

portion of drive was again intersected. In order to save a long and expensive shoot to convey the ore from the mouth of this level to a suitable place at which the loading-station of the aerial line could be re-erected, and to convey material to the battery, it was decided that a new level should be driven into line of lode. This level (No. 4) is now in progress, and to date about 275 ft. has been driven. It is anticipated that the lode will shortly be cut here, after which the aerial line will be shifted to mouth of this level, and the lode in both levels will be worked from No. 4. This will greatly facilitate operations in the mine, and also minimise the outside handling.

*Lord Edward Mine.*—The late legal manager, Mr. Lee, reports: This mine was sold in August, 1901, to the adjoining company, the Big River Gold-mining Company (Limited), and is now being developed from the latter's main shaft. The Lord Edward Company has therefore been wound up.

*Big River Mine.*—The legal manager, Mr. T. H. Lee, reports as follows: During the year 75 tons of quartz was produced from some stone found in the No. 1 intermediate level, which yielded 30 oz. 6 dwt. gold, valued at £120 13s. 10d. Operations in the mine have been confined to No. 1 intermediate level, Nos. 2 and 6 levels. In No. 1 intermediate 80 ft. of driving has been done; a small payable block of stone was cut, which has been risen on and taken out. The drive was then extended a short distance on reef-track, but nothing payable was found. Over No. 2 level two rises were carried up on stone, one 34 ft. and the other 75 ft., but as the stone ran out operations were discontinued. In No. 6 level a large amount of prospecting, consisting altogether of about 772 ft. of crosscutting and driving, has been done, but without anything of a permanent character being disclosed, although indications at different places were very favourable. At present a drive is being carried on in this level in a north-westerly direction with two men. Owing to the failure to strike any extent of payable stone in the upper levels, it has been decided that the mine shall be explored at a greater depth. With this object the sinking of the main shaft is to be commenced early in the new year, and it is intended to sink it 150 ft. deeper before opening out for a new level.

Mr. E. W. Spencer, engineer for the Consolidated Goldfields of New Zealand (Limited), submits the following reports:—

*Wealth of Nations.*—In this mine our attention has been almost entirely restricted to the bottom level, as far as development-work is concerned, with the result that at the end of the year the 800 ft. drive was cut 547 ft. north of the shaft. Along this distance a considerable amount of quartz was encountered, for at 142 ft. from the shaft we struck a very strong body of stone, which at this point was 12 ft. in width, but of only medium grade. This drive was connected to the winze from the 700 ft. level at 500 ft. from the shaft, the drive at this point following a very nice band of stone 3 ft. in width, carrying very fair gold. The battery level at the Wealth has been extended north towards the Energetic shaft 156 ft., having 192 ft. more to go to connect. The total footages driven during the year amount to 591 ft., and 156 ft. of sinking and rising has been done. This mine has been very seriously handicapped during recent years by the awkward means of raising ore through a blind incline shaft, operated by means of an overshot water-wheel situated some 1,800 ft. away from the shaft. Hoisting a skip from the bottom level by this means occupies about eight minutes for each complete trip, allowing just time to fill and empty the skip, hence making it necessary to hoist on two shifts when one should be sufficient with efficient means. To overcome these obstacles permission was received from London last September to start a new main shaft to handle the output of this mine with, so a start was then made to retimber the Energetic shaft from the bottom (about 40 ft. above the Wealth of Nations battery level) up to the surface. At the end of the year 70 ft. had been stripped and retimbered from its original size of 9 ft. 3 in. by 4 ft. 6 in. to its new size of 13 ft. 2 in. by 6 ft. 2 in. There are in all 362 ft. to retimber; then the brace of the shaft will be lifted 12 ft., a temporary hoist installed, and sinking started. By the time this shaft reaches the present bottom of the Wealth of Nations it will be 1,212 ft. deep. During the past year 12,015 tons of quartz has been milled for a return of 3,987 oz. 9 dwt. 8 gr. bullion, valued at £16,448 4s. 5d., and concentrates to the value of £875 4s. 1d. have been extracted; 7,206 tons of coarse sands have been cyanided, yielding bullion to the value of £4,390 3s. 5d., at a cost of 3s. 5·456d. per ton treated. During the year the battery has been lit with electric light supplied from a Crompton dynamo. Besides this no alterations have been made in the equipment, the other machinery having given satisfaction.

*Golden Fleece.*—During the year a considerable quantity of development-work has been done, amounting in all to 1,730 ft. of driving and crosscutting and 300 ft. sinking and rising, besides which the shaft has been sunk 150 ft.—that is, from No. 10 or the low level down to No. 11, a vertical distance of 125 ft., plus sump-room. Stopping has been carried on throughout the mine from No. 5 level downwards to No. 10, and producing in all 14,807 tons of quartz, yielding 7,227 oz. 19 dwt. 20 gr. of bullion, valued at £28,612 2s. 2d., besides which sulphurets to the value of £2,070 5s. 9d. have been sold; also 11,170 tons of coarse sands have been cyanided, yielding bullion to the value of £5,416 14s. 4d., at a treatment-cost of 2s. 4·202d. per ton, leaving a profit of 7s. 4·182d. No alterations have been made in the equipment during the period under review, the whole of the machinery doing good work.

*Percival.*—Early in the year the Perseverance tunnel was repaired for its full length, and the south drive extended 72 ft., exposing a small body of quartz of no particular value.

*Golden Treasure.*—No work has been done on this property, with the exception of removing the hoist from the Treasure shaft preparatory to placing at the Energetic shaft.

*Welcome Gold-mining Company (Limited).*—During the past year only a small amount of exploratory-work has been done, as all attempts at tracing the stone down to the low-level tunnel, Specimen Hill, failed; so all that remained to be done was to pull out and mill the quartz. About 240 tons was stoped by the company and stacked at grass; then tenders were called for letting the