

This is going to be really interesting

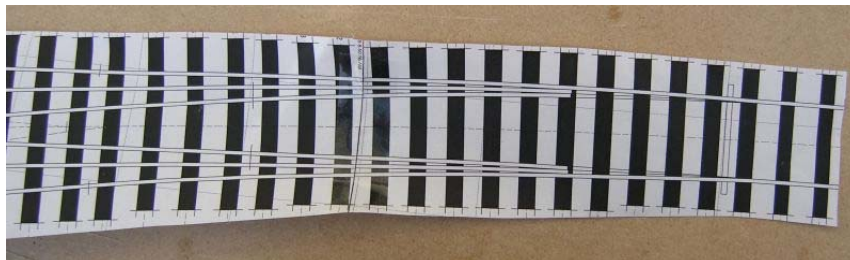
I need a curved 3 way point (all left hand) at the entrance to the new mineral yard on Heyside. There isn't a lot of space, and I wanted it to look a bit cramped. However the usual 3 way tandem turnout is too long, so after a lot of fiddling about, I am building a far less common 3 throw turnout. The problem with these turnouts is that the 2 pairs of blades occupy the same space which makes clearance and linkage difficult. Other than that, they're a doddle

Now, the template was produced in Templot, but I had neither the expertise or time to produce something so complex with so many partial templates. I would therefore like to thank Alan McMillan who Templotted it for me, and Martin Wynne who tweaked it to make it a little easier. They were both very generous with their time.

There is a good picture in Bob Essery's book 'Railway Signalling and Track Plans' page 14. He says 'It is very difficult to model and probably only possible in a scale standard', and that the Midland Railway in particular made considerable use of them in sidings. That's a confidence builder then!

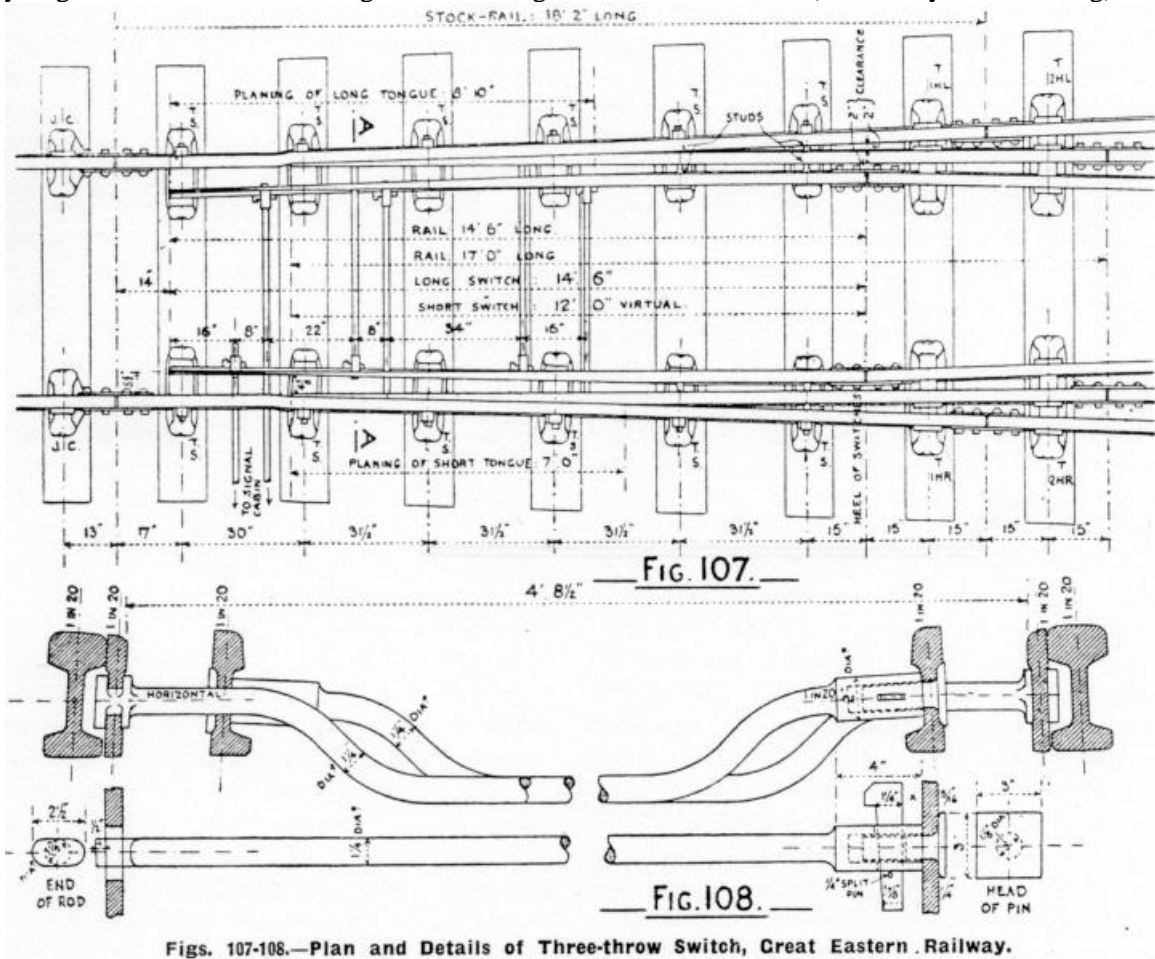
Martin Wynne has posted a drawing of the business end of a GER 3 throw turnout on the Templot Club thread, and I hope he will post it here too when he spots this thread (as he surely will)

