Exhibit

90. Bus time-table—western suburbs (put in by Mr. Akehurst).

91. Samples of concession tickets (put in by Mr. Singleton).

- 92. Driver's journal of Gallaher's bus-service (put in by Mr. Northcroft in cross-examination of Mr. Joll).
- 93. Wellington Tramways Annual Report, 31st March, 1927 (put in by Mr. Cable).
  94. Omnibus operating-costs for year ending 31st March, 1927 (put in by Mr. Cable).

95. Year-book of Wellington (put in by Mr. Cable).

96. Plan of Auckland, 2nd June, 1928 (put in by Mr. Troup).

97. Plan of Auckland showing suggested boundaries of Auckland (put in by Mr. Bush).

98. Copy of Greater Brisbane Act (put in by Mr. Bush).99. Statistical statement from Waitemata Power Board.

- 100. Plan showing suburban areas amalgamated with city (put in by consent).
- 101. Bundle of tram-running journals (put in by Mr. Meredith in cross-examination of Mr. Ford).

102. Large map showing classified roads (put in by Mr. Anderson).

103. Small maps showing classified road (put in by Mr. Anderson). 104. File of letters (put in by Mr. Thomas).

105. Return showing number of local authorities serving on more than one Board.

106. Thirteen railway time-table cards (put in by Mr. Casey).

107. 1924 programme of railway-construction (put in by Mr. Casey).

108. Railway Graphic Time-tables.109. Railway Working Time-tables.

110. Statement of mileage and cost per hour of bus (put in by Mr. Northcroft).

## APPENDIX D.

## BRIEF DESCRIPTION OF AUCKLAND'S METROPOLITAN DISTRICT TRAMWAY AND OMNIBUS SERVICES.

## THE TRAMWAYS SYSTEM.

From 1902 till 1919 the Auckland tramways were run by a private company, the Electric Tramways Co., Ltd. In the year 1919 the whole system was purchased as a going concern by the Auckland City Council. It is an electric tramway system. Since the 31st March, 1924, the whole of the electric energy required to propel the system has been purchased from the Auckland Electric-power Board.

The tramways now serve some 32.6 miles of route, of which 31.5 miles are double track and 1.1 miles single track. The routes run through the districts controlled by seven different local bodies, 61 per cent. of the route-length being within the city. The track-gauge is 4 ft.  $8\frac{1}{2}$  in., with tracks at 10 ft.  $8\frac{1}{2}$  in. centres.

The standard construction for the permanent-way is a cross-sleeper construction on scoria ballast, but there still remain some considerable lengths of old concrete stringer and original sleeper construction. Rails were originally of 92 lb. section but all recent work has been laid with 110 lb. at 112.6 lb. rails. The track-surface is paved in bituminous macadam.

Power at 550 volts D.C. is supplied by 3/0 gauge copper-alloy trolly-wires suspended over each track on insulated hangers, either by span wires of 7/12 galvanized steel supported by side poles or by centre-poles and cross-arms. It is intended that this latter type of construction be eventually replaced with span wire construction. The poles are of tubular steel and Australian hardwood.

The system operates 206 cars, all of which are of the double-entrance closed type, and mostly bogie cars. The latest type of car is 44 ft. 4 in. long by 7 ft. 6 in. wide, and accommodates fifty-two seated passengers and thirty-eight standing. This class of car is equipped with four 35 to 40 horse power motors arranged for series parallel control.

Two car-depots are in use—namely, a suburban depot at Epsom, with a capacity of 100 cars, and a city depot at Gaunt Street, with a capacity of 126, and sufficient vacant land for extending to a capacity of 168 cars. This latter depot is very conveniently situated for broken-shift and special-traffic cars.

A modern workshops and stores is maintained at Mount Roskill, where repairs of all kinds are carried out.

The tramway services at present operated by the department are as follows:—

- 1. Remuera Road
- From city via Beach Road, Parnell, Newmarket, and Remuera Road to terminus at Upland Road. 4:51 miles.
- 2. Victoria Avenue ... From city (Wellesley Street) via Symonds Street, Khyber Pass, Newmarket, Remuera Road, and Victoria Avenue to terminus at Shore Road. 4.69 miles.