Section 2.—Electric Railways.*

The cheap and reasonably rapid conveyance of human beings is a necessity of modern urban life. One important means by which this necessity is supplied throughout Canada is the electric street railway, generally operated by hydro-electric energy.

Historical.—Replacing the horse-car systems, used in Montreal and Toronto as early as 1861, electric street railways were first seen in operation in Canada in 1885, when a successful experimental railway was constructed and operated at the Toronto exhibition grounds. Before many years their safety and convenience resulted in the discarding of the older systems. An electric system 7 miles in length was opened at St. Catharines in 1887, using the double overhead trolley. The second electric railway in Canada commenced operations in Vancouver, in June, 1890. This was followed by the completion of the Ottawa Electric Railway in 1891, and the electrification of the Montreal and Toronto systems in 1892. The street railways of other eastern cities were generally electrified during the 1890's, while in the newer western cities electricity was used from the commencement. In the cities of Eastern Canada, electric street railways are generally operated by private companies under city franchises, while in a considerable number of cities in Ontario and the West the street railways are owned and operated by the municipalities, a fact indicated in Table **26.**

Many difficulties are met in operating the cars during the winter season, owing to snow. This, however, has been overcome by the use of sweepers, scrapers and ploughs. The single overhead trolley system has been found the most suitable and is in general use. During the past few years an increasing number of motor buses have been used; in 1924 only 48 were operated, but by 1935 the number had increased to 552.

In addition to street railways in the cities there are several systems serving suburban areas and also doing an inter-urban business, but this latter class of service is fast being supplanted by motor bus service. Indeed the development of motor vehicles, while providing competition for all forms of rail transportation, has affected electric railways more seriously than steam railways. The dependence of the former upon short-distance passenger traffic renders them particularly susceptible to the competition of motor vehicles. Since the War, a number of electric railways have been abandoned, first main track mileage has declined 26 p.c. since 1925 (see Table **27**, p. 662), while even in the larger cities electric railways have generally been obliged to increase their tariffs owing to the slow growth or actual decline of traffic.

Subsection 1.—Equipment of Electric Railways.

Table **24** below shows details of the track mileage and of the rolling-stock of electric railways in the four latest years. Statistics of the first and second main track mileage in each year since 1919 will be found in Table **27** of Subsection 3, and of the mileage operated by individual companies in Table **26** of Subsection 2.

* Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report on Electric Railways in Canada.