reasonably good looking telephone kiosk.

K2 TELEPHONE KIOSK  
'0' Gauge scale



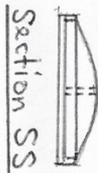
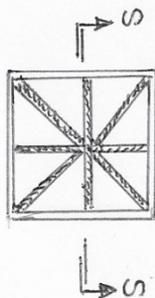
Panels A, B, C & D cut  
from 0.5mm Plastikard  
All dimensions in mm.



Glazing bars were  
cut from paper which  
had been painted red  
on both sides, with  
double sided tape  
used to fix the bars  
to the plastic glass.

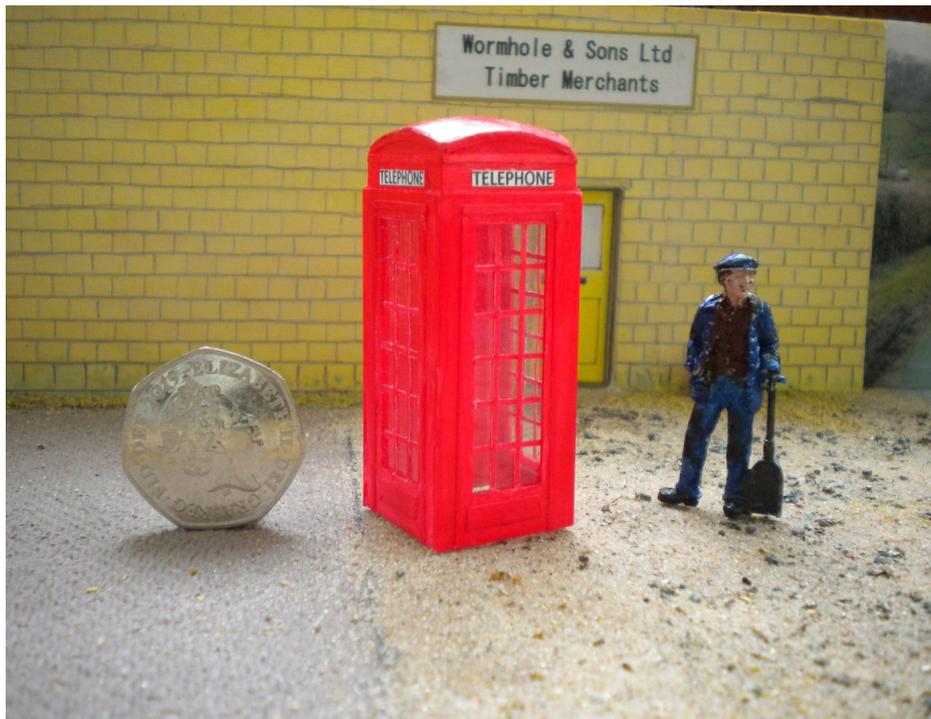
Panel A glued onto  
Panel B. X level bases  
\* Front Panel A & B with  
cut out forming recess  
for plastic glass panel  
\* Back Panel A & B without  
cut out.

Panel C glued onto  
Panel D. X level bases  
Side Panels C & D  
both have cut outs  
forming recess for  
plastic glass panel



The Kiosk dome formed  
on a 23mm square base.  
Then domed shapes shown  
shaded, glued to the base.  
Then paper soaked in a  
PVA diluted solution placed  
over the dome and left to  
dry.

These photographs show the finished article



This chap looks like he is searching in his pocket for a penny to make a call. Any ideas what job he could be thinking of to put his spade to good use?

## Rhymney Railway "J" class

*Trevor Hughes*

Some time ago a fellow modeller asked me if I would build a 4mm scale Lester brass kit. He liked the ideas that I have for locomotive building, namely split frames, compensation and multistage gearboxes, built as far as possible with self-lubricating plastic gears. I haven't got very far with it at the moment but members may be interested - it is a rather different (and quite involved) way of dealing with a brass kit.

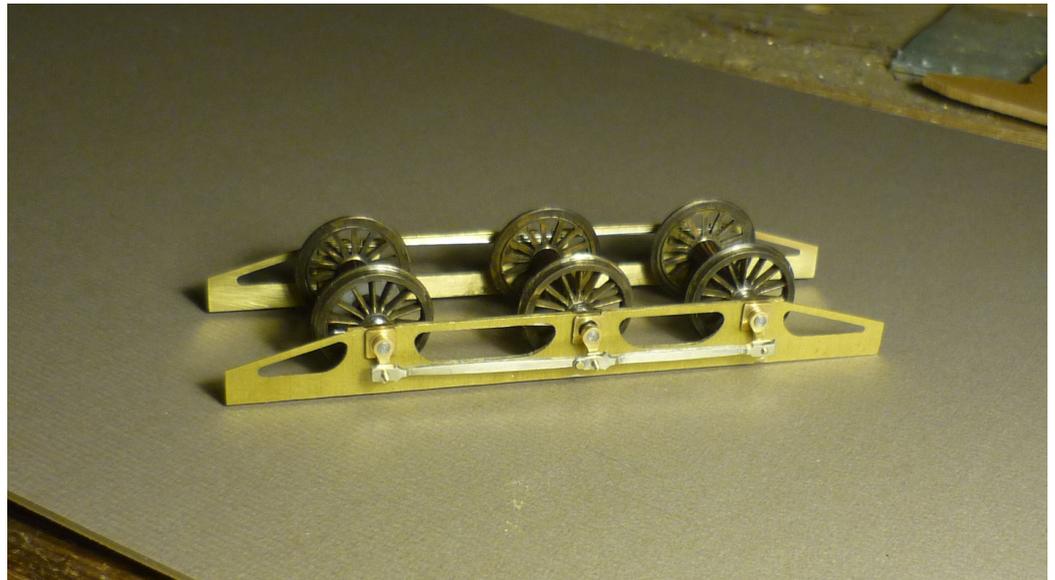
The prototype was built with double frames and the kit designer intended the engine to work inside framed with dummy outsides. I hate to see the gap in the frames where the axleboxes should be and the Romford extended axles as well, so I decided to add some strengthening plates inside the very flimsy etches. At 0.3 mm thick these were close to scale but not really suited for anything other than a glass case model. The frames were done on my pantograph miller using the drawing of the locomotive, suitably enlarged, as the pattern. I arranged to have the new frames in 0.7mm engraving brass and for them to be slightly smaller all round than the etch. This makes the thickness less apparent and conveniently gives just the right space for the Maygib square axleboxes. The existing plastic horn guides were discarded. They were of no use in a split frame system and in any case the plastic had shrunk down in the 25 years that the kit had been on my friend's shelf and the axleboxes had become an interference fit.



