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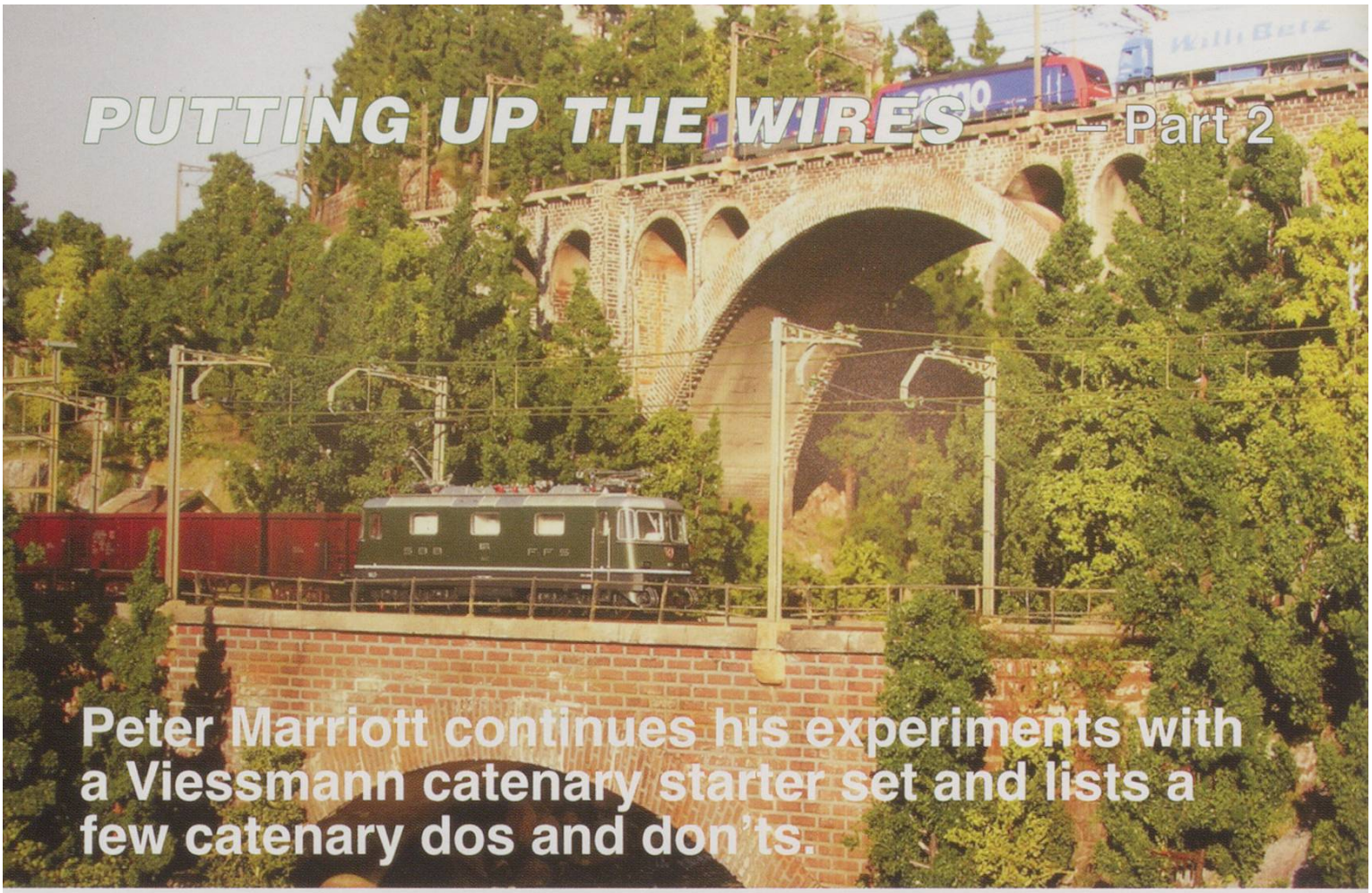
PUTTING UP THE WIRES – Part 2



Peter Marriott continues his experiments with a Viessmann catenary starter set and lists a few catenary dos and don'ts.

In the first part of this article we looked at putting up the masts; now we need to fix the wires onto these and to do this the stage by stage process outlined below should be followed:

1. Gently push the bent ends of the wires over the arms of the mast – the top and bottom ones. The arms have a grey plastic covering that holds the wires quite tightly.
2. Do the same on the next mast.
3. Leave the first wire in place.
4. Work along to the next wire and fix it to the masts in the same way.
5. When you are happy that the masts are at ninety degrees to the track and there is no excessive pull or stretch in the wires use a pair of small pliers to tighten the bent ends over the arms.

