In Fort Rouge Park, Winnipeg.

Good Roads the Way to Progress.

By Logan Waller Page.

On top of a hill on the lower Brownsville road, running out of Jackson, Tenn., there was, a few years ago, a big farm which had come into the possession of a bank as satisfaction for a debt. It could not be sold and it was rapidly falling into neglect. Only a part of it was rented, and that for only $100 a year. Suddenly all this was changed. A real estate dealer purchased the tract, at a good price, divided it into three farms, and immediately sold it again. Houses were built, fruit trees were planted, and thrift and industry prevailed where indolence and improvidence had existed but a short time before. The reason for all this was that the lower Brownsville road had been changed from a long streak of mud to an improved highway.

The building of the road had come about in this way. The levee roads leading into Jackson had been corduroyed to allow travel over them in winter. Mr. Sam. C. Lancaster persuaded the county officials that macadamizing these roads would be a cheaper and more lasting improvement, and so it proved to be. Then came a good roads convention, and the building of a 1,000-foot, object-lesson road. It aroused a good deal of enthusiasm, but no definite steps were taken. Then came the "winter of great mud" in 1902-3. The roads were impassable; it required two strong mules to draw a milk wagon with two milk cans, and all day was consumed in going a few miles. For more than six weeks this condition prevailed. No one attempted to pass over these roads except in case of dire necessity. The farmers were locked in and all trade was stopped. The opportune moment had arrived. A mass-meeting of the citizens was called and all those who could get to it came. In the midst of the debate about the necessary bond issue, a farmer arose and said:

"Mr. Chairman, I am just a plain farmer and have no business trying to talk at this meeting. I am all covered with mud; there is mud on my boots and all over my clothes, and my hat is all spattered up, too. I walked to this meeting because my horse couldn't travel the roads. I've got a little farm and sawmill out on the Poplar Corner road, just a little over two miles from town, and, if I could climb up on a hard road with my truck and what lumber I've saved, I could clear enough in one day to pay my tax on that road; but I haven't got it.

"I bought some groceries from you (turning to a merchant) this month; yes, $5 worth, for I carried them out on my back; but, if I had a good road it would have been $25, I am sure."

The bonds were issued. As soon as the construction of the roads began, the land values in the country began to go up—in some cases from 20 to 100 per cent. There are no houses "to rent" in Jackson; builders are busy, numbers of new real-estate offices have been opened, large tracts of farm land are being subdivided, and prices are being paid which astonish the most far-seeing champion of this now popular movement.

New families from adjoining counties and states are constantly coming in, some to make their homes in the city and others wanting farms on the "good roads." Still others, looking ahead and anticipating profits, have made purchases five and six miles back from these roads, paying largely increased prices. So much for the influence of good roads upon a single farm, and upon a community. On the nation the effect would be the same, only infinitely multiplied.

A team of horses, struggling along a mud road in the endeavor to draw half a load, affords a striking object-lesson when compared to a team drawing a heavily loaded wagon at a comfortable trot along a stone-surfaced road. This isolat ed example must be multiplied by three million in order to obtain the cumulative effect of bad roads upon traffic in the United States. Not less than $250,000,000 is the useless tribute annually levied upon the people of the United States by its bad roads. In 1896, a widespread inquiry made by the Office of Public Roads indicated that the average cost of hauling on roads in the United States was twenty-five cents per ton per mile. In 1906, just ten years later, the Bureau of Statistics ascertained from their 2,800 county correspondents that the average cost per ton per mile was about twenty-three cents and the average length of haul 9.4 miles. This rate is exceedingly conservative, and can be safely accepted as a basis of calculation.