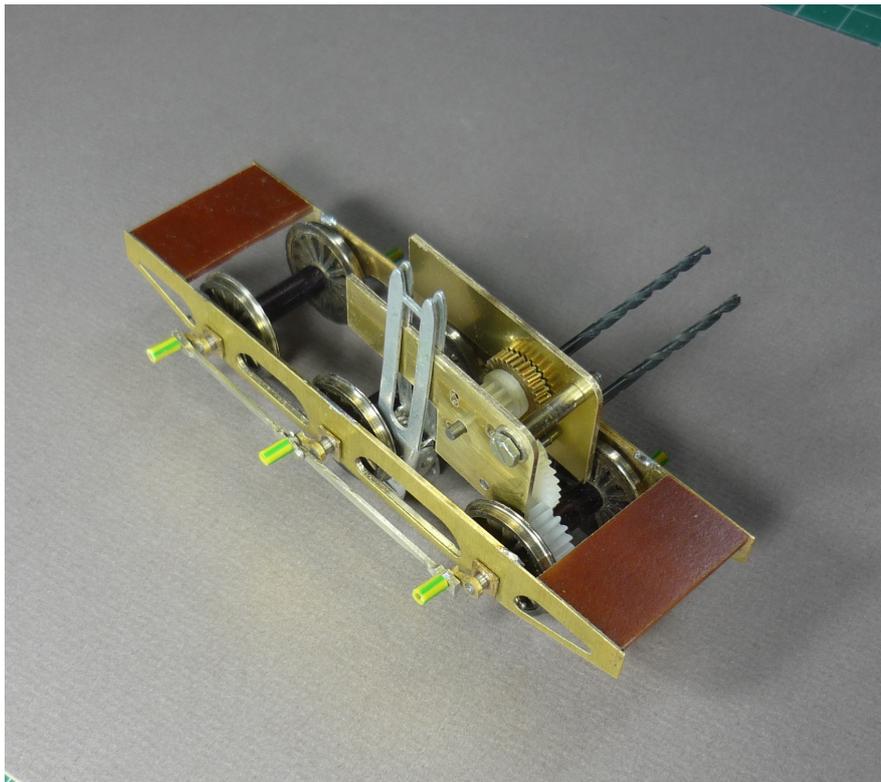
The wheels are lost wax cast in Nickel Silver and fitted to  $3/32$ " axles. These in turn are turned down to give a 2mm diameter shoulder on which the crank can be fitted. The Maygib boxes were bushed down from  $1/8$ " with phosphor bronze sleeves. The cranks were milled, again from patterns taken off the locomotive GA. They are fitted with 14BA brass countersunk head screws to act as crankpins. In my usual loco work, the rods would also be produced on the pantograph to ensure that they fitted the axle centres. In this case I elected to use the existing etched N/S rods, and used some convenient  $3/32$ " pinpoint wagon axles to check that the rod centres matched the axlebox setting. The stub axles are held in a paxolin sleeve, and fixed with Loctite 290

The engine will have a gear drive on to the rear axle with the front and centre axle free to move under the control of a central beam.

The axleboxes can move about 1mm up and down on the front two axles with the rear being fixed. The boxes are held in place with a keeper made from a stainless-steel pin threaded through eyelets made from brass wire.



### *Update*



Continued, if somewhat slow, progress on Jonathan David's Rhymney Railway "J" class saddle tank. Now with the gearbox temporarily in place. It will be fixed eventually to the inside frames.

The gear ratio is 60:1 using some small cast gears that I had on hand. My usual choice of HP printer gears were all too large to fit within the outline of the firebox and ashpan. These old gears tend to shrink with age, many proprietary locomotives in the past have suffered failures because of this. The shaft size was originally 2mm, now down to 1.9mm. It is difficult to ream out to 2mm and maintain

concentricity, but a lot easier to fit 1.9mm shafts. Not a commonly stocked size, but the shanks cut from cheap twist drills will do very nicely.

The rods have been set up using temporary crank pin nuts made from pieces of plastic cable insulation, I have been running out of all sorts of stuff recently, small size BA nuts and bolts being one. If anyone is looking round for a supplier of these, and for other modelling requirements, I can recommend the service given by Chris Barker at Todmorden Model Supplies.

## ANOTHER “JUST” JOB

Michael Bennett

In my last article I referred to the construction of the new control cabinet which had been delayed by a penchant for 'playing trains'. Now with that job completed and all trains brought to rest the next job was clearly the construction of the baseboard sections to link the MPD to the main layout. The supporting structure for this link has been in place since June, the track plans finalised in July and all components for the track purchased by August. This included 30 metres of code 55 together with 9 large radius electrofrog points.

The points took some time to source as the lock-down had caused Peco to cease production for a while. Eventually some were located in Honiton, some in Lancing and the rest in Halesowen. My preferred method of controlling points, where wire in tube is not practicable, is with Conrad's 'Point Mechanisms' and it will come as no surprise that these arrived from Austria much quicker than items from the above locations. The Conrad is very similar to Hoffman but at an acceptable price and experience has proved them to be totally reliable.

However just before commencing on this project I had an eureka moment which like all 'just jobs' proved to occupy an inordinate amount of time. Before moving house the 7ft x 2ft MPD had been located over boards C & D on which are situate 4 running tracks of necessity in tunnel and 6 points in a deep cutting. It struck me that now in a larger room and hence being able to separate the MPD from the main layout, these boards could be part of the scenic section. Having infilled 7 access cut-outs (all of an awkward shape) further realisation dawned that the goods loop which had not previously traversed these boards could now be made into a complete circuit and that the short siding in the goods yard could now be extended by some 4ft to provide valuable wagon storage.



Turning hidden trackwork into something presentable was now essential as I had not previously bothered to install the 2 additional sleepers wherever track sections had been joined.

**Photo left.** Shows the 6 points previously in a deep cutting and the need to now insert the missing sleepers. The loose-pin hinge will be removed.

What larks this proved, as in conjunction with this I felt the curves should be super-elevated. Fortunately, the track had only been pinned and could therefore be lifted slightly to insert both sleepers and packing for the super-elevation. To my mind if a cant is not provided trains appear to be leaning out on the curves – an optical illusion but not very realistic. It is therefore well worth the time spent to apply some degree of super-elevation. Previous experience had shown it is too easy to overdo this and that it is essential to gradually increase it on a transition curve. Whilst bogie vehicles can cope quite well this is not necessarily the case with pony trucks or indeed long wheel base 2 axle wagons. In the

larger scales where compensation can be applied I am sure this would not be so much of a problem but I have never ventured to compensate axles in N gauge, although I bet somebody somewhere has done so, and done so successfully.



