

# The L.B.& S.C.R. Modellers Digest

Issue 0  
January 2015



A journal of the Brighton Circle, for those modelling the “Brighton” in all scales and gauges.

## Contents

- 2 Editorial
- 3 - 8 Skeims Hill - 7mm scale by Peter Wisdom
- 9 - 14 Modelling rail built buffer stops by Phil Taylor
- 15 - 19 Forthcoming releases
- 20 - 22 Carriages for umber locos
- 24 - 26 Motorising a rather small 4mm scale loco by Eric Gates
- 27 Exhibitions featuring Brighton layouts
- 28 Brighton Circle membership details

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# Editorial

Welcome to the trial edition of LB&SCR Modellers Digest.

The aim of this Digest is to publish material that is of interest to those who model the LB&SCR (and possibly other pre-grouping companies). Many members of the Brighton Circle have drawn on the historical research that is published in the Brighton Circular, for the purposes of building models; this publication is intended to support that community. If this trial is judged to be a worthwhile venture, then subsequent editions might record some more of those models, the techniques and products that are used to build them and some of the particular challenges that arise in portraying the LB&SCR.

It is not entirely a coincidence that this trial edition appears as four new Ready to Run Brighton locomotive will be available in the near future. Dapol is shortly to add a 7mm scale Terrier to its range, Bachmann has announced a mixed traffic E4 0-6-2 radial tank engine and an H2 Atlantic (but the latter in Southern Railway condition) and OO Works will shortly release an I3 express passenger 4-4-2 tank. Hopefully this will inspire some new modellers to consider the Brighton as a possible prototype and to look for information to support their work. The Brighton Circle has conducted a considerable amount of research over many years on the history of the LB&SCR, which has supported preservationists and modellers alike. If you are interested in modelling the Brighton, then details of Circle membership are at the end of this Digest.

Eric Gates,

Modelling Steward, the Brighton Circle.



## Skeims Hill - 7mm

I crossed over from 00 to 0 in 1990 with the purchase of a Vulcan Terrier kit, bought on a whim, with the view that I could resell it if I decided not to build it. However the kit did get made up, I was pleased with the result and so started on the road to 0 gauge; a move I have not regretted.

I started a layout in the cellar on boards 5' 6" x 2' 6" - rather big but avoided points on board joints. Before much track was laid, I moved upstairs to the ground floor and then again to the first floor. The first layout was from the first Gauge O Guild book of layouts in an' L' shape, but the curves defeated me as I could never get decent running; that may have been my stock rather than the layout. So I designed a terminus to fiddle yard layout, using a three way point and a double slip to get a quart into a pint pot.





## Trackwork

Plain track was Peco, with home made points, using C & L chairs on ply sleepers with rivets at strategic places. Point operation is via an Ambis lever frame, with piano wire rodding and home made cranks. Movement is transmitted via a driving bar as per the Guild Manual Page 2-2-51 fig 2-64. The points on the board without the lever frame are driven by H & M point motors and all points have an associated micro switch for common crossing polarity. The ballasting is all over, using a Slaters' product that they no longer stock, which has the appearance of beach ballast, as used by the L.B.& S.C.R. pre 1900's. If I build another layout, then it's off to the foreshore, if I can find out who owns it, so that I don't get my collar felt.



Fiddle yards have varied from traverser to turntable to cassettes and back to a traverse, as the layout is back in the cellar, where there's no room to swing a cat, let alone a turntable. The latest traverser runs on three drawer runners with electrical switching via homemade bolts.



The control panel is minimalist and contains section switches and DPDT switches to change control between the station operator and the fiddle yard operator. Electrics are simple common return.

### **Buildings**

The buildings are all Brighton prototypes with a carcass of 5mm foam board clad with Slaters brick Plastikard, coloured using water soluble coloured pencils, blended with a barely damp cotton bud (buy a pack, you will use a lot on a 7mm building). The signal box was constructed to the appropriate size for the station and was subsequently entered for the Ken Leeming Trophy at Guildex and was awarded second place in a one horse race. The Station Building is Forest Row, as it is not too large, however it has a large amount of coloured brickwork in yellow, black, white and red, as well as brick coloured; a job I completed over a period of two years. The goods shed is based on a plan of Partridge Green, which must be under scale, as the E1 takes out the girder over the door. The bridge that hides the fiddle yard entrance is based on photographs of Leamland bridge at Horsted Keynes and brick counting.





## Rolling Stock

The passenger set consists of Roxey four wheelers in etched brass, plus horse boxes, luggage vans, a first class saloon and a scratch built carriage truck. Also available is a scratch built set of Craven coaches.

Goods stock is a mix of white metal and plastic kits, and some scratch builds. I have built a number of foreign wagons, eg SER & LSWR, to introduce different liveries among the predominant grey.



