engine, and, judging from the manner the battery was working, the company will be fortunate to get 50 per cent. of the gold the quartz contains. It is said that the pyrites, of which there is a considerable quantity in the stone, contains a good deal of gold. There is, however, no appliance for saving the pyrites. Since the company have commenced crushing they have got about 700oz. of gold, representing a value of about £2,700. They were employing at the time of my visit about thirteen men.

Victoria Company.—This company's ground adjoins the southern boundary of the Crœsus. The reef or lode is running about 5 chains to the southward of the Crœsus line, and has a north-westerly and south-easterly direction, and seems likely to join the Crœsus line in the Blue Slate Company's claim. The ground has been stoped out for 130ft. in length, and to a depth of 40ft. on one end and 54ft. on the other, and there is about 400 tons of stone on the surface ready to send to the crushing-battery, which is now in course of erection. The lode varies considerably in size, from 6in. to 2ft., consisting of similar crystalline quartz to that in the Crœsus lode, and contains a good percentage of iron-pyrites, the joints and seams in the stone being coated with oxide of iron and manganese. A trial-crushing of 2 tons was taken from the cap of the reef, which went nearly 3oz. to the ton; but, judging from the appearance of the stone on the surface, the bulk crushing will fall far short of this yield. The company are sinking a new shaft, and erecting a horse-whim to wind the quartz from the mine. They hold an area of 60 acres, and have ten men employed. The mining-timber for this district comes from Waikouaiti, and costs delivered on the ground £10 per 100 pieces of manuka, 6ft. 6in. long and from 6in. to 7in. in thickness, while laths cost £3 10s. per 100.

Blue Slate Company.—This company is held by a few individuals. The registered capital is £12,000; but £9,000 of this amount is declared paid, so that the available capital is £3,000. A considerable amount of work has been done in this ground, which is 30 acres in extent. At the time of my visit there were twenty men employed in sinking a main shaft and in stoping out quartz. The lode they are working on is the same line of reef that goes through the Crœsus ground; but they expect to cut the junction of the Victoria and Crœsus reefs in their ground. They were working the reefs from two shafts at a depth of about 45ft., and have about 120 tons of stone on the surface ready to send to their crushing-plant. The lode varies in size from 4ft. wide to 2in. In places it almost pinches out, leaving nothing but a thin seam of pug to mark the division between the hanging- and foot-wall. On the 45ft. level the lode is very small, and the indications show that it will either cut out as they go down, or occur here and there in bunches. There is, however, too little work yet done to form a decided opinion respecting it.

This company have erected one of the Huntingdon centrifugal roller-mills 5ft. in diameter, having a stone-breaker and Challenge ore-feeder attached, at the side of Deighton Creek, about 60 chains from their claim. These are worked by a steam-engine. The gold is to be collected on copper plates and in quicksilver-wells, and finally the material is to pass over blanket-tables; but there is no appliance to collect the pyrites that the ore contains. This mill is estimated to crush about from 18 to 20 tons of stone in the twenty-four hours. Mr. Kitchener, the manager and part proprietor, informed me that the whole cost of the crushing-plant and opening out the mine at the time of my visit was not over £2,000.

The engine employed to drive the mill is one of Park and Lacey's—of San Francisco—horizontal high-pressure engines, and certainly one of the cheapest-got-up engines that can be manufactured. It has a 10in. cylinder and 16in. stroke, and is to run at a speed of 140 revolutions per minute, which the manufacturers estimate will give thirty-five-horse power. The cost of coal on this field will be considerable, and the question of "penny-wise and pound-foolish" enters largely into the class of engine to be worked with the greatest economy. No doubt a compound condensing-engine would cost more in the first instance, but it would save it itself in a few months. This class of engine would not consume more than one-half of the fuel required to supply steam for a high-pressure engine.

On my second visit to this company's reduction-works in March last, the mill was being kept steadily at work. The pulverised material from the mill has to pass through a No. 10 slot screen, which is equal to about 1,400 holes to the square inch. Judging from the muddy water that passes over the quicksilver-tables, it is impossible that this company can save a fair percentage of the gold in the quartz. The fine gold will be carried away in slimes into the creek.

Break of Day Company.—This company holds an area of 90 acres, which includes three licensed holdings, known by the names of the Close of Day, Break of Day, and the Jubilee. There was no work being done on this ground at the time of visit. A trial-crushing was taken from the cap of the reef, which gave 6oz. 6dwt. per ton; but there is not much work done to prove the payable character of the lode. It is the same line of reef that the Victoria Company is working on, and similar in size, and lies to the eastward of that company's ground.

Zealandia Company.—This company is working on two lines of reef further south than the Victoria line. They have three winzes down on the lode, the main one being 62ft. in depth. The reef varies in thickness from 1ft. to 2ft., and a little gold can be seen in the stone. There were eight men employed in opening out the ground, and getting stone ready for crushing as soon as the public crushing-battery is erected. They had a trial-crushing of 2 tons, which went 2oz. to the ton.

This public battery is being erected at the side of Deighton Creek, and consists of two rock-breakers, with Challenge ore-feeders, and two Huntingdon centrifugal roller-mills 5ft. in diameter, which are proposed to be worked by a fifty-horse-power high-pressure engine. This plant and engine was purchased some time ago; but since the arrival of Mr. Peterson, who came over from San Francisco with a plant for the Consolidated Company, and has been appointed consulting engineer for this company, they are trying to dispose of this engine, and get either one or two compound condensing-engines; and, instead of having their two mills at one place, it is deemed more suitable and convenient for the claimholders to have each mill erected separately in different places. Of course,