

## No. 15.

Mr. Warden CAREW to the UNDER SECRETARY for GOLD FIELDS.

SIR,—

Warden's Office, Lawrence, 26th May, 1879.

I have the honor to forward the usual statistical returns with this, the annual report of the progress and condition of the Tuapeka Gold Field, for the year ending 31st March, 1879.

*Mining.*—There has been considerable excitement during the year in mining circles, arising from the realization of expectations long held that the Blue Spur was not the only payable auriferous deposit of its kind in the district. For several years past it has been well known to miners that at Wetherstone's, and at Waitahuna, there were extensive basin deposits of the peculiar blue cemented drift from which the now famous Blue Spur derives its name. So early in the history of this gold field as the year 1864, a shaft was sunk in the Wetherstone's basin, by a prospecting party in the pay of the Provincial Government, to a depth of about 430 feet. Gold was found in this shaft at several depths, but at the lowest level attained the prospect was less encouraging than at higher levels, and, after a tunnel had been driven about 30 feet without greater success, the shaft was abandoned. From time to time small parties of miners have prospected in the same basin, but with small encouragement, until about twelve months ago Messrs. Gascoigne and Brown obtained promising prospects, and by energetic prospecting commenced to develop the auriferous value of the ground, and up to the present time with marked success and a promising future. The earliest success of this party was the signal for a rush, and within a short period no less than thirty-seven applications for mining leases were lodged for an area of 270 acres, covering the whole basin of cement so far as it is known to extend. The prospectors, Gascoigne and Brown, promoted the Wetherstone's Cement Company (Limited), under "The Companies Act, 1872," which has acquired their leasehold, erected a first-class ten-stamp crushing battery, with all the latest improvements, and has already had four crushings, with a result of about 765 oz. of gold. Two other companies have been formed and registered, energetic prospecting has been prosecuted in several claims, and in some cases most satisfactory prospects have been obtained. The Premier and Tuapeka Companies have both arranged for the erection of ten-stamp batteries, and a small battery is to be made that will be easily movable from claim to claim, to test the value of the ground in other leaseholds before expensive permanent machinery is put up. The Wetherstone's discovery is a valuable one, but the extent of its importance cannot yet be estimated; the Blue Spur claims had been worked for ten or twelve years before any fair estimate was formed of their value, and so it must be with the Wetherstone's claims; their real value will take a long time to develop, but the experience gained at the Spur will be a valuable guide and assistance, and tend to expedite the work and to realize the maximum of profit.

Near to the head of old Waitahuna Gully is a cement deposit, similar to those at the Blue Spur and Wetherstone's, and it has attracted almost as much attention as the last named. Some miners had been sluicing there for some time with paying results, although, from the hard nature of the deposit, sluicing is a very imperfect mode of extracting the gold. A few months ago a rush set in to the ground, and twenty-two applications were lodged for mining leases covering an area of 202 acres over the basin. Excellent prospects have been obtained, and three batteries of stamps, in all twenty-five head, are in course of erection, one being now nearly complete. In a few months the old gully, one of the oldest goldworkings in Otago, will again be a busy place, and success seems assured.

A company has been organized to rework old Gabriel's Gully, the place where Gabriel Reid discovered the precious metal that has done so much to advance this Island. The gully is now filled up with tailings from the Blue Spur workings, which have raised the bed of the gully at one part 60 to 80 feet above the natural surface. The whole of this immense deposit contains gold, small in quantity per cubic yard; but it is believed to be sufficient to yield a profit with skilful working, and it is well known that buried under the tailings are large blocks of ground left undisturbed by miners in the early days of the gold field that will now pay handsomely. The company holds a special claim of fifteen acres, and I trust when I next report it will be in full and profitable work, as it will afford employment to a large number of men.

The Blue Spur continues to be worked with the usual success. There are nine claims in work—two by sluicing, the other seven by crushing. There are seven batteries employed at crushing—three of twenty, two of fifteen, one of ten, and one of five stamps, or 105 heads in all. The machinery employed is of the best description for the purpose; it is all driven by water power, is kept going night and day, and each head of stamps is estimated to crush from eight to ten tons per diem. This is five or six times the average for quartz: but this is explained by the fact that the gratings used for quartz must be fine, from 90 to 150 per square inch, while for cement four to eight holes to the inch is sufficient, and consequently as the holes are large the stuff from the boxes can escape rapidly.

The yield from the Waipori division of the district has fallen off considerably, and the number of miners there is much reduced. This is principally due to the inclemency of the last winter, which told with great severity in that almost alpine region, and for several months prevented miners there from following their usual occupations. There is known to be a large extent of auriferous land at Waipori, and, although the yield generally is not large, I believe the prospects of that division of my district will again revive.

Quartz-mining is not yet a decided success in this district, although some good patches of gold have been occasionally found. The old reef at Waipori is still being worked, but not with much success. A party of Chinese opened a new reef there, and have obtained a mining lease, with the view of working it. A new reef has been lately discovered between Gabriels and Wetherstone's, and is now being prospected, as also is one at Waitahuna.

*Population.*—The average number of European miners employed during the year was 400, and of Chinese 430. This is a small decrease of Europeans from my estimate for the previous year, principally from the Waipori division; but the cement workings are now creating a demand for men, and the number will quickly increase. The decrease of Chinese is about 220, but the number now here is quite sufficient, for much of the old workings, to which they generally confine their attention, is now exhausted.