

Engineering Department

A. W. CAMPBELL,
O.L.S., C.E., M.C.S., C.E.

Road Reform.

The movement for better roads has, unfortunately, in many sections been misunderstood. It is believed that the cry for good roads, or better roads, is raised by a few enthusiasts who know little or nothing about the practical phase of the question, and frequently this argument is used by men from whom better things might reasonably be expected, because it suits their peculiar purpose for the time being. No agitation for municipal reform has ever been put on foot that is more far reaching in its economy than that for road reform, and fortunately, the discussion of the question in all its phases, in many parts of the province, has attracted the attention of conscientious municipal men who are honest in their endeavors to serve their constituents faithfully and well, and in these sections the matter has been taken hold of with genuine enthusiasm and marvellous benefits are resulting.

The work performed by the Eastern Ontario Good Roads Association is only an illustration of what may be done in other parts of the province. Central and western Ontario have in the past expended more money, and consequently have, as a general thing, better roads than are to be found in the eastern counties, but, unfortunately for the ratepayers, these better roads are not good roads, built upon a foundation or in a manner likely to prove easy of maintenance within reasonable cost. In the eastern counties, through the work of the new organization, road administration in the municipalities is being reduced to a science. Last year the association engaged a man skilled in the working of concrete, who travelled through the different municipalities making concrete pipe in local gravel pits, and, in a few hours pointing out to local workmen how concrete pipe for smaller sluices can be easily and cheaply made by themselves, and also building a concrete arch in a culvert where the capacity required is too great for the ordinary pipe. The simplicity of the work and the cheapness and durability have so impressed the people of any township visited, that concrete for this purpose is now being used generally. The economy of this simple diversion is one which appeals to every municipal man of experience, and has so impressed councillors generally of the many similar ways in which reform can be worked that a new awakening has been created.

At the beginning of the season of 1901, the association organized a good roads train, equipped with all modern machinery, such as steam rollers, rock crushers, graders, etc, and started on a campaign of illustration, visiting municipalities where

material had been collected and building a stretch of one and one-half to one mile in length as required. The material and labor for this purpose was supplied by the local authorities, and the machinery was all handled by experts. The result has been a clear demonstration of modern practice; as to how a road should be formed and drained, how the material should be prepared and applied, how the road should be finished, and showing what a good road really is, and what such a road really will cost, and something of equal importance is proving, on the ground, the utility of modern implements in building roads cheaply and perfectly.

So popular was this work of illustration, that it was carried on during the whole season, and the demand was so great as to compel the association to continue the work which was recommenced this year as early as the weather would permit.

Several townships have already been visited, and many stretches of road built, and it is expected that the work will be continued during the season. Each piece of work during its construction is visited by thousands of farmers, who sit for hours watching most interestedly the work in progress, and towards the conclusion of each section a public meeting is held for the purpose of clearly pointing out the merits of each part of the work, and rendering a statement to the ratepayers of the actual cost, and generally for discussing some plan by which a regular system of that kind of work might be inaugurated for the township. These stretches of road are usually selected from bad pieces of leading roads which require immediate attention, and which the council with their imperfect implements do not feel capable of handling. They are not built for exhibition purposes only, and consequently the money and the labor are only such as would have to be expended in any event. The work of this association is meeting with the enthusiastic approval of the people of the eastern counties, and it is not predicting too much to say that vastly better roads will be the result of their efforts, and that millions of dollars will be saved to the ratepayers of these counties.

Similar organizations should exist in every part of the Province, and we are pleased to see that an effort is now being made to organize what might be known as the Western Ontario Good Roads Association. At the last meeting of the Eastern Good Roads Association invitations were sent to counties outside their district in order that those counties might have, if they so desired, an opportunity of attending their meeting, and benefiting by the work of their session. To this invitation many counties responded and a goodly number of delegates were present.

The delegates from the county of Ontario were so impressed with the proceedings, and with the advisability of having similar work done west of Kingston, that in the county council, they recommended that Mr. J. E. Farewell, their county clerk, be instructed to communicate with county clerks of other counties, calling a meeting of delegates during the second week of the Toronto exhibition, to meet for the formation of a similar organization at Toronto. This report was adopted by the council, and a circular letter issued by Mr. Farewell has been sent to the county clerks requesting that the warden and chairman of the committee on legislation and memorials, and the chairman on roads and bridges do attend such meeting.

Fully appreciating the importance of such a movement, we trust that this invitation will be readily accepted, and that delegates from every county not now receiving the benefit of the Eastern Association will be present, and that a strong association of municipal councillors will be formed, and this far-reaching question of road reform be taken hold of in a substantial and businesslike way. The small cost of sending delegates to such a meeting is insignificant when compared with the vast amount that may be saved to the ratepayers by a more profitable expenditure of the road appropriation resulting from the work of such an association.

Meeting of Health Officers.

The annual meeting of the Executive Health Officers' Association of Ontario will be held in Berlin on Sept. 9 and 10. The experimental work carried on at Berlin by the Government under the Provincial Board of Health, on the septic tank method of sewage disposal is well advanced, and it is expected that the members of the association will find much that is interesting and instructive in the work being carried on. The usual reduced rates on the railways will be given on the certificate plan. Dr. P. H. Bryce is the secretary-treasurer of the association. The programme provided embraces the following subjects: (1) The public water supplies of Ontario. (2) Sewerage works and methods of sewage disposal. (3) The needs for sanitary supervision in the construction and operation of workshops and factories in Ontario. (4) Sanitation of transportation. (5) Problems in the preparation, storage and transportation of food products. (6) The problem of municipal health work. (7) Report of special committee on vaccination. (8) Variation in type of contagious disease.

Owen Sound recently had an object lesson on the saving that may be effected by day labor. Its lowest bid for a stretch of granolithic sidewalk was \$6,136.74, but City Engineer McDowall did the work for \$5,011.67, and included in that sum curbing to the value of \$544 that the contractors did not tender on.