

# ROADS AND PAVEMENTS

## QUEBEC PROVINCIAL TREASURER DISCUSSES GOOD ROADS.\*

Good roads are absolutely necessary to agricultural life; bad roads are a brake on the wheels of progress, and if the actual loss could be computed, the farmers would be appalled if they could be shown the figures of their losses through bad roads, and the money lost to the municipalities in consequence of making and maintaining them by crude and defective methods.

The various governments of the province had attended to the creation of great commercial arteries, but the time has come when the question of improving the rural highways must be considered. No government can be expected to assume the entire burden, as the making of roads must be regarded as purely a municipal undertaking, but the government can encourage the municipalities and stimulate them to undertake the work and improve their methods.

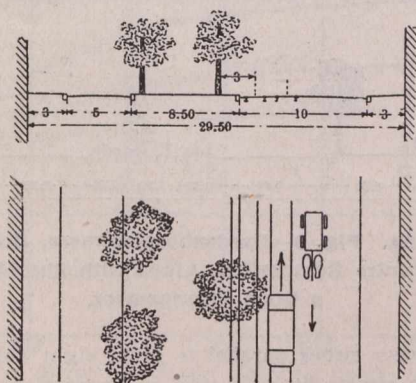
The day is within measurable distance when this community and all other communities will be relieved from the incubus of tall bridges, turnpike trusts—these relics of a primitive civilization.

\*Extracts from an address by Hon. P. S. G. Mackenzie, Treasurer for Quebec.

## CITY DESIGN AND TRANSPORTATION.\*

By M. Wattman, Manager of the Municipal Tramways of Cologne.

One of the marked characteristics of the last few decades, both in Europe and America, is the rapid growth of city population in contradistinction from country population. The attractions which a city affords to those of leisure in the way of pleasure and intellectual pursuits, the opportunities which it offers to the working classes in the diversity and extent of



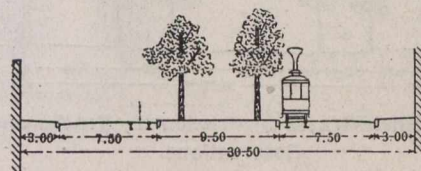
City Planning. Fig. 1—Centre Reservation with Tracks on One Side.

employment, and the advantages which it provides to manufacturers in the way of shipping facilities and to the public in general in the conveniences of shopping, are making city residence very desirable to all classes. In fact, this has be-

\*Abstract of a report presented at the meeting of the International Street and Interurban Railway Association, Brussels, September 6-11, 1910.

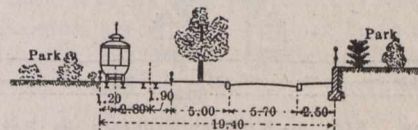
come so distinctly the case that municipal questions are among the most important sociological problems of the age.

The most serious of these problems is the housing of the inhabitants. Even the well-to-do can afford to occupy only a small expanse of the ground area and are obliged to live in most cases in apartments rather than in individual houses. The congestion in the poorer sections of the city is necessarily far greater and in the poorest districts municipal authorities are often unable to secure the thorough enforcement of even



City Planning. Fig. 2—Centre Reservation with Tracks on Each Side.

the most elementary laws of health and sanitation. The impossibility of lateral expansion has forced an expansion upwards, with the inevitable deprivation to a large proportion of the population of the amount of light and air which the laws of health require. The ultimate effect of this, especially upon children, cannot be negligible. An environment of narrow courts, dark stairways, small and crowded rooms, must be detrimental to the physical and moral development of the rising generation.



City Planning. Fig. 6—Street in Königsberg Alongside of Parks.

The greatest need of our large cities is in the reduction of this evil through lateral expansion, which is made possible only by means of adequate and rapid transportation. With horse cars but little relief could be afforded, but the development of electric railways during the past 20 years provides

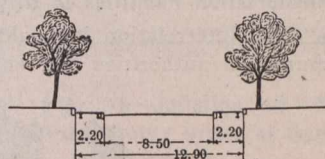


Fig. 4—Street in Düsseldorf; Tracks on Side Reservations.

a possible solution of this problem because it increases enormously the space available for city expansion.

### Dependence of Community on Electric Cars.

It is difficult to determine the proportion of people who use the electric cars to go from one point to another within the city in preference to other means of movement, but a few figures which have been compiled will be of interest. These figures were obtained by making a record of the number of persons travelling in tramway cars, in other vehicles, by bicycles and on foot, on typical days, past different important points in the cities mentioned.

A record taken at two important points in Copenhagen during November, 1907, shows: number in vehicles, 3,181;