Hopefully, photograph 6 of an HST leaning into a super-elevated curve will dispel any doubts of the additional time and effort being worthwhile.

**Photo left** Showing an HST leaning into the curve on the down fast line.

The raised section to the rear will [eventually] carry 3 tracks to join to the MPD link baseboards.

Closing the circuit of the previous goods loop proved interesting as the tracks had previously stopped at the end of the board and were soldered to copper clad. Thus, the usual way of carrying the track across the board joints, soldering to copper-clad and then cutting could not be achieved without major surgery.

**Photo right** Showing the preparations for extending the two tracks. The track on the left is a siding off the goods loop which can now be extended and joined to form a circuit. The track on the right is a siding which can now be extended by some 4ft.



This meant careful alignment using an old cut section of straight Tracksetta for horizontal alignment and ensuring vertical alignment by way of the finger and eye tests followed by a proving run.

**Photo left** Showing the goods line soldered to copperclad. The make-up pieces are glued using 2 ton epoxy. The weight is being used to maintain the track in position whilst soldering the fishplates. (A scale 100 tons?)

**photo right** Tracks joined. The left track is the existing up slow line. The centre track is the extended goods line off a double slip squeezing and wending it's way between existing buildings. I foresee a severe speed restriction being imposed.

And so, the 'just job' involving some 7ft of additional track with a further 28ft of track to be improved not to mention the cork, additional

droppers, connection to the bus and weathering seemed to occupy my life for longer than originally anticipated. However once completed the additional track now enables me to run 5 trains simultaneously and when they all happen to pass through the station area it does look rather good, despite the station being "no platformed" - using parlance borrowed from the Oxford Union. Mind you, operating 5 trains simultaneously means the finger is never far from that large red emergency stop button. Perhaps at some time in the future I may even get around to ballasting, but I fear that could be some way off as I really, really must now construct the link baseboards to connect that MPD to the main layout. However, at present this pales into insignificance as I am reliably informed the grass has grown - again!



**photo left** Showing trackwork for boards C & D now in place with additional sleepers and super-elevation applied but awaiting weathering. Also, shown are the infills to the baseboards where access holes had previously been necessary.

## More of the wall...

Nick Coppin

In the last episode of 'Tracy Island', I was wondering how to make 30' of stone wall. In the past, I have used the carved Das method to reasonable effect. This requires you to squidge a layer of Das (£4 a kilo from The Works) onto a rigid backing (card, hardboard, ply etc), let it dry and then carve individual stones into it. It is quite a soothing process but does take ages. I did it with a 16mm to the foot scale wall and three feet took a few weeks; on and off.



It is good technique for dressed stone as you might find around a tunnel mouth.

In 7mm with smaller stones and 30' to carve, I doubt I would still be here before it was finished! So instead of carving a layer of clay, I *pressed* the wall shape into it. I cut two strips of hardboard and glued them together and clamped them onto a former as I wanted them to be curved to a set radius of about 4 foot 6 inches.



The former was made by gluing and screwing thick blocks of mdf onto a piece of OSB (Stirling board) following a 4 foot 6 inch radius curve. I was using the inside curve of the blocks, so I stuck parcel tape to prevent the glued joint between the sheets of hardboard getting stuck to the former. (If you want a straight wall, you could just use thicker plywood instead of laminating.



Having made boats in the past, I have plenty of clamps so I could clamp the 2 layers of hardboard securely to the jig.

When the glue had set, I took the curved, double thickness hardboard off the former and spread the outside face with a very thin layer of PVA glue. I rolled out thin sheets of Das air-drying clay and stuck it to the hardboard. To make a good impression, the clay needed to be of an even thickness, so I rolled it on a jig. This is a block of wood with two battens either side of a gap where the hardboard fitted. The battens are of sufficient thickness to allow a couple of millimetres of clay. I used a length of inch diameter dowel to roll the clay onto the hardboard.



Once I had a consistently thick layer of clay, I was able to press the stone pattern into it. The press tool was made by rolling a thin layer of Das onto a rectangle of plywood and before it could harden, pressing the ends of a random selection of wood strips into the clay.



I chose a range of wood strips and as I used each one once, I dropped them onto a pile, then shuffled the pile and used them again to achieve a random range of stones, rather than consciously selecting different stone shapes. The wood made impressions where the stones would be, leaving the gaps between the stones as ridges.



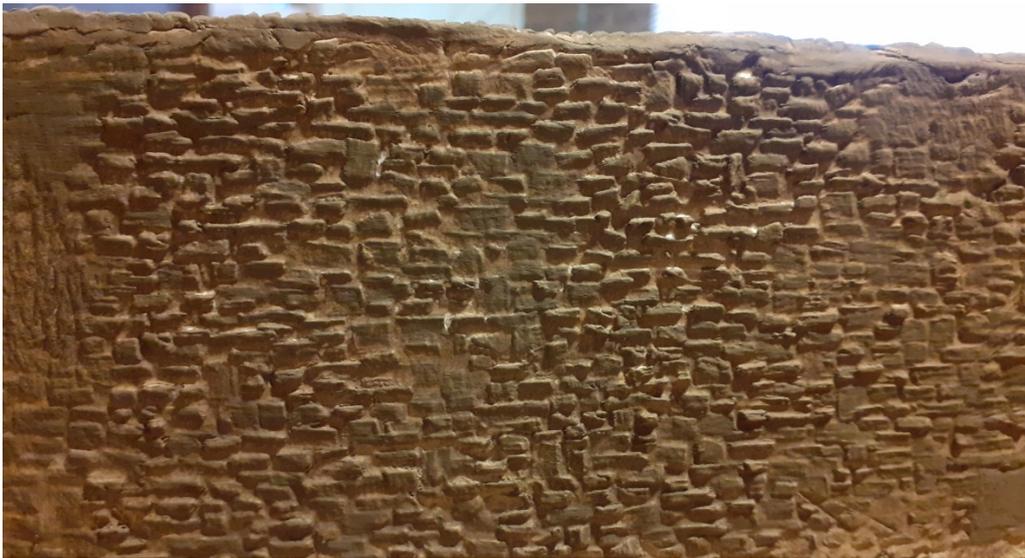
Thus, when pressed into the clay-clad wall, the stones stood proud and the gaps were pushed in between the stones. The press tool was sprayed with two layers of paint to stop it sticking to the clay of the wall. Below is the finished wall:

On the back of the wall, I have glued wood blocks, each with a screw hole to fasten the section of wall down to the baseboard.

