

## INCLINES AND ELEVATED TRACK SUPPORT SYSTEM

1. With inclines and high level tracks a model railway will become more spectacular as well as more interesting to operate. The use of different track levels allows a greater 'mileage' of track to be accommodated in a limited area. The steepest incline recommended is 1 in 16 ( $3\frac{1}{2}^\circ$ ) (Fig.1) and this is achieved by fitting Inclined Piers to the track at 24 sleeper intervals, straight or curved. Less steep inclines will enable longer trains to operate up them. The steepest incline on a British Railway main line is 1 in 30 at Folkestone Harbour.

### R.658 INCLINED PIERS

### R.659 HIGH LEVEL PIERS

2. Before fitting any Piers the track layout should be assembled completely 'in the flat', but not pinned down.

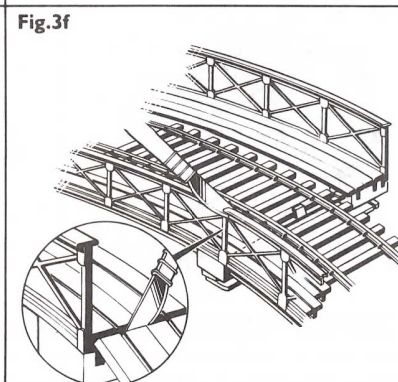
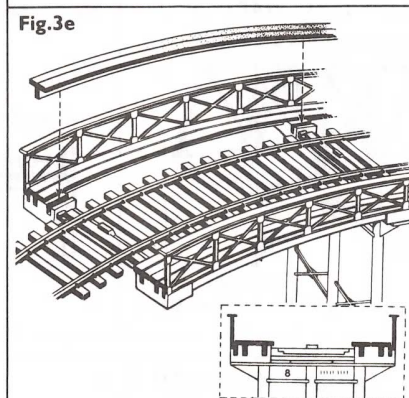
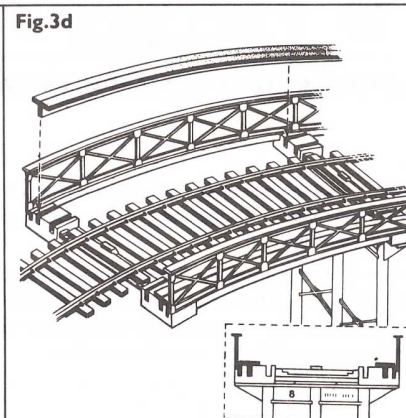
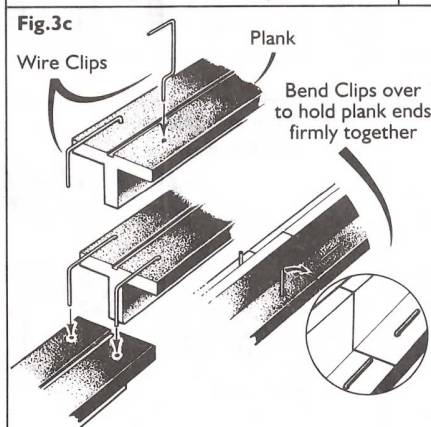
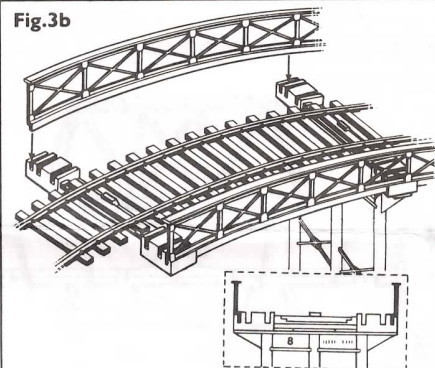
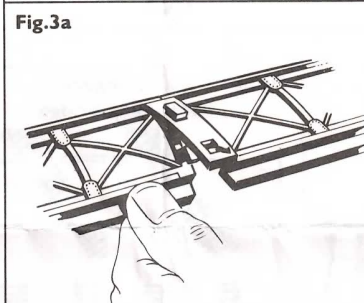
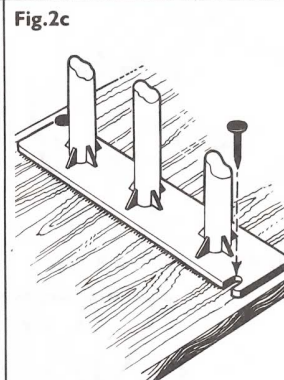
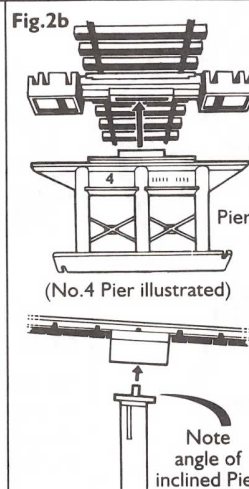
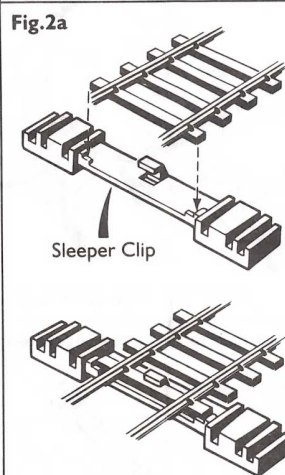
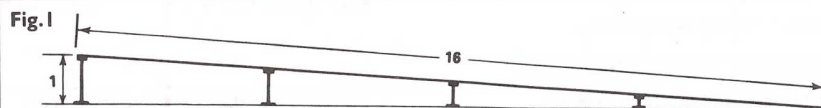
- Fit a Sleeper Clip to the underside of the track (Fig.2a) at the place where the highest point of the incline will be required, fit another Sleeper Clip 30 sleepers down the track, and then further Clips at intervals of 24 sleepers down to the normal surface level.

