## WESTERN ONTARIO GOOD ROADS ASSOCIATION.

The annual convention of the Western Ontario Good Roads Associatian was held in the Municipal Buildings, Toronto, during the last week of February, and numerous questions of importance were submitted for discussion. Among those taking part in the proceedings were : Mayor Urquhart, of Toronto; Warden Hartmann, of York ; ex-Warden Cummings, of Carleton ; J. W. Gibbs, cf Ontario County ; F. Walter, of Waterloo ; J. D. Evans, of York; J. A. Buchanan and R. R. Brett, of Essex; Major Bruce, of Simcoe; D. H. Moyer, ot Lincoln; C. E. Hewson, of Simcoe; A. W. Campbell, Commissioner of Highways; Wm. Jackson, of Elgin; F. Shaver, of Victoria; Dr. Wood, Kirkfield; J. H. Macdonald, of Waterloo; R. F. Miller, of Rainham Centre; C. E. Lundy, of Newmarket. The Act to Aid in the Improvement of Highways and questions relative to county and township bridges were matters receiving chief consideration. Mr. Jas. Graham, Lindsay, was re-elected Presi-dent, and Lieut.-Col. Farwell, Whitby, secretary-treasurer. Executive and legislation committees were also appointed. It was decided to hold the next meeting in Toronto.

## ONTARIO LAND SURVEYORS.

The annual convention of the Association of Ontario Land Surveyors was held in Toronto during the last week of February with an unusually large attendance. Of special interest to municipal councils was a paper by E. G. Barrow, City Engineer of Hamilton, on "Cement Concrete Sidewalks." In Hamilton 96 miles of this walk has been laid in five years, at a cost of 12½ cents a square foot. Curbing costs 33 to 40 cents a lineal foot. Among others were papers by J. S. Sing, of Toronto, on "Transportation"; by W. A. McLean, of Toronto, on "Water Powers of Ontario"; by James Robertson, of Glencoe, E. C. Steele, of Sault Ste. Marie, and J. F. Whitson, of Toronto. C. A. Jones, Petrolea, was elected President; J. W. Tyrrell, Hamilton, Vice-President; and Captain K. Gamble, Toronto, Secretary-Treasurer. At the annual dinner speeches were made by Hon. E. F. Davis, Commissioner of Crown Lands; Col. Otter, E. D. Armour, K.C., Prof. Galbraith, and others.

## EASTERN ONTARIO GOOD ROADS ASSOCIATION

The third annual convention of the Eastern Ontario Good Roads Association was held in Ottawa on March 17th and 18th, there being a large attendance from eastern counties, while a number of western counties were also represented. The president, Mr. Cummings, in his opening address welcomed the delegates warmly, and outlined the success that had attended the efforts of the association for the past year. More townships in Eastern Ontario commuted statute labor last year than ever before. Half the townships in Carleton were now doing their road work in a business like manner. The commutation system appears to be giving general satisfaction in spite of the high cost of labor and other disadvantages that have to be contended with. Three years ago not a township in Eastern Ontario was using concrete culverts, but some forty townships were using them at present, as the result of practical illustrations given by experts sent out by the association. The County of Lanark has taken the most progressive steps during the year in voting \$100,000 to construct a leading system of county roads. The movement will be successful and other counties ought to follow Lanark's good example. The Western Ontario Good Roads Association was formed as a direct result of the good work done by the eastern association. Great progress was made in the effort to secure the assistance of the Dominion Government in the building of good roads.

Mr. Cummings also spoke of the progress that was being made in the construction of good highways in the different states of the Union.

Following the President's opening address, speeches were made at the Thursday morning session by E. A. Johnson of L'Orignal; Mr. Richardson, M. P., of Grey County; Edward Kenrick, of Wentworth, and Mr. Allen, of Nova Scotia.

At the afternoon session addresses were given by Messrs Johnson of Leeds & Grenville : John Brown of Beachburg ; E. A. Johnson of L'Orignal ; David Mair of Almonte ; Jas Ballantyne of Ottawa East, and A. W. Campbell, Commissioner of Highways.

County Councillor D. Quinlan, of Barrie, addressed the Friday morning session on the county roads of Simcoe. He said that Simcoe County raised \$100,000, and by so doing secured \$50,000 from the Ontario Government's million dollar grant, giving \$150,000 in all for the work. In all, 400 miles of road were designated for improvement and work so far has been carried out on 127 miles. Of the money available \$140,000 was divided amongst the townships, according to their equalized assessment, and \$10,000 laid aside for work on roads used by more than one municipality. The council voted a further \$40,000 to carry on the work and expected the additional proportionate amount promised by the Provincial Government, In Simcoe \$10,000 was also set aside for the improvement of the parts of the road on the plan lying in the outskirts of the incorporated towns and villages.

Other speakers were Mr. Bruce Payne of Granby, Quebec; Warden J. M. Rogers of Lanark County; Senator Edwards and Hon. H. S. Earl of Detroit. Resolutions were adopted favoring a Dominion Good Roads Bureau; the commutation of statute labor; a uniform width of four feet between sleigh runners; while a fourth congratulated Lanark County on going ahead in the good roads movement.

The next convention will be held in Brockville.

## SWAMP ROADS.

Roads passing through swamps are often found difficult and expensive to construct and maintain. This arises from the fact that the soil is usually a decayed vegetable mould, always soft and mucky when wet—a condition maintained by the lack of drainage. The chief difference between a swamp road, however, and one on high land is the matter of drainage—a complete proot, if other evidence were lacking, that the most necessary rule to be observed in making good roads is to provide good drainage.

In making a road through a swamp, every opportunity should be taken to carry the water away from the roadside. If this can be perfectly done, it will cease to be a swamp road, in spite of any difference in the quality of the soil. It is too often supposed that, by throwing up a sufficiently high grade, and piling on a great quantity of gravel, a permanent road must result. This may succeed in some instances, but conditions are rare in which it does so, unless, at the same time, good drainage is provided. Pending the time when sufficient drainage can be had, the best that can be done is to lay a corduroy foundation, on this place a covering of earth, then a surface coat of gravel or broken stone. Rather than use the black vegetable mould, which becomes mucky when wet, it is advisable to cover the corduroy with clay loam, a gravelly loam, sand or clay. Sand, when slightly moist, makes a good foundation. If the case is one in which the road passes over an extremely boggy ground, a good bottom can sometimes be made by throwing in a thick matting of willows and other shrubs and branches, on which to place the covering of earth, then gravel or stone