

Dirt roads can be materially improved for summer travel, by passing a grader or planer lightly over them early in the spring, before the ground has become hard and baked by the sun. It is much more satisfactory to make a road good by the use of machinery, than to wear it down by travel. If a grader is not available for this work, a second hand railroad rail, one weighing from 50 to 70 pounds per yard, can be dragged by a team of horses up one side of the road and down the other with excellent effect, one round trip is usually sufficient. A steel beam is equally as good. The object of this treatment, is to smooth down the ridges and fill the ruts and hollows. The blade of the grader, or the rail, should be kept nearly square across the road so as to carry a sufficient amount of earth before them to fill depressions. It is most important that this work should be done while the ground is slightly moist.

It is not advisable to repair holes in an earth road by filling them with gravel or broken stone. The latter materials do not wear down so rapidly as the earth around them, with the result that they become bumps or ridges, and the result is to make two holes, where there was originally only one.

Nearly all roads in Ontario have at one time been "dirt" roads. By a process of evolution some have become gravel or broken stone roads. A dirt road nicely crowned and well drained will make an excellent foundation on which to place a layer of gravel. A driveway which has passed through an apprenticeship as a dirt road, and has, during that time, had due attention given to its drainage requirements, will have indicated the points at which open drains, culverts and under-drains are most needed. With these provided, gravel can be applied to the best advantage.

#### Statute Labor.

The inefficiency of statute labor is forcibly illustrated by an extract from a report of the clerk of the township of Tuckersmith, (Huron County), to the commissioner of highways:

"We annually let contracts for laying on about 200 cords of gravel, (this year 191 cords, at an average cost of \$1.52), which is under the direct supervision of the council. This is a great help to the roads, and is nearly always put on to good advantage.

We have 2812 days statute labor which this year laid down for us 3676 loads. We showed the electors at nomination that if the above days were commuted at 75 cents per day, the proceeds (at same cost as our job work \$1.52 per cord) would lay down 600 yards, clear of all expenses, and would be better material, more intelligently laid down, it seemed to almost stagger those who had never given the matter serious thought.

Not an increased expenditure on the roads, but better methods of applying the present outlay is the great object to be attained by the good roads movement in Ontario. The townships of this Province are, as a rule, dealing very generously with their roads in so far as the amount of money and labor spent on them is concerned. The great difficulty is that this money and labor is not so directed as to secure the greatest and most lasting results. It would appear that the farmers of this country have been so actively engaged in improving their methods of farm work, and in advancing what seem to be their more personal interests, that the importance of making similar progress with regard to road management has been overlooked.

The advantages of methodical and systematic management are becoming more and more recognized in all departments of industry, from the most simple and commonplace, to the most complex and comprehensive. In none is it more noticeable than in farming, and in the sowing and rotation of crops, the handling of stock, the use of machinery, every farmer can, from his own experience, find instances of new and better method and system. Between good management and bad, between suitable methods and unsuitable, between system and the absence of system, there is all the difference between the successful and the unsuccessful farmer. Good management and bad management, good roads and bad roads stand on precisely the same footing.

While in a number of instances, and with excellent effect, county councils take charge of the main highways, yet the great body of roads must still remain under the exclusive control of township councils, and the township methods with respect to road improvement, are therefore in the highest degree important. In the township system, the general rule has been, for many years, that the roads are maintained by statute labor, together with money grants made annually by the council. The roads of each township are divided into beats or divisions, and a pathmaster is appointed to each. The average length of road divisions varies in different townships, but is commonly one or two blocks in length, thus ranging from about one and a quarter to three miles. The number of pathmasters thus varies in accordance with the size of the township and the length of road beats, there being ordinarily from 50 to 150 in each township. A pathmaster is appointed for one year only, and rarely does he hold office for two years in succession. It is considered that by appointing a different man from year to year, it enables each to make such improvement as he thinks desirable in front of his own farm.

Early in the year, after his appointment, each pathmaster receives from the township clerk, a list of those required to do work in his division, with the number of days each should perform. This number

of days is fixed by the Assessment Act, according to the assessed value of property, but each township council has the privilege of adopting a schedule of its own. This many have done, and in place of using the assessed value as a basis for levying the statute labor, some determine it according to acreage.

After receiving the statute labor roll for his division, the pathmaster "calls out" for a certain day or days those on his list. Each man appears with such implements as he wishes to use. If he brings a team of horses, this with a driver, is estimated as the equivalent of two days. Under the direction of the pathmaster, who is not himself required to work, the labor is performed.

The statute labor system as thus outlined, was in keeping with the spirit of pioneer days, when the need for roads was urgently felt, when the work consisted of cutting down trees, clearing the road allowance of logs and stumps, of corduroying stumps, and throwing up a dirt grade. For such conditions, and for such improvement, statute labor was admirably adopted, and did a vast amount of good.

To-day, circumstances are very different. The need of roads is not so keenly felt as in the time of early settlement, and there is not the same incentive for hard and careful work. Men work on the roads very much as they work on their farms. Some are shiftless, some lazy, some stupid, some careless, and so the list might be carried on. Each works, plans the work, or oversees it according to his own ideas. The statute labor system in this respect, is not so much a system as an entire absence of system.

Township roads, however, are not kept up by statute labor alone. The ratepayers of many townships who know only of the grants for small repairs, scattered here and there over the townships, do not realize how much money is, in the aggregate, spent on their roads in the course of a year. The amount is in no sense objectionable, and if the money were applied to the best advantage there are few townships which could not spend even more than they are now doing on road improvement.

The difficulty arises from the fact that this money is spent on the statute labor basis. The making of money appropriations was commenced many years ago, with a view to supplementing statute labor. They were then very small amounts, but with the growth of the Province, this practice has increased, until in many instances, the total money appropriation exceeds the statute labor for the year valued at one dollar a day. Thus the money spent has constantly increased until it is of greater consequence than the statute labor, but the latter is permitted to govern the expenditure of the former.

The citizens of Coldwater are considering installation of public waterworks system.