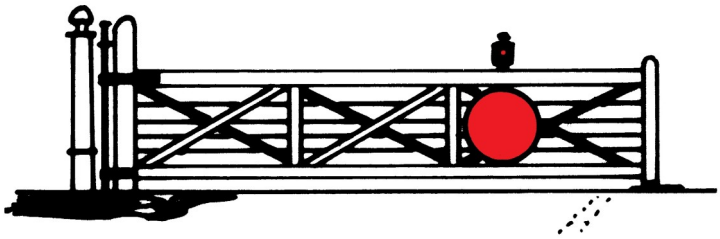
LC4 LEVEL CROSSING KITS



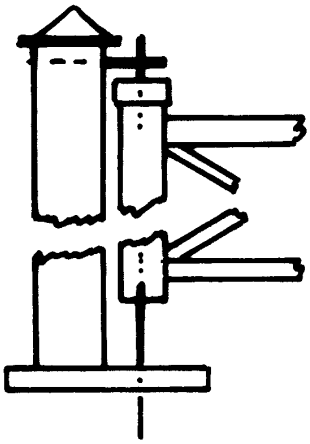
GENERAL INSTRUCTIONS

Establish the post positions for the gates by measuring the width of the trackbed along the line of the road. This will determine the size of the gates required, the crossing needing anything from one two-bay gate or a single four-bay gate up to double gates of differing sizes to suit the number of tracks or the angle of the roadway.

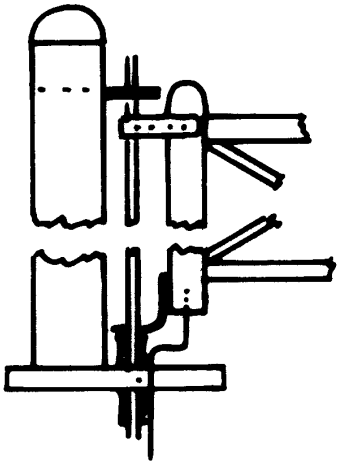
Remove any flash or casting feeds on the gate diagonals with a sharp craft knife. If you need to file, resort to draw filing side to side with a Swiss file to avoid digging into the casting.

Obtain a good photograph of the type of crossing you intend to model.

Assembly should be undertaken with a pencil bit soldering iron, low melt solder and a liquid flux. Tin all brass parts with ordinary solder first.

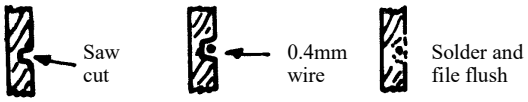


Direct hinge - LNER, LMS, SR



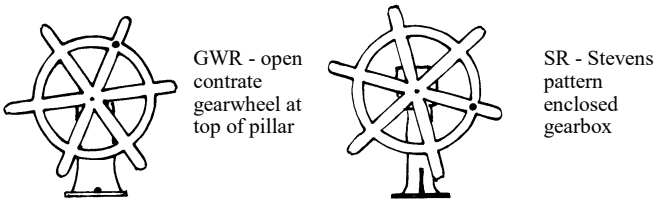
Indirect hinge - GWR, McK&H

The road gate is normally carried on a heavy foot bearing below ground. In the model, this should be replicated by brass tube going through the foot casting and soldered into the larger hole in baseplate (1). The driving axle will either pass through this tube directly into the gate heel, or will form an intermediate hinge. In the latter case the driving axle will go through the smaller baseplate hole with a joggle into the heel to prevent locking up when moving.



Board of Trade regulations required that child and dog proof guard rails were fitted to the gates at intervals not exceeding 9", starting at the bottom gate rail. They were usually made from ¾" wrought iron tubing (gas pipe), replicated on the model by the supplied 0.3mm diameter wire. The tubes were later replaced or augmented by diamond mesh expanded metal, for which a piece of material is supplied.

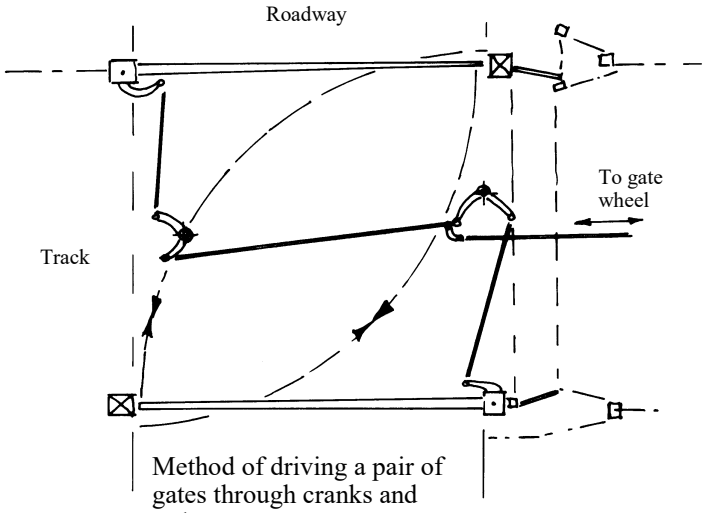
The gates can be made to operate by motor or manual drive using the etched cranks (2) with wires to link them.



