

through different stages of treatment by gravitation, although the character of the country is specially adapted for the erection of crushing-plants. The slopes of the terraces and hills adjoining the valleys are admirably suitable for the erection of plants. Where the stone taken from the mines can be emptied direct on to a grizzly, and what does not pass through goes down to a rock-breaker, where the ore is reduced to about 1 in. in diameter and falls into a hopper, which in turn feeds the ore-feeders; and on the lower side of the stamping-battery there should be sufficient elevation to admit of tables, concentrators, vats, and sumps, so that the ore in its different stages of manipulation may pass down from the time it is emptied on to the grizzly until the gold produce is ready for melting.

The principal assays in connection with the mines in the Reefton district are made by Mr. Aitken, instructor of the School of Mines. Many of these assays show that there is a great loss in gold. The following statement shows the results of some of the assays and tests made:—

Name of Company or Party.			Character of Parcel assayed or tested.	Quantity tested.	Gold per Ton.
				Tons.	Oz. dwt. gr.
1.	Progress Company	...	Tailings, fire assay	...	0 12 19
2.	"	...	"	...	0 9 12
3.	"	...	Concentrates from blankets, fire assay	...	2 16 8
4.	"	...	"	...	2 2 18
5.	"	...	"	...	3 6 15
6.	"	...	"	...	2 16 12
7.	"	...	Berdan blanketings, fire assay	...	5 4 3
8.	"	...	"	...	8 2 1
9.	"	...	Tailings, cyanide extraction	...	0 6 12
10.	"	...	"	...	0 6 1
11.	Globe Company	...	" " fire assay	...	0 6 6
12.	"	...	" " "	...	0 4 14
13.	"	...	" " "	...	0 5 21
14.	"	...	Blanketings, fire assay	...	1 13 5
15.	"	...	Concentrates " "	...	2 10 7
16.	"	...	Berdan blanketing, fire assay	...	6 10 16
17.	Fiery Cross	...	" "	...	5 5 19
18.	"	...	" "	...	5 1 6
20.	Golden Fleece	...	Concentrates, fire assay	...	5 10 10
21.	Royal Fleece	...	Tailings	...	0 11 3
22.	Wealth of Nations	...	Blanketings	...	2 10 18
23.	"	...	"	...	2 1 12
24.	Cumberland	...	Tailings	...	0 5 10
25.	"	...	"	...	0 12 10
26.	"	...	Blanketings	...	2 8 0
27.	Golden Fleece	...	Tailings	...	0 7 20
28.	United Alpine	...	"	...	0 7 4
29.	Welcome	...	"	...	0 7 20
<i>Treatment in Berdans with Chemicals.</i>					
31.	Fiery Cross	...	Blanketings	4.75	4 10 4
32.	"	...	"	5.35	5 2 1

There is every facility for working the mines and machinery in this district. There is an abundance of mining-timber on all the different claims. There are large areas containing coal of an excellent character for fuel in close proximity to the mines, while an abundant water-supply can be obtained as a motive-power to work machinery, besides the fact that there is scarcely any water to contend with in working the mines.

The fact that no pumping-machinery has ever been required demonstrates fully this statement. The country is well opened up by dray-roads and horse-tracks, and the Township of Reefton being connected by railway with Greymouth the transit of goods and machinery from a seaport is accomplished at a comparatively low cost. With all these advantages quartz-mining in the Reefton district, if carried on in an intelligent manner, should be a large field for the profitable investment of capital in mining enterprises.

I have, &c.,

HENRY A. GORDON, M.A.Inst.M.E.,

The Hon. the Minister of Mines.

Inspecting Engineer.

Approximate Cost of Paper.—Preparation, not given; printing (2,350 copies), £13 13s. 6d.

By Authority: SAMUEL COSTALL, Government Printer, Wellington.—1895.

Price, 6d.]