

any great value, would have to be not less than about 100 sluice-heads, as there is a great depth of wash-drift that would have to be moved, and it is only in certain layers where the gold is found. The only source from which a large supply could be had is from the Hokitika River, and the amount of money required to bring in anything like 100 sluice-heads of water from this source is beyond the reach of private parties, and it certainly would not be an advisable work for the Government to undertake. The old workings at Rimu were carried on from shafts, and the ground at the new discovery is of a similar character, excepting that the drift is more stony, and the gold of a coarser character.

The prospectors, Ward and party, are near the south-eastern end of the lead. As far as yet known there are only two claims beyond this point where payable gold has been found—namely, Higgins and party and Stephens and party. The next claim on the supposed run of gold is that of Griffin and party, which is only about 200ft. from Stephens's shaft in the direction the lead would apparently follow; but this party has not yet been successful in finding anything of a payable character. It is supposed that the lead is broken at this point; but that is yet very questionable. All the gold-bearing layers are on a false bottom, which is of fine gravel, resembling in many places other portions of the superincumbent drift; therefore if the shaft happened to be sunk on a blank place on the lead it would be difficult to know where to open out, unless the levels and dip of the run of gold in Ward's, Higgins's, and Stephens's claims were accurately taken, and even then there is a possibility of the gold-bearing layer taking a jump to a deeper or higher level. On examining the character of the auriferous layer in Stephens and party's claim, which is yielding from 7dwt. to 8dwt. of gold to the load, the only difference in the appearance of the headings, wash-drift, and bottom is that the gold-bearing layer has more heavy stones in it, and is intermixed with a mullocky sediment resembling to a great extent some of the intermediate levels on Ross Flat, and more particularly the one found on what was termed the fourth bottom in the Morning Star Company's claim. It is by no means a clean river-wash, as found in many places; at the same time, the stones amongst the wash-drift are all well rounded, as though they had been brought a considerable distance by the action of water. The same peculiarity exists here as at Ross as regards the different bottoms on which the gold is found. Some of the shafts have been bottomed on what was supposed to be the same level as that on which gold was found in the adjoining claims, and, after opening out at that level and getting a little gold, uprisers have been constructed and a better layer found above. This was the case in Gibson and party's claim. A drive was put in to the eastward for 40ft. from the bottom of the shaft, in a layer which yielded from 3dwt. to 4dwt. of gold to the load; but the run cut out at the end of the drive. A drive was then made in the opposite direction from the shaft for 40ft., and an uprise constructed for 12ft., when a better layer was found, which yielded from 6dwt. to 7dwt. to the load. This has occurred in several of the claims.

The lead has been traced in a north-westerly direction from Ward and party's claim to near Arch Creek, a distance of about a mile; but it does not appear to run continuously, or, at least, the shafts on the line have not struck it; but at Arch Creek there appears to be a break, or, at least, a mullock-bar across the lead, and it has not been yet picked up beyond this point. However, the field cannot be said to be prospected yet, and it may be found to be only a continuation of the same run of gold to that found in the old workings between the Township of Rimu and the Mahinapua Creek. It is not yet certain that the claims between Ward's and Arch Creek are all on the same run of gold. There is a possibility that there is more than one lead. Indeed, it is highly probable that different leads exist on the field. There are other claims further to the eastward from Ward's, on the opposite side of a small ridge, which are evidently on a separate run of gold-bearing wash-drift, carrying the same character of gold. In all, there are twenty-eight claims on the field in which less or more gold is found. Some of these will give fair results for working, and others may prove extremely poor, as is the case on every goldfield.

In regard to the future prospects of this field, there is good reason to believe that better leads of gold will yet be found at lower levels. There is plenty of evidence to show that the country along the coast in this locality has, at some period of the world's existence, been at a much higher level, having rivers following different courses from their present ones. The deep workings at Ross clearly prove this: the same character of wash-drift found on the terrace bottom on the Ross flat, 200ft. below the present sea-level, is found on the top of Mount Greenland, and again on the terraces above the flat referred to. A similar character of wash-drift to that above the terrace bottom, in the intermediate gold-bearing layers in this flat, is found at Rimu, and no permanent bottom has been found in any shaft on the field. There is therefore every reason to suppose that other gold-bearing layers will be found at a deeper level, likely to contain more gold than the levels at which the workings are at present carried on. The average depth of the shafts on the recent discovery at Rimu is about 85ft., and there is no water of any consequence to contend with, most of the shafts being entirely free of water. That being the case, the shafts should be sunk to greater depths, in order to prove the ground.

At Back Creek the claims at the front of the terrace, which is only a short distance from the ground recently discovered, are working at a deeper level. There are, therefore three different layers of auriferous wash-drift known, none of which are on a clearly-defined bottom. Judging from the formation of the country, and the large area of drift-wash in the flats and terraces, there is every probability of far richer ground being found at the deeper levels; and, if this be so, the field is one that would support a very large population.

Should a large number of claims get on gold, there would be a difficulty in obtaining sufficient water to wash the dirt. There are no creeks in the vicinity from which water can be brought, and to attempt to form a company to bring in a large supply from the Hokitika River, in the present position of the field, is out of the question. Water will have to be obtained, and probably the cheapest way will be to wash the dirt in paddocks into a reservoir on the terrace, water being pumped from the Hokitika River. The cost of pumping machinery to lift the water would depend