67 C.—3.

in the different parts of the goldfield are as follows: In Una Hill and Karaka, pearl-spar; in the central and northern divisions, ruby-silver, copper pyrites, and stibnite; and in Tararu Creek, galena, resinous-coloured blende, manganese oxides, and copper pyrites. In the Occidental Mine, in Una Hill, resinous-coloured blende was a constant associate of the gold in the rich parts.

## Future Prospects of the Goldfield.

During the twenty-seven years that have elapsed since the opening of this field, the working of the mines has been principally conducted by private enterprise, or by companies with local interests. The richness of the lodes and leaders permitted the operations to be conducted, in most cases, with a small working capital, and in this way the more readily-accessible gold-bearing veins have become gradually exhausted. The production of gold, up to the end of last year, was valued at over £5,500,000—a yield unsurpassed by any other goldfield of the same area.

Besides yielding so large a treasure, the mining operations of the past have added much valuable information respecting the distribution and extent of the gold-bearing reefs and country, which will be of great value in the subsequent development of the field. There is a widespread, but erroneous, impression, that the Thames, as a goldfield, is rapidly approaching its end. The fact is, that it is simply nearing the end of the first stage of its existence. It is an undoubted fact that the main reefs of the Thames are more numerous, and of greater persistency in size and extent, than those of any other goldfield in New Zealand, and their development promises a brighter and more permanent prosperity for the future than that experienced in the past. The period intervening between the end of the old and the beginning of the new condition is certain to be a period of acute depression and stagnation, and the longer the interval the greater the depression will be.

After mature consideration, I have arrived at the conclusion that the future extension of the field may be effected from three different directions. First, there is the systematic development of the large low-grade reefs which exist in the Moanataiari, Waiotahi, Una Hill, and Hape areas. Among these should be specially mentioned the Sons of Freedom, Reuben Parr, Golden Age, Waiotahi, Hague-Smith, and Jupiter Reefs, in the Thames proper,—all large, persistent, well-defined, gold-bearing lodes. I am confident that our future wealth lies in our low-grade ores; and have no hesitation in saying that the undeveloped wealth contained in the millions of tons of ore in these reefs forms one of the most valuable and reliable assets of the Hauraki Goldfields.

Most of the lodes enumerated above could be worked "water-free" for many years, and only require cheap transit for the ore, and efficient battery treatment, to be made to yield steady returns. A work of great urgency is the extension of the Moanataiari Tunnel, which would then be an underground road and adit of great public utility, and enable large blocks of ore, at present left standing, to be worked with advantage and profit. Examples of what may be effected by cheap milling, together with a high rate of extraction, is afforded by the leading mines at Waihi and Karangahake, where low-grade ore is made to yield steady dividends. It was proved conclusively, some years ago, that the same ore, when treated by the ordinary wet-battery process, would not pay half the working expenses.

In the second place, there is the development of the large gold-bearing reefs in the northern extension of the Thames auriferous belt, in the upper valleys of the Tararu and Puru Streams. Some of these reefs attain a thickness of 40ft., and they are traceable on the surface for thousands of yards. They are enclosed in the most favourable class of propylite, and, wherever they have been tested, they contain gold. In the early days of the goldfield they attracted a good deal of attention. Several batteries were erected in their vicinity, and, even with the crude appliances then in use, they were made to yield thousands of ounces of the precious metal. From then till now they have lain neglected and almost forgotten. At the present time, however, two small four-stamper batteries are being erected to further test them: one at Lowrie's Reef, in the Tararu watershed, and the other in Puru Creek, above the Forks, to crush stone from the splendid reefs which traverse the wooded ranges forming the watershed between the Puru and the Tararu Streams. The erection of these small batteries by private enterprise in such inaccessible places can only be accomplished by much self-sacrifice and a brave determination to overcome all obstacles. It is sincerely to be hoped that these pioneers will reap an ample reward for their efforts; but, whatever their results may be, I am convinced that there is a bright future in store for these districts, whenever the capital is available for their development on a large scale. The reefs are mostly low-grade, and the bulk of the gold is so fine that it will require the best appliances and skill for its profitable extraction, and these can only be obtained by the expenditure of money.

In the third place, there is the working of the deep levels on the Thames foreshore. This may be considered under two distinct phases—namely, the exploration and working of the deep ground lying below the existing levels; and the development of the large area of virgin ground lying under Block 27.

The working of the deep ground, below the present levels, could be most easily effected by deepening one of the existing shafts on the foreshore and at once opening out new levels on the best-known gold-bearing reefs. If these proved to be payable, still lower levels could be constructed, and this course could be continued so long as the results warranted the additional expenditure.

The systems of reefs which, from the splendid returns obtained from them in the upper levels, especially deserve to be thoroughly tested in this manner are the Saxon, Queen of Beauty, and Vanguard. These contain many strong well-defined lodes, which have been proved to exist in the lowest workings so far undertaken upon them. From the necessity which exists of erecting suitable pumping and winding machinery, this will be a costly, although a thoroughly legitimate, mining undertaking.