

Layout Cameo

# BIRCH VALE REBORN

How this 4mm scale 1970s vintage layout was given a 1990s facelift is related by *Dave Booth*. Photography by *Bill Rich*

**B**efore the resurrection story I must set the scene and relate some history. Brought up as part of a railway family living some eight miles out of Manchester in the shade of the Pennines, I started to model seriously in the late 1950s. By the early '60s I came to the opinion that my artistic ability (very close to zero), meant that if I was to build a realistic layout then it would have to be a model of a real place. I chose Hayfield in Derbyshire, the only single line branch I had seen. British Rail kindly sent me a sketch of the track plan and a letter to show the station staff giving me permission to measure and photograph as required. However my employer stopped further progress by offering me promotion which meant

moving across the Pennines. This new home was to have a railway room and when I was back to modelling again I decided on a more local station, Holmfirth (now famous because of the BBC TV series 'Last of the Summer Wine'). Built to 3mm scale this layout was accurately modelled to scale length and just fitted down one side of the railway room.

This explains the delay of some eight years before I restarted the research of Hayfield which, was first exhibited as a finescale OO layout in 1971. During the research period I had made the acquaintance of Maurice Daniels of the Macclesfield MRG. Maurice was a great help and loaned many pictures. His interest in this Midland

& Great Central Joint Branch Line was caused by his building a model of Birch Vale, the last station along the branch before the terminus at Hayfield.

In 1972 very successfully employed as an electrical engineer, I made a very serious change of career direction by giving up my job and becoming a full time student, living on a grant in order to qualify as a lecturer. Shortly after this I received a phone call from Maurice asking if I would like to buy Birch Vale. My financial situation as a full time student with no real income would of course not allow this and I had to turn down this chance to own a layout with some fine modelling. Not many weeks later Maurice again phoned, this time to ask if I would accept the

I think the porter is putting the barrow on its legs! J72s didn't get to Gorton, but I saw one at Newcastle in the 1960s resplendent in apple green and had to have one! The story is that it's on loan from Doncaster until the J94s are all delivered - they'd requested a J50!



Layout as a gift as he could not bring himself to destroy it and he no longer had space to keep it. I could only say 'Yes please.'

My railway room was now getting rather full with Hayfield down one side, Holmfirth down the other and Birch Vale perched about 18" above Holmfirth, with perhaps 18" or so to squeeze down the middle. For exhibition purposes hidden sidings were built to couple Hayfield to Birch Vale and Hayfield's hidden sidings were modified to fit Birch Vale to give an end-to-end, two station layout about 40' long. It was exhibited in this form at many Yorkshire area shows in the early '70s. Without going further into history, round about this time I was persuaded by the group with whom I modelled that we should 'go P4' (I think I'm the only one of that group still modelling to 18.83 gauge, but now I have followed Ray Hammond's lead and use S4 track standards). I contacted Maurice to ask if he would be offended if I relaid the track on Birch Vale to 18.83 and as he offered no objection this was done and the layout served as a test track for my conversion to this gauge.

A fruitless attempt to build a model of Newton for Hyde on the GC main line Woodhead route, plus two house moves meant that it was not until around 1990 that Birch Vale was ensconced in my present railway room (actually one side of a purpose built garage which also includes my present workshop). Standards of layout building have improved much over these years and this old stager of a layout was not only showing its age, but its standards no longer stood out so brilliantly as in the '70s. I felt indebted to Maurice that it should not be destroyed but be resurrected and brought up to today's standards. This article is really about the problems involved in retaining outdated baseboards, but modifying the total structure to meet present day exhibition presentation: also trying to keep the best of the old, but adding modern ideas. It would be nice to say that I sat down and planned what to keep, what to modify, what to add, but that would be lies. The resurrection only became a definite, planned process after many of the changes had taken place. It all started because my original attempt at P4 trackwork was far from good, and as a test track, I could never be sure whether a derailment was due to a fault in the vehicle being tested, or to poor track!

