

Mr. Warden MACFARLANE to the UNDER-SECRETARY for MINES, Wellington.

SIR,—

Westland Mining District, Hokitika, 18th April, 1903.

I have the honour to forward herewith the mining statistical returns, together with my annual report on mining matters generally in the district under my charge.

In reviewing the year's mining-work in my district a short synopsis of the more salient points of improvement will, when taken in connection with my last year's report, suffice to give a fairly clear idea of the progress made and the position attained, without recapitulating much that is set out in my last year's report.

ALLUVIAL MINING.

Throughout this district alluvial mining maintains about the same number of men, and the output of gold is practically the same, but, with the exception of the Mont d'Or, none of the larger companies have reached the dividend-paying stage.

I furnish herewith a report on Humphrey's Hydraulic Sluicing Company (Limited), kindly supplied by Mr. Spencer, the company's manager: "I herewith submit my report on the work conducted by this company during the year 1902. Water-race: On the whole, the water-race has stood well, supplying the regular water with which to work the claim. There have been several breaks during the year, but this is not surprising when it is remembered that the race is about seventeen miles long, passing through some very rough country. The supply of water has enabled sluicing to be carried on steadily, with a delay of approximately three days per month on the average. Sluicing: On the No. 1 face (on the eastern side of Humphrey's Gully) a very large quantity of gravel has been removed during the year, amounting to 442,700 cubic yards. Most of this was sluiced from the far end and middle of the face, where the wash was of more promising appearance. The yield of gold from this face was 614 oz. 13 dwt., equal to 0.666 gr. per yard. Of this amount, 108 oz. 8 dwt. 6 gr. of gold, representing 17.635 per cent., was caught on the tables. The decreased percentage obtained from the tables is due, presumably, to the greater length of boxes above the tables (amounting to about 10 chains), affording a better opportunity for the gold to settle. On the No. 2 face (on the western side of Humphrey's Gully) a very large amount of work has been done towards opening up the gravel, and, at the end of 1902, 111,700 cubic yards had been removed. Of this quantity, however, a large amount had to be sluiced through a very short length of boxes, as it was only possible to put on a box at the head or tail as room was made for it; hence the gold-yield so far obtained from this face cannot be taken as a guide to the actual gold-contents of the gravel. As soon as a sufficient area was opened up to receive the gold-saving tables the construction was put in hand, and the tables started to work at the end of August. Since then, of the 78 oz. 19 dwt. 23 gr. so far obtained from the face 33 oz. 19 dwt., representing 42.97 per cent. of the total yield, was retained on the tables. The equipment at this face is very similar to that erected on the No. 1 face during the year 1901, but a greater spread of tables has been provided on the No. 2 face, the gold-saving area amounting to 2,048 square feet. A hoist has also been installed for the removal of trees, stumps, &c., without which it would be impossible to work the ground. This face is supplied with light by Jardus arc lamps, the current for which is generated by the dynamo on No. 1 face. Output: The total gold obtained from the claim during the period under review amounts to 693 oz. 12 dwt. 23 gr., valued at £2,705 4s. Expenditure: The total expenditure during the year amounts to £4,439 19s. 9d. Of this amount, £2,395 18s. 11d. represents the actual revenue expenditure for wages and stores on claim and water-race. Rents, taxes, travelling-expenses, and accident insurance amount to £581 8s. 4d.; whilst on capital account £1,439 17s. 6d. was expended in plant and wages, and on stores on race and claim."

A large expenditure had to be incurred to bring water on to this company's claim, and up to date working-expenses have been very heavy. An important feature in the working of this claim is that of extensive gold-saving tables for saving the fine gold. The wisdom of such departure from old-fashioned methods should be an object-lesson to similar companies; but diggers are a very conservative race, and, with the exception of this company, they still adhere to their old methods, thus throwing into the tailing-dump gold that might pay the working-expenses of the claim.

I regret to say that there has been no new development of material value during the year, and if the same number of men are to be maintained it is absolutely necessary that more systematic prospecting in the back country take the place of the abortive attempts being made under the auspices of the Mining Association.

Quartz-mining is a negative quantity, although many miners hold the opinion that in the fastnesses of the Southern Alps rich deposits will yet be found.

SEA-BEACHES.

All black-sand beaches are at present commanding considerable attention. From the Montezuma beaches, north of Hokitika, to Bruce Bay claims are being applied for, and dredges ordered to work same. The prospects obtained warrant the erecting of dredges specially designed to deal with black sand, and should be in full working-order under three months. The prospects, I am informed, that are now being obtained on the Mikonui Beach are of a most encouraging character, and if such continue in the next paddock taken out capital will be forthcoming for the erection of a most up-to-date dredging plant especially adapted for dealing with the black-sand beach-deposits. The same favourable reports reach me from beaches at Saltwater, where an up-to-date dredge is now being built, and should be ready to commence dredging operations in two months, all things being favourable. Negotiations are in an advanced stage for the construction of dredges at the Five-mile, Okarito, and Gillespie's Beaches.

As a further mark of the line of progress in the matter in question, our almost isolated miners at Bruce Bay keep their ever-watchful eyes on the beaches for the combings, and as a result of