in the tunnel, but the depth from the surface was not sufficient to give any fair test of the worth of the lodes. The tunnel was merely a preliminary work, and it is the intention of the Company to sink a main shaft in a good position, to work the most promising of the reefs discovered in the tunnel. With this object in view the lodes are now being tested, but no great amount of success has yet been attained. I deemed it necessary to refer to the operations of those two Companies, as being the principal efforts now in progress, for the development of new resources outside the mines which have been worked for years.

Leaving those works which are at present unproductive, I have to direct attention to those localities from which the largest proportion of the gold has been obtained. They are situated on the Moanatairi and Kuranui Ranges, and on the Waio Karaka Flat. In my last report I referred to the growing prosperity of the Upper Moanatairi district, and to the development of the mines at the lowest levels. The Sons of Freedom reef has been for a long time considered the principal one of a system of lodes which have been opened in this locality. In the Sons of Freedom mine the main tunnel had intersected this reef at a depth of 400 feet from the surface at the time I wrote my last report; but since then the lode has been fully opened up, and the main level has been connected with the upper workings by means of a rise on the overlie of the reef. This gave opportunity for opening up blocks of the reef for stoping, and for several months past, the Company has continued to employ a crushing force of from ten to twenty head of stampers on good payable stuff, which has yielded handsome dividends to the shareholders. The same reef was also opened in the Watchman and Middle Star mines at nearly the same depth as the Sons of Freedom adit level, but those Companies have not met with a similar amount of success.

Amongst the most prominent and important enterprises of the Thames gold field, the most noticeable is the Old Whau mine. I referred to this Company briefly in my last report. The first Company, although they obtained many rich yields from the mine, got into difficulties, and the mine was sold up, and bought by the present proprietors for £2,500. They at once started a low-level tunnel to cut the reef. Owing to the hardness of the ground through which the tunnel had to be driven, it cost £1,900, although its length was only 300 feet. A long rise had then to be put up to meet the upper level, so as to ventilate the mine and afford scope for working the ground. The first level worked was at a depth of 113 feet from the surface. A very large amount of rich stone was obtained from this and from the next level opened, which was 40 feet deeper. There are two reefs, each of which averages from 3 to 10 feet in width, and the quality of the stone produced by these reefs has scarcely been excelled by that obtained from the Caledonian mine in its best days. As an instance of its extraordinary richness, I may mention that a small parcel of 6 cwt. of specimens heavily impregnated with gold, which was crushed about a week ago, yielded over 1,000 ounces of gold; and 2½ tons selected from the general crushing stuff on account of its richness, likewise produced over 1,100 ounces of gold. The general crushing stuff, irrespective of this rich quartz, yields an average of 2⅓ ounces to the ton. Early next month a dividend of £3 per share, or a total of £9,000, will be paid to the shareholders out of the profits of the mine for little over a month's work. The deepest level at which the mine is now worked is 140 feet above the adit, and it is estimated that the amount of ground opened up above that level (the 200 feet level) will afford ample employment for the next twelve months, without encroaching at all on the block which lies between the 200 feet level and the adit. This is one of the most remarkable instances of success which I have to record as having occurred recently, but it is not by any means a solitary one.

The Golden Calf Company has experienced a remarkable change of fortune recently. After expending a large amount of capital, sinking a main shaft and working on the main reefs of the mine with little success, it was deemed advisable to remove the winding engine, and re-erect it over a shaft sunk on the old Just in Time claim, before it was amalgamated with the Golden Calf. This mine had been worked to a depth of 150 feet by the old shareholders with considerable success, but the reef was of a mullocky character, containing very little quartz, although the body of crushing stuff was about two feet in width. The Golden Calf Company determined to sink this shaft a further depth of 100 feet, and then open out at that depth on the reef; but subsequently, when the shaft had been sunk to a depth of 260 feet, they opened out at the 200 feet level. Here one of the most extraordinary finds of gold which has ever come under my observation occurred. Embedded in the mullock, of which the lode was composed, were found large flakes of apparently pure gold, some of which were about three inches square and three-quarters of an inch thick, and others smaller. There was a large deposit of this stuff found, in all about 500 ounces. It required no other treatment than melting in the crucible, losing only 41 per cent., the remainder being gold. These flakes were not, I may remark, of the usual consistence of melted metal; they looked rather as if the particles of gold in the lode were sufficiently fused to make them adhere together, but they could be separated with little force. Since that time the prospects of the mine have improved. Other deposits of this singular composition have been found, although not in such large quantities as that to which I have referred; and in addition to this, the general crushing stuff from the lode yields on an average 2½ ounces to the ton.

The Central Italy mine, adjoining the Golden Calf, has to be classed among the gold-producing ones, and it is expected that the Company will be in a position to pay dividends next month. I have also to refer to the enterprise shown by the Moanatairi Company. Their mine has been opened up from the Kuranui Hill tunnel, at a depth of 180 feet from the surface, and a great extent of the lodes have, indeed, been worked out to that depth; but the Company are now sinking a main shaft from the tunnel level to further develop their mine, and have besides erected a powerful crushing plant of forty-one head of stampers on the beach at the mouth of the tunnel, to be used exclusively in crushing quartz from the Company's own mine. This battery has been erected at a cost of about £13,000, and is considered the best constructed and most efficient plant of its power in the Australian Colonies. The whole plant and machinery, including the compound engine of 75 horse-power which drives the machinery, is of Auckland manufacture. With this powerful auxiliary the mine can be made to pay handsomely with a moderate average of 7 dwts. to the ton. The battery is capable of crushing 100 tons of quartz per day, and is fitted up with the very best appliances.

The Waio Karaka district has assumed a greater amount of importance since my last report, and