WISCONSIN ENGINEER DISCUSSES STATE AID

Says It Is Not "a Gift of the Gods Acquired Without the Sweat of the Brow."

ROADS NEED TWO DITCHES

State Supervision and State Aid Are Effective Instruments for Obtaining Better Roads in Any State, Writes A. R. Hirst.

Most of the States have created State road departments to give advice when requested in matters affecting road and bridge construction, or have adopted the principle of State aid or State supervision, or both, in the construction of highways. Some of these States have adopted the policy of building certain main roads at the sole expense of the State, and have provided for State maintenance thereafter. In ay discussion of State aid, not only for roads, but for any other purpose, we should not lose sight of the basic fact that money provided by any State to aid or perform any activity is produced almost wholly by direct taxes paid by the people of that State. State aid is by no means "a gift of the gods acquired without the sweat of the brow," writes A. R. Hirst, State highway engineer of Wisconsin.

"In the Middle West, at least, the old system of local control is still enough in effect to furnish one big reason why State after State has independently determined that some charge had to be made if roads fitting modern conditions, instead of those of the dark ages, were to be obtained. Road building is not an exact science yet success in road construction depends upon the recognition of certain fixed principles by the builder, which principles must be observed in the construction and maintenance of all types of roads, whether they be surfaced or of natural earth. These principles are simple, and yet even to-day probably one-half of those in charge of road construction either do not realize them or fail to carry them into effect. In Wisconsin, if we could even get the local road builders to concede universally that a road should have two ditches instead of one, we would feel that he had accomplished a real revolution.

"In addition to this general lack of realization of the basic principles of road construction, the trouble with systems of local control and local construction and maintenance has everywhere been that every piece of road was well built or well maintained, there was no guarantee that the next mile would not be utterly bad and the usefulness of the good piece almost wholly lost.

"Another important factor in spreading the State-aid idea has been the fact that it causes incorporated cities and villages to pay a portion of the cost of rural highways, consequently reducing the cost to the rural communities to a point where they feel encouraged to take up high-class construction on the most important roads. The result is that these roads are made capable of serving adequately, not only the rural population, but also the people of the cities and villages, who are indirectly, if not directly, interested in the conditions of these principal arteries through which they must draw their rural trade.

"The best evidence that State supervision and State aid are effective instruments for obtaining better roads lies in the fact that no State which has ever adopted a system of either advisory or compulsory State supervision of road work, or of State aid, or of exclusive State construction, has ever afterwards abandoned it. The original laws have been changed in almost every State; there have been changes in organization and changes in general scheme. But every State has adhered to the basic idea that if effective State-wide road construction is to be secured, it must be through State aid and supervision on the more important roads. We know of no State which has developed its main lines of travel to meet modern requirements without some system of State aid or State construction. The State most closely approaching this condition is Indiana, but it is understood that even there the system of local bond issues and consequent local construction has not been wholly satisfactory and that some other system will soon be substituted.

"The first effect of State aid has invariably been to increase road construction of an adequate character. This is due to two reasons. First, under all State aid laws the cost has been distributed better than under local laws. Second, all State aid laws are so arranged that unless a county proceeds with construction it sacrifices money to other counties which do proceed.

"The second result of State aid has been better construction and the standardization of plans throughout the State, even though different types of construction are necessary in different counties, as is the case.

"The third result has been the effect State aid construction has had on other construction in the State, in that the roads, culverts and bridges constructed under State plans and specifications have served as examples from which, in many cases, local construction has distinctly benefited.

"It is now practically universally conceded that any work of importance, if it is to be a success, must have a head. A State highway commission made up of high-class technical and non-technical members, with a highway engineer as executive officer, and an engineering staff trained in both the scientific and practical sides of road and bridge construction, is the logical head of highway construction in any State. The principal employees of a State highway department can be engineers paid reasonable salaries, who should be, and usually are, more experienced in road and bridge design and construction than the men whom counties can afford to employ. These men deal with conditions not in one county only, but in many counties, and that they are usually able to handle any road or bridge situation that may arise is not the result of chance or book education or white collars, but is simply the result of State-wide experience. Having had the opportunity of seeing many pieces of many kinds of work, they have probably already encountered and helped to overcome almost every difficulty ordinarily met with in road or bridge construction."

Guessing at Road Costs.

There are so many conflicting statements regarding the cost of roadwork that the desirability of a comprehensive method of highway accounting is evident, in order that taxpayers may not be misled concerning the total expense of such work. The Iowa State Highway Commission has had considerable difficulty in finding out what the counties in that State have been spending, because of this failure to have a complete system of accounts. One rich county reported collecting $16,000 for roadwork, but after investigation the commission found that $32,500 had been collected. An investigation of the accounts of another wealthy county reporting $3,200 collected revealed a total collection of $19,600. The discrepancies were not due to an intention to hide the amount of the funds, but merely to lack of good accounting. Even greater confusion was found in the methods of the townships.