The couplings are a modified Sprat and Winkle, as used by Crawley MRS, which, like most auto couplings, are not 100%, but nothing in life is perfect and I prefer them to the big hand from the sky.



## Locomotives

Locomotives are a mix of kits and scratch builds

### Kits

E1 Strasbourg	0-6-0t Meteor kit (Stroudley version)
D1 Withdean	0-4-2t Albion kit
E1 Aldrington	0-6-0t Albion kit (Billinton version)
A1 Beulah	0-6-0t Vulcan kit

### Scratch builds

E3 West Brighton	0-6-2t
Epsom	2-4-0
Egmont	2-2-2t

A1 Kemptown

A1 Earlswood

D3 Shoreham

Manning Wardle small goods

With the exceptions of the last four scratch builds, all of the above have been expertly painted by Colin Hayward, who has recently retired - which is good news for him but not for those of us who need locos painted!

Currently, in some stage of building, are a Craven well tank, petrol railcar No 4 and, for some time in the future, two A1 etches.





Modelling the L.B.& S.C.R., I would urge anyone interested in early periods and companies to join the appropriate society. Apart from joining a body of like minded enthusiasts the information available either from archives or through queries can only extend your knowledge and the authenticity of your modelling.

I have exhibited Skeims Hill on twelve occasions and I would like to thank all of those operators who have worked their way through the schedule, hopefully without too many derailments.



Finally a thank you to all those traders and manufacturers who keep us supplied with kits and bits to enable us to pursue our hobby, which after some 40 years of modeling, still continues to hold my interest.

© Peter Wisdom 2015

# Modelling of LB&SCR Standard Rail-Built Buffer Stops in 4mm Scale

Many of the pre-group companies had their own distinctive style of buffer stop (apparently called 'stop blocks' by railway staff), and the Brighton was no different. The company's standard design was made from bullhead rail (presumably re-used from worn out running rail), combined with a wooden beam attached by brackets, with an adjustable cross-rod behind the beam. It appears to have been in use from a fairly early date (mid/late 19<sup>th</sup> century). As far as is known there is no proprietary kit or 'ready to run' model of this type available, and it certainly adds a touch of authenticity and Brighton style to your model, making it worth the effort of scratchbuilding.

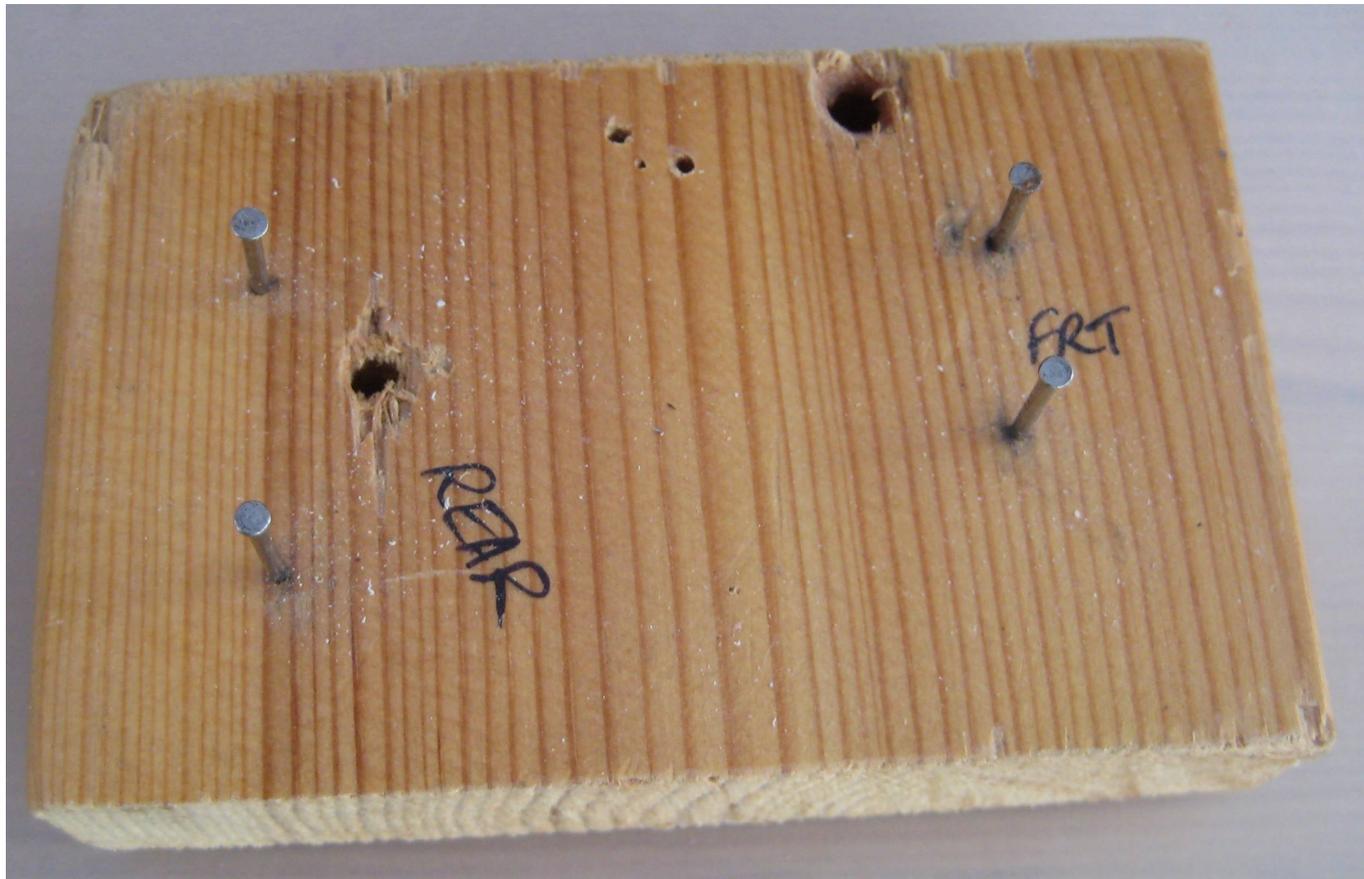
I understand that the appended drawing was prepared by the late John Talbot-Jones in 1975 and was kindly supplied by Barry Luck after an enquiry through the Brighton Circle egroup in 2005.

