

constructed dredges were not built to dredge at a great depth, nor were they required to do so when they were first placed upon the river. But the bed of the river is getting gradually filled up with gravel, which is continually travelling down with the current; so that, the depth of drift at the present time to lift before getting at the best portion of the auriferous wash is fully 9ft. more than it was when dredging first commenced on the river.

Between the bridge crossing the Clutha River near the Beaumont and Coal Creek, at the head of the flat above Roxburgh, there are ten dredges worked by steam and one worked by a current-wheel, representing a value of about £25,000. Five of these dredges are owned by private individuals, and six of them by companies, and there are about sixty-five men continually employed on them. The following is a tabulated statement which gives some idea of the dredging results in this locality for the last year:—

Name of Company or Owner.	Locality at Work.	Quantity of Gold obtained Last Year.	Remarks.
Golden Run ...	Island Block ...	Oz. 999	...
Miller's Creek ...	Miller's Flat ...	698	...
Ettrick...	490	...
J. Dewar and party	...	Not known.	Small wages. 5oz. to 6oz. of gold a week.
Roxburgh ...	Roxburgh... ..	555	
Dunedin ...	Coal Creek ...	922	
Pringle and party	...	Not known.	Gives fair wages to the shareholders.
Bennett and party	Between Island	"	Paying very well.
Brazil and party ...	Block and head of Miller's Flat	"	Gives an average of £5 per week to each of the shareholders.
Aitken and party...	...	"	Paying small wages.

The Golden Run Company paid the shareholders, from the proceeds of five months' operations, dividends to the extent of 8s. per share, besides clearing off the whole of their liabilities. The Roxburgh Company have cleared off their liabilities, and paid a dividend of 1s per share.

Some of the dredges higher up the river have given good returns. Mr. Garde got something like 30oz. of gold per week from his steam- and current-wheel dredges, which leaves him a handsome profit for the capital he has invested. The pneumatic dredge which was erected below Alexandra, in the gorge of the Clutha, by a syndicate of Melbourne gentlemen, proved a failure, and they let it to a party of tributers, who shifted it higher up the river and succeeded in getting very good returns. It was thought that this dredge could be made to work amongst the boulders in the gorge where bucket-dredges could not be placed.

Spencer and party have purchased the steam-dredge formerly belonging to the Kawarau Big Beach Company, and removed it to their special river claim below Clyde, at a cost, it is said, of about £2,000. This is about one-half its original cost, and they are now commencing to work it.

Hyde and party purchased the dredge belonging to the Frankton Beach Company for £400, and removed it, at a cost of £200 for carriage, to the Clutha River at Clyde, where they were erecting it at the time of my visit, and expected to have it completed at a total cost of about £2,000. This party lowered the framing supporting the dredging tumbler, so as to have less top leverage, but they have destroyed to a great extent the space for gold-saving appliances; but this is held by a great many persons connected with dredges to be of only secondary importance. It seems to be a question of lifting the material and to rush it through, taking chance whether a large percentage of the gold is saved or not; and wherever this is done the auriferous gravel is lifted at the bow of the dredge and deposited again at the stern, with only a small percentage of the gold extracted from it. It is simply an impossibility to rush a great body of auriferous gravel through a narrow sluice with a large quantity of water, and save a fair percentage of the gold it contains; and this applies with greater force to the auriferous drifts found in river-beds, where the gravel and particles of gold have been rolled and knocked about together until the gold is in minute particles and in very thin flakes. It is the mistake that is made on all the dredges, that there is not sufficient washing-surface where the gold is in fine, minute particles. The material requires to go over the surface of the gold-saving appliances in a very thin film, having all the stones and shingle separated from the sand before the material is allowed to pass over the gold-saving tables.

Both Spencer and party and Hyde and party have got their dredges very cheaply, but it remains to be seen whether they will in future be worked with success. The failure of these dredges heretofore has been in their gold-saving appliances. They could lift large quantities of material, but only to deposit it again at the stern of the dredge with very little of the gold extracted. It is reported that Hyde and party, since commencing to work, have got about 20oz. of gold per week, which should give the shareholders good returns for the capital they have invested.

A great many are now turning their attention to dredging the beds of rivers, and the results of the dredging operations every year go to prove that this principle of working auriferous drifts will be used greatly in the future. Many of the defects of the early dredges have been remedied, and further improvements are being made every year; and, although the appliances are yet far from being perfect, dredging, as applied to gold-mining, is further advanced in New Zealand than in any other country in the world, and it is to be hoped that it will continue to maintain this prestige.