(2.) DREDGE MINING.

This class of gold-mining is rapidly declining, only forty-five dredges being in commission during 1916, whereas in 1906 there were 167 active dredges. During the year five dredges ceased operations—viz., Red Jacks and Murray's Freehold on the West Coast, and Manuherikia, McGeorge's No. 1, and Earnseleugh No. 2, in Otago—in addition to which the Confidence at Lowburn and the Bruce at Glenore were dismantled.

The following table shows the result of dredge-mining operations in New Zealand during the past eleven years:—

Year.		Total Number of Dredges	Value of Production.	Average Production per	Dividend-paying Dredges owned by Registered Companies.		Number of Persons	
		working.	rodución.	Dredge.	Number.	Dividends.	employed.	
			£	£		£		
1906		167	505,199	$3{,}025$	66	103,722		
1907		128	419,634	3,278	65	89,707	1,150	
1908		123	373,818	3,039	47	75,800	1,013	
1909		111	327,676	2,952	37	56,788	893	
1910		104	315,237	3,031	35	51,918	838	
1911		93	297,900	3,203	31	45,318	775	
1912		87	257,333	2,958	28	38,841	694	
1913		74	195,848	2,646	11	18,750	621	
1914		64	191,112	2,986	16	23,080	491	
1915		52	164,605	3,165	21	26,333	427	
1916		45	125,317	2.785	10	9,915	392	

There appears to be a reasonable probability of a revival of dredging in the Hokitika district. Near Rimu, on the Hokitika River, favourable results have recently been attained after prospecting operations by means of three Mines Department Keystone placer drills, carried out by Mr. G. E. D. Seale, Government Drill Superintendent, for the Rimu Options (Limited), an Australian company. The area taken up by this company consists of thirteen special claims, containing about 1,200 acres, which has been divided into four dredging properties or subsidiary companies, as shown on the accompanying plan. This plan also shows the position of boreholes and estimated values given by Mr. Seale, for which, however, the Mines Department accepts no responsibility. The claims are situated on a buried channel of the Hokitika, commencing near Rimu Township and extending north-westward to the Hokitika–Ross Railway at Mahinapua Creek, near the ocean-beach, a distance of three miles and a half with an average width of about 50 chains. The whole of the buried channel is contained in this area. This channel has been several times referred to in the reports and maps of the Geological Survey Branch of the Mines Department as a probable locality for payable gravel; but owing to the presence of water and the difficulty of testing the somewhat "heavy" and, in places, "tight" gravel by the primitive methods formerly employed the lower portion of the channel has remained unprospected until the operations here referred to were undertaken. Government Keystone drilling has been carried out over 650 acres, upon those properties situated nearest the beach outlet to the channel

The group of claims known as Rimu Options No. 4, which are embraced in the property near the Rimu end of the channel and which contain about 550 acres, is now being prospected by Government drills for the Hokitika Syndicate (Limited), a recently formed London company.

Dredging operations commenced during April, 1917, by the Rimu No. 1 Dredging Company. The dredge "Glasgow," formerly in commission at Sandy Point, Otago, having been purchased, was refloated on the claim. This dredge has buckets of 7 cubic feet nominal capacity, with an estimated speed of ten buckets per minute. Owing to the heavy nature of the ground, this dredge has so far not proved at all suitable. The following are the published results of dredging to the time of this report going to the printer:—

Date of Clean-up, 1917.			Time worked.	Value of G	old o	
April 16 .		 	 1 week	158	18	0
April 23 .		 	 1 week	111	16	0
April 30 .		 	 1 week	70	4	0
May 9.		 	 1 week 2 days	70	10	0
May 18 .		 	 1 week 2 days	170	8	0
$\overline{ m June} \ 2$.		 	 2 weeks 1 day	183	5	0

These returns, averaging about 5d. per cubic yard, when compared with the results obtained by Keystone drilling, as shown upon the accompanying plan, are unsatisfactory. The ground worked so far is about 1 acre; it contains very large stones tightly cemented by oxide of iron.