My 4mm/foot scale models were made by bending lengths of bullhead rail, which were then soldered together in a simple jig. The brackets, cross-rod and bolt heads were added, followed by the beam. The construction can be better understood by referring to the drawing and pictures, while the design appears in many historic photographs. Indeed it is still possible to see many of these buffer stops all over the Brighton system to this day. See the following photographic sequence for more details.



## Photo 1

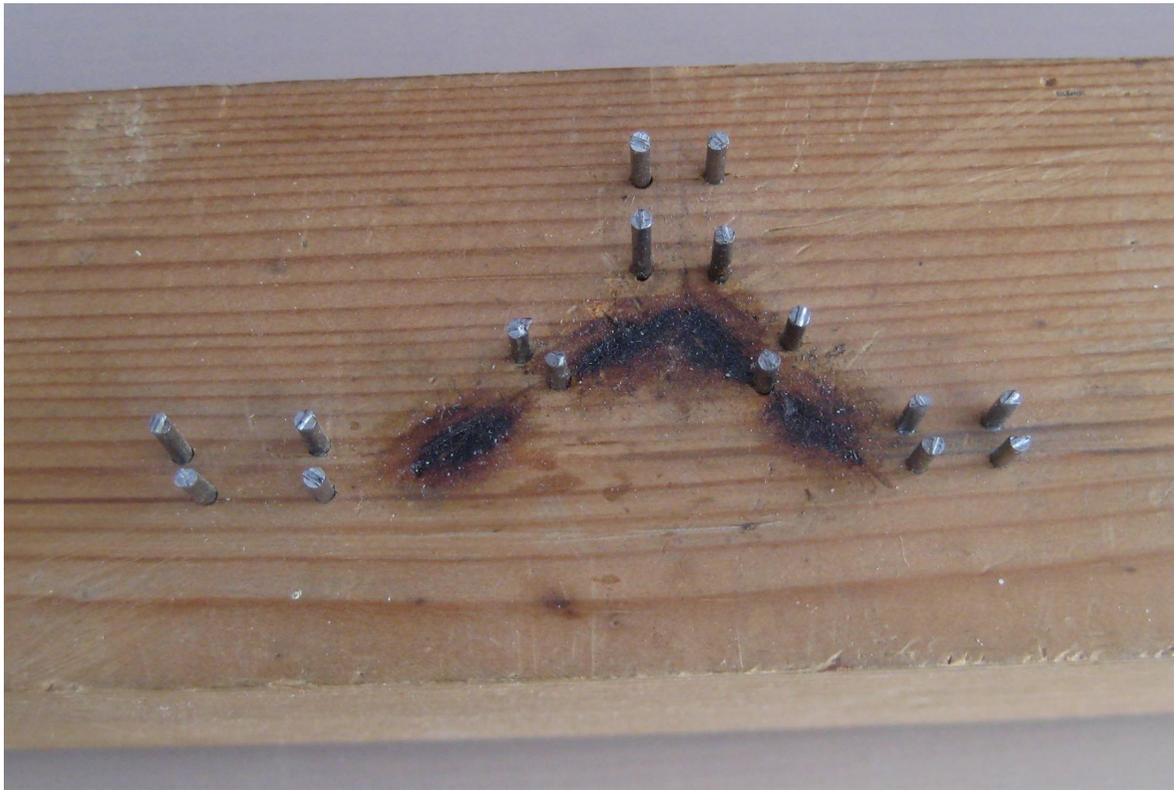
This shows the first of two simple jigs. This one is to allow the pairs of bends in the rails to be produced consistently. The panel pins are 1.4mm dia. and 15.0mm apart (front) and 22.3mm apart (rear). These dimensions (pin centre to pin centre) are not critical, the important thing is that all the matching rails in each stop are the same shape. As you can see I used an old piece of wood as the base of the jig, the holes for the pins to be driven into should be pre-drilled a fraction smaller than the pins. The rail has to be bent in its vertical (stronger) axis. To make this easier, it



