

Mild reproach

For this issue, the Editor's request was for "something" about rolling stock and "photographs would be nice". And all this two weeks before his copy date! I fear Jim does not realise that even producing rubbish takes *some* time and thought! Anyway, here goes.

On a visit in 1995 (last century!) to the New South Wales Rail Transport Museum at Thirlmere, near Sydney, I saw a gem of coach. It was an eight-wheel radial, and all that they could tell me about it was that it came from about 1860, and were surprised at my interest – mad 'poms'! It had an 'open plan' interior, with bench seats each side and a double sun roof mounted on wrought-iron twiddly bits between the layers. Construction was wood on an iron chassis. I had always read that the GWR and the LNWR were the first with radials, but as early as 1860?

Pacemakers

I wanted to model a pair of the vehicles, but having no tape measure with me I had to resort to the time-tested method of 'pacing out'. I paced out the length, then my wife Hilary did the same. I knew that, if I halved her figure, it should be the same as mine and it was – 30 ft.

When we got home, I went through all my coach drawings of the period, getting surprisingly consistent average sizes from many different companies for doors, windows, and partitions. Most of the door and window units were 2ft wide, and there were fifteen on my coach – so I went for 30 ft., with two bogies 6ft. 6ins apart and with wheelbases of 7ft. 6ins.

Bodywork

Now I know it is crazy, but I made a brass die and injection-moulded a batch of sides and ends, to be sure

that the two coaches I wanted would be identical. However, don't be put off here – I know most of you can and do produce perfectly good bodies in Plastikard – I just know my limitations: I might produce two sides the same but *never* four!

Chassis solution

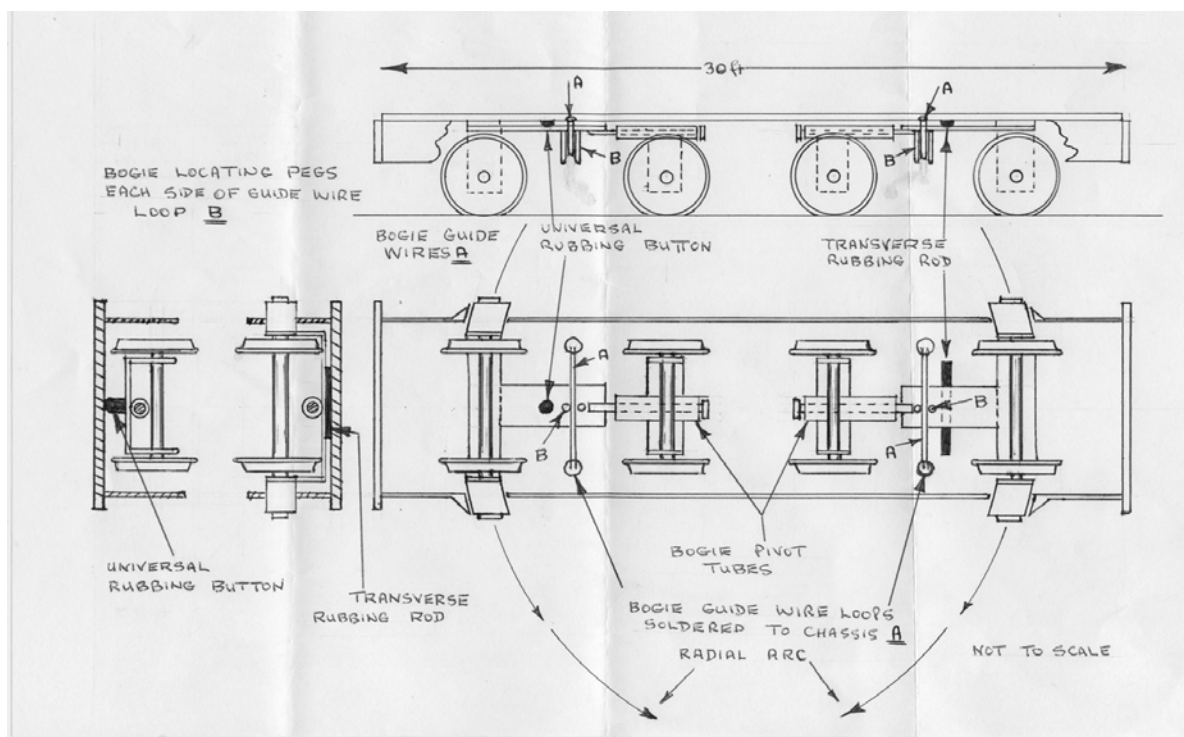
The *interesting* bit is the chassis. How do you compensate an eight-wheel radial to go round quite tight curves? After a few experiments, I ended up as per the drawing, opposite and which I will try to describe.

There are two 4-wheel bogie units, each 'Flexichas-ed' via a pivot tube. The outboard axle is the radial, with outside pinpoint bearings, the inner is on a simple bracket.

Because the radial arc is well inboard of the bogie near the centre of the coach, you cannot mount the bogie centrally, but must allow the radial axle boxes to do the guiding, while a pair of bogie locating pegs, either side of guide wire loops, soldered to the chassis retain them in flexible mode.

The weight of the coach is taken by a transverse rod at one end and a button at the other, which 'rub' over the top of the bogies. The transverse rod holds the coach upright, but allows rocking movement *lengthwise*, while the button allows both pitch and roll, and can slide sideways, the wheelbase being retained by the guide wires and pegs.

It works very well, but is an absolute pig to get on the track in the first place!



Now-we-know Department

Mike has modelled a former First Class car, built by the Midland Carriage Company in Birmingham, England, and delivered in 1868 to the NSWGR. In addition, twelve Second Class cars, with a centre birdcage Guard's compartment, came from the Oldbury Carriage and Wagon Company. The group was known as the 'Eight-Wheel Mountain Radials', and it seems initially to have been far from satisfactory, both in regard to workmanship and to the fundamental radial arrangement. One newspaper in that year described them as "now in stock as lumber, being found for some reason or another, entirely unfit for use", and there were those who smelt malpractice and argued for a local carriage building capability.

The mechanical arrangements led to the vehicles swaying in a highly disconcerting manner, with the local manager maintaining that they had been ordered for service into the Blue Mountains at an average speed of around 30 kph, and it was wrong to have used them on the straighter and faster section between Sydney and Penrith. After rebuilding of the end axles, by removing a centre pivot pin thus leaving the radial axles alone to control longitudinal movement, and by some restraint on the suspension links to dampen oscillation, a more acceptable ride resulted and they settled down as the best carriages on the system.

The vehicle on display at Thirlmere was involved in a derailment in 1898, when the rear axle broke, and two others followed. It returned to service until 1918, after which it served the Way and Works Branch. En route for scrapping, it ran hot and appears to have been sidetracked for repair in Guburn, until it was discovered as a rose among the thorns and repainted for the centenary of the railways in Goulburn in 1969. It was then placed in the Rail Museum at Enfield, ultimately moving to the New South Wales Rail Transport Museum at Thirlmere, where Mike came upon it.

The above information comes from a splendidly comprehensive and thoroughly exemplary work on the *Coaching Stock of the NSW Railways*, published in 1999 – subsequent to Mike's visit, of course – by Eveleigh Press, PO Box 345 Matra-ville, NSW 2036, Australia, as ISBN 1 876568 00 3. We wholeheartedly commend it. Eveleigh Press publish many authoritative books on the railways of New South Wales, including the *Byways of Steam* series, all of which are well worth buying, even if you are not already gripped by that fascinating system.

These publications are available from SCR Publications at the above address.