



Garden tramways – the next Big Idea!

Robert J Harley means big, in 1:8 scale

Early days on the Heathfield Tramway – the Hellingly Hospital loco pauses as it pulls PET parcels van 109 up the gradient. The main plants in this view are Japanese acer, peony and buddleia.
Photos: Robert J Harley

I grew up in the 1950s. Many childhood days were spent at my grandparents' house in East Sussex. It had a large garden that backed on to a wood bordering the railway line from Tunbridge Wells to Eastbourne. The Cuckoo Line, as it was affectionately known, also provided a connection with the Hellingly Hospital tramway, which was only a short walk away. I would often explore the trackbed in the hope of catching a glimpse of whatever strange tramcar was taking up service from the station to the hospital. I was totally fascinated by this rural set of rails that meandered through fields and, seemingly lost in the foliage, emerged at intervals from a thick carpet of wild flowers to traverse country lanes.

The other excursion I enjoyed was the trip to Princes Park, Eastbourne and the ride on the miniature tramway to the Crumbles. My favourite tram was car 238. This had a curious half deck arrangement above each driving platform. I was always anxious to secure one of these seats so that I could have a good view of the narrow gauge track ahead. The swaying trolley wire seemed almost in arm's reach. In my imagination I envisaged car 238, or a smaller version,

transported to my grandparents' garden. I planned a network of routes and was very disappointed when none of the adults seemed to share my enthusiasm. So the dream died.

Several decades then passed. After joining the TLRS, I did manage to put together a couple of trams in the 'standard' 1:16 scale, but the hankering for something larger never quite left me. Unfortunately, the postage stamp size of my modern garden rather ruled out a passenger carrying layout. There was also the problem of power supply. I didn't fancy the prospect of small children running into overhead wires. In order to keep the overhead away from the centre of the garden, I decided on a simple L shape, single track line that hugged the fence. Battery power or a surface contact system was a possibility to be investigated later.

Any large scale model had to be of a manageable size and straightforward to construct. Inspiration came in the form of an article in the British Electric Traction Company's house journal. A picture of a Potteries parcel van looked a likely candidate. Unpowered, four wheels and a simple box like structure – it was the ideal starter vehicle for my experimental 1:8 scale



Memories of Robert Harley's favourite tram, Blackpool Balloon replica 238 (right), built by Claude Lane for his Eastbourne tramway operation in 1955. The car had special shelf-like seats above the driver's cabs that were only suitable for children. Withdrawn in 1957, it was sold in 1963, along with Boat replica 225 (with Darwen "Queen" replica 23 of 1949 on the earlier St Leonards tramway above) and double deck open top 3 to Don Sorenson of Wilton, Connecticut, USA and has since disappeared.



garden line. The van was built cheaply out of scrap materials. Wood and brass strip made up the body and the wheels were a set of old Reeves castings machined in a lathe.

The Potteries four feet track gauge translated to six inches (152mm) between the miniature rails. Since my wife and I are keen gardeners, it was agreed that the new tramway had to be in keeping with the existing environment. The trackbed was dug out, several lengths of aluminium rail were purchased from Maxitrak and were fixed to gauge by threaded rod. A bed of shingle was then used as a base for the permanent way. Traction standards were fashioned out of copper pipe and the overhead itself was copper wire extracted from old co-axial TV cable. The power supply was originally a couple of car batteries that fed into a hand held speed controller.

Since I considered myself a pioneer, I decided unilaterally that I wasn't going to mess around with different track gauges. Although purists might flinch, six inches appeared to be a good

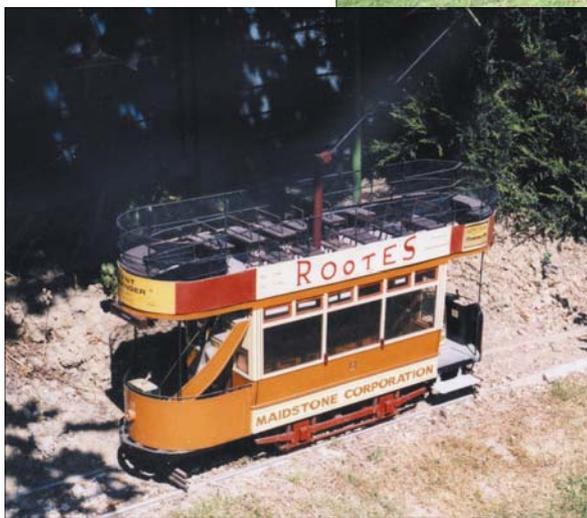
compromise on which to run models of both standard and narrow gauge prototypes.