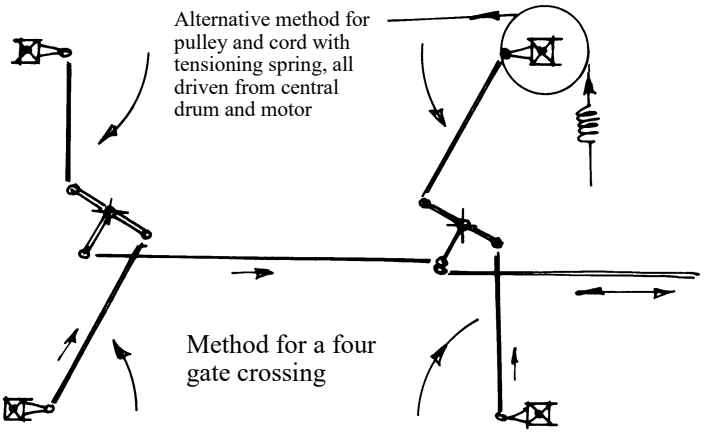
The crossing is usually protected by signals placed either side, the whole being interlocked by a signal box adjacent to the crossing. The etched operating handwheel (13) should be mounted in the box on a small pedestal of the type shown above.

The large cast bracket (7) on the etched sheet is for very large gates with a tall hinge post (~10') and is used to brace the gate against the diagonal support rods. It is found on GWR and McKenzie & Holland gates.

Painting - with the exception of some early gates which seem to have been painted buff, most gates were painted white with all ironwork in black. Targets and lamp cases were always signal red, which faded to a pale pink, especially when south facing. The border of SR disc targets (9) was commonly picked out in white.



