

State Aid.

The construction of a national highway to be known as The Great Road of America is being advocated by some of the leading road reformers of the United States. It is proposed that the road will pass through the States along the Atlantic seaboard, that a branch will cross the continent on a central line from Washington to San Francisco and will there unite with another line passing north and south through the States on the Pacific Coast. It is proposed that the road will be built by the different states traversed.

The construction of a system of first-class highways is one of the most important and necessary public works which the government of any country can undertake. So important are the common roads considered by the people of France that certain routes are entirely built and maintained by the national government, and state aid is largely given to roads of minor importance. Germany has a very similar system of road construction and repair to that of France. In England the important roads are in charge of the counties, but aid is given from the national treasury. All countries which have sufficiently appreciated the value of good roads have thus centralized the authority over them. Those states of America, notably Massachusetts, Connecticut, and New Jersey, which are most progressive in the road reform movement, have established systems of state assistance.

State aid is beneficial in many ways, and it is affirmed by the best authorities to be the only means of providing good roads. Without state assistance, the important roads of a locality are built and maintained in the same manner as are the little travelled roads. Very rarely can a community undertake the general construction of roads in any but a superficial manner unless state assistance is given. Local systems are always disconnected not only among each other, but also within themselves.

It is the rule that every township and county has certain main trunk roads on which the traffic from the back concessions converges until finally, as the market town is approached, there is collected a very great amount of travel. Such roads as these should be of the best description at all seasons of the year. The ordinary means used in the construction of local roads is not sufficient. In Ontario, such roads in wet seasons, are, as a rule, as impassable as any of the back concessions. They nevertheless receive the greater part of the statute labor and expenditure available in the municipality. The great amount of travel over them is so destructive during the wet periods that, to repair them, they absorb the energy of the municipality, are still bad, and the back concessions are still worse.

These defects are not, of course, a necessity; but they are, in actual experience, always found to exist. There are

exceptions; there are roads in Ontario which are good during the entire year wet or dry; there are others which, while not good throughout their entire length, are good in sections. But these are the exceptions which prove the generality of our roads to be bad and the contrast is a very striking one. It is to be hoped that we will soon have more exceptions; and that they will multiply until the rule is reversed.

Some Practical Results.

Interest in the improvement of streets and highways grows apace and is evidencing its existence by practical results and there is abundance of room in this locality to continue the good work. The introduction of the grading machine has wrought a marvellous change, even in Huron County, and an illustration of how it improves roadways may be seen on the gravel road through McKillop township. In addition to cutting off the raised edges of soil and earth so as to allow the free escape of water to the ditches, the centre of the road is nicely crowned and by the application of a good coat of fine gravel this road has been put in almost perfect condition. The difference between the road above mentioned and that of the same highway further North is very painfully noticeable. We don't suppose there are any very good reasons why what was done through McKillop could not be duplicated between Walton and Wroter and the sooner the test is made the better. From years of hard wear in many places the center of the road instead of being crowned to readily shed the water, is hollowed so that it is impossible in the Spring and Fall to keep it drained, and as a consequence the heavy teaming soon cuts ruts and the rough stones speedily manufacture mud holes by the aid of the wagon wheels, and instead of it being a pleasure to drive it becomes the opposite and is wearing to harness, rig and driver. The Good Road's Movement is making a move in the right direction in placing at the disposal of the general public all information relative to the most modern means of improving on the old plan followed under statute labor and while not increasing the expense to municipalities a vast and permanent improvement may be arrived at by concerted action in adopting the plans indicated by them, and tested beyond any peradventure. If every municipal council will use a grading machine properly and put gravel instead of rocks or sand on the centre of the road bed, the day of good roads is not far distant, which will be hailed with pleasure by all who use the Queen's highway. The streets of our towns and villages are also in need of a different course of treatment than that in vogue, and we are pleased to notice the example set by Wingham, Blyth, Clinton and other places worthy of emulation by those who have not initiated them—*Brussels Post*.

Choice of Paving Material.

The science of street paving is not in an experimental stage. There are certain varieties of pavement which, with proper precautions, can be laid with considerable certainty of success. When failure results, it can generally be traced to defects which could and should have been avoided under skilled management.

But experiments should not be conducted in a large way with material, the wearing properties of which are not definitely proven by experience. Millions of dollars have been wasted by municipal councils jumping at new forms of pavement which prove a reduction of initial cost. Wooden block pavement has been one of the chief sources of wholesale experiment and waste in Ontario. There are certain standard forms of pavement which should be retained until other materials have proven their utility beyond question.

And because a pavement is found to give good results, under a certain set of conditions of climate and wear, it is not to be inferred that it will be equally suitable for another set of conditions of climate and wear. A Victoria is a very useful carriage in which to go for a drive, but we do not use it for carrying building stone nor cord-wood. Pavements, like vehicles, have to be designed and constructed according to the use for which they are intended. And very much as the bridge engineer calculates the strains to which a bridge will be subjected the expert road builder will study the design for a pavement required to meet certain conditions.

There is no one variety of pavement suited to all degrees and forms of traffic, no one variety which can be used to advantage for all locations. Granite block pavement is the most durable which can be constructed, requires but little repair and is well adapted to steep grades, but is rough, noisy and trying on the hoofs of horses. Asphalt is a very smooth and agreeable pavement on which to drive, is handsome, sanitary and may be kept very clean, but it is less durable than granite and cannot be used on steep grades. Vitified brick is fairly well adapted to steep grades, ranking next to granite in the foothold afforded horses, is smooth and less noisy than granite, is very agreeable for driving or wheeling, may be kept very clean, but is less durable than either granite or asphalt. Crushed stone (macadam) is the most agreeable of all for driving, is not noisy, is superior to all in safety, is adapted to steep grades, but under excessive traffic, is very expensive to maintain.

"What's your occupation, bub?" asked a visitor at the capitol of a bright boy whom he met in the corridor. The boy happened to be a page in the White House. "I'm running for congress, sir," he replied.—*Christian Intelligencer*.