

This mine is situated at about 1,869ft. above sea-level, and, although the shaft is already a great depth, there is very little water in the ground. The water, being hauled with tanks, does not exceed 1,080 gallons in twenty-four hours—about 45 gallons of water per hour—which is lifted with the winding-engine at slack time, when no quartz is being sent up.

This company has a crushing plant erected at the foot of the range, facing the Inangahua River, at a distance of about 97 chains from the mine, which is connected by an aerial tramway capable of transmitting about 50 tons of quartz in eight hours. The crushing battery consists of twenty heads of stamps $7\frac{1}{2}$ cwt. each, with two berdans, one Watson-Denny pan, and six Triumph concentrators. These are driven by a turbine water-wheel, the water being brought in an open conduit from the Inangahua River for a distance of about $1\frac{1}{4}$ miles. This water-race gives a head when the turbine is erected of about 40ft.

The crushing plant is one of the old type of crushing batteries, having the ordinary quicksilver and blanket tables; but nothing like a fair percentage of the gold is extracted, and no steps appear to be yet taken to stop this waste of gold. Mill-proprietors are content to still adhere to the old system of saving gold, in the happy belief that their appliances for the extraction of the precious metals are all that can be desired, and that they have little to learn in this respect. The company are, however, saving the tailings, which now amount to at least 50,000 tons, and when these tailings come to be properly treated it will be found that a large loss in gold has been made in the first instance; besides, a portion of the gold is carried away with the muddy water from the tables, and conveyed by the stream beyond recovery.

With regard to the value of the ore in the Globe Mine, Mr. P. Q. Caples recently took samples promiscuously from the face of the lodes, and had them assayed at the School of Mines at Reefton, with the following results:—

		Oz.	dwt.	gr.	
(1.) Quartz from East Block, No. 5 level	...	0	17	15	gold per ton.
(2.) Quartz from winze, East Block, No. 5 level	...	1	15	22	"
(3.) Quartz from Middle Block, No. 6 level	...	1	13	23	"
(4.) Quartz from Middle Block, No. 6 level	...	1	12	0	"

These samples were taken at haphazard across the face, but still these assays cannot be taken as the average value of the lode. Merely taking a few samples in this manner gives little idea what the whole of the lode will average. If the ore were all pulverised and mixed, and assays made, the average value would be ascertained.

Progress.

This is a special claim of 90 acres, and includes ground formerly held by the Oriental Company and a claim known as the Jupiter. This ground adjoins the western boundary of the Globe special claim, the Globe Company's shaft being about 130ft. east of the Progress boundary. There has been 58,714 tons of quartz crushed from this ground, which yielded 27,060oz. gold, representing a value of £108,310, of which dividends have been paid to the extent of £19,200.

There are two lines of reefs in this ground, one having an easterly and westerly direction, which goes into the Globe, and one running in a northerly and southerly direction. The upper workings were carried on from adit-levels, and the present workings are carried on from a shaft, which is sunk at a point about 1,650ft. in from the mouth of the No. 2 level. This shaft is sunk to a depth of 450ft.

The No. 1 level cuts the eastern and western lode about 130ft. below the surface, and this level was carried to the Globe boundary. The lode in this level was about 20ft. in width, but its length was never determined, as stone was left in the faces at both ends, and it is only partially worked overhead, as the stone at that time was considered to be of two low grade. The north and south block was worked from an intermediate level above No. 1 to the surface, averaging about 7ft. in thickness. 1,000 tons was crushed from this block, which gave an average yield of 14dwt. of gold per ton, but it was not cut in No. 1 level.

The No. 2 level is the deepest adit-level that can be constructed, and is 270ft. under the surface where the east and west lode was cut. This level cut the lode at 1,470ft. in from its mouth, where it was 32ft. in thickness. There are four distinct blocks on this line of reef—namely, the Dam, Black's, Adam's, and Smith's blocks. From No. 1 to No. 2 level a large amount of work has been done on Smith's block, which is the most westerly one, but the whole of this stone has not been taken out, as it was considered of too low grade. The north and south lode was never cut in this level.

The No. 3 level is 400ft. below the surface, but very little work was done on the level. There was a great thickness of lode, but the stone was considered of too low grade, although it averaged $8\frac{1}{4}$ dwt. of gold per ton. Three distinct blocks of stone were cut in this level, having an aggregate length of 300ft. It may seem strange that such a large lode as that opened up in this level would not pay for working when it gave an average of $8\frac{1}{4}$ dwt. of gold per ton. In the report submitted by the directors to the annual meeting of shareholders, dated 28th July, 1893, they state "that 4,130 tons of stone was crushed, which yielded 1,761oz. gold, equal to $8\frac{1}{4}$ dwt. per ton, and the stone was so poor that the directors did not feel justified in working worthless quartz, and left thousands of tons behind." All that can be said with reference to this is, that if this large body of stone was crushed and treated in an intelligent manner there would be a considerable increase in the yield of gold, and leave a large profit to the shareholders.

The No. 4 level is 550ft. below the surface, where there are three distinct blocks of stone on the east and west line of reef. Two of these came all the way down from No. 3 level, and one was found in the foot-wall about midway between No. 3 and No. 4 levels, having a width of about 2ft. 6in., when cut and widened out to 3ft. showing gold freely. The whole of the blocks on this level are not yet taken out.