So I had to scrap my original track and relay the layout with much more care, but not too perfect, because my stock must be tested on track with some 'less than the best' sections. In order that the layout could perhaps be exhibited with its new track, it was found desirable to lengthen the scenic section so as to include the turnout into the siding which I have christened 'Bank Siding'. Maurice had had this turnout off scene. It was also necessary to organise hidden sidings at each end and as I was not happy with the exit areas



The doors of the goods shed have been removed, but it is otherwise as built, certainly better than the norm in 1972! The bridge, backscene, Lowe's shed and lorry are original too. In the immediate foreground the camera has emphasised the 'lift-off' scenery covering the baseboard joint and clamp. A K3 can be seen returning to shed, tender first.

some additional scenery would need to be added. These modifications proceeded in a haphazard and slow fashion. Track was first, beginning with the turnouts; two left-handers. Some years ago I had decided that the minimum curvature for my point work was to be 'type B6'. Accordingly these two points were built using the 'B6 Turnout Template' provided by the Scalefour Society, with rivets and sleepers from the Scalefour Stores following the guidelines of the Scalefour Digest sheet written by Messers Wilkins and Goodall.

Although following the 2" x 1" softwood frame with insulation board top construction much advocated by the magazines of the 1960-70 period, Maurice's boards were rather more substantial than usual and are perhaps best described as 'individual'. The track base is two layers (in some places three) of 1/2" insulation board glued together and this material and it's double thickness has caused problems throughout all my changes.

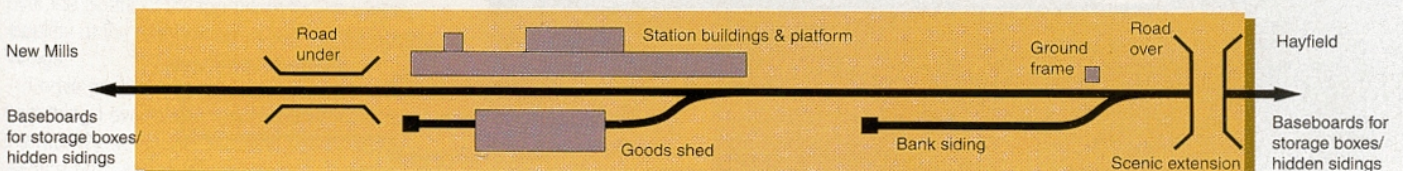
My first P4 track had been built onto the original cork track bed plus ballast which the OO track had vacated. To lay better track meant that all ballast had to be removed and the easiest way to do this was to lift not only the ballast but also the cork underlay. Easy to say, easy to do, easy to rip away the top surface of the insulation board! I was now faced with a trackbed whose surface was not only uneven but also 'fluffy' with the soft fibres of the insulation board. The obvious

solution was to completely cut away the insulation board and lay a trackbed of chipboard or plywood. However I wished to retain all the buildings, including the station building and platform, and much more of the scenic features. Also have you tried cutting insulation board? Horrible stuff! The selected answer to this problem was to arrange each board to be truly level in both dimensions and then to pour a very liquid plaster mix over the track bed. When set but still damp, the surface was 'polished' with a clean, wet, steel mini trowel. This resulted in a nice flat surface, but a not perfect trackbed on which to lay a cork underlay. Plain track was a mix of 'ply & rivet' and moulded plastic sleepers in lengths of about 10 sleepers, (a Ratio product?). Before the turnouts were laid I had to solve the problem of how to arrange their operation.

Maurice's OO points had been operated by wire in tube, the tube running on the top face of the boards, below the scenery. Needless to say that the existing tube runs did not fall in the correct position for the new point work and would have to be abandoned. My previous methods of point operation had been based on the oft described 'slider in curtain rail' system but the massive depth of these baseboards would not allow this without some modification (see Figure 1).

The length of the 4mm pillars varied with the depth of the baseboard below the point blades. The false tie bars were covered loosely with paper

## BIRCH VALE TRACK PLAN





As a schoolboy I 'footplated' 7402 from Hyde Junction to Macclesfield and back, some 50-60 miles. The body is Slater's 'Plastikard' and was my very first attempt at scratch-building! The chassis was my first attempt in 18.83mm gauge and later was used to prove that I could cope with S4 standards. Much nostalgia for me in this picture. It's the third chimney and still not quite right!

which was then ballasted over so that only the blade wires showed. At the time this work was carried out I thought there was a need to facilitate point operation from either front or rear of layout and as I was to keep the electricians simple by having mechanical, hand operated points, extra mechanical work was needed. The pull wire was welding rod, gripped to a home made pillar which was attached to the slider, Bare brass connectors stripped out of 10amp connector strip were used somewhere in the pull wire run to limit movement, the same connector system was used to allow the pull grips (bent welding rod) to be easily fitted front or back, or removed for safety during transportation.

