

Experiments are at the present time being conducted by Mr. French on the Monowai ore, and also by Mr. Park on ores containing copper-sulphides, and these experiments, so far as they have been made, go to show that they will find a process to deal with them satisfactorily. Ore from the Champion Mine at Tui Creek has been sent to Swansea and Freyburg, to ascertain whether it could be profitably treated; but the process adopted at those works is not suitable for this class of ore. It is therefore not to be wondered at that lodes containing ore of this character are not taken up and worked; but the time is not far distant when a process to deal with it in a satisfactory manner will be found out.

The rapid and extensive development of the mines at Karangahake, Waihi, Waitekauri, and Coromandel, and the large returns obtained from these mines, have been the means of attracting foreign capitalists. A great number of English companies, with large capital, have been formed to work different fields in both the North and South Islands, and a certain amount of this capital is set aside for opening up and developing the mines. These companies, instead of making small calls from time to time, have a certain amount of paid-up working capital available at once for carrying on large operations, and for the erection of plants with all the latest modern appliances for the treatment of ore. And even in the case of the local companies which have been formed, the money received from the sale of shares has in most instances been paid to the credit of these newly-formed companies for the development of the mines, instead of going into the pockets of the promoters as in days gone by.

The mining industry is assuming a far more healthy appearance, and gradually acquiring a more solid and commercial basis; and when the present mines that have recently been taken up by wealthy companies are properly developed there is every reason to believe that in future this industry will assume very large proportions. This is an industry which many of our leading men hold up to ridicule as being a species of gambling; nevertheless, at least about one-ninth of the European population in the colony is supported by it, and it therefore forms a great factor in the colony's progress.

During the year ending the 31st December last, dividends to the extent of £68,000 have been paid by quartz-mining companies in the Auckland District.

It may be worthy of mention that a company termed "The Kauri Mining Corporation" has been formed in London, with a subscribed capital of £500,000, to take over the freehold properties of the Kauri Timber Company, comprising nearly 3,700 acres, situated in Coromandel, Whangapoua, Kuaotunu, and Tairua. Rich lodes have been found in these properties, and it is the intention of this corporation to expend, it is said, about £100,000 in developing these lodes and carrying on prospecting operations, which means the employment of a very large number of men. This year, therefore, opens under very favourable auspices of a great revival of quartz-mining.

PUHIPUHI.

Very little work has been done on this field for some years previous to the past one. The original prospectors found some rich silver-ore, but owing to the crude appliances erected, and lack of sufficient metallurgical knowledge to treat the ore in an intelligent manner, the venture at that time proved a failure. During last year vigorous operations have again been commenced, and special claims and licensed holdings have been applied for, comprising an area of about 1,300 acres. A company called the British Gold- and Silver-mining Company (No Liability) has been formed, and has taken up four special claims, and for some time past has had between thirty and forty men at work opening out the mine, laying tramways, and overhauling the crushing battery, &c.

Mr. A. Gordon French, who is at present experimenting with the Monowai ore at Waiomo visited the Puhipuhi field last winter, and after passing several months in testing the ore he is satisfied that it can be made to pay for working, especially in the Prospectors' and the Waipu Claims, where the ore is said to give an average assay-value of 25oz. silver and 5dwt. of gold to the ton. At the same time Mr. French states that much richer ore could be sorted out, but, as stone containing from 15oz. to 18oz. of silver to the ton will pay for working, he considers it would be no advantage to pick the ore.

In regard to the former workings in these mines, Mr. French states "that, in his opinion, when they were first opened up they were skilfully worked, and justice was done to the ore at the battery as far as was then possible, but owing to the necessity of putting the ore through the kiln to prepare it for the battery, at least one-third of its silver and gold passed into the air in fumes. The difficulty is now overcome by the introduction of an invention which arrests the volatile silver and gold, and at the same time puts the ore into the best condition for the extraction of the rest of the bullion."

It is to be hoped that Mr. French has thoroughly satisfied himself that the process he proposes to adopt for the treatment of the Puhipuhi ore will come up to his expectations. The difficulty in inventing any new process is, that the working shall be economical, yet capable of extracting a high percentage of the metals in the ore. It is comparatively easy to extract large percentages in laboratory experiments, but when treating the ore on a large scale it may be found that the cost of treatment precludes it from being carried on with commercial success. There are large lodes traversing the Puhipuhi field, and the same line and class of country runs on from Puhipuhi towards Cape Brett. Both gold and silver have been obtained by frequent assays of samples from lodes at the latter place.

The field is one well worthy of being prospected, and it is one where there is a fair probability of payable auriferous and argentiferous lodes being discovered. With the exception of the claim now held by the British Gold and Silver Company, and formerly worked by the Prospectors' Company, there is very little legitimate prospecting done. Some years ago, samples of ore from this field were sent to the Colonial Laboratory for assay, which showed that it contained as much as 1,000oz. of silver to the ton, and when such rich samples can be obtained it gives an impression that other