

small coal bunker where it was upheld by two slender wrought-iron stanchions and stiffened against side stresses by a pair of crossed diagonal stays springing upwards from the back-plate of the bunker. An extension rod arrangement attached to the left-hand crosshead served to operate the feed-pump when the engine was in motion. The front and rear buffers consisted of large wooden slabs attached to the cross beams of the main framework, whilst two slot "draw-head" couplers were provided at each end of the engine to permit the attachment of wagon coupling chains placed at different levels. Sandboxes, of vertical canister shape and obviously an after-thought, were fixed at each side of the smoke-box for forward running, whilst perched on top of the cab-roof, a simple rectangular box provided sand against the outer side of the rear coupled wheel, on the right hand side, for backward running.

### **THE SECOND NARROW-GAUGE LOCOMOTIVE AT JOADJA**

It is evident that in spite of its ugly appearance the first engine proved successful in service as a similar engine was obtained from Messrs Andrew Barclay, their work's number 211 of 1879. The new acquisition had its steam pipe placed within the boiler and a neat safety-valve column, rising through the flat-topped saddle-tank, was placed above the fire-box, in place of the dome as fitted to the earlier engine. Although there is a claim that the second engine was slightly larger than the first, the former had outside cylinders 7 inches in diameter with a stroke of 15 inches, whilst the coupled wheels had a diameter of 30½ inches. To house their two locomotives the company, as before mentioned, erected a galvanised iron shed, fitted with front and rear doors and a curved smoke-vent running along the crest of the gabled roof for its full length.

### **THE ROLLING STOCK IN USE ON THE JOADJA RAILWAY**

The rolling stock constructed for the Joadja Railway were, as far as can be ascertained, of the four-wheeled type, with the frames and superstructure built of local hardwood and imported match-boarding. The heavy frames were extended at both ends to form "dumb-buffers". A large number of open high-sided trucks, with sloping ends and "drop" sides were used for the conveyance of coal and shale. Several varieties of tank wagons of rather primitive design and of various capacities

were employed for the bulk handling of kerosene and other liquids. Several of these vehicles had their frames and bearings placed between the wheels, the horizontal tank being secured to the frames by means of wrought iron straps. It is surmised that these tanks were lifted from their wheeled frames and placed in Departmental open wagons for conveyance over the Government Railway system. Cased goods and general merchandise of a valuable nature were transported in covered vans fitted with double swing doors at each side. These vans had roofs of corrugated iron and the timber boards forming the sides were laid diagonally to the framing thus strengthening the whole structure. It is understood that at least two passenger carriages were in use on the railway. They also ran on four wheels and were divided into two compartments, each with a longitudinal double seat in the central position, the common back being too vertical for passenger comfort. The cars, although roofed, had open sides above waist level, and as springs were a sadly missing refinement on all the railway vehicles, one can only say that travel on the train was better than walking. One traveller has related that "the passenger accommodation could not be considered at all comfortable, especially during the winter or even when the weather is at all hot. In wet weather rain may enter, in cold weather it is very unpleasant and in hot weather the piercing rays of the sun are the reverse to agreeable. The fare each way is half a crown, rather cheaper than the railway fares for the same distance".

It is possible that the passenger carriages were not permitted to descend, or ascend, the main haulage way in the interests of public safety. According to the reminiscences of an old resident of Joadja, Mrs Hill, "life had its drawbacks at Joadja in the early days. We had to ride up the side of the mountain to the railway in the shale trucks which were hauled to the top by a cable. You had to bring your own seat and it was an every day sight to see a woman setting out for a day's shopping carrying a stool, box, or chair for the journey to Mittagong. I had my favourite cushion for these trips. In winter it was advisable to take a rug". It is understood that when the haulage way was in operation the company officials raised no objection to their people riding the shale wagons over the incline at their own risk. However, many were afraid to undertake this seemingly hazardous adventure, consequently, after alighting from the Mittagong train they walked the mile or so down the steep road leading to the floor level of the Joadja Valley. Others preferred to walk, or slide,