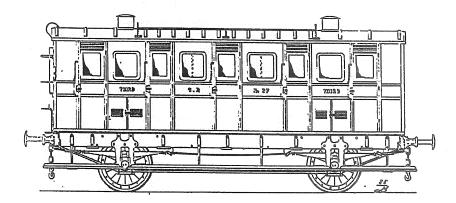


Decent Medels



CALEDONIAN RAILWAY THIRD-1870

These coaches were built in the early 1870's by Joseph Wright & Co. of Birmingham, who were absorbed into Metropolitan Cammell.

They can be seen in several early photographs behind old Caledonian 8^{\prime} singles and 2-4-0s, for which kits are also planned.

C.R. 4-WHEEL THIRD - BODY

- Detach the body from the fret, file off all tags, (but not the little grab-handle on the L.H. edge of each side), absolutely flush.
- While the body is still flat, solder the door interiors/drop lights in place - hold them in place, externally, with masking tape after positioning the drop lights squarely behind the door opening. Now re-drill the holes for the door-handles. Two drop lights are "open".
- Fold the body carefully as follows:-
 - Fold over the top fold, to the angle of the roof (check with a card template).
 - ii) Bend up the ends, preferably in bending bars, make sure you bend on the very inside of the fold-line, to maximise the height of the ends.

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- iii) Fold up the sides, to meet the edges of the ends (the grab-handles fit into matching recesses) solder up inside the corners, and the body, after some 15 minutes, is more or less complete.
- Detach the seat-template, along with the base-plate just below it on the fret. Tape the base-plate to a board and turn the template up vertically.
- 5. Now detach the seats and bend to match the template. There is a single seat "G" for each end of the coach, and 4 double seats. Note that 2 of the latter("E") have a small central hole in the top fold. Re-drill this hole, as necessary, to accept the end of the roof-support "F" (see Diagram 1), (1mm drill for 7mm, 0.6 for 4mm).
- Carefully bend all seats to shape, and persuade them into the coach, by gently bending out the sides of the body. Fit the end seats first.
- Insert the roof supports into the hole in the seat backs, under the slots in the top body-side fold.
- Position each sest in turn, and solder to the floor.
- Make sure when finally soldering the two inner seats in place, that the roof support is vertical.
- 10. Then solder the roof cross-beams to the top fold, pulling the sides of the vehicle straight, at the same time.
- Now roll the roof to shape, check for fit and detail as follows:
 - i) Find the roof grab-handles "S" (there are 2 required, with one spare provided). Remove from the fret, but keep the tags attached to the handles. Push the tags through the slots at one end of the roof, and solder from the inside. Remove or bend over the surplus tag on the inside.
 - ii) Now detach roof-rack supports "T", one at a time (one spare only provided) and insert through the holes in the roof, to form a rectangular luggage-rack. When they are all soldered in place, feed straight brass wire through the holes, to complete the rack. Note that you have to insert the roof-rack supports, solder in place, then twist each through 90° this will become clear when you come to feed the wire through the holes (only applies to 7mm).
 - iii) Fit the two lamps to the roof roof detail is complete for now.

