

RESULTS OF TESTS—continued.

No. of Test.	Speed of Car.		Elapsed Time: Seconds.	Length of Stop: Feet.	Mean Retardation.		Grade, 1 in	Acceleration due to Gravity: Feet per Second ² .	Total Retardation of Car: Feet per Second ² .	Retardation due to Car: resistance: Feet per Second ² .	Total Retardation due to Brakes: Feet per Second ² .	Mean Retarding force of Brakes: per Cent. Car-weight.	Sand.	Remarks.
	Miles per Hour.	Feet per Second.			By Time: Feet per Second ² .	By Distance: Feet per Second ² .								

TABLE 13.

Brake-test at Auckland. Date: 1st May, 1910. Location: Wellesley Street East. Type of brake used: Pneumatic wheel and mechanical track brakes. Type of car: Double-bogie single-deck, No. 75. Weight of car (total): 48,888 lb. Description of test: Coasting on track brake; emergency air applied on signal, and track brake put down harder.														
78	12.5	18.3	3.9	57.7	4.692	2.900	14.19	2.27	5.17	0.36	4.81	15.10	No	Rail good.
79	14.2	20.8	4.8	72.0	4.330	3.004	14.19	2.27	5.27	0.36	4.91	15.20	"	"
80	16.8	24.6	5.5	97.6	4.472	3.100	14.19	2.27	5.37	0.36	5.01	15.70	"	"
81	17.3	25.3	5.7	98.0	4.438	3.270	14.19	2.27	5.47	0.36	5.11	16.00	"	"
83	23.6	34.5	7.5	189.2	4.600	3.145	14.19	2.27	5.41	0.36	5.05	15.80	"	"
84	22.0	32.3	7.3	160.2	4.424	3.256	14.19	2.27	5.83	0.36	5.47	17.10	"	Rear free wheel skidded nearly 1 chain.
85	19.9	29.2	7.1	146.3	4.112	2.914	14.19	2.27	5.18	0.36	4.82	15.15	"	Ditto.
Mean	..	..	..	..	..	..	..	..	5.39	..	5.03	15.62	..	..

TABLE 14.

Brake-test at Christchurch. Date: 11th May, 1910. Location: Moorhouse Avenue. Type of brake used: Pneumatic wheel. Type of car: Double combination, No. 9. Weight of car (total): 42,714 lb. Description of test: Emergency.														
1	16.30	23.80	4.6	75.50	5.17	3.750	2.200	-0.146	3.735	0.32	3.415	10.60	Yes	Rail wet and mull
2	14.50	21.25	3.6	48.67	5.90	4.630	2,200	-0.146	4.615	0.32	4.295	13.30	"	"
3	10.50	15.40	3.0	28.00	5.13	4.125	2,200	-0.146	4.110	0.32	3.790	11.80	"	"
4	10.25	15.00	2.8	28.67	5.35	3.930	2,200	-0.146	3.915	0.32	3.595	11.20	"	"
5	7.25	10.61	2.4	16.42	4.42	3.430	2,200	-0.146	3.415	0.32	3.095	9.61	"	"
6	7.50	11.00	2.2	18.17	5.00	3.330	2,200	-0.146	3.315	0.32	2.995	9.30	"	"
7	17.60	25.75	5.0	80.50	5.15	4.125	2,200	-0.146	4.110	0.32	3.790	11.80	"	"
8	17.80	26.15	4.8	82.00	5.44	4.175	2,200	-0.146	4.160	0.32	3.840	11.90	"	"
9	19.30	28.25	5.8	100.67	4.87	3.970	2,200	-0.146	3.955	0.32	3.635	11.30	"	"
10	19.10	28.00	5.6	100.00	5.00	3.920	2,200	-0.146	3.905	0.32	3.585	11.10	"	"
11	20.08	29.37	6.0	103.00	4.89	4.190	2,200	-0.146	4.175	0.32	3.855	12.00	"	"
12	20.08	29.37	5.6	99.50	5.24	4.350	2,200	-0.146	4.335	0.32	4.015	12.40	"	"
13	20.80	30.50	6.4	113.50	4.76	4.100	2,200	-0.146	4.085	0.32	3.765	11.70	"	"
14	20.80	30.50	6.0	110.50	5.10	4.210	2,200	-0.146	4.195	0.32	3.875	12.00	"	"
15	21.78	31.90	6.6	128.50	4.83	3.970	2,200	-0.146	3.955	0.32	3.635	11.30	"	"
16	22.00	32.25	6.6	129.50	4.88	4.020	2,200	-0.146	4.000	0.32	3.680	14.40	"	"
17	22.80	33.50	7.8	155.50	4.30	3.610	2,200	-0.146	3.595	0.32	3.275	10.15	No	"
18	22.90	33.60	7.4	144.00	4.54	3.925	2,200	-0.146	3.910	0.32	3.590	11.15	"	"
Mean	..	..	..	..	..	..	..	..	3.960	..	3.700	11.33	..	..