is possible to anneal (soften) the rail by heating to red hot (for example over a gas hob) and allowing to cool slowly. Clean the resultant oxidation off after cooling. You can use nickel silver or steel rail, the former will solder more easily. The pair of bends should be started in each piece of rail so as to obtain the correct spacing, but do not worry about the lengths or exact bend angles yet, these can be adjusted later.

## Photo 2

This shows the slightly more sophisticated jig for verifying the final bend angles and assembling each side of the buffer stop. Again 1.4mm dia. panel pins are used, carefully positioned using the drawing as a guide. The tops have to be cut off the pins to allow the assembly to be removed after soldering/glueing. To make the assembly (i.e. half a buffer stop), you will need two 'front' pieces (noting that the inner is shorter than the outer), two 'rear' pieces, and a central piece in the shape of an asymmetric upturned V. This last is easy to produce without a jig as it only has one



bend. Adjust the angle of each piece until it fits snugly into the jig, and then cut to length referring to the drawing. If making several assemblies, it is best to make a 'master' of each of the four components, and use them to make the others the same length. After cleaning, tinning and fluxing, the assembly can be soldered together with a suitably powerful iron (e.g. 40W). Or if you prefer, use an adhesive such as Araldite or superglue. Don't forget that each half will be handed, with the shorter front piece to the inside.

### Photo 3

This shows the completed buffer stop from the rear. The small brackets that in reality secure the beam to the rails can be bent from small pieces of brass or nickel silver shim, and attached by soldering or glueing. I made the beam from lolly stick material, which is a very fine grained wood ideal for the purpose. If necessary reduce the thickness by rubbing on sand paper, then cut to size. The distance between the two sides, plus the length of the beam and cross bar should be adjusted to suit the gauge you are working in. The cross bar can be made from brass wire or plastic rod. Brass is preferable because of its fine-ness and strength, but will need to be insulated with a coat of varnish, paint, Araldite or similar before inserting in small holes drilled into the uprights.



## Photo 4

A three quarter side view. Note the slightly angled top to the verticals, this is best achieved by filing after assembly of each side. I added the bolts using the tiny plastic mouldings available from Grandt Line\*. The metal parts were painted with a slightly textured very dark grey, to simulate the 'tarred black' finish of the real thing. The beam is very pale grey which is more realistic than stark white. Weathering was added using a wash of track colour followed by dry brushing suitable dirt shades. The assembly should fit over the track, although you may have to adjust rail chair positions or trim them to allow a good fit. It is worthwhile checking for any short circuit before switching on the track power!



\*Their 1:48 scale 1 1/4" nut, bolt, washer and 1 1/2" Hex Nut, Bolt.

Copyright Phil Taylor



## New release - 7mm scale

Dapol Terrier

Thames and Brighton  
are expected to be  
available in Stroudley  
livery from January  
2015

List price £199.95 with-  
out sound.

Further details at

[http://www.tower-  
models.com/  
towermodels/ogauge/  
dapol/dapolloco/  
index.htm](http://www.tower-models.com/towermodels/ogauge/dapol/dapolloco/index.htm)

Photo copyright and courtesy of Graham Muspratt.

Dapol 7mm scale Terrier on display at the Warley show.

First liveried example.

# 3 new Ready to Run Brighton locos in 4mm scale



[Bachmann](#) 4mm scale E4 to be available in Umber - due April/May, listed at £99.95.



[Bachmann](#) H2 Atlantic available “during 2015”.  
Note that this is not being advertised in LBSC livery.

