

If it is not desired to at once make permanent improvements, much can be done on residence streets by widening and levelling the sodded space at the side of the roadway, opening and freeing from obstruction the surface gutters, and improving and providing outlets for the tile drains. In doing this work, the travelled roadway will be given a better crown, and the mud or earth that is scraped from it can be used in filling up and levelling, where needed, the sides or boulevard. The same class of work can be extended to all streets of the village, and much of it can be cheaply done by the judicious use of the road grader.

PURCHASE OF GRAVEL.

Many townships buy gravel by the load. This is very much like buying water by the pailful instead of digging a well. Gravel should be bought by the pit or by the acre, and should be available at all times for any farmer who wants to increase the value of his land by improving the road past it. Especial care should be taken by councils to see that, prior to the performance of statute labor, the pit is stripped and the gravel otherwise treated if necessary.

This material, purchased at from five to ten cents a load, when mixed with an excessive amount of sand or clay, is a most expensive road material for much travelled highways. When we consider the number of pits in some townships and their immense size, representing thousands of loads that have been taken out, and then consider the short mileage gravelled, we must readily see that something in the quality of material and the mode of construction is radically wrong. In some instances more than the value of a whole farm has been paid for gravel purchased by the load and taken from a small corner. If first-class material were used, under ordinary traffic the annual repairs necessary would be very much lessened.

SYSTEM BEING ADOPTED BY TOWNSHIPS.

The defects of statute labor have not been pointed out, and the system condemned without offering a better substitute. This substitute is not in the experimental stage. It has been tried and its advantages proven by a hundred and more townships of the Province. It is not contended that this system can be adopted by a by-law of the township and then left to itself to make and repair the roads. The best system that can be devised will prove a failure unless the councillors and people of the township try to make good use of it. This system, particularly until it is thoroughly established, will require the painstaking effort of the council and public-spirited men of the township to carry it into effect. It is particularly important that the road commissioner or commissioners appointed by the council shall be thoroughly capable and practical men, who can plan the work of improvement with a good understanding of the principles of road-making, can carry the work on methodically and with good judgment, can conduct the purchasing and business portion of the office to best advantage, and who can direct and manage the men employed.

The system recommended should be adapted in its details to local conditions, but the general failures are the following :

Statute labor is commuted at a fixed rate per day, and the amount is collected at the same time as the other taxes by the township tax collector ; or, if preferred, in place of commuting statute labor a special rate on the township assessment may be levied for road purposes, thereby entirely doing away with statute labor.

Money can be handled to very much better advantage than can the statute labor. The money can be expended at the most favorable time of the year, where it is most needed, and faithful work can be demanded of those earning it.

One road overseer or commissioner is appointed for the entire township ; or, if desired, the township is divided into a convenient number of divisions for road purposes, usually two, three or four, and a road commissioner is appointed over each. This practically amounts to a reduction of the number of pathmasters, and the enlarging of road divisions, and is essential to the success of the proposed system. To merely commute statute labor and retain the former number of pathmasters, giving each a small amount to spend, means a perpetuation of most of the defects of the statute labor system.

It is not best for councillors to act as road commissioners. Councillors, like the pathmasters of the old statute labor system, are elected annually, and cannot become experienced. There is a tendency for them to use their office not so much for the benefit of the roads as to gain votes for the next election. The ratepayers are apt to become dissatisfied unless councillors perform the duties of commissioner without remuneration.

Councillors cannot be as independent as are road commissioners, and they cost the township fully as much in commissions, mileage fees, etc.

The duties of the road overseer are :

(a) To supervise all work and repairs done on the roads and bridges within his division.

(b) To acquaint himself with the best methods of constructing and maintaining good roads, and of operating graders and other road machinery used by the township.

(c) To employ, direct and discharge all men and teams required to carry on the work, and to purchase necessary materials.

(d) To see that all washouts, drain and culvert obstructions, bridge failures and other unforeseen defects are repaired and protected, with the least possible delay, so as to prevent further injury to the road, or accident to users of the road, and to otherwise act promptly in all cases of emergency.

(e) To report to the council early in each year as to the work required the coming season, and to carry out the instructions of the council with regard thereto, and to perform such other services as may be required of him from time to time under the written instructions of the council.

(f) To collect the poll tax in his division.

(g) To keep an accurate record of the men employed and the work done, and to furnish this written form to the reeve at proper intervals in order that the reeve, upon being satisfied with the correctness of the statement may issue cheques for the payment thereof.

(h) To stake out all works and see that they are undertaken systematically, so that no time will be lost in taking men, teams and machinery from one part of the township to another.

(i) To supervise the performance of all work done by contract, and certify as to completion, acting as inspector for the township.

(j) To supervise the opening of snow roads under such regulations thereto as, in the opinion of the council, the needs of the township may require.

(k) To report to the council at the close of each year, showing in detail the character, location and cost of each separate work undertaken.

(l) Works, the cost of which will exceed a certain fixed amount (ordinarily from \$10 to \$20, as may be determined by the council) may be let by contract to the lowest satisfactory bidder, but in the event of any work being duly advertised to be let by contract, and the tenders being too high, in the opinion of the commissioner or the reeve, it should be the duty of the former to undertake the work by day labor under his own direction.