That's the background. I'm not going to bore you with a detailed account of construction, but I shall post a few pictures as I go. It is being built in tandem (ha!) with other pointwork, so there will probably be periods of inactivity which will at least give me thinking time!

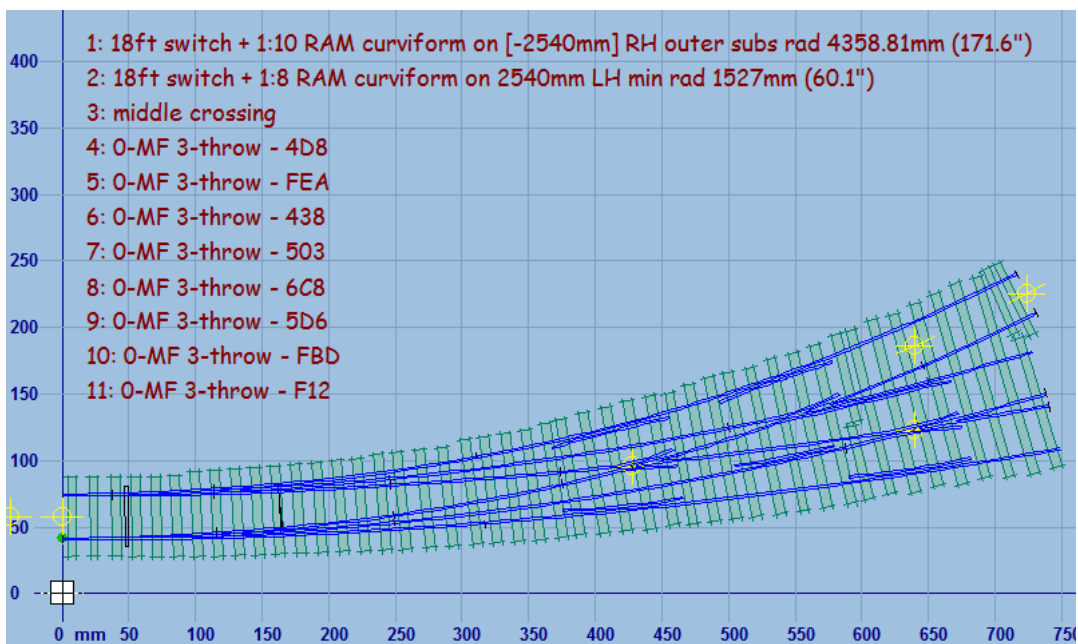


Hi Richard,

Here you go then. Click this drawing to see the original scan in full detail (cancel any auto-resizing):



Figs. 107-108.—Plan and Details of Three-throw Switch, Great Eastern Railway.



