

and is formed of mullock and small leaders or veins of quartz. In carrying on the construction of an adit near the surface, this lode was met with at 60ft. in from the mouth. It has now been opened out and a winze sunk for 50ft., which still shows the lode material to be of a payable character for working. In the Me and Rowe Mine a considerable amount of prospecting has been done, and a portion of the reef stoped out, but the stone is of very low grade, 60 tons being crushed for 7½oz. of gold.

At Waitekauri there are altogether about sixteen miners employed, chiefly in the old workings, near the surface, and from small leaders and veins, which are interstratified with the country rock. There has been 950 tons of quartz crushed last year from the Waitekauri Mine, which yielded 288oz. of gold; ½ ton from the Eclipse Mine yielded 22½oz.; 10½ tons from the Star of Hope gave 26½oz.; 150 tons from the Mangakura yielded 25½oz.; 65 tons from the Welcome gave 38oz.; and ½ ton from the Young New Zealand yielding 20½oz.: making a total of 1,176½ tons, which yielded 420oz. of gold.

TUI CREEK DISTRICT.

Champion Company.—About three years ago an auriferous and argentiferous lode was discovered near the saddle between the Waihou Valley and Waitawheta Creek, at an elevation of about 2,200ft. above sea-level. The outcrop near the saddle was prospected to some extent without any rich ore being found, and the lode was traced on the surface for about 30 chains in a southern direction, when it was found to contain rich ore, and on getting further southward a portion of the lode showed a large percentage of galena. The lode can be traced on the surface, and is from 10ft. to 12ft. in width, containing ores of lead, zinc, mercury, silver, and gold; indeed, it is one of the most heterogenous lodes I have seen in the colony. The lode has been cut through in many places on the surface, and an adit has been constructed for 150ft., near the head of a creek which falls into the Waihou River. In this adit the reef has been partially cut through, showing it to be quite as wide as found at the surface, having seams of very rich ore containing silver combined with gold. There is about 2ft. of the hanging-wall side of the lode which contains a large percentage of galena, some of the assays showing about 70 per cent., and silver at the rate of from 10oz. to 15oz. per ton. At the time the La Monte furnace was at work at the Thames some of the galena ore was purchased for £22 10s. per ton. One hundred and fifty tons was shipped to England for treatment, which realised for £11 10s. to £12 10s. per ton.

The owners of the mine have entered into arrangements with Mr. Parkes (a gentleman who has recently come from England, and who treated successfully the ore sent Home), to examine the lode and nature of the ore, with the view of erecting works here to treat it in a similar manner. There is no doubt but this is one of the finest properties in the district, when a proper method of treating of the ore is adopted. There are three other reefs or lodes in the Champion Company's ground, which show good prospects of gold and silver. Owing to the large body of ore in all these lodes, and the situation of the mine, the stone can be broken out and transported to the plant for treatment at a very cheap rate. Between 500 and 600 tons are now laying at the mine ready to send for treatment when works are erected.

TE AROHA DISTRICT.

When the quartz reefs on this field were first opened it was expected that they would, when properly developed, give employment to a large population for many years; and, indeed, there was never a new field that had a better opportunity of being properly tested than this one, inasmuch that as soon as it was opened Messrs. Firth and Clarke erected one of the finest stamping-batteries in the colony, and undertook to crush the quartz at 10s. per ton. In order to enable the miners and claim-holders to avail themselves of the crushing-plant, the Piako County Council, with a subsidy of £9,000 from the Government, constructed about three miles of tramway, at a cost of nearly £19,000, to connect the principal mines with the battery. When the battery and tramway were completed, every one was under the impression that the field, opened under such favourable auspices, would give good returns to those who invested their capital, and largely increase the revenue of the county, but these expectations were not realised. First one claim gave up, and then another. At the time of my visit, in January last, there was only one claim at work.

Notwithstanding the gloomy aspect this field presents, I have still confidence that as soon as there is a plant on the field capable of treating the ore properly many of the mines now idle will be taken up again and worked with profit. Although the crushing-battery erected by Messrs. Firth and Clarke is one of the best in the colony at the present time, it is well known that not more than 50 per cent. of the bullion is obtained by the ordinary battery process, and in many instances the percentage saved is far below this. The gold on this field is extremely fine, and it occurs in bands in the stone being disseminated through these bands in very minute atoms. Not only is it always found in finely divided particles among the quartz, but it is also associated with silver and other minerals, some of which occur in such a form as to be very refractory to treat. Indeed, there is very little free-milling ore to be found on the field.

To show the value of some of the ore from this field, when the New Find Company first commenced to work their mine the quartz gave 2oz. of gold to the ton by the ordinary battery process. The tailings were afterwards treated in berdans, and yielded almost a similar amount. They were ultimately treated in berdans a second time, and still paid for working. It will therefore be seen that a very small percentage of the bullion in the stone was obtained in the first process by the ordinary stamping-battery.

The *New Find Mine* was the only one at work at the time of my visit. It has recently been purchased from the original company by Messrs. Firth and Clarke, the proprietors of the Battery Company, for £2,000 in cash and the liabilities paid. The Battery Company have twenty-seven men employed on the mine and seven men on the tramway, the latter being leased from the county by the proprietors of the battery at a rental of £100 per annum, on condition that the charges for the