

of silver, amounting to about 1,100oz. per ton, and I naturally anticipated seeing something of more than ordinary interest in the mine. Two tunnels have been driven; the upper one on the lode inside the eastern drive had fallen in. The reef showed in the roof and walls at the junction of this with the southern drive. It did not seem of a very definite character; yet it was from this part that the very rich specimen or specimens were obtained. There was but a small paddock of stone at the mine mouth, and this appeared to be of no very high quality. It is, however, only fair to state that I was informed that this had been picked over and over again by specimen-hunters, and what remained could not be expected to represent fairly the quality of that part of the lode from which it was taken. The quartz here is of the ordinary type of Puhipuhi reef stone. The containing-rocks are somewhat different from what appear in Prospectors' No. 1 and Prospectors' No. 2 Claims. Here the rocks are a dark slate, or a grey quartz rock, having a slate or flaggy structure.

"*Caledonian Mine.*—This is in the continuous reef, which has been prospected by a drive along the lode for about 100ft. The stone, which is of a light-grey colour, and of the ordinary character of Puhipuhi stone, is stacked at the mouth of the mine, and, although very rich samples are not obtainable from the heaps, nor in the mine, silver may be detected in most of the stacked stone. The lode is held within rocks of the same character as those which contain the Young Colonial reef. This mine seems the most promising of those situate on the western slope of the Puhipuhi table-land.

"*Waimarie Claim.*—The Maori or Waimarie Claim is situate a little more to the north-east than the two last described. The quartz is of a dark colour at the mine face, but weathers white at the outcrop. This is due to the presence in the joints of the stone of powdery manganese oxide. I was told that good samples had been obtained from the reef driven on in this claim, but there was no one on the ground to verify this statement, and the samples taken have not as yet been analysed. The containing-rock is a black contorted concretionary slate, which to the eastward adjoins and underlies the chert or quartz rock described as occurring in the Young Colonial and Caledonian Claims.

"*Matilda Claim, and Claims on the Waikari side of the Table-land.*—Other claims were examined on the side of the field, which, as the character of the reef stone and country rock are essentially the same as in those already described, I need not lengthen out this report by specially describing. But further to the east, on the brow of the Puhipuhi table-land, near Comstock Hotel, is the Matilda Claim, which deserves a passing notice on account of its having been asserted that the stone in it contains bromide of silver. I brought samples of the stone, but it contained no bromide of silver, nor trace of any ore of silver whatever. The so-called reef is nothing more than the grey chert or quartz rock already described, which on exposure has weathered to a milky-white colour. Of the claims on the Waikari side of the table-land, only the Luminary and Santa Claus Claims were visited by me.

"*Luminary Claim.*—The Luminary Claim is at the level of the stream on the east side of the table-land. There is a good body of stone, but I saw no indication of the presence of silver. The containing-rock is of a clay character, the chert or quartz rock having been passed over in the descent from the table-land. Three tunnels have been driven on this holding, that at the creek-level being the largest, not exceeding 100ft. in length.

"*Santa Claus Claim.*—The Santa Claus Claim lies on the eastern border of the table-land, a little to the south of the trig. station, and nearly opposite to the surveyed site of the township. This has been taken up as a gold- and silver-mining lease, but so far as I know neither of these metals, nor even a quartz-reef, have yet been found. The ground was first applied for by Mr. O'Brien as a lease for the purpose of mining or collecting cinnabar, this ore of mercury having been discovered in small quantities in the small creeks descending from the table-land to the Waikari on this side. Subsequently, part of the ground applied for was pegged out as a gold- and silver-mining lease, and this double holding was in existence at the time of my visit.

"*Cinnabar.*—Of gold or silver I saw none, nor evidence of any, but of cinnabar there exists very definite indications—sufficient for the vigorous prosecution of search for the lode were the obstacles surrounding the search less difficult than I found them to be. The prospects of cinnabar have hitherto been obtained in three small creeks following east across the Santa Claus Claim. In the middle of one of these a fair prospect can be obtained—say, one ounce to the dish of stuff taken from the creek-bed. These indications were naturally followed up towards the table-land from whence the creek took its rise, but it was disappointing to find that the prospect of ore did not beyond a certain point improve in this direction, and that the slope was so thickly covered by large volcanic boulders, broken away from the edge of the table-land, that along the run or wash of ore it was almost impossible by ordinary means to reach the bed-rock.

"On the ridges between these different small streams the bed-rock could be reached, and at two places short tunnels had been made, the lower, that most to the north-east, being started under the impression that the old rock formed a bar beyond which lay, in deeper ground, an alluvial wash containing the cinnabar main deposit. The pug wall of a fault or slide, cutting across a soft cherty grey slate, had led to this misconception of the real state of things, and when I arrived on the ground the prospectors were in great doubt as to the source of the ore, and the proper method of prospecting this piece of ground. I had samples of the ore washed from the bed of the creek, hoping that adhering fragments of rock might give a clue to the rocks in which the lodes should be sought for, because the amount actually to be obtained from the alluvial deposits of the creek would hardly be worth the cost of the preparatory works required to collect it. But the ore was pure and showed no trace of adhering rock. Most of it was well water-worn, or appeared to be so, and this not because it travelled far, but owing to the soft nature of the mineral itself. Still, a closer examination showed that much of it had travelled no great distance, nor so far as to abrade the original surfaces the ore possessed when it was set free from its rock matrix. These unabraded surfaces were of that character which would be natural to it, and which it might be expected the ore would possess, had it been formed in the cavities which abound in the volcanic rocks of the