The Templot file for this can be downloaded from: [3-throw for Richard](#) . The centre road is the main road, with LH and RH switch deflections to the outer roads.

Richard, I split one of the long timbers above for better chair positioning, but I don't see it in your photo? Have you and Alan made some further changes since?

The full discussion about all this is at: [3-throw discussion on Templot Club](#) .

### IMPORTANT NOTE - 3-WAY TURNOUTS

This topic is about *three-throw* turnout. 99% of 3-way turnout are *not* three-throw turnout like this. They are *tandem* turnout, i.e. with staggered switches.

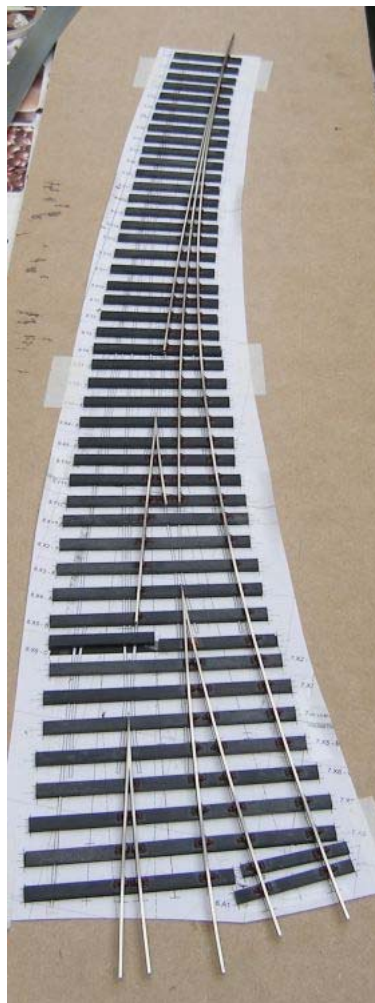
Three-throw turnout are tricky to build and have very limited prototype applications. If you have arrived at this topic looking for information about 3-way turnout, please refer instead to *tandem* turnout. Click here to search for the relevant topics on Templot Club: [tandem turnout](#) .

(Tandem turnout are often called *lap* turnout in the USA and some other countries.)

Hi Martin

No, we have not made any further changes. The template I stuck down was the last but one iteration, without your final fine-tuning. It has since had the one timber removed and replaced with your 2 short timbers, before any of the rails were added. It's moved on a bit since that photo was taken, so I shall add an update tomorrow.

Well, I think this thing has a chance of working.....





I've totally changed my normal order of construction. I've done the blades on one side at an early stage to see whether my thoughts as to construction and operation would work - they do - and I wanted to set the second stock rail by reference to the blades to make sure I had adequate clearance.

I'm really enjoying this

*dikitriki wrote:* I wanted to set the second stock rail by reference to the blades to make sure I had adequate clearance.

Hi Richard,

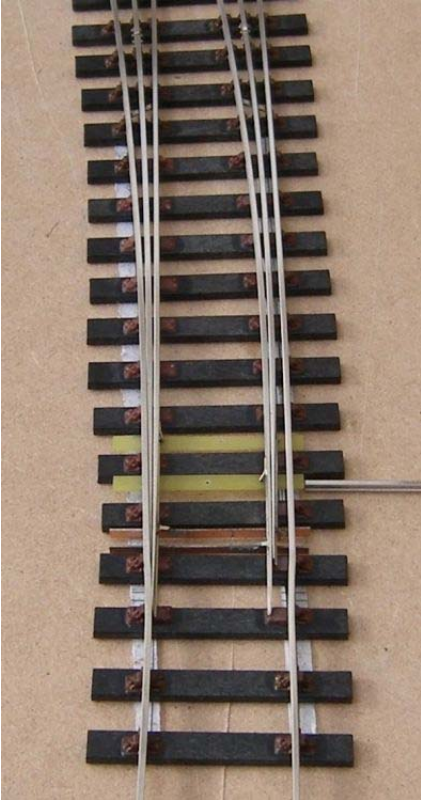
Make sure you put an outward set in it -- the ruling curve is along the centre road. If you have a ruling curve along the outer road, the radius on the inner road will be well below your minimum at the switch.

