

various heaps were dealt with the total of the whole products divided by the number of cubic yards removed from the shaft would give the value per yard of the material through which the shaft was sunk. This would only give the average value of a very limited area of the claim; consequently, it would be necessary to sink further shafts in such places as would, from local indications, afford a reasonable chance of ascertaining the approximate quantity of gold that the claim would probably contain. When a shaft had been bottomed, the timber could be drawn, and the plant and material removed to a place where another prospecting-shaft was to be sunk.

If a party of men were employed in sinking in this way they would become used to the work, and be able to carry it on so that a prospecting-shaft could be completed at a much less cost than in the case of inexperienced parties of men undertaking the work for each claim. On the contents of the gravel taken from the different shafts being ascertained (and in this the utmost skill and care is required), it will be seen what quantity of material is available, and its value per yard. The dredging engineer should then be consulted as to whether the results given warrant that the gravels could be made to yield profit, and he could then determine what class of dredge would be most suitable.

The great areas of river deposit in the valleys and flats throughout the greater part of the auriferous districts in Otago and Southland that hitherto have not been explored, but which in many instances are known to contain small quantities of gold, are well worthy of being prospected in a systematic manner as above indicated. There is every reason to expect that the result of exploration would show many places to contain sufficient quantities of gold to afford remunerative employment to a large number of men in carrying on dredging-work. This is reasonably to be expected, as in the past the amount of gold required to make a payable prospect was so much more than what is now considered to be payable for dredging. Care, it is to be hoped, will be observed by those embarking in the dredging industry to profit by the hints above given as to prospecting before dredge-building is begun in the working of their claims.

One of the errors fallen into in quartz-mining, especially in the Auckland District during the late boom, consisted in the erection of very expensive machinery for treatment of the products before it was discovered whether quartz in payable quantities existed in the mines or not, and this should, if possible, be avoided. Ill-advised and precipitate action, such as has too often obtained, will tend to materially prejudice the prospects of the dredging industry, the more as it is the expressed intention of those interested to proceed with the construction of many new dredges. However, as before remarked, if due precautions are observed in the direction of securing knowledge of the prospects by preliminary work, the industry will be prosecuted on a sounder basis, and its expansion will necessarily tend to enhance the yield of gold from the alluvial deposits of the colony.

The following abstracts contain lists of claims in occupation for dredging purposes throughout Otago:—

ABSTRACT of LICENSES for SPECIAL CLAIMS and LICENSED HOLDINGS issued from the Wardens' Offices, and registered on or before the 31st March, 1898, in the Books of the Mining Registrar.

Date of License.	Area.	Locality.	Block.	Survey District.	Name of Claim.	Name of Registered Owner.
<i>Naseby.</i>						
6/8/96	A. 43 0 0	Hyde ..	VII., II.	Rock and Pillar	Hyde Dredging Co.	A. D. Silk.
13/10/96	R. 100 0 0	..	III.	Naseby ..	Hogburn Dredging Co. (steam-dredging)	The Naseby Dredging and Hydraulic Sluicing Co. (Ltd.).
29/9/96	P. 97 3 30	Naseby ..	I.	Maniototo	Guffie and Co. ..	Ditto.
29/9/96		Kyeburn River, Naseby	III.	Kyeburn ..	Kyeburn Junction Dredging Claim	Kyeburn Gold-dredging Co. (Ltd.).
29/9/96		Ditto ..	II.	" ..	Kyeburn Pioneer Dredging Co.	"
27/10/96		Kyeburn ..	"	" ..	Mount Ida Dredging Co.	Mount Ida Gold-dredging Co. (Ltd.).
27/10/96		" ..	II.	" ..	Naseby Dredging Co.	Mount Ida Gold-dredging Co. (Ltd.).
5/3/97		Cambrian, St. Bathans	I.	Swinburn	"	Black and Beattie.
5/3/97		Ditto ..	IV.	Blackstone ..	"	W. C. Pitches.
25/3/97		Naseby ..	I.	St. Bathans' Blackstone	"	Naseby Dredging and Hydraulic Sluicing Co. (Ltd.).
25/3/97		Enterprise Gully, Naseby	IV., VII.	Maniototo ..	"	James McLaren.
20/7/97		Kyeburn River, Naseby	III., XVIII.	" ..	"	Agnes Wilson.
20/7/97		Ditto ..	V.	Kyeburn ..	"	Archibald Leckie.
5/11/97		St. Bathans' ..	II.	St. Bathans' Blackstone	Hawkdun Dream Gold-dredging Co.	Patrick Hanrahan and Ulick Fahy.
21/1/98		Cambrian, St. Bathans	VIII.	"	New Arrival Gold-dredging Co.	John Beattie.
21/1/98		St. Bathans' ..	IV.	"	"	John Ewing.
21/1/98		St. Bathans' ..	I.	St. Bathans	"	"
<i>Cromwell.</i>						
13/10/94		Alberttown ..	IV.	Lower Wanaka	"	Andrew Hamilton.
16/7/96		Kawarau ..	I., II.	Cromwell ..	Electric	Roy and McGeorge.
6/4/96		" ..	I.	" ..	Electric No. 2	"
4/8/96		" ..	II.	Kawarau ..	"	Allan and Aitken.
20/8/96		" ..	I.	Cromwell ..	"	W. E. Lane.
1/10/96		Nevis River ..	III.	Nevis ..	"	Thomas Steel.
1/10/96		" ..	"	" ..	"	A. D. Silk.
1/10/96		Cromwell Brewery	I.	Cromwell	"	Hartley and Riley Beach Co.
1/10/96		" ..	VI.	Wakefield	"	"