

(approximately) £68,080; and in Otago 11,679 tons of quartz and tailings were treated for a return of 5,560oz. of gold, having an estimated value of £21,545. The total quantity of quartz and tailings-treated last year was 171,237 tons, which yielded gold and bullion to the value of about £468,958, as against £358,250 for the previous year. The yield last year from the quartz-workings was equal to 47 per cent. of the total value of the gold entered for exportation, compared with 40 per cent. for the preceding year.

In the Hauraki goldfields the cyanide process is now very extensively used, and it is of great interest to state that no less than 71 per cent. of the total production of the gold and bullion of those goldfields was extracted through the agency of that process. The extraction of bullion by the cyanide process last year was 52 per cent. of the total value of the bullion obtained in this district. Judging from these figures, the time is not far distant when the process will be more generally adopted at the mines in the North Island. During the past few years the cyanide process, in the hands of different metallurgists and engineers, has made rapid strides, chiefly in the designing of plants and appliances to facilitate the handling of the ore and reducing the cost of treatment. The ordinary cyanide process is not suitable for the treatment of all classes of ore, more especially that containing base metallic substances, including copper compounds; but no doubt modifications and improvements will be found to overcome the difficulty, as a result of the researches now being conducted by different metallurgists and chemists.

#### COROMANDEL.

In this district the Hauraki Mine still continues to be the chief gold-producer. The monthly returns maintain a very high value, and prove the shot of gold on Legge's Reef to be of great extent and exceptional richness. The Hauraki Mine alone produced more than half the yield of gold from the Coromandel Goldfield during the year just ended, and the rich returns from this mine have created a demand for properties in this field. A large number of mining properties have been acquired by English companies, and at the present time prospecting operations are being carried on over extensive areas of gold-bearing country. Judging from past results, it is only reasonable to expect that many valuable finds will be made as operations proceed.

One of the principal features of the operations of the past year has been the deepening of the Kapanga shaft, with the view of testing the ground at the lower levels. These operations having an important bearing on the solution of the problem of deep sinking in all parts of the Hauraki goldfields, they were aided by a small subsidy from the Government. I have much pleasure in stating that so far the results have been very satisfactory. The value to the field of the discovery of a rich vein of quartz at a depth of 930ft. can hardly be over-estimated, affording, as it does, conclusive proof that gold exists at the low levels 200ft. deeper than the greatest depth reached at the Queen of Beauty shaft at the Thames, to which I shall refer presently. The results obtained at the Kapanga Mine should afford encouragement to foreign companies who have purchased mines on which capital is to be expended in deep sinking.

At Kuaotunu, the Kapai-Vermont Mine has yielded payable returns throughout the year, and already several mines have been acquired by capitalists with the intention of extensive operations being undertaken. The chief drawback to this field is the scarcity of water for motive-power, which makes the treatment of the ore more expensive than at the Thames.

In this district 18,034 tons of quartz and 8,830 tons of tailings were treated during the year, yielding 41,253oz. and 3,534oz. of gold respectively, representing a value of £138,897; while 1,045 men were employed in the district in connection with the mines.

#### THAMES.

During the past year there was a slight improvement in the returns from this field. Up to the present time, systematic mining operations have been restricted to a very limited area, not exceeding 700 acres altogether, and the returns of gold have been phenomenal. The Thames Goldfield proper is divided