

## WISCONSIN'S EXPERIENCES IN ROAD BUILDING\*

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WHEN we think of the great era of railroad building from 1879 to 1884, we must think of the great achievements of the engineers of those days, because in those five years there were built in the United States 40,000 miles of railway, and there was spent in that enterprise about \$20,000 per mile, or \$800,000,000 in the five years. This year there is available in the United States \$650,000,000 for the building of highways. I say "available," because we will not spend it; our people have been willing to provide the money much faster than we can provide the brains and experience to construct the roads.

We have available in the state of Wisconsin this year, the sum of \$20,000,000 for good roads, but it is not burning our pockets one iota, because we expect to spend only what we can properly spend and deliver value for, no more and no less.

## Forget Politics in Road-Building

We have had in my state a very long and bitter fight. When we first started the work in 1907, and spoke before the farmers' institutes, it was lucky sometimes that we preserved an exit at the rear, because we could not always get out the front door. The farmers were suspicious of a young man who would come out and tell the old fellows with whiskers down to their knees how to build roads. As I grow older, I think that the farmers were right. If I did not know any more now than I knew then, I would hand in my resignation. The state of Wisconsin has spent eleven years and probably \$60,000 in educating me. But when you start in to build roads, you must pay for the education that you receive in one way or another, and the municipality that keeps its executive in office the longest, will spend the least in education.

When we are handling large amounts of money, we must forget politics and get men who know highway construction and maintenance.

It may be of interest to describe Wisconsin. It has an area of 56,000 square miles, extends north and south about 450 miles, and is in about the same latitude as the settled portions of Ontario. A large share of the state has been glaciated, but about one-quarter of it, the southwestern portion, or Mississippi section, has never been glaciated, and is very rough and hilly. In the centre we have the bed of an ancient sea, which is now a bed of sand, and we have to go through that with no road material at hand to work with. Our population is about 2,500,000. The true valuation of the state is about \$3,000,000,000. In the northern part of the state the settlement is still rather sparse, and the land is worth from \$10 to \$30 per acre. In the southern portion, we have some of the highest developed land in the world.

Wisconsin is the leading American dairy state. We produce more milk, butter, cheese and condensed milk than any other state in the union. Dairying is the greatest occupation in Wisconsin, as far as the farmers are concerned. We have whole counties in which the true value is \$150 per acre for every acre in the county; and, on the other hand, we have whole counties where the true value is 150 cents per acre.

## Movement Started in 1907

We started what might be called a modern highway movement in 1907, with 71 counties and 1,200 towns. The number of pathmasters or road superintendents varied from as low as one in very exceptional instances to as many as 80 in a township containing about 60 miles of road; in other words, they scrapped about the odd fractions of the road miles. We had 40,000 town road superintendents. They changed every year. The principal occupation of each man was to show what a fool the man before him had been. I

don't blame them so much for what they did, because they were placed in charge of men with whom they had to live for 365 days in the year. It was against human nature for a system like that to give results except where they really wanted roads, and then they got roads.

Engineers can go out and build a good road when they are given \$30,000 or \$40,000 per mile with which to build it; but these chaps were up against \$30 or \$40 per mile to maintain roads which were really cow-paths; and when you think that they had to milk 30 or 40 cows each day for a living, and do other farm work, as well as look after their section of the road, it is a wonder they did so well. It was more the fault of the system than the men.

## Changes in Highway Legislation

The first step we took was to enact the county aid law, which provided that the county boards should consist of the township chairman and a member from the town board, and a member from every village, city and town in the county. It also provided that this county board should lay out a county system of highways, and that they should select a county highway commissioner, and that when a town voted a certain amount for the improvement of a road, the county should vote a like sum and build the road. That law was in effect from 1907 till 1911.

The state highway department during that time was more or less an advisory body. They could call us in and ask us for advice, and take it or not, just as they pleased. This law was only moderately successful; only about 20 counties out of 71 acted under it, and of these, five did excellently. In 1911, realizing that we must go a little faster, the state-aid law was passed, which provided that on a limited portion of our roads, 15% of our mileage, if a town or county put up two-thirds of the cost of a road, the state would put up one-third, and the road was built by the county to the satisfaction of the state department. We have spent about \$22,000,000 under this law in the construction of about 8,000 miles of road of all classes, and several thousand bridges.

This law had one drawback, from a general state standpoint, and that is that the location of these roads were in the hands of the town or county councils, and the result was that there were no two cities in the state that were connected by a good road. In other words, after spending up to \$18,000,000 and building 6,000 miles of road, the longest stretch of continuous highway we had in the state was 18 miles. In 1917 we took a further step forward and enacted what they call the state trunk-highway law, in which it was provided that there should be laid out by the state highway commission, under the general supervision of the legislative committee, a system of 5,000 miles of road which should connect every county seat with every other county seat. This 5,000 miles was about 6½% of our 76,000 total mileage.

## State Responsible for 5,000 Miles

Our federal aid money was to be spent exclusively on this 5,000 miles. In connection with this we established the greatest experiment ever tried in connection with roads; from the minute they were taken over, they were taken over by the county for maintenance by the counties under the general supervision of the state. In other words, the state took the responsibility for the maintenance of these 5,000 miles of road, no matter how good or how bad they might be when taken over. The minute when they were taken over was at 12 o'clock noon, May 1st, 1918. When a certain unit of government says it will build a road, other units of government immediately stop all work on that road, and it is allowed to get into any state of disrepair. If we had said that we were going to construct these 5,000 miles under federal aid, these 5,000 miles of road, which were supposed to be the main roads in the state, would have been the worst roads in the state, because all local effort to improve them would have immediately stopped, and, therefore, it was provided that they should be maintained by the counties through which they ran, under the supervision of the highway department of the state; and if they were maintained to our satisfaction, the county should be repaid the total cost of

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