

expenditure they have been to last year, in the purchase and alterations in their crushing-plant, have for a time put a damper on the prospects of the company. The chairman of directors, at the annual meeting on the 29th December last, spoke very hopefully of the state of the mine. In a block of ground that had been opened up the ore was of a white, open formation, and it was a question whether this was worth saving. He tested this ore by assay, and found it to have a value of £26 18s. 6d. per ton, made up largely of silver. The cost of carting the quartz to the battery was from 3s. to 4s. per ton, but a tramway could be constructed for about £400, which would reduce the transit of the quartz from the mine to about 1s. per ton.

The five heads of stamps referred to in my last report as being erected, and used instead of a rock-breaker, was not a success. When the ore was soft, and well broken up, the five heads of stamps could break up far more of the ore than the ten-heads battery could crush, and when the quartz was hard, and in large pieces, the five heads could not break it fast enough, consequently the five-heads used instead of a rock-breaker has been removed, and the ore is now hand-fed into the crushing-battery. The plant is similar to that which was erected at Waihi for wet crushing, but the company have found that they cannot save a sufficient proportion of their bullion by this process, and are now using the Cassel process by converting the tanks that were formerly used as settling tanks into vats for leaching the ore. Judging by their construction, and *modus operandi*, they will not get a large percentage of the bullion by this process. They were treating the tailings at the time of my visit; the crushing operations being suspended for a time.

During the year ending December last, they got 493ozs. of gold, representing a value of £1,107 4s.; but their expenditure was,—

	£	s.	d.	£	s.	d.
For wages of workmen employed in mine ...	...	...	...	515	9	0
For wages of workmen employed in battery ...	...	...	...	269	3	10
For carting and freight... ..	...	...	...	157	4	4
Mine requisites, and survey, &c. ...	...	...	...	77	7	9
<b>Total</b> ... ..	...	...	...	<b>1,019</b>	<b>4</b>	<b>11</b>
Erection of battery ... ..	501	19	8			
Battery requisites ... ..	533	3	2			
Battery foundry-work ... ..	449	4	3			
Insurance ... ..	16	10	8			
				<b>1,500</b>	<b>17</b>	<b>9</b>
Water-race and dam ... ..				390	1	7
Constructing low-level adit ... ..				270	0	9
Office expenses, &c., ... ..				84	8	0
Directors' fees and travelling-expenses ...				133	0	0
<b>Making a total of</b> ... ..				<b>£3,397</b>	<b>13</b>	<b>0</b>

This shows a deficiency of £2,290 9s. on the year's transactions; but if the first four items and the last two be only taken—namely, £1,236 12s. 11d., it would only show an actual deficiency on the working for the twelve months of £129 8s. 11d. During the year ending the 31st March last, 800 tons of ore was crushed, which yielded 500oz. of gold. The average number of men employed during the year being twelve.

#### *Tui Creek.*

A considerable amount of work has been done at Tui Creek in opening out the Champion Mine, but it appears the refractory class of ore met with does not hold out sufficient inducement to the prospectors to erect a plant to treat the ore; indeed, they are at their wit's end to know the description of plant that would treat the ore most successfully and economically. When the Te Aroha Gold and Silver Company erected their plant at Waiorongomai, it was thought that a new era had dawned, and that it would deal successfully with the class of ore from the Champion Mine. The Champion Company, on the strength of this, constructed an aerial tramway from their mine to the flat, and sent down some 35 tons of ore to get treated at Waiorongomai; but it was found that the plant there was only capable of extracting about 30 per cent. of the value of the bullion, and therefore no further trials were made. Some small parcels were treated by the Crown Company, who extracted a fair percentage of the bullion by the cyanogen process, but the plant being erected in an inaccessible place, and the company not being prepared to treat ores in quantity for the public, nothing has been done beyond doing a little work now and again in the mine for the purpose of preventing a forfeiture of the claim from taking place.

The chairman of the company, Mr. J. B. Montgomerie, London, has, in conjunction with Mr. Parks, been experimenting with the view of perfecting a process to treat it successfully, but nothing has yet come of it. In the directors' report at the annual meeting of the company in London, over twelve months ago, the following paragraph occurs: "The chairman, who has devoted much time and attention to the subject of treating the ore, is confident that the process has now been thoroughly developed, and that it will considerably cheapen the cost of treatment, and satisfactorily deal with the company's ore. Designs and estimates for a suitable plant have been prepared, and the directors are now considering the best means of obtaining the necessary capital for erecting the same, which they hope to submit to the shareholders at an early date." This report was submitted to the shareholders on the 29th January, 1892, but nothing further has been heard about this process. Their balance-sheet up to the 31st August, 1891, shows that the capital is nominally £75,000, of which £43,000 has been given to vendors in fully paid-up shares as part payment for the property; 13,323 shares have been issued, and £10,826 5s. paid upon them. The purchase of the mine was £45,000; cost of additional land as a machine-site, and purchase of May Bell Claim, £167 9s.; amount expended in mining and general outlay, including London office expenses, up to the 31st August,