Method of driving a pair of gates through cranks and rods

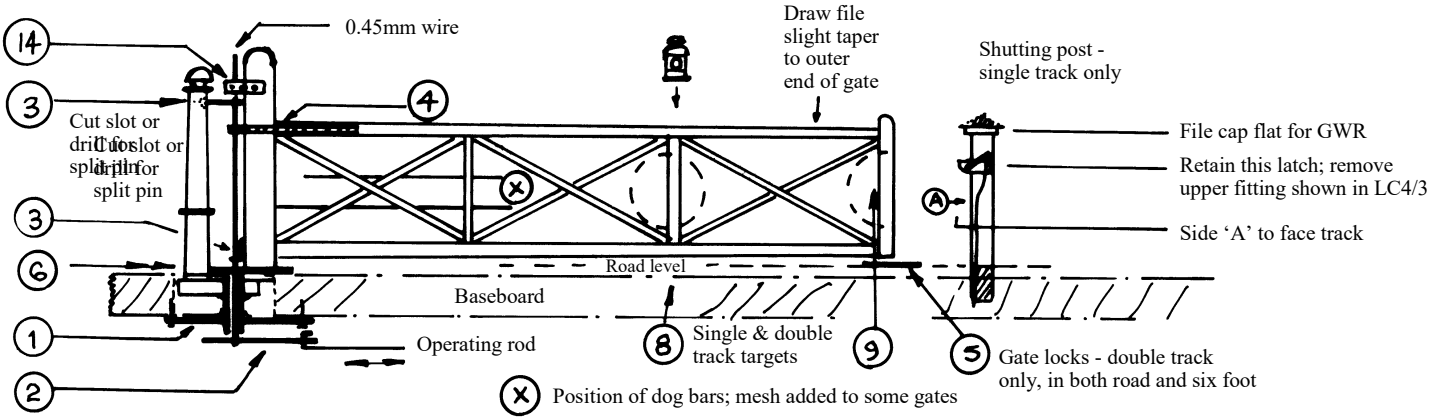


Method for a four gate crossing

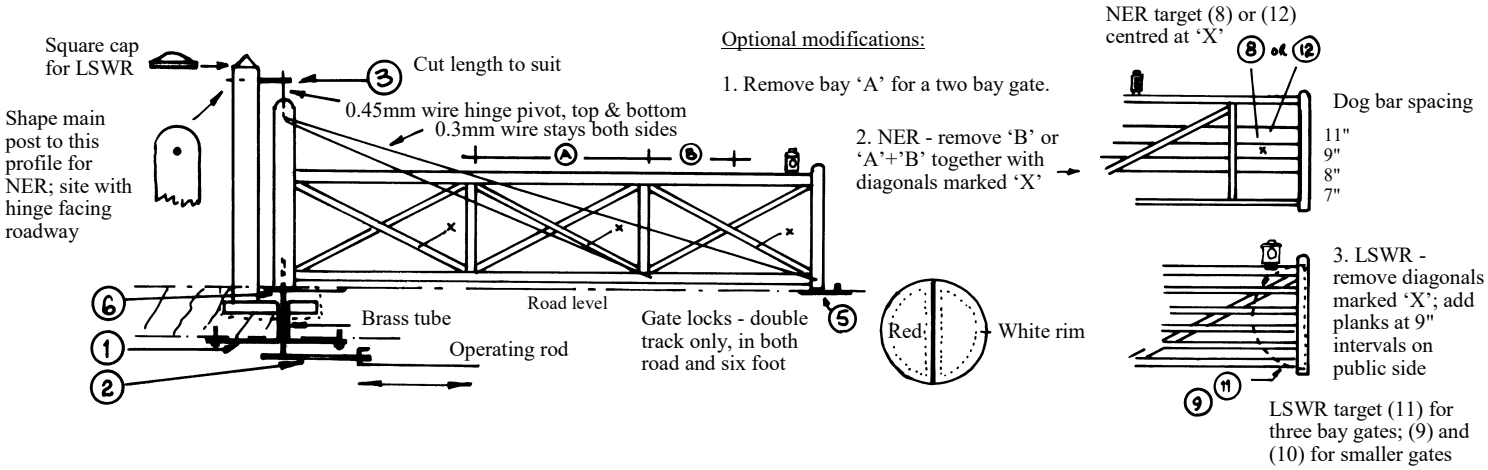
Parts on each fret

1. Baseplate (2)
2. Crank (2)
3. Hinge (4)
4. Strapping (2)
5. Gate lock (2)
6. Cover plate (2)
7. Bracket
8. Small full target
9. Small half target (2)
10. Overlay for 9 (2)
11. Large full target
12. Square target (2)
13. Gate wheel
14. Hinge strapping (2)
15. Corner strapping (2)

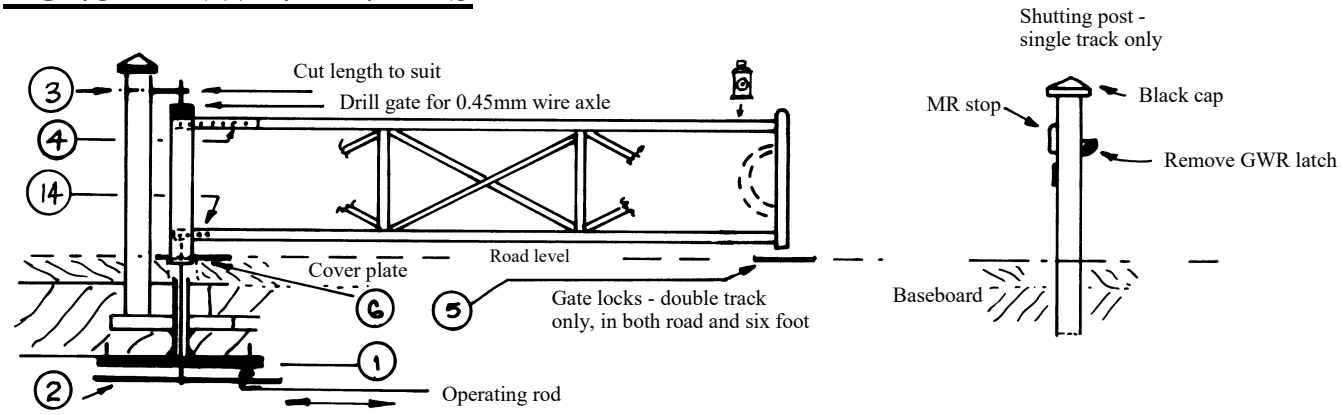
LC4/1 - GWR



LC4/2 - GNR/NER/LNER & LC4/5 - LSWR/SR



LC4/3 - LNWR/MR/LMS



LC4/4 - McKenzie & Holland (LB&SCR/NSR)

Large gate typical of a skew crossing shown - cut and shut the gates to give 4+2 bays instead of 3+3