To colour the wall, I followed advice in David Wright's book

*Making Rural Buildings for Model Railways*. I mixed about one part oil paints to nine parts white spirit to make a wash. I used Payne's Grey, Burnt Umber and a little Yellow. The paint was not thoroughly mixed so the colour is varied across the wall. I sloshed this on and left it to dry. When it was dry I 'dry brushed' a mixture of Payne's Grey, Burnt Umber, yellow and white onto the surface of the 'stones' using a sponge.

I have never bothered much about lighting but I must say, different light makes an awful lot of difference. When the light is in the right place, it looks OK but in the wrong light it just looks muddy.



Here is artificial light from above:



And here is natural light from one side:

I shall add some dried 'Mind-your-own-business'/'Baby's tears' *Soleirolia soleirolii* as creeper and the odd notice warning of *Trains*; something we should all be aware of!

## Layout and Point Control: DCC, DC and Megapoints

Peter Cox

Now that you have seen the photographs of the point servos under the baseboards last month, I thought it might be of interest to show how I control the points and the track power on my layout.

### DCC/DC

Many of you will know that I went DCC a good while ago, and have been using an NCE Powercab for some years now with every satisfaction. Like many of you no doubt, I have quite a few DC only locos which either have to be converted to DCC or be left lonely on the shelves. I have converted quite a few now, with difficulty varying from very easy to downright unpleasant, but there are others which are either not worth converting because they are inappropriate on my US outline layout, or are too tricky to merit the attempt. I have avoided having to relegate some favourite locos to the shelves by wiring in a dual DC/DCC circuit. Another advantage of having the DC is that I can check and run-in any DC purchases before converting them to DCC. A three way centre-off two pole switch is used to connect the circuit to either the DCC Powercab like the rest of the layout, or to my old (that is, ancient), but still reliable H&M DC controller. This is simple to wire and you just need to make sure that the circuit is isolated (both positive and negative leads) from the others on the layout by rail breaks.

I have divided my layout into five different sections. Here is a picture of the switchboard:-



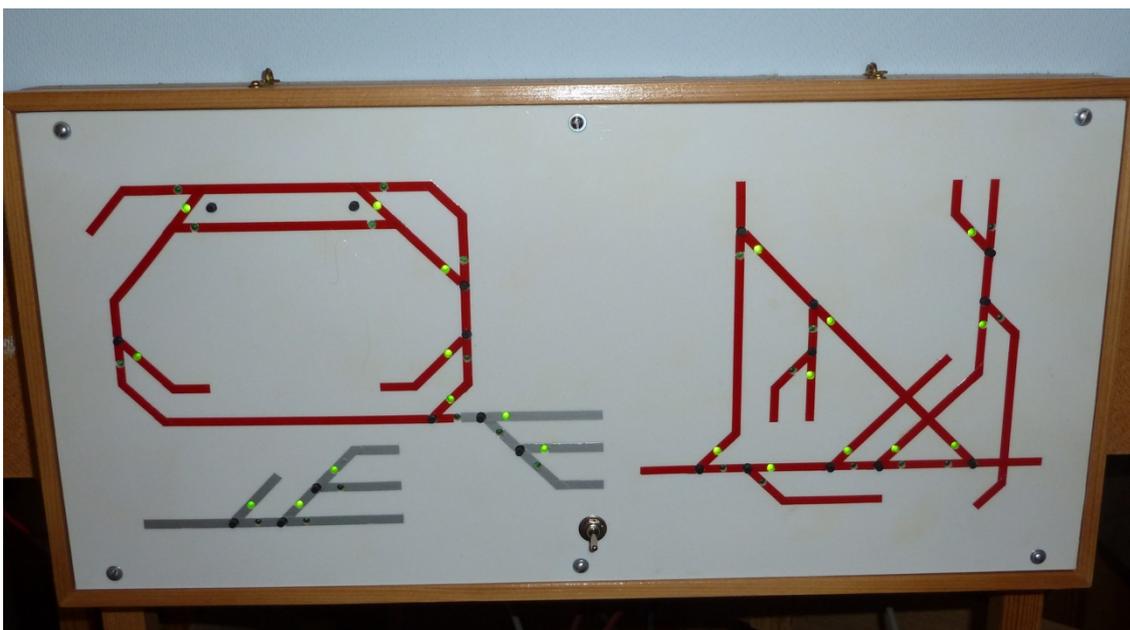
The five section switches are at the top. (Yes, I know there are six, but that is for any future change of plan). In each case the centre position, as shown, is *off*, and down is *on*; except for the left hand section 1 switch where centre is *off*, down is *on* for DCC, and up is *on* for DC. The cable at the front connects to the Powercab, and the H&M controller is wired in at the back. That is all there is to it. Oh really - so what is that green board in the middle with the tubes on it?

## Short-Circuit Protection

A problem with DCC, because the track power is always on at full, is the potentially heavy current that can be developed through a short-circuit. If not spotted quickly for whatever reason, whether it be by the distraction of telephone, drink, grandchildren or increasing age, this can melt things and possibly damage the electronics. There are various ways of protecting against this, one being to wire car bulbs in series with the electrical section leads. These light up because of the current rush to warn you when there is a short-circuit, and, by heating up, cut down the current in, and thus protect, the rest of the section. Trying to find the right bulbs and holders for them was a bit of a hassle, so I settled for the neat and not expensive NCE circuit protection board above. (That is the other reason for the six switches. Its six bulbs provide separate protection for six sections.) This works really well, as the relevant circuit bulb lights up brilliantly when there is a short, leaving you in no doubt that the loco has stopped for that reason and not just because of a dead rail. That section can then be switched off immediately before any damage is done, and the fault investigated at leisure.

