

Methods of Working.

Worked by shaft—					
Steam-power used	..	..	..	..	7
Horse-power used	..	..	..	..	5
Hand-power used	..	..	..	..	2
					— 14
Worked by adit—					
Engine-planes	..	..	..	..	8
Horse-power used	..	..	..	..	7
Self-acting inclines	..	..	..	..	3
Hand-power used	..	..	..	..	38
					— 56
Open-work	..	..	..	..	22
					— 92

I have, &c.,

GEORGE J. BINNS,

Inspector of Mines.

The Under-Secretary of Mines, Wellington.

REPORTS UPON INSPECTION OF QUARTZ-MINES, WESTPORT DISTRICT.

No. 3.

Mr. Inspector BINNS, F.G.S., to the UNDER-SECRETARY of MINES.

SIR,—

Dunedin, 23rd October, 1885.

I have the honour, in accordance with my letter dated the 29th April, 1885, to make the following report on the quartz-mines in the Westport District, an inspection of which was undertaken by me in accordance with verbal instructions received on the 26th April, 1885, from the Secretary of Mines:—

1, 2, and 3. *Golden Fleece Extended Quartz-mine, Golden Treasure Quartz-mine, and Energetic Quartz-mine* were, at the time of my visit, not working.

4. *Wealth of Nations Quartz-mine*.—15th August, 1885.—Only very little was being done at this claim. A tunnel had been driven, starting about 30ft. above the battery, and continuing for 820ft. Subsequently 120ft. was driven on the strike of the reef southwards, and at 100ft. on this level a winze was sunk, carrying irregular blocks of stone all the way down. Mr. Watson had kept no weekly report, as so little was being done. In all other respects the condition of the work was satisfactory.

5. *Keep It Dark Quartz-mine*.—15th August, 1885.—This mine continues to be well and profitably worked; but the Act was not observed as it should have been. The shaft was fenced on one side only, and there was no cover on the cage. There are two filling-shafts, through both of which access to the surface may be gained. Notwithstanding Mr. Gordon's letter of the 15th April, 1884, no copy of the plan was kept at the mine. The output per week at the time of my visit was about 210 tons, and the yield per ton $12\frac{1}{2}$ dwt. I did not see the weekly report, as it was in the office, which was locked. It would be advisable for the manager to have a key. Twenty men were employed below-ground, and seven above, exclusive of six at the battery.

6. *Golden Point Quartz-mine* was not at work.

7. *Globe Quartz-mine*.—17th August, 1885.—At the time of my visit stoping was not being carried on, the battery being kept going by some inferior stone which happened to be on hand. A shaft has now been sunk, and the winding-gear is worked from the main water-wheel, which is situated at the battery, 99 chains away. The rope used for the transmission of power is a $\frac{3}{4}$ -inch diameter steel rope, passing round a 12-feet wheel. The drum is 5ft. in diameter, and remarkable as being, so far as I am aware, the first attempt at a conical drum which has been used for winding-purposes in the colony. It is somewhat primitive in design, and could not be used for raising or lowering men, as a single chain replaces the rope for the short distance necessary; still, the useful principle is there, and eases the load at starting. The clutch was very defective; but I was given to understand that it was merely a substitute, the original having been broken. The chain attached to the cage was needlessly long; but, as men are not raised or lowered in the shaft, this cannot be objected to. For the same reason the cages are uncovered. There is a signal up the shaft, which is well sunk and timbered, but unfenced. The bottom-level is at 238ft.; and at 88ft. is a chamber connected with the former main level, which is now used solely for timber and men. The ladders, which are substantial, have proper platforms; but the slope is very slight, being only 7in. in about 23ft. Mr. Gordon's remonstrances *re* explosives, plan, and reports do not appear to have borne fruit, for powder is taken down in 25-pound kegs, detonators in boxes of 100, no report is kept, and there was no plan at the mine. The law thus appears to be entirely disregarded. At the time of my visit six men only were employed.