

## APPENDIX.

### REPORTS OF INSPECTORS OF MINES.

Mr. JAMES COUTTS, Inspector of Mines, Thames, to the Under-Secretary, Mines Department.

SIR,—

Inspector of Mines' Office, Thames, 8th February, 1901.

I have the honour to furnish herewith the returns and report on the gold-mining industry in the Hauraki district for the nine months ended 31st December, 1900.

The gold returns from the mines worked by companies on the Thames have been very disappointing, and the important development-works in the Thames-Hauraki Mine have been greatly retarded by a series of misunderstandings about the drainage and contributions from the mines interested, until at last money from England has not been forthcoming to carry operations on any longer, and the Thames-Hauraki Company have applied, and been granted, six months' protection for the mine. Several mines around Coromandel have also been closed down for the want of funds; still, it is pleasing to hear that some of the outside mines are looking well, and likely to give payable returns; also the mines in the Ohinemuri district, such as the Waihi, New Zealand Crown, and Waitekauri Mines, continue yielding excellent returns.

#### GREAT BARRIER ISLAND.

*Barrier Reefs Gold-mining Company (Limited).*—This company's crushing plant, with all the necessary appliances, &c., as mentioned in last annual report, was completed some three months ago. The mill bunker has a capacity of 200 tons, and the main storage-bunkers behind the mill have a capacity of 1,000 tons of quartz; from this bunker the quartz is trucked by hand-labour to the mill and dumped into the ore-crusher, one man working eight hours daily being sufficient to keep the battery running continuously for the twenty-four hours. The distance from the main bunker to the mine by the tramway is about half a mile; the trucks are steel, and hold 1 ton of quartz each. They are hauled from the bunker by horses to the various shoots in the No. 3 level, where they are loaded and taken out, then braked down from the tunnel to the battery on an easy graded tramway. The process and treatment of the ore is by amalgamation, concentration, and cyaniding. The cost of milling in December was 9s. 1d. per ton, and of mining and trucking 15s. 9d. per ton; total cost, £1 4s. 10d. Two lots of concentrates were shipped to Australia and sold to a smelting company, and recent experiments made by the battery superintendent, Mr. Noble, indicate that a good extraction of the values from the concentrates can be obtained by agitation in cyanide solution. Should further tests prove this can be done, it will pay to put up a small plant to treat the concentrates at the mill, as the cost of such treatment should not be more than one-third the cost of shipment, smelting, and other charges incurred by sending it to Australia. The operations in the mine are confined to driving and stoping at and above the No. 3 or low level that connects with the battery. The eastern drive on the reef at this level has been extended a distance of 100 ft., and a little stoping has been done on the back of the level, but most of the quartz treated at the mill has been obtained from the stopes over No. 1 and No. 2 levels, where the reef varies from 1 ft. to 3 ft. in thickness. The reef has been driven on for a distance of from 700 ft. to 950 ft. at the different levels, and the levels are about 100 ft. apart. The returns show that 3,038 tons of ore has been treated for 3,654 oz. of bullion, value £3401 3s. 7d., exclusive of that received for the concentrates sold; and an average number of eighty-five men have been employed on the property during the year.

#### COROMANDEL.

*Kapanga Mine.*—This company's operations have been directed in prospecting and working on the various reefs and leaders that traverse the property between the 450 ft. level and the surface, employing on an average thirty-eight men; but the various places tried have ended in disappointment. This is to be regretted, as the company have worked the mine continuously for a large number of years on calls, and have received no dividends for the very large amount of money that has been expended on the property. The reefs operated upon have been from 6 in. to 3 ft. in thickness, and during the nine months 73 tons of general quartz and 72 lb. of specimens have been crushed and treated for 151 oz. 16 dwt. of gold; value, £434 18s. 11d.

*Hauraki Mine.*—During the period under review work has been steadily carried on, the operations being chiefly confined to driving and stoping on the reef and leaders known to exist above the Nos. 1, 2, 3, and 4 levels. These vary from 2 in. to 2 ft. thick. The greater part of the work has been carried on over the back of No. 3 level, where the No. 1 Legge's, and cross leaders were worked with excellent results. On the No. 4 or low level the Castle Rock and other reefs are being operated upon, but apparently no rich chute of ore is met with as in the upper levels, and no new or important discoveries have been made. 1,130½ tons of quartz was treated for 2,934 oz. 17 dwt. of gold; value, £9,148 7s. 3d. An average of seventy-nine men have been employed.

*Blagrove's Freehold Mine.*—Operations have been steadily carried on in this mine. The results have been anything but encouraging for the large amount of work that has been done. Driving, sinking, stoping, and prospecting-work generally were prosecuted on the eastern and western sections of the property. Sometimes encouraging prospects were obtained, but unfortunately no payable ore to any extent was met with, owing, no doubt, to the country being very much broken and the leaders heaved about. 10 tons of quartz and 15 lb. of specimens have been treated for 22 oz. 9 dwt. of gold; value, £67 2s. 8d. An average of eighteen men have been employed.