

driver, but how are we to educate an automobile how to act when it has a fool driver?

Mr. Pugsley stated that difference in conditions had prevented York County from establishing a county road system, the north having porous soil and gravel and the south having clay and not much good road-making material.

We are now at work on a scheme whereby the city of Toronto and the county will designate a system to which the city will contribute a substantial sum.

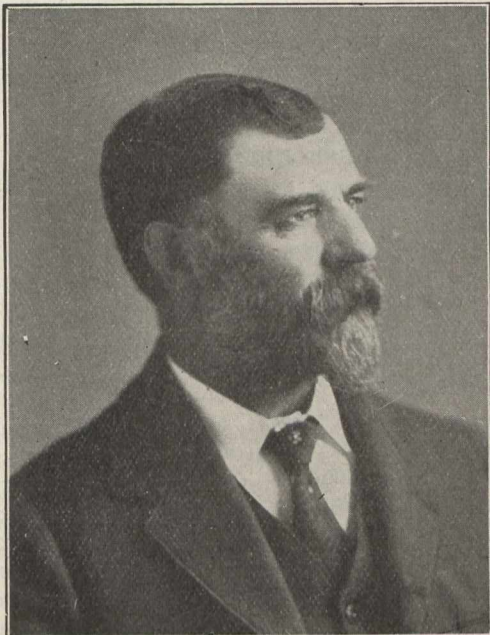
Geo. S. Henry, Oriole, ex-warden of York, told how the statute labor system looking after roads was followed by the township system and the county system.

The local improvement system as used in cities is not applicable in the county because one man might have to pay on half a mile of frontage.

He referred to the decrease in the rural population, and the effect of that on the cost of living.

It's for the cities to improve the highways and to improve the standard of living in the country, so that we can keep our population in the country.

Toronto's foundation was due to its excellent agricultural surroundings. Those surroundings have enhanced the city's



Mr. W. H. Pugsley, President of the Ontario Provincial Good Roads Association

position much, and it's for the city to return something. We're justified in asking the cities for financial aid.

Government Standard.

The Government standard for county roads was expounded by Mr. W. A. McLean, C.E., Provincial Engineer of Highways. The system of handling the work, and its supervision, was of first importance. Every county undertaking a system of county roads is expected to have a county superintendent. The Government standard is made flexible to suit the circumstances in any locality.

Replying to questions Mr. McLean said there was no standard yet set for upkeep; the most desirable method was to keep the roads constantly in strict repair.

Abolish Statute Labor.

Mr. George C. Diehl, C.E., of Buffalo, County Engineer of Erie County, New York State, in the course of an interesting address on the system of highway construction and management in his State, unhesitatingly recommended that statute

labor should be abolished. New York State had, he said, in a hundred years spent \$200,000,000 on labor on the highways, with scarcely a cent's worth of permanent work to show in return, but in the past two years, with compulsory money system, it had built 6,000 miles of macadamized township roads, as good as any State, State-aided, or Federal roads.

To Amend Our Law.

Mr. Diehl suggested two ways of improving the state of the law in Ontario; increasing the amount of the aid from the Province, not necessarily to 50 per cent., but somewhat on the plan of New York State, where the aid is given in proportion as the community requires it; and having Provincial supervision for all the roads, the township officials working under the direction of trained Provincial supervisors.

Speaking of the proportion that cities should bear of the cost of road improvement in the counties, he told that Buffalo, about Toronto's size, has, during the past five or six years, paid \$1,000,000 towards building county roads, the city paying 85 per cent. of the Erie County road tax. The territory extends for a radius of approximately 25 miles south and east, covering about 200 square miles; New York city and Buffalo together paid about 95 per cent. of the total cost of road making in the State.

As to automobiles, Dr. Diehl said that about five per cent. both of motorists and of horse-drivers were "road hogs." It was not fair to blame the other ninety-five per cent. for their selfishness or folly.

Indians Not Taxed a Cent.

In reply to a question by Chief Elliott, Mr. Diehl stated that in the United States they thought the Indians had been treated badly enough, so they built any roads through the reserves without taxing the Indians in the township peopled by them for one cent. Special Highway Superintendents were to be appointed for each reserve by a bill now before the State Legislature, and the State would give each of them an appropriation for each road and bridge in the reserve.

Concrete vs. Steel.

Mr. Frank Barker, C.E., County Engineer of York County, gave a comparison of steel and concrete bridges. He said the popular belief in the superior durability and fire-proof quality of steel was not based on sufficient foundation. Concrete possessed greater economy for compressive stresses, but was not capable of resisting tensile stresses as steel would, concrete was flood-proof, frost-proof, rust-proof, and fire-proof. Steel, embedded in concrete, takes on the permanency which it lacks of itself.

Favors Provincial Commission.

In his paper on "Ontario Highways, Past, Present, and Future," Mr. H. J. Bowman, C.E., of Berlin, speaking of the need of specially constructed roads for automobile traffic, said there had to be a coating of oil or tar to keep the binding in place. It was out of the question that the farmers should pay for these. Motor-car owners would think very little of a tax of \$10 a year, in fact he thought they would gladly pay much more for the use of good roads. He advocated a Provincial Highway Commission to take charge of a road system apart from politics.

May It Come Quickly.

Mr. G. M. Farrington, of Prince Edward County, thought we were on the eve of a great revolution in road building. He hoped it would come quickly, so we in this generation could enjoy its benefits. Good roads increased the value of farms.

Longer Hind Axles.

"Preparation and Use of Road Metal," was dealt with by Mr. A. McG. Rankin, of Collins Bay, Councillor of