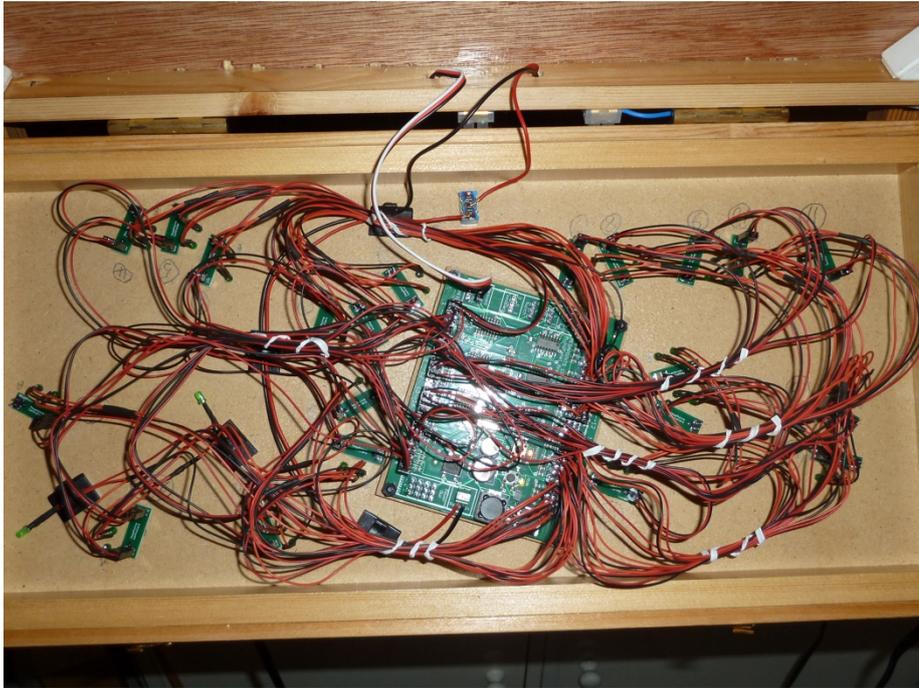
## Point Control

I have been a Megapoints fan for some time now - well, if you were at his talk you will know how hard his enthusiasm is to resist! - , and I decided to make a layout diagram with push-buttons and LCD lights to control my points. This is what it the display front looks like:-

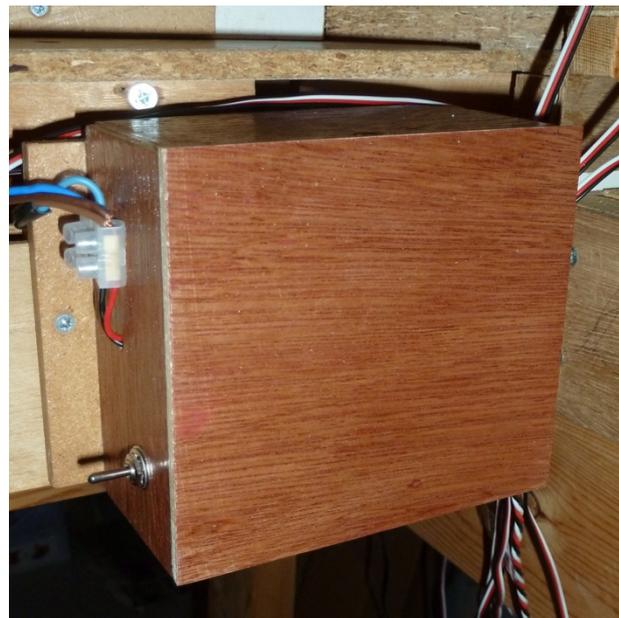
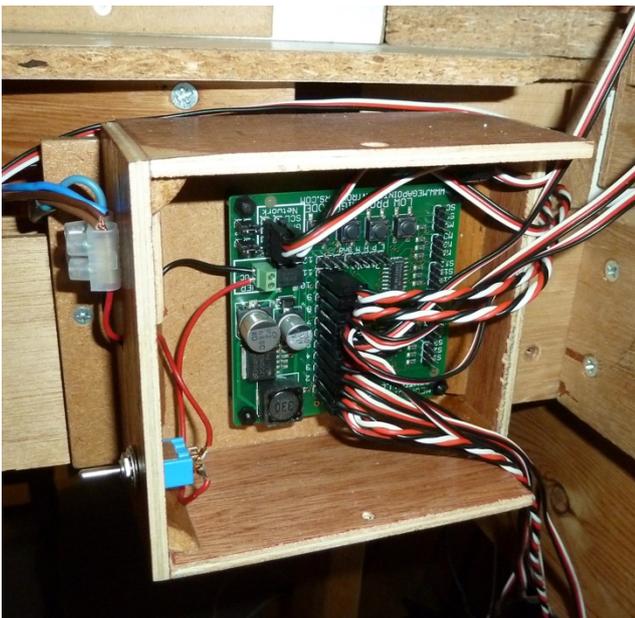


You can see the black push-buttons at each point and the LCDs showing which way the point is set. A touch of a button switches the point. The DCC/DC section is in red on the left; the grey sections represent two storage siding sections; and the town terminus and yard section is in red on the right. (I only had two colours of sticky tape!) If you think, correctly, "But that is only four sections", the fifth is not shown, but is the steady 1 in 50 climbing spiral that goes from the branch at top left above, feeding the second level of storage sidings (stacked above the first) after half a turn, and then entering the town after another full turn. If that does not make sense you will have to wait till you can come to see it!

The two catches you can see at the top of the case allow the display to open by hinging downwards, and this is the inside 'works':-



It is not nearly as complicated as it looks – honestly! The pre-wired switches and LCDs plug into the Megapoints master board. One lead brings in power, and one lead goes from here to the two point servo control boards. Each control board controls 12 point servos, and, as I have 23 servos to drive, I have two control boards. (Luckily, it was not 25!) From the control boards a three-strand cable goes to each point. Finally, here is a picture of a control board, inside and out:-



So far, to my great relief, it all works well.

# Shed Bashing

Gordon Woods

A number of years back I helped my brother to build a long wished for layout based on a locomotive depot. The slight challenge was that he had chosen 52A, which as many of you may know was Gateshead, which in its heyday one of the main East Coast depots for steam then diesel. Stuart was looking to model the early 1980s 'blue era': he did not have a lot of space but he had plenty of locos, not least the 7 Deltics that he had quietly collected!

Back in 2011, I got to the point where a track plan had emerged for the available space but the real challenge was the distinctive 1950s shed building (itself a rebuild of a much older loco shed.) Added to which, apart from a solitary NER style signal box, I had never scratchbuilt a building before, let alone a scaled down version of a 9 road engine shed.

I knew the look I wanted and so began the research phase and one of the first pieces of serious online research of railway history that I had undertaken. I soon came across a site called *Derelict Places*

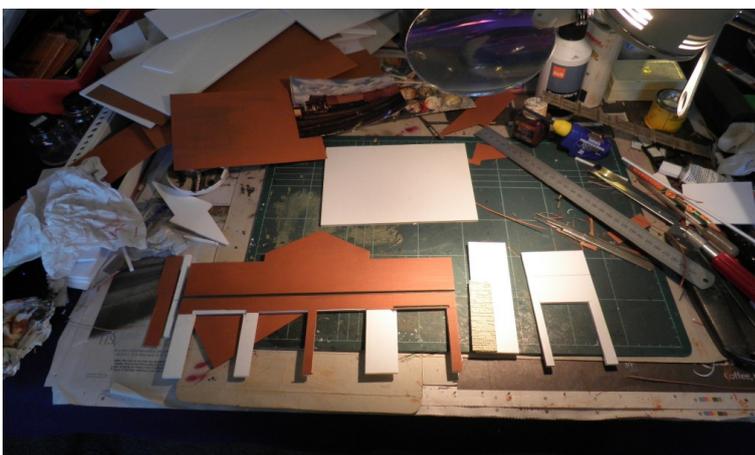
<https://www.derelictplaces.co.uk>

which some members may be aware of.