It Keeps Heat From Feet.

That "necessity is the mother of invention" has been demonstrated in Richmond. The facts came out in the story of the invention of the "Aero Foot Saver," the product of a Richmond man, who sought relief from the heat of his auto engine. While operating his car as a jitney the owner found that his comfort was marred by the heat from the engine, and he tried all kinds of shoes, but everything failed until he worked out a device to carry the heat away from the footboard. After months of experiments with designs and materials, he finally produced a design which carried off the heat of the engine in the summer, and in the winter it could be removed, allowing the heat to be utilized to keep away the cold.

One dozen devices were made and attached to Ford cars, and only one owner out of the dozen permitted the removal of the device after a tryout. The "Aero Foot Saver" is purely a Richmond product, being invented and manufactured here, and it will doubtless spread the fame of Richmond among owners of Ford cars all over this and other countries.

CAPTURES COYOTE WITH DODGE BROTHERS' CAR

Edward Spear, With Two Passengers, Succeeds in Running Down Coyote in Fast Time.

Capturing wild coyotes with motor cars is a sport not every one is privileged to enjoy. More exciting even than the stories of the recent shark hunting on the eastern coast is the account of Edward Spear's "chase of the wolf" on the plains of the McCord Ranch, near Fresno, Cal. Mr. Spear is a Dodge Brothers representative in Coalinga, Cal. The Coalinga Record describes it as "the fastest twenty-eight minutes of fun in the thirty years of his life."

Spear had two passengers with him in his Dodge Brothers roadster, when he came upon the coyote, according to the Record, but the chase soon became so furiously fast that they persuaded him to pause until they got out. Spear resumed the chase alone. The Record says:

"As the car drew near, Mr. Coyote took a single look and was off like the wind, but Spear kept right after him. Finally the coyote, half-frightened to death by Spear's yelling, began to slacken his speed and resorted to dodging, in an effort to get away. As he wodld dodge, so would the car, and, after a series of dodges and dives Spear finally caught him with a front wheel and put the predatory varmint out of the running. Spear was compelled to run over the animal four times before he could kill him."

Anderson Discusses Co-Operation.

Lee Anderson, commercial manager of the Hupp Motor Car Corporation, spoke on "Co-Operation," before the World's Salesmen's Congress in Detroit. Stating that co-operation as applied to the traveling salesman has three aspects, first, between the salesman and the house; second, between the salesman and his customer, and third between one salesman and another, Mr. Anderson continued:

"It is now generally accepted that the biggest fool in business is the man who fools himself into the belief that he can be anything but square with the people to whom he sells his goods. The golden rule goes in business even stronger than it does in morals, religion or ethics.

"That there is a broader phase of the co-operation between the salesman and his customer than merely not being dishonest or too sharp in one's dealings. And this broader co-operation is service."

Blazing the Way.

Finding one's way along an unknown road with the help of a map or touring guide is very much easier than the old-fashioned method of asking for guidance at farmhouses every few miles. But it is not so easy as following a well-marked route, and the Massachusetts Highway Commission has accordingly marked a number of the leading through routes in that State by painting bands on the poles and bridges along the way, even through the cities. Blue bands with white borders are used for routes running north and south, red bands for east and west routes, and yellow bands for the others.

Early State Aid Roads.

It is often said that the use of State money for the construction of roads is of quite recent origin. The New Jersey State aid law of 1891 is sometimes referred to as the first instance of such use of State funds in this country. As a matter of fact, State money was spent for such purposes more than seventy-five years ago. Kentucky paid out over $2,000,000 for road improvements between 1820 and 1840, under the direction of a State highway engineer, who drew a salary of $5,000 a year, a very large sum for those days. The roads built then were twenty-four to thirty feet wide between the ditches. The surfaces were constructed of broken stone, and the bottoms were of large stones wedged together to make what road-builders call a telford foundation. About 1850 business conditions in the country became bad, and this work stopped. When it was resumed in 1908 such a long period had elapsed since the earlier State-aid work that 1908 is usually fixed as the beginning of State roadwork in Kentucky.

The "Glide Six" Is Here.

The "Glide Six," a car which is making a fine record in the West, is being introduced in Richmond by F. H. Hicks, of the Hicks Motor Company, and the "Glide Six" promises to become one of the favorites of the Richmond owners. The Hicks Motor Company also distributes the "Ross Eight" in this city and section. Both of these cars are practically newcomers in the East, and each possesses points of workmanship and material which every prospective owner will be interested in.

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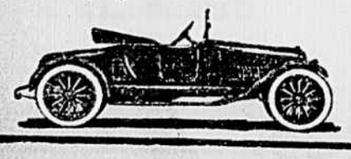

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So let us make you a definite proposition. Go to the show room of the Paige dealer where this new car is on exhibition. Ask him to give you a thorough demonstration over any road conditions that you may select.

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