C.—3.

Waikaia.

39

Muddy Creek Terraces.—The principal feature in this district during the year was the progress made in the construction of the large water-race from Dome Creek. This work is one of great magnitude, and is nearing completion. The pipe-line and sluicing plant is now being installed on the claim by Mr. F. Broune, the mine-manager.

Waikaka.

A local syndicate took up an area of ground near the Waikaka Township. A deep lead of auriferous gravels crosses the valley near the township, and it is proposed to work this by means of hydraulic sluicing and elevating. A right to construct a race and pipe-line to carry twenty-one heads of water from the Waikaka Stream has been granted. The cost of construction of the race, and the purchase and laying down of the plant is estimated at £15,000. No steps have yet been taken to begin operations.

down of the plant, is estimated at £15,000. No steps have yet been taken to begin operations.

Pahia Sluicing Company, Pahia (R. T. Hucklebridge, manager).—This company secured a lease over 47 acres of Connor's freehold land. The land was long known to be auriferous, but was unworkable by any of the methods in use in the locality, consequent upon the scarcity of water. The claim was prospected by driving and by boring, and proved payable to the satisfaction of the lessees, who thereupon introduced the system of working the ground by a hydraulic pump. The first plant proved too small for efficient working, and, aided by a subsidy from the Mines Department, a larger and more capable plant was installed. A Marshall portable engine and boiler of 14-horse power was procured to drive a Wilberforce rotary sluicing pump 7 in. suction and 8 in. delivery column. The material is elevated 30 ft. This plant has done efficient work on the claim, which consists of a terrace 40 ft. in height, composed of heavy-clay beds and seams of auriferous sand and gravel. The present bottom of the claim consists of clay and sand-beds, below which the value of the material is still unproved. The plant is said to have worked efficiently, but proceedings are now at a standstill pending settlement of a dispute regarding disposition of sludge and dirty water with landowners having riparian rights on the Rurikaka Stream.

Nightcaps.

Wairaki Gold-prospecting Association.—The discovery of gold-bearing alluvial ground in the Night-caps district led to the ground being taken up for gold-mining purposes. A number of shallow pits and trenches were sunk, and a water-race was cut in from an adjoining creek to sluice the ground. Aided by a subsidy from the Mines Department, the claimholders were enabled to further prospect this new field, upon which £500 had been spent to the end of the year. The ground is shallow. Prospecting operations continue to be conducted.

Preservation Inlet.

Gulche's Head-sluicing Claim.— This claim was tested during the year with a small water-supply gathered from the gullies in the immediate neighbourhood. It is claimed that the test proved that the deposit would be payable if treated with a large body of water. An attempt is now being made to raise sufficient capital to undertake the gigantic work of bringing in the necessary water-supply.

GOLD-DREDGING.

In connection with this branch of the mining industry, I have to report that the usual number of visits were made to the dredges at work in this district.

The means adopted by the Mines Department in order to have the regulations complied with, in the interests of life and property, have proved satisfactory. Generally speaking, the regulations are duly complied with.

Among improvements effected during the year may be mentioned the installation of electrical power on the Earnscleugh Gold-dredging Company's No. 5 dredge, and the introduction of a shaking-box to replace the revolving-screen on the Golden Gem dredge, Miller's Flat.

Dredge-pontoons are generally built with hardwood and kauri timber. It was reasonably expected that the kauri planking would last a great length of time, but in many dredges some inferior planks were inserted and these have taken dry-rot. I have examined the pontoons, and remedies have been adopted where necessary.

Calico copies illustrating Professor Schaefer's method of rendering first aid to the apparently drowned, published by direction of the Hon. the Minister of Mines, have been distributed to the dredges and have been greatly appreciated by the dredgemen.

The opinion is largely held that the dredging industry is in a decadent stage, and it must be admitted that the day of the small and moderate-power dredge is fast drawing to a close. On the other hand, the operations of the Earnsclough, Rise and Shine, and Rising Sun dredges prove what may be done on low-grade gravels with machines of suitable power.

Throughout the year 1908 there were sixty-three dredges in active operation in Otago and forty-nine in Southland. This shows a decrease of nine working dredges in Otago and three in Southland.

A number of dredges were standing idle, and a few were totally dismantled.

ACCIDENTS.

HYDRAULIC AND ALLUVIAL MINES.

Fatal.

8/8/08: Joseph Tognazzini and James Lindsay, labourers, were accidentally killed by an explosion of gelignite while working on the Muddy Terrace water-race construction at Waikaia. Lindsay attempted to withdraw the remains of an unexploded charge with his pick.

8/12/08: Percy Valpy, a partner in Valpy Bros.' sluicing claim, Glenorchy, was caught by a land-slip and partially buried while working in the tail-race. A slip due to heavy rains the previous night came off the hillside into the tail-race. Valpy died before he was extricated.