This produced some excellent images of just what I was looking for, but there were other good images out there too.



The first modelling task was to replicate something of the frontage (as shown above) at 4mm scale. There was only going to be room for five roads rather than 9 but the key thing was to try and capture the feel of the place. Curiously perhaps, I decided to take the scaling from one of Stuart's locos and work from there. Measuring around one of his Deltics standing on the rails I produced a template for one of the shed entrances which were nicely rectangular. From this I copied across and played around with the templates on paper until I had what looked to be a nice balance as a line drawing on paper. This was then drawn out on the back of a Weetabix box and the frontage mocked up as a card outline (something I have always since found useful). With a few more tweaks I was then able cut the frontage out on a single piece of artists' foam board which I then would laminate with Slaters embossed styrene brick sheets.



Basically, the same process was followed for the sides and ends. I was fortunate that the south side of the shed had a stepped profile in plan view, a legacy of the steam shed that pre-existed the 1950s one I was building. These steps added significantly to the structural rigidity of the model and the basic shell of the walls and ends was complete. (It is always good practice to work on a clear and tidy work table...)



Left, the basic shell of foam board laminated with Slaters English bond styrene sheet forms the basic structure. Also featuring a still green Bachmann Deltic. The model is long enough to take three locos on each road.

Next came the roof. See below. The real building has semi-circular roof trusses over the main roads. This was not going to be possible (or worthwhile) to model but I did want to find something that looked right. Some seriously big Plastruct girders were sourced and these gave me the potential to have something robust and structurally sensible. Glazing was hard Perspex with tile paper and glazing bars of styrene strip. The distinctive roof vents were found as resin castings at a model rail show; I have not recorded the make but they were just the job.



The low side windows (see above) were cut down from larger windows from (I think) the Wills range of building accessories and capture the flavour reasonably well.

The doors on the real thing were 'wasp' striped (see photos below) but I had some Scalescenes doors in black/yellow horizontal stripes and these looked the part. Given the huge extent of brickwork the painting, in enamels was 'impressionistic' with some mild weathering – although I could have done more when you look at the photo below right.



On the layout, Stuart had sourced a ready-made office building from the Bachmann Scenecraft range. The shot below is not a great picture of the building in place but some sense of the atmosphere created, not to mention 9900hp in those three Deltics (well, the full size ones) plus the trusty 03 that would have been the station pilot across the river at Newcastle Central. Some might say that the models (shed and locos) are far too clean for Gateshead...



A shot for interest taken by my father inside the real 52A / GD circa 1980 with two class 40s (081 and 077) receiving attention.



# GANGWAY CONNECTORS

Michael Bennett

Many moons ago at Chatham Model Railway Club our Chairman came across an article from a Scottish Club on making gangway connectors. The dimensions given are for 'OO' gauge but were very difficult to comprehend from the script, which probably had it's origins in Gaelic. However, perseverance accompanied by some well-chosen expletives eventually overcame the language barrier and the end result turned out to be most satisfactory.

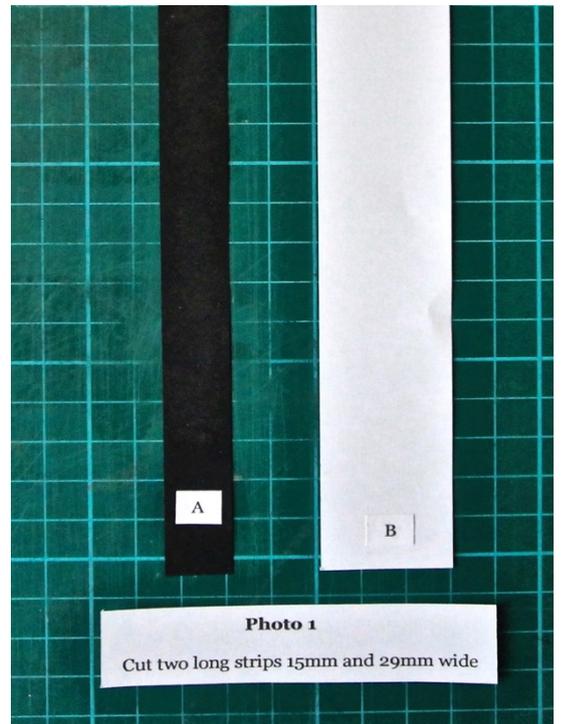
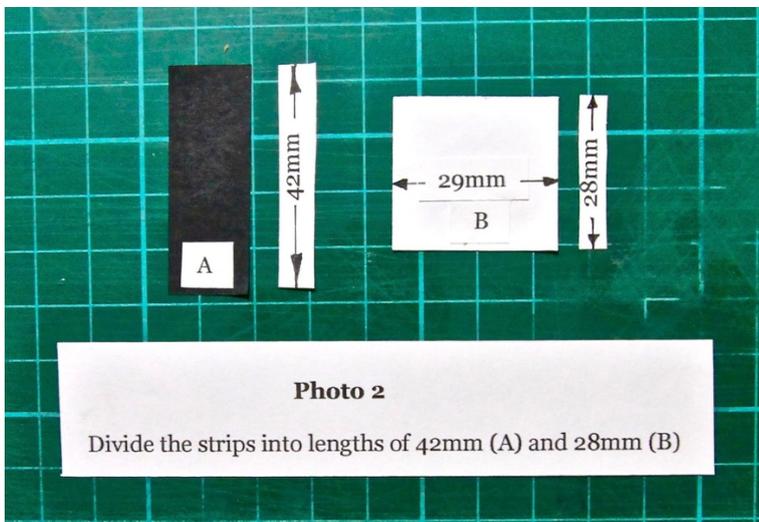
The instructions were re-written into English and are reproduced below taking one step at a time to ensure clarity. The photographs show one black and one white sheet only in order to differentiate between the two pieces. Whilst the dimensions are for 'OO' gauge and could be scaled up to 'O', I have not attempted it in 'N' because, apart from my lack of ability, I believe the 80 gsm paper would be too thick, heavy and non-pliable. Matt black paper is obtainable on eBay at £3.15 for 15 sheets of A.4

