

From this it will be seen that the total for the year 1887 of mineral products shows an increase in value of £21,428, which is due to the yield of kauri-gum more than compensating for the falling-off in the yield of gold.

GOLD.

The amount and value of gold obtained within any specified period in the colony cannot be accurately ascertained; but, as the whole of it, with the exception of what is used in the colony—a comparatively small quantity—is exported, the Customs returns may be taken as giving a close approximation of the yield for the periods to which they refer. The falling-off for the year 1887 is £92,469, as compared with 1886. Again, comparing the export for the six months ended the 30th June, 1888, with the corresponding six months of 1887, there is a falling-off in value of £13,580. The decrease is almost entirely in the alluvial fields of the West Coast and Otago.

The yield of gold from quartz is fairly constant from year to year, as the following statement, covering a period of four years, for the two principal quartz-mining districts—viz., Auckland and Reefton—will show. The returns are for the twelve months ending the 31st March in each case:—

District.	1884-85.		1885-86.		1886-87.		1887-88.	
	Quartz.	Gold.	Quartz.	Gold.	Quartz.	Gold.	Quartz.	Gold.
	Tons.	Oz.	Tons.	Oz.	Tons.	Oz.	Tons.	Oz.
Auckland,—								
Coromandel	456	3,201	550	3,382	305	4,170	1,923	6,774
Thames and Ohinemuri	31,496	37,705	35,998	61,540	34,827	38,142	35,207	39,354
Te Aroha	11,042	9,506	6,552	4,489	4,743	3,658	7,166	2,918
	42,994	50,412	43,100	69,411	39,875	45,970	44,296	49,046
Reefton	34,349	23,997	27,198	14,591	23,930	21,143	24,403	16,775
Totals	77,343	74,409	70,298	84,002	63,805	67,113	68,699	65,821

Coromandel shows an increase in the quantity of stone crushed and also in the yield of gold, principally due to the vigorous prosecution of the Kapanga Mine. Thames and Ohinemuri show but little variation in the number of tons crushed, and with the exception of the year 1885-86 the yield of gold is very regular. The large yield for 1885-86 is due to rich stone having been obtained from the Cambria Mine. The returns from the Te Aroha field have been steadily getting less year by year, but notwithstanding this there is a prospect of this field being worked yet with more success. The Reefton district shows a large falling-off in the yield of gold last year, which is in a great measure due to two of the regular dividend-paying mines—Welcome and Keep-it-Dark—producing very low-grade stone during the year. In the latter mine, however, the reef now found at the lower levels gives promise of better returns for this year.

The quartz-mines in the Lake District of Otago have not given returns last year quite up to their usual average. At the end of Roughridge, Ida Valley, two old claims which had been worked at different times in the course of the last twenty years, and latterly abandoned for several years, were reopened last year, and from 400 tons of stone the handsome return of 820oz. was obtained. At Serpentine, which has gone through a somewhat similar experience to that of Roughridge, payable gold has been struck at several points along a low-level adit, 900ft. long, following the general course of the reef.

On the Old-Man Range, above Bald Hill Flat, White's reef yielded 830oz. of gold from 820 tons of stone. This mine is at a very high level, about 3,000ft. above the sea, and can only be worked for seven or eight months in the year.

The vicissitudes of failure and success which have attended quartz-mining in New Zealand go to show that persevering and well-directed efforts are almost sure of their reward. The Kapanga Mine already referred to, the Phoenix Mine at Skippers, and the Globe at Reefton, may be taken as examples of what capital and skill can accomplish; while failures, which could be quoted by the dozen, go to show that it is futile for persons without adequate means to engage in an enterprise requiring a large preliminary outlay before success can be achieved. Notwithstanding the failures, observation strengthens the conviction that there will yet be a very great development of quartz-mining in the colony.

DREDGING-PLANTS.

Since the introduction of the Wellman dredger, which was constructed to work the bed of the Clutha River, Otago, a large number of dredging-claims have been taken up; but, unfortunately, the pipes sent out from England with this dredger were found to be far too small to be of any real utility in carrying on dredging-operations. The holders of the claims recently taken up are waiting to see this new appliance properly tested before commencing their operations. The novel feature of this dredge is that it lifts the gravel by means of suction produced by a centrifugal pump, the manner hitherto of raising gravel from the beds of rivers being by bucket-dredges.

A large number of claims have also been taken up on the ocean beaches on the west coast of the Middle Island, and also on the east coast, between the mouth of the Clutha River and the Bluff. Mr Brooke-Smith has introduced what is termed the Ball dredger (similar in construction to Wellman's), and is at present erecting one on the Five-mile Beach in the Okarito district, Westland. Should these dredges be successful there will be a large field opened out. Mr. McQueen, of Dunedin, who placed a steam-bucket dredger in the Clutha in 1881, which has been in successful operation ever since, is now building a steel pontoon bucket-dredge at Granite Creek, on the ocean beach, about twenty miles north of Westport. The machinery is to be driven by a turbine, fed through a flexible piping from a water-race.