

to Hartley Vale Siding. Near the western end of the southern loop a short dead-end spur branched south-westwards and led to the coal bunkers of the winding-engine boiler house. Incidentally the latter building was tucked under the western lee of a gigantic sandstone outcrop, an upthrust well above the crest level of the out-jutting ridge. It is unfortunate that details are not to hand concerning the safety measures in use at the bank-head to prevent wagons entering on to the haulage-way without being attached to the wire cable.

The company's metre gauge horse tramway between the bank-head loop sidings and the terminal at Hartley Vale Siding has been described as the "HILL TOP" section, and came into operation early in January 1870. The route of the single line was set out by Norman Selfe, a well known professional engineer of Sydney. The "HILL TOP" section had a length of about one mile fifteen chains and followed, for the most part, the upper northern contours of a deep valley which drained into Reedy Creek. Leaving the entrance point of the loop sidings at the head of the haulage-way the original route avoided a 20 foot high rock outcrop by curving sharply around its north-western contours. In later years when steam traction was introduced this outcrop was excavated to form a cutting and thus eliminated the sharp curvature of the original horse line in this particular vicinity. At the same time a run-round loop was added, together with a locomotive shed and service pit, and a short spur siding leading southwards to serve a small bench of shale retorts, the entrance points to each of these two latter tracks faced towards Hartley Vale Siding. Then, on the main line so to speak, came a rock cutting excavated through a swelling of the upper hill-side beyond which the trace, on a falling grade and in a southerly direction entered a siding where, judging by the width of the formation, a passing loop, or perhaps a staging siding, was provided. The line then wended its way on a rising gradient through numerous sidings and over embankments thrown across narrow rocky declivities. The last embankment had a maximum height of about twenty feet and formed the major earthwork on the line. Here the track curved northward and after crossing the Mount Victoria to Bell Road on the level, entered the gateway protecting the access to the Departmental Railway at Hartley Siding.

Within the boundary gate the metre gauge tramway met a facing point which sent its branch line northwards to line up against the eastern side of the Departmental dead-end goods siding. An overhead gantry, fitted with a side lifting crab, passed over the two sidings and facilitated the transference

of bulky or heavy goods between the wagons stand-side by side on their different gauge tracks. Clear of the facing point the metre gauge line crossed on the level a short dead-end extension of the Departmental transfer siding. Beyond this crossway, which was unprotected, a second facing point gave connection to two adjacent loop lines that were almost centrally divided in their length by a cross-over, possibly in use at a later date for engine release purposes. The two lines then climbed a loading bank at the outer end of which the eastern track joined the western track at a trailing point before the latter terminated in a short shunting spur. The eastern track near its southern entrance point sent a short single spur southwards, this line being evidently used for the transference of cased kerosene and drums of crude oil, by means of horse drawn vehicles, from the metre gauge wagons to the standard gauge goods shed or wagons.

Metre gauge open four-wheeled box wagons loaded with shale were propelled to the outer banked section of the terminus where the mineral could be hand-lifted or shovelled into open type "D" class Departmental wagons standing at a lower level. It was typical of the harsh industrial conditions of the time that no protection of any kind was provided for the physical comfort of the workmen engaged at the transference sidings. Hartley Vale Siding was located on the exposed crest of the Darling Causeway, 3320 feet above sea level, and subject to chilling wintry gales, often accompanied by snow, which swept up from the depths of the adjacent Vale of Clwydd, or westwards from the Valley of the Grose. Men were regarded as expendable and if one dropped out there were always others ready and willing to take his place. The employment system was devoid of any semblance of decency or humanity, vide local information.

THE DEPARTMENTAL STANDARD GAUGE SIDINGS AT HARTLEY VALE

Entrance to the Departmental standard gauge sidings at Hartley Vale was controlled from a track-side "Frame A" which, in 1866, had levers added for the operation of main line Distant, and Home, semaphore signals in both the Up and the Down directions, as supplied by Messrs McKenzie and Holland. Incidentally the semaphore signals were removed in 1891. However they were replaced with additions in 1901, when a crossing loop for main line trains was installed, together with the addition of a loop at the southern end of the goods transfer siding.