

Buffer Rods.

The Buffer Rods, four in number, to be of the best S. C. wrought iron, made as shown on the detail drawing, to pass through a turned elm block with a gun-metal socket and an iron band outside, fixed with 3 $\frac{1}{8}$ -in. bolts to the end frame, and screwed inside. The buffer rod to be $2\frac{1}{2}$ -in. diameter in the socket, and extend as far as the disc, and 1 $\frac{1}{2}$ -in. diameter for the rings to work on, with screw and nut at the ends to take the back blow. The rods to be furnished with counter-dies and parting plates complete, as shown. The buffer head to have a $\frac{1}{4}$ -in. plate screwed on the outside, with countersunk head.

Side Connecting Chains.

The Side Connecting Chains, four in number, to be of 1-in. best cable-iron 2-ft. 3-in. long, each two to have hooks, the other two to have links 6-in. long, at their extremities— $\frac{1}{8}$ -in. fixed to the end frame by eye bolts with square necks passing through them and the corner bracket, with nuts to be screwed inside against an $\frac{1}{4}$ -in. iron and $\frac{1}{2}$ -inch vulcanised India-rubber washers. The chains to be fixed 7-ft. 6-in. apart from centres, and equidistant from the centre line of frame.

Steps.

The Step Irons, two in number, to be 1 $\frac{1}{2}$ -in. round iron, with arms attached, as shewn, to carry the steps and screw into the head formed on the corner bracket, as shewn by the detail drawing. The steps to be of fancy ribbed plate iron, 1 $\frac{1}{2}$ -in. thick, according to sample, 1-ft. long by 9-in. wide, and riveted with flush rivets on the top side of steps. The top step to be bent in the form shewn, and riveted to the flange of angle iron of side frame with a strut stay 2-in. by $\frac{1}{2}$ -in., as shewn.

Each side spring to have a Baille's patent volute spring as an auxiliary, fixed as shewn.

Break.

The Break to be made according to the general and detail drawings, of the best materials. All the parts to be clean and well fitted, filed, bored and turned, respectively, as shewn. The blocks to be of willow or poplar.

Axle Boxes.

The axle boxes to be Normanville's Patent, clean, sound and well made castings, in every respect according to the detail drawings. The grease box covers to be strong, well made and closely fitted.

The bearings to be of "Vaucher's" patent metal, sound, well made and well bedded into the axle boxes, and fitted to the journals of the wheels. The grease holes in the axle boxes, and in the bearings, to be accurately formed to meet each other as shewn. The spring clips to be clean and well forged, filed and fitted to their places, the holes in the axle boxes to be rimmed out true to receive them.

The Body.

The side standards, sixteen in number, to be of rolled L iron 2 $\frac{1}{2}$ -in. by $2\frac{1}{4}$ -in., turned under to the form shewn, with $\frac{1}{2}$ -in. plate bases, L iron 2-in. by 2-in., as shewn to enclose, and well riveted to them at the top. The bases of standards to be well riveted to the L iron on face of, and inner flange on top of side frame. The end standards, six in number, to be of rolled T iron 2 $\frac{1}{2}$ -in. by $2\frac{1}{4}$ -in., with $\frac{1}{2}$ -in. plate bases, and fixed at such distances as to divide the ends into four equal panels, as shewn, and well riveted to the L iron on top, and to L iron on top side of end frame. The inside of side standards to be filled in with well-seasoned ash, rounded as shewn on the drawing. The ends to be lined with $\frac{1}{2}$ -inch side lining board, as shewn. The sides between the door openings and ends outside, to be covered with $\frac{1}{2}$ -in. plate iron, well riveted to the standards and L iron 2-in. by 2-in., at bottom, between the standards and the L iron on side and end frames. The plates to be fixed $\frac{1}{2}$ -in. below the nosing of L iron at bottom, to prevent the water getting in. The end plates next to the guard's box to have window openings, with fixed sashes, as shewn. The door openings at top to have a piece of oak 3 $\frac{1}{2}$ -in. by $\frac{1}{2}$ -in. riveted to the top L iron to form a rebate for the heads of the doors. The body to be divided in length into three compartments and a guard's box, at the distances shewn. The transverse partitions of $\frac{1}{2}$ -in. plate iron to extend from the floor plates to the roof, and be fixed to the T iron at top, with L iron 1 $\frac{1}{2}$ -in. by $1\frac{1}{2}$ -in. at the sides and bottom, well riveted.

The guard's box to be lined with $\frac{1}{2}$ -inch lining board, as shewn, and to have two seats 1-ft. 6-in. high, with 1-in. deal top and rounded nosing, fixed on framed legs and bearers. The floor plate in box to be covered with an inch deal floor transversely, fixed to the plates by rivets flush on the top side. The roof to be formed with T iron 2-in. by 2-in., as shewn, and covered with a roof plate $\frac{1}{2}$ -in. thick. The joints of the roof plate to be planed true and made watertight, turned up at the sides to form a gutter for the rain. The plate to be well riveted to the T iron and L irons at the sides and ends. The roof lamp to be fixed in the centre of opening formed in the partition to guard's box, and the glass of Lamp to be protected with a wire cage, fixed to the roof inside. The top of van to have a moulding, as shewn, mitred round under the cover plate, well fixed to it, the sides, and ends. The roof to have a rail and standards on top, as shewn, of $\frac{1}{2}$ -in. round cover plate, well fixed to it, the sides, and ends. The standards to have plate bases $\frac{1}{2}$ -in. thick formed at the end, well riveted to the side and end L irons, 6-in. high. The standards to have plate bases $\frac{1}{2}$ -in. thick formed at the end, well riveted to the side and end L irons at the top of van. The top end of the standards to be screwed and pass through the rail with a nut on the top.

Doors.

The Doors, twelve in number, to be made of well-seasoned oak 1 $\frac{1}{2}$ -in. thick, turned under to the form shewn. The whole of them to be lined inside with $\frac{1}{2}$ -inch lining, and the outside to be covered with $\frac{1}{2}$ -in. plate iron, keeping the plate over the joint of the door— $\frac{1}{2}$ -in. to form a rebate, and well screwed to the frame-work. The doors to be 3-ft. 8 $\frac{1}{2}$ -in. high, eight of them in pairs, 6-ft. wide; two ditto 3-ft. 9-in. wide, and two ditto 1-ft. 9-in. wide. The top part of the doors for guard's box to have moveable mahogany sashes, at the height shewn, with ventilators over them. The doors to be furnished with a brass-handled turnuckle each, and lock chases to be cut in the standards for the bolts to shoot into to fasten them. The whole of the doors to be hung with three strong hinges each, 24 inches long, well riveted to the standards, and provided with strong sliding bolt fastenings of approved description, and strong carriage door locks.

The dimensions written on the drawings and specification to be taken in preference to dimensions by scale, and any discrepancy that may arise between the drawings and specification to be settled by the Superintendent of the carriage department.