

ROADS AND STREETS IN ONTARIO.

BY A. W. CAMPBELL, C.E., PROVINCIAL ROAD COMMISSIONER.

The study of road construction in Ontario must necessarily be very largely of a theoretical nature since we have, as yet, little or no local practice to guide us. For this reason, I purpose, in a brief paper, to merely touch upon a few of the prominent points which enter into the building of a roadway, with a view to more clearly define the situation as we find it in the settled districts of this province to-day.

The civil engineer when undertaking the construction of a road in Ontario, must first of all free himself of the idea that European practice, in all details, can be transferred to Canada without alteration. Ontario has a climate very different from that of England or France, or even of some of the Eastern States in America, to which we are beginning to look for information. Ontario is subject to extremes of heat and cold such as are not experienced in England. The English climate is largely one of continuous drizzle. In Ontario we have seasons of drought followed by torrential rains, but this drought is not so long continued as we frequently find it in some of the Eastern States. England is much more densely populated than Ontario; there is greater wealth in proportion to the road mileage, and the demands of traffic and travel are different. At the same time, all experience teaches something, and in its judicious application lies the skill of the engineer. One of the most important lessons we learn is that the methods of one country are rarely applicable in all their details to the requirements of another.

The actual construction of a road is a matter of an exceedingly local nature. Just as the methods of one country cannot be transferred, in all details, to another, so we find that the plans best adapted to one township or county, may have to be modified when transferred to an adjoining municipality, in order to fit the road to altered local conditions and requirements. Not only must the civil engineer understand how to build a good road when he has a given climate, and a given quality and class of material, but he must

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