

in paid-up shares was given to the promoters, and £2,000 in cash. About £20,000 was spent on the works, and debentures were issued for £4,565; and all that was got for this expenditure was the £600—the price given by the present company for the property. It is to be deplored that English capitalists who embark money in mining ventures in the colony are led astray by men making representations which cannot be borne out. Even the gentleman this Red Hill Company sent out from England, who was represented to be a Fellow of the Chemical Society, and at one time an Instructor in the Royal School of Mines, London, reported to the company that they had a mine of undoubted value. This shows clearly that, notwithstanding this gentleman's high scientific attainments, he lacked the practical knowledge of the value of mining property.

The present company hold the whole of the water-rights from the Parapara River, and therefore will always have a good supply of water to carry on hydraulic-sluicing operations. It is only with a good supply of water that this ground can be made to pay. Although there are some runs or leads of gold going through their ground, they have found that a great deal of barren ground will also require to be washed away. At present prospecting work is suspended, owing to the shareholders who are finding the working capital being dissatisfied with the arrangements they entered into with the vendors; however, this has now been satisfactorily adjusted, and water will be brought on to the ground.

#### WEST COAST.

#### WESTPORT DISTRICT.

#### *Charleston.*

In the early days of this field a number of machines were used to crush the auriferous cement found in the different leads of gold-bearing sand in this locality. Some of the proprietors of these crushing-machines did extremely well; but for many years this system of working the ground has been abandoned for hydraulic-sluicing. A large portion of the field has been worked by the latter system, but the known auriferous leads that can be profitably worked on the sluicing system are becoming daily less, and the miners have again turned their attention to the working of the auriferous cement. In some places this cement is very hard and compact, and in other places it is merely found in blocks amongst the sand; but in no place on this field is there a large number of stones mixed with the cement. The whole of the auriferous leads in the vicinity of Charleston, and, it may be said, along the coast-line for a long distance each way, has been caused by the action of the sea. They are merely ancient ocean beaches, the land having gradually risen, and different leads were from time to time formed by the action of the waves on the beach, the light sand and material being carried away with the waves, and the heavier and denser material being left behind by a system of natural concentration on a gigantic scale. The large quantities of iron-sand concentrated by this action are so closely connected together that in some places it stands up like a hard sandstone-rock, in thin seams or bands, having a horizontal bedding. In other places the cement is soft and very easily broken up, but of too hard a nature for the particles of sand of which it is composed to be thoroughly disintegrated by the action of water from a hydraulic nozzle. The result of this has been that there are a number of men who get their livelihood by simply putting wide tables in the bed of the river covered with blankets or cocoanut matting, and as the muddy water passes over some of the fine gold adheres to the blankets or matting. The particles of cement sent down the tail-races of the miners lies on the beaches of the river in places, and becomes disintegrated by the action of the atmosphere, and thereby liberates the particles of gold encased in the cement.

About two years ago the proprietors of the Dublin City Claim erected a crushing-machine to treat the cement, and, this having proved a success, there are now five other machines erected by other parties. The Dublin City proprietors have a battery of eight heads of stamps, which, they informed me, was capable of crushing about thirty loads of cement in the twenty-four hours. The stamp-mortars have a back and front delivery, and are fitted with gratings having about 190 holes to the square inch. The pulverised material is carried away in chutes from the gratings, and distributed over wide tables, the head of which is covered with copper-plates 4ft. long, and below this, the tables are 12ft. long, covered with blankets. This, together with a small rotary amalgamating barrel, completes the plant. The stamps are very light, not more than from 3cwt. to 4cwt. each. These are driven by an overshot water-wheel, 30ft. in diameter, using about half a sluice-head of water. All the plants on the field are similar in construction, and driven by overshot water-wheels. The following are the claims which have cement-crushing machines:—

Dublin City Claim	...	...	...	8 heads of stamps, 4 men in claim.
Hero	...	...	...	4 " " 3 " "
Try Again	...	...	...	5 " " 2 " "
Higgins and party	...	...	...	5 " " 3 " "
Birch and Sons	...	...	...	4 " " 3 " "
Fox's Claim	...	...	...	4 " " 1 " "
Connelly and Dwyer	...	...	...	4 " " 3 " "

With the exception of the Dublin City, the rest of the claims have only commenced operations, so that at the time of my visit very little was known as to the results of working the cement. There is no doubt if the cement is found to be payable for working, a large number of cement-crushing machines will be used, as the auriferous cement deposits cover large areas. There is also a very large deposit of this cement at Brown's Terrace, on the opposite side of the Nile River from the Back Lead, and this is said to be very rich; and it is stated that a company has been formed in Christchurch to work a portion of the ground on this terrace.

Weir Brothers, who erected a hydraulic elevating-plant to work the tailings in Ballarat Creek several years ago, are still carrying on their operations and getting well paid for their labours; and