

The average quantity exported for the twenty years 1895 to 1914 was 8,493 tons, and the average value £499,613. The following table gives particulars of the export for the last twelve years:—

Particulars of Kauri-gum exported from New Zealand from 1907 to 31st March, 1918, inclusive.

Country to which exported.	1907.		1908.		1909.		1910.		1911.		1912.	
	Tons.	£	Tons.	£	Tons.	£	Tons.	£	Tons.	£	Tons.	£
United States of America	5,171	381,566	2,855	215,291	5,127	375,126	4,149	263,375	3,514	209,216	3,894	232,566
United Kingdom	2,468	162,121	1,799	123,011	2,290	140,235	3,253	151,319	2,378	130,767	2,468	114,640
Germany ..	936	27,473	667	23,841	639	24,111	913	28,016	1,142	34,062	1,053	32,964
Canada ..	53	4,512	21	1,646	24	2,555	66	7,687	9	1,061	40	3,370
Australia ..	42	2,216	155	6,458	149	8,576	66	4,465	75	2,559	39	2,487
Belgium ..	21	821	22	1,572	17	1,770	29	1,899	78	3,990	123	5,088
France ..	9	918	10	875	1	85	19	1,656	75	5,774	37	3,037
Austria-Hungary	..	..	1	104	1	68	124	3,011	131	3,968	159	4,611
Russia ..	..	..	..	..	..	..	15	1,976	80	1,859	2	184
Netherlands ..	1	114	..	..	..	..	6	133	55	1,206	42	974
Sweden ..	7	147	..	..	2	172	30	720	35	803	35	952
Italy ..	..	..	..	..	..	..	23	779	15	417	15	410
Japan ..	..	..	..	..	..	..	..	..	..	25	1	22
Hong Kong ..	..	..	..	..	..	..	..	..	..	..	..	..
Argentina ..	..	..	..	..	..	..	..	8	..	..	..	..
Totals ..	8,708	579,888	5,530	372,798	8,250	552,698	8,693	465,044	7,587	395,707	7,908	401,305

Country to which exported.	1913.		1914.		1915.		1st January to 31st March, 1916.		1st April, 1916, to 31st March, 1917.		1st April, 1917, to 31st March, 1918.	
	Tons.	£	Tons.	£	Tons.	£	Tons.	£	Tons.	£	Tons.	£
United States of America	3,995	308,456	4,531	316,200	3,312	222,856	974	60,010	3,158	218,214	2,316	164,516
United Kingdom	3,390	187,547	3,335	148,370	1,172	48,585	336	13,548	1,484	68,378	363	13,982
Germany ..	833	27,880	373	21,193	..	..	..	..	..	..	..	..
Canada ..	62	4,618	70	2,114	56	4,550	118	8,972	133	7,718	1,929	124,271
Australia ..	80	3,933	19	1,720	9	594	5	314	29	1,982	18	1,577
Belgium ..	126	5,120	34	1,519	..	..	..	..	..	..	..	..
France ..	45	3,995	42	3,599	5	430	..	..	..	..	..	..
Austria-Hungary	112	2,617	14	329	..	..	..	..	..	..	..	..
Russia ..	53	1,725	3	225	21	2,118	..	..	50	3,440	..	..
Netherlands ..	60	2,495	8	664	..	..	..	..	..	..	..	..
Sweden ..	15	420	20	560	..	..	..	..	..	..	..	..
Italy ..	9	300	23	855	..	..	..	..	..	..	..	..
Japan ..	..	..	1	96	..	..	..	..	..	..	10	506
Hong Kong ..	..	..	..	..	..	..	..	..	8	539	..	..
Argentina ..	..	..	..	..	..	..	..	..	..	..	..	..
Totals ..	8,780	549,106	8,473	497,444	4,575	279,133	1,433	82,844	4,862	300,271	4,636	304,852

DR. MACLAURIN'S SALT VACUUM PROCESS FOR CLEANING KAURI-GUM.

Much attention has been given during the year to Dr. Maclaurin's process of cleaning the low-grade gums. After successful laboratory tests a miniature plant with a capacity for treating half a hundredweight at a time was first constructed, and satisfactory results were obtained. I was then authorized to test the process on a commercial scale, and a plant which would deal with half a ton in a charge was installed at the Government Gum-store in Auckland.

The process is known as the "vacuum salt process." The *modus operandi* is briefly as follows: The gum is introduced into a cone-shaped tank together with a strong solution of common salt. The contents of the tank are agitated by appropriate means and the air pumped out. On stopping the agitation the gum rises to the surface of the salt solution and the dirt sinks to the bottom. The dirt and gum are now easily separated by allowing the lower portion of the solution with the dirt in suspension to run off through a valve at the bottom of the cone into a tank, and afterwards allowing the upper portion of the solution carrying the gum to run off into a second tank. The solution carrying the dirt and that carrying the gum are filtered separately to recover the salt solution, which is used in subsequent operations. The gum is finally well washed in such a way as to remove all trace of salt, and is then dried.

The trials made proved very satisfactory, and the results obtained on the large scale were almost equally as good as those obtained in the laboratory. Much of the low grades of gum which come into Auckland from the gumfields contain anything from 25 to 50 per cent. of dirt and foreign matter. The gum is sifted in the stores, and a certain amount of the dirt removed from it before being exported. The grades known as "black chips" and "dust" are used in large quantities in the manufacture of linoleums. These chips as they are exported contain from 25 to 35 per cent. of dirt and foreign matter, and the low-grade black dust from 60 to 75 per cent. Now by Dr. Maclaurin's process this dirt and foreign matter can be practically all eliminated.