

country. The track was laid with flat-bottomed rails, weighing 45 pounds per yard, which were locally manufactured by the Fitzroy Bessemer Steel, Hermatite Iron, and Coal Company. Roughly split hardwood sleepers were obtained from the neighbouring gum-tree forests and the road-bed was innocent of ballast apart from mother earth.

What may be regarded as the "Upper" terminal sidings of the Joadja-Mittagong Railway, as first laid down, consisted of a lengthy loop, the western track being utilised for the reception of loaded vehicles after they were brought up the haulage way at the end of a rope, whilst the eastern track was slightly humped in its length to permit empty vehicles being gravitated, as required, to the point where the rope was attached preparatory to their descent into the valley far below. At the northern end of the reception road, in the immediate vicinity of the winding-engine and its boiler house, a short dead-end spur led in a north-westerly direction to enter a single road engine-shed where accommodation for two tank locomotives was available. Judging by the absence of run-round facilities at these "Upper" sidings it could be assumed that the locomotive hauled its train to Mandemar and propelled the vehicles on the return journey. A neat brick cottage, built about midway on the western side of the reception siding and surrounded by exotic trees, evidently housed the banksman in charge of the winding-engine and haulage arrangements.

Leaving the "Upper" sidings the company's new railway ran in a south-easterly direction for about one mile, following the crest of a rocky ridge between two forest and fern clad gullies, to gain the alignment of the bush track, grandiloquently known as Joadja Road, at the small farming settlement of Joadja. Here the railway curved sharply to the north-east and continued along the northern side of the Joadja Road for upwards of a mile where the road veered eastward, leaving the railway to pursue its general north-easterly course in order to eventually reach the intersection of the Wombeyan Caves Road and its temporary terminus. Advantage was taken of the ground levels, the route passing through open forest country and keeping closely to the water-shed in order to keep earthworks to an absolute minimum. The formation, where practicable, was raised about nine inches or so above the normal surface to avoid drainage problems.

Although precise details are not to hand concerning the temporary terminal siding arrangements at Mandemar, an examination of the long abandoned site, made in recent years, suggested that a loop

siding, possibly with a single tracked outer extension for shunting purposes, fulfilled all requirements. A narrow roadway, which was traversed by horse-drawn vehicles engaged in the shale and oil transfer arrangements at Mandemar, led directly eastwards to Mittagong, linking enroute with the main road to Berrima when in the vicinity of the old established village of Fitzroy (now known as Welby). The surrounding country-side is most pleasant with the wooded hills of Mount Oxley on the south, grassed round-topped hills on the north with an occasional peep at the coned top of Mount Jellore, and on the eastern distance ahead looms the high rocky face of Mount Gibraltar, known to its friends as "The Gib" and to the aboriginals of old as "BOWRAL".

On a first things first basis it should be mentioned at this juncture that the business affairs of the Australian Kerosene, Oil, and Mineral Company, were generally conducted in accordance with Scottish national principles relative to employment and the acquisition of plant. The indefatigable work's manager, John Brown, was largely responsible for the implementation of the above policy. With this knowledge it will be readily understood that recruitment of personnel took place largely along the bleak shores of Fife, the most important mining district of Scotland. Preference was also given to Scottish manufacturers of locomotives and mining equipment.

THE FIRST NARROW-GAUGE LOCOMOTIVE AT JOADJA

The author is indebted to the late Malcolm Park for information dealing with the locomotives obtained at various times to operate the Joadja private narrow-gauge railway system. This knowledge was gained about 1934 from a fellow enthusiast in London who specialised in the compilation of maker's numbers issued by British firms primarily engaged with the building of steam locomotives. Unfortunately there does not appear to be any local detailed source, relative to the Joadja locomotives, available for checking purposes. Contemporary newspaper articles only betray the fact that the company had a locomotive in use, whilst statistical records mention that the company possessed five locomotives. However, there is one unexplained bogey to overcome which gives reason for serious thought inasmuch as at 1881 the company was credited with having a 4 feet 8½ inches locomotive in its possession. As the Joadja Railway was laid to a gauge of 3 feet 6 inches one is at a loss to explain the company's interest in owning such