

gold, the geological conditions of Green's mine being evidently wanting. Only one of these trial-places, called McLeod's workings, deserves, I think, some further exploration, as the run of rotten rock seems to strike nearly in the same direction as that of Green's, and prospects of fine hackly gold are said to be obtainable from it by tin-dish trials. Considering the great scarcity of quartz reefs in the district, in connection with the fact that there are a number of surface-workings and dry alluvial gullies—high above the boundary-line of the Manuherikia Lake-drift—which have yielded payable gold from gravel very poor in quartz, it is highly probable that such gold was derived from mullock-deposits similar to that at Green's, and the district therefore certainly deserves more extended and systematic prospecting."

With regard to the method of working this deposit, I quite agree with Professor Ulrich that a puddling-machine would be the best method of first dealing with the material, and afterwards crushing the residue in either a Chilian mill or Wheeler's pans. The schist, being extremely friable, would be carried off by the action of puddling, leaving only the small quartz-grit to be finally dealt with.

Rough Ridge.—Otago Central Company.—This company has been in operation for several years, but has not yet been successful in finding a large body of auriferous quartz of a payable character. The Rough Ridge abounds in quartz leaders containing gold, in some of which rich specimens are found. Several gold-bearing reefs have been from time to time found in the locality and partially worked; but they do not run so regularly as in other parts of the colony. The reef that is being worked by the Otago Central Company averages from about 8in. to 10in. thick. In some places it runs out to about an inch in thickness, and in other places it widens out to 2ft. There is a little gold to be seen in the stone; but the quantity to be obtained, unless very rich, will not pay for working. This company is working from a tunnel driven in from the side of the range. At the end of this tunnel a stream of falling water can be heard, which indicates that they are close on some watercourse, or, probably, a large reef. However, they have stopped operations at the end of the tunnel at present, and are stoping out a leader of quartz, which I have before described, with the view of having it crushed at an adjoining battery.

Tinker's.—This is situated about eight miles from Black's, or Ophir, at the foot of the Dunstan Range, where some very rich alluvial deposits have been found. The Blue Duck Company here, three years ago, washed out 2,400oz. gold with eight men in seven months and a half. This company have been steadily paying good dividends, and, although the ground is not so rich as it formerly was, it still pays the shareholders very well. Adjoining this company's ground the Matakiniui Company have a mining lease which they work by hydraulic sluicing. They completed their water-race about nine months ago, and have now got their ground opened up, which promises to pay well. Their water-supply is taken from the Matakiniui Creek, and is brought across Spottis Creek in a siphon made of malleable-iron pipes, 14 gauge, 15in. in diameter, and 1,518ft. in length, having 60ft. of head at the intake end. The tailings from this company's workings go down into Spottis Creek, thence down a new tail-race that has recently been constructed through the ground purchased by the Government a short time ago from Messrs. Laidlaw and Crawford.

The following table will show the principal companies at work in this field, the number of men employed, and the amount of water used by each company:—

Name of Person or Company.	Number of Men employed.	Number of Sluice-heads of Water used in working the Ground.	Head of Water or Pressure used, in Feet.
Blue Duck Company	8	14	130
Matakiniui Company	8	6	180
Undaunted Company	8	12	250
Reid's Company	6	5	180
Sims and party	6	4	..
	36	41	..

Altogether there may be from eighty to a hundred miners employed at Tinker's; but the companies mentioned carry on the principal works. Since the purchase of Laidlaw and Crawford's property by Government, the miners have constructed about three miles of a new tailing-channel, and cut a ditch a hundred chains in length to divert the course of Spottis Creek.

St. Bathans.—This is a district which has contributed its steady quota of gold ever since it was opened in 1863. During the last year about 4,000oz. of gold were obtained from this field, which includes Cambrian's. There are about a hundred miners steadily employed here, all engaged in hydraulic sluicing. One of the most enterprising miners of the colony lives in this locality—Mr. John Ewing, who carries on several large undertakings, and is generally successful in anything he undertakes. About three years ago he purchased a claim at Vinegar Hill for £1,100, and put a hydraulic plant on the ground costing about £2,000. He has spent in wages, since the purchase of the ground, £6,000, and paid £1,600 for water. In all, this claim has cost him £10,700, out of which he has only yet received gold worth about £7,000; but from the remainder of the ground that is still unworked he anticipates to be well paid for the