

tion of a site for a large dam which the proprietors are building to conserve water. The water from this source is to be used for hydraulic mining and for driving dredges equipped with Pelton wheels. The probable cost of the undertaking will be £1,000; but the proprietors consider the work necessary with regard to future gold-mining on Waipori. Owing to the rapid exhaustion of the auriferous areas with which the present-day appliances are fitted to cope, the dredging industry is declining in the district. Holders of water-rights now have to seriously consider the best application of these rights to open up new alluvial ground. The question of consolidation of water-rights is also involved in this. Much of the ground turned over by the present-day steam-driven dredges will pay for working again provided that large plants capable of turning over a great amount of material and being cheaply driven are used. In addition to this, ground proved to a depth of 80 ft. has not yet been worked, and large power is necessary to deal with this ground. With regard to the construction of the dam, nothing is being spared to make the work satisfactory. The schist rock of the locality affords good building-stones, which are conveyed by tramway direct to the walls. Two stone walls are being built 90 ft. apart at the base and 50 ft. apart at the top. The walls are each 10 ft. at the base and 5 ft. at the top, being carried to a height of 30 ft. The site of the dam-walls will allow of the embankment being carried much higher should the necessity arise in the future. The outer face of the structure has a batter of 1 in 6 and the inner face 1 in 1. A novel method of filling in the intervening space between the walls has been adopted. An elevating plant has been erected in the flat which forms the dam-site. The material treated is payably auriferous, and the gold is saved in the elevator-boxes. The tailings, which are composed of clays and gravels, are discharged into the space between the walls. There is every indication that this method will prove successful, while it has also the advantage of being cheap and expeditious. The area of the water-surface will be about 11 acres. Ten men are employed on the work, the completion of which is estimated to take eight months from the date of inception.

Sew Kew and party, Lammerlaw Creek (Area of claim, 40 acres).—Hydraulic sluicing and elevating operations have been continued during the year, four men being employed in the claim. There is still a large area of ground to be worked, and the owner has disposed of the property for a satisfactory figure to Nicholson and party, Waipori, who will continue to work on the usual lines.

Bakery Flat Hydraulic Sluicing and Elevating Company, Upper Waipori (J. T. Johnson, Manager), (Area of claim, 84 acres).—This claim has been worked by hydraulic sluicing and elevating during the year with fair results. The bottom worked to is in places either the schist country rock or the quartz drift filling a deep and tortuous ravine which traverses the length of the claim. It is proposed now to bring the plant and water-supply up to their highest state of efficiency and make an attempt to bottom this channel. A previous attempt to effect this failed at a depth of 61 ft. owing to heavy drainage from the river. Should this undertaking be successfully accomplished and payable auriferous washdirt be discovered, the life of mining in Waipori will be prolonged indefinitely, as this deep lead extends through the valley for about twelve miles.

Golden Point Hydraulic Sluicing Claim, Upper Waipori (D. O'Brien, Manager).—This plant is now operating in shallow ground near the Waipori River. The claim continues to be worked on the usual lines with fair success. Four men usually employed.

Post-office Creek Hydraulic Sluicing Claim, Lower Waipori (J. R. Parker, Manager).—Owing to the poorness of the water-supply and the heavy nature of the material to be sluiced away, work in this claim is not of a very progressive nature. Four men are usually employed.

Munro and George's Hydraulic Sluicing Claim, Lower Waipori.—The plant has been transferred to the lower end of the claim and a large paddock opened out on the Post-office Creek deep lead. The run of gold-bearing wash is very narrow on the bottom, but is, however, fairly rich.

The gullies and creek-beds of the Lammerlaw and Lammermoor Ranges still afford employment to a number of individual miners during the summer season.

Dredging.—Two dredges ceased operations during the year and were dismantled; eight continue to work, seven of these being owned by private or semi-private parties. The most payable areas on Waipori Flat are now about worked out, the remaining ground being such as will support parties of working shareholders only. O'Brien's application of water-power continues to be a success in this district and has enabled the poorer areas of ground to be worked profitably.

Beaumont.

Champion Hydraulic Sluicing and Elevating Company (Limited), (R. Pilling, jun., Secretary, Lawrence; John Fahey, Manager).—Operations were continued during the early part of the year without success. The ground farthest from the river has now been worked out, and future operations (if continued) must be carried out on the river-frontage. The ground is deep and the drainage is consequently heavy, hence the work is considerably hampered. As the outcome of these difficulties, the company sold its water-rights, plant, and claim to J. Fahey and others, who have formed a small company known as the Plunket Gold-mining Company to carry on operations. Should the present proprietors not be successful, the water might be applied to terrace and flat ground further down the Clutha River, below Beaumont, or it could be cut in to the Tuapeka district, where there is ample scope for its application. The carrying-out of either proposal would, however, demand considerable expenditure.

J. Buchanan has a ground-sluicing claim on terraces containing river wash below Beaumont. The water-supply is intermittent.

Dredging.—The New Paul's Beach dredge, situated seven miles below Beaumont and owned by Mr. William Adams, Dunedin, is the only one working in this district. Operations have been carried on during the year with a fair amount of success. The Golden Gravel dredge has been transferred to the Rosedale Syndicate's claim, Waikaka Valley.