The report of the Interstate Commerce Commission for the year ended June 30, 1906, shows that the railroads handled more than 820 million tons of freight originating on their respective lines. Of this amount, agricultural, forest, and miscellaneous. products constituted about 32 per cent,, or approximately 265 million tons. If we assume that 200 million tons, or less than 80 per cent. of this total, was hauled over the country roads, the cost at twenty-three cents on an average haul of 9.4 miles would be $432,400,000. To this must be added the enormous tonnage hauled from farms to canals, wharves, and docks for shipment by water. If the cost of this hauling is placed at only $67,500,000, the total would reach the startling sum of half a billion dollars annually, and this does not include the products hauled back and forth between farms and mills. To meet the possible contention that 80 per cent. is a high estimate of the agricultural, forest, and miscellaneous products hauled by wagon, attention is called to the fact that many million tons of mining products are hauled by wagon, and these are not considered in this estimate.

Is this cost necessary and legitimate? The experience of France, England, and Germany affords the answer to this query. In those three countries, the average cost of hauling is reported by our consuls to be about ten cents per ton per mile. Leading writers on highway engineering state that the cost of hauling on broken stone roads, dry and in good order, should be eight cents per ton per mile. When it is considered that the roads of England, France, and Germany are, to a large extent, surfaced with broken stone, the consular reports seem to be in entire agreement with the engineers. If the cost of hauling can be reduced in the United States to one-half the present average, or 11½ cents a ton, the resultant saving would be $250,000,000 a year. And, if wise and equitable road laws and good business management are substituted for the present antiquated and wasteful systems, an additional direct saving of $40,000,000 in the administration of the roads will result; so that, by the simplest possible process of reasoning it is apparent that the people of this country have it within their power to save themselves $290,000,000 a year in the two items of hauling and road administration.

Railroad rates were 7⅓ cents per ton per mile in 1837. Sixty-eight years of progress has resulted in bringing the cost of hauling by rail to 7.8 mills in 1905, or about one-ninth the original rate. Seventy years ago, the charge for hauling on the old Cumberland Pike was seventeen cents per ton per mile, and this allowed a profit. Our railroad and steamship rates have gone down and our common road rates have gone up, until it now costs the farmer 1.6 cents more to haul a bushel of wheat 9.4 miles from his farm to a neighboring railroad station than it does to haul it from New York to Liverpool, a distance of 3,100 miles. These are conditions which should hasten the era of road building.

The high cost of hauling is not the only burden which the American people are carrying by reason of their bad roads. In traversing a region of country isolated from markets by reason of bad roads, one is struck by the wastes of untilled land and by the lack of variety in the products. This is a condition more frequently due to lack of adequate transportation facilities than to lack of industry and intelligence of the inhabitants. The point may be illustrated by assuming a series of concentric circles to be drawn about a market town or railroad station, constituting zones of production in all of which the roads are uniformly bad.

Within the first zone, all products can be delivered to market at a profit. Within the second zone, certain products must be eliminated because of the length of haul. Milk, small fruits, and certain kinds of vegetables requiring quick delivery and careful transportation might be cited as examples. In the third zone, still other products must be eliminated because of the prohibitive cost of hauling. The fourth zone will include only those products which can be held until the roads are passable and then hauled long distances and sold at a profit. Beyond this zone, the land must be left unproductive or utilized for grazing and timber.

Every improvement in the roads leading from this market widens these zones, makes unproductive land productive, and enables the farmer to exercise a wider discretion in determining the character of his crops. The prosperity of the individual farmer becomes far greater, the traffic of the railroad increases, the consumer receives better supplies at lower prices, and thus the beneficial effects continue in an ever-widening circle, like the ripple produced by a stone cast into the water.

On June 1, 1900, there were nearly 425 million acres of uncultivated land in the United States. That improved roads will prove an important factor in developing this great domain cannot be questioned. The golden possibilities which are opening up to the tiller of the soil as soon as he is brought in touch with the markets and can successfully practice intensive farming are foreshadowed by the insignificant statement in the census reports to the effect that the average value per acre of vegetables produced in the United States in 1899 was $42, and of small fruits $80.80; while the average for corn was only $8.72, wheat $7.03, and oats $7.34. The meaning of these facts is being grasped by the intelligent farmers throughout the length and breadth of the land, and it is only a step further in the logic of the situation for them to perceive that improved roads are a necessity in the working out of the problem. When the great, silent, farmer class is won over,