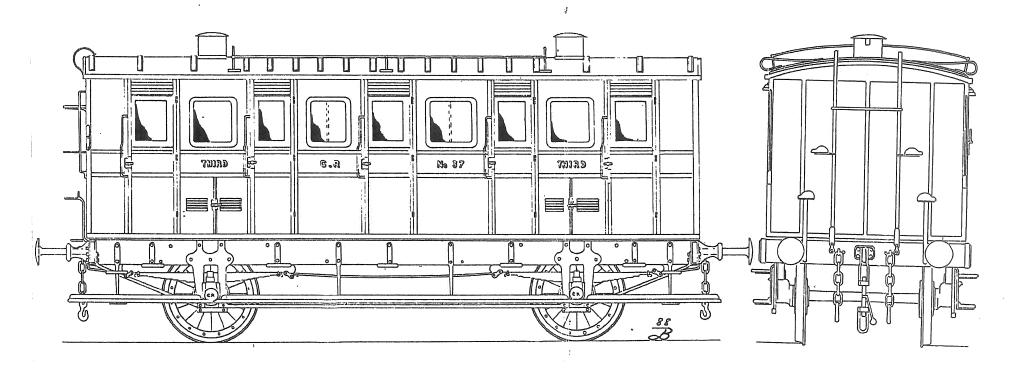
- 12. Have a look at the grab-handles "R" and study Diagram 2, so that you understand the design the long grab-handles also incorporate the base-plate, with a hole in it for the door handle. If you are working in 7mm scale, proceed as follows:i) Drill through the "door-handle" holes in the coach side, and through the holes in the grab-handles (before detaching these from the frame), with a no. 72 drill.
 - ii) Detach one grab-handle at a time there are no spares, so be nice to them. File off any surplus tags, and bend the ends at an angle - see Diagram 3.
 - iii) Insert the door-handle through the hole in the base-plate attached to the R.H. bottom end of the grab-handle.
 - iv) Clean the coach-side with a fibre-glass brush, put a spot of solder-paste in the two recesses in the door-frame, and insert the door-handle (complete with grab-handle) through the hole in the bodyside.
 - v) Hold in place with masking-tape, externally, put a dab of solder-paste on the portion of the doorhandle, inside the coach and solder in place.
 - vi) Expose one end, at a time, of the grab-handle on the coach exterior and solder in place. It helps if you insert a card-spacer behind the lower half of the grab-handle, to space it off the body-side.

If all the above sounds fiddly, then please persevere, it's not difficult, and the end result is well worth the few minutes spent getting it right.

For 4mm models, you have to make door handles from filed-down pins. You can then proceed, as for 7mm, or simply use super-glue to fasten the handles in place.

- 13. To complete the body, now find the end-steps and have a good look at Diagram 4. These steps, if done nicely, are one of the most appealing features of the model, and a lot of thought has gone into the design, to simplify the construction. Proceed as follows:
 - i) Detach the two "A" pieces, and bend exactly to the profile in the drawing. The little hole in the long straight strap matches a hole in the end of the coach. When "A" is bent correctly to shape, tin the rear of the strap, and fasten to the end of the coach, by means of a pin through this hole. Note: "A"s are L.H. and R.H. fit to correct side! Insert the pin, from inside the coach and leave enough protruding, to solder piece "B" to, next:
 - ii) Solder "B" to the two pins, and cut off the surplus.
 - iii) Bend "C" as in Diagram 4 and store safely for now - these fit to the chassis. (See chassis notes for bending instructions).





FROM METRO-CAMMELL

DRAWING 2284, 1870

John Boyb 9/88

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- 14. Solder one lamp-iron at the L.H. end of each coach-side, see Diagram 7. Impress the "rivet-detail" on the rear of the lamp-iron, detach from the fret, bend to shape and solder into the recess in the coachside.
- 15. Finish off the body, with the cast door-vents.