2426 ‘St. Alban’s Head’ in Southern Railway olive green livery (Picture Courtesy Bachmann Plc)

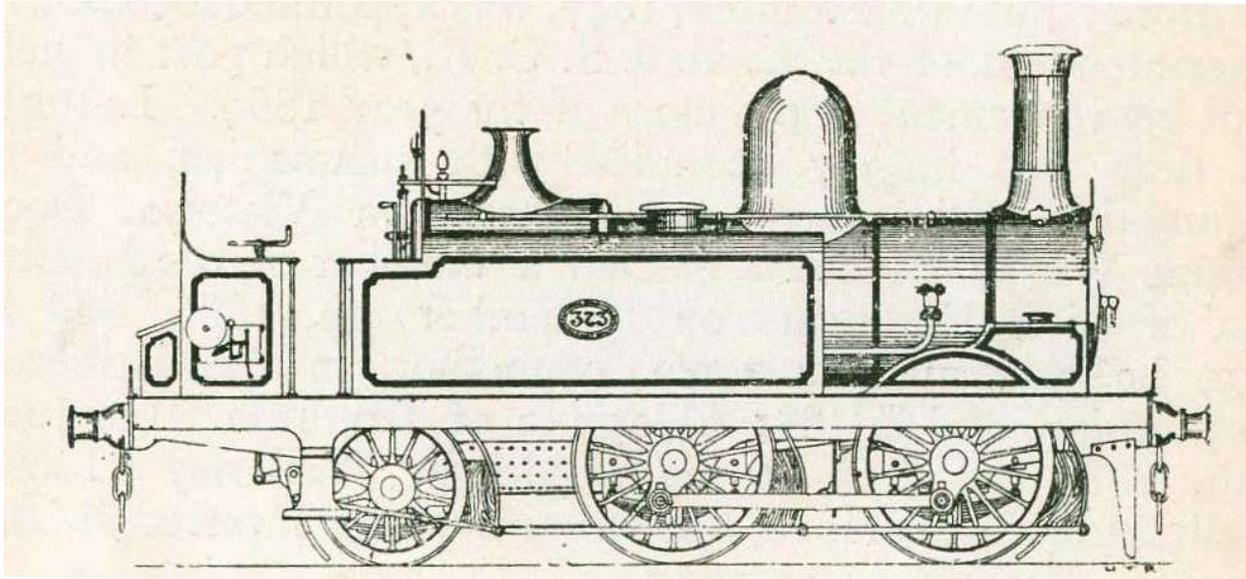


Dave Searle collection

[OO Works](#) I3 4-4-2T No 24 is expected to be available in umber in the early Summer at £250.

And now for something completely different.....

## EBM numbers 18 and 21



When Craven resigned in 1869, he left two tank engines half built. When Stroudley assumed responsibility, he took the design in hand and turned out a pair of open cab 0-4-2 tanks, which include an interesting mix of Craven and Stroudley features. The locos were not particularly long lived, going to scrap in the late 1880s.

EBM models are currently preparing the artwork for etches to enable the construction of these two locos in 4mm scale. It is probable that metal castings for the main fittings will also become available. Further progress and availability details will be published on the [EBM website](#). The website also contains details of Mike Waldron's other activities and products that support modellers of the L.B.& S.C.R.

Latest news - available before Easter and price should be a little under £100

For those looking for carriages to go with their 4mm scale umber locos, here are some suggestions.

[Roxey Mouldings](#) has been supporting Brighton modellers for over 30 years and includes a number of kits in the range that are suitable for umber period, 4mm scale modellers. Illustrated is a 54 foot, 9 compartment Third, with a Tricompo and a Brake/3rd also available.

Construction is etched brass, with cast fittings.

The range also includes push pull carriages for your umber Terrier, or Stroudley 4 wheelers for the earlier period (see below).



The [Stroudley 4 wheelers](#) are also available in 7mm scale and make the ideal train for the new Dapol Terrier in Stroudley livery.

Photos courtesy of Dave Hammersley.

alternatively.....



An LBSCR 'Balloon' Brake. This was built up from a Blacksmith kit (now part of [Coopercraft](#)) in etched brass and is of soldered construction. The kit went together very well with no pitfalls. Painting the umber colour was done with an airbrush, but the cream panels were all done by laying the carriage on it's side and using an eye dropper to put minute drops of emulsion of the required colour into each panel. The consistency of the mixture allowed the colour to run to every corner of the panel with no surplus going onto the umber. The side was left to dry and then the other side was done in an identical way. When all was dry, lettering and numbers were added and the whole airbrushed with letraset varnish.

© Michael de Jong Smith.

... and for those who do not like soldering.



Ratio do a 48ft Midland 8 compartment carriage, the sides of which are sufficiently similar to LB&SCR 48ft 8 compartment carriages (to LB&SCR Diagram 161; SR Diagram 64) as to allow modification. The LB&SCR built 152 thirds and 2 seconds to this diagram between 1894 and 1905. The minimum modification required is the omission of the roof vents either side of the gas lamps on the roof. However, the 10ft bogies should be modified to make 8ft bogies (etched brass versions are available); the curved bottom ends replaced by straight ends (scratch built) and the corners filled; foot board moved lower (invert sole bar – foot board assembly); appropriate buffers and grab handles fitted; gas tanks moved; and truss rods replaced. Most of the required fittings may be sourced from [Roxey Mouldings](#), although the spares box proved adequate for these models, thus minimizing cost.



