

pany, developments consisted in driving upon No. 14 level to the limit of the ore-body with unimportant results. At the Keep-it-Dark Mine, which has [so long been, and still] continues, on the dividend-paying list, developments during the year have not been up to the average, but it is satisfactory to note that the ore-values are now improving as depth is attained.

Operations at the Blackwater Mines (Limited) have during the year been carried out systematically on sound lines, and without ostentation, and there is satisfactory evidence to suppose that the gold-production of the West Coast district will shortly be increased from this mine. A main shaft has been sunk past the No. 3 level to a depth of 457 ft., head-gear and winding equipment have been erected, and on the completion of the milling and treatment plant now being speedily installed this mine will enter upon its career under favourable auspices.

Southern Inspection District.

There has to be recorded a slight increase in the production of the quartz-mines in the Provinces of Otago and Southland, but the yield for the year only amounted to £9,004, and, as in the case of the previous year, no dividends were declared by registered quartz-mining companies. It is gratifying to state, however, that renewed activity is being devoted to this branch of mining.

At the mine of the Barewood Gold-mining Company (Limited) improved prospects have recently been obtained at the No. 4 (300 ft.) level. A 29-horse-power Campbell producer-gas plant (Tangye, maker) was installed for operating the battery, with such beneficial results that a saving of 2s. 7d. per ton of ore milled has been effected in the cost of fuel when compared with that consumed by the oil-engine formerly in use. The testimony in favour of gas plants for power-generation at this and the Waihi Mine, where they have been lately introduced, is entirely satisfactory.

(2.) DREDGE-MINING.

During the year, as will be seen from the following statement, the average yield per working dredge was £3,278, being an increase of £277 on that obtained during the former year; there has, however, to be recorded a decline of £81,565 in the gold-production, and the number of working dredges has decreased by thirty-nine.

There is now reason to believe that the industry has settled down to a steady and permanent level, which will be more satisfactory to shareholders. There has been a tendency in the past to place expensive dredges upon claims which after a few phenomenal yields, or perhaps not even that, have subsequently turned out valueless; but this condition has now materially altered, and claims are worked systematically by well-established methods, and, as a result, the industry, taken all round, has been run on sound commercial lines. It has been proved that it is of no advantage moving the dredge about on the claim for the purpose of picking the eyes out of it; experience has taught that the only proper method is to work it in a face, taking the bad with the good. The application of electricity has been extended by the Earnsclough Gold-dredging Company to their No. 5 dredge, as a result of the successful installation of this power on the same company's No. 3 dredge the previous year, by which a saving in the cost of power amounting to 50 per cent. was accomplished.

The introduction of shaking tables of different design to replace revolving screens, which appeared to be in favour during the previous year, has not proved as satisfactory as was expected, and the tendency is now to revert to the revolving screen and elevator in preference to the stationary sluice-box, although it must be admitted, after inspection of the areas dredged over, that by the latter appliance the ground operated upon is restored to a more suitable condition for agricultural purposes.

The following statement shows the number of dredges, the gold produced by them, and the dividends paid during 1906 and 1907:—

Inspection District*	Number of Dredges.				Number of Persons ordinarily employed.	Yield during 1907.	Average Yield per Dredge, 1907.	Dividends paid.	
	1906.		1907.					1907.	1906.
	Idle.	At work.	Idle.	At work.					
West Coast ...	7	31	2	25	201	£ 75,676	£ 3,027	£ 16,488	£ 24,086
Southern ...	23	136	35	103	949	343,958	3,339	73,219	79,636
Totals ...	30	167	37	128	1,150	419,634	3,278	89,707	103,722

In the Southern District eight dredges are now operated by hydraulic power and two by electricity.