Electrical switching for the frog is in one case an industrial limit switch, in the other a small slider switch. In both cases the switch is attached to the pull wire or an extension from it. The slide switch also doubles as the pull grip for rear of

layout operation.

As previously stated I did not like the means of exit to the hidden section at each end; Maurice had used a sheet of tin foil-coated hardboard with an exit 'tunnel mouth', the tin foil intended to give a hazy reflection and the effect of increased length - in my opinion not successfully. I also wanted to add some 2' of scenery at the Hayfield end. Here, modelling licence came into play as I decided on a non-existent overbridge to disguise the exit. The space used as hidden sidings was taken up by this extension, meaning a new baseboard for hidden sidings was needed.

At the opposite, New Mills End, I again used some licence and raised the scenic land on the viewing side. With trees planted on the lineside the hole in the eventually to be painted scenery would be disguised. The area for the old hidden sidings was left unused but would have insufficient length for the trains I intended to run,

meaning that a new baseboard was required at this end too.

A little time before this, Chris Pendleton had published his brilliant idea for a storage box come fiddle siding (see *MRJ* No.27 'Variation for fiddle') and I was so impressed with his ideas that I copied them unchanged and built a New Mills storage box and a Hayfield storage box. These initially allowed operation without building the new baseboards for each end, because the storage box cover becomes the temporary trackbed for the cassettes. The baseboards have since been built as they are needed for exhibition work. There is likely to be some modification to the cassettes as I have had some alignment and some electrical continuity problems with his design (perhaps my poor workmanship Chris?). Other than that I consider his concept to be 'one big step for modelkind' and my stock is now either in use or in a storage box.

Figure 1 Wire fixed to false tie bar below ballast level, set to gauge and soldered to point blades.

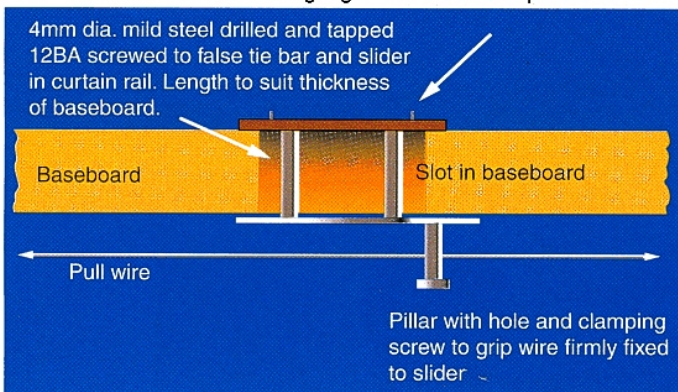
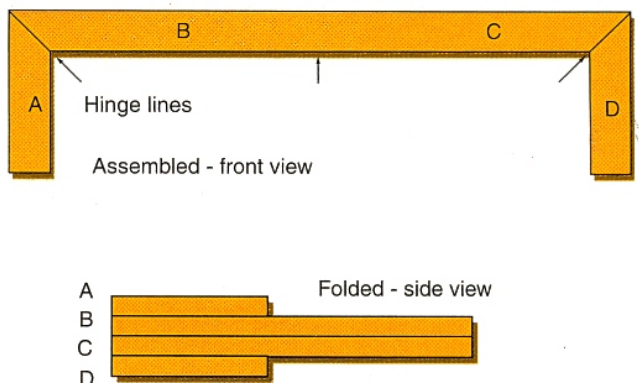


Figure 2



Over the years my railway rooms have had layout supports which incorporated storage for normal do-it-yourself tooling and materials, even toys, in addition to modelling equipment and research files etc. The basis of this has been a family 'hand-me-down' set of drawers which has its flat top surface some 42" above floor level and this sets the height of my layout supports. Accordingly, when at home, my layouts have always been higher than was the norm. My viewing height is now becoming the fashion, the track bed being about 4' above the floor.

The problem with a fixed support system is that the legs needed for the layout of exhibitions must either be removable or must present a level seating surface when folded. This is bad enough if designing a layout from scratch, but becomes a nightmare situation when trying to organise for an existing layout. Birch Vale's individually styled baseboards caused much head-scratching in this department. The final decision was to go for a system which would allow easily and firmly fixed, removable pairs of legs which would be fitted at home prior to a show, but which would fold easily for transport and fold back to vertical on arrival at the exhibition hall. When back home they would be removed and put into storage.

