

RESULTS OF TESTS.

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 2.

Brake-test at Auckland. Dates: No. 13, 26th April, 1910; Nos. 46 and 47, 28th April, 1910. Location: Parnell Rise. Type of brake used: Mechanical track brake. Type of car: Double-bogie single-deck, No. 75. Weight of car (total): 48,888 lb. Description of test: Coasting on track brake; track brake applied hard on signal.

13	11.7	17.2	14.5	178.6	1.18	0.83	8.77	3.67	4.50	0.36	4.14	13.0	No	Good rail.
46	11.2	16.4	12.1	144.7	1.36	0.93	8.77	3.67	4.60	0.36	4.24	13.3	"	"
47	10.7	15.7	15.1	178.1	1.04	0.69	8.77	3.67	4.36	0.36	4.00	12.6	Yes	"
Mean	..	..	..	..	..	..	..	..	4.49	..	4.13	12.9		

TABLE 3.

Brake-test at Auckland. Date: 26th April, 1910. Location: College Hill. Type of brake used: Mechanical track brake. Type of car: Double-bogie single-deck, No. 75. Weight of car (total): 48,888 lb. Description of test: Coasting on track brake; track brake applied hard on signal.

5	9.2	13.5	11.4	126.6	1.18	0.72	11.74	2.75	3.47	0.36	3.11	9.80	Yes	Rail good.
6	9.7	14.2	12.1	126.4	1.17	0.797	11.74	2.75	3.547	0.36	3.187	10.00	No	"
7	11.2	16.4	11.4	128.1	1.44	1.05	11.74	2.75	3.80	0.36	3.44	10.80	"	"
8	11.7	17.2	10.5	128.3	1.64	1.16	11.74	2.75	3.91	0.36	3.55	11.20	"	"
9	13.9	20.4	13.4	179.5	1.52	1.16	11.74	2.75	3.91	0.36	3.55	11.20	"	"
10	14.9	21.9	14.6	215.8	1.50	1.34	11.74	2.75	4.09	0.36	3.73	11.75	"	"
Mean	..	..	..	..	..	..	..	..	3.79	..	3.43	10.70		

TABLE 4.

Brake-test at Auckland. Date: 1st May, 1910. Location: Wellesley Street East. Type of brake used: Mechanical track brake. Type of car: Double bogie single-deck, No. 75. Weight of car (total): 48,888 lb. Description of test: Coasting on track brake; track brake applied hard on signal.

54	10.6	15.5	8.7	101.0	1.78	1.19	14.19	2.27	3.46	0.36	3.10	9.72	No	Dew on rail.
55	14.1	20.6	9.5	140.3	2.168	1.512	14.19	2.27	3.782	0.36	3.422	10.80	"	Sanded going up grade.
56	13.1	19.2	9.1	127.3	2.110	1.448	14.19	2.27	3.718	0.36	3.358	10.60	"	Sand still on rail.
57	15.9	23.2	9.9	154.1	2.343	1.746	14.19	2.27	4.016	0.36	3.656	11.50	"	"
58	19.3	28.2	11.7	225.1	2.410	1.766	14.19	2.27	4.036	0.36	3.676	11.60	"	"
Mean	..	..	..	..	..	..	..	..	3.80	..	3.44	10.70		