

6. There has been a very prevalent depression in mining affairs during the greater portion of the past year, principally caused by the falling off in the extraordinary yields from the Caledonian Mine. Indeed, latterly, the operations of this Company have been suspended, as it was found impossible to sink to lower levels until the Pumping Association's shaft had intersected the reef and drained it. The present depth of the Company's workings is 300 feet. At first an effort was made to continue sinking, but the combined efforts of the mining machinery of the Caledonian and Tookey Mines were insufficient to drain the water. At present, rich prospects are being found in the 70 feet and 100 feet levels of the mine, and no time will be lost in opening the deeper levels, when it shall become possible to recommence operations.

7. Early in the month of August the Cure Mine became prominent for extraordinary yields, and for a long time it maintained the premier position as a gold producer. In September one small parcel of two tons of stone produced 966 ounces of gold. In the same month a crushing of 370 tons yielded 600 ounces, and the total yield from the mine from September, 1872, to January, 1873, amounts to 6,415 ounces of gold from 1,522 tons of quartz. This mine was worked from a depth of about 80 feet below the sea level. The rich quartz from which these returns were principally obtained became exhausted or broken a few months ago, and since then the Company have been engaged in prospecting their mine towards the surface, working upwards from the same level.

8. The Albion Company, whose shaft was being sunk to intersect the Caledonian reef at a still lower level than the Pumping Association's, have recently been compelled to discontinue operations, a strong stream of water having been met with and the machinery erected being insufficient for drainage. The Pumping Association works will also assist this Company. There are numerous other Companies located on the same line of reef, whose operations have been carried on during the past year with varying success. Amongst others, the Golden Calf, the Central Italy, and the Otago. The latter Company has recently come on a rich reef in the 300 feet level of their mine, and during the present month have had a crushing which yielded an average of 3 oz. 14 dwts. of gold to the ton of stone.

9. The Golden Crown, formerly, one of the richest mines on the field, before the portion of the Caledonian reef striking through it became exhausted, has recently been turning out well. A new reef, evidently one of a system, has been found in the 130 feet level, and has produced a very large quantity of gold, enabling the Company to pay off a balance of £5,000 to the Pumping Association, besides handsome dividends to the shareholders.

10. The portion of the Thames Gold Field, which has recently become most prominent, is the upper portion of the Moanataiari Creek, where a large number of claims on the Sons of Freedom line of reef have become developed. In this instance a very valuable line of reef has been worked for a very great length, and has proved of immense richness; and by the enterprise of the companies located on its strike, low levels have been opened, which will afford work for many years to come. The lowest level at which the reef is at present opened is in a tunnel driven by the Sons of Freedom Company to a length of 900 feet through very hard country. The cost of this tunnel may be estimated at £2,000, but it opens the reef at a depth of 400 feet from the surface, or 200 feet below the level, which has hitherto been worked with such profit to the Company. A winze or underlie shaft is being sunk on the dip of the reef to meet the main level, and this is now down 150 feet. A similar tunnel is being driven by the Middle Star Company to intersect the same reef at or about the same level. This drive, which has also proved a very costly one, has already reached a length of 650 feet, but will probably have to be carried a further length of 120 feet before it intersects the reef. In both these instances, the shareholders have been relieved from the payment of funds towards the expenses by the profitable working of the upper ground.

11. The Watchman Company have also intersected the same reef in their main tunnel, which is on rather a higher level than the others; and communication having been formed with the upper level by means of a winze, the mining operations of the company may now be said to have fairly commenced. It was in the Black Angel Mine that the richest run of gold ever found on this line of reef was developed; and during the past year that Company has enjoyed a large share of prosperity, and has contributed materially to the gold returns of the field. The level at which the reef has been worked in this mine is 200 feet higher than that at which it was intersected in the Sons of Freedom tunnel. In the Whau Mine the same lode has been opened, but not worked on to any great extent; and in the Alburnia Mine it has also been discovered at a level 400 feet higher than that of the Sons of Freedom tunnel. From these facts it will be seen that a very large extent of this reef has been operated upon at various levels. It has proved auriferous throughout, and contains belts of golden stone varying in width from 10 to 40 inches. But the reef to which the Alburnia and Whau Companies have devoted their attention is a parallel one belonging to the same system, but locally known as Dixon's reef. This also has been well developed and proved very rich. The Whau Company have driven their main tunnel to intersect this reef a length of 300 feet, but it has not yet come to hand. In sinking a winze from the old level to meet this one, a rich run of gold was met with, and a parcel of 15 tons crushed from this portion of the mine in February yielded 612 ounces of gold. The history of this mine is not without interest. From some cause or another the first Whau Company were unable to make the mine pay. They got into difficulties and the property was sold. It was purchased by the present proprietors, who at once commenced the low level. They were unable to carry on operations in the upper workings owing to the water, but the extended operations of Dixon's Mine drained off theirs, and they have thus been enabled to sink the winze before alluded to. The first crushing, after paying all expenses, enabled the shareholders to divide almost half as much money as the ground originally cost them. In the Alburnia and Dixon's Mines this reef has been worked to great advantage during the year. The course of these reefs is generally N.E., and all the claims located on them are at present prosperous, with general indications of improvement.

12. There is another system of reefs developed on the flat at Grahamstown, which has assumed great importance. Upon these reefs the Bright Smile, City of London, Queen of the May, and other companies are now carrying on operations at a depth of 200 to 250 feet under the level of the sea, with profitable results.

13. The Kurunui main tunnel to which I alluded in my last report has proved a most beneficial