The Viessmann catenary system can be used to operate locomotives through the wires and pantograph. I did not attempt to do this but I understand that to electrify the system it will be necessary to use Power Mast (4111) plus a Fuse (4188). A Power Mast should be installed roughly every 3 metres to maintain a good supply. There are many finer points to catenary construction that are outside the scope of this article. One of these is wire tensioners. Viessmann retail parts to build this feature. The current supply wire (contact wire) and support wires can be purchased "ready assembled" but if you wish to use finer section wire it may be necessary to build your own. Painting the finished product is a matter of personal choice but, in my opinion, matt green on the steel masts and silver effect on these wires looks quite realistic.

I certainly do not profess to be a "catenary expert" but rather someone who has happened to put up a few masts, wires and gantries. I am still at the learning stage about the complexities of prototype catenary and how to interpret that in model form. Some layouts run electric locomotives with their pantographs in the down position even when the catenary is built. In my view, this rather spoils the effect. If you do not wish to run the pantographs in the full upright position, locomotives can be run with pantographs in a nearly full position with the pantograph being held by thin wire attached to it just below the contact wire. This is not obvious in the normal viewing position.

This Viessmann catenary set was an eye opener for me. It does what it says on the box (though the instructions are in German!) – it's simple and quick to build. I'll definitely use the Viessmann system on my next catenary project. For ease of assembly and overall good appearance Viessmann catenary has a lot going for it. It is especially recommended for "first time" catenary builders.

Some dos and don'ts when installing catenary.

- Prior to commencing the erection of

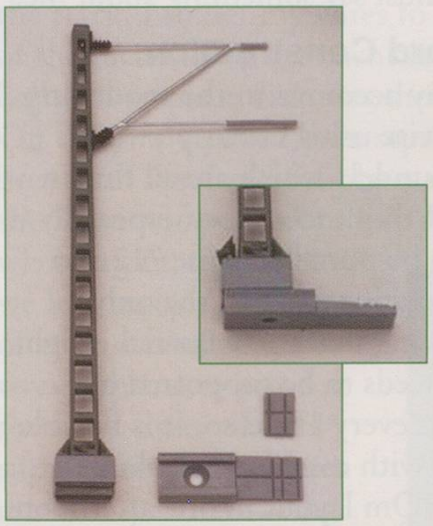
catenary in model form study the construction techniques used on the prototype.

- The Sommerfeldt catalogue and wiring guide are useful background reading. They will help to clarify terms such as messenger wire and radius pull-off. Fortunately both booklets contain text in English.
- It is worth reading other modellers' accounts of their catenary building process because different techniques can be passed on.
- The minimum tool kit required for catenary installation is a drill for the holes in the baseboard to take the masts, a pencil, a ruler, a small pair of pliers and good eyes to notice if the mast is in the right place.
- It is best to consider the installation of the catenary at the planning stage of the layout.
- If an open plan framework baseboard is used then thought must given to be where the masts will go. They cannot be supported in fresh air!
- If the material used for the baseboard is too soft then the masts will not be fixed firmly enough.
- It is vitally important to weather and ballast your track before installation of the catenary. It's near by impossible to do it satisfactorily with the wires and masts erected!
- Be careful that masts do not foul long carriages or wagons.
- The wire even along a straight piece of track should run in a slight zigzag.
- The sharper the track radius the closer the masts will be to each other and the shorter the contact wires will be.
- Those who do not wish to use proprietary products can scratch-build their own systems using aircraft control wire or similar. Masts can be formed from the model H girders and similar – these are retailed in both plastic and metal.
- One shortcut to providing a catenary system is not to install the wires - some modellers are content with just masts - but this would not satisfy many modellers and some would say that it is a shortcut too far.

Catenary construction should not be rushed. Enjoy it.

The Viessmann catenary system is available in the UK from Gaugemaster, who also supply Peco track, Gaugemaster ballast and Noch scatter material. Websites: www.gaugemaster.com www.viessmann.de

This article was adapted from an article published in "Model Rail" magazine. We thank Peter for allowing us to reproduce it.



TOP LEFT: *Viessmann catenary and fixing foot.*

P.36 TOP: *Pictures of Heki Gotthard diorama at Nuremberg Toy Fair 2008.*

TOP: *Although DB locomotives in view, this shows how the wires work at a crossover and the end of a siding.*

BOTTOM: *How wires are fixed at tunnel entrance*