

Quite recently, owing to late discoveries, and to the probability of English capital being introduced for the working of some of the mines, interest in this portion of the district is reviving, and several new licensed holdings have recently been applied for. At Waihi the Waihi Gold-mining Company, formed in England for the purchase and working of the Union and Rosemont Companies' holdings, have started vigorously to work to put up pumping-machinery and erect works for the reduction of the complex ores which abound in the district. At the Tui mine, Te Aroha, operations will shortly be resumed on a comprehensive scale, the property having been acquired by an English company. A discovery of a rich lode of lead-ore has recently been made in this mine, which will add materially to its value, and will, it is hoped, to a great extent, obviate the use of metallic lead in smelting—an item which, in the treatment of ores by the La Monte process, proved a very expensive one. The New Find Mine, at Waiorongomai, Te Aroha, has been acquired by Mr. W. R. Wilson, of Melbourne, who has since disposed of it to a company formed in Melbourne, who have started energetically to work and develop the property. They intend to add to their already extensive battery such improvements as experience proves to be most suitable for the reduction of the ores of the district.

Altogether the outlook for the future is most encouraging, and, as a consequence of the revived confidence in the prosperity of the district, prospecting is being carried on throughout the peninsula with vigour, and several new finds have already been reported from various localities. The want of roads and tracks to connect these new discoveries with the townships is much felt. The district is mountainous, and heavily timbered. The fact of payable quartz being found at so many different and widely-separated points seems to indicate that the whole of the Hauraki Peninsula is more or less rich in gold and silver lodes, and the energy with which prospecting has after so many years been resumed, will, I am convinced, lead to important discoveries.

In dealing with the present condition and future prospects of this district the question of proper appliances and processes for treating the various ores found in it becomes a most important consideration. That the future prosperity of these goldfields will depend largely on the means afforded for the reduction of our ores is beyond doubt. That a great loss has been sustained for many years by the inadequate machinery employed for this purpose has been abundantly proved by repeated assays from ores from all parts of the district, and a practical demonstration of the truth of these tests was afforded by the La Monte furnace during the short time it was in operation, where quartz, which would not pay to treat by the usual battery process, yielded from £10 to £80 per ton. This furnace, though it did not prove a success in economically dealing with the refractory ores of this district, produced at least one beneficial result. It drew forcible attention to the waste that had been going on for years, and the possibility of adapting a process by which the productiveness of the district might be almost indefinitely enlarged, and led the way to the newer processes which are now being introduced. Efforts have been made to establish a trade in the exportation of ores, principally to Freiburg, in Germany, and several parcels have been purchased at very satisfactory prices and exported, but owing to the cost of carriage, freight, and other charges, only ore of the better class can be thus dealt with at a profit, and the project so far has not been to any extent successful. The desideratum appears to be the erection of suitable machinery in convenient localities, at which the ore could be taken by the miners and disposed of for cash. The realisation of such a system appears to be within a reasonable distance of fulfilment. Attention has been for some time directed to the selection or invention of some system by which the successful treatment of the different ores of the district could be effected. Inquiries have been instituted in the principal mining districts of the world, and already these investigations have borne fruit, and there will shortly be in operation four or five systems which have elsewhere proved successful. The Askham-Molloy process, the machinery for which is now completed, has been introduced by a local company, who have acquired from the inventors the right to its use in their reduction works. They have purchased the Herald battery, on the Thames foreshore, and have now completed the necessary alterations and additions, and the system will receive a practical trial in a short time. The principle of the treatment consists in the application of electricity, by which the inactivity of the mercury, technically known as "sickening," caused by the presence of base minerals, is obviated, and the amalgamation of the quicksilver with the gold is allowed to operate to its fullest extent. One of the other processes I refer to is the Newberry-Vautin process, negotiations for the right to use which, and for the erection of the necessary machinery, have been completed. The building and machinery erected by the La Monte Furnace Company have been purchased, and the necessary alterations and additions will shortly be undertaken. This system, it is confidently expected, will successfully deal with ores containing gold and silver in the metallic form, as also in chemical combinations. Besides these processes, the Waihi Company, at Waihi, will shortly be engaged in the erection of machinery for the treatment of the complex ores found in their mines by a system which has been decided on as being the most likely to deal successfully with them. The Mount Aroha Company (late New Find), at Te Aroha, are about to improve their machinery by the addition of appliances which experience has elsewhere shown to have been successful with quartz such as is found in their property. In addition to these, Mr. Alexander Parkes, of London, a gentleman of long and varied experience as a metallurgist and mineralogist, is about to introduce a system of his own invention, which it is confidently anticipated will deal successfully with the most refractory ores to be found here. Earnest attention having now been directed to the subject, and the benefit likely to accrue to this district and to the colony at large being recognised, it is to be hoped that the next twelve months will see this most difficult and vexatious problem finally solved. This, with the introduction of foreign capital for the development of the mines, will, it is expected, give a great impetus to mining, and restore confidence and hope in the future of the district. These expectations cannot, however, find fulfilment for many months. Expensive machinery has to be erected, roads and tramways made, shafts sunk, and tunnels driven, and a large amount of what miners term "dead work" has to be undertaken before any return can be hoped for from the outlay of capital; but, in the meantime, these preparatory