See photo 1 right

1. Cut a 15mm wide strip of paper
2. Divide this strip into lengths of 42mm [call these A]
3. Now cut a 29mm wide strip of paper

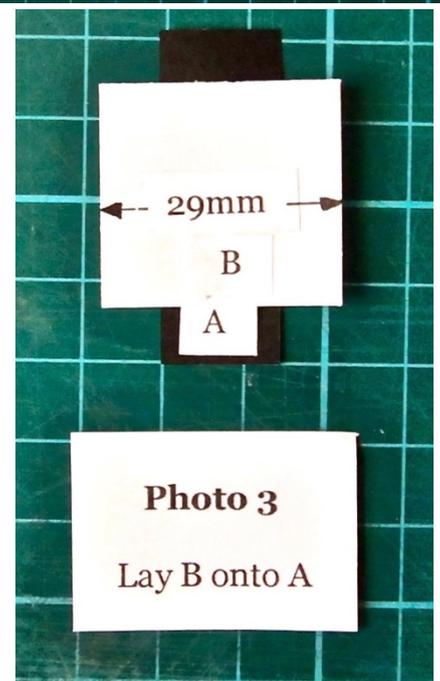
See photo 2 below

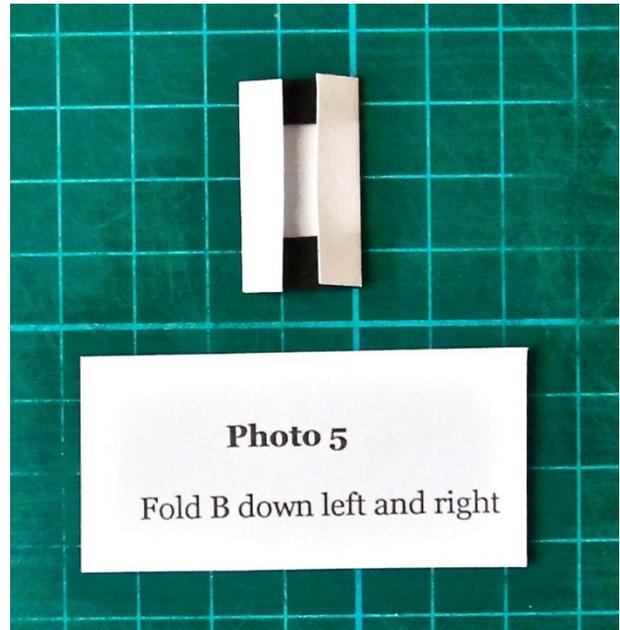
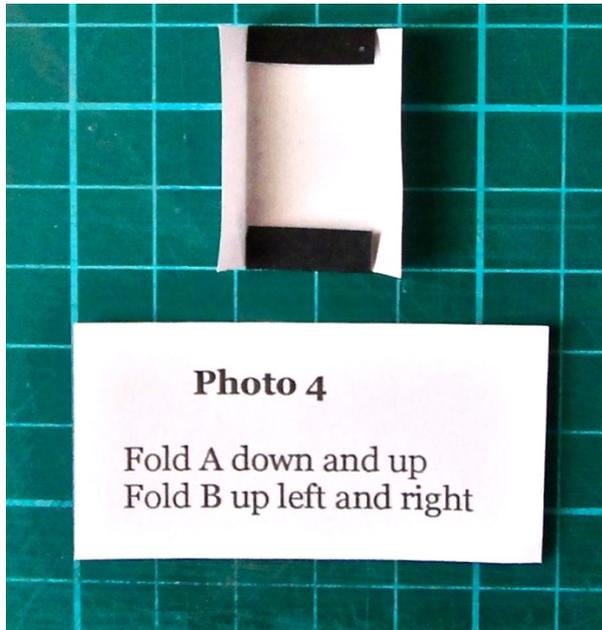
4. Divide this strip into lengths of 28mm [call these B]
5. Lay A down such that the width is 15mm and the length is 42mm



See photos 3 right and 4 & 5 below

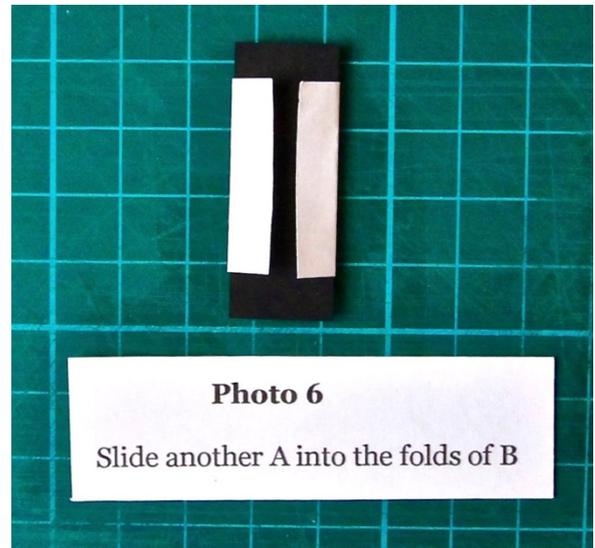
6. Now overlay A with B and position symmetrically with the width of 29mm
7. Fold the 7mm top projection of A over and down onto B
8. Fold the 7mm bottom projection of A over and up onto B
9. Fold the 7mm left projection of B over onto A
10. Fold the 7mm right projection of B over onto A
11. This is the first section of the concertina which will form the gangway connection



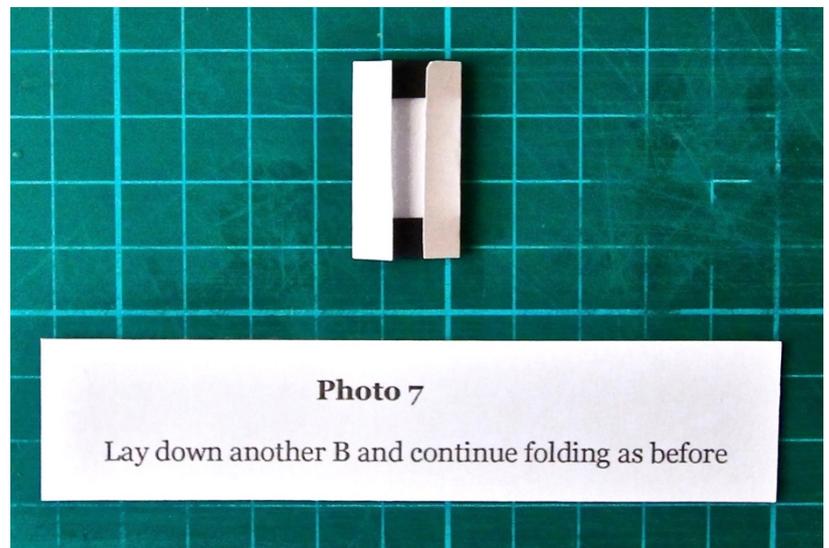


Now for the second concertina:-

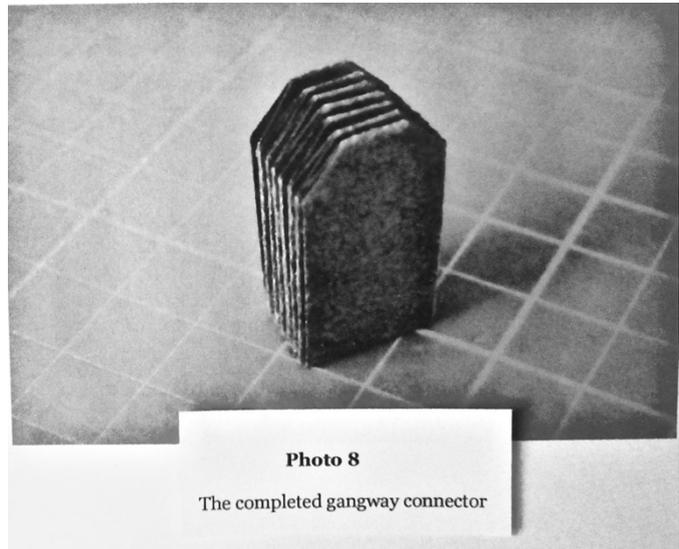
12. Slot another A into the folded arms of the previous B (Photo 6)
13. take another B and lay it onto A, symmetrically as before
14. Fold A down and up as before
15. Fold B across from left and from right as before
16. This has now formed the second concertina
17. Continue adding folded A's and B's until the desired thickness is achieved



18. When this thickness is as desired, take another strip A
19. As before lay it onto the work, BUT do not fold down
20. This strip A is folded inwards top and bottom into the previous folds
21. To prevent this A from becoming undone from the pile it may be glued (see 24 & 25)
22. When one is satisfied that all works well cut the top corners off at 45 deg.
23. Cut card or balsa to fit neatly inside the carriage end doorway
24. Glue the last placed end to this card/balsa
25. This secures the final A into the concertina if not previously glued



26. The first made concertina is now free to "float" against the adjacent carriage



## Workshop: disposals, acquisitions and information sought and shared

**MDF** Peter Cox

Does anyone know of a source of 8' by 4' 3mm thick (1/8") MDF? B & Q no longer stock it, and it is so much nicer to use than hardboard, which is the substitute I am faced with. I can get it if I go to London; if I order 50 sheets; or if I am satisfied with A3 and A4 sized pieces, which are intended as artists' canvases; but none of these possibilities quite fits my needs.

### Books for sale (£1.00 each) and journals free to a good home (or even a bad one!)

*Nick Coppin, collect from Broseley*

Welsh Railways Archive, journal of the Welsh Railways Research Circle. Volume 1, no. 1 to volume 7 no. About 50 issues.

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| <ol style="list-style-type: none"><li>1. Great Western Collection, Guild of Railway Artists</li><li>2. Don Breckon's Great Western Railway</li><li>3. Memories of Steam, Tom Quinn</li><li>4. Cotswold Memories, recollections of rural life in the steam age, Pigram and Edwards</li><li>5. Pictorial Record of GW wagons, JH Russell</li><li>6. History of GWR goods wagons, Atkins, Beard, Hyde and Turret</li><li>7. Loco Profile no. 3 GW 4 cylinder 4-6-0s</li><li>8. GWR road vehicles, Aldridge and Earnshaw</li><li>9. GW coaches appendix volume 1, JH Russell</li><li>10. GWR iron minks, Lewis, Lloyd, Metcalfe and Miller</li><li>11. GW siphons, Slinn and Clarke</li><li>12. GW portrait, Adrian Vaughan</li><li>13. Portrait in Oil, Illustrated history of BP, Ritchie</li><li>14. Bridge across the century, Story of the Forth bridge</li><li>15. Royal visit to Crewe works, edited by Talbot</li><li>16. Illustrated history of LNWR coaches, Jenkinson</li><li>17. LNWR 30'1" carriages, Millard</li><li>18. Official drawings of LMS wagons, Essery</li></ol> | <ol style="list-style-type: none"><li>19. Etched loco construction, Rice</li><li>20. Loco chassis construction in 4mm, Rice</li><li>21. The 4mm engine, a scratchbuilder's guide, Guy Williams</li><li>22. More 4mm engines, Guy Williams</li><li>23. The 4mm coach Part 1, Stephen Williams</li><li>24. GW branch line modelling Parts 1 and 2, Stephen Williams</li><li>25. Private owner wagons on the Cambrian, Lloyd</li><li>26. Locomotives at the Grouping volume 4, GWR, Casserley and Johnston</li><li>27. Manchester and Milford Railway, Holden</li><li>28. GWR in 20<sup>th</sup> century, OS Nock</li><li>29. Milling operations in the lathe, Tubal Cain</li><li>30. The Country Railway, St John Thomas</li><li>31. Locos of Severn-Lamb, Holroyde and Little</li><li>32. Gear fitting fore the small scale modeller with no workshop, Mike Sharman</li><li>33. Wheel specifications for the modeller, Sharman</li><li>34. Edward Beal's Railway Modelling Series, book 2, Layout and Survey</li><li>35. Model Railways Handbook, 7<sup>th</sup> Edition</li></ol> |
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## Radio Control items For Sale

From Mike Wakefield

FlySky FST4B 4 channel 2.4GHz radio control transmitter, complete with a FSR6B receiver.

I use these to control my live steam and battery locos.

Unused, in original box and packaging, although I have tested to make sure they all work (they do).

Instructions can be downloaded from here:

<https://static1.squarespace.com/static/5bc852d6b9144934c40d499c/t/5d24794d508d000001653147/1562671488693/FS-T4B+manual.pdf>

There's also YouTube videos showing how to bind the receiver and transmitter, just search for FlySky FST4B

You'll need some AA batteries for the transmitter.

£20, collect from Baschurch.

### Specifications:

Channels:	4
RF range:	2.4055-2.475 GHz
RF power:	Less than 20 dBm
Protocol:	AFHDS
Low voltage alarm:	lower than 9V
PS2/USB Port:	PS/2 port PPM
Antenna length:	26mm
Power input:	12V DC 1.5AA*8
Online Update:	No
Weight:	495g
Size:	189*97*295mm
Color:	Black
Certificate:	CE, FCC ID:N4ZFLYSKYT4B