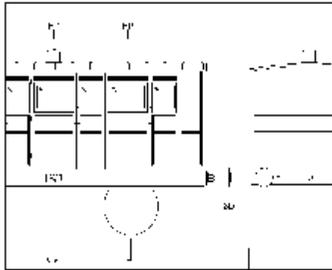
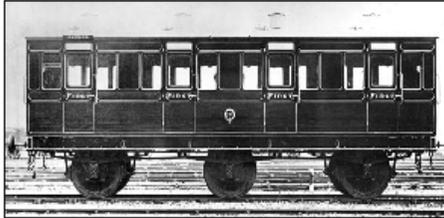


## LB&SCR CARRIAGES Vol 1

by

Ian White, Simon Turner and  
Sheina Foulkes

It is now almost forty years since the publication of *Carriage Stock of the LB&SCR* by PJ Newbury, and twenty since David Gould produced *Bogie Carriages of the London, Brighton & South Coast Railway*. This new book is the first of two volumes intended to complete the coverage of LB&SCR carriages and passenger-rated vans. Volume 1 covers the 4- and 6-wheeled ordinary passenger stock, and a second volume



will describe the 4- and 6-wheeled saloon and passenger-rated vans, and will also give an account of the restoration of LB&SCR carriages at the Bluebell Railway.

This is the first comprehensive coverage of all LB&SCR designs, with many previously unseen photographs, and will appeal to followers of the SR, LB&SCR and Bluebell Railway, and railway carriage enthusiasts in general. In particular, the newly-produced scale drawings and prototype details will be of great interest to railway modellers.

The aim is to provide a "design history" based on contemporary historical documents supplemented by practical knowledge gained through the study and restoration of surviving carriage bodies. Written by acknowledged experts in the field,

who have all been involved in the restoration of LB&SCR carriages on the Bluebell Railway, the two volumes describe how carriage design developed, and how it followed new developments in train lighting, braking, communication and the social distinctions of the time.

Both volumes are profusely illustrated with photographs and scale drawings, and are produced to the same high standard as this publisher's *LSWR Carriages Volume 3* and *LSWR Carriages Volume 4* by Gordon Weddell. All royalties from the sale of these volumes are being donated to the Bluebell Stroudley Coach Fund.



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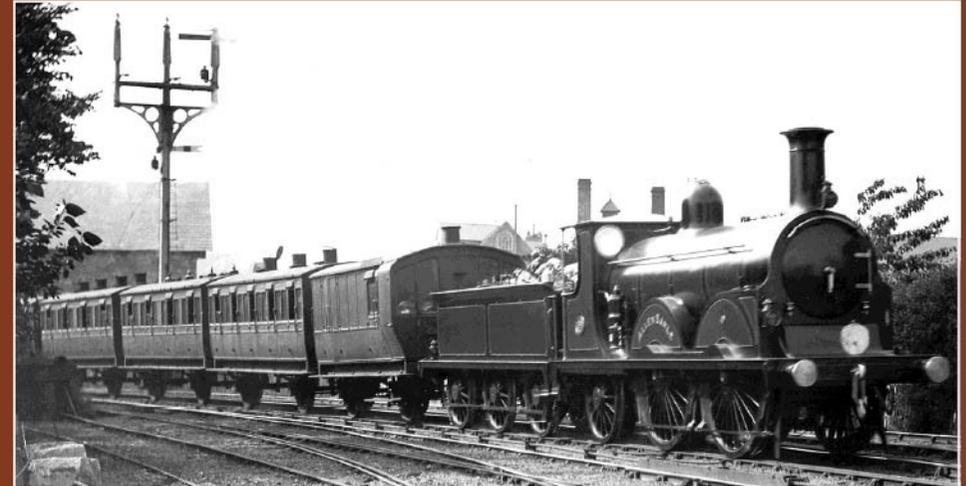
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# LB&SCR CARRIAGES

