RESULT of EXPERIMENTS made to ascertain the relative DURABILITY and WEAR of NEW ZEALAND and MANILLA ROPE.—Wellington, March and April, 1871. Table G.

Description of Rope. Percentage of the control of Rope. Percentage of the control of Rope. Percentage of the control of the control of Rope. Percentage of the control of the co	Durability, per cent.			100	134	74	110	100	98
CINCUMPERSORE. Constitution Cincumpent. Concomplete Concomplet	No. of miles run.			173.3	242.6	129.9	190.6	173.3	164.6
CIRCUMPERENCE. Constrained Circumstance Cir	No. of feet run, at 4,575 per hour.			915,000	1,281,000	686,250	1,006,500	915,000	869,250
CIRCOMPERENCE. Content of the co	Mo. of days run.			20	88	12	22	50	19
Chocumerer cent. Chocumerer cent. Loss at chafe chorer innent. Loss, per cent. Loss, per cent. Loss, per cent. Helorer innehes. Helorer innehes. Loss, per cent. Helorer innehes. Helorer		Per centage of loss or gain.			-20.3		_	- 10	+
CINCUMPERENCE. Concument. Concument. Concument. Concument. Concument. Concument. Concument. Concument. Cons. Concument. Conc	W екент.	Loss or gain.	oz. drs.	ly noted.	-2 12.6	0-	ly noted.	-1	
CINCUMFERENCE. Loss at chafe cent. Concomment. Chafer chafe chafe chafe chafe chafe chafe chafe chafe chafe Chafer ment. Chafer charteners, per cent. Chafer charteners, per cent. Chafer charteners, per cent. Chafer charteners, Chafer charten			oz. drs.	accurate	10 14.2		accurate	3.8	
CIRCUMPERENCE. CIRCUMPERENCE. Loss at least charter chart. Loss, per cent. Refore. Refo	Гемети.		oz. drs.	Not			Not		
CINCUMFERENCE. Loss at Chafe Cha		Per centage of Shrink.		74.	1.5	.34	11.0	0.9	so so
CIRCUMFERENCE. CIRCUMFERENCE. Loss at chafe chafter innent. Before inches. 1.43 1.25 20 28 18 8 0 7.75 1.56 1.34 14 22 18 2 1 4.75 1.56 1.34 22 22 22 18 2 0 4 1.56 1.34 14 22 18 1 1 4.75 1.56 1.34 14 28 18 1 1 4.75			ff. in.	0 1			1111	1 0.5	
CIRCUMFERENCE. CIRCUMFERENCE. Loss at chafe chafter innent. Before inches. 1.43 1.25 20 28 18 8 0 7.75 1.56 1.34 14 22 18 2 1 4.75 1.56 1.34 22 22 22 18 2 0 4 1.56 1.34 14 22 18 1 1 4.75 1.56 1.34 14 28 18 1 1 4.75		Per centage of Stretch.		9.7	10	9.4	1.9	6.1	6.4
CINCUMPERENCE. CINCUMPERENCE. Inches. Inches.			ft. in.						1 4.5
CINCUMPERENCE. inches. inches	CIRCUMFERENCE.		. s i						18 1
		Loss at chafe opposite splice, per cent.		22	88	22	22	58	22
		Loss, per cent.		13	50	14	22	24	14
		After Experiment.	inches.	1.25	1.25	1.34	1.12	1.18	1.34
		Before Experiment.	inches.	1.43	1.56	1.56	1.43	1.56	1.56
Description of Rope. Dry Mew Zealand (white) (farred) Wet Manilla Wet New Zealand (white) (tarred)				:	÷	:	:	÷	:
Dry Man Wet New	Description of Rope.			:	w Zealand (white)		:	' Zealand (white)	" (tarred)
· · · · · · · · · · · · · · · · · · ·		H		Man	Dry \ Ne		Man	Wet New	

The ropes were run over pulleys fixed on a horizontal shaft at Messra. Kebbell's mill, and through a block below, to which a 56th weight was attached. Circumference of pulleys, 154 inches; grooved out

to a diametre of 24 inches.

The ropes were wetted with salt water poured on them till they would absorb no more, and the wetting was repeated every fourth day, after the ropes had apparently dried.

The ropes were machine made, from Lloyd's Steam Rope Works, near Auckland, and are ralued at £45 per ton. The Manilla was purchased in Wellington, and was the best of the size that could be procured. The results show that the New Zealand white rope, when kept dry will last 60 per cent. longer than tarred rope of the same make, and 34 per cent. longer than the Manilla, but chafes more by 10 per cent, but had 5 per cent. Steam of shrinkage.