Looking good!

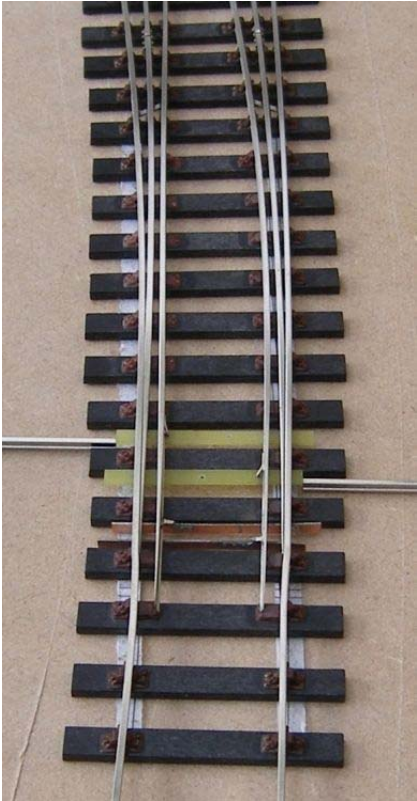
Thanks for the reminder Martin. I had remembered, having made a mental note of your advice on the Templot Club thread. The three-throw turnout has been completed, and it all works well, though I've no doubt some fine-tuning will be required when it is glued in place. There is (inevitably) just a little too much flex in it as it is.

Anyway, I've been out and about with the camera.....

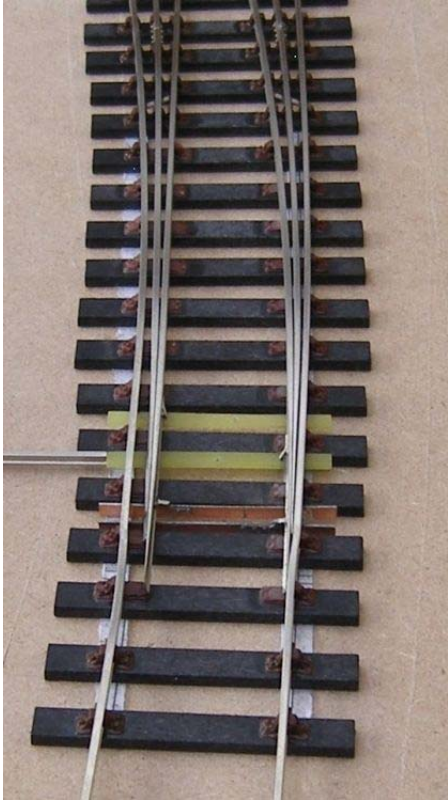
Set for the right road



The middle road

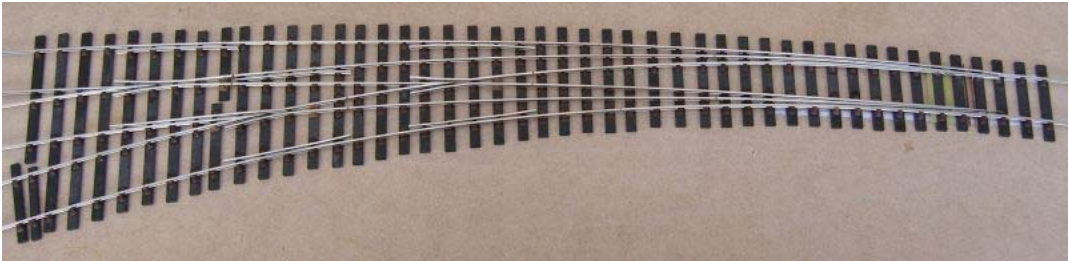


The left road



Note that each stretcher bar acts upon an outer and inner pair of blades, and that the outer and inner blades are of unequal length.

And two overall pics...





It's been a fun exercise, one of those instances where everything worked out first time, I suspect because I'd spent 2 weeks thinking about it before starting, and also, of course, having the assistance from the merry band of Templeers.