Quite logically, the next vehicle out of the car works supplied the wherewithal to pull the parcels van. On the original section of track the Hellingly Hospital locomotive, powered by an ex-Ford windscreen wiper motor, fairly galloped along. Like a dog after a rabbit, it raced madly away, dragged the van off the end of the rails and undertook a flying leap into the lupins. Luckily the damage was minimal, but the performance of this TGV (*tramway à grande vitesse*) on its inaugural run was very impressive. When questioned about the wrecked plants, I later blamed the slugs!

Maidstone open top car 11 was built for my son, who was born in the county town of Kent. As an experiment I not only used the usual electric motor from the automotive industry, but I also employed spray can car paints to obtain the famous Maidstone golden ochre hue. Those of a nervous disposition should be warned that, if



At the top end of the tramway near the terminus the traction standard on the right is an eighth scale copy of an LT trolleybus design. On the tram front the Hellingly loco is about to pass a stand of *Crocsmia*, with a variegated *hosta* just before the end of the track.



Robert Harley built Maidstone 11 for his son who was born in the town.

you mix car paints with other sorts of paints, something really horrible can happen.

Of course, models of this size are awkward to carry by one person alone. We have managed so far, but I will have to devise some sort of glorified trolley arrangement to transport my trams from the garage workshop to the track. This minor problem of moving the rolling stock about will become more pressing, when I complete my large scale version of LT car 577. This vehicle was a regular performer past my local tram stop on Well Hall Road, Eltham, and I would like to think that, as a small lad, I rode on the car. A good friend of mine, Des Adeley, a model engineer of some repute, got castings made of the truck sides. He also helped assemble the truck and the gearing to the motors. Car 577 should be ready for its first outing in the not too distant future.

I realise I am very much a lone wolf, when it comes to eighth scale tramways, but the educa-

tive and 'fun' factor has been enormous. It certainly adds to the joy of gardening, especially when there are now so many miniature plant varieties on offer. I have also learnt skills I never had before, such as surveying and track laying. Obviously, a larger layout than I have at present would be appealing, with perhaps a tunnel under the garden path. However, there may be drawbacks to thinking big. If one of the family cats took to sleeping on the track, and was then struck by a large tramcar – a Feltham might fit the bill here - the resulting vet's bills (and potential visit from the RSPCA) could hamper operations somewhat. The moral of the story is that, at this scale, pets and infant owners of very small fingers should be carefully supervised.

So far so good; however, I am never really satisfied. It might be interesting to explore the possibilities of quarter size trams on fifteen inch (381mm) gauge track. A good compromise between running accurate scale models and operat-



Gordon Hatch was an inspiration to others. This view shows the maestro at work. The Birney car in the background was capable of pulling a passenger round Gordon's extensive backyard layout in Canada.

ing a passenger carrying set up was pioneered by the late Gordon Hatch of Victoria, Canada. His grandson has posted an eloquent tribute to Gordon on the internet. You can find it at www.urban21.ca/streetcar%20models.htm

The models were designed to pull control trailers on which a driver and passenger were seated. The rails appear to be steel bar and the overhead

is high enough off the ground not to be a nuisance.

If I need a new challenge, then this might be the way forward. The only proviso being that I would have to confine myself to minimum cost, recycled materials.

Whatever happens, I'll try to let you know how I get on.

Recommended reading

The internet contains a wealth of information on trams and electric locomotives built for miniature railways – some interesting sites are listed below, they are correct at the time of writing:

www.discoverlivesteam.com/magazine/67.html
www.discoverlivesteam.com/magazine/86.html
www.discoverlivesteam.com/magazine/83.html
www.corrishill.co.uk/tram.html
www.4qd.co.uk/faq/bmnc1.html
<http://railsystemsco.com/Groovy%20track.htm>

I can recommend the *Going Electric* series by Rex Nicholls, as printed in the *Model Engineer* from 17 March 1989 to 18 August 1989; also an

article by Des Adeley in the 1 February 1991 issue. F J Cunuder wrote a piece about his Cardiff miniature tramway in the *Model Engineer* for 1 February 1980. Closer to home, we have an excellent description by H C Burford of the Wootton Tramway in *Tramfare* issue 115 of November 1986. Vic Mitchell of Middleton Press fame has also written in *Tramfare* about his miniature M Class car. *Garden Rail* for November 1997 featured an account by John Hiscott of the South Canterbury Light Railway.

If you can read German, then I recommend the chapter on tramways in *Liliputbahnen in Parks und Gaerten* by Gerhard and Ursula Arndt. Likewise, Dieter Hoeltge's book *Strassen-und Stadtbahnen in Deutschland – Hessen* has a short section on the 410mm (16.15 inches) gauge line in the youngsters' road safety park in Frankfurt.