

CHARLESTON AND ADDISON'S FLAT.

At Charleston the miners have not had a constant supply of water, and the ground is becoming very poor, so that any loss of time in waiting for water becomes a serious matter to them. There is a large area of cemented sand, containing a little gold, but this sand requires to be pounded up before the gold can be got out of it by sluicing. One or two parties have erected crushing-batteries to treat this cement, and, as far as can be ascertained, they are making good wages. All the available water in the district is taken up and conserved in dams and reservoirs, and a survey has recently been made by the County Council of a water-race from the Four Mile Creek, to bring an additional supply on the field. At Croninville there are a few good claims, but the scarcity of water does not allow them to be worked to advantage.

At Addison's Flat there are several very good claims; some of them have been worked for many years, and have given good returns. There is a large extent of auriferous ground in this locality, with a great depth of gravel-wash; some of which contains little or no gold until the bottom layer is reached. In the early days of the field some of the richest portions then known were driven out, but where the ground was deep there was always water to contend with. A large quantity of gold was taken from the Shamrock lead, but as it got into deep ground the water became too much to overcome. At the time this lead was worked a party constructed about three miles of a tunnel tail-race, but the levels not being correctly taken, it was found, after being completed, that it was not constructed at a deep enough level to be of any use to drain the ground. This tail-race has been abandoned for many years. Some of the claims are worked on the flat by having tail-races which are both used for drainage and for sluicing into, the stones and tailings being lifted up on an inclined tramway by a water-balance and stacked in the worked out-ground. The large areas of ground worked and still being worked on this principle show that this is a flat which would support a large population if a good supply of water could be brought on to the field. There are two claims worked on the hydraulic-elevating principle—namely, the Fair Maid and Gladstone and Mace and Bassett's. A large amount of money has been expended in bringing in a water-supply and putting plant on the ground. The Fair Maid and Gladstone Company have brought in an additional supply of water, so that the sluicing operations can now be steadily carried on. The scarcity of sufficient water has been a great drawback to this company, as sluicing could not be continuously carried on, some of the ground being poor, and had to be sluiced away, in order to get a gut into richer ground. All this comparatively dead work told against the company when the receipts for the value of gold obtained were placed against the expenditure. Next year this company expects to make good profits by steadily working the ground. The hydraulic elevator and whole plant is one of the best in the colony. At first some trouble was caused by the constant breakage of the cast-iron liners at the bottom of the elevating-pipe, but lately the company have been using cast-steel liners, which is a great improvement on the iron ones, and gives no trouble. Their gold-saving tables are the best in the colony for recovering the fine gold, and they are known by the name of "Guthrie's patent." Tables of this description are required for saving the fine gold on the dredges, and, if they were used at many of the sluicing claims in Otago, it would be found that the extra quantity of gold saved would soon recoup their cost. The tables used at the Fair Maid and Gladstone Company Claim have a surface-area of about 1,440 square feet.

Mace and Bassett have now been working their claim for about three years, and are satisfied with the returns. They have gone to considerable expense in constructing dams, a main line of supply pipes, 20in. in diameter and 7,000ft. in length, giving a head of water at the claim of about 75ft. Recently they have suspended operations, and are shifting the hydraulic elevator further ahead, the distance of running the material to the elevator being too great for the fall. They have recently had a survey and levels taken, with the view of bringing in another supply of water, so that they can work two elevators, which is likely to be undertaken during the ensuing year.

KUMARA DISTRICT.

This is the largest hydraulic-sluicing field in the colony, and one that is likely to continue to give payable returns for working for the next twenty years, even although no fresh discoveries are made. No doubt the lead will yet be traced to the south-east of Larrikins' Flat, on the terrace between the Kapitea Creek and Larrikins, and to the north-westward towards the sea-beach, and it is possible that gold will be traced through the township. Indeed, there are payable claims now opened out below the township, within the borough boundary. A claim known as McIlveney and party has recently been opened out alongside the zigzag leading to the Teremakau bridge. This party has only had twenty-four three-hour shifts of ten heads of water, they washed up at the time of my visit and obtained 25oz. gold, which must be considered extremely good, seeing that the claim is only being opened out. The depth of ground is about 25ft., but they are working on a false bottom. Another claim, known as Kellar and party, have been working for about two years, and their Christmas washing paid them about £5 per week each; but the run of gold this party has been working on has nearly run out, and they will have to do some prospecting before they get payable returns again. Arnerich and party have opened out a claim lower down than Kellar and party's claim, but so far the returns have not proved payable. Still lower down the terrace facing the Teremakau River there is a special claim of 50 acres held by Pearn and others. Working has been carried on in this claim for about four months, but so far the returns have not given the men wages. The ground, however, has been very regular as regards the quantity of gold. The average earnings of the men being about £2 6s. per week. The last three mentioned claims are using undercurrents constructed on the American principle, which saves a good deal of gold.

The workings on Nardoo Flat continue to progress favourably. There are four claims in this locality, and from the manner in which the workings are carried on one would expect payable returns. There are three claims alongside the main road between Kumara and Dillmanstown which are giving very good returns, and will last for the next fifteen years. The one most recently opened—viz., Stenard and party—was taken up in the early days of the field and abandoned