You can now proceed to the CHASSIS

1869 THIRD CHASSIS

- Detach the main chassis, fold down the chassis sides, bend out the footsteps horizontally.
- 2. Bend down the tags in the floor (4 one end, 2 the other) and solder the bend lines.
- Remove wheel units "J" and "K", bend to shape as follows:
 - i) Bend down the long transverse folds
 - ii) Remove brake-shoes "L" from the fret, insert into the slots in "J" and "K", then bend down the side pieces of "J" and "K" - see diagram 5.
 - iii) Solder the corners of the wheel units for strength, then insert the bearings and wheels.
- 4. Remove the triangular brake-rodding from the fret and gently remove the surplus tags. Fit the outer ends of the rods into the slots in the brake-shoes as follows:
 - i) The brake-rods with the three adjustment holes these fit the outer brake-shoes, and run under the axle. The centre leg needs to be twisted, at the end, at 90° to make it vertical - see diagram 6.
 - ii) The other pair of brake-rods fit the inner brakeshoes and point towards the axle.
- Adjust the position of the brake-shoes, to clear the wheels and solder the connecting strap, to the base of the wheel unit.
- Trial fit the wheel units to the chassis to check that the chassis runs nicely, then remove temporarily.
- 7. Study carefully the design of the solebar overlays "N" before cutting through any tags, to release from the fret. Note that the diagonal bracing straps at each end, the top steps, the footboard supports and legs, are all in one piece to simplify construction. Then carefully cut through the tags, detach the whole overlay and trim gently. Then indent the "bolt-heads" on the rear of the overlay, and on the front of the tie-bar retaining fold-over strap at the foot of each tie-bar. Be especially careful of the footboard legs, they are easily damaged at this stage.

- 8. Trial fit the solebar overlay to the side of the chassis. The centre step on the chassis needs to slide gently through the corresponding slot in the overlay.
- Fix the overlay in place, with solder-paste, super-glue or Thixofix (which I use).
- 10. Bend out horizontally, the supports at the bottom of the footboard legs. Detach the footboards, bend to shape and solder to the supports, making sure that the axlebox clearance slots match the axle-centres.
- 11. Find end-steps "C", and bend to the profile in diagram 4. Note that there are 2 "bolt-heads" to be impressed on the rear, before you start bending. The best way to bend is as follows:-
 - Bend up the rear part of the step, then bend the step over on itself, and solder to the support.
 - i1) Bend the bottom end into a shallow "S" shape, with snipe-nose pliers.
 - iii) Bend just under the step, as a sharp curve, not a 90° angle and solder to the headstock. These steps are then vulnerable to accidental damage until the body and chassis are mated after painting, so be careful with them.
- 12. Complete the model by fitting the cast springs, axleboxes and headstocks. Then finish off the model with couplings and safety-chains. The latter can be fitted through the holes in the headstock with loops of wire or small split pins with the etched hooks soldered on, preferably at the other end. You can then proceed to paint the model, before final assembly.

PAINTING

Photos exist of these early coaches in all-brown livery, and with white panels. The whole interior needs to be finished in a wood grain effect, with the roof underside white. I normally airbrush the whole interior white, then apply a thin wash of an oak colour. When that has dried, pick out the door window-straps in a grey-black, also the vertical roof supports.

Before doing any painting, protect the wheel-treads, buffer shanks (heads can be "rusty-brown"), door and grab-handles, with masking fluid.

For the all purple-brown livery, spray all over with primer and then apply purple-brown all over, including the chassis, before picking out the metal work in grey-

black. For a coach in clean condition, to get the purple-brown really dark, I tend to spray over black. For a nice weathered look, I use grey primer then airbrush thin coats of purple-brown on, until the desired "faded brown" look is achieved.

Window frames and drop lights are then picked out in dark or faded mahogany, as wanted. Panels are lined out in yellow, with a thin red line on the outside edge ie: down the ends, and along the bottom. The door-vents would also be lined horizontally in yellow.

At least some coaches had white waist and upper panels, the chassis on these would be black. The lettering is as per drawing.

FINAL ASSEMBLY

- Fit the body to the chassis by bending down the chassis attachment tags, push these through the slots in the floor, and push flat with the floor.
- Do the same with the wheel-units, twist tags to secure.
- 3. Slide the end of the roof, with the grab-handles on it, under the curved end of steps "A" (adjust or trim these as necessary, at this stage) and secure the roof to the top fold on the body-sides, with impact adhesive or even double-sided carpet tape.

To improve the appearance of the roof, I attach a thin strip of card all round the underside of the roof - this also disguises any gaps at the top of the ends and sides.

Model should now be complete - if you are pleased with it, and would like to see more of these delightful vintage coaches in kit form, then all you have to do is say so - I have a long list of coaches just waiting, from 1847 - 1877.

