

## QUARTZ-WORKINGS.

This important branch of the gold-mining industry continues to make rapid and advanced strides, notwithstanding the fact that the yield shows a slight decrease compared with 1895-96. This decrease has been in the most part from the mines in the North Island and at Reefton, the cause of which has already been pointed out. During last year 113,731 tons of quartz and tailings were treated in the Auckland District, yielding 198,547 oz. bullion, representing an estimated value of £354,256, as against bullion to the value of £378,107 for the former year, being a decrease of £23,851. In Nelson and the West Coast 15,369 tons of quartz was crushed for a return of 10,217 oz. of gold, valued approximately at £40,900.

In the future treatment of quartz for the extraction of gold the new plants erected on the different fields will be in a marked degree superior to those formerly in use. The adoption of labour-saving appliances, stone-breakers, elevators, and self-acting feeders for the mills, the concentration of tailings and slimes, and improvements in the methods of dealing with the pyritous matter will be the means of reducing the cost of extracting the gold and silver from the ore.

The cyanide process, which is already used with success, is being made the subject of exhaustive experiments with a view to improvements in the methods of percolation, filtration, &c. In the Hauraki district 77·7 per cent. of the quantity of gold and bullion produced was won by this process. The quality of the bullion extracted by the cyanide process was, however, of a lower grade than that obtained by amalgamation, the proportion of the value of the former being only 64 per cent. From the increase in the number of plants in which the Cassel Company's patent will be used which are already erected and in course of construction it is evident that this method of gold-saving will be even more extensively used in the future. In view of present importance and the continuance of future great benefit arising from the use of the cyanide process, which is eminently suitable for the extraction of gold from a large proportion of the quartz found in New Zealand, it has been decided, subject to the approval of the Legislature, to acquire by purchase the existing patent-rights within the colony for the use of cyanide in the extraction of gold and silver.

## COROMANDEL COUNTY.

The Hauraki Mine continues to produce the richest quartz in this locality. The other mines—namely, the Scotty's, Kapanga, Success, Hauraki North, Tokatea, and Royal Oak—have produced payable quartz, but the returns were limited, the operations carried on being chiefly towards development, and not in working out the reefs. The Kapanga shaft, which is the deepest in the colony, has been sunk to a depth of 1,000 ft., and boring operations have been again resorted to, with a view of further deepening the shaft. The Scotty's shaft is being continued, and has now reached a depth of 325 ft. Other shafts are also being put down in this portion of the district; whilst at Kauri Block, especially where three years ago the probability of mining activity appeared very remote, no less than fifteen engine-shafts may now be seen, in all of which mines vigorous operations are being carried on; and hopes are entertained that the Hauraki reef will be traced through the ground adjacent to that now famous mine. The low levels at Tokatea are also being further worked, and a shaft is now sunk 100 ft. below the adit-level. At Kuaotunu the work of development in the Try Fluke and Kapai-Vermont Mines is steadily progressing, and throughout the Kauri Company's land a good deal of prospecting work is being carried on.

In this district 18,748 tons of quartz and 100 tons of tailings were treated during the year, yielding 35,846 oz. and 40 oz. of gold respectively, representing a value of £100,911. The number of miners in this district was 1,329, of which 750 were employed in connection with the gold-producing mines.

*Dividends.*

The Hauraki Gold-mining Company, since the date of registration on the 5th December, 1894, sold gold to the value of £220,866, and paid dividends up to date amounting to £136,000.