

Mr. McKay, in his last year's explorations, has, in tracing these auriferous quartz drifts and gold-bearing breccias in Otago, shown that there is a large field for the extension of gold-mining in the alluvial deposits, but the whole of the areas mentioned require to be worked by hydraulic sluicing to make them pay, and this naturally comes to the question of utilising the whole of the available creeks and streams—the construction of dams and reservoirs for the storage of water, so that none of it be wasted. On the West Coast goldfields extensive auriferous gravel deposits exist, which are capable of giving profitable employment to a large population if water were available.

MARLBOROUGH DISTRICT.

Mahakipawa.

The mining population here is gradually getting less, the best portion of the creek claims on Crown lands having been worked out. There are still a great many solid blocks of ground, the taking-out of which will afford employment to men for a considerable time, and if the water in the creek-bed was diverted, there is no doubt but that a great portion of the ground would be worked over a second time. During the last year the repeated floods in the creek have prevented mining operations from being carried on for more than half the time. The slightest flood in the creek very soon fills all the underground workings with water, and, as the pumping appliances are all very small, it takes weeks before the ground is again drained so as to allow the men to work.

Arrangements have been made to put a dam across the creek-bed, where the bed-rock is near the surface, and to place a flume alongside the terrace to carry the water in ordinary flood-time. When this flume is completed it will enable the men to work the ground more steadily.

The Hibernian Company went into liquidation last year, and the property was purchased by Mr. Darrell, who is now carrying on mining operations.

The King Solomon Company has been able to work this year more regularly than during the previous one on account of having puddled back the water in the shaft at about 40ft. below the surface, where an impervious stratum was found. This has been the means of effectually damming back the surface-water, and the result has been that the workings have been carried on at a profit. There is yet some distance of the lead of auriferous wash drift to work on the upper end of the ground adjoining the Hibernian Claim, and there is about 60ft. between the workings and the Empire City Claim, adjoining the lower boundary.

Judging from an examination of the surface of the ground and surroundings, there is every indication of the course of the Mahakipawa Creek having been close against the foot of the range at the back of the township, and that, after having had its course there for a long period, a slip from the side of the range has taken place, which blocked up the original course of the creek, causing the water to cut its present channel on the opposite side of the valley. The remains of the slip are clearly seen, and a portion of the Township of Cullensville is built upon it. The inference to be taken from this is that the auriferous lead of wash drift will be found passing through the Empire City ground, and under Mr. Matheson's hotel, and thence along the foot of the range. If prospecting were done in this direction it is likely to be accompanied with success.

The Golden Gate and Alice Fell Companies, who hold claims lower down the flat than the township, have never been in the runs of auriferous wash drift that came down the old creek-bed. Whatever gold was got in these claims came from the run that is being worked by hydraulic sluicing on Davis and Carr's claim. It is probable that the original creek-bed will be about from 3 chains to 6 chains nearer the range than the last shaft put down by the Alice Fell Company.

Davis and Carr's claim is still continuing to give fair returns. There is a considerable depth of wash drift on the terrace where they are sluicing, and indications point to its being a portion of an old slip from the side of the range, and in this case there is a probability of wash drift being found higher up the range that will prove payable for working, but the difficulty would then be the getting of a supply of water. When once the creek-bed is all worked out, water can be lifted from the Mahakipawa Creek and its branches in order to sluice the ground on the side of the terrace, but at the present time this would be impracticable on account of the number of men who hold claims in the creek-bed. A good deal of gold has been taken from this field, and it is still a field that will afford employment to a small mining population for many years, and if the gold can be traced down the flat it would give the field a new life; nevertheless, if such were the case, much more powerful pumping plants would have to be used, so as to successfully contend with the water.

Wakamarina.

There are only a few parties working in the valley of the Wakamarina. The bed of the river in the early days had rich deposits of auriferous wash drift, and in some of the bars and crevices in the rock in the river-bed the clean gold could be taken up the same as out of a sluice-box. Some of the tributaries of the river, such as Deep Creek and Dead Horse Creek, were very rich for a certain distance up from their junction with the river, but above the line of reefs there was very little gold found. Deep Creek was especially very rich near its junction with the river, and directly below its junction there is a deep, narrow gorge which has never been worked, and a good many people have still a belief that heavy deposits of gold exist there. About eight years ago a company was formed to work this gorge, but the capital was too small to even get a dam put in and the water pumped out. This company has been re-formed at least three successive times, expending all its capital, and very little more is known about the deposit in this gorge than when operations were first commenced. Altogether, about £10,000 has been expended. A great deal of this money was frittered away in dilly-dallying while taking out the wash drift after the water was pumped out. It is one of those places where all the hands that could be profitably employed should have been put on, so as to take the ground out quickly, the river being very liable to sudden freshes, and all the work done would thus to a certain extent be destroyed.