For a less steep incline the interval between the Sleeper Clips can be larger but it is not advisable to space them more than about 32 sleepers apart as the track may tend to sag with a train on it. At this spacing the incline is 1 in 21 ( $2\frac{3}{4}^\circ$ ).

- Then, starting with the lowest (marked 1), fit a Pier under each Sleeper Clip (Fig.2b). Note that the top surfaces of the Inclined Piers (**but not the High Level Piers**) are slightly angled and that these angles must be aligned with the incline.

The fit of Sleeper Clips to Piers is snug but a drop of polystyrene cement may be used to make a permanent fit if desired.

- If the layout is to be permanently fixed to a baseboard, track pins (R.207, not supplied) should be used to tack the Piers in position. Slots are provided in their bases for this purpose (Fig.2c).



### R.660 ELEVATED TRACK SIDEWALLS

3. To 'clothe' an inclined or elevated track structure sidewalls may be added and these, being flexible, fit to straight or curved track elements. A set contains lattice sections and 'planking' for approximately 4ft. (122cm) of track which is sufficient for a standard incline. To provide support the additional Sleeper Clips included should be clipped to the track midway between those already in use for the Piers.

- Clip together the eight Lattice Sections (Fig.3a) into two lengths of four sections each.

- Fit one length into the **outer** grooves in the Sleeper Clips (Fig.3b) on one side of the track starting at the top of an incline, or, if appropriate, at an overbridge, and the other length into the outer grooves on the other side of the track. At this stage the Lattice Sections will be found to be insecure.

- Take four lengths of Planking and join them, end to end, using the wire clips provided (Fig.3c). Ensure that the clips are correctly bent over to hold the ends of the 'Planks' firmly together.

- Insert this extended length into the **centre** grooves of the Sleeper Clips, again starting from the top, so that it locks in the Lattice Section (Fig.3d). Try to avoid having a clipped joint exactly on a Sleeper Clip.

- Join together the rest of the Planking in fours and insert them into the other grooves (Fig.3e).

- If the Planking and Lattice Sections are used on curved track the inner side will extend further than the outer side at the base of the incline. The projecting ends may be cut off with scissors or a sharp knife to finish the structure off neatly (Fig.3f). Only cut a Lattice Section adjacent to a vertical strut close to where it is retained in a Sleeper Clip.