TABLE III.—FUEL-CONSUMPTION, LINE B 1.

Miles.		500-, 7	00-, 1,000-train Traff	340-, 477-, 681-train Traffic.		
	Grade, Per Cent.	Speed.	Resistance, One Train.	Mile-pounds = R.M.	Resistance, One Train.	$Mile-pounds = \mathbf{R}.\mathbf{M}.$
0.728	Same as B 3			15,594	Same as B 3	21,969
0.830	3.33	10	30,150	25,050	42,700	35,450
1.010	3.03	$\overline{12}$	27,650	27,920	39,100	39,500
5.521	Same as B 3			153,680	Same as B 3	217,100
(2.68)	0.33	8.5-12	*5,200	13,920	*7,350	19,700
	Total R,M., Otira to summit			236,164	•••	333,719
0.187	R.M., sa	me as B	3 on summit	713.5	Same as B 3	1,009
1.836		ealey to su	immit, same as	18,597	Same as B 3	26,406
10.112	(Total lei	ngth of lin	e.)			
Cotal R.M	ı I. uphill	•••		(254,761)		(360,125)
Equivalen	t R.M. do	wnhill (10	per cent.)	25,476		36,012
otal equivalent R.M., one round trip				280,950	•	397,146

= £1.842 per round trip.

\* Resistance due to curvature.

TABLE IV--FUEL-CONSUMPTION, LINE A.

Miles.		500-, 700	)-, 1,000-train Traff	340-, 477-, 681-train Traffic.		
	Grade, Per Cent.	Speed.	Resistance, One Train.	Mile-pounds = R.M.	Resistance, One Train.	Mile-pounds = R.M.
6·640 0·262 0·162 0·752	2·70 2·57 2·51 2·47	12 12 12 12	24,950 23,850 23,350 23,000	165,700 6,250 3,780 17,300	35,200 33,700 33,000 32,500	233,400 8,830 5,350 24,450
$0.275 \ (1.126)$	2·46 0·24	12 8·5–12	22,950 *4,450	6,310 5,010	32,400 *6,280	8,920 7,070
	Total R.N	I., Otira	to Summit	204,350	•••	288,020
0.194	Summit level.	12	2,450	475	3,460	671
0.194	Summit level.	12	1,365	265	1,935	376
	R.M., bot	h ways on	Summit level	740		1,047
0·312 0·363	2·42 1·67	$\begin{bmatrix} 12 \\ 12 \end{bmatrix}$	12,565 9,115	3,920 574	17,850 12,920	5,565 814
	R.M., Bea	aley to Sur	mmit	4,494	***	6,379
Cotal R.M. uphill				(208,844)	•••	(294,399)
Equivalent R.M. downhill (10 per cent.)				20,884	•••	29,440
Total equ	ivalent R.M	I., one rou	ınd trip	230,468		324,886

Cost of fuel = R.M.  $\div$  215,384.6 = £1.07 per round trip.

Cost of fuel = R.M.  $\div$  215,384.6 = £1.508 per round trip.

<sup>\*</sup> Resistance due to curvature.