

TRIAL of LOCOMOTIVES between Invercargill and Gore with NIGHTCAPS COAL--continued.

Particulars.	TYPE OF ENGINE.							
	Baldwin. Class Q.	Glasgow. Class U.C.	Glasgow. Class U.A.	Baldwin. Class U.B. First importation.	Baldwin. Class U.B. Second importation.	N.Z.R. Class W.A.	Baldwin. Class W.D.	Baldwin. Class W.D.
<i>Locomotive Tests: General Results--continued.</i>								
Water used per square foot of grate-surface per hour running-time	138.74	349.96	359.97	344.22	327.10	317.77	296.02	296.80
Equivalent evaporation per pound of coal from and at 212° F.	6.09	6.02	5.27	5.75	6.06	6.04	5.75	5.79
Weight of coal burned on journey ..	4,613.6	4,714.6	5,534	4,900	4,371.7	4,279.5	4,409	4,406
Actual weight of wood used in lighting-up ..	224	224	224	224	224	224	224	224
Actual weight of coal used in lighting-up ..	784	784	784	784	784	784	560	560
Total weight of coal and wood used ..	5,621.6	5,722.6	6,542	5,908	5,379.7	5,287.5	5,193	5,190
Coal consumed per ton mile of train-load ..	0.185	0.189	0.246	0.218	0.195	0.190	0.214	0.214
Coal used per ton of train per 100 miles ..	18.54	18.95	24.62	21.80	19.45	19.04	21.44	21.43
Weight of coal consumed per hour ..	1,116.1	1,140.6	1,332.1	1,185.4	1,057.6	1,081.2	1,066.7	1,066
Average weight of coal burned per square foot of grate-surface per hour running-time	27.90	71.29	83.34	74.09	66.10	64.45	62.75	62.70
Coal used per train mile ..	57.67	58.93	69.18	61.25	54.64	53.49	55.11	55.07
Calorimetric value of coal ..	8,663.8	8,663.8	8,663.8	8,663.8	8,663.8	8,663.8	8,663.8	8,663.8
Weight of ashes taken from ashpan ..	183	178	125	120	51	56	58	50
Weight of ashes taken from smoke-box ..	16	194	280	242	257	246	223	230
Weight of ashes, &c., taken out of firebox ..	66	39	98	57	78	95	69	50
Maximum boiler-pressure ..	200	200	(all clinker and dirt)	(all clinker and dirt)	(all clinker and dirt)	(all clinker and dirt)	(all clinker and dirt)	(all clinker and dirt)
Minimum boiler-pressure ..	165	171	175	175	175	200	170	200
Mean boiler-pressure throughout journey ..	192.4	186.4	151.3	161.3	169.9	194.3	164.9	189.9
Mean temperature of feed-water ..	46.4	46.1	46.3	47.8	46	47.6	50.6	48.1
Mean temperature of atmosphere ..	50.9	45.5	47.4	54.5	49.1	52.2	55.2	51.8
Average speed in miles per hour ..	19.35	19.35	19.28	19.35	19.35	19.28	19.35	19.35
Actual time in motion ..	248	248	249	248	248	249	248	248
Time made up or lost ..	Nil	Nil	1 lost	Nil	Nil	Nil	Nil	Nil
Number of stops ..	5	5	5	5	5	1 lost	5	5
Aggregate intermediate stops ..	87	86	91	87	87	88	87	87
<i>Analysis of Nightcaps Coal--</i>								
Fixed carbon ..	Composition.							
Hydrocarbon ..	43.62							
Water ..	33.68							
Ash ..	18.33							
	4.37							