

No. 12.

Mr. Warden MACFARLANE to the UNDER-SECRETARY of MINES.

SIR,—

Jackson's Bay, 18th May, 1886.

I have the honour to enclose herewith the goldfields report for the twelve months ended the 31st March, 1886; also general report on the mining districts under my charge for the same period.

Okarita District.—No new discoveries of any consequence have been made in this district during the past year; consequently mining matters are in much the same state as they were in 1885. The working population remains about the same; and those settled in the district are making small wages. Mining is mostly confined to the sea-beaches and the terraces near the coast. Nothing much in the way of prospecting has been done. However, one capable and well-equipped party are about to try to turn Cook's River above the gorge, where splendid prospects of gold were found many years ago; but, with this exception, there is no movement in the direction of opening new ground. Indications on the coast would warrant a careful search inland. This applies more especially to the country in the vicinity of Jacob's River, near Bruce Bay, where, in the morainic deposits forming the bluffs near the mouth of this river, gold, tin, and other ores have been found. Nothing whatever is known of the upper reaches or sources of this river. It has not been explored five miles from the sea-beach, and then only by settlers hunting stray cattle. From the quantity of porphyry and other metalliferous rocks to be seen on the sea-beach along the face of the bluffs, it may be taken for granted that mineral lodes are to be found inland. There is therefore ample room and opportunity, and a most promising country, in which the energetic prospector may enrich himself and benefit the colony at large.

I have, &c.,

The Under-Secretary of Mines Wellington.

D. MACFARLANE, Warden.

No. 13.

Mr. Warden MACFARLANE to the UNDER-SECRETARY of MINES.

SIR,—

Warden's Office, Jackson's Bay, 18th May, 1886.

During the past year gold-mining in this district has shown some signs of improvement. A few good parcels of gold were obtained in the Abbey Rock Ranges, and on some of the neighbouring beaches. The parties at work are reported as making good wages. The miners on the Haast beaches are still at work, but, having considerable difficulties in the shape of water and heavy stripping to contend with, their average earnings are not quite satisfactory. To the south of Jackson's Bay, gold has been found from the Hope River to Big Bay. A sample of 4oz. from the Gorge River was brought to this office, showing a good deal of coarse gold; and I am led to believe that many of the streams coming out of this block carry gold that will pay men from £2 to £3 per week per man.

Metals other than Gold.

As anticipated, the year's explorations have resulted in some important discoveries—amongst others, that of a nickeliferous alloy new to science, associated with gold, platinum, tin, and magnetite, and found in the sands and gravels of the Gorge and neighbouring rivers and creeks. This discovery has resulted in ten mineral leases having been applied for, seven of which have been granted, with the probability of extensive operations being started at an early date. The value of the discovery may be gathered from the analysis made by Mr. Skey, of the Geological Department, copy of which see herewith:—

“Results of Analysis of Specimen No. 4,106, forwarded by the Warden, Jackson's Bay.—Locality, Barn Bay and Gorge River.—Reported 30th September, 1886.—Preliminary Report.—No. 1, Supposed Platinum: This does not contain any platinum, but is almost a pure alloy of nickel and iron, its approximate composition being as follows: Nickel, 68; iron, 31; sand, gold, &c., 1=100. The alloy appears to be a definite compound of iron and nickel—one equivalent of iron to two of nickel. If nickel keeps up its price of 12s. per pound, this alloy will be worth 8s. per pound; so that if it can be obtained in quantity it should prove a valuable find. No. 2, *Wash from Workings:* Approximate analysis—Nickel and iron alloy, 24.77; magnetite, 19.68; titanite iron, garnets, gold, and platinum, 55.55=100. The quantity of platinum is very small, only a few minute scales showing. There is a probability that this alloy has some relation to the nickeliferous pyrites occurring in the neighbourhood of this find.—W. SKEY.”

“Further Report, 3rd October, 1886.—Besides nickel alloy and two kinds of platina, this sand contains 32.14 per cent. of cassiterite, equal to 25 per cent. of tin.—W. SKEY.”

Ten years ago, when I found this metal in very small quantity when exploring on the Cascade River, I took it to be an impure platinum; but on finding the metal in greater quantity I had it tested, with results as above. Instructed by the Minister of Mines, I examined and reported on the matter to the Government; and, being cognizant of the existence of the remarkable mineral belt, known as the Olivine Range, lying at the back of where this stream-metal is found, I spent two weeks in company with the prospector, Mr. Douglas, in endeavouring to trace the metal to its matrix. Professor Black, when here, found traces of nickel in one of the