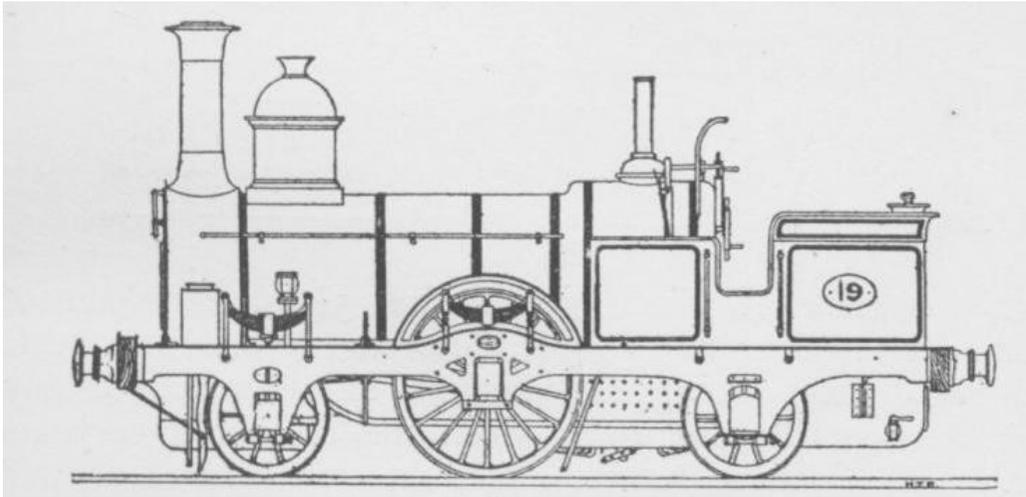
Volume 1

FOUR- & SIX-WHEELED ORDINARY  
PASSENGER STOCK



Ian White, Simon Turner and Sheina Foulkes

Available now from the  
[Bluebell Railway shop!](#)



Above - a rebuilt Brighton Sharpie

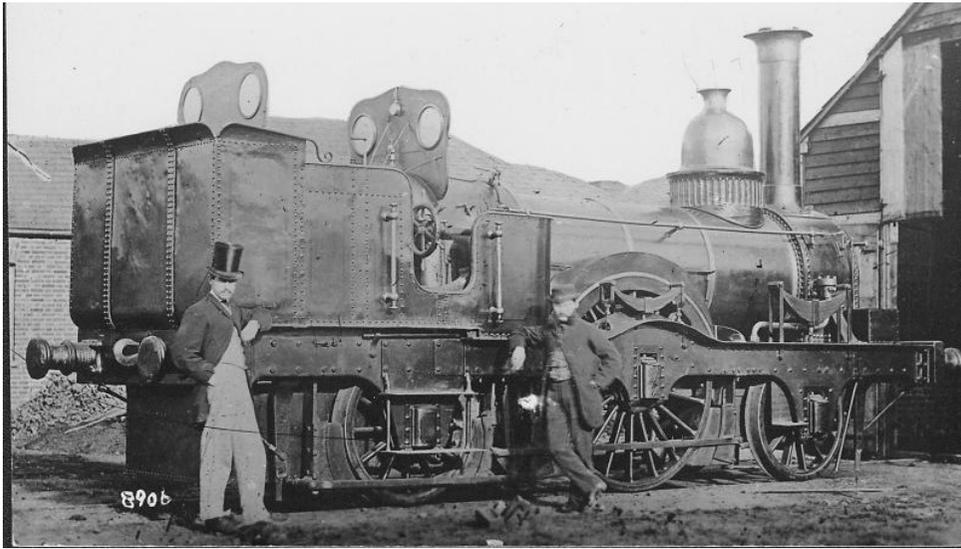
Below - the castings from 5&9



## Motorising a rather small loco.

When Chris Cox showed some prototype castings for a Sharpie at the AGM a couple of years ago, my immediate reaction was to wonder whether it would be possible to build the kit as a tank engine rebuild and motorise it

At top left is a line drawing of one of the Sharpies that Craven rebuilt as a well tank and below is a photo of the set of castings developed by 5&9. I am prepared to admit at this stage that the resulting model is not a strict replica of any of the Brighton rebuilds as far as I know. The castings represent one of the early Sharps, with a somewhat shorter wheel-base than that in the drawing and I am not aware of a drawing of a converted early series loco. The closest that I have found is the photo on the next page of a loco that was sold to the Colne Valley and Halstead Railway, which appears to have "improved" it somewhat.



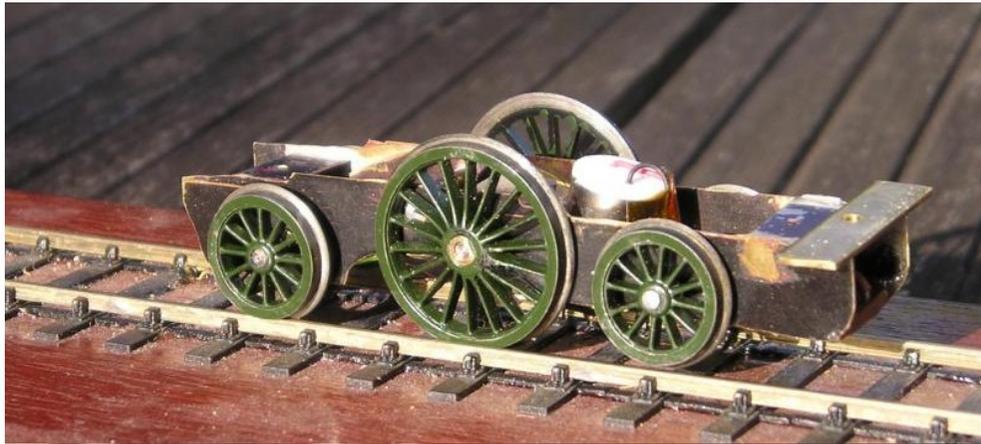
Above - Colne Valley and Halstead Sharpie  
Below - The model, showing where the castings end and the scratchbuild begins.



