

CLYDE AND ALEXANDRA.

Dredging.

Dredging still constitutes the chief form of mining in this part of the district. There are a few claims worked by means of hydraulic sluicing, and a fair number of men are apparently profitably employed in the surrounding gullies and terraces. Year by year, however, they are slowly but surely diminishing in number. This is to be accounted for by the decreasing area of available land, and in some measure to the fact that the old pioneer miner is dying out, and the younger men seem disinclined to follow the precarious occupation of their fathers. Dredging affords by its greater certainty of steady income a much more attractive occupation to the younger generation, who prefer a regular wage to the uncertain result of striking out on their own account.

I think, however, that alluvial mining will continue to exist for many years. There are terraces and gullies yet unworked which will as time goes on yield profitable employment to miners. This applies more particularly to a large stretch of country on the Galloway side of the Manuherikia River, where at the present time it is very difficult to obtain sufficient water for cradling purposes. It is hoped that the water-race now nearly completed by the Alexandra Bonanza Company will supply a long-felt want. The race under construction, assisted by the reservoir proposed to be formed, will bring in at least forty heads of water, and, as it is possible the company may not at all times require the whole of it in its sluicing operations, a few heads may be available for distribution at a reasonable rental. If so, I have no doubt that there is ground in the locality sufficient to profitably employ at least fifty men.

The Alexandra Bonanza Gold-dredging and Sluicing Company, which holds a large special claim in the Manuherikia Valley, a few miles above Alexandra, has during the past year been engaged in an enterprise of some magnitude. It is at present constructing the water-race previously alluded to, capable of carrying from forty to fifty sluice-heads of water. The race is about twenty miles in length, and is 8 ft. wide by 2½ ft. deep, and runs from a dam in the Greenland Swamp over a great portion of the Galloway Run to the terrace which it is intended to work. The dam at the head of the race will be very extensive, covering some 12,000 or 13,000 acres. The total cost of dam and race will be about £12,000. The race is now nearing completion, but it will be some months yet before the dam is ready. As soon as water is available it is the intention of the company to vigorously push on operations on the claim. At Tucker Hill, near Alexandra, Rivers and party have been successfully carrying on operations on their claim. This claim has been in existence for some years, and is worked by means of a water-race some ten miles in length, heading from the locality of Mount Campbell.

The unusually high level of the Clutha River for a lengthened period has here, as in other portions of the district, operated to the detriment of the dredging industry. The present condition of the river is generally regarded as abnormal; but the fact is dredging in the gorges has only recently been attempted, and in consequence the rise and fall of the river is more closely watched now than formerly. Closer observation in the past would probably have disclosed the fact that the present state of the river is only a repetition of what has frequently happened before, and a recurrence of which must always be regarded as a not unlikely contingency.

Apart, however, from the condition of the river, a very serious obstacle, in my opinion, to gorge-dredging was caused by defects in the dredges themselves. In the hurry and bustle of the "boom," and the anxiety on the part of the shareholders to get a dredge on the claim, no sufficient effort was made to ascertain the depth of the ground to be dredged, in consequence of which there are several incapable dredges that cannot properly work the claims, no matter what condition the river is in.

Despite all the drawbacks and disappointments, there are many dredges doing remarkably well in this portion of the district. That part of the river which lies between Clyde and Alexandra has not been so adversely affected by the continuous high river as the narrower and more confined portions running through the gorges, and in this dredging has been more regularly carried on. The Perseverance and Earnsclough dredges, as well as those of the Enterprise, Manuherikia, Alexandra, Eureka, Molyneux Hydraulic, and Chicago Companies, have maintained fairly steady work through the year, with very satisfactory returns. Several new dredges began operations during the year; amongst others, the Dunstan Lead, between Clyde and Alexandra, a very large and complete dredge—the largest yet on the river. Among the gorge dredges the Monte Christo, near the Clyde end of the Cromwell Gorge, promises to be most successful. It started with some splendid returns, but after a few months' operations had to close down owing to the increasing river. Of the two remarkably fine dredges being constructed to work the Earnsclough Flat, the Fraser River dredge is lying incomplete, and all work has been abandoned. The company having called up all their capital, the property was sold by the mortgagee, and the purchaser has not so far done anything towards its completion, although from first to last some £18,000 has already been expended upon it. The Earnsclough No. 3, a very fine-looking and powerful dredge—to be worked by electricity—is still in process of construction; but the progress is slow, and it will be some months yet before work on the claim can be commenced. In the early part of last year the Golden Falls Company's dredge was completed and a trial made. This dredge was a reversion to the old-time current-wheel as the motive power. It was believed that with the improvements which years of experience had suggested, and with more powerful and efficient gear than formerly, this system could be made effective and thus save a large expenditure in working-expenses. The result has proved a disappointment, and it is unlikely that any new dredges will be built on this principle.

An entirely new kind of elevator for removing the tailings resulting from the working of the dredge has been introduced during the course of the year. It is the invention of Messrs. Payne and Peck, of Dunedin, and consists of a rapidly revolving apparatus against which the tailings are directed by means of a shoot. They are struck by the rapidly revolving beaters and flung to a considerable distance. This form of elevator has been applied to the Ngapara dredge, near Alex-