

ing the surface curved sharply in a north-easterly direction and, on a rising gradient crossed the coke-works road on the level to reach the coal loading staith previously installed against and above the standard gauge loop siding. Here a loop was placed in the skipway for outbye and inbye skips, together with a steam-driven winch to bring the skips out from the mine, the haulage cable being attached behind the last skip of the empty rake before they descended down hill to re-enter the adit.

THE BRICKWORKS BRANCH RAILWAY. NEWNES.

The Brickworks Branch, at a facing point to Down trains, left the main line at Newnes immediately in advance of the crossover leading to the low level coal and coke loading loop siding. The branch, on a steep descending gradient, curved northwards to reach a trestle bridge built across the Wolgan River. When clear of this structure a facing point was met, the straight leg of which entered the brick kiln area as a short dead-end siding, whilst the curved leg turned north-eastward along the river bank where a pair of loop sidings were placed to provide standage for wagons engaged in the "Export" shale trade. A single-track extension from the loop crossed over a small creek draining the adjacent Shale Gully by means of a culvert formed by a pair of discarded boiler shells topped with earth to enter a shale loading staith. A system of narrow gauge tramways, said to have had a gauge of twenty-seven inches, led to the staith from No. 1 and the No. 2 shale adits and, so it is understood, eventually extended along the bank of the river for some distance to serve No. 3 adit.

THE CONSTRUCTION LOCOMOTIVES OF THE WOLGAN RAILWAY.

It is known that at least three steam locomotives were in use on the construction of the Wolgan Railway, one under the ownership of the Commonwealth Oil Corporation and the other two obviously obtained on a hiring basis from the Railway Department. Possibly engines on loan were changed about but records are lacking, it has even been claimed that an "S" class 4-6-4 side-tank engine (later 30 class) was tested on one occasion

over the steep grades.

The construction engine in the possession of the Corporation was a small 2-4-0 side-tank, No. 360 X of Class "F", which had been purchased in November 1906 from the New South Wales Railway Department. This particular locomotive was built by Messrs Beyer Peacock and Company, of Manchester, their work's number 2666. It was placed in traffic during February 1886 on the Sydney suburban service and was withdrawn in October 1902, later being relegated to the Duplicate List, hence the ominous letter "X" after the road number. Together with the rest of its class this engine in the days of its youth looked spick and span in a green livery, set off with a polished brass dome shade and copper-topped chimney, thus gaining the most unusual nick-name of the "GREEN DONKEY" from its human associates.

No. 360 X possessed a pair of inside cylinders, each with a diameter of 15 inches (subsequently increased to 16 inches) and a stroke of 22 inches. The leading wheels were 37 inches and the coupled wheels 61 inches in diameter. The round-topped boiler had a total heating surface of 900 square feet and the weight has been given at 38 tons 12 cwts, the tractive effort being 13,300 pounds.

There is reason to believe, according to the writing on a post card, that No. 360 X had the honour of being the first engine into Newnes when the Wolgan Railway was opened. In an effort to ease the wheels of this engine around the five chain curves a system of water jets, piped from the side-tanks, played water against the wheel flanges. It has been said that the side-tanks were "rotten" around their base, consequently a thick wooden plank bolted to the outside bottom level held a joint, no doubt made of a red and white lead putty mixture, against the leaky side plates. The engine had a very short life at Newnes and was transferred to the Corporation's private railway at Torbane, replacing the "N" class 0-6-0 side-tank engine previously in use on this line.

The smallest of the known hired locomotives commenced life as the "PIONEER", an apt name for a construction engine. It was built by Messrs Manning Wardle and Company, of Leeds, their work's number 32 of 1861, for Messrs Brassey and Bollard, and eventually came into use on construction duties with contractors for sections of the Great Northern Railway of New South Wales.

Opposite:

A N.S.W.G.R. Q-class locomotive hired for construction purposes in the Penrose Gorge.

N.J. Thorpe colln.