

Clutha River.

Golden Gate Company.—This company was formed recently for the purpose of building a large and powerful dredge immediately adjoining and just below the Island Block Company's Claim. The dredge, which will be fitted with all the newest appliances, is expected to commence working about the end of September; and it is intended to make an endeavour to pick up the run of gold on the Government reserve, about 10 chains, on the bank of the river, at the north-west end of the Island Block Company's Claim, which was at one time worked by the latter company.

The Golden Run Dredge.—This is the first dredge to be seen on the Clutha above the Island Block Sluicing Claim. At the time of my previous visit the dredge was working close to the high bank on the west side of the river, where it was said to be remarkably rich, but dangerous to work in consequence of the dredging causing large landslips, one of which, at about that time, had nearly buried the dredge. In order to continue operations with safety under the river-bank on this side, a head-race was constructed from a small stream, distant a mile and a half, at a cost of about £150, and a Giant nozzle and pipes were procured at a cost of another £150. When there was sufficient water available the bank of the river, 27ft. high, was sluiced off to the water-level to the extent of about an acre and a half, and this is now ready for the dredge to operate on. When the acre and a half is dredged the value of the ground will be known, and, if payable, another strip of 75 links wide—to the Clutha Road—by about 10 chains or more in length can be sluiced off. This strip would probably be the outside limit of payable ground. The dredge is, at the present time, working on ground in the stream previously worked by another small dredge, and it is paying very well; in fact, it is said to be paying this dredge much better than it did the one that went over the ground first. The first dredge did not reach the bottom of the gold-bearing wash, and consequently left some of the best ground undisturbed. The present dredge reaches the fine white quartz-wash which forms the bottom in many places—no gold has yet been found in paying quantity below it—it forms a floor on the same level as the "pipeclay" bottom. The depth now being dredged is from 21ft. to 25ft., from which level the white wash is brought up. It is a splendid bottom to dredge on, and there should be no gold left behind if proper care be taken by those in charge of the shift. The claim is said to extend upward for a distance of 15 chains above the block now stripped, all of which is supposed to be very good ground; in fact, some of it is known to be very rich. The sluice-boxes have a fall of 1 in 8, and are fitted with perforated plates above the bottom, with $\frac{1}{4}$ in. holes 1in. apart; under the plates is plush, covered with fine wire netting of $\frac{1}{2}$ in. mesh, for a length of 20ft. Following the plates there are 8ft. of angle-iron ripples, under these is plush. Following this there are 12ft. of perforated plates having cocoanut-matting underneath, and below this is calico lying on the bottom of the box. Notwithstanding all this care to save the gold some fine gold is still found at the tail-end of the sluice-boxes. It is said the eye can easily detect a difference in three samples of gold, when kept apart, from each separate kind of ripple or saving appliance in use here. The quantity dredged per shift of eight hours is estimated roughly at 250 tons. The quantity of coal consumed each twenty-four hours is about a ton, or a little over 300 tons per annum, and costs 16s. 6d. per ton at the dredge. The engine is 14-horse power nominal, was made by Anderson and Son, of Christchurch, and is considered by the manager in charge to be first class. The sluicing-water is lifted by a centrifugal pump, and about two heads are used. A tailings-elevator, capable of stacking the tailings 15ft. above the level of the water, is now on the ground, and will be fixed on the dredge at an early date. When the dredge was working near the high bank she could not reach the bottom in consequence of the tailings coming back on her; the elevator will obviate this. The elevator is a new thing as applied to dredges, and was first designed by Cutten Brothers, civil engineers, of Dunedin. The only one yet working is on a dredge at Alexandra, where it is admitted by all dredge-owners to be a great success. The elevator for the Golden Run was designed by Mr. Roberts, civil engineer, Dunedin. The Golden Run Company was formed about three years ago with a capital of £3,000, of which £1,000 was given to the promoters in paid-up shares, and 19s. per share has been paid up on the remaining 2,000 shares. The company, since the commencement of dredging operations, have paid off their liabilities, and declared £1 6s. 6d. per share in dividends.

Bennett and Party's Excelsior Dredge.—This is the second above the Golden Run, and is working opposite Mr. Steele's farm. It was at one time a current-wheeler, but is now being worked by a compound engine of 6-horse power nominal, and is capable of doing much more work than at present. It dredges from 24ft. to 26ft.; the bottom is clay, sand, and rock, and very patchy. The depth across the river varies very much, from 12ft. to 26ft.; but the value of the ground is much alike from side to side of the stream. The dredge is said to lift about 30 tons of gravel per hour, or 240 tons each eight-hours' shift. It is kept going continuously by having three eight-hour shifts. The sluicing-water is lifted by a number of 5-gallon buckets fixed to the rim of a wheel at the side of the dredge, and is capable of lifting more than is required. The sluice-boxes have a fall of 2ft. 6in. to the 12ft., and are 2ft. 6in. wide. They are provided with perforated plates, having $\frac{1}{4}$ in. tapered holes, under which plush is laid for a length of 7ft. The top 3ft. of the plush is said to catch nearly all the gold. Under the top sluice-box, and running parallel with it, is a second box of the same width, and at probably 40in. lower level, to catch the droppings from the buckets, generally called a "catch all." In this box is placed cocoanut-matting, but the gold here saved forms a very small proportion of the total obtained. The claim is likely to last for many years, and the men are pleased with their earnings. The consumption of coal is estimated at 80 tons per annum. The dredge at the present time is working close to the perpendicular bank, 23ft. high, on the west side of the river.

Pringle and Party's Dredge is on the adjoining claim to the Golden Run, and is working a little above it on the opposite side of the stream. This dredge is very similar in size, &c., to the Excelsior; the engine is by the same maker, and is of equal horse-power; it is capable of lifting the same quantity of gravel, and dredges to the same depth, and is worked for twenty-four hours by two men on each shift, and it is said to consume about 80 tons per annum. On the western boundary