

# The Canadian Engineer

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## The Canadian Engineer

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### THE HIGHWAY AND THE AUTOMOBILE.

The automobile on a Canadian country road in summer impresses one forcibly and in a most unpleasant manner with the unsuitability of our roads for such traffic. The highway engineer has not been able to keep pace with the mechanical engineer, the result being that the clients of both are heavy losers.

The automobile industry suffers in two ways. The very few highways suitable for such traffic limit its use and the dust nuisance destroys the running gear, thus increasing the cost and again limiting its use.

The rapid deterioration of the gravel or macadam road under self-propelled carriages, while a loss to the municipality, is also one cause of friction between the motor tourist and ratepayer along such travelled roads.

The automobile is here to stay, and we may as well recognize this fact and be prepared to increase its usefulness. Not only have we self-propelled carriages for passengers, but the volume of freight transported by motor vehicles increases daily.

In cities the matter of suitable road material is not a difficult question. The tax-rate is sufficiently high to provide for pavements of asphalt, tar-macadam, wood or granite block. None of these are perceptibly injured by motor-vehicles, even those equipped with non-skidding devices. A road built for heavy urban traffic is quite sufficient for good motoring, but a road sufficient for rural districts might be quite unsuitable.

With public sentiment still opposed to the automobile travelling on rural highways it is hopeless to expect council to grant money to overcome the dust nuisance, no matter how inexpensive the device suggested. When the day does come for improvement the first attempts will doubtless be made with some coating material.

In some sections of the United States a top dressing of coal oil has been used. This allayed the dust, but soon wore off. Heavy bituminous material was then tried, and with much better success. Farther than this experiments on country roads have not been tried.

The next step will doubtless be tar-macadam roads. Already many residential streets in our cities are paved with this mixture of broken stone tar and pitch. Where the stone is crushed granite and the road well rolled when put down good results will be secured, even when the road is subjected to the destructive skidding devices of touring machines.

Under the present system of township road control very little progress will be made in road improvement. Country roads would be an advance, but State-controlled roads under the direction of a central board would give a system of roads uniform in construction and complete in location giving the maximum of service. This should be our aim, even if it does appear visionary. Only under such a system could leading roads suitable for motor traffic be built.

### SOME FIGURES FROM A STRIKE.

On July 1st the union plasterers were locked out. They were receiving fifty cents an hour for an eight-hour day. They were offered forty cents an hour, and upon refusing to accept this offer work was closed down.

The plasterers have been idle twenty working days, or at a total loss of eighty dollars per man. It has been