

There are many other promising quartz-mines throughout the colony, which are showing signs of steady but sure progress; but to particularize each one, and refer to it separately, would I fear weary the House.

Before leaving the interesting subject of quartz-mining, I desire briefly to refer to the invention known as the "La Monte Process," for the extraction of gold and silver from ore; and I feel much cause for regret that the smelting-works erected on that principle at the Thames have failed to come up to the expectations that had been formed of them. The failure, however, seems fairly attributable to the want of cheap and proper fluxes; for, although the process gave a larger product of metal from the ore than any other method yet adopted in the colony has done, the cost of treatment under existing circumstances precludes it from use in operating upon ores of low grade, of which there are unlimited quantities in many portions of New Zealand. It is fair, however, to the promoters of the process to state that, through the erection of their works, the attention of the miners has been directed more closely to the richly-argentiferous ores which are now found to be abundant in the Ohinemuri district, and along the Hauraki Gulf to the Thames. I have little doubt, within a short period a new and valuable branch of mining, that has hitherto lain dormant, will be vigorously prosecuted. As illustrative of the great mineral richness of the large district of the Thames, I may here refer to the valuable discovery recently made at Waiomo, a trial-crushing of the stone having yielded at the rate of 75oz. of gold to the ton. With such evidence of wealth in our mines, I hope the miners of New Zealand will pause before deciding to proceed to Western Australia; for, with the greater experience I have been enabled to gather by the visits I have had the pleasure periodically to make to the many mining centres and districts in this colony, I feel convinced that to the practical miner, as well as to the steady worker who is willing to follow the pursuit of mining, no better field can be found for the profitable occupation of their labours, nor no finer or more wholesome sphere for the well-being and exercise of their physical capacities, than exists in this colony.

ALLUVIAL-GOLD MINING.

In reference to alluvial mining, which is chiefly carried on in the Middle Island, I intend merely to direct the attention of honourable gentlemen to some of the principal fields, the foremost of which is Kumara, on the West Coast. By means of the water-supply provided by the State for the manipulation of this field, the yield of gold from it last year was 13,856oz. The large extent of ground yet unworked, with its great depth of drift-wash proved to be auriferous, is sufficient evidence that this field will give remunerative employment to a considerable mining-population for years to come.

One of the largest alluvial mining companies on the West Coast is the Humphrey's Gully, near to Hokitika, which has expended a very great amount of capital in bringing on to their lease a water-supply to wash or sluice the high terraces on the watershed of the Arahura River. This company will, I hope, be able to give profitable employment to a great number of miners for, I may say, a very long period of time.

Another model of mining skill and enterprise in alluvial workings is to be found at Ross on the property known as the Ross United Company; and I may say that at this mine are to be found the deepest alluvial-gold workings at present known in the colony. Recently, at a depth of 230ft. below sea-level, a layer of auriferous wash-dirt has been found upon the same bottom that the Cassius and Morning Star Companies did so well out of in former years; but the lead of gold was never before traced, as it has recently been, extending towards the ocean-beach.

In Otago our chief supply of alluvial gold is coming from Naseby, St. Bathans, Tinker's, Cromwell, Clyde, Criffel, Round Hill, and Orepuki. The great drawback up to the present time with several of the best of these mines in respect to gold-producing is the want of water. The most recently-discovered field—Criffel—has suffered very much in prosperity for want of water; and from the altitude of these mines—4,000ft. above sea-level—the miners can only work for barely six months during the year, the ground being covered with snow for nearly the remainder. Notwithstanding all difficulties, Criffel has produced during last year about 3,500oz. of gold of which we have an account, and I believe that a large quantity of gold from that district finds its way on to other fields, and is sold as gold from more favoured localities. Two water-races are now being constructed to the mines, and when these are completed and full of water the production of gold will be greatly increased, as the ground seems to be especially adapted for sluicing.