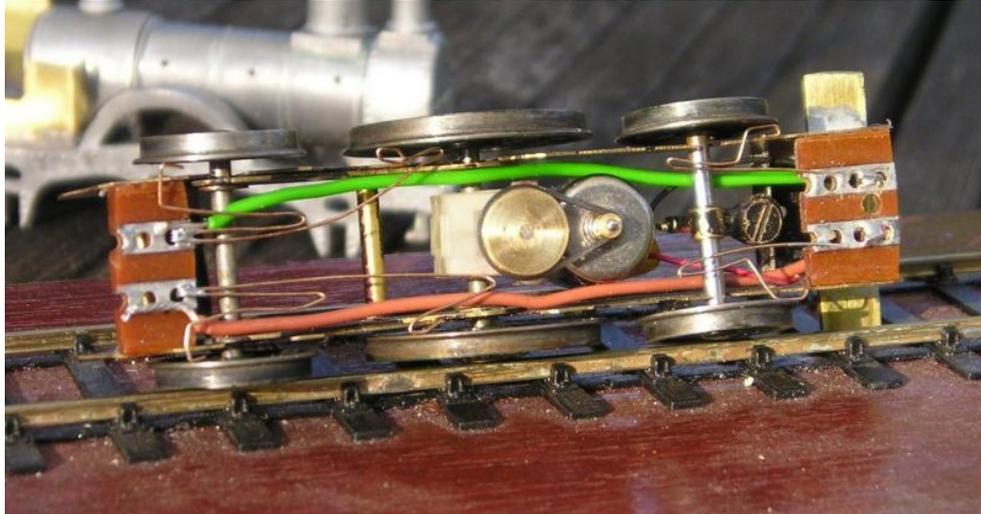
The purpose of this article is less about the source and construction of the loco body and more about how it is possible to fit in a motor. The absence of cab or sidetanks mean that the boiler and firebox are the only available space.

After considerable thought, and some discussion on RMWeb, the following arrangement was squeezed in. A [Nigel Lawton](#) 12v 10mm x 12mm mini motor, provides the power, linked by rubber bands to a [Mousa gearbox](#) (half of the pair that you get as a set). The gearbox hangs vertically behind the axle and the motor is attached to it, to sit vertically in the firebox. The photos on the following page will give an idea of how it fits together and how much space is required.

While I do not assume that there are many readers who are desperate to create a similar Sharpie, the arrangement of the drive train may offer a solution for other very small locos and for this reason, I felt that it was worth describing.



The upper photo shows a side view of the chassis, with the motor just showing between the rear and driving wheels. Even though it does not appear to stick up much above the frames, it still intrudes into the firebox.



The lower photo shows the underneath of the chassis. The motor sits just to the right of the driving axle, with the two pulleys linking the motor and gearbox; these provide a major part of the gear reduction. The gearbox itself hangs on the driving axle, behind the large pulley.

A final view to show the loco in working order and with some very gentle weathering. Performance is probably at least up to the standards of the prototype.



# Exhibitions featuring Brighton Layouts

[Ferring](#) will be attending a one day show at Beckenham, Kent on 24<sup>th</sup> October 2015

[East Grinstead](#) see linked website

[Plumpton Green](#) see linked website

[Hailsham](#) see linked website

# The Brighton Circle

The Brighton Circle is the Historical Society of the London, Brighton and South Coast Railway (L.B& S.C.R.). It is dedicated to the research and publication of information about the company and it produces a quarterly journal entitled the Brighton Circular.

While the Circle is primarily focussed on railway historical research, there has been an important interaction with preservationists, particularly on the Bluebell Line, and with railway modellers. The Bluebell line provides an important source of original artefacts, which contribute valuable information about the company's practice. Modellers have benefitted by access to data about the physical appearance of the company and its operations and, as a result, members of the Circle have been able to produce scratch builder aids, paint and lettering on a limited run basis, which are made available among other members.

Membership of the Brighton Circle for 2015 is

£20.00 for full membership

£17.00 for those over 65

Applications should be sent to

[The Membership Secretary, Peter Wisdom](mailto:peter.wisdom.wisdom@btinternet.com)

peter.wisdom.wisdom@btinternet.com

The Circle is also in contact with local historians, industrial archaeologists, family historians and other groups whose interests intersect with those of the Circle.

**L**

**V**