

"The work for the year ending the 31st March has been practically confined to the three principal mines at Opitonui—viz., the Maiden, Carvill, and Lanigan's and Hilda—with the intention of developing these to such an extent as would provide constant work for the 40-stamp mill before undertaking further extensive prospecting operations on the less developed reefs. In order to concentrate on these mines, and on the erection of the mill, all outside work was discontinued soon after the report sent to you last year was written, operations being suspended at the Owerā, Murphy's Hill, and Lillis Mines, and also on the Australasia and other less developed reefs at Opitonui.

"*Maiden Mine.*—The Maiden main shaft has been sunk to a total depth of 153 ft., and levels opened out at 64 ft. and 144 ft. At No. 1 level the lode was cut by a cross-cut to the north at 137 ft. 6 in. from the chamber, and at No. 2 level at 120 ft. At No. 1 level the reef had been driven along to the westward 78 ft., and at No. 2 level 7 ft., up to the end of March, and these levels have since been rapidly extended. The roof is poor where first cut, but improves as followed to the westward towards the ore-chute worked in the No. 2 adit. The No. 2 adit-level has been extended to a total distance of 850 ft., when driving was suspended, the reef having become valueless. Stopping was commenced in this adit in January, and a leading stope had been taken out for 107 ft. in length up to the end of March, the reef being of good payable quality. In the No. 1 adit a rise has been made to surface, 113 ft. A great deal of surface work has also been done about this shaft, the heaviest item being the making of an incline tram from the end of the railway to the shaft. This incline is worked by means of a small steam-winch.

"*Carvill Mine.*—The main shaft has been sunk to 71 ft., and a chamber has been cut and level driven at 65 ft. The level has been extended 438 ft. 6 in. along the course of the lode in a south-westerly direction, and cross-cuts amounting to 32 ft. of driving have been put in. The reef is a body of clean stone averaging 3 ft. in width, and of payable quality. The winze from the adit has been connected with this level, total depth being 78 ft. The mine having shown itself to be valuable, it was decided to equip it with a permanent winding and pumping outfit, instead of the prospecting plant with which the above work was done. A fine double-cylinder, double-drum, helical-gear hoisting-engine has been obtained from the Union Ironworks of San Francisco, and is now being erected. The cylinders are 10 in. by 12 in., and drums 4 ft. in diameter, and the machine is capable of a working load of 10,000 lb. The poppet-heads are 60 ft. in height. The steam is obtained from two Tangye's Colonial type multitubular boilers of 14- and 20-horse power (nominal) respectively. The pump is a Blake-Knowles steam sinking-pump of capacity 7,200 gallons per hour from a depth of 350 ft. The machinery will be at work in June, when sinking of the shaft will be resumed.

"*Lanigan's and Hilda Mine.*—The main shaft has been sunk to 216 ft. in depth, and there are now three levels open from it. The Lanigan's low-level adit connects with the shaft at 44 ft. down, and is now called No. 1 level, while Nos. 2 and 3 levels are at depths of 124 ft. and 204 ft. respectively. The No. 1 level had been extended to 1,584 ft. from the mouth of the adit on the 31st March, and has proved the chutes of ore worked in the higher levels in the Hilda section of the mine to be living downwards very satisfactorily, the ore being of more even quality than at the higher levels, and of rather better average value. The No. 2 level has not been extended eastward since last report, but a leading stope has been opened for 58 ft. in length, and a winze to No. 3 level has been started. At No. 3 level a chamber has been cut, and a cross-cut 60 ft. in length driven south to intersect the lode, which here proved to be a large 'formation' of broken country-rock. Levels had been driven 118 ft. east and 113 ft. west on the walls of this formation at the 31st March without as yet reaching the valuable portion of the lode. The No. 2, or Hilda low-level adit has been extended to a total distance of 943 ft. from the cross-cut to the westward and 92 ft. to the eastward, the latter drive coming out to surface, and giving a more convenient entrance than the old cross-cut. The reef in this level is rather patchy, but is a strong large lode containing valuable chutes of ore. Stopping has been commenced on the Hilda No. 2 chute, the leading stope being beaten out for 54 ft. in length. A branch drive 126 ft. in length has been made along the north wall at a point where the reef made a very sudden bend, in order to straighten the level. On surface a large ore-hopper has been built, and the main shaft has been connected with the railway-line by a branch. In order to get a good tip for mullock also, a drive has been made through the steep spur north of the shaft, a total distance of 112 ft. The shaft has been equipped with baling-tanks and safety-cages.

"*Sawmill.*—The sawmill now contains one breaking-down frame, one large circular-saw with automatic travelling bench, one smaller circular-saw with breast bench, one cross-cut swing-saw or goose bench, and a planing-machine. It is capable of an output of 60,000 superficial feet of sawn timber per day. Up to the 31st March the amount of sawn timber produced by the mill has been 1,351,575 superficial feet, most of which has been used in the Central 40-stamp mill and the mines and accessory buildings. A bush tramway about half a mile in length is now being constructed to get out the timber lying near the head of Quartz Creek more expeditiously and cheaply.

"*Railway.*—The railway from Whangapoua to the mines and battery has been completed, a large number of sidings and conveniences of one sort and another having been put down during the year. The total length of track laid is 8 miles 33 chains, and of formation 9 miles 23½ chains. The cost of the line is, in round figures, £11,400 for the line, and branches, and sidings; £1,500 for locomotive and rolling-stock; and £700 for wharf, coal-bin, goods and engine sheds, and other buildings. The coal-bin holds over 100 tons of coal. Another locomotive has been ordered, from the H. K. Porter Company, of Pittsburgh, Pennsylvania, U.S.A., and will shortly be in use.

"*Water-race.*—The water-race supplying water to the Central Mill is brought in from the Waingaro Creek, and is a mile and a half in length. This is for battery-supply purposes only, not for power.