

Great Western Railway.

SPECIFICATION

OF A

Six-wheeled Third Class Carriage,

WITH

Six compartments for fourteen Passengers each, and one compartment in the centre for a Guard's Box and capable of being used for Passengers.

General Dimensions.

	Ft. In
Extreme length at base	27 0
Ditto width at do.	9 4
Height from floor to under side of top side frames	5 6
Height from floor to underside of roof boards in the centre	6 0

Dimensions of Compartments.

Four of the passenger compartments to be 4-ft. 1-in. from centre to centre of the division fillets. The centre compartment, for the Guard's Box, or for passengers, to be 3-ft. from centre to centre of partitions. The end passenger compartments to be 4-ft. 2½-in. each from centre of partitions to outside of ends.

Description and quality of Materials.

The bottom and top sides and bottom and frames, buffer planks and floor bearers, to be of Memel oak, each in one length. The four corner pillars to be of English oak. The door pillars, standing pillars, and other framing, to be of English ash. The roof, seats and partition boards to be of American yellow pine (the roof boards to be in one length.) The floor boards to be of red deal, 9-in. wide. The upper panels to be of papier maché, the lower panels to be of plate iron weighing 4-lbs. per superficial foot.

Bottom Frame and Floor.

The bottom side frames to be 3-in. deep by 7-in. wide at the top, bevelled off to the sweep of the standing pillars, rebates formed in them for the doors to shut against, and for receiving the floor boards, as shown.

The bottom end frames to be 3-in. deep by 7-in. wide, rebated to receive the floor boards, and morticed for the upright end framing.

The bottom sides and ends to be framed together, as shown, and secured by strong wrought iron knees inside and a wrought iron angle plate, sunk flush outside.

The floor bearers to be 3-in. by 1½-in., morticed into the side frames with barefaced tenons, the shoulders cut bevel and let into the lips of the mortices, according to the detail drawing.

Trimming bearers, 3-in. by 1½-in., parallel with the side frames, to be formed between the others at each wheel, to support the floor where cut away for the wheel cases, and under each buffer plank bracket. The wheels to be 9-ft. 2-in. apart centres.

The flooring to be in two thicknesses of ¾-in. red deal, laid crossing each other at an angle of 45-deg. with the sides. The boards to be kept flush with the top of the side frames, and cut to fit closely round the wheel cases. The whole to be closely screwed together and to the floor bearers and rebates.

Side Elevation.

The four corner pillars to be 4-in. square, bevelled to the sweep of the body, and cut under as shown for the lap of the panels, tenoned into the bottom frames and strengthened by a strong wrought iron knee firmly bolted on each side at top and bottom; the internal corners to be chamfered off from the lining boards.

The standing pillars and door pillars to be straight from the roof to the elbow rails, then swept under 2½-in. Rebates to be formed for the doors to shut against, as shown. The tenons to have screws through the shoulders to strengthen them, and wrought iron knees bolted to them and to the bottom and top sides and buffer planks.

The elbow rails and diagonal braces to be cut to the form shown, and morticed into the standing pillars and top side frames. All the joints to be strongly screwed and accurately fitted.

The top side frames to be cut to the sweep shown on the plan, with rebates for the tops of the doors, mortices for the door and middle standing pillars and diagonal braces, and notches for the elbow rails and roof sticks.