Used to having my layouts stand high, I found it easy to accept the Proscenium Arch presentation which is becoming popular and in building mine I also intended to try out the 'box beam' principle of construction. I decided on a trackbed height of about 4' 5", a proscenium arch of 6" width with a viewing slot of 18". The top beam of the arch would need to be about 9' 6" long and strong enough to carry the lighting which was likely to be a 4' fluorescent fitting.

The box beam construction used was of 1" PAR softwood and 2mm MDF. I had the supplier rip an 8' x 4' sheet of MDF into eight equal width strips each 8' long so the actual beam size works out at about 5 7/8" x 1" section. The MDF was glued and stapled as a sandwich around the softwood strip, top, bottom and ends and seems to have produced a very strong beam. Time will tell!

Nine foot plus is too long for easy transport so the beam was made in two parts. Layouts which I have built for exhibition have been based on folding pairs of baseboards. This gives protection for track and scenery when in transport, the pairs of boards having the look of a coffin. I have been unable to design this feature into Birch Vale as I wished to retain the excellently painted back scenes. However this experience led to my proscenium arch being of four parts, all linked by hinges, which when folded presents a package of some 4' 9" x 6" x 4" (Figure 2).

This was achieved by folding the top beam about its vertical centre line, by mitring its joints to the verticals and hinging these mitres in the opposite direction. Opened, it stands 2' high by 9' 6" long, the mitre hinges face rearward so are unseen by the public, the centre hinges are front facing but are concealed from view by the Birch Vale nameplate. This nameplate assembly slips over the centre of the top beam to add some stability at the fold and on its rear sit the lighting fittings.

I have gone on record elsewhere to say that the best thing I ever did for my modelling was to join the Manchester Model Railway Society and the second best was to join the Scalefour Society. It is

my intention that their logos will be included on the proscenium arch, covering from view my poor efforts at mitring. I have the S4 logo ready but my computer scanning ability has as yet failed to produce the MMRS one.

My aim has always been to retain that which was so outstanding in the '70s that it can stand comparison with today's efforts. To this end, all the buildings are retained, the painted backscenes are retained and I have attempted to match them with the end exits and the extension. At the time of writing there is still some work to do on the backscenes and repairs to minor damage and ageing. The road underbridge, the buffer block and wall supporting the banking at Bank sidings and most of the ground features have been retained. The original trees, plastic abominations good in their time, and most of the ground cover have been updated.

The platform surface and that of the goods yard were originally representations of tarmac using emery paper, but this had started to lift at its joints and corners and so was lifted. The yard should have been cobbles and I have attempted this with a plaster and PVA mix. However, I'm not satisfied and it will be relaid sometime in the future. The platform was resurfaced with a plaster, ground cork and sand mix with black drawing ink added. Edging stones are card and were laid before the new 'tarmac'. The road which ducks under the line at the New Mills end is surfaced with some nice embossed card cobbles, as is the footpath. This was excellent in 1970, but leaves something to be desired now. If and when I master cobbling properly then this will be relaid.

As built, the model of the goods shed had its doors closed and as this meant very restricted use of the yard I removed them. Because it is now

possible to see inside, I have attempted to represent the interior with a loading bay and platform. Apart from some resticking of notices the station buildings are exactly as built circa 1970 and must be considered a credit to Maurice's standards at that time. The groundframe hut opposite Bank sidings is still a gem of a model and will not be modified beyond a touch-up paint job. The bridge over the road is also original and will be left as it is.

Painting on the backscenes is I think, in oils; it was good then and it is still better than most now. Keeping the original backscene is my current problem, still to be solved. While they have always worked well in the past, the recent fitting of the proscenium arch has highlighted the fact that they are too low. Somehow I must increase the height without detracting from the original painting. It's all problems trying to maintain and improve an old model!

I have not attempted to describe the methods used for the new ground cover, instead read Barry Norman's 'Landscape Modelling'; thanks Barry. My construction of trees has not been described either. These were built after chatting with Tony Hill at Scaleforum about three years ago. I copied his methods slavishly and it seemed to work for me so thanks Tony. Tony has since written a book about his methods but I'm ashamed to say I can't name it.

There are many other friends to thank, but if I try to name them I'm bound to forget one and cause offence, so thanks to you all! However three must be named; Margaret my wife who has much to put up with and can often be seen sporting an 'I hate model railways' badge, Bill who took the photos, and of course the man who caused it all - Maurice.



The guard in Bank Siding waves to our photographer while the J72, having dropped off the vans, runs back up the line to